(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
21 September 2023 (21.09.2023)

WIPO | PCT

(10) International Publication Number
WO 2023/174948 A3

(51) International Patent Classification:

A61K 9/00 (2006.01)	*A61K 31/5377* (2006.01)
A61K 9/107 (2006.01)	*A61K 31/553* (2006.01)
A61K 31/05 (2006.01)	*A61K 31/58* (2006.01)
A61K 31/12 (2006.01)	*A61K 31/7135* (2006.01)
A61K 31/192 (2006.01)	*A61K 38/12* (2006.01)
A61K 31/196 (2006.01)	*A61K 47/14* (2017.01)
A61K 31/216 (2006.01)	*A61K 47/12* (2006.01)
A61K 31/4025 (2006.01)	*A61K 47/28* (2006.01)
A61K 31/4184 (2006.01)	*A61K 31/4418* (2006.01)
A61K 31/436 (2006.01)	*A61K 31/496* (2006.01)
A61K 31/44 (2006.01)	*A61K 9/14* (2006.01)
A61K 31/4453 (2006.01)	*A61K 9/51* (2006.01)
A61K 31/502 (2006.01)	*A61K 31/00* (2006.01)

(21) International Application Number:
PCT/EP2023/056506

(22) International Filing Date:
14 March 2023 (14.03.2023)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
63/269,330 14 March 2022 (14.03.2022) US
PCT/EP2022/058180
28 March 2022 (28.03.2022) EP

(71) Applicant: **TRX BIOSCIENCES LIMITED** [GB/GB]; The Walbrook Building, 25 Walbrook, London EC4N 8AF (GB).

(72) Inventors: **GOODING, Daniel**; c/o TRx Biosciences Limited, The Walbrook Building, 25 Walbrook, London EC4N 8AF (GB). **BREW, John**; c/o TRx Biosciences Limited, The Walbrook Building, 25 Walbrook, London EC4N 8AF (GB). **BANNISTER, Robin M.**; c/o TRx Biosciences Limited, The Walbrook Building, 25 Walbrook, London EC4N 8AF (GB).

(74) Agent: **EYRE, David Edward**; 9 St Catherine's Road, Littlehampton BN17 5HS (GB).

(54) Title: COMPOSITIONS HAVING IMPROVED BIOAVAILABILITY OF THERAPEUTICS AND USES THEREOF

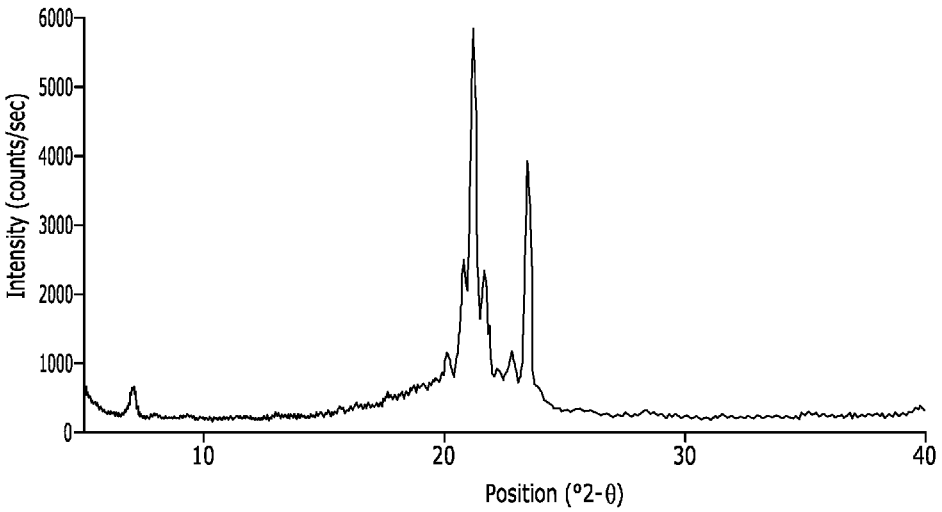


FIG. 1A

(57) Abstract: The present specification discloses pharmaceutical composition disclosed herein comprises one or more fibrates, one or more glycerolipids, and one or more digestion enhancers. The disclosed glycerolipids comprise one or more hard fats and one or more liquid fats. The disclosed digestion enhancers comprise one or more bile acids, one or more phospholipids, one or more free C_{14-24} fatty acids, one or more free C_{14-24} fatty acid surfactants, or any combination thereof. The present specification also discloses methods and procedures to formulate the disclosed one or more fibrates into the disclosed pharmaceutical compositions. The present specification further discloses methods and uses of the disclosed pharmaceutical compositions in the treatment of an inflammation and/or neuroinflammation.

WO 2023/174948 A3

[Continued on next page]

(81) **Designated States** *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CV, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IQ, IR, IS, IT, JM, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS, ZA, ZM, ZW.

(84) **Designated States** *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, CV, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SC, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, ME, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

— *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*

— *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

Published:

— *with international search report (Art. 21(3))*

— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*

— *in black and white; the international application as filed contained color or greyscale and is available for download from PATENTSCOPE*

(88) **Date of publication of the international search report:**
26 October 2023 (26.10.2023)

Compositions Having Improved Bioavailability of Therapeutics and Uses Thereof

[0001] This international patent application that claims the benefit of priority and is entitled to the filing date of International Patent Application Serial No. PCT/EP2022/058180, filed on March 28, 2022, U.S. Patent Application Serial No. 17/656,702, filed on March 28, 2022, and U.S. Provisional Patent Application 63/269,330, filed March 14, 2022, the content of each of which is hereby incorporated by reference in its entirety.

[0002] Oral delivery of a therapeutic compound is the most preferred route of administration and account for eighty percent of all the pharmaceutical compositions on the market. The underlying premise of traditional oral delivery is that the therapeutic compound must first be released from the composition into the gastrointestinal fluids being absorbed by capillaries lining the duodenum of the small intestine and then distributed systemically by the bloodstream. However, the effectiveness of oral delivery typically relies on the pharmacokinetic properties of the pharmaceutical composition and the therapeutic compound formulated therein, with the amount of therapeutic compound released from the pharmaceutical composition (dissolution rate) and the amount of the therapeutic compound absorbed into systemic circulation and made available to the body (or bioavailability) being two primary critical factors.

[0003] Poorly water soluble or hydrophobic therapeutic compounds both present particularly difficult oral delivery challenges due to their poor aqueous solubility and slow dissolution rate in the aqueous gastrointestinal environment. To solve these problems, the pharmaceutical industry has traditional focused on optimizing the formulation of a pharmaceutical composition in a manner that 1) improves the dissolution rate of a hydrophobic therapeutic compound within the formulation to increase the amount released into the gastrointestinal tract; and/or 2) improves the bioavailability of the hydrophobic therapeutic compound to increase the amount systemically delivered to the body.

[0004] For hydrophilic therapeutic compounds, the formulation challenges are different. Although these compounds are readily soluble in the aqueous gastrointestinal environment, many are poorly absorbed, due to poor membrane permeability and/or enzymatic degradation. Many solid dosage formulations of hydrophilic therapeutic compounds exhibit poor or no absorption of the therapeutic compounds.

[0005] One approach to improve the pharmacokinetics of a pharmaceutical composition comprising hydrophobic therapeutic compound has been the requirement to ingest the pharmaceutical composition with a high fat content meal to facilitate absorption in the small intestine and thus increase its bioavailability. Ingestion of the meal triggers the digestive process in the stomach which includes release of bile from the gall bladder into the duodenum, where it breaks down and absorbs fats from food. Although such meals do not generally influence dissolution rates, the absorption of the therapeutic compound that is released is enters the systemic circulation in higher amounts due to the concomitant absorption of fats from the meal.

[0006] Another approach to improve the pharmacokinetics of a pharmaceutical composition comprising hydrophobic therapeutic compound has been the use of phospholipid-based formulations, including

macroemulsion, microemulsion, self-emulsifying drug delivery systems (SEDDS), self-microemulsifying drug delivery systems (SMEDDS), self-nanoemulsifying drug delivery systems (SNEDDS), solid-lipid nanoparticle (SLN), liposomes and lipoplexes. These surfactant-based formulations create oily emulsions with the therapeutic compound which facilitates its absorption by the small intestine into systemic circulation, and thus increases bioavailability of the therapeutic compound. However, besides not generally affecting dissolution rates, such surfactant-based formulations also destabilize membrane lining in the stomach causing irritation. Additional limitations associated with this approach include, *e.g.*, *in vivo* drug precipitation, formulation handling issues, limited lymphatic uptake, lack of predictive *in vitro* tests and oxidation of unsaturated fatty acids, which restrict their potential usage. Accordingly, wide variability of the bioavailability of therapeutic compounds remains a daunting hurdle.

[0007] The present specification provides an alternative approach where pharmaceutical compositions disclosed herein are formulated to rely on physiological lipid digestion and absorption systems to achieve absorption and enhanced efficacy and increase bioavailability of therapeutic compounds to better facilitate treatment of a disease or disorder. In addition, such formulations are not only applicable to highly lipophilic therapeutic compounds but also provide a means to increase the solubility of therapeutic compounds that are generally less soluble in both aqueous and lipid matrices.

SUMMARY

[0008] Aspects of the present specification disclose, in part, a pharmaceutic composition comprising a) one or more therapeutic compounds, b) one or more glycerolipids, and c) one or more digestion enhancers. A therapeutic compound disclosed herein can be a hydrophilic therapeutic compound, a hydrophobic therapeutic compound, or a pharmaceutical active agent or ingredient, a diagnostic agent or ingredient, a cosmeceutical active agent or ingredient, or a nutraceutical active agent or ingredient. A glycerolipid disclosed herein includes hard fats and liquid fats. A hard fat is a glycerolipid that is solid at 18°C and includes triglycerides. A liquid fat is a glycerolipid that is liquid at 18°C and also includes partially hydrolyzed glycerolipids and monoglycerides. Digestion enhancers disclosed herein include one or more bile acids, one or more phospholipids, one or more free C_{14-24} fatty acid surfactants, one or more fatty acid salts, one or more fatty acid derivatives with a polyhydroxylated head group, one or more steroidal surfactants, or any combination thereof. A composition disclosed herein may further comprise one or more pharmaceutically-acceptable stabilizing agents.

[0009] Other aspects of the present specification disclose a method of treating an individual with a disease or disorder, the method comprising the step of administering to the individual in need thereof a pharmaceutical composition disclosed herein, wherein administration results in a reduction in a symptom associated with the disease or disorder, thereby treating the individual.

[0010] Other aspects of the present specification disclose, in part, a pharmaceutic composition for use in treating a disease or disorder, the pharmaceutic composition comprising a) one or more therapeutic compounds, b) one or more glycerolipids, and c) one or more digestion enhancers. A therapeutic compound

disclosed herein can be a hydrophilic therapeutic compound, a hydrophobic therapeutic compound, or a pharmaceutical active agent or ingredient, a diagnostic agent or ingredient, a cosmeceutical active agent or ingredient, or a nutraceutical active agent or ingredient. A glycerolipid disclosed herein includes hard fats and liquid fats. A hard fat is a glycerolipid that is solid at 18°C and includes triglycerides. A liquid fat is a glycerolipid that is liquid at 18°C and also includes partially hydrolyzed glycerolipids and monoglycerides. Digestion enhancers disclosed herein include one or more bile acids, one or more phospholipids, one or more free C_{14-24} fatty acid surfactants, one or more fatty acid salts, one or more fatty acid derivatives with a polyhydroxylated head group, one or more steroidal surfactants, or any combination thereof. A composition disclosed herein may further comprise one or more pharmaceutically-acceptable stabilizing agents.

[0011] Other aspects of the present specification disclose a use of a pharmaceutical composition disclosed herein in the manufacture of a medicament for the treatment of a disease or disorder.

BRIEF DESCRIPTION OF THE DRAWINGS

[0012] The accompanying drawings, which are incorporated in and constitute a part of this specification, illustrate aspects of the disclosed subject matter in at least one of its exemplary embodiments, which are further defined in detail in the following description. Features, elements, and aspects of the disclosure are referenced by numerals with like numerals in different drawings representing the same, equivalent, or similar features, elements, or aspects, in accordance with one or more embodiments. The drawings are not necessarily to scale, emphasis instead being placed upon illustrating the principles herein described and provided by exemplary embodiments of the invention. In such drawings:

[0013] FIGS. 1A-1H show representative PXRD spectra analyzing a disclosed pharmaceutical composition comprising fenofibrate with **FIG. 1A** showing a representative PXRD spectra of a GELCURE® 43/01 standard; **FIG. 1B** showing a representative PXRD spectra of a cholic acid standard; **FIG. 1C** showing a representative PXRD spectra of a fenofibrate standard; **FIG. 1D** showing a representative PXRD spectra of a Vehicle standard; **FIG. 1E** showing a representative PXRD spectra of a disclosed pharmaceutical composition comprising fenofibrate standard; **FIG. 1F** showing a representative PXRD spectra of a fenofibrate standard superimposed over a representative PXRD spectra of a disclosed pharmaceutical composition comprising fenofibrate standard with asterisks above peak indicating relevant peak overlap; **FIG. 1G** showing a representative PXRD spectra of a cholic acid standard superimposed over a representative PXRD spectra of a Vehicle standard with asterisks above peak indicating relevant peak overlap; and **FIG. 1H** showing a representative PXRD spectra of a cholic acid standard superimposed over a disclosed pharmaceutical composition comprising fenofibrate standard with asterisks above peak indicating relevant peak overlap;

[0014] FIGS. 2A-2B show representative UHPLC tracings of fenofibric acid levels in blood and brain with **FIG. 2A** shows a UHPLC tracing of fenofibric acid levels in blood after oral administration of 30 mg/kg of disclosed pharmaceutical compositions comprising fenofibrate; and **FIG. 2B** shows a UHPLC tracing of

fenofibric acid levels in brain after oral administration of 30 mg/kg of disclosed pharmaceutical compositions comprising fenofibrate;

[0015] FIG. 3 shows a representative UHPLC tracing of mebendazole levels in blood after oral administration of 30 mg/kg of disclosed pharmaceutical compositions comprising mebendazole;

[0016] FIG. 4 shows a representative UHPLC tracing of olaparib levels in blood after oral administration of 30 mg/kg of disclosed pharmaceutical compositions comprising olaparib.

DESCRIPTION

[0017] The present specification discloses pharmaceutical compositions formulated for oral delivery in a manner where the therapeutic compound present in the pharmaceutical composition is preferentially taken up into the lymphatic system. The pharmaceutical compositions disclosed herein comprises one or more therapeutic compounds, one or more glycerolipids, and one or more digestion enhancers. A glycerolipid disclosed herein facilitates dissolvement of a therapeutic compound disclosed herein into solution and/or acts as a stabilizing agent that prevents a disclosed therapeutic compound from precipitating out of the pharmaceutical composition. A digestion enhancer disclosed herein increases the solubility of the one or more therapeutic compounds in the glycerolipid matrix, in conjunction with the glycerolipids, increases absorption of these compounds into the lymphatic system, and increases availability of these compounds to their therapeutic target. As shown herein, a disclosed pharmaceutical composition formulated using one or more glycerolipids and one or more digestion enhancers disclosed herein increases bioavailability of a therapeutic compound minimally by maintaining higher levels of the therapeutic compound over extended time period as well as increasing the directed bio-distribution of the therapeutic compound to its therapeutic target. Furthermore, besides achieving the greatest amount of therapeutic compound exposure over time to its therapeutic target, in many cases, a disclosed pharmaceutical composition enables a therapeutic compound to also reach its maximum concentration in the shortest period of time. Overall, a disclosed pharmaceutical composition exhibits a superior pharmacokinetic and pharmacodynamic profiles over current formulations of the same therapeutic compound making the disclosed pharmaceutical compositions more effective and efficacious for its intended use.

[0018] The majority of the digestion of dietary organic macromolecules and almost all absorption of the resulting breakdown products, occurs in the small intestine. The luminal wall of the small intestine is lined with many projections called villi, each of which comprises intestinal cells called enterocytes. Enterocytes not only secrete enzymes that digest proteins (polypeptides), carbohydrates (polysaccharides), and fats (lipids) but these cells also absorbed the amino acids, monosaccharides and fatty acid breakdown products. Interestingly, however, enterocytes process these breakdown products differently with amino acids and monosaccharides being taken up by capillaries and transported systemically by the blood system and fatty acids being taken up by blind ended lymphatic vessels called lacteal and then transported systemically by the lymphatic system. The disclosed pharmaceutical compositions take advantage of this differential

processing by formulating therapeutic compounds that are preferentially processed by enterocytes in a manner where these compounds are taken up and transported int the lymphatic system.

[0019] Dietary lipids typically consumed by a mammal comprise 90% triglycerides as well as small amounts of cholesterol esters and phospholipids. Unlike proteins and carbohydrates, dietary lipids are hydrophobic molecules that cannot dissolve in the fluids present in the lumen of the small intestine and instead aggregate together to form fat globules. Pancreatic lipase is a water-soluble enzyme that cleaves ester bonds and breaks down lipid triglycerides into fatty acids and glycerol. However, due to its hydrophilic character lipase remain in the intestinal fluids, are unable to dissolve into fat globules and as such can only access and cleave triglycerides located at the surface where fat globules and intestinal fluids interface. In order to increase efficiency and cleavage rate at which lipase can breakdown lipids in the small intestine, the liver produces a fluid called bile. Bile contains amphipathic molecules such as bile salts including sodium cholate and sodium chenodeoxycholate, phospholipids including lecithin, as well as the hydrophobic steroid cholesterol. When bile is excreted into the small intestine it mixes with the fat globules in a manner where bile salts and phospholipids intercalate with and break apart these structures into smaller units called emulsion droplets as well as recruits an amphipathic molecule called coliapse. Colipase is a protein co-enzyme that binds lipase to the emulsion droplets and stabilizes the enzyme in its active conformation, As such, emulsification greatly increases the surface area of which lipases can act upon triglycerides as well as increases its efficiency and catalytic rate thereby enabling sufficient amounts of lipid digestion to occur in the small intestine.

[0020] As lipid triglyceride digestion proceeds, the resulting free fatty acids, which are also hydrophobic and insoluble in the intestinal fluids, associate with the phospholipids from the bile to form tiny droplets called mixed micelles having a phospholipid and bile salt composition which encapsulates the free fatty acids. Mixed micelles, which are about 200 to 500 times smaller in size than emulsion droplets, fuse with the membranes of enterocytes where the free fatty acids enter the cytosol of these cells. Once inside the enterocytes, the free fatty acids are transported to the lumen of smooth endoplasmic reticulum and are transformed back into triglycerides are assembled with cholesterol and phospholipids into spherical lipid structures. These lipid structures are transported to the rough endoplasmic reticulum where apoprotein Apo B-48 is attached to the surface to form large lipoproteins called chylomicrons. Chylomicrons are then packaged is the Golgi apparatus and exit the basolateral side of the enterocytes via exocytosis. Since chylomicrons are too large to be taken up by blood capillaries, these lipoproteins enter the lymphatic system via the lacteal in a process that depends on Apo B-48. The chylomicrons then circulate through the lymph vessels and drain into the blood system via the thoracic duct bypassing the liver circulation. Once chylomicrons are in the blood system, these lipoproteins travel to various extrahepatic tissues where their triglycerides are hydrolyzed by the activity of the lipoprotein lipase, allowing the released free fatty acids and glycerol to be absorbed by the tissues. When a large portion of the triglycerides has been hydrolyzed, chylomicron remnants are formed and are taken up by the liver, thereby also transferring dietary fat to this organ.

[0021] The present specification discloses pharmaceutical compositions formulated for oral delivery in a manner where the fibrate present in the pharmaceutical composition is preferential taken up into the lymphatic system. The pharmaceutical compositions disclosed herein comprises one or more fibrates, one or more glycerolipids, and one or more digestion enhancers. A digestion enhancer disclosed herein increases the solubility of the one or more fibrates in the glycerolipid matrix, in conjunction with the glycerolipids, increases absorption of these compounds into the lymphatic system and increases availability of these compounds to their therapeutic target.

[0022] Natural digestion processes rely upon the secretion of bile onto the ingested gut contents and rely upon their mixing with the gut contents to initiate emulsification and access to other digestion processes such as the activity of lipases. These processes must be completed for the drug to be absorbed. A full gall bladder response in relation to the ingestion of lipids will secrete up to 50-60 mL of bile into the duodenum. The present invention relies upon the intimate mixing of digestion enhancers with the fibrate in the preparation of a pharmaceutical composition disclosed herein that can then be taken orally by the patient. The fibrate is then presented to the gut lumen in a form that is immediately ready for uptake. This process is highly efficient as the digestion enhancers are intimately mixed with the formulation lipid excipients. Without wishing to be limited by any theory, the pharmaceutical compositions disclosed herein employ components that are the products of triglyceride digestion to mimic the conditions created by a high fat meal. There formulations enable the one or more fibrates contained therein to be bundled along with the free fatty acids into micelles and absorbed by the enterocytes which then package the one or more fibrates into chylomicrons. The fibrate loaded chylomicrons are then transported by the lymphatic system to their target cells where the fibrates are taken up by these cells to exert their beneficial effects. In essence, the chylomicrons are being co-opted as a drug delivery system for the one or more fibrates contain in a pharmaceutical composition disclosed herein. By controlling the components and amounts of the one or more glycerolipids and one or more digestion enhancers, the disclosed pharmaceutical compositions provide a more consistent and predictable bioavailability of the one or more fibrates disclosed herein that could ever be achieved by reliance on a high fat meal.

[0023] The pharmaceutical compositions disclosed herein are advantageous for several reasons all of which ultimately increase the bioavailability and efficacy of the one or more fibrates contained therein. For example, a pharmaceutical composition disclosed herein delivers its fibrates via the lymphatic system. The use of the lymphatic system to deliver fibrates is beneficial for several reasons. First, the lymphatic system avoids pre-systemic metabolism that reduces the bioavailability of many fibrates administered using a traditional oral delivery approach. Also called first pass effect or first-pass metabolism, a fibrate absorbed by the digestive system must first enter the hepatic portal system before reaching systemic circulation. While in the hepatic portal system, a fibrate can be metabolized by hepatic enzymes of the liver which reduce the amount of fibrate that enters systemic circulation. As such, delivery of fibrates via the lymphatic system acts as a bypass to the hepatic portal system for fibrates susceptible to hepatic metabolism. The lymphatic uptake system represents an attractive opportunity for the preferential delivery of drugs. However, small water-soluble molecules that obey the rules for paracellular absorption (such as Lipinski's Rules) are not ideal substrates for lymphatic uptake. Additional highly lipophilic molecules which are often

poorly and variably bioavailable even when absorbed by lymphatic uptake. This invention, uses a wide family of digestion enhancers in a lipidic delivery system, to allow both the small molecule Lipinski compliant drugs and the highly lipophilic drugs to be effectively delivered through the lymphatic uptake route.

[0024] Additionally, the lymphatic route of administration can aid delivery of fibrates directly to its target cells, thereby increasing its bioavailability and decreasing its clearance rate. For example, fibrate loaded chylomicrons transported into the lymphatic system would drain into the thoracic artery and circulate throughout the body via the arterial system until reaching a capillary bed where the fibrate loaded chylomicrons extracavates into the surrounding tissue to be taken up by target cell. Fibrate loaded chylomicrons not taken up by target cells and cleared from the extracellular environment by interstitial fluid where they are taken up by lacteals, transported by the lymphatic system, and drained into the thoracic artery where the fibrate loaded chylomicrons would once again be systemically recirculated throughout the body. Such lymphatic-based administration results in more fibrate being delivered to the various systems, organs, and tissues due to the avoidance of the hepatic portal system discussed above. Additionally, since more fibrate enters the general circulatory system, its elimination, i.e., metabolism and excretion, is prolonged, thereby decreasing the clearance rate of this compound which effectively increases its half-life.

[0025] Another advantage of the disclosed pharmaceutical compositions is the use of chylomicrons to selectively biodistribute the one or more fibrates contained therein to immune cells such as, *e.g.*, macrophages and dendritic cells. For example, there are several processes whereby macrophages can take up chylomicrons. First, macrophages circulating in the lymph and blood secrete lipoprotein lipase and chylomicrons are substrates for this enzymatic activity resulting in the uptake of chylomicron proteins and lipids, and by extension any fibrates contained within the chylomicrons. Additionally, the exogenous lipoprotein metabolism pathway through a series of processing events converts chylomicrons to LDL particles which become oxidized by ROS to create oxidized LDL particles. FAT/CD36 scavenger receptor located on membrane of macrophages bind to and endocytose these oxidized LDL particles including any fibrates contained therein. Ultimately, these fibrate-loaded macrophages will be directed to cells undergoing pathologic distress where the fibrates can be delivered to these distressed cells.

[0026] Additionally, when processed in the small intestine into micelles, components of the disclosed pharmaceutical compositions are believed to mimic pathogen-associated molecular patterns (PAMPs). Absorption of these micelles by gut-associated lymphoid tissue (GALT) of the small intestine result in the subsequent the subsequent uptake by immune cells like macrophages and dendritic cells by a pattern recognition receptor-mediated process. It is also suspected that since these micelles share structural similarities to chylomicrons, these micelles can also be taken up via the macrophage lipoprotein lipase process discussed above.

[0027] The disclosed pharmaceutical compositions are also advantageous because the components used for its formulation mimic the signals that trigger bile and pancreatic lipoprotein lipase secretion, enhance the rate of micellular formation, and increase the enterocyte absorption rate of micelle above that achieved

with the use of the digestion enhancers in the formulation alone. Such characteristics increase the speed and amount of fibrate entering the lymphatic system and thus its bioavailability.

[0028] Besides the preferential uptake into the lymphatic system and selective biodistribution to immune cells, the disclosed pharmaceutical compositions have several additional advantages. For example, fibrates are poorly water soluble or hydrophobic therapeutic compounds that heretofore have proven difficult to formulate in a therapeutically effective manner due to, *e.g.*, their insolubility or instability in solution resulting in precipitation. Additionally, it has surprisingly be found that significantly higher concentrations of fibrates can be formulated in a pharmaceutical composition disclosed herein relative to currently known formulations. In addition, a disclosed pharmaceutical composition comprising one or more fibrates dramatically increase the dissolution rate and bioavailability of these compounds.

[0029] Yet another advantage of the disclosed pharmaceutical compositions is enhanced specificity for the cellular targets of the one or more fibrates. Chylomicrons comprise membrane-bound proteins which function as ligands which associate with their cognate receptors located on the membrane surface of cells. One such ligand of these large lipoprotein particles are proteins that interact with lipid transport proteins. As fibrate-loaded chylomicrons are shed for absorption, cells that express high levels of lipid transport proteins on the cellular membrane preferentially bind and internalize these lipoprotein particles. For example, the brain has high levels of lipid transport proteins on the cellular membrane allowing passage across the blood brain barrier, and other epithelial tissue such as the choroid plexus. This mechanism thereby increases the efficacy of these compounds. Other cells that express high levels of lipid transport proteins on the cellular membrane include, immune, heart, adipose, hepatic, and cancer cells. Heart cells express high levels of lipid transport proteins on their surface and we may therefore anticipate an increased cardiotoxicity for therapeutic compounds delivered through the lymphatic pathway. However, cardiotoxicity of therapeutic compounds is commonly caused through a high C_{max} concentrations of free compound, resulting in GPCR or ion channel related pathologies. Surprisingly therefore lipid delivery of therapeutic compounds can result in lower-than-expected cardiotoxicity as these targets are protected from high concentrations of free compounds, as they are only slowly released from the chylomicron phase. Thus, the use of a pharmaceutical composition disclosed herein can also be associated with reduce cardiac side effects and diminished toxicity. In addition, upon ingestion, therapeutic compounds remain embedded in the oily/fatty excipients, limiting opportunity for the compounds to become solubilized in the aqueous gut contents, thereby avoiding contact toxicities such as gastric erosion and other localized damage or harm. As well as avoiding first pass metabolism and local toxicities, the enhanced uptake through the lymphatic pathway also minimizes the contact and availability of free therapeutic compound further down the alimentary canal. In this way interaction and disruption of the gut microbiome can be minimized. This is a particular benefit in using the technology with antimicrobial agents. Furthermore, due to the anatomy of the lymphatic system, the lungs can be effectively targeted with appropriate medications. For example, anti-inflammatory, antifibrotic, antimicrobial and bronchodilatory medications can be considered ling targeting through lymphatic delivery, using this technology.

[0030] Furthermore, the disclosed pharmaceutical compositions are unlike current surfactant-based formulations, such as, *e.g.*, macroemulsion, microemulsion, self-emulsifying drug delivery systems (SEDDS), self-microemulsifying drug delivery systems (SMEDDS), self-nanoemulsifying drug delivery systems (SNEDDS), solid-lipid nanoparticle (SLN), liposomes and lipoplexes. The disclosed pharmaceutical compositions are not emulsions or self-emulsifying compositions, and as such avoid the side-effects associated with these formulations like destabilizing the membranes lining in the stomach causing irritation. Additionally, the disclosed pharmaceutical compositions avoid the manufacturing issues associated with current surfactant-based formulations, such as, *e.g.*, formulation handling issues and no predictive *in vitro* testing. The disclosed pharmaceutical compositions also avoid the problems associated with current surfactant-based formulations include, *e.g.*, *in vivo* drug precipitation, limited lymphatic uptake, and lack of and oxidation of unsaturated fatty acids. Surprisingly, by mimicking the microenvironment of a mixed micelle, the disclosed pharmaceutical compositions completely bypass the dissolution phase of drug uptake resulting in significantly greater bioavailability of one or more fibrates contained therein. Unlike the self-emulsifying systems above the formulations disclosed herein are designed to avoid the formation of stable emulsions and when added to water, do not undergo spontaneous emulsification (exhibit the Ouzo Effect). Rather, when added to water these materials are clearly immiscible.

Pharmaceutical Composition

[0031] Aspects of the present specification disclose, in part, a composition. A composition disclosed herein is generally administered as a pharmaceutical acceptable composition. As used herein, the term "pharmaceutically acceptable" refers any molecular entity or composition refers any molecular entity or composition useful in preparing a pharmaceutical composition that is generally safe, non-toxic, and neither biologically nor otherwise undesirable and includes that which is acceptable for veterinary use as well as human pharmaceutical use. As used herein, the term “pharmaceutically acceptable composition” is synonymous with “pharmaceutical composition” and means the combination of one or more therapeutic compounds disclosed herein that are combined with one or more glycerolipids, one or more digestion enhances, and other components disclosed herein to form the product that is administered to an individual. A pharmaceutical composition disclosed herein is useful for medical and veterinary applications. A pharmaceutical composition may be administered to an individual alone, or in combination with other supplementary active ingredients, agents, drugs or hormones.

[0032] The present specification discloses pharmaceutical compositions useful to formulate a wide variety of therapeutic compounds. In some embodiments, a pharmaceutical composition disclosed herein comprises a) one or more therapeutic compounds, b) one or more glycerolipids, and c) one or more digestion enhancers. In some embodiments, a pharmaceutical composition disclosed herein comprises a) one or more therapeutic compounds, b) one or more glycerolipids, c) one or more bile acids and/or one or more bile salts, one or more phospholipids, one or more free C_{14-24} fatty acid surfactants, or any combination thereof. In some embodiments, a pharmaceutical composition disclosed herein comprises a) one or more therapeutic compounds, b) one or more glycerolipids, c) one or more bile acids and/or one or more bile salts; and d) one or more phospholipids. In some embodiments, a pharmaceutical composition disclosed

herein comprises a) one or more therapeutic compounds, b) one or more glycerolipids, c) one or more bile acids and/or one or more bile salts; d) one or more phospholipids; and e) one or more free C_{14-24} fatty acid surfactants. In all the above embodiments, one or more therapeutic compounds disclosed herein can comprise one or more hydrophilic therapeutic compounds, one or more poorly water soluble or hydrophobic therapeutic compounds, or any combination thereof.

[0033] In some embodiments, a pharmaceutical composition disclosed herein comprises a) one or more therapeutic compounds, b) one or more triglycerides, one or more partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, or a combination of one or more triglycerides and one or more partially hydrolyzed glycerolipids, and c) one or more digestion enhancers. In some embodiments, a pharmaceutical composition disclosed herein comprises a) one or more therapeutic compounds, b) one or more triglycerides, one or more partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, or a combination of one or more triglycerides and one or more partially hydrolyzed glycerolipids, c) one or more bile acids and/or one or more bile salts, one or more phospholipids, one or more free C_{14-24} fatty acid surfactants, or any combination thereof. In some embodiments, a pharmaceutical composition disclosed herein comprises a) one or more therapeutic compounds, b) one or more triglycerides, one or more partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, or a combination of one or more triglycerides and one or more partially hydrolyzed glycerolipids, c) one or more bile acids and/or one or more bile salts; and d) one or more phospholipids. In some embodiments, a pharmaceutical composition disclosed herein comprises a) one or more therapeutic compounds, b) one or more triglycerides, one or more partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, or a combination of one or more triglycerides and one or more partially hydrolyzed glycerolipids, c) one or more bile acids and/or one or more bile salts; d) one or more phospholipids; and e) one or more free C_{14-24} fatty acid surfactants. In all the above embodiments, one or more therapeutic compounds disclosed herein can comprise one or more hydrophilic therapeutic compounds, one or more poorly water soluble or hydrophobic therapeutic compounds, or any combination thereof.

[0034] In some embodiments, a pharmaceutical composition disclosed herein comprises a) one or more therapeutic compounds, b) one or more triglycerides, one or more monoglycerides, or a combination of one or more triglycerides and one or more monoglycerides, and c) one or more digestion enhancers. In some embodiments, a pharmaceutical composition disclosed herein comprises a) one or more therapeutic compounds, b) one or more triglycerides, one or more monoglycerides, or a combination of one or more triglycerides and one or more monoglycerides, c) one or more bile acids and/or one or more bile salts, one or more phospholipids, one or more free C_{14-24} fatty acid surfactants, or any combination thereof. In some embodiments, a pharmaceutical composition disclosed herein comprises a) one or more therapeutic compounds, b) one or more triglycerides, one or more monoglycerides, or a combination of one or more triglycerides and one or more monoglycerides, c) one or more bile acids and/or one or more bile salts; and d) one or more phospholipids. In some embodiments, a pharmaceutical composition disclosed herein comprises a) one or more therapeutic compounds, b) one or more triglycerides, one or more monoglycerides, or a combination of one or more triglycerides and one or more monoglycerides, c) one or

more bile acids and/or one or more bile salts; d) one or more phospholipids; and e) one or more free C_{14-24} fatty acid surfactants. In all the above embodiments, one or more therapeutic compounds disclosed herein can comprise one or more hydrophilic therapeutic compounds, one or more poorly water soluble or hydrophobic therapeutic compounds, or any combination thereof.

[0035] A pharmaceutical composition disclosed herein is formulated as an anhydrous solid, a solid dispersion, or a molecular dispersion. As such, the formulations of the disclosed pharmaceutical compositions lack any water. In addition, as discussed above, the disclosed pharmaceutical compositions are not emulsions or self-emulsifying compositions. As such, a pharmaceutical composition disclosed herein will maintain its hydrophobilc lipid characteristics when in an aqueous environment, behaving just like fats and oils and requiring the lipid digestive process to be broken down for absorption. Only when exposed to pancreatic juices from the small intestine will emulsification occur. One reason is that the one or more glycerolipids and the one or more digestion enhancers used are not sufficiently amphiphilic to initiate emulsification and require the action of bile secreted by the gall bladder during the digestion process in order for these components to contribute to the formation of micellar structures. Another reason is that the bile acid, fatty acid surfactants, phospholipids, and any other digestion enhancer are all individually and in combination below the critical micellar concentration necessary for emulsification to occur.

Therapeutic Compound

[0036] Aspects of the present specification disclose, in part, a therapeutic compound. A therapeutic compound is a compound that provides pharmacological activity or other direct effect in the diagnosis, cure, mitigation, treatment, or prevention of disease, or to affect the structure or any function of the body of man or animals. A therapeutic compound includes both a small molecule therapeutic compound that is synthesized and a synthetic peptide, a biologic therapeutic compound manufactured in, extracted from, or semi synthesized from biological sources including vaccines, whole blood, blood components, allergenics, somatic cells, gene therapies, tissues, recombinant therapeutic protein, and living medicines used in cell therapy.

[0037] Non-limiting examples of a therapeutic compound include, a pharmaceutical active agent or ingredient, a diagnostic agent or ingredient, a cosmeceutical active agent or ingredient, and a nutraceutical active agent or ingredient. A therapeutic compound disclosed herein may be used in the form of a pharmaceutically acceptable salt, solvate, or solvate of a salt, e.g. the hydrochloride. Additionally, therapeutic compound disclosed herein may be provided as racemates, or as individual enantiomers, including the R- or S-enantiomer. Thus, the therapeutic compound disclosed herein may comprise a R-enantiomer only, a S-enantiomer only, or a combination of both a R-enantiomer and a S-enantiomer of a therapeutic compound. A therapeutic compound disclosed herein can be a hydrophilic therapeutic compound or a hydrophobic therapeutic compound.

[0038] A pharmaceutical composition disclosed herein may comprises one or more therapeutic compounds based on Biopharmaceutics Classification System (BCS) Class I-IV drugs. The BCS is a

scientific framework for classifying drug substances based on based on its minimum aqueous solubility in the pH range of 1 to 7.5, dose and human fraction absorbed or intestinal membrane permeability, see U.S. Department of Health and Human Services Food and Drug Administration Center for Evaluation and Research (CDER), *Waiver of in vivo Bioavailability and Bioequivalence Studies for Immediate-Release Solid Oral Dosage Forms Based on a Biopharmaceutics Classification System, Guidance for Industry* (2017), which is hereby incorporated by reference in its entirety. When combined with the dissolution of the drug product, the BCS takes into account three major factors that govern the rate and extent of drug absorption from IR solid oral dosage forms: (1) dissolution, (2) solubility, and (3) intestinal permeability. This system categorizes drugs into four classes according to their permeability and solubility. BCS Class I drugs are therapeutic compounds that have high solubility and high permeable and are generally absorbed completely. BCS Class II drugs are therapeutic compounds that have low solubility and high permeable and would be absorbed completely, if in solution. BCS Class III drugs are therapeutic compounds that have high solubility and low permeable and have difficulty being absorbed completely, even though the agent is in solution (high dissolution rate). BCS Class IV drugs are therapeutic compounds that have low solubility and low permeable and are difficult to get in solution and once in solution are difficult to get absorbed. Subclassification shave also been proposed based on whether a therapeutic compound from BCS Class I or III is an acid, a base or neutral, see Tsume, et al., *The Biopharmaceutics Classification System: Subclasses for in vivo predictive dissolution (IPD) methodology and IVIVC*, Eur. J. Pharm. Sci. 57: 152-163 (2014), which is hereby incorporated by reference in its entirety.

[0039] In some embodiments, a pharmaceutical composition disclosed herein may comprises one or more BCS Class I therapeutic compounds, BCS Class II therapeutic compounds, BCS Class III therapeutic compounds, BCS Class IV therapeutic compounds, or any combination thereof. In aspects of these embodiments, a pharmaceutical composition disclosed herein may comprises one or more BCS Class I therapeutic compounds. In aspects of these embodiments, a pharmaceutical composition disclosed herein may comprises one or more BCS Class II therapeutic compounds. In aspects of these embodiments, a pharmaceutical composition disclosed herein may comprises one or more BCS Class III therapeutic compounds. In aspects of these embodiments, a pharmaceutical composition disclosed herein may comprises one or more BCS Class IV therapeutic compounds.

[0040] A pharmaceutical composition disclosed herein may comprises one or more hydrophilic therapeutic compounds. A hydrophilic therapeutic compound disclosed herein includes amphipathic therapeutic compound, and are water soluble compounds with appreciable or substantial water solubility. In some embodiments, a hydrophilic therapeutic compound disclosed herein has an intrinsic water solubility (i.e., water solubility of the unionized form) of, *e.g.*, at least 0.1 % by weight, at least 0.5 % by weight, at least 1 % by weight or, and more typically at least 10% by weight.

[0041] A pharmaceutical composition disclosed herein may comprises one or more hydrophobic therapeutic compounds. A hydrophobic therapeutic compound disclosed herein includes lipophilic therapeutic compounds, and are poorly water-soluble compounds having little or no water solubility. In some embodiments, a poorly water soluble or hydrophobic therapeutic compound disclosed herein has an

intrinsic water solubility(i.e., water solubility of the unionized form) of, *e.g.*, at most 1 % by weight, at most 0.5% by weight, at most 0.1 % by weight, and more typically at most 0.01 % by weight.

[0042] In some embodiments, a therapeutic compound disclosed herein is a therapeutic compound comprising an organic acid functional group, such as, *e.g.*, a carboxylic acid functional group or sulfonic acid functional group. Examples of a disclosed therapeutic compound comprising an organic acid functional group include a free acid form of a therapeutic compound (*i.e.*, a therapeutic compound having a free organic acid) and a salt form of a therapeutic compound (*i.e.*, a therapeutic compound having an organic acid salt). An organic acid salt form of a therapeutic compound includes any therapeutic compound associated with an alkali metal, such as, *e.g.*, lithium (Li), sodium (Na), potassium (K), rubidium (Rb), cesium (Cs), and francium (Fr), or alkaline earth metal, such as, *e.g.*, beryllium (Be), magnesium (Mg), calcium (Ca), strontium (Sr), barium (Ba), and radium (Ra).

[0043] In some embodiments, a therapeutic compound disclosed herein is a therapeutic compound comprising an organic base functional group, such as, *e.g.* an amine functional group. Examples of a disclosed therapeutic compound comprising an organic base functional group include a therapeutic compound containing an organic base functional group capable of donating ions. In some embodiments, a therapeutic compound containing an organic base functional group capable of donating ions is a therapeutic compound containing an amine functional group capable of donating ions including, without limitation, a primary amine, a secondary amine, a tertiary amine, amide, amidine, amido, amino, imidate, imide, imine, imino, iminohydroxyl, and a quaternary salt.

[0044] Non-limiting examples of a therapeutic compound include those classified by the United States Pharmacopea (USP) including analgesics (including opioids and non-opioids), anesthetics, antibacterials (including antibiotics), anticonvulsants, antidementia agents, antidepressants, antidotes and antitoxins, antiemetics, antifungals, anti-inflammatory agents (including corticosteroids, disease-modifying antirheumatic drugs (DMARDs), and nonsteroidal anti-inflammatory drugs (NSAIDs)), antimigraine agents, antimyasthenic agents, antimycobacterials, antineoplastics, antiparasitics, antiparkinson agents, antipsychotics, antivirals (including HIV antiretrovirals and direct-acting hepatitis C drugs), anxiolytic (anti-anxiety) agents, bipolar agents, blood glucose regulators (including insulin and other diabetes medications), blood products (including anticoagulants), cardiovascular agents (including beta-blockers. ACE inhibitors, and lipid management drugs such as statins and PPAR agonists), central nervous system agents (including amphetamines), dental and oral agents, dermatological (skin) agents, enzyme replacement agent, gastrointestinal agents (including H2 blockers and proton pump inhibitors), genitourinary (genital and urinary tract) agents, hormonal agents (adrenal, pituitary, prostaglandins, sex hormones, including estrogen, testosterone, and anabolic steroids, and thyroid), hormone suppressant (adrenal, parathyroid, pituitary, sex hormones, and thyroid), immunological agents, inflammatory bowel disease agents, metabolic bone disease agents, nootropic agents, ophthalmic agents, otic agents, respiratory tract agents (including antihistamines and bronchodilators), sedatives and hypnotics, skeletal muscle relaxants, and therapeutic nutrients, minerals, and electrolytes.

[0045] Non-limiting examples of a therapeutic compound include those classified as 5-alpha-reductase inhibitors, 5-aminosalicylates, 5HT3 receptor antagonists, adamantane, adrenal cortical steroids, adrenal corticosteroid inhibitors, agents for hypertensive emergencies, agents for pulmonary hypertension, aldosterone receptor antagonists, alkylating agents, allergenics, alpha-glucosidase inhibitors, alternative medicines, amebicides, aminoglycosides, aminopenicillins, aminosalicylates, amphetamines, AMPA receptor antagonists, amylin analogs, analgesics, androgens, anabolic steroids, Angiotensin Converting Enzyme (ACE) inhibitors, angiotensin II inhibitors, angiotensin receptor blockers, anorexiants, antacids, antiadrenergic agents, antiandrogens, antianginal agents, antiarrhythmic agents, antiasthmatic agents, antianxiety agents, antibiotics, anticholinergic agents, anticoagulants, anticoagulant reversal agents, anticonvulsants, antidepressants, antidiabetic agents, antidiarrheals, antidotes, antiemetic agents, antifungals, antigonadotropic agents, antigout agents, antihelmintic agents, antihistamines, antihyperlipidemic agents, antihypertensive agents, antihyperuricemic agents, antiinfective agents, antimalarial agents, antimanic agents, antimetabolites, antimigraine agents, antineoplastic agents, antineoplastic detoxifying agents, antineoplastic interferons, antiparkinson agents, antiplatelet agents, antipseudomonal penicillins, antipsoriatics, antipsychotics, antirheumatics, antirosacea agents, antiseptic and germicides, antispasmodics, antithyroid agents, antitoxins and antivenins, antituberculosis agents, antitussive agents, antivertigo agents, antiviral agents, antiviral boosters, anxiolytics, sedatives, and hypnotics, aromatase inhibitors, astringents, atypical antipsychotics, azole, barbiturates, BCR-ABL tyrosine kinase inhibitors, benzodiazepines, beta blockers, beta-adrenergic blocking agents, beta-lactamase inhibitors, bile acid sequestrants, bisphosphonates, bone morphogenetic proteins, bone resorption inhibitors, bronchodilator combinations, bronchodilators, BTK inhibitors, calcimimetics, calcineurin inhibitors, calcitonin, calcium channel blocking agents, carbapenems, carbonic anhydrase inhibitors, cardiac stressing agents, cardioselective beta blockers, cardiovascular agents, catecholamines, CDK 4/6 inhibitors, central nervous system agents, cephalosporins, cerumenolytics, CFTR potentiators, CGRP inhibitors, chelating agents, chemokine receptor antagonist, chloride channel activators, cholesterol absorption inhibitors, cholinergic agonists, cholinergic muscle stimulants, cholinesterase inhibitors, chronotropic agents, CNS stimulants, coagulation modifiers, colony stimulating factors, corticosteroids, corticotropin, coumarins and indandiones, cox-2 inhibitors, decongestants, diarylquinolines, dibenzazepine, diagnostic dyes, dipeptidyl peptidase 4 inhibitors, disease-modifying antirheumatic drugs (DMARDs), diuretics, echinocandins, EGFR inhibitors, erythropoiesis agents, estrogen receptor antagonists, estrogens, expectorants, factor Xa inhibitors, fibric acid derivatives, first generation cephalosporins, fourth generation cephalosporins, functional bowel disorder agents, gallstone solubilizing agents, gamma-aminobutyric acid analogs, gamma-aminobutyric acid reuptake inhibitors. gastrointestinal agents, genitourinary tract agents, GI stimulants, glucocorticoids, glucose elevating agents, glycoprotein platelet inhibitors, glycylcyclines, gonadotropin releasing hormones, gonadotropin-releasing hormone antagonists, gonadotropins, group I antiarrhythmics, group II antiarrhythmics, group III antiarrhythmics, group IV antiarrhythmics, group V antiarrhythmics, growth hormone receptor blockers, growth hormones, guanylate cyclase-C agonists, H. pylori eradication agents, H2 antagonists, hedgehog pathway inhibitors, hematopoietic stem cell mobilizer, heparin antagonists, heparins, HER2 inhibitors, herbal products, histone deacetylase inhibitors, hormones, hydantoin, hydrazide derivatives, immunologic agents, immunostimulants, immunosuppressive agents, impotence agents, incretin mimetics, inotropic agents, insulin, insulin-like growth factors, integrase strand

transfer inhibitor, interferons, interleukin inhibitors, interleukins, intravenous nutritional products, investigational drugs, iodinated contrast media, iron products, ketolides, leprostatics, leukotriene modifiers, lincomycin derivatives, local injectable anesthetics, lymphatic staining agents, macrolide derivatives, macrolides, magnetic resonance imaging contrast media, malignancy photosensitizers, mast cell stabilizers, meglitinides, melanocortin receptor agonists, metabolic agents, methylxanthines, mineralocorticoids, minerals and electrolytes, mitotic inhibitors, monoamine oxidase inhibitors, mTOR inhibitors, mucolytics, multikinase inhibitors, muscle relaxants, mydriatics, neprilysin inhibitors, neuraminidase inhibitors, neuromuscular blocking agents, neuronal potassium channel openers, NHE3 inhibitors, nicotinic acid derivatives, NK1 receptor antagonists, non-opioids, NNRTIs, non-cardioselective beta blockers, non-sulfonylureas, nonsteroidal anti-inflammatory drugs, nootropic agents, NS5A inhibitors, nucleoside reverse transcriptase inhibitors (NRTIs), nutraceutical products, nutritional products, ophthalmic agents, opioids, otic agents, oxazolidinedione, parathyroid hormone and analogs, PARP inhibitors, PCSK9 inhibitors, penicillins, peripheral opioid receptor antagonists, peripheral opioid receptor mixed agonists/antagonists, peripheral vasodilators, peripherally acting antiobesity agents, phenothiazine, phenylpiperazine, phosphate binders, PI3K inhibitors, plasma expanders, platelet aggregation inhibitors, platelet-stimulating agents, polyenes, probiotics, progesterone receptor modulators, progestins, prolactin inhibitors, prostaglandin D2 antagonists, protease inhibitors, protease-activated receptor-1 antagonists, proteasome inhibitors, proton pump inhibitors, PPAR agonists, psoralens, psychotherapeutic agents, purine nucleosides, pyrrolidine, quinolones, radiocontrast agents, radiologic adjuncts, radiologic agents, radiologic conjugating agents, radiopharmaceuticals, renal replacement solutions, renin inhibitors, respiratory agents, rifamycin derivatives, salicylates, sclerosing agents, second generation cephalosporins, selective estrogen receptor modulators, selective immunosuppressants, selective phosphodiesterase-4 inhibitors, selective serotonin reuptake inhibitors, serotonin-norepinephrine reuptake inhibitors, serotoninergic neuroenteric modulators, sex hormones, SGLT-2 inhibitors, skeletal muscle relaxants, smoking cessation agents, somatostatin and somatostatin analogs, spermicides, statins, streptogramins, streptomyces derivatives, succinimide, sulfonamides, sulfonylureas, sympathomimetic amines, synthetic ovulation stimulants, tetracyclines, therapeutic radiopharmaceuticals, thiazide, thiazolidinediones, thioxanthenes, third generation cephalosporins, thrombin inhibitors, thrombolytics, thyroid drugs, TNFα inhibitors, tocolytic agents, transthyretin stabilizers, triazines, urea cycle disorder agents, urinary pH modifiers, uterotonic agents, vasodilators, vasopressin antagonists, vasopressors, VEGF/VEGFR inhibitors, viscosupplementation agents, vitamin, and VMAT2 inhibitors.

[0046] A therapeutic compound disclosed herein may be a protein kinase inhibitor. A protein kinase inhibitor is a type of enzyme inhibitor that blocks the action of one or more protein kinases. Protein kinases are ubiquitous intracellular and cell surface proteins that play critical roles in cell signaling pathways involved in metabolism, injury responses, adaption, growth, and differentiation. They act by adding a phosphate group to a protein (phosphorylation), usually on a specific amino acid which often makes the protein or enzyme "active". The human genome has more than 500 protein kinases and they can be classified as tyrosine, serine-threonine or nonspecific (both), based upon their amino acid specificity.

[0047] A tyrosine kinase inhibitor can be divided into two main families, receptor tyrosine kinase (RTK) inhibitors and non-receptor or cytoplasmic tyrosine kinase (nRTK) inhibitors. Nonlimiting examples of RTK

inhibitors include RTK class I inhibitors (EGF receptor family) (ErbB family), RTK class II inhibitors (Insulin receptor family), RTK class III inhibitors (PDGF receptor family), RTK class IV inhibitors (VEGF receptors family), RTK class V inhibitors (FGF receptor family), RTK class VI inhibitors (CCK receptor family), RTK class VII inhibitors (NGF receptor family), RTK class VIII inhibitors (HGF receptor family), RTK class IX inhibitors (Eph receptor family), RTK class X inhibitors (AXL receptor family), RTK class XI inhibitors (TIE receptor family), RTK class XII inhibitors (RYK receptor family), RTK class XIII inhibitors (DDR receptor family), RTK class XIV inhibitors (RET receptor family), RTK class XV inhibitors (ROS receptor family), RTK class XVI inhibitors (LTK receptor family), RTK class XVII inhibitors (ROR receptor family), RTK class XVIII inhibitors (MuSK receptor family), RTK class XIX inhibitors (LMR receptor), and RTK class XX inhibitors (Undetermined). Nonlimiting examples of nRTK inhibitors include ABL nRTK inhibitors, ACK nRTK inhibitors, CSK nRTK inhibitors, FAK nRTK inhibitors, FES nRTK inhibitors, FRK nRTK inhibitors, JAK nRTK inhibitors, SRC nRTK inhibitors, SYK nRTK inhibitors, and TEC nRTK inhibitors.

[0048] A serine-threonine kinase (STK) inhibitor can be divided into two main families, receptor protein serine/threonine kinase (RSTK) inhibitors and non-receptor or cytoplasmic serine/threonine kinase (nRSTK) inhibitors. Nonlimiting examples of receptor protein serine/threonine kinase inhibitors include Polo kinase (PLK) inhibitors, Cyclin-dependent kinase (CDK) inhibitors, (RNA-polymerase)-subunit kinase (RPS6K) inhibitors, Mitogen-activated protein kinase (MAPK) inhibitors, MAPK kinase (MAPKK) inhibitors, MAPK kinase kinase (MAPKKK or MAP3K) inhibitors, Tau-protein kinase (TPK) inhibitors, non-specific serine/threonine protein kinase inhibitors, Pyruvate dehydrogenase kinase (PDK) inhibitors, Dephospho-(reductase kinase) kinase inhibitors, 3-methyl-2-oxobutanoate dehydrogenase (acetyl-transferring) kinase inhibitors, (isocitrate dehydrogenase (NADP+)) kinase inhibitors, (tyrosine 3-monooxygenase) kinase inhibitors, myosin-heavy-chain kinase inhibitors, Fas-activated serine/threonine kinase inhibitors, Goodpasture-antigen-binding protein kinase inhibitors, IκB kinase inhibitors, cAMP-dependent protein kinase (or Protein kinase A, PKA) inhibitors, cGMP-dependent protein kinase (or Protein kinase G, PKG) inhibitors, Protein kinase B (PKB) inhibitors, Protein kinase C (PKC) inhibitors, Rhodopsin kinase inhibitors, Beta adrenergic receptor kinase inhibitors, G-protein coupled receptor kinase inhibitors, Ca^{2+}/calmodulin-dependent (CaM) kinase (CAMK) inhibitors, Myosin light-chain kinase inhibitors, Phosphorylase kinase inhibitors, and Elongation factor 2 kinase inhibitors. Two exemplary RSTK inhibitors are a Rho-associated protein kinase (ROCK) kinase inhibitor including ROCK 1 inhibitors and ROCK 2 inhibitors, and MAPK kinase inhibitors including MAPK1 inhibitors, MAPK3 inhibitors, MAPK4 inhibitors, MAPK6 inhibitors, MAPK7 inhibitors, MAPK8 inhibitors, MAPK9 inhibitors, MAPK10 inhibitors, MAPK11 inhibitors, MAPK12 inhibitors, MAPK13 inhibitors, MAPK14 inhibitors, and MAPK15 inhibitors.

[0049] A therapeutic compound disclosed herein may be a poly ADP ribose polymerase (PARP) inhibitor. PARP inhibitors are a group of pharmacological inhibitors of the enzyme poly ADP ribose polymerase (PARP). PARP inhibitors are used to treat cancer and are considered a potential treatment for acute life-threatening diseases, such as stroke and myocardial infarction, as well as for long-term neurodegenerative diseases. In some embodiments, a PARP inhibitor is a PARP 1 inhibitor or a PARP 2 inhibitor. Non-limiting examples of PARP inhibitors are iniparib, olaparib, niraparib, rucaparib, talazoparib, and veliparib.

[0050] In one embodiment, a pharmaceutical composition disclosed herein comprises one or more therapeutic compounds in an amount of, *e.g.*, about 0.05%, about 0.1%, about 1%, about 2.5%, about 5%, about 7.5%, about 10%, about 12.5%, about 15%, about 17.5%, about 20%, about 22.5%, about 25%, about 30%, about 35%, about 40%, about 45%, or about 50% by weight. In one embodiment, a pharmaceutical composition disclosed herein comprises one or more therapeutic compounds in an amount of, *e.g.*, at least 0.05%, at least 0.1%, at least 1%, at least 2.5%, at least 5%, at least 7.5%, at least 10%, at least 12.5%, at least 15%, at least 17.5%, at least 20%, at least 22.5%, at least 25%, at least 30%, at least 35%, at least 40%, at least 45%, or at least 50% by weight. In one embodiment, a pharmaceutical composition disclosed herein comprises one or more therapeutic compounds in an amount of, *e.g.*, at most 0.05%, at most 0.1%, at most 1%, at most 2.5%, at most 5%, at most 7.5%, at most 10%, at most 12.5%, at most 15%, at most 17.5%, at most 20%, at most 22.5%, at most 25%, at most 30%, at most 35%, at most 40%, at most 45%, or at most 50% by weight.

[0051] In one embodiment, a pharmaceutical composition disclosed herein comprises one or more therapeutic compounds disclosed herein in an amount of, *e.g.*, about 0.05% to about 1%, about 0.05% to about 2.5%, about 0.05% to about 5%, about 0.05% to about 7.5%, about 0.05% to about 10%, about 0.05% to about 12.5%, about 0.05% to about 15%, about 0.05% to about 17.5%, about 0.05% to about 20%, about 0.05% to about 22.5%, about 0.05% to about 25%, about 0.05% to about 30%, about 0.05% to about 40%, about 0.05% to about 50%, about 0.1% to about 1%, about 0.1% to about 2.5%, about 0.1% to about 5%, about 0.1% to about 7.5%, about 0.1% to about 10%, about 0.1% to about 12.5%, about 0.1% to about 15%, about 0.1% to about 17.5%, about 0.1% to about 20%, about 0.1% to about 22.5%, about 0.1% to about 25%, about 0.1% to about 30%, about 0.1% to about 40%, about 0.1% to about 50%, about 1% to about 2.5%, about 1% to about 5%, about 1% to about 7.5%, about 1% to about 10%, about 1% to about 12.5%, about 1% to about 15%, about 1% to about 17.5%, about 1% to about 20%, about 1% to about 22.5%, about 1% to about 25%, about 1% to about 30%, about 1% to about 40%, about 1% to about 50%, about 5% to about 10%, about 5% to about 20%, about 5% to about 30%, about 5% to about 40%, about 5% to about 50%, about 5% to about 60%, about 5% to about 70%, about 5% to about 80%, about 5% to about 90%, about 10% to about 20%, about 10% to about 30%, about 10% to about 40%, about 10% to about 50%, about 10% to about 60%, about 10% to about 70%, about 10% to about 80%, about 10% to about 90%, about 20% to about 30%, about 20% to about 40%, about 20% to about 50%, about 20% to about 60%, about 20% to about 70%, about 20% to about 80%, about 20% to about 90%, about 30% to about 40%, about 30% to about 50%, about 30% to about 60%, about 30% to about 70%, about 30% to about 80%, about 30% to about 90%, about 40% to about 50%, about 40% to about 60%, about 40% to about 70%, about 40% to about 80%, about 40% to about 90%, about 50% to about 60%, about 50% to about 70%, about 50% to about 80%, about 50% to about 90%, about 60% to about 70%, about 60% to about 80%, about 60% to about 90%, about 70% to about 80%, about 70% to about 90%, or about 80% to about 90% by weight.

[0052] In one embodiment, a pharmaceutical composition disclosed herein comprises one or more therapeutic compounds in a concentration of, *e.g.*, about 25 mg/mL, about 30 mg/mL, about 35 mg/mL, about 40 mg/mL, about 45 mg/mL, about 50 mg/mL, about 60 mg/mL, about 65 mg/mL, about 70 mg/mL,

about 75 mg/mL, about 100 mg/mL, about 125 mg/mL, about 150 mg/mL, about 175 mg/mL, about 200 mg/mL, about 225 mg/mL, about 250 mg/mL, about 275 mg/mL, about 300 mg/mL, about 325 mg/mL, about 350 mg/mL, about 375 mg/mL, about 400 mg/mL, about 425 mg/mL, about 450 mg/mL, about 475 mg/mL, about 500 mg/mL, about 525 mg/mL, about 550 mg/mL, about 575 mg/mL, or about 600 mg/mL. In one embodiment, a pharmaceutical composition disclosed herein comprises one or more therapeutic compounds in a concentration of, *e.g.*, at least 25 mg/mL, at least 30 mg/mL, at least 35 mg/mL, at least 40 mg/mL, at least 45 mg/mL, at least 50 mg/mL, at least 60 mg/mL, at least 65 mg/mL, at least 70 mg/mL, at least 75 mg/mL, at least 100 mg/mL, at least 125 mg/mL, at least 150 mg/mL, at least 175 mg/mL, at least 200 mg/mL, at least 225 mg/mL, at least 250 mg/mL, at least 275 mg/mL, at least 300 mg/mL, at least 325 mg/mL, at least 350 mg/mL, at least 375 mg/mL, at least 400 mg/mL, at least 425 mg/mL, at least 450 mg/mL, at least 475 mg/mL, at least 500 mg/mL, at least 525 mg/mL, at least 550 mg/mL, at least 575 mg/mL, or at least 600 mg/mL. In one embodiment, a pharmaceutical composition disclosed herein comprises one or more therapeutic compounds in a concentration of, *e.g.*, at most 25 mg/mL, at most 30 mg/mL, at most 35 mg/mL, at most 40 mg/mL, at most 45 mg/mL, at most 50 mg/mL, at most 60 mg/mL, at most 65 mg/mL, at most 70 mg/mL, at most 75 mg/mL, at most 100 mg/mL, at most 125 mg/mL, at most 150 mg/mL, at most 175 mg/mL, at most 200 mg/mL, at most 225 mg/mL, at most 250 mg/mL, at most 275 mg/mL, at most 300 mg/mL, at most 325 mg/mL, at most 350 mg/mL, at most 375 mg/mL, at most 400 mg/mL, at most 425 mg/mL, at most 450 mg/mL, at most 475 mg/mL, at most 500 mg/mL, at most 525 mg/mL, at most 550 mg/mL, at most 575 mg/mL, or at most 600 mg/mL.

[0053] In one embodiment, a pharmaceutical composition disclosed herein comprises one or more therapeutic compounds in a concentration of, *e.g.*, about 25 mg/mL to about 50 mg/mL, about 25 mg/mL to about 75 mg/mL, about 25 mg/mL to about 100 mg/mL, about 25 mg/mL to about 125 mg/mL, about 25 mg/mL to about 150 mg/mL, about 25 mg/mL to about 200 mg/mL, about 25 mg/mL to about 250 mg/mL, about 25 mg/mL to about 300 mg/mL, about 25 mg/mL to about 350 mg/mL, about 25 mg/mL to about 400 mg/mL, about 25 mg/mL to about 450 mg/mL, about 25 mg/mL to about 500 mg/mL, about 25 mg/mL to about 550 mg/mL, about 25 mg/mL to about 600 mg/mL, about 50 mg/mL to about 100 mg/mL, about 50 mg/mL to about 150 mg/mL, about 50 mg/mL to about 200 mg/mL, about 50 mg/mL to about 250 mg/mL, about 50 mg/mL to about 300 mg/mL, about 50 mg/mL to about 350 mg/mL, about 50 mg/mL to about 400 mg/mL, about 50 mg/mL to about 450 mg/mL, about 50 mg/mL to about 500 mg/mL, about 50 mg/mL to about 550 mg/mL, about 50 mg/mL to about 600 mg/mL, about 75 mg/mL to about 100 mg/mL, about 75 mg/mL to about 150 mg/mL, about 75 mg/mL to about 200 mg/mL, about 75 mg/mL to about 250 mg/mL, about 75 mg/mL to about 300 mg/mL, about 75 mg/mL to about 350 mg/mL, about 75 mg/mL to about 400 mg/mL, about 75 mg/mL to about 450 mg/mL, about 75 mg/mL to about 500 mg/mL, about 75 mg/mL to about 550 mg/mL, about 75 mg/mL to about 600 mg/mL, about 100 mg/mL to about 150 mg/mL, about 100 mg/mL to about 200 mg/mL, about 100 mg/mL to about 250 mg/mL, about 100 mg/mL to about 300 mg/mL, about 100 mg/mL to about 350 mg/mL, about 100 mg/mL to about 400 mg/mL, about 100 mg/mL to about 450 mg/mL, about 100 mg/mL to about 500 mg/mL, about 100 mg/mL to about 550 mg/mL, about 100 mg/mL to about 600 mg/mL, about 150 mg/mL to about 200 mg/mL, about 150 mg/mL to about 250 mg/mL, about 150 mg/mL to about 300 mg/mL, about 150 mg/mL to about 350 mg/mL, about 150 mg/mL to about 400 mg/mL, about 150 mg/mL to about 450 mg/mL, about 150 mg/mL to about 500 mg/mL, about 150

mg/mL to about 550 mg/mL, about 150 mg/mL to about 600 mg/mL, about 200 mg/mL to about 250 mg/mL, about 200 mg/mL to about 300 mg/mL, about 200 mg/mL to about 350 mg/mL, about 200 mg/mL to about 400 mg/mL, about 200 mg/mL to about 450 mg/mL, about 200 mg/mL to about 500 mg/mL, about 200 mg/mL to about 550 mg/mL, about 200 mg/mL to about 600 mg/mL, about 250 mg/mL to about 300 mg/mL, about 250 mg/mL to about 350 mg/mL, about 250 mg/mL to about 400 mg/mL, about 250 mg/mL to about 450 mg/mL, about 250 mg/mL to about 500 mg/mL, about 250 mg/mL to about 550 mg/mL, about 250 mg/mL to about 600 mg/mL, about 300 mg/mL to about 350 mg/mL, about 300 mg/mL to about 400 mg/mL, about 300 mg/mL to about 450 mg/mL, about 300 mg/mL to about 500 mg/mL, about 300 mg/mL to about 550 mg/mL, about 300 mg/mL to about 600 mg/mL, about 350 mg/mL to about 400 mg/mL, about 350 mg/mL to about 450 mg/mL, about 350 mg/mL to about 500 mg/mL, about 350 mg/mL to about 550 mg/mL, about 350 mg/mL to about 600 mg/mL, about 400 mg/mL to about 450 mg/mL, about 400 mg/mL to about 500 mg/mL, about 400 mg/mL to about 550 mg/mL, about 400 mg/mL to about 600 mg/mL, about 450 mg/mL to about 500 mg/mL, about 450 mg/mL to about 550 mg/mL, about 450 mg/mL to about 600 mg/mL, about 500 mg/mL to about 550 mg/mL, about 500 mg/mL to about 600 mg/mL, and about 550 mg/mL to about 600 mg/mL.

Glycerolipids

[0054] A pharmaceutical composition disclosed herein may comprises one or more glycerolipids. Glycerolipids are composed mainly of mono-, di-, and tri-substituted glycerols and are hydrophobic molecules having an HLB of less than 4. One group of glycerolipids is the glycerides, where one, two, or all three hydroxyl groups of glycerol are each esterified using a fatty acid to produce monoglycerides, diglycerides, and triglycerides, respectively. In these compounds, each hydroxyl groups of glycerol may be esterified by the same fatty acid or different fatty acids. In some embodiments, a monoglyceride disclosed herein may include a saturated or unsaturated fatty acid having a carbon length of C_{12}-C_{24}. In some embodiments, a diglyceride disclosed herein may include one saturated or unsaturated fatty acid having a carbon length of C_{12}-C_{24}, or two saturated or unsaturated fatty acids each having a carbon length of C_{12}-C_{24}. In some embodiments, a triglyceride disclosed herein may include one saturated or unsaturated fatty acid having a carbon length of C_{12}-C_{24}, two saturated or unsaturated fatty acids each having a carbon length of C_{12}-C_{24}, or three saturated or unsaturated fatty acids each having a carbon length of C_{12}-C_{24}.

[0055] Two types of glycerolipids are used in formulating one or more therapeutic compounds disclosed herein to produce a pharmaceutical composition disclosed herein. One type is hard fats, namely glycerolipids that are solid at 18°C. A disclosed hard fat or glycerolipid that is solid at 18°C has several purposes. During the formulation process of a pharmaceutical composition disclosed herein, a hard fat complexes with a therapeutic compound disclosed herein, stabilizes it in a glycerolipid matrix that prevents the compound from precipitating out. Additionally, during administration of a pharmaceutical composition disclosed herein, a hard fat disclosed herein triggers the lipid digestion process stimulating the release of bile from the gallbladder to enhance the emulsification of the administered pharmaceutical composition. Furthermore, the hard fats present in the pharmaceutical composition serve as substrates for pancreatic lipase which breaks down these hard fats into glycerol and free fatty acids. The presence of these digested

lipid molecules triggers their absorption, along with the associated therapeutic compound, by the enterocytes lining the lumen of the duodenum of the small intestine. Once internalized, the enterocytes subsequent process and distribute the free fatty acid/therapeutic compound mixture into the lymphatic system. A disclosed hard fat or glycerolipid that is solid at 18°C do not have emulsion forming properties since these lipids does not exhibit a critical micelle concentration. As such, another purpose of a disclosed hard fat or glycerolipid that is solid at 18°C is to prevent formulary components that do possess a critical micelle concentration from initiating emulsification by diluting these components to below their critical micelle concentration and providing an anhydrous environment that reduces the necessary interaction of these components to initiate emulsification.

[0056] The other type of glycerolipid used in formulating one or more therapeutic compounds disclosed herein is liquid fats or oils, namely glycerolipids that are liquid at 18°C. The primary purposes of a disclosed liquid fat or glycerolipid that is liquid at 18°C is as a solvent that facilitates dissolvement of a therapeutic compound disclosed herein as well as a stabilizing agent that prevents a disclosed therapeutic compound from precipitating out of the glycerolipid matrix. A disclosed liquid fat or glycerolipid that is liquid at 18°C do not have emulsion forming properties since these lipids does not exhibit a critical micelle concentration. As such, another purpose of a disclosed liquid fat or glycerolipid that is liquid at 18°C is to prevent formulary components that do possess a critical micelle concentration from initiating emulsification by diluting these components to below their critical micelle concentration and providing an anhydrous environment that reduces the necessary interaction of these components to initiate emulsification.

[0057] In some embodiments, a pharmaceutical composition disclosed herein may include one or more glycerolipids in an amount of, *e.g.*, about 20% by weight, about 25% by weight, about 30% by weight, about 35% by weight, about 40% by weight, about 45% by weight, about 50% by weight, about 55% by weight, about 60% by weight, about 65% by weight, about 70% by weight, about 75% by weight, about 80% by weight, about 85% by weight, about 90% by weight, or about 95% by weight. In some embodiments, a pharmaceutical composition disclosed herein may include one or more glycerolipids in an amount of, *e.g.*, at least 20% by weight, at least 25% by weight, at least 30% by weight, at least 35% by weight, at least 40% by weight, at least 45% by weight, at least 50% by weight, at least 55% by weight, at least 60% by weight, at least 65% by weight, at least 70% by weight, at least 75% by weight, at least 80% by weight, at least 85% by weight, at least 90% by weight, or at least 95% by weight. In some embodiments, a pharmaceutical composition disclosed herein may include one or more glycerolipids in an amount of, *e.g.*, at most 20% by weight, at most 25% by weight, at most 30% by weight, at most 35% by weight, at most 40% by weight, at most 45% by weight, at most 50% by weight, at most 55% by weight, at most 60% by weight, at most 65% by weight, at most 70% by weight, at most 75% by weight, at most 80% by weight, at most 85% by weight, at most 90% by weight, at most 95% by weight, or at most 99% by weight.

[0058] In some embodiments, a pharmaceutical composition disclosed herein may include one or more glycerolipids in an amount of, *e.g.*, about 20% to about 30%, about 20% to about 40%, about 20% to about 50%, about 20% to about 55%, about 20% to about 60%, about 20% to about 70%, about 20% to about 80%, about 20% to about 90%, about 25% to about 30%, about 25% to about 40%, about 25% to about

50%, about 25% to about 55%, about 25% to about 60%, about 25% to about 70%, about 25% to about 80%, about 25% to about 90%, about 30% to about 40%, about 30% to about 50%, about 30% to about 55%, about 30% to about 60%, about 30% to about 70%, about 30% to about 80%, about 30% to about 90%, about 40% to about 50%, about 40% to about 55%, about 40% to about 60%, about 40% to about 65%, about 40% to about 70%, about 40% to about 75%, about 40% to about 80%, about 40% to about 85%, about 40% to about 90%, about 40% to about 95%, about 45% to about 55%, about 45% to about 60%, about 45% to about 65%, about 45% to about 70%, about 45% to about 75%, about 45% to about 80%, about 45% to about 85%, about 45% to about 90%, about 45% to about 95%, about 50% to about 55%, about 50% to about 60%, about 50% to about 65%, about 50% to about 70%, about 50% to about 75%, about 50% to about 80%, about 50% to about 85%, about 50% to about 90%, about 50% to about 95%, about 55% to about 60%, about 55% to about 65%, about 55% to about 70%, about 55% to about 75%, about 55% to about 80%, about 55% to about 85%, about 55% to about 90%, about 55% to about 95%, about 60% to about 65%, about 60% to about 70%, about 60% to about 75%, about 60% to about 80%, about 60% to about 85%, about 60% to about 90%, about 60% to about 95%, about 65% to about 70%, about 65% to about 75%, about 65% to about 80%, about 65% to about 85%, about 65% to about 90%, about 65% to about 95%, about 70% to about 75%, about 70% to about 80%, about 70% to about 85%, about 70% to about 90%, about 70% to about 95%, about 75% to about 80%, about 75% to about 85%, about 75% to about 90%, about 75% to about 95%, about 80% to about 85%, about 80% to about 90%, about 80% to about 95%, about 80% to about 99%, about 85% to about 90%, about 85% to about 95%, about 85% to about 99%, about 90% to about 95%, or about 90% to about 99% by weight.

[0059] In some embodiments, pharmaceutical composition disclosed herein may include one or more hard fats or glycerolipids that are solid at 18°C comprising, or consisting essentially of or consisting of a mixture of saturated C_{10}-C_{18} triglycerides, a mixture of saturated C_{10}-C_{20} triglycerides, a mixture of saturated C_{10}-C_{22} triglycerides, a mixture of saturated C_{10}-C_{24} triglycerides, a mixture of saturated C_{12}-C_{18} triglycerides, a mixture of saturated C_{12}-C_{20} triglycerides, a mixture of saturated C_{12}-C_{22} triglycerides, a mixture of saturated C_{12}-C_{24} triglycerides, a mixture of saturated C_{14}-C_{18} triglycerides, a mixture of saturated C_{14}-C_{20} triglycerides, a mixture of saturated C_{14}-C_{22} triglycerides, a mixture of saturated C_{14}-C_{24} triglycerides, a mixture of saturated C_{16}-C_{18} triglycerides, a mixture of saturated C_{16}-C_{20} triglycerides, a mixture of saturated C_{16}-C_{22} triglycerides, a mixture of saturated C_{16}-C_{24} triglycerides, a mixture of saturated C_{18}-C_{20} triglycerides, a mixture of saturated C_{18}-C_{22} triglycerides, a mixture of saturated C_{18}-C_{24} triglycerides, a mixture of saturated C_{20}-C_{22} triglycerides, or a mixture of saturated C_{22}-C_{24} triglycerides.

[0060] In some embodiments, pharmaceutical composition disclosed herein may include one or more hard fats or glycerolipids that are solid at 18°C comprising, or consisting essentially of or consisting of a mixture of unsaturated C_{10}-C_{18} triglycerides, a mixture of unsaturated C_{10}-C_{20} triglycerides, a mixture of unsaturated C_{10}-C_{22} triglycerides, a mixture of unsaturated C_{10}-C_{24} triglycerides, a mixture of unsaturated C_{12}-C_{18} triglycerides, a mixture of unsaturated C_{12}-C_{20} triglycerides, a mixture of unsaturated C_{12}-C_{22} triglycerides, a mixture of unsaturated C_{12}-C_{24} triglycerides, a mixture of unsaturated C_{14}-C_{18} triglycerides, a mixture of unsaturated C_{14}-C_{20} triglycerides, a mixture of unsaturated C_{14}-C_{22} triglycerides, a mixture of unsaturated C_{14}-C_{24} triglycerides, a mixture of unsaturated C_{16}-C_{18} triglycerides, a mixture of unsaturated C_{16}-C_{20}

triglycerides, a mixture of unsaturated C_{16}-C_{22} triglycerides, a mixture of unsaturated C_{16}-C_{24} triglycerides, a mixture of unsaturated C_{18}-C_{20} triglycerides, a mixture of unsaturated C_{18}-C_{22} triglycerides, a mixture of unsaturated C_{18}-C_{24} triglycerides, a mixture of unsaturated C_{20}-C_{22} triglycerides, or a mixture of unsaturated C_{22}-C_{24} triglycerides.

[0061] In some embodiments, pharmaceutical composition disclosed herein may include one or more hard fats or glycerolipids that are solid at 18°C comprising, or consisting essentially of or consisting of a mixture of saturated and unsaturated C_{10}-C_{18} triglycerides, a mixture of saturated and unsaturated C_{10}-C_{20} triglycerides, a mixture of saturated and unsaturated C_{10}-C_{22} triglycerides, a mixture of saturated and unsaturated C_{10}-C_{24} triglycerides, a mixture of saturated and unsaturated C_{12}-C_{18} triglycerides, a mixture of saturated and unsaturated C_{12}-C_{20} triglycerides, a mixture of saturated and unsaturated C_{12}-C_{22} triglycerides, a mixture of saturated and unsaturated C_{12}-C_{24} triglycerides, a mixture of saturated and unsaturated C_{14}-C_{18} triglycerides, a mixture of saturated and unsaturated C_{14}-C_{20} triglycerides, a mixture of saturated and unsaturated C_{14}-C_{22} triglycerides, a mixture of saturated and unsaturated C_{14}-C_{24} triglycerides, a mixture of saturated and unsaturated C_{16}-C_{18} triglycerides, a mixture of saturated and unsaturated C_{16}-C_{20} triglycerides, a mixture of saturated and unsaturated C_{16}-C_{22} triglycerides, a mixture of saturated and unsaturated C_{16}-C_{24} triglycerides, a mixture of saturated and unsaturated C_{18}-C_{20} triglycerides, a mixture of saturated and unsaturated C_{18}-C_{22} triglycerides, a mixture of saturated and unsaturated C_{18}-C_{24} triglycerides, a mixture of saturated and unsaturated C_{20}-C_{22} triglycerides, or a mixture of saturated and unsaturated C_{22}-C_{24} triglycerides.

[0062] In some embodiments, a pharmaceutical composition disclosed herein may include one or more hard fats or glycerolipids that are solid at 18°C comprising, or consisting essentially of or consisting of a mixture of triglycerides having a melting point of, *e.g.*, about 25°C, about 26°C, about 27°C, about 28°C, about 29°C, about 30°C, about 31°C, about 32°C, about 33°C, about 34°C, about 35°C, about 36°C, about 37°C, about 38°C, about 39°C, about 40°C, about 41°C, about 43°C, about 43°C, about 44°C, about 45°C, about 45°C, about 47°C, about 48°C, about 49°C, or about 50°C. In some embodiments, a pharmaceutical composition disclosed herein may include one or more hard fats or glycerolipids that are solid at 18°C comprising, or consisting essentially of or consisting of a mixture of triglycerides having a melting point of, *e.g.*, at least 25°C, at least 26°C, at least 27°C, at least 28°C, at least 29°C, at least 30°C, at least 31°C, at least 32°C, at least 33°C, at least 34°C, at least 35°C, at least 36°C, at least 37°C, at least 38°C, at least 39°C, at least 40°C, at least 41°C, at least 43°C, at least 43°C, at least 44°C, at least 45°C, at least 45°C, at least 47°C, at least 48°C, at least 49°C, or at least 50°C. In some embodiments, a pharmaceutical composition disclosed herein may include one or more hard fats or glycerolipids that are solid at 18°C comprising, or consisting essentially of or consisting of a mixture of triglycerides having a melting point of, *e.g.*, at most 25°C, at most 26°C, at most 27°C, at most 28°C, at most 29°C, at most 30°C, at most 31°C, at most 32°C, at most 33°C, at most 34°C, at most 35°C, at most 36°C, at most 37°C, at most 38°C, at most 39°C, at most 40°C, at most 41°C, at most 43°C, at most 43°C, at most 44°C, at most 45°C, at most 45°C, at most 47°C, at most 48°C, at most 49°C, or at most 50°C.

[0063] In some embodiment, a pharmaceutical composition disclosed herein may include one or more hard fats or glycerolipids that are solid at 18°C comprising, or consisting essentially of or consisting of a mixture of triglycerides having a melting point of, *e.g.*, about 25°C to about 37°C, about 25°C to about 38°C, about 25°C to about 39°C, about 25°C to about 40°C, about 25°C to about 41°C, about 25°C to about 42°C, about 25°C to about 43°C, about 25°C to about 44°C, about 25°C to about 45°C, about 25°C to about 46°C, about 25°C to about 47°C, about 25°C to about 48°C, about 25°C to about 49°C, about 25°C to about 50°C, about 28°C to about 37°C, about 28°C to about 38°C, about 28°C to about 39°C, about 28°C to about 40°C, about 28°C to about 41°C, about 28°C to about 42°C, about 28°C to about 43°C, about 28°C to about 44°C, about 28°C to about 45°C, about 28°C to about 46°C, about 28°C to about 47°C, about 28°C to about 48°C, about 28°C to about 49°C, about 28°C to about 50°C, about 30°C to about 37°C, about 30°C to about 38°C, about 30°C to about 39°C, about 30°C to about 40°C, about 30°C to about 41°C, about 30°C to about 42°C, about 30°C to about 43°C, about 30°C to about 44°C, about 30°C to about 45°C, about 30°C to about 46°C, about 30°C to about 47°C, about 30°C to about 48°C, about 30°C to about 49°C, about 30°C to about 50°C, about 32°C to about 44°C, about 32°C to about 45°C, about 32°C to about 46°C, about 32°C to about 47°C, about 32°C to about 48°C, about 32°C to about 49°C, about 32°C to about 50°C, about 34°C to about 44°C, about 34°C to about 45°C, about 34°C to about 46°C, about 34°C to about 47°C, about 34°C to about 48°C, about 34°C to about 49°C, about 34°C to about 50°C, about 36°C to about 44°C, about 36°C to about 45°C, about 36°C to about 46°C, about 36°C to about 47°C, about 36°C to about 48°C, about 36°C to about 49°C, about 36°C to about 50°C, about 38°C to about 44°C, about 38°C to about 45°C, about 38°C to about 46°C, about 38°C to about 47°C, about 38°C to about 48°C, about 38°C to about 49°C, about 38°C to about 50°C, about 40°C to about 44°C, about 40°C to about 45°C, about 40°C to about 46°C, about 40°C to about 47°C, about 40°C to about 48°C, about 40°C to about 49°C, about 40°C to about 50°C, about 42°C to about 44°C, about 42°C to about 45°C, about 42°C to about 46°C, about 42°C to about 47°C, about 42°C to about 48°C, about 42°C to about 49°C, or about 42°C to about 50°C.

[0064] In some embodiments, a pharmaceutical composition disclosed herein may include one or more hard fats or glycerolipids that are solid at 18°C comprising, or consisting essentially of or consisting of a mixture of triglycerides in an amount of, *e.g.*, about 10% by weight, about 15% by weight, about 20% by weight, about 25% by weight, about 30% by weight, about 35% by weight, about 40% by weight, about 45% by weight, about 50% by weight, about 55% by weight, about 60% by weight, about 65% by weight, about 70% by weight, or about 75% by weight. In some embodiments, a pharmaceutical composition disclosed herein may include one or more hard fats or glycerolipids that are solid at 18°C comprising, or consisting essentially of or consisting of a mixture of triglycerides in an amount of, *e.g.*, at least 10% by weight, at least 15% by weight, at least 20% by weight, at least 25% by weight, at least 30% by weight, at least 35% by weight, at least 40% by weight, at least 45% by weight, at least 50% by weight, at least 55% by weight, at least 60% by weight, at least 65% by weight, at least 70% by weight, or at least 75% by weight. In some embodiments, a pharmaceutical composition disclosed herein may include one or more hard fats or glycerolipids that are solid at 18°C comprising, or consisting essentially of or consisting of a mixture of triglycerides in an amount of, *e.g.*, at most 10% by weight, at most 15% by weight, at most 20% by weight, at most 25% by weight, at most 30% by weight, at most 35% by weight, at most 40% by weight, at most 45% by weight, at most 50% by weight, at most 55% by weight, at most 60% by weight, at most 65% by

weight, at most 70% by weight, at most 75% by weight, at most 80% by weight, at most 85% by weight, at most 90% by weight, at most 95% by weight, or at most 99% by weight.

[0065] In some embodiments, a pharmaceutical composition disclosed herein may include one or more hard fats or glycerolipids that are solid at 18°C comprising, or consisting essentially of or consisting of a mixture of triglycerides in an amount of, *e.g.*, about 10% to about 20%, about 10% to about 25%, about 10% to about 30%, about 10% to about 35%, about 10% to about 40%, about 10% to about 45%, about 10% to about 50%, about 10% to about 55%, about 10% to about 60%, about 10% to about 65%, about 10% to about 70%, about 15% to about 20%, about 15% to about 25%, about 15% to about 30%, about 15% to about 35%, about 15% to about 40%, about 15% to about 45%, about 15% to about 50%, about 15% to about 55%, about 15% to about 60%, about 15% to about 65%, about 15% to about 70%, about 20% to about 25%, about 20% to about 30%, about 20% to about 35%, about 20% to about 40%, about 20% to about 45%, about 20% to about 50%, about 20% to about 55%, about 20% to about 60%, about 20% to about 65%, about 20% to about 70%, about 25% to about 30%, about 25% to about 35%, about 25% to about 40%, about 25% to about 45%, about 25% to about 50%, about 25% to about 55%, about 25% to about 60%, about 25% to about 65%, about 25% to about 70%, about 30% to about 35%, about 30% to about 40%, about 30% to about 45%, about 30% to about 50%, about 30% to about 55%, about 30% to about 60%, about 30% to about 65%, about 30% to about 70%, about 35% to about 40%, about 35% to about 45%, about 35% to about 50%, about 35% to about 55%, about 35% to about 60%, about 35% to about 65%, about 35% to about 70%, about 40% to about 45%, about 40% to about 50%, about 40% to about 55%, about 40% to about 60%, about 40% to about 65%, about 40% to about 70%, about 45% to about 50%, about 45% to about 55%, about 45% to about 60%, about 45% to about 65%, about 45% to about 70%, about 50% to about 55%, about 50% to about 60%, about 50% to about 65%, about 50% to about 70%, about 55% to about 60%, about 55% to about 65%, about 55% to about 70%, about 60% to about 65%, about 60% to about 70%, or about 65% to about 70% by weight.

[0066] In some embodiments, a pharmaceutical composition disclosed herein may include one or more liquid fats or glycerolipids that are liquid at 18°C comprising, or consisting essentially of or consisting of a mixture of mono-, di- and triglycerides. In some embodiments, pharmaceutical composition disclosed herein may include one or more liquid fats or glycerolipids that are liquid at 18°C comprising, or consisting essentially of or consisting of a mixture of unsaturated C_{10}-C_{18} monoglycerides, C_{10}-C_{18} diglycerides, and C_{10}-C_{18} triglycerides, a mixture of unsaturated C_{10}-C_{20} monoglycerides, C_{10}-C_{20} diglycerides, and C_{10}-C_{20} triglycerides, a mixture of unsaturated C_{10}-C_{22} monoglycerides, C_{10}-C_{22} diglycerides, and C_{10}-C_{22} triglycerides, a mixture of unsaturated C_{10}-C_{24} monoglycerides, C_{10}-C_{24} diglycerides, and C_{10}-C_{24} triglycerides, a mixture of unsaturated C_{12}-C_{18} monoglycerides, C_{12}-C_{18} diglycerides, and C_{12}-C_{18} triglycerides, a mixture of unsaturated C_{12}-C_{20} monoglycerides, C_{12}-C_{20} diglycerides, and C_{12}-C_{20} triglycerides, a mixture of unsaturated C_{12}-C_{22} monoglycerides, C_{12}-C_{22} diglycerides, and C_{12}-C_{22} triglycerides, a mixture of unsaturated C_{12}-C_{24} monoglycerides, C_{12}-C_{24} diglycerides, and C_{12}-C_{24} triglycerides, a mixture of unsaturated C_{14}-C_{18} monoglycerides, C_{14}-C_{18} diglycerides, and C_{14}-C_{18} triglycerides, a mixture of unsaturated C_{14}-C_{20} monoglycerides, C_{14}-C_{20} diglycerides, and C_{14}-C_{20}

triglycerides, a mixture of unsaturated C_{14}-C_{22} monoglycerides, C_{14}-C_{22} diglycerides, and C_{14}-C_{22} triglycerides, a mixture of unsaturated C_{14}-C_{24} monoglycerides, C_{14}-C_{24} diglycerides, and C_{14}-C_{24} triglycerides, a mixture of unsaturated C_{16}-C_{18} monoglycerides, C_{16}-C_{18} diglycerides, and C_{16}-C_{18} triglycerides, a mixture of unsaturated C_{16}-C_{20} monoglycerides, C_{16}-C_{20} diglycerides, and C_{16}-C_{20} triglycerides, a mixture of unsaturated C_{16}-C_{22} monoglycerides, C_{16}-C_{22} diglycerides, and C_{16}-C_{22} triglycerides, a mixture of unsaturated C_{16}-C_{24} monoglycerides, C_{16}-C_{24} diglycerides, and C_{16}-C_{24} triglycerides, a mixture of unsaturated C_{18}-C_{20} monoglycerides, C_{18}-C_{20} diglycerides, and C_{18}-C_{20} triglycerides, a mixture of unsaturated C_{18}-C_{22} monoglycerides, C_{18}-C_{22} diglycerides, and C_{18}-C_{22} triglycerides, a mixture of unsaturated C_{18}-C_{24} monoglycerides, C_{18}-C_{24} diglycerides, and C_{18}-C_{24} triglycerides, a mixture of unsaturated C_{20}-C_{22} monoglycerides, C_{20}-C_{22} diglycerides, C_{20}-C_{22} triglycerides, or a mixture of unsaturated C_{22}-C_{24} monoglycerides, C_{22}-C_{24} diglycerides, and C_{22}-C_{24} triglycerides.

[0067] In some embodiments, a pharmaceutical composition disclosed herein may include one or more liquid fats or glycerolipids that are liquid at 18°C comprising, or consisting essentially of or consisting of a mixture of saturated C_{10}-C_{18} monoglycerides, C_{10}-C_{18} diglycerides, and C_{10}-C_{18} triglycerides, a mixture of saturated C_{10}-C_{20} monoglycerides, C_{10}-C_{20} diglycerides, and C_{10}-C_{20} triglycerides, a mixture of saturated C_{10}-C_{22} monoglycerides, C_{10}-C_{22} diglycerides, and C_{10}-C_{22} triglycerides, a mixture of saturated C_{10}-C_{24} monoglycerides, C_{10}-C_{24} diglycerides, and C_{10}-C_{24} triglycerides, a mixture of saturated C_{12}-C_{18} monoglycerides, C_{12}-C_{18} diglycerides, and C_{12}-C_{18} triglycerides, a mixture of saturated C_{12}-C_{20} monoglycerides, C_{12}-C_{20} diglycerides, and C_{12}-C_{20} triglycerides, a mixture of saturated C_{12}-C_{22} monoglycerides, C_{12}-C_{22} diglycerides, and C_{12}-C_{22} triglycerides, a mixture of saturated C_{12}-C_{24} monoglycerides, C_{12}-C_{24} diglycerides, and C_{12}-C_{24} triglycerides, a mixture of saturated C_{14}-C_{18} monoglycerides, C_{14}-C_{18} diglycerides, and C_{14}-C_{18} triglycerides, a mixture of saturated C_{14}-C_{20} monoglycerides, C_{14}-C_{20} diglycerides, and C_{14}-C_{20} triglycerides, a mixture of saturated C_{14}-C_{22} monoglycerides, C_{14}-C_{22} diglycerides, and C_{14}-C_{22} triglycerides, a mixture of saturated C_{14}-C_{24} monoglycerides, C_{14}-C_{24} diglycerides, and C_{14}-C_{24} triglycerides, a mixture of saturated C_{16}-C_{18} monoglycerides, C_{16}-C_{18} diglycerides, and C_{16}-C_{18} triglycerides, a mixture of saturated C_{16}-C_{20} monoglycerides, C_{16}-C_{20} diglycerides, and C_{16}-C_{20} triglycerides, a mixture of saturated C_{16}-C_{22} monoglycerides, C_{16}-C_{22} diglycerides, and C_{16}-C_{22} triglycerides, a mixture of saturated C_{16}-C_{24} monoglycerides, C_{16}-C_{24} diglycerides, and C_{16}-C_{24} triglycerides, a mixture of saturated C_{18}-C_{20} monoglycerides, C_{18}-C_{20} diglycerides, and C_{18}-C_{20} triglycerides, a mixture of saturated C_{18}-C_{22} monoglycerides, C_{18}-C_{22} diglycerides, and C_{18}-C_{22} triglycerides, a mixture of saturated C_{18}-C_{24} monoglycerides, C_{18}-C_{24} diglycerides, and C_{18}-C_{24} triglycerides, a mixture of saturated C_{20}-C_{22} monoglycerides, C_{20}-C_{22} diglycerides, C_{20}-C_{22} triglycerides, or a mixture of saturated C_{22}-C_{24} monoglycerides, C_{22}-C_{24} diglycerides, and C_{22}-C_{24} triglycerides.

[0068] In some embodiments, a pharmaceutical composition disclosed herein may include one or more liquid fats or glycerolipids that are liquid at 18°C comprising, or consisting essentially of or consisting of a mixture of saturated and unsaturated C_{10}-C_{18} monoglycerides, C_{10}-C_{18} diglycerides, and C_{10}-C_{18} triglycerides, a mixture of saturated and unsaturated C_{10}-C_{20} monoglycerides, C_{10}-C_{20} diglycerides, and C_{10}-C_{20} triglycerides, a mixture of saturated and unsaturated C_{10}-C_{22} monoglycerides, C_{10}-C_{22} diglycerides, and

C_{10}-C_{22} triglycerides, a mixture of saturated and unsaturated C_{10}-C_{24} monoglycerides, C_{10}-C_{24} diglycerides, and C_{10}-C_{24} triglycerides, a mixture of saturated and unsaturated C_{12}-C_{18} monoglycerides, C_{12}-C_{18} diglycerides, and C_{12}-C_{18} triglycerides, a mixture of saturated and unsaturated C_{12}-C_{20} monoglycerides, C_{12}-C_{20} diglycerides, and C_{12}-C_{20} triglycerides, a mixture of saturated and unsaturated C_{12}-C_{22} monoglycerides, C_{12}-C_{22} diglycerides, and C_{12}-C_{22} triglycerides, a mixture of saturated and unsaturated C_{12}-C_{24} monoglycerides, C_{12}-C_{24} diglycerides, and C_{12}-C_{24} triglycerides, a mixture of saturated and unsaturated C_{14}-C_{18} monoglycerides, C_{14}-C_{18} diglycerides, and C_{14}-C_{18} triglycerides, a mixture of saturated and unsaturated C_{14}-C_{20} monoglycerides, C_{14}-C_{20} diglycerides, and C_{14}-C_{20} triglycerides, a mixture of saturated and unsaturated C_{14}-C_{22} monoglycerides, C_{14}-C_{22} diglycerides, and C_{14}-C_{22} triglycerides, a mixture of saturated and unsaturated C_{14}-C_{24} monoglycerides, C_{14}-C_{24} diglycerides, and C_{14}-C_{24} triglycerides, a mixture of saturated and unsaturated C_{16}-C_{18} monoglycerides, C_{16}-C_{18} diglycerides, and C_{16}-C_{18} triglycerides, a mixture of saturated and unsaturated C_{16}-C_{20} monoglycerides, C_{16}-C_{20} diglycerides, and C_{16}-C_{20} triglycerides, a mixture of saturated and unsaturated C_{16}-C_{22} monoglycerides, C_{16}-C_{22} diglycerides, and C_{16}-C_{22} triglycerides, a mixture of saturated and unsaturated C_{16}-C_{24} monoglycerides, C_{16}-C_{24} diglycerides, and C_{16}-C_{24} triglycerides, a mixture of saturated and unsaturated C_{18}-C_{20} monoglycerides, C_{18}-C_{20} diglycerides, and C_{18}-C_{20} triglycerides, a mixture of saturated and unsaturated C_{18}-C_{22} monoglycerides, C_{18}-C_{22} diglycerides, and C_{18}-C_{22} triglycerides, a mixture of saturated and unsaturated C_{18}-C_{24} monoglycerides, C_{18}-C_{24} diglycerides, and C_{18}-C_{24} triglycerides, a mixture of saturated and unsaturated C_{20}-C_{22} monoglycerides, C_{20}-C_{22} diglycerides, C_{20}-C_{22} triglycerides, or a mixture of saturated and unsaturated C_{22}-C_{24} monoglycerides, C_{22}-C_{24} diglycerides, and C_{22}-C_{24} triglycerides.

[0069] In some embodiments, a pharmaceutical composition disclosed herein may include one or more liquid fats or glycerolipids that are liquid at 18°C comprising, or consisting essentially of or consisting of a mixture of mono-, di- and triglycerides having a melting point of, *e.g.*, at most 15°C, at most 16°C, at most 17°C, at most 18°C, at most 19°C, or at most 20°C. In some embodiments, a pharmaceutical composition disclosed herein may include one or more liquid fats or glycerolipids that are liquid at 18°C comprising, or consisting essentially of or consisting of a mixture of mono-, di- and triglycerides having a melting point between, *e.g.*, about 0°C to about 5°C, about 0°C to about 10°C, about 0°C to about 15°C, about 0°C to about 20°C, about 0°C to about 22°C, about 0°C to about 25°C, about 5°C to about 10°C, about 5°C to about 15°C, about 5°C to about 20°C, about 5°C to about 22°C, about 5°C to about 25°C, about 10°C to about 15°C, about 10°C to about 20°C, about 10°C to about 22°C, about 10°C to about 25°C, about 15°C to about 20°C, about 15°C to about 22°C, or about 15°C to about 25°C.

[0070] In some embodiments, a pharmaceutical composition disclosed herein may include one or more liquid fats or glycerolipids that are liquid at 18°C comprising or consisting essentially of or consisting of a mixture of mono-, di-, and/or triglycerides in an amount of, *e.g.*, about 10% by weight, about 15% by weight, about 20% by weight, about 25% by weight, about 30% by weight, about 35% by weight, about 40% by weight, about 45% by weight, about 50% by weight, about 55% by weight, about 60% by weight, about 65% by weight, about 70% by weight, or about 75% by weight by weight. In some embodiments, a pharmaceutical composition disclosed herein may include one or more liquid fats or glycerolipids that are liquid at 18°C comprising or consisting essentially of or consisting of a mixture of mono-, di-, and/or

triglycerides in an amount of, *e.g.*, at least 10% by weight, at least 15% by weight, at least 20% by weight, at least 25% by weight, at least 30% by weight, at least 35% by weight, at least 40% by weight, at least 45% by weight, at least 50% by weight, at least 55% by weight, at least 60% by weight, at least 65% by weight, at least 70% by weight, or at least 75% by weight. In some embodiments, a pharmaceutical composition disclosed herein may include one or more liquid fats or glycerolipids that are liquid at 18°C comprising or consisting essentially of or consisting of a mixture of mono-, di-, and/or triglycerides in an amount of, *e.g.*, at most 10% by weight, at most 15% by weight, at most 20% by weight, at most 25% by weight, at most 30% by weight, at most 35% by weight, at most 40% by weight, at most 45% by weight, at most 50% by weight, at most 55% by weight, at most 60% by weight, at most 65% by weight, at most 70% by weight, or at most 75% by weigh.

[0071] In some embodiments, a pharmaceutical composition disclosed herein may include one or more liquid fats or glycerolipids that are liquid at 18°C comprising or consisting essentially of or consisting of a mixture of mono-, di-, and/or triglycerides in an amount of, *e.g.*, about 10% to about 20%, about 10% to about 25%, about 10% to about 30%, about 10% to about 35%, about 10% to about 40%, about 10% to about 45%, about 10% to about 50%, about 10% to about 55%, about 10% to about 60%, about 10% to about 65%, about 10% to about 70%, about 15% to about 20%, about 15% to about 25%, about 15% to about 30%, about 15% to about 35%, about 15% to about 40%, about 15% to about 45%, about 15% to about 50%, about 15% to about 55%, about 15% to about 60%, about 15% to about 65%, about 15% to about 70%, about 20% to about 25%, about 20% to about 30%, about 20% to about 35%, about 20% to about 40%, about 20% to about 45%, about 20% to about 50%, about 20% to about 55%, about 20% to about 60%, about 20% to about 65%, about 20% to about 70%, about 25% to about 30%, about 25% to about 35%, about 25% to about 40%, about 25% to about 45%, about 25% to about 50%, about 25% to about 55%, about 25% to about 60%, about 25% to about 65%, about 25% to about 70%, about 30% to about 35%, about 30% to about 40%, about 30% to about 45%, about 30% to about 50%, about 30% to about 55%, about 30% to about 60%, about 30% to about 65%, about 30% to about 70%, about 35% to about 40%, about 35% to about 45%, about 35% to about 50%, about 35% to about 55%, about 35% to about 60%, about 35% to about 65%, about 35% to about 70%, about 40% to about 45%, about 40% to about 50%, about 40% to about 55%, about 40% to about 60%, about 40% to about 65%, about 40% to about 70%, about 45% to about 50%, about 45% to about 55%, about 45% to about 60%, about 45% to about 65%, about 45% to about 70%, about 50% to about 55%, about 50% to about 60%, about 50% to about 65%, about 50% to about 70%, about 55% to about 60%, about 55% to about 65%, about 55% to about 70%, about 60% to about 65%, about 60% to about 70%, or about 65% to about 70% by weight.

[0072] In some embodiments, pharmaceutical composition disclosed herein may include one or more liquid fats or glycerolipids that are liquid at 18°C comprising, or consisting essentially of or consisting of one or more monoglycerides. A monoglyceride includes, without limitation, glycerol monomyristoleate, glycerol monopalmitoleate, glycerol monosapienate, glycerol monooleate, glycerol monoelaidate, glycerol monovaccenate, glycerol monolinoleate, glycerol monolinoelaidate, glycerol monolinolenate, glycerol monostearidonate, glycerol monoeicosenoate, glycerol monomeadate, glycerol monoarachidonate,

glycerol monoeicosapentaenoate, glycerol monoerucate, glycerol monodocosahexaenoate, and glycerol mononervonate.

[0073] In some embodiments, pharmaceutical composition disclosed herein may include one or more liquid fats or glycerolipids that are liquid at 18°C comprising, or consisting essentially of or consisting of unsaturated C_{10}-C_{18} monoglycerides, unsaturated C_{10}-C_{20} monoglycerides, unsaturated C_{10}-C_{22} monoglycerides, unsaturated C_{10}-C_{24} monoglycerides, unsaturated C_{12}-C_{18} monoglycerides, unsaturated C_{12}-C_{20} monoglycerides, unsaturated C_{12}-C_{22} monoglycerides, unsaturated C_{12}-C_{24} monoglycerides, unsaturated C_{14}-C_{18} monoglycerides, unsaturated C_{14}-C_{20} monoglycerides, unsaturated C_{14}-C_{22} monoglycerides, unsaturated C_{14}-C_{24} monoglycerides, unsaturated C_{16}-C_{18} monoglycerides, unsaturated C_{16}-C_{20} monoglycerides, unsaturated C_{16}-C_{22} monoglycerides, unsaturated C_{16}-C_{24} monoglycerides, unsaturated C_{18}-C_{20} monoglycerides, unsaturated C_{18}-C_{22} monoglycerides, unsaturated C_{18}-C_{24} monoglycerides, unsaturated C_{20}-C_{22} monoglycerides, or unsaturated C_{22}-C_{24} monoglycerides.

[0074] In some embodiments, pharmaceutical composition disclosed herein may include one or more liquid fats or glycerolipids that are liquid at 18°C comprising, or consisting essentially of or consisting of saturated C_{10}-C_{18} monoglycerides, saturated C_{10}-C_{20} monoglycerides, saturated C_{10}-C_{22} monoglycerides, saturated C_{10}-C_{24} monoglycerides, saturated C_{12}-C_{18} monoglycerides, saturated C_{12}-C_{20} monoglycerides, saturated C_{12}-C_{22} monoglycerides, saturated C_{12}-C_{24} monoglycerides, saturated C_{14}-C_{18} monoglycerides, saturated C_{14}-C_{20} monoglycerides, saturated C_{14}-C_{22} monoglycerides, saturated C_{14}-C_{24} monoglycerides, saturated C_{16}-C_{18} monoglycerides, saturated C_{16}-C_{20} monoglycerides, saturated C_{16}-C_{22} monoglycerides, saturated C_{16}-C_{24} monoglycerides, saturated C_{18}-C_{20} monoglycerides, saturated C_{18}-C_{22} monoglycerides, saturated C_{18}-C_{24} monoglycerides, saturated C_{20}-C_{22} monoglycerides, or saturated C_{22}-C_{24} monoglycerides.

[0075] In some embodiments, a pharmaceutical composition disclosed herein may include one or more liquid fats or glycerolipids that are liquid at 18°C comprising, or consisting essentially of or consisting of a mixture of saturated and unsaturated C_{10}-C_{18} monoglycerides, a mixture of saturated and unsaturated C_{10}-C_{20} monoglycerides, a mixture of saturated and unsaturated C_{10}-C_{22} monoglycerides, a mixture of saturated and unsaturated C_{10}-C_{24} monoglycerides, a mixture of saturated and unsaturated C_{12}-C_{18} monoglycerides, a mixture of saturated and unsaturated C_{12}-C_{20} monoglycerides, a mixture of saturated and unsaturated C_{12}-C_{22} monoglycerides, a mixture of saturated and unsaturated C_{12}-C_{24} monoglycerides, a mixture of saturated and unsaturated C_{14}-C_{18} monoglycerides, a mixture of saturated and unsaturated C_{14}-C_{20} monoglycerides, a mixture of saturated and unsaturated C_{14}-C_{22} monoglycerides, a mixture of saturated and unsaturated C_{14}-C_{24} monoglycerides, a mixture of saturated and unsaturated C_{16}-C_{18} monoglycerides, a mixture of saturated and unsaturated C_{16}-C_{20} monoglycerides, a mixture of saturated and unsaturated C_{16}-C_{22} monoglycerides, a mixture of saturated and unsaturated C_{16}-C_{24} monoglycerides, a mixture of saturated and unsaturated C_{18}-C_{20} monoglycerides, a mixture of saturated and unsaturated C_{18}-C_{22} monoglycerides, a mixture of saturated and unsaturated C_{18}-C_{24} monoglycerides, a mixture of saturated and unsaturated C_{20}-C_{22} monoglycerides, or a mixture of saturated and unsaturated C_{22}-C_{24} monoglycerides.

[0076] In some embodiments, a pharmaceutical composition disclosed herein may include one or more liquid fats or glycerolipids that are liquid at 18°C comprising, or consisting essentially of or consisting of a monoiglyceride having a melting point of, *e.g.*, at most 15°C, at most 16°C, at most 17°C, at most 18°C, at most 19°C, or at most 20°C. In some embodiments, a pharmaceutical composition disclosed herein may include one or more liquid fats or glycerolipids that are liquid at 18°C comprising, or consisting essentially of or consisting of a monoglyceride having a melting point between, *e.g.*, about 0°C to about 5°C, about 0°C to about 10°C, about 0°C to about 15°C, about 0°C to about 20°C, about 0°C to about 22°C, about 0°C to about 25°C, about 5°C to about 10°C, about 5°C to about 15°C, about 5°C to about 20°C, about 5°C to about 22°C, about 5°C to about 25°C, about 10°C to about 15°C, about 10°C to about 20°C, about 10°C to about 22°C, about 10°C to about 25°C, about 15°C to about 20°C, about 15°C to about 22°C, or about 15°C to about 25°C.

[0077] In some embodiments, a pharmaceutical composition disclosed herein may include one or more liquid fats or glycerolipids that are liquid at 18°C comprising or consisting essentially of or consisting of one or more monoglycerides in an amount of, *e.g.*, about 10% by weight, about 15% by weight, about 20% by weight, about 25% by weight, about 30% by weight, about 35% by weight, about 40% by weight, about 45% by weight, about 50% by weight, about 55% by weight, about 60% by weight, about 65% by weight, about 70% by weight, or about 75% by weight. In some embodiments, a pharmaceutical composition disclosed herein may include one or more liquid fats or glycerolipids that are liquid at 18°C comprising or consisting essentially of or consisting of one or more monoglycerides in an amount of, *e.g.* at least 10% by weight, at least 15% by weight, at least 20% by weight, at least 25% by weight, at least 30% by weight, at least 35% by weight, at least 40% by weight, at least 45% by weight, at least 50% by weight, at least 55% by weight, at least 60% by weight, at least 65% by weight, at least 70% by weight, or at least 75% by weight. In some embodiments, a pharmaceutical composition disclosed herein may include one or more liquid fats or glycerolipids that are liquid at 18°C comprising or consisting essentially of or consisting of one or more monoglycerides in an amount of, *e.g.*, at most 10% by weight, at most 15% by weight, at most 20% by weight, at most 25% by weight, at most 30% by weight, at most 35% by weight, at most 40% by weight, at most 45% by weight, at most 50% by weight, at most 55% by weight, at most 60% by weight, at most 65% by weight, at most 70% by weight, or at most 75% by weight.

[0078] In some embodiments, a pharmaceutical composition disclosed herein may include one or more liquid fats or glycerolipids that are liquid at 18°C comprising or consisting essentially of or consisting of one or more monoglycerides in an amount of, *e.g.*, about 10% to about 20%, about 10% to about 25%, about 10% to about 30%, about 10% to about 35%, about 10% to about 40%, about 10% to about 45%, about 10% to about 50%, about 10% to about 55%, about 10% to about 60%, about 10% to about 65%, about 10% to about 70%, about 15% to about 20%, about 15% to about 25%, about 15% to about 30%, about 15% to about 35%, about 15% to about 40%, about 15% to about 45%, about 15% to about 50%, about 15% to about 55%, about 15% to about 60%, about 15% to about 65%, about 15% to about 70%, about 20% to about 25%, about 20% to about 30%, about 20% to about 35%, about 20% to about 40%, about 20% to about 45%, about 20% to about 50%, about 20% to about 55%, about 20% to about 60%, about

20% to about 65%, about 20% to about 70%, about 25% to about 30%, about 25% to about 35%, about 25% to about 40%, about 25% to about 45%, about 25% to about 50%, about 25% to about 55%, about 25% to about 60%, about 25% to about 65%, about 25% to about 70%, about 30% to about 35%, about 30% to about 40%, about 30% to about 45%, about 30% to about 50%, about 30% to about 55%, about 30% to about 60%, about 30% to about 65%, about 30% to about 70%, about 35% to about 40%, about 35% to about 45%, about 35% to about 50%, about 35% to about 55%, about 35% to about 60%, about 35% to about 65%, about 35% to about 70%, about 40% to about 45%, about 40% to about 50%, about 40% to about 55%, about 40% to about 60%, about 40% to about 65%, about 40% to about 70%, about 45% to about 50%, about 45% to about 55%, about 45% to about 60%, about 45% to about 65%, about 45% to about 70%, about 50% to about 55%, about 50% to about 60%, about 50% to about 65%, about 50% to about 70%, about 55% to about 60%, about 55% to about 65%, about 55% to about 70%, about 60% to about 65%, about 60% to about 70%, or about 65% to about 70% by weight.

[0079] Commercially available hard fats or glycerolipids that are solid at 18°C include, without limitation, Cocoa butter, mixtures of saturated C_{10}-C_{18} triglycerides having a melting point around 33°C (GELUCIRE® 33/01), mixtures of saturated C_{10}-C_{18} triglycerides having a melting point around 39°C (GELUCIRE® 39/01), and mixtures of saturated C_{10}-C_{18} triglycerides having a melting point around 43°C (GELUCIRE® 43/01), Commercially available liquid fats or glycerolipids that are liquid at 18°C include, without limitation, a hydrolyzed corn oil including glycerol monolinoleate (MAISINE™ 35-1, MAISINE™ CC). In some embodiments, a hydrolyzed corn oil including glycerol monolinoleate (MAISINE™ 35-1, MAISINE™ CC) comprises about 32% to 52% monoglycerides including glycerol monolinoleate, about 40% to 50% diglycerides, and about 5% to 30% triglycerides.

[0080] A pharmaceutical composition disclosed herein comprises any ratio of hard fats or glycerolipids that are solid at 18°C to liquid fats or glycerolipids that are liquid at 18°C that stabilizes one or more therapeutic compounds disclosed herein in a manner that prevents precipitation of the one or more therapeutic compounds. In some embodiments, a pharmaceutical composition disclosed herein comprises a hard fats or glycerolipids that are solid at 18°C to a liquid fats or glycerolipids that are liquid at 18°C ratio of, *e.g.*, about 5:1, about 4:1, about 3:1, about 2:1, or about 1:1. In some embodiments, a pharmaceutical composition disclosed herein comprises a hard fats or glycerolipids that are solid at 18°C to a liquid fats or glycerolipids that are liquid at 18°C ratio of, *e.g.*, about 5:1 to about 4:1, about 5:1 to about 3:1, about 5:1 to about 2:1, about 5:1 to about 1:1, about 4:1 to about 3:1, about 4:1 to about 2:1, about 4:1 to about 1:1, about 3:1 to about 2:1, about 3:1 to about 1:1, or about 2:1 to about 1:1.

[0081] In some embodiments, a pharmaceutical composition disclosed herein comprises a hard fats or glycerolipids that are solid at 18°C to a liquid fats or glycerolipids that are liquid at 18°C ratio of, *e.g.*, about 1:5, about 1:4, about 1:3, or about 1:2. In some embodiments, a pharmaceutical composition disclosed herein comprises a hard fats or glycerolipids that are solid at 18°C to a liquid fats or glycerolipids that are liquid at 18°C ratio of, *e.g.*, about 1:5 to about 1:4, about 1:5 to about 1:3, about 1:5 to about 1:2, about 1:5 to about 1:1, about 1:4 to about 1:3, about 1:4 to about 1:2, about 1:4 to about 1:1, about 1:3 to about 1:2, about 1:3 to about 1:1, or about 1:2 to about 1:1.

Digestion Enhancers

[0082] A pharmaceutical composition disclosed herein may comprises one or more digestion enhancers. The primary purposes of the one or more digestion enhancers are to enhance solubility of a therapeutic compound disclosed herein with the glycerolipid admixture, to enhance absorption of a therapeutic compound disclosed herein thereby improving the pharmacokinetics of the compound, and/or to improve availability and facilitate selected bio-distribution of a therapeutic compound disclosed herein thereby improving the pharmacodynamics of the compound. These improved properties are achieved by the one or more digestion enhancers by creating a pre-lipid digestion formulation of a therapeutic compound disclosed herein which facilitates and enhances the processing of the one or more glycerolipids disclosed herein when a pharmaceutical composition disclosed herein enters the duodenum region of the small intestine. Such glycerolipid processing enables the one or more therapeutic compounds contained in the pharmaceutical composition to be absorbed by enterocytes along with the digested glycerolipids and subsequently processed and transported into the lymphatic system. In some embodiments, a pharmaceutical composition disclosed comprises one or more digestion enhancers that includes one or more bile acids. In some embodiments, a pharmaceutical composition disclosed comprises one or more digestion enhancers that includes cholic acid. In some embodiments, a pharmaceutical composition disclosed comprises one or more digestion enhancers that includes one or more C_{14}-C_{24} free fatty acids. In some embodiments, a pharmaceutical composition disclosed comprises one or more digestion enhancers that includes one or more C_{14}-C_{20} free fatty acids. In some embodiments, a pharmaceutical composition disclosed comprises one or more digestion enhancers that includes an oleic acid, a steric acid, or a linoleic acid. In some embodiments, a pharmaceutical composition disclosed comprises one or more digestion enhancers that includes one or more C_{14}-C_{24} free fatty acid surfactants. In some embodiments, a pharmaceutical composition disclosed comprises one or more digestion enhancers that includes one or more C_{14}-C_{20} free fatty acid surfactants. In some embodiments, a pharmaceutical composition disclosed comprises one or more digestion enhancers that includes a sodium oleate, a sodium stearate, and/or a sodium linoleate.

[0083] In some embodiments, a pharmaceutical composition disclosed comprises one or more digestion enhancers that includes 1) one or more bile acids disclosed herein; and 2) one or more C_{14}-C_{24} free fatty acids disclosed herein. In some embodiments, a pharmaceutical composition disclosed comprises one or more digestion enhancers that includes 1) a cholic acid disclosed herein; and 2) one or more C_{14}-C_{20} free fatty acids disclosed herein. In some embodiments, a pharmaceutical composition disclosed comprises one or more digestion enhancers that includes 1) a cholic acid disclosed herein; and 2) an oleic acid, a steric acid, or a linoleic acid.

[0084] In some embodiments, a pharmaceutical composition disclosed comprises one or more digestion enhancers that includes 1) one or more bile acids disclosed herein; 2) one or more C_{14}-C_{24} free fatty acids disclosed herein; and 3) one or more C_{14}-C_{24} free fatty acid surfactants disclosed herein. In some embodiments, a pharmaceutical composition disclosed comprises one or more digestion enhancers that includes 1) a cholic acid disclosed herein; 2) one or more C_{14}-C_{20} free fatty acids disclosed herein; and 3)

one or more C_{14}-C_{20} free fatty acid surfactants disclosed herein. In some embodiments, a pharmaceutical composition disclosed comprises one or more digestion enhancers that includes 1) a cholic acid disclosed herein; 2) an oleic acid, a steric acid, and/or a linoleic acid; and 3) a sodium oleate, a sodium stearate, and/or a sodium linoleate.

[0085] In some embodiments, a pharmaceutical composition disclosed comprises one or more digestion enhancers that includes 1) one or more bile acids disclosed herein; and 2) one or more phospholipids disclosed herein. In some embodiments, a pharmaceutical composition disclosed comprises one or more digestion enhancers that includes 1) a cholic acid disclosed herein; and 2) one or more phospholipids disclosed herein.

[0086] In some embodiments, a pharmaceutical composition disclosed comprises one or more digestion enhancers that includes 1) one or more C_{14}-C_{24} free fatty acids disclosed herein; and 2) one or more phospholipids disclosed herein. In some embodiments, a pharmaceutical composition disclosed comprises one or more digestion enhancers that includes 1) one or more C_{14}-C_{20} free fatty acids disclosed herein; and 2) one or more phospholipids disclosed herein. In some embodiments, a pharmaceutical composition disclosed comprises one or more digestion enhancers that includes 1) an oleic acid, a steric acid, and/or a linoleic acid; and 2) one or more phospholipids disclosed herein.

[0087] In some embodiments, a pharmaceutical composition disclosed comprises one or more digestion enhancers that includes 1) one or more bile acids disclosed herein; 2) one or more C_{14}-C_{24} free fatty acids disclosed herein; and 3) one or more phospholipids disclosed herein. In some embodiments, a pharmaceutical composition disclosed comprises one or more digestion enhancers that includes 1) one or more bile acids disclosed herein; 2) one or more C_{14}-C_{20} free fatty acids disclosed herein; and 3) one or more phospholipids disclosed herein. In some embodiments, a pharmaceutical composition disclosed comprises one or more digestion enhancers that includes 1) a cholic acid disclosed herein; 2) an oleic acid, a steric acid, and/or a linoleic acid; and 3) one or more phospholipids disclosed herein.

[0088] In some embodiments, a pharmaceutical composition disclosed comprises one or more digestion enhancers that includes 1) one or more bile acids disclosed herein; 2) one or more phospholipids disclosed herein; and 3) one or more C_{14}-C_{24} free fatty acid surfactants disclosed herein. In some embodiments, a pharmaceutical composition disclosed comprises one or more digestion enhancers that includes 1) a cholic acid disclosed herein; 2) one or more phospholipids disclosed herein; and 3) one or more C_{14}-C_{20} free fatty acid surfactants disclosed herein. In some embodiments, a pharmaceutical composition disclosed comprises one or more digestion enhancers that includes 1) a cholic acid disclosed herein; 2) one or more phospholipids disclosed herein; and 3) a sodium C_{14}-C_{20} free fatty acid disclosed herein. In some embodiments, a pharmaceutical composition disclosed comprises one or more digestion enhancers that includes 1) a cholic acid disclosed herein; 2) one or more phospholipids disclosed herein; and 3) a sodium oleate, a sodium stearate, and/or a sodium linoleate.

[0089] In some embodiments, a pharmaceutical composition disclosed comprises one or more digestion enhancers that includes 1) one or more C_{14}-C_{24} free fatty acids disclosed herein; 2) one or more phospholipids disclosed herein; and 3) one or more C_{14}-C_{24} free fatty acid surfactants disclosed herein. In some embodiments, a pharmaceutical composition disclosed comprises one or more digestion enhancers that includes 1) one or more C_{14}-C_{20} free fatty acids disclosed herein; 2) one or more phospholipids disclosed herein; and 3) one or more C_{14}-C_{20} free fatty acid surfactants disclosed herein. In some embodiments, a pharmaceutical composition disclosed comprises one or more digestion enhancers that includes 1) an oleic acid, a steric acid, and/or a linoleic acid; 2) one or more phospholipids disclosed herein; and 3) one or more sodium C_{14}-C_{20} free fatty acid surfactants disclosed herein. In some embodiments, a pharmaceutical composition disclosed comprises one or more digestion enhancers that includes 1) an oleic acid, a steric acid, and/or a linoleic acid; 2) one or more phospholipids disclosed herein; and 3) a sodium oleate, a sodium stearate, and/or a sodium linoleate.

[0090] In some embodiments, a pharmaceutical composition disclosed comprises one or more digestion enhancers that includes 1) one or more bile acids disclosed herein; 2) one or more C_{14}-C_{24} free fatty acids disclosed herein; 3) one or more phospholipids disclosed herein; and 4) one or more C_{14}-C_{24} free fatty acid surfactants disclosed herein. In some embodiments, a pharmaceutical composition disclosed comprises one or more digestion enhancers that includes 1) one or more bile acids disclosed herein; 2) one or more C_{14}-C_{20} free fatty acids disclosed herein; 3) one or more phospholipids disclosed herein; and 4) one or more C_{14}-C_{20} free fatty acid surfactants disclosed herein. In some embodiments, a pharmaceutical composition disclosed comprises one or more digestion enhancers that includes 1) a cholic acid disclosed herein; 2) an oleic acid, a steric acid, and/or a linoleic acid; 3) one or more phospholipids disclosed herein; and 4) one or more sodium C_{14}-C_{20} free fatty acid surfactants disclosed herein. In some embodiments, a pharmaceutical composition disclosed comprises one or more digestion enhancers that includes 1) a cholic acid disclosed herein; 2) an oleic acid, a steric acid, and/or a linoleic acid; 3) one or more phospholipids disclosed herein; and 4) a sodium oleate, a sodium stearate, and/or a sodium linoleate.

[0091] In some embodiments, a pharmaceutical composition disclosed herein may comprising or consisting essentially of or consisting of one or more digestion enhancers in an amount of, *e.g.*, about 1% by weight, about 2.5% by weight, about 5% by weight, about 7.5% by weight, about 10 % by weight, about 12.5% by weight, about 15 % by weight, about 17.5% by weight, about 20% by weight, about 22.5% by weight, about 25% by weight, about 30% by weight, about 35% by weight, about 40% by weight, about 45% by weight, about 50% by weight, about 55% by weight, about 60% by weight, about 65% by weight, about 70% by weight, about 75% by weight, or about 80% by weight. In some embodiments, a pharmaceutical composition disclosed herein may comprising or consisting essentially of or consisting of one or more digestion enhancers in an amount of, *e.g.*, at least 1% by weight, at least 2.5% by weight, at least 5% by weight, at least 7.5% by weight, at least 10 % by weight, at least 12.5% by weight, at least 15 % by weight, at least 17.5% by weight, at least 20% by weight, at least 22.5% by weight, at least 25% by weight, at least 30% by weight, at least 35% by weight, at least 40% by weight, at least 45% by weight, at least 50% by weight, at least 55% by weight, at least 60% by weight, at least 65% by weight, at least 70% by weight, at least 75% by weight, or at least 75% by weight. In some embodiments, a pharmaceutical

composition disclosed herein may comprising or consisting essentially of or consisting of one or more digestion enhancers in an amount of, *e.g.*, at most 1% by weight, at most 2.5% by weight, at most 5% by weight, at most 7.5% by weight, at most 10 % by weight, at most 12.5% by weight, at most 15 % by weight, at most 17.5% by weight, at most 20% by weight, at most 22.5% by weight, at most 25% by weight, at most 30% by weight, at most 35% by weight, at most 40% by weight, at most 45% by weight, at most 50% by weight, at most 55% by weight, at most 60% by weight, at most 65% by weight, at most 70% by weight, at most 75% by weight, or at most 80% by weight.

[0092] In some embodiments, a pharmaceutical composition disclosed herein may comprising or consisting essentially of or consisting of one or more digestion enhancers in an amount of, *e.g.*, about 1% to about 2.5% by weight, about 1% to about 5% by weight, about 1% to about 10% by weight, about 1% to about 15% by weight, about 1% to about 20% by weight, about 1% to about 25% by weight, about 2.5% to about 5% by weight, about 2.5% to about 10% by weight, about 2.5% to about 15% by weight, about 2.5% to about 20% by weight, about 2.5% to about 25% by weight, about 5% to about 10% by weight, about 5% to about 15% by weight, about 5% to about 20% by weight, about 5% to about 25% by weight, about 10% to about 20%, about 10% to about 25%, about 10% to about 30%, about 10% to about 35%, about 10% to about 40%, about 10% to about 45%, about 10% to about 50%, about 10% to about 55%, about 10% to about 60%, about 10% to about 65%, about 10% to about 70%, about 15% to about 20%, about 15% to about 25%, about 15% to about 30%, about 15% to about 35%, about 15% to about 40%, about 15% to about 45%, about 15% to about 50%, about 15% to about 55%, about 15% to about 60%, about 15% to about 65%, about 15% to about 70%, about 20% to about 25%, about 20% to about 30%, about 20% to about 35%, about 20% to about 40%, about 20% to about 45%, about 20% to about 50%, about 20% to about 55%, about 20% to about 60%, about 20% to about 65%, about 20% to about 70%, about 25% to about 30%, about 25% to about 35%, about 25% to about 40%, about 25% to about 45%, about 25% to about 50%, about 25% to about 55%, about 25% to about 60%, about 25% to about 65%, about 25% to about 70%, about 30% to about 35%, about 30% to about 40%, about 30% to about 45%, about 30% to about 50%, about 30% to about 55%, about 30% to about 60%, about 30% to about 65%, about 30% to about 70%, about 35% to about 40%, about 35% to about 45%, about 35% to about 50%, about 35% to about 55%, about 35% to about 60%, about 35% to about 65%, about 35% to about 70%, about 40% to about 45%, about 40% to about 50%, about 40% to about 55%, about 40% to about 60%, about 40% to about 65%, about 40% to about 70%, about 40% to about 75%, about 40% to about 80%, about 45% to about 50%, about 45% to about 55%, about 45% to about 60%, about 45% to about 65%, about 45% to about 70%, about 45% to about 75%, about 45% to about 80%, about 50% to about 55%, about 50% to about 60%, about 50% to about 65%, about 50% to about 70%, about 50% to about 75%, about 50% to about 80%, about 55% to about 60%, about 55% to about 65%, about 55% to about 70%, about 55% to about 75%, about 55% to about 80%, about 60% to about 65%, about 60% to about 70%, about 60% to about 75%, about 60% to about 80%, about 65% to about 70% by weight, about 65% to about 75%, about 65% to about 80%,. about 70% to about 75%, about 70% to about 80%, or about 75% to about 80%.

Bile Acids

[0093] A pharmaceutical composition disclosed herein may comprises one or more bile acids. The primary purpose of bile acids are to enhance solubility of a therapeutic compound disclosed herein within the glycerolipid admixture, to enhance absorption of a therapeutic compound disclosed herein thereby improving the pharmacokinetics of the compound, and/or to improve availability and facilitate selected bio-distribution of a therapeutic compound disclosed herein thereby improving the pharmacodynamics of the compound. In addition, as disclosed in Example 2, a bile acid disclosed herein improves the solubility of a therapeutic compound disclosed herein within one or more glycerolipid and/or one or more free C_{14-24} fatty acids disclosed herein. The improved solubility properties are achieved by the bile acids by preventing the recrystallization of a therapeutic compound during solidification when the molton pharmaceutical composition cools to room temperature (18°C to 20°C). The improved pharmacokinetic properties are achieved by the bile acids by breaking apart the lipid component of a pharmaceutical composition disclosed herein via its surfactant properties into smaller lipid structures that mimic emulsion droplets, thereby facilitating the emulsification process. The "emulsion droplets" recruit coliapse and create a greater surface area for which pancreatic lipase can digest the hard fat glycerolipids present there within which ultimately enhances enterocyte absorption and subsequent chylomicron formation. Bile acids are involved in signaling for the initiation of chylomicron formation. Hence the inclusion of bile acids in the lipid formulation will maximise this signaling pathway and the production of chylomicrons, As a result, the improved pharmacodynamic properties provided by bile acids are produced by increasing the availability of a therapeutic compound by increasing its content within chylomicrons prior to entering the circulatory system and subsequently facilitating the delivery of the therapeutic compound to compartments such as the brain passing across membranes such as the blood-brain barrier and the choroid plexus.

[0094] Amphipathic molecules having an HLB of greater than 12, bile acids have a specific chemical structure, different from ordinary aliphatic surfactants, due to the presence of a large, rigid, and planar hydrophobic moiety of a steroid nucleus carrying 2–4 hydroxyl groups. Specifically, bile acids comprise the following basic components: (1) 4 rings, (2) a 5-/8-carbon side chain that ends with a carboxylic acid, and (3) a number of hydroxyl groups (whose position/number changes among the various salts). The rings are ascribed the letters A, B, C, and D based on their distance from the side chain with the -COOH group, the D ring being the most distant (as well as being 1 C smaller than the other rings), as discussed below. Beta hydroxyl groups face up/out, alpha groups down, and every bile acid has a 3-hydroxyl group that originates from their cholesterol precursor. The chemical structure of bile salts results in this emulsification pathway being useful in accordance with the teachings of the disclosure, and accordingly, synthetic surfactants will not work.

[0095] Examples of bile acids include, without limitation, chenodeoxycholic acid, cholic acid, dafachronic acid, deoxycholic acid, glycocholic acid, glycohenodeoxycholic acid, lithocholic acid, taurochenodeoxycholic acid, taurocholic acid, and any stereoisomer thereof. cholic acid and chenodeoxycholic acid are referred to as primary bile acids while deoxycholic acid (which is converted from cholic acid) and lithocholic acid (which is converted from chenodeoxycholic acid) are referred to as

secondary bile acids. Taurocholic acid and glycocholic acid (derivatives of cholic acid) and taurochenodeoxycholic acid and glycochenodeoxycholic acid (derivatives of chenodeoxycholic acid) are the major bile acids that serve as the basis for the bile salts found in bile.

[0096] There is a direct correlation between the amount of a bile acid present in a pharmaceutical composition disclosed herein and the improved properties observed. As such, the more bile acid present in a pharmaceutical composition disclosed herein the greater the improvement in solubility, absorption, and availability of the therapeutic composition. In addition, the upper limit of bile acid including in a pharmaceutical composition disclosed herein is not limited to the solution point of a bile acid. As such, a pharmaceutical composition disclosed herein can include supersaturating amounts of a bile acid. As such, the upper limit of bile acid that can be included in a pharmaceutical composition disclosed herein is its critical micellar concentration (CMC). Besides the above-mentioned improved properties, an additional advantage of supersaturating amounts of a bile acid is the presence of the resulting nanoparticle formation of crystalline bile acid in a pharmaceutical composition disclosed herein. Without wishing to be limited by a one theory, bile acid nanoparticles can serve as a reservoir that upon exposure to the alkaline environment of the small intestine dissolve and form bile salts which in turn further enhances the emulsification process of the pharmaceutical composition disclosed herein.

[0097] The amount of a bile acid useful in a pharmaceutical composition disclosed herein is an amount below its CMC. In some embodiments, the amount of a bile acid useful in a pharmaceutical composition disclosed herein is an amount below its CMC and one that is supersaturating. In some embodiments, a pharmaceutical composition disclosed herein may comprising or consisting essentially of or consisting of one or more bile acids in an amount of, *e.g.*, about 0.1% by weight, about 0.5% by weight, about 1.0% by weight, about 1.0% by weight, about 1.5% by weight, about 2.0% by weight, about 2.5% by weight, about 3.0% by weight, about 3.5% by weight, about 4.0% by weight, about 4.5% by weight, about 5.0% by weight, about 5.5% by weight, about 6.0% by weight, about 6.5% by weight, about 7.0% by weight, about 7.5% by weight, about 8.0% by weight, about 8.5% by weight, about 9.0% by weight, about 9.5% by weight, or about 10.0% by weight. In some embodiments, a pharmaceutical composition disclosed herein may comprising or consisting essentially of or consisting of one or more bile acids in an amount of, *e.g.*, at least 0.1% by weight, at least 0.5% by weight, at least 1.0% by weight, at least 1.5% by weight, at least 2.0% by weight, at least 2.5% by weight, at least 3.0% by weight, at least 3.5% by weight, at least 4.0% by weight, at least 4.5% by weight, at least 5.0% by weight, at least 5.5% by weight, at least 6.0% by weight, at least 6.5% by weight, at least 7.0% by weight, at least 7.5% by weight, at least 8.0% by weight, at least 8.5% by weight, at least 9.0% by weight, at least 9.5% by weight, or at least 10.0% by weight. In some embodiments, a pharmaceutical composition disclosed herein may comprising or consisting essentially of or consisting of one or more bile acids in an amount of, *e.g.*, at most 0.1% by weight, at most 0.5% by weight, at most 1.0% by weight, at most 1.5% by weight, at most 2.0% by weight, at most 2.5% by weight, at most 3.0% by weight, at most 3.5% by weight, at most 4.0% by weight, at most 4.5% by weight, at most 5.0% by weight, at most 5.5% by weight, at most 6.0% by weight, at most 6.5% by weight, at most 7.0% by weight, at most 7.5% by weight, at most 8.0% by weight, at most 8.5% by weight, at most 9.0% by weight, at most 9.5% by weight, or at most 10.0% by weight.

[0098] In some embodiments, a pharmaceutical composition disclosed herein may comprising or consisting essentially of or consisting of one or more bile acids in an amount of, *e.g.*, about 0.1% to about 0.5%, about 0.1% to about 1.0%, about 0.1% to about 2.0%, about 0.1% to about 3.0%, about 0.1% to about 4.0%, about 0.1% to about 5.0%, about 0.1% to about 6.0%, about 0.1% to about 7.0%, about 0.1% to about 8.0%, about 0.1% to about 9.0%, about 0.1% to about 10.0%, about 0.5% to about 1.0%, about 0.5% to about 2.0%, about 0.5% to about 3.0%, about 0.5% to about 4.0%, about 0.5% to about 5.0%, about 0.5% to about 6.0%, about 0.5% to about 7.0%, about 0.5% to about 8.0%, about 0.5% to about 9.0%, about 0.5% to about 10.0%, about 1.0% to about 2.0%, about 1.0% to about 3.0%, about 1.0% to about 4.0%, about 1.0% to about 5.0%, about 1.0% to about 6.0%, about 1.0% to about 7.0%, about 1.0% to about 8.0%, about 1.0% to about 9.0%, about 1.0% to about 10.0%, about 2.0% to about 3.0%, about 2.0% to about 4.0%, about 2.0% to about 5.0%, about 2.0% to about 6.0%, about 2.0% to about 7.0%, about 2.0% to about 8.0%, about 2.0% to about 9.0%, about 2.0% to about 10.0%, about 3.0% to about 4.0%, about 3.0% to about 5.0%, about 3.0% to about 6.0%, about 3.0% to about 7.0%, about 3.0% to about 8.0%, about 3.0% to about 9.0%, about 3.0% to about 10.0%, about 4.0% to about 5.0%, about 4.0% to about 6.0%, about 4.0% to about 7.0%, about 4.0% to about 8.0%, about 4.0% to about 9.0%, about 4.0% to about 10.0%, about 5.0% to about 6.0%, about 5.0% to about 7.0%, about 5.0% to about 8.0%, about 5.0% to about 9.0%, about 5.0% to about 10.0%, about 6.0% to about 7.0%, about 6.0% to about 8.0%, about 6.0% to about 9.0%, about 6.0% to about 10.0%, about 7.0% to about 8.0%, about 7.0% to about 9.0%, about 7.0% to about 10.0%, about 8.0% to about 9.0%, about 8.0% to about 10.0%, or about 9.0% to about 10.0% by weight.

[0099] In some embodiments, a pharmaceutical composition disclosed herein may comprising or consisting essentially of or consisting of one or more bile acids in a concentration of, *e.g.*, at most 0.01 mM, at most 0.025 mM, at most 0.05 mM, at most 0.075 mM, at most 0.1 mM, at most 0.25 mM, at most 0.5 mM, at most 0.75 mM, at most 1 mM, or at most 5 mM. In some embodiments, a pharmaceutical composition disclosed herein may comprising or consisting essentially of or consisting of one or more bile acids in a concentration of, *e.g.*, about 0.01 mM to about 0.05 mM, about 0.01 mM to about 0.1 mM, about 0.01 mM to about 0.5 mM, about 0.01 mM to about 1 mM, about 0.01 mM to about 5 mM, about 0.05 mM to about 0.1 mM, about 0.05 mM to about 0.5 mM, about 0.05 mM to about 1 mM, about 0.05 mM to about 5 mM, about 0.1 mM to about 0.5 mM, about 0.1 mM to about 1 mM, about 0.1 mM to about 5 mM, or about 1 mM to about 5 mM.

C_{14-24} Fatty Acids

[0100] A pharmaceutical composition disclosed herein may comprises one or more free C_{14-24} fatty acids. A fatty acid comprises a carboxylic acid with a long unbranched hydrocarbon chain which may be either saturated or unsaturated and are hydrophobic molecules having an HLB of less than 4. The primary purpose of free C_{14-24} fatty acids are to enhance solubility of a therapeutic compound disclosed herein within the glycerolipid admixture and to enhance absorption of a therapeutic compound disclosed herein thereby improving the pharmacokinetics of the compound. The improved solubility properties are achieved by the

free C_{14-24} fatty acids due to their properties of being a solvent that facilitates dissolvement of a therapeutic compound disclosed herein. The improved absorption properties are achieved by the free C_{14-24} fatty acids by facilitating and increasing the formation of micelles by breaking up larger emulsion droplets, thereby mimicking the lipid digestion products of triglycerides, namely free fatty acids. As such, a C_{14-24} fatty acid disclosed herein increases the uptake of micelles comprising one or more therapeutic compounds into enterocytes. In addition, as disclosed in Example 2, a free C_{14-24} fatty acids disclosed herein improves the solubility of a bile salt disclosed herein.

[0101] In some embodiments, pharmaceutical composition disclosed herein may include one or more free C_{14-24} fatty acids comprising, or consisting essentially of or consisting of unsaturated free C_{14}-C_{16} fatty acids, unsaturated free C_{14}-C_{18} fatty acids, unsaturated free C_{14}-C_{20} fatty acids, unsaturated free C_{14}-C_{22} fatty acids, unsaturated free C_{14}-C_{24} fatty acids, unsaturated free C_{16}-C_{18} fatty acids, unsaturated free C_{16}-C_{20} fatty acids, unsaturated free C_{16}-C_{22} fatty acids, unsaturated free C_{16}-C_{24} fatty acids, unsaturated free C_{18}-C_{20} fatty acids, unsaturated free C_{18}-C_{22} fatty acids, unsaturated free C_{18}-C_{24} fatty acids, unsaturated free C_{20}-C_{22} fatty acids, or unsaturated free C_{22}-C_{24} fatty acids. In some embodiments, pharmaceutical composition disclosed herein may include one or more free C_{14-24} fatty acids comprising, or consisting essentially of or consisting of ω−3 unsaturated free C_{18}-C_{22} fatty acids, ω−5 unsaturated free C_{18}-C_{22} fatty acids, ω−6 unsaturated free C_{18}-C_{22} fatty acids, ω−7 unsaturated free C_{18}-C_{22} fatty acids, ω−9 unsaturated free C_{18}-C_{22} fatty acids, ω−10 unsaturated free C_{18}-C_{22} fatty acids, ω−11 unsaturated free C_{18}-C_{22} fatty acids, or ω−12 unsaturated free C_{18}-C_{22} fatty acids.

[0102] In some embodiments, pharmaceutical composition disclosed herein may include one or more free C_{14-24} fatty acids comprising, or consisting essentially of or consisting of saturated free C_{14}-C_{16} fatty acids, saturated free C_{14}-C_{18} fatty acids, saturated free C_{14}-C_{20} fatty acids, saturated free C_{14}-C_{22} fatty acids, saturated free C_{14}-C_{24} fatty acids, saturated free C_{16}-C_{18} fatty acids, saturated free C_{16}-C_{20} fatty acids, saturated free C_{16}-C_{22} fatty acids, saturated free C_{16}-C_{24} fatty acids, saturated free C_{18}-C_{20} fatty acids, saturated free C_{18}-C_{22} fatty acids, saturated free C_{18}-C_{24} fatty acids, saturated free C_{20}-C_{22} fatty acids, or saturated free C_{22}-C_{24} fatty acids.

[0103] In some embodiments, a pharmaceutical composition disclosed herein may include one or more free C_{14-24} fatty acids comprising, or consisting essentially of or consisting of a mixture of saturated and unsaturated free C_{14}-C_{16} fatty acids, a mixture of saturated and unsaturated free C_{14}-C_{18} fatty acids, a mixture of saturated and unsaturated free C_{14}-C_{20} fatty acids, a mixture of saturated and unsaturated free C_{14}-C_{22} fatty acids, a mixture of saturated and unsaturated free C_{14}-C_{24} fatty acids, a mixture of saturated and unsaturated free C_{16}-C_{18} fatty acids, a mixture of saturated and unsaturated free C_{16}-C_{20} fatty acids, a mixture of saturated and unsaturated free C_{16}-C_{22} fatty acids, a mixture of saturated and unsaturated free C_{16}-C_{24} fatty acids, a mixture of saturated and unsaturated free C_{18}-C_{20} fatty acids, a mixture of saturated and unsaturated free C_{18}-C_{22} fatty acids, a mixture of saturated and unsaturated free C_{18}-C_{24} fatty acids, a mixture of saturated and unsaturated free C_{20}-C_{22} fatty acids, or a mixture of saturated and unsaturated free C_{22}-C_{24} fatty acids.

[0104] Non-limiting examples of a free C_{14-24} fatty acid include palmitic acid (hexadecenoic aicd), palmitolinolenic acid, palmitidonic acid, palmitovaccenic acid, palmitoleic acid, sapienic acid, 4-Hexadecenoic acid, stearic acid (octadecenoic acid), α-linolenic acid, stearidonic acid, α-eleostearic acid, β-eleostearic acid, pumicic acid, 7,10,13-octadecatrienoic acid, 12-octadecenoic acid, linoleic acid, linolelaidic acid. γ-linolenic acid, calendic acid, pinolenic acid, vaccinic acid, ruminic acid, oleic acid, elaidic acid, petroselinic acid, arachidic acid (eicosanoic acid), dihomo-α-linolenic acid, eicosic acidtraenoic acid, eicosapentaenoic acid, 9,12,15-eicosatrienoic acid, β-eicosic acidtraenoic acid, dihomo-linoleic acid, dihomo-γ-linolenic acid, arachidonic acid, paullinic acid, 7,10,13-eicosatrienoic acid, gondoic acid, 8,11-eicosadienoic acid, meadic acid, gadoleic acid, 8-eicosenoic acid, behenic acid (docosanoic acid), clupanodonic acid, docosahexaenoic acid, adrenic acid, osbondic acid, erucic acid, lignoceric acid (tetracosanic acid), 9,12,15,18,21-Tetracosapentaenoic acid, 6,9,12,15,18,21-Tetracosahexaenoic acid, and nervonic acid.

[0105] The amount of a free C_{14-24} fatty acid useful in a pharmaceutical composition disclosed herein is an amount that does not adversely affect the pharmacokinetics of a therapeutic compound it is being formulated with. In some embodiments, a pharmaceutical composition disclosed herein may comprising or consisting essentially of or consisting of one or more free C_{14-24} fatty acids in an amount of, *e.g.*, about 1% by weight, about 2.5% by weight, about 5% by weight, about 7.5% by weight, about 10 % by weight, about 12.5% by weight, about 15 % by weight, about 17.5% by weight, about 20% by weight, about 22.5% by weight, about 25% by weight, about 35% by weight, about 30% by weight, about 40% by weight, about 50% by weight, about 60% by weight, about 70% by weight, or about 75% by weight. In some embodiments, a pharmaceutical composition disclosed herein may comprising or consisting essentially of or consisting of one or more free C_{14-24} fatty acids in an amount of, *e.g.*, at least 1% by weight, at least 2.5% by weight, at least 5% by weight, at least 7.5% by weight, at least 10 % by weight, at least 12.5% by weight, at least 15 % by weight, at least 17.5% by weight, at least 20% by weight, at least 22.5% by weight, at least 25% by weight, at least 30% by weight, at least 35% by weight, at least 40% by weight, at least 50% by weight, at least 60% by weight, at least 70% by weight, or at least 75% by weight. In some embodiments, a pharmaceutical composition disclosed herein may comprising or consisting essentially of or consisting of one or more free C_{14-24} fatty acids in an amount of, *e.g.*, at most 1% by weight, at most 2.5% by weight, at most 5% by weight, at most 7.5% by weight, at most 10 % by weight, at most 12.5% by weight, at most 15 % by weight, at most 17.5% by weight, at most 20% by weight, at most 22.5% by weight, at most 25% by weight, at most 30% by weight, at most 35% by weight, at most 40% by weight, at most 50% by weight, at most 60% by weight, at most 70% by weight, or at most 75% by weight.

[0106] In some embodiments, a pharmaceutical composition disclosed herein may comprising or consisting essentially of or consisting of one or more free C_{14-24} fatty acids in an amount of, *e.g.*, about 1% to about 2.5% by weight, about 1% to about 5% by weight, about 1% to about 10% by weight, about 1% to about 15% by weight, about 1% to about 20% by weight, about 1% to about 25% by weight, about 2.5% to about 5% by weight, about 2.5% to about 10% by weight, about 2.5% to about 15% by weight, about 2.5% to about 20% by weight, about 2.5% to about 25% by weight, about 2.5% to about 30% by weight, about 5% to about 10% by weight, about 5% to about 15% by weight, about 5% to about 20% by weight, about

5% to about 25% by weight, about 5% to about 30% by weight, about 10% to about 15% by weight, about 10% to about 20% by weight, about 10% to about 25% by weight, about 10% to about 30% by weight, about 10% to about 40% by weight, about 10% to about 45% by weight, about 10% to about 50% by weight, about 10% to about 60% by weight, about 10% to about 70% by weight, about 15% to about 20% by weight, about 15% to about 25% by weight, about 15% to about 30% by weight, about 15% to about 40% by weight, about 15% to about 45% by weight, about 15% to about 50% by weight, about 15% to about 60% by weight, about 15% to about 70% by weight, about 20% to about 25% by weight, about 20% to about 30% by weight, about 20% to about 40% by weight, about 20% to about 45% by weight, about 20% to about 50% by weight, about 20% to about 60% by weight, about 20% to about 70% by weight, about 30% to about 40% by weight, about 30% to about 50% by weight, about 30% to about 60% by weight, about 30% to about 70% by weight, about 30% to about 75% by weight, about 35% to about 40% by weight, about 35% to about 50% by weight, about 35% to about 60% by weight, about 35% to about 70% by weight, about 35% to about 75% by weight, about 40% to about 50% by weight, about 40% to about 60% by weight, about 40% to about 70% by weight, about 40% to about 75% by weight, about 50% to about 60% by weight, about 50% to about 70% by weight, or about 60% to about 70% by weight.

[0107] In some embodiments, a pharmaceutical composition disclosed herein may comprising or consisting essentially of or consisting of one or more free C_{14-24} fatty acids in a concentration of, *e.g.*, at most 0.01 mM, at most 0.025 mM, at most 0.05 mM, at most 0.075 mM, at most 0.1 mM, at most 0.25 mM, at most 0.5 mM, at most 0.75 mM, at most 1 mM, at most 1.25 mM, at most 1.5 mM, at most 1.75 mM, or at most 2 mM. In some embodiments, a pharmaceutical composition disclosed herein may comprising or consisting essentially of or consisting of one or more free C_{14-24} fatty acids in a concentration of, *e.g.*, about 0.01 mM to about 0.05 mM, about 0.01 mM to about 0.1 mM, about 0.01 mM to about 0.5 mM, about 0.01 mM to about 1 mM, about 0.01 mM to about 1.25 mM, about 0.01 mM to about 1.5 mM, about 0.01 mM to about 1.75 mM, about 0.01 mM to about 2 mM, about 0.05 mM to about 0.1 mM, about 0.05 mM to about 0.5 mM, about 0.05 mM to about 1 mM, about 0.05 mM to about 1.25 mM, about 0.05 mM to about 1.5 mM, about 0.05 mM to about 1.75 mM, about 0.05 mM to about 2 mM, about 0.1 mM to about 0.5 mM, about 0.1 mM to about 1 mM, about 0.1 mM to about 1.25 mM, about 0.1 mM to about 1.5 mM, about 0.1 mM to about 1.75 mM, about 0.1 mM to about 2 mM, about 0.5 mM to about 1 mM, about 0.5 mM to about 1.25 mM, about 0.5 mM to about 1.5 mM, about 0.5 mM to about 1.75 mM, about 0.5 mM to about 2 mM, about 1 mM to about 1.25 mM, about 1 mM to about 1.5 mM, about 1 mM to about 1.75 mM, or about 15 mM to about 2 mM.

Phospholipids

[0108] A pharmaceutical composition disclosed herein may comprises one or more phospholipids. Like bile acids disclosed herein, phospholipids disclosed herein to break apart the lipid component of a pharmaceutical composition disclosed herein via its surfactant properties into smaller lipid structures that mimic emulsion droplets, thereby facilitating the emulsification process. The “emulsion droplets” recruit coliapse and create a greater surface area for which pancreatic lipase can digest the hard fat glycerolipids present therewithin. In addition phospholipids disclosed herein, along with free fatty acid surfactants

disclosed herein, facilitate formation of micelles by associating with the lipid digestion products of triglycerides, and then enhancing association of the triglyceride digestion products with fatty acid transporters, thereby enhancing absorption lipid molecules and the associated therapeutic compound into enterocytes.

[0109] The structure of the phospholipid generally comprises a hydrophobic tail of one or more fatty acids and a hydrophilic head containing phosphoric acid functional group and is amphipathic in nature and having an HLB of greater than 12. Phospholipids include, without limitation, phosphoglycerides and phosphosphingolipids. Phosphoglycerides have a general structure comprising a glycerol backbone with two fatty acids esterified to the first and second hydroxyl groups of glycerol and a phosphoric acid group esterified to the third hydroxyl group of glycerol. An alcohol group is esterified to the phosphoric acid group of a phosphoglyceride. Phosphoglycerides always have two fatty acids usually with one fatty acid being saturated and the other being unsaturated. Phosphoglycerides are generally typed according to the particular alcohol group present on the phosphortic acid group, such as, *e.g.*, ethanolamine, choline, serine or inositol. Non-limiting examples of phosphoglycerides include a phosphatidic acid (phosphatidate) (PA), a phosphatidylethanolamine (PE), a phosphatidylcholine (PC), a phosphatidylserine (PS), a cardiolipin, and a phosphoinositide including phosphatidylinositol (PI), phosphatidylinositol phosphate (PIP), phosphatidylinositol bisphosphate (PIP2), and phosphatidylinositol triphosphate (PIP3).

[0110] Although structurally different, phosphosphingolipids also have a polar head and two nonpolar tails. Phosphosphingolipids have a general structure comprising a long-chain amino alcohol sphingosine backbone with a fatty acid forming an amide linkage to the amino group of to the sphingosine backbone and a phosphoric acid group esterified to the hydroxyl group of the sphingosine backbone. Non-limiting examples of phosphosphingolipids include a ceramide phosphorylethanolamine (Cer-PE), and ceramide phosphorylcholine (Cer-PC), and ceramide phosphorylglycerol (Cer-PG).

[0111] In addition to its amphipathic nature, a phospholipid can be a zwitterionic phospholipids. A zwitterionic phospholipid is a fully ionized molecule that contains an equal number of positively charged and negatively charged functional groups and is electrically neutral. Non-limiting examples of a zwitterionic phospholipid include phosphatidylethanolamine (PE), phosphatidylcholine (PC), ceramide phosphorylethanolamine (Cer-PE), and ceramide phosphorylcholine (Cer-PC).

[0112] Phospholipids disclosed herein include lecthins. Lecthins are amphiphilic mixtures of glycerophospholipids. In some embodiments, a lecthin comprises a mixture of phosphatidylcholine, phosphatidylethanolamine, phosphatidylinositol, phosphatidylserine, and phosphatidic acid. In some embodiments, a lecthin comprises 19% to 21% phosphatidylcholine, 8% to 20% phosphatidylethanolamine, 20% to 21% phosphatidylinositol, and 5% to 11% phospholipids comprising phosphatidylserine, and phosphatidic acid.

[0113] In some embodiments, a pharmaceutical composition disclosed herein may comprising or consisting essentially of or consisting of one or more phospholipids in an amount of, *e.g.*, about 1.0% by

weight, about 1.5% by weight, about 2.0% by weight, about 2.5% by weight, about 3.0% by weight, about 3.5% by weight, about 4.0% by weight, about 4.5% by weight, about 5.0% by weight, about 5.5% by weight, about 6.0% by weight, about 6.5% by weight, about 7.0% by weight, about 7.5% by weight, about 8.0% by weight, about 8.5% by weight, about 9.0% by weight, about 9.5% by weight, or about 10.0% by weight. In some embodiments, a pharmaceutical composition disclosed herein may comprising or consisting essentially of or consisting of one or more phospholipids in an amount of, *e.g.*, at least 1.0% by weight, at least 1.5% by weight, at least 2.0% by weight, at least 2.5% by weight, at least 3.0% by weight, at least 3.5% by weight, at least 4.0% by weight, at least 4.5% by weight, at least 5.0% by weight, at least 5.5% by weight, at least 6.0% by weight, at least 6.5% by weight, at least 7.0% by weight, at least 7.5% by weight, at least 8.0% by weight, at least 8.5% by weight, at least 9.0% by weight, at least 9.5% by weight, or at least 10.0% by weight. In some embodiments, a pharmaceutical composition disclosed herein may comprising or consisting essentially of or consisting of one or more phospholipids in an amount of, *e.g.*, at most 1.0% by weight, at most 1.5% by weight, at most 2.0% by weight, at most 2.5% by weight, at most 3.0% by weight, at most 3.5% by weight, at most 4.0% by weight, at most 4.5% by weight, at most 5.0% by weight, at most 5.5% by weight, at most 6.0% by weight, at most 6.5% by weight, at most 7.0% by weight, at most 7.5% by weight, at most 8.0% by weight, at most 8.5% by weight, at most 9.0% by weight, at most 9.5% by weight, or at most 10.0% by weight.

[0114] In some embodiments, a pharmaceutical composition disclosed herein may comprising or consisting essentially of or consisting of one or more phospholipids in an amount of, *e.g.*, about 1.0% to about 2.0%, about 1.0% to about 3.0%, about 1.0% to about 4.0%, about 1.0% to about 5.0%, about 1.0% to about 6.0%, about 1.0% to about 7.0%, about 1.0% to about 8.0%, about 1.0% to about 9.0%, about 1.0% to about 10.0%, about 2.0% to about 3.0%, about 2.0% to about 4.0%, about 2.0% to about 5.0%, about 2.0% to about 6.0%, about 2.0% to about 7.0%, about 2.0% to about 8.0%, about 2.0% to about 9.0%, about 2.0% to about 10.0%, about 3.0% to about 4.0%, about 3.0% to about 5.0%, about 3.0% to about 6.0%, about 3.0% to about 7.0%, about 3.0% to about 8.0%, about 3.0% to about 9.0%, about 3.0% to about 10.0%, about 4.0% to about 5.0%, about 4.0% to about 6.0%, about 4.0% to about 7.0%, about 4.0% to about 8.0%, about 4.0% to about 9.0%, about 4.0% to about 10.0%, about 5.0% to about 6.0%, about 5.0% to about 7.0%, about 5.0% to about 8.0%, about 5.0% to about 9.0%, about 5.0% to about 10.0%, about 6.0% to about 7.0%, about 6.0% to about 8.0%, about 6.0% to about 9.0%, about 6.0% to about 10.0%, about 7.0% to about 8.0%, about 7.0% to about 9.0%, about 7.0% to about 10.0%, about 8.0% to about 9.0%, about 8.0% to about 10.0%, or about 9.0% to about 10.0% by weight.

C_{14-24} Fatty Acid Surfactants

[0115] A pharmaceutical composition disclosed herein may comprises one or more free C_{14-24} fatty acid surfactants. A fatty acid surfactant comprises a carboxylic acid with a long unbranched hydrocarbon chain which may be either saturated or unsaturated associated with an alkali metal or other metal ion and are hydrophobic molecules amphipathic molecules having a HLB of greater than 12. The primary purpose of the one or more free C_{14-24} fatty acid surfactants are to enhance solubility of a therapeutic compound disclosed herein with the glycerolipid admixture and to enhance absorption of a therapeutic compound

disclosed herein thereby improving the pharmacokinetics of the compound. The improved solubility properties are achieved by the one or more free C_{14-24} fatty acid surfactants through the interaction of its carboxylic acid functional group with sodium ions present on a therapeutic compound which neutralizes the charge and facilitating the compounds interaction with the hydrophobic glycolipid admixture. The amount of the one or more free C_{14-24} fatty acid surfactants to a pharmaceutical composition disclosed herein is calculated to be stoichiometric at a minimum or supra-stoichiometric to ensure enough moles of the one or more free C_{14-24} fatty acid surfactants are present to displace the salt from the therapeutic compound and have the salt replaced by the fatty acid as a counterion which forms solubilized therapeutic compound in the lipid matrix. In the case of a freebase therapeutic compound the fatty acid surfactant also acts as a solubilizer of therapeutic compound in the composition, and is not acting as a counter-ion, so it can be in sub- or supra-stoichiometric concentrations. The improved absorption properties are achieved by the free C_{14-24} fatty acid surfactants by facilitating and increasing the formation of mixed micelles by breaking up larger emulsion droplets, thereby mimicking the lipid digestion products of triglycerides, namely free fatty acids. As such, a C_{14-24} fatty acid surfactant disclosed herein increases the uptake of micelles comprising one or more therapeutic compounds into enterocytes. A free C_{14-24} fatty acid surfactant disclosed herein is a free C_{14-24} fatty acid that is associated with an alkali metal, such as, *e.g.*, lithium (Li), sodium (Na), potassium (K), rubidium (Rb), cesium (Cs), and francium (Fr), or alkaline earth metal, such as, *e.g.*, beryllium (Be), magnesium (Mg), calcium (Ca), strontium (Sr), barium (Ba), and radium (Ra).

[0116] In some embodiments, pharmaceutical composition disclosed herein may include one or more free C_{14-24} fatty acid surfactants comprising, or consisting essentially of or consisting of unsaturated free C_{14}-C_{16} fatty acid surfactants, unsaturated free C_{14}-C_{18} fatty acid surfactants, unsaturated free C_{14}-C_{20} fatty acid surfactants, unsaturated free C_{14}-C_{22} fatty acid surfactants, unsaturated free C_{14}-C_{24} fatty acid surfactants, unsaturated free C_{16}-C_{18} fatty acid surfactants, unsaturated free C_{16}-C_{20} fatty acid surfactants, unsaturated free C_{16}-C_{22} fatty acid surfactants, unsaturated free C_{16}-C_{24} fatty acid surfactants, unsaturated free C_{18}-C_{20} fatty acid surfactants, unsaturated free C_{18}-C_{22} fatty acid surfactants, unsaturated free C_{18}-C_{24} fatty acid surfactants, unsaturated free C_{20}-C_{22} fatty acid surfactants, or unsaturated free C_{22}-C_{24} fatty acid surfactants. In some embodiments, pharmaceutical composition disclosed herein may include one or more free C_{14-24} fatty acid surfactants comprising, or consisting essentially of or consisting of ω−3 unsaturated free C_{18}-C_{22} fatty acid surfactants, ω−5 unsaturated free C_{18}-C_{22} fatty acid surfactants, ω−6 unsaturated free C_{18}-C_{22} fatty acid surfactants, ω−7 unsaturated free C_{18}-C_{22} fatty acid surfactants, ω−9 unsaturated free C_{18}-C_{22} fatty acid surfactants, ω−10 unsaturated free C_{18}-C_{22} fatty acid surfactants, ω−11 unsaturated free C_{18}-C_{22} fatty acid surfactants, or ω−12 unsaturated free C_{18}-C_{22} fatty acid surfactants.

[0117] In some embodiments, pharmaceutical composition disclosed herein may include one or more free C_{14-24} fatty acid surfactants comprising, or consisting essentially of or consisting of saturated free C_{14}-C_{16} fatty acid surfactants, saturated free C_{14}-C_{18} fatty acid surfactants, saturated free C_{14}-C_{20} fatty acid surfactants, saturated free C_{14}-C_{22} fatty acid surfactants, saturated free C_{14}-C_{24} fatty acid surfactants, saturated free C_{16}-C_{18} fatty acid surfactants, saturated free C_{16}-C_{20} fatty acid surfactants, saturated free C_{16}-C_{22} fatty acid surfactants, saturated free C_{16}-C_{24} fatty acid surfactants, saturated free C_{18}-C_{20} fatty acid

surfactants, saturated free C_{18}-C_{22} fatty acid surfactants, saturated free C_{18}-C_{24} fatty acid surfactants, saturated free C_{20}-C_{22} fatty acid surfactants, or saturated free C_{22}-C_{24} fatty acid surfactants.

[0118] In some embodiments, a pharmaceutical composition disclosed herein may include one or more free C_{14-24} fatty acid surfactants comprising, or consisting essentially of or consisting of a mixture of saturated and unsaturated free C_{14}-C_{16} fatty acid surfactants, a mixture of saturated and unsaturated free C_{14}-C_{18} fatty acid surfactants, a mixture of saturated and unsaturated free C_{14}-C_{20} fatty acid surfactants, a mixture of saturated and unsaturated free C_{14}-C_{22} fatty acid surfactants, a mixture of saturated and unsaturated free C_{14}-C_{24} fatty acid surfactants, a mixture of saturated and unsaturated free C_{16}-C_{18} fatty acid surfactants, a mixture of saturated and unsaturated free C_{16}-C_{20} fatty acid surfactants, a mixture of saturated and unsaturated free C_{16}-C_{22} fatty acid surfactants, a mixture of saturated and unsaturated free C_{16}-C_{24} fatty acid surfactants, a mixture of saturated and unsaturated free C_{18}-C_{20} fatty acid surfactants, a mixture of saturated and unsaturated free C_{18}-C_{22} fatty acid surfactants, a mixture of saturated and unsaturated free C_{18}-C_{24} fatty acid surfactants, a mixture of saturated and unsaturated free C_{20}-C_{22} fatty acid surfactants, or a mixture of saturated and unsaturated free C_{22}-C_{24} fatty acid surfactants.

[0119] Non-limiting examples of a free C_{14-24} fatty acid surfactant include sodium palmitate (hexadecanoate), sodium palmitolinolenate, sodium palmitidonate, sodium palmitovaccenate, sodium palmitoleate, sodium sapienate, sodium 4-Hexadecenoate, sodium stearate (octadecenoate),sodium α-linolenate, sodium stearidonate, sodium α-eleostearate, sodium β-eleostearate, sodium pumicate, sodium 7,10,13-octadecatrienoate, sodium 12-octadecenoate, sodium linoleate, sodium linolelaidate. Sodium γ-linolenate, sodium calendate, sodium pinolenate, sodium vaccinate, sodium ruminate, sodium oleate, sodium elaidate, sodium petroselinate, sodium arachidate (eicosanoate),sodium dihomo-α-linolenate, sodium eicosatetraenoate, sodium eicosapentaenoate, sodium 9,12,15-eicosatrienoate, sodium β-eicosatetraenoate, sodium dihomo-linoleate, sodium dihomo-γ-linolenate, sodium arachidonate, sodium paullinate, sodium 7,10,13-eicosatrienoate, sodium gondoate, Sodium 8,11-eicosadienoate, sodium meadate, sodium gadoleate, sodium 8-eicosenoate, sodium behenate (docosanoate), sodium clupanodonate, sodium docosahexaenoate, sodium adrenate, sodium osbondate, sodium erucate, sodium lignocerate (tetracosanate), sodium 9,12,15,18,21-Tetracosapentaenoate, sodium 6,9,12,15,18,21-Tetracosahexaenoate, and sodium nervonate.

[0120] The lower limit of one or more free C_{14-24} fatty acid surfactants that can be included in a pharmaceutical composition disclosed herein is an amount sufficient to solubilize a therapeutic compound and confer its improved absorption properties. The upper limit of one or more free C_{14-24} fatty acid surfactants that can be included in a pharmaceutical composition disclosed herein is its micellar concentration (CMC).

[0121] The amount of one or more free C_{14-24} fatty acid surfactants useful in a pharmaceutical composition disclosed herein is an amount below its CMC. In some embodiments, a pharmaceutical composition disclosed herein may comprising or consisting essentially of or consisting of one or more free C_{14-24} fatty acid surfactants in an amount of, *e.g.*, about 0.1% by weight, about 0.5% by weight, about 1.0% by weight,

about 1.0% by weight, about 1.5% by weight, about 2.0% by weight, about 2.5% by weight, about 3.0% by weight, about 3.5% by weight, about 4.0% by weight, about 4.5% by weight, about 5.0% by weight, about 5.5% by weight, about 6.0% by weight, about 6.5% by weight, about 7.0% by weight, about 7.5% by weight, about 8.0% by weight, about 8.5% by weight, about 9.0% by weight, about 9.5% by weight, or about 10.0% by weight. In some embodiments, a pharmaceutical composition disclosed herein may comprising or consisting essentially of or consisting of one or more free C_{14-24} fatty acid surfactants in an amount of, *e.g.*, at least 0.5% by weight, at least 1.0% by weight, at least 1.5% by weight, at least 2.0% by weight, at least 2.5% by weight, at least 3.0% by weight, at least 3.5% by weight, at least 4.0% by weight, at least 4.5% by weight, at least 5.0% by weight, at least 5.5% by weight, at least 6.0% by weight, at least 6.5% by weight, at least 7.0% by weight, at least 7.5% by weight, at least 8.0% by weight, at least 8.5% by weight, at least 9.0% by weight, at least 9.5% by weight, or at least 10.0% by weight. In some embodiments, a pharmaceutical composition disclosed herein may comprising or consisting essentially of or consisting of one or more free C_{14-24} fatty acid surfactants in an amount of, *e.g.*, at most 0.1% by weight, at most 0.5% by weight, at most 1.0% by weight, at most 1.5% by weight, at most 2.0% by weight, at most 2.5% by weight, at most 3.0% by weight, at most 3.5% by weight, at most 4.0% by weight, at most 4.5% by weight, at most 5.0% by weight, at most 5.5% by weight, at most 6.0% by weight, at most 6.5% by weight, at most 7.0% by weight, at most 7.5% by weight, at most 8.0% by weight, at most 8.5% by weight, at most 9.0% by weight, at most 9.5% by weight, or at most 10.0% by weight.

[0122] In some embodiments, a pharmaceutical composition disclosed herein may comprising or consisting essentially of or consisting of one or more free C_{14-24} fatty acid surfactants in an amount of, *e.g.*, about 0.1% to about 0.5%, about 0.1% to about 1.0%, about 0.1% to about 2.0%, about 0.1% to about 3.0%, about 0.1% to about 4.0%, about 0.1% to about 5.0%, about 0.1% to about 6.0%, about 0.1% to about 7.0%, about 0.1% to about 8.0%, about 0.1% to about 9.0%, about 0.1% to about 10.0%, about 0.5% to about 1.0%, about 0.5% to about 2.0%, about 0.5% to about 3.0%, about 0.5% to about 4.0%, about 0.5% to about 5.0%, about 0.5% to about 6.0%, about 0.5% to about 7.0%, about 0.5% to about 8.0%, about 0.5% to about 9.0%, about 0.5% to about 10.0%, about 1.0% to about 2.0%, about 1.0% to about 3.0%, about 1.0% to about 4.0%, about 1.0% to about 5.0%, about 1.0% to about 6.0%, about 1.0% to about 7.0%, about 1.0% to about 8.0%, about 1.0% to about 9.0%, about 1.0% to about 10.0%, about 2.0% to about 3.0%, about 2.0% to about 4.0%, about 2.0% to about 5.0%, about 2.0% to about 6.0%, about 2.0% to about 7.0%, about 2.0% to about 8.0%, about 2.0% to about 9.0%, about 2.0% to about 10.0%, about 3.0% to about 4.0%, about 3.0% to about 5.0%, about 3.0% to about 6.0%, about 3.0% to about 7.0%, about 3.0% to about 8.0%, about 3.0% to about 9.0%, about 3.0% to about 10.0%, about 4.0% to about 5.0%, about 4.0% to about 6.0%, about 4.0% to about 7.0%, about 4.0% to about 8.0%, about 4.0% to about 9.0%, about 4.0% to about 10.0%, about 5.0% to about 6.0%, about 5.0% to about 7.0%, about 5.0% to about 8.0%, about 5.0% to about 9.0%, about 5.0% to about 10.0%, about 6.0% to about 7.0%, about 6.0% to about 8.0%, about 6.0% to about 9.0%, about 6.0% to about 10.0%, about 7.0% to about 8.0%, about 7.0% to about 9.0%, about 7.0% to about 10.0%, about 8.0% to about 9.0%, about 8.0% to about 10.0%, or about 9.0% to about 10.0% by weight.

[0123] In some embodiments, a pharmaceutical composition disclosed herein may comprising or consisting essentially of or consisting of one or more free C_{14-24} fatty acid surfactants in a concentration of, *e.g.*, at most 5 μM, at most 10 μM, at most 15 μM, at most 20 μM, at most 25 μM, at most μM, or at most 35 μM. In some embodiments, a pharmaceutical composition disclosed herein may comprising or consisting essentially of or consisting of one or more free C_{14-24} fatty acid surfactants in a concentration of, *e.g.*, about 1 μM to about 5 μM, about 1 μM to about 10 μM, about 1 μM to about 15 μM, about 1 μM to about 20 μM, about 1 μM to about 25 μM, about 1 μM to about 30 μM, about 1 μM to about 35 μM, about 5 μM to about 10 μM, about 5 μM to about 15 μM, about 5 μM to about 20 μM, about 5 μM to about 25 μM, about 5 μM to about 30 μM, about 5 μM to about 35 μM, about 10 μM to about 15 μM, about 10 μM to about 20 μM, about 10 μM to about 25 μM, about 10 μM to about 30 μM, about 10 μM to about 35 μM, about 15 μM to about 20 μM, about 15 μM to about 25 μM, about 15 μM to about 30 μM, about 15 μM to about 35 μM, about 20 μM to about 25 μM, about 20 μM to about 30 μM, about 20 μM to about 35 μM, about 25 μM to about 30 μM, about 25 μM to about 35 μM, or about 30 μM to about 35 μM.

Curcumin

[0124] Aspects of the present specification disclose, in part, a curcumin. In some embodiments, a pharmaceutical composition disclosed herein may include a curcumin. Curcumin is a pigment of phenolic nature extracted from *Curcuma longa*. Although a pharmacologically bioactive molecule, curcumin is able to facilitate gall bladder contraction, making this compound useful as a digestion enhancer disclosed herein. Gall bladder contraction is an important process in the absorption of fat and thus provide an important benefit increase the formation of mixed micelles by breaking up larger emulsion droplets, thereby increasing the uptake of micelles comprising one or more therapeutic compounds into enterocytes. While a highly insoluble compound, curcumin is soluble using a formulation disclosed herein.

[0125] The amount of a curcumin useful in a pharmaceutical composition disclosed herein is a therapeutically effective amount or an amount effective in facilitating gall bladder contraction. In some embodiments, a pharmaceutical composition disclosed herein may comprising or consisting essentially of or consisting of curcumin in an amount of, *e.g.*, about 0.1%, about 0.5%, about 1% by weight, about 1.5% by weight, about 2% by weight, about 2.5% by weight, about 3% by weight, about 4% by weight, about 5% by weight, about 7.5% by weight, or about 10 % by weight. In some embodiments, a pharmaceutical composition disclosed herein may comprising or consisting essentially of or consisting of curcumin in an amount of, *e.g.*, at least 0.1%, at least 0.5%, at least 1% by weight, at least 1.5% by weight, at least 2% by weight, at least 2.5% by weight, at least 3% by weight, at least 4% by weight, at least 5% by weight, at least 7.5% by weight, or at least 10 % by weight. In some embodiments, a pharmaceutical composition disclosed herein may comprising or consisting essentially of or consisting of curcumin in an amount of, *e.g.*, at most 0.1%, at most 0.5%, at most 1% by weight, at most 1.5% by weight, at most 2% by weight, at most 1% by weight, at most 1.5% by weight, at most 2% by weight, at most 2.5% by weight, at most 3% by weight, at most 4% by weight, at most 5% by weight, at most 7.5% by weight, or at most 10 % by weight.

[0126] In some embodiments, a pharmaceutical composition disclosed herein may comprising or consisting essentially of or consisting of curcumin in an amount of, *e.g.*, about 0.1% to about 1% by weight, about 0.1% to about 1.5% by weight, about 0.1% to about 2% by weight, about 0.1% to about 2.5% by weight, about 0.1% to about 5% by weight, about 0.1% to about 7.5% by weight, about 0.1% to about 10% by weight, about 0.5% to about 1% by weight, about 0.5% to about 1.5% by weight, about 0.5% to about 2% by weight, about 0.5% to about 2.5% by weight, about 0.5% to about 5% by weight, about 0.5% to about 7.5% by weight, about 0.5% to about 10% by weight, about 1% to about 1.5% by weight, about 1% to about 2% by weight, about 1% to about 2.5% by weight, about 1% to about 5% by weight, about 1% to about 7.5% by weight, or about 1% to about 10% by weight.

Glycol Polymers

[0127] Aspects of the present specification disclose, in part, a glycol polymer. In some embodiments, a pharmaceutical composition disclosed herein may include one or more glycol polymers.

[0128] A pharmaceutical composition disclosed herein may comprise a stabilizing agent in an amount sufficient to stabilize the free acid or base present in a therapeutic compound disclosed herein. In other aspects of this embodiment, a pharmaceutical composition disclosed herein may comprise a stabilizing agent in an amount of, *e.g.*, less than about 40% by weight, less than about 35% by weight, less than about 30% by weight, less than about 25% by weight, less than about 20% by weight, less than about 19% by weight, less than about 18% by weight, less than about 17% by weight, less than about 16% by weight, less than about 15% by weight, less than about 14% by weight, less than about 13% by weight, less than about 12% by weight, less than about 11% by weight, less than about 10% by weight, less than about 9% by weight, less than about 8% by weight, less than about 7% by weight, less than about 6% by weight, less than about 5% by weight, less than about 4% by weight, less than about 3% by weight, less than about 2% by weight, or less than about 1%. In other aspects of this embodiment, a pharmaceutical composition disclosed herein may comprise a stabilizing agent in an amount of, *e.g.*, about 1% to about 5% by weight, about 1% to about 7% by weight, about 1% to about 10% by weight, about 1% to about 12% by weight, about 1% to about 15% by weight, about 1% to about 18% by weight, about 1% to about 20% by weight, about 2% to about 5% by weight, about 2% to about 7% by weight, about 2% to about 10% by weight, about 2% to about 12% by weight, about 2% to about 15% by weight, about 2% to about 18% by weight, about 2% to about 20% by weight, about 3% to about 5% by weight, about 3% to about 7% by weight, about 3% to about 10% by weight, about 3% to about 12% by weight, about 3% to about 15% by weight, about 3% to about 18% by weight, about 3% to about 20% by weight, about 4% to about 5% by weight, about 4% to about 7% by weight, about 4% to about 10% by weight, about 4% to about 12% by weight, about 4% to about 15% by weight, about 4% to about 18% by weight, about 4% to about 20% by weight, about 5% to about 7% by weight, about 5% to about 10% by weight, about 5% to about 12% by weight, about 5% to about 15% by weight, about 5% to about 18% by weight, about 5% to about 20% by weight, about 6% to about 7% by weight, about 6% to about 10% by weight, about 6% to about 12% by weight, about 6% to about 15% by weight, about 6% to about 18% by weight, about 6% to about 20% by weight, about 7% to about 10% by weight, about 7% to about 12% by weight, about 7% to about 15% by weight,

about 7% to about 18% by weight, about 7% to about 20% by weight, about 8% to about 10% by weight, about 8% to about 12% by weight, about 8% to about 15% by weight, about 8% to about 18% by weight, about 8% to about 20% by weight, about 9% to about 10% by weight, about 9% to about 12% by weight, about 9% to about 15% by weight, about 9% to about 18% by weight, about 9% to about 20% by weight, about 10% to about 12% by weight, about 10% to about 15% by weight, about 10% to about 18% by weight, or about 10% to about 20% by weight.

[0129] A stability agent as disclosed herein is not a solvent as it is used in an amount that does not result in substantial dissolving of a solute. As such, the amount stability agent used in a solid solution composition disclosed herein results in no more than 85% dissolution of a therapeutic compound disclosed herein. In aspects of this embodiment, he amount stability agent used in a solid solution composition disclosed herein results in. *e.g.*, no more than 80%, no more than 75%, no more than 70%, no more than 65%, no more than 60%, no more than 55%, no more than 50%, no more than 45%, no more than 40%, no more than 35%, no more than 30%, no more than 25%, no more than 20%, no more than 15%, no more than 10%, or no more than 5% dissolution of a therapeutic compound disclosed herein.

[0130] In an embodiment, a glycol polymer may comprise a pharmaceutically-acceptable PEG polymer. PEG polymers, also known as polyethylene oxide (PEO) polymers or polyoxyethylene (POE) polymers, are prepared by polymerization of ethylene oxide and are commercially available over a wide range of molecular weights from 100 g/mol to 10,000,000 g/mol. PEG polymers with a low molecular mass are liquids or low-melting solids, whereas PEG polymers of a higher molecular mass are solids. In an aspect of this embodiment, a PEG polymer used as a stability agent is a liquid PEG polymer. In aspects of this embodiment, a PEG polymer has a molecular weight of, *e.g.*, no more than 100 g/mol, no more than 200 g/mol, no more than 300 g/mol, no more than 400 g/mol, no more than 500 g/mol, no more than 600 g/mol, no more than 700 g/mol, no more than 800 g/mol, no more than 900 g/mol, or no more than 1000 g/mol.

[0131] A PEG polymer include, without limitation, PEG 100, PEG 200, PEG 300, PEG 400, PEG 500, PEG 600, PEG 700, PEG 800, PEG 900, PEG 1000, PEG 1100, PEG 1200, PEG 1300, PEG 1400, PEG 1500, PEG 1600, PEG 1700, PEG 1800, PEG 1900, PEG 2000, PEG 2100, PEG 2200, PEG 2300, PEG 2400, PEG 2500, PEG 2600, PEG 2700, PEG 2800, PEG 2900, PEG 3000, PEG 3250, PEG 3350, PEG 3500, PEG 3750, PEG 4000, PEG 4250, PEG 4500, PEG 4750, PEG 5000, PEG 5500, PEG 6000, PEG 6500, PEG 7000, PEG 7500, PEG 8000, PEG 8500, PEG 9000, PEG 9500, PEG 10,000, PEG 11,000, PEG 12,000, PEG 13,000, PEG 14,000, PEG 15,000, PEG 16,000, PEG 17,000, PEG 18,000, PEG 19,000, or PEG 20,000.

[0132] In another embodiment, a glycol polymer may comprise a pharmaceutically-acceptable polypropylene glycol (PPG) polymer. PPG polymers, also known as polypropylene oxide (PPO) polymers or polyoxypropylene (POP) polymers, are prepared by polymerization of propylene oxide and are commercially available over a wide range of molecular weights from 100 g/mol to 10,000,000 g/mol. PPG polymers with a low molecular mass are liquids or low-melting solids, whereas PPG polymers of a higher molecular mass are solids. In an aspect of this embodiment, a PPG polymer used as a stability agent is a

liquid PPG polymer. In aspects of this embodiment, a PPG polymer has a molecular weight of, *e.g.*, no more than 100 g/mol, no more than 200 g/mol, no more than 300 g/mol, no more than 400 g/mol, no more than 500 g/mol, no more than 600 g/mol, no more than 700 g/mol, no more than 800 g/mol, no more than 900 g/mol, or no more than 1000 g/mol.

[0133] A PPG polymer include, without limitation, PPG 100, PPG 200, PPG 300, PPG 400, PPG 500, PPG 600, PPG 700, PPG 800, PPG 900, PPG 1000, PPG 1100, PPG 1200, PPG 1300, PPG 1400, PPG 1500, PPG 1600, PPG 1700, PPG 1800, PPG 1900, PPG 2000, PPG 2100, PPG 2200, PPG 2300, PPG 2400, PPG 2500, PPG 2600, PPG 2700, PPG 2800, PPG 2900, PPG 3000, PPG 3250, PPG 3350, PPG 3500, PPG 3750, PPG 4000, PPG 4250, PPG 4500, PPG 4750, PPG 5000, PPG 5500, PPG 6000, PPG 6500, PPG 7000, PPG 7500, PPG 8000, PPG 8500, PPG 9000, PPG 9500, PPG 10,000, PPG 11,000, PPG 12,000, PPG 13,000, PPG 14,000, PPG 15,000, PPG 16,000, PPG 17,000, PPG 18,000, PPG 19,000, or PPG 20,000.

[0134] In some embodiments, a pharmaceutical composition disclosed herein does not include a glycol polymer. In aspects of these embodiments, a pharmaceutical composition disclosed herein does not include a PEG polymer. In other aspects of these embodiments, a pharmaceutical composition disclosed herein does not include a PGG polymer. In yet other aspects of these embodiments, a pharmaceutical composition disclosed herein does not include both a PEG polymer and a PGG polymer.

Release effects

[0135] In an embodiment, a substantial amount of a therapeutic compound present in a pharmaceutical composition disclosed herein is delivered to or enters a lipid digestion and/or absorption pathway. In aspects of this embodiment, about 10%, about 20%, about 30%, about 40%, about 50%, about 60%, about 70%, about 80% about 90%, or about 95% of a therapeutic compound present in a pharmaceutical composition disclosed herein is delivered to or enters a lipid digestion and/or absorption pathway. In other aspects of this embodiment, at least 10%, at least 20%, at least 30%, at least 40%, at least 50%, at least 60%, at least 70%, at least 80% at least 90%, or at least 95% of a therapeutic compound present in a pharmaceutical composition disclosed herein is delivered to or enters a lipid digestion and/or absorption pathway. In yet other aspects of this embodiment, at most 10%, at most 20%, at most 30%, at most 40%, at most 50%, at most 60%, at most 70%, at most 80% at most 90%, or at most 95% of a therapeutic compound present in a pharmaceutical composition disclosed herein is delivered to or enters a lipid digestion and/or absorption pathway.

[0136] In yet other aspects of this embodiment, about 10% to about 20%, about 10% to about 30%, about 10% to about 40%, about 10% to about 50%, about 10% to about 60%, about 10% to about 70%, about 10% to about 80%, about 10% to about 90%, about 10% to about 100%, about 20% to about 30%, about 20% to about 40%, about 20% to about 50%, about 20% to about 60%, about 20% to about 70%, about 20% to about 80%, about 20% to about 90%, about 20% to about 100%, about 30% to about 40%, about 30% to about 50%, about 30% to about 60%, about 30% to about 70%, about 30% to about 80%, about

30% to about 90%, about 30% to about 100%, about 40% to about 50%, about 40% to about 60%, about 40% to about 70%, about 40% to about 80%, about 40% to about 90%, about 40% to about 100%, about 50% to about 60%, about 50% to about 70%, about 50% to about 80%, about 50% to about 90%, about 50% to about 100%, about 60% to about 70%, about 60% to about 80%, about 60% to about 90%, about 60% to about 100%, about 70% to about 80%, about 70% to about 90%, about 70% to about 100%, about 80% to about 90%, about 80% to about 100%, or about 90% to about 100%, of a therapeutic compound present in a pharmaceutical composition disclosed herein is delivered to or enters a lipid digestion and/or absorption pathway.

[0137] In an embodiment, an insubstantial amount of a therapeutic compound present in a pharmaceutical composition disclosed herein is absorbed by blood capillaries and enters directly into the blood. In aspects of this embodiment, at most 1%, at most 5%, at most 10%, at most 20%, at most 30%, at most 40%, at most 50%, at most 60%, at most 70%, at most 80% at most 90%, or at most 95% of a therapeutic compound present in a pharmaceutical composition disclosed herein is absorbed by blood capillaries and enters directly into the blood. In aspects of this embodiment, about 1% to about 10%, about 1% to about 20%, about 1% to about 30%, about 1% to about 40%, about 1% to about 50%, about 1% to about 60%, about 1% to about 70%, about 1% to about 80%, about 1% to about 90%, about 1% to about 95%, about 10% to about 20%, about 10% to about 30%, about 10% to about 40%, about 10% to about 50%, about 10% to about 60%, about 10% to about 70%, about 10% to about 80%, about 10% to about 90%, about 10% to about 95%, about 20% to about 30%, about 20% to about 40%, about 20% to about 50%, about 20% to about 60%, about 20% to about 70%, about 20% to about 80%, about 20% to about 90%, about 20% to about 95%, about 30% to about 40%, about 30% to about 50%, about 30% to about 60%, about 30% to about 70%, about 30% to about 80%, about 30% to about 90%, about 30% to about 95%, about 40% to about 50%, about 40% to about 60%, about 40% to about 70%, about 40% to about 80%, about 40% to about 90%, about 40% to about 95%, about 50% to about 60%, about 50% to about 70%, about 50% to about 80%, about 50% to about 90%, about 50% to about 95%, about 60% to about 70%, about 60% to about 80%, about 60% to about 90%, about 60% to about 95%, about 70% to about 80%, about 70% to about 90%, about 70% to about 95%, about 80% to about 90%, about 80% to about 95%, or about 90% to about 95%, of a therapeutic compound present in a pharmaceutical composition disclosed herein is absorbed by blood capillaries and enters directly into the blood.

Formulating Procedure

[0138] The inclusion of one or more digestion enhancers to one or more therapeutic compounds to a pharmaceutical composition disclosed herein is applicable to any therapeutic compound administered by a route of administration where uptake of the compound is achieved by absorption through the gastrointestinal tract, such as, *e.g.*, oral delivery. However, formulation of a pharmaceutical composition disclosed herein is dependent on the solubility of a therapeutic compound in the one or more glycerolipid used in formulating the pharmaceutical composition. As such, formulation of any one particular therapeutic compound disclosed herein is achieved by the process described below which produces pharmaceutical

compositions where one or more therapeutic compounds remain stably incorporated in the glycerolipid mixture.

[0139] In some embodiments, a selected therapeutic compound can be formulated using 1) glycerolipids including at least one liquid fat (glycerolipid that is liquid at 18°C) and at least one hard fat (glycerolipid that is solid at 18°C) and 2) one or more digestion enhancers. In some embodiments, the one or more liquid and hard fats are first heated and the one or more digestion enhancers are solubilized in the glycerolipid admixture. Upon completion of solubility of the digestion enhancers, and if appropriate, the temperature of the admixture can be adjusted anda selected therapeutic compound is then dissolved in this heated admixture to incorporate the compound. In some embodiments, the one or more liquid fats are first heated and the one or more digestion enhancers are solubilized in the liquid fats. Upon completion of solubility of the digestion enhancers, and if appropriate, the temperature of the admixture can be adjusted and a selected therapeutic compound is then dissolved in this heated admixture to incorporate the compound. Upon complete dissolution of the therapeutic compound, one or more hard fats are then added to this heated admixture. In some embodiments, one or more digestion enhancers are first heated and a selected therapeutic compound is then dissolved to this heated admixture to incorporate the compound. Upon completion dissolution of the therapeutic compound, and if appropriate, the temperature of the admixture can be adjusted and one or more liquid fats are then added and incorporated into this admixture. Upon completion of solubility of the one or more liquid fats, one or more hard fats are then added and incorporated into this admixture. The initial heating step in all procedures is performed at a temperature sufficient to dissolve the one or more digestion enhancers and selected therapeutic compound and can be empirically determined based on the melting point of the selected components. Generally, this temperature range is about 60°C to about 170°C. Any subsequent adjustment to the heat when one or more liquid fats and/or one or more hart fats are being added to the admixture is performed at a temperature sufficient to melt the hard fats and can be empirically determined based on the melting point of the hard fat used in the formulation. Generally, this temperature range is about 40°C to about 60°C.

[0140] This incorporated mixture is then allowed to cool to room temperature, at which time stirring is ceased and the mixture is transferred to suitable containers where it will solidify. Once cooled, the pharmaceutical composition can be optionally stability tested by reheating the composition to a temperature sufficient to cause it to melt. The reheating step is performed at a temperature sufficient to melt the glycerolipid components and can be empirically determined based on the melting point of the hard fat used in the formulation. Generally, this temperature range is 40°C to 50°C. The selection of the one or more digestion enhancers is generally not a critical component in this process, as a bile acid, free fatty acid, phospholipid, or free fatty acid surfactant can all be used in any combination to achieve a pharmaceutical composition disclosed herein. As shown in Example 2, the preparative methods all include a complete dissolution phase that upon cooling nano-crystallization of some components occurs and this is described in the XRPD spectra.

[0141] Examples 3-6 exemplify therapeutic compounds formulated according to this process.

Methods and Uses

[0142] Aspects of the present specification disclose, in part, a method of treating an individual with a disease or disorder. In one embodiment, the method comprises the step of administering to an individual in need thereof a pharmaceutical composition disclosed herein, wherein administration reduces a symptom associated with the disease or disorder, thereby treating the individual. Aspects of the present specification disclose, in part, a pharmaceutical composition disclosed herein for use in the treatment of a disease or disorder. Aspects of the present specification disclose, in part, use of a pharmaceutical composition disclosed herein for the treatment of a disease or disorder. Aspects of the present specification disclose, in part, use of a pharmaceutical composition disclosed herein in the manufacture of a medicament for the treatment of a disease or disorder. A disease or disorder disclosed herein includes, without limitation, a neoplasm, a cancer, an inflammation, an autoimmune disorder, an idiopathic pulmonary fibrosis, and a renal disease or disorder. As a pharmaceutical composition disclosed herein relies on the digestive process of the gastrointestinal tract, oral administration is the preferred route of administration.

[0143] Aspects of the present specification disclose, in part, treating an individual suffering from a disease or disorder. As used herein, the term "treating," refers to reducing or eliminating in an individual a clinical symptom of a disease or disorder; or delaying or preventing in an individual the onset of a clinical symptom of a disease or disorder. For example, the term "treating" can mean reducing a symptom of a condition characterized by a disease or disorder by, *e.g.*, at least 20%, at least 25%, at least 30%, at least 35%, at least 40%, at least 45%, at least 50%, at least 55%, at least 60%, at least 65%, at least 70%, at least 75%, at least 80%, at least 85%, at least 90% at least 95%, or at least 100%. The actual symptoms associated with a disease or disorder are well known and can be determined by a person of ordinary skill in the art by taking into account factors, including, without limitation, the location of the disease or disorder, the cause of the disease or disorder, the severity of the disease or disorder, and/or the tissue or organ affected by the disease or disorder. Those of skill in the art will know the appropriate symptoms or indicators associated with a specific type of disease or disorder and will know how to determine if an individual is a candidate for treatment as disclosed herein.

[0144] Aspects of the present specification disclose, in part, a disease or disorder that is a neoplasm. Neoplasms can be divided into four main groups: benign neoplasms, in situ neoplasms, malignant neoplasms, and neoplasms of uncertain or unknown behavior. A neoplasm can be benign, potentially malignant, or malignant (*i.e.*, cancer). A benign neoplasm include uterine fibroids, osteophytes and melanocytic nevi (skin moles). Potentially-malignant neoplasms are localized, do not invade or destroy surrounding tissue but have the potential to transform into a malignant neoplasm. Potentially-malignant neoplasms include carcinoma in situ. Malignant neoplasms are commonly called cancer. They invade and destroy the surrounding tissue, may metastasis and, if untreated or unresponsive to treatment, will generally prove fatal. Secondary neoplasm refers to any of a class of cancer that is either a metastatic offshoot of a primary tumor, or an apparently unrelated tumor that increases in frequency following certain cancer treatments such as chemotherapy or radiotherapy. Rarely there can be a metastatic neoplasm with no known site of the primary cancer and this is classed as a cancer of unknown primary origin.

[0145] Aspects of the present specification disclose, in part, a disease or disorder that is a cancer. Cancer, or malignant neoplasm, is a large group of diseases involving uncontrolled growth and division of abnormal cells. A cancer can be a primary cancer, the initial or original malignant neoplastic disease, or a metastatic cancer, a malignant neoplasm deriving from a primary cancer that spread or invaded to other parts of the body cause new malignant neoplasms. A cancer can be a solid tumor comprising an abnormal mass of tissue that usually does not contain cysts or liquid areas, or a non-solid (blood) tumor, malignant neoplasms lacking mass.

[0146] Cancers are classified by the type of cell that the tumor cells resemble and is therefore presumed to be the origin of the tumor. These types include carcinomas, sarcomas, lymphomas and leukemias, germ cell tumors, and blastomas. A carcinoma is malignancy arising from epithelial cells, including the epithelial lining that covers the surface of internal organs and glands. This group includes many of the most common cancers and include nearly all those in the bladder, brain, breast, cervical, colon, endometrium, kidney, liver, lung, ovarian, pancreas prostate, rectum, skin, small intestine, stomach, thyroid, and uterus. A sarcoma is malignancy arising from mesenchymal cells and include neoplasms derived from connective tissue such as, *e.g.*, bone, cartilage, fat, nervous, and vascular tissue, A lymphoma or leukemia is malignancy arising from hematopoietic (blood-forming) cells that leave the marrow and tend to mature in the lymph nodes (lymphoma) and blood (leukemia). A germ cell tumor is malignancy arising from pluripotent cells, most often presenting in the testicle or the ovary (seminoma and dysgerminoma, respectively). A blastoma is malignancy arising from immature "precursor" cells or embryonic tissue.

[0147] Non-limiting examples of a cancer, whether a primary cancer or a metastatic cancer, include a basil-cell skin cancer, a bladder cancer, a brain cancer, a breast cancer, a cervical cancer, a colon cancer, an endometrial cancer, a glioblastoma, a Hodgkin's lymphoma, a non-Hodgkin's lymphoma, a kidney cancer, a leukemia, a lip cancer, a liver cancer, a lymphoma, a melanoma, a mesothelioma, a myeloma, a non-small cell lung cancer, a non-melanoma skin cancer, an oral cancer, an ovarian cancer, a pancreatic cancer, a prostate cancer, a rectal cancer, a sarcoma, a small cell lung cancer, a squamous cell skin cancer, and a thyroid cancer.

[0148] In aspects of this embodiment, a cancer includes a bone or muscle cancer including, without limitation, a chondrosarcoma, an Ewing's sarcoma, a malignant fibrous histiocytoma, an osteosarcoma, a rhabdomyosarcoma, and a heart cancer.

[0149] In aspects of this embodiment, a cancer includes a brain or neuronal cancer including, without limitation, an astrocytoma, a brainstem glioma, a pilocytic astrocytoma, an ependymoma, a primitive neuroectodermal tumor, a cerebellar astrocytoma, a cerebral astrocytoma, a glioblastoma, a glioma, a medulloblastoma, a neuroblastoma, an oligodendroglioma, a pineal astrocytoma, a pituitary adenoma, and hypothalamic glioma.

[0150] In aspects of this embodiment, a cancer includes a breast cancer including, without limitation, a female breast cancer, an invasive cribriform carcinoma, an invasive lobular carcinoma, a medullary carcinoma, a male breast cancer, a phyllodes tumor, and a tubular carcinoma.

[0151] In aspects of this embodiment, a cancer includes an endocrine cancer including, without limitation, an adrenocortical carcinoma, an islet cell carcinoma (endocrine pancreas), a merkel cell carcinoma, a multiple endocrine neoplasia syndrome, a parathyroid cancer, a pheochromocytoma, and a thyroid cancer.

[0152] In aspects of this embodiment, a cancer includes an eye cancer including, without limitation, a retinoblastoma and an uveal melanoma

[0153] In aspects of this embodiment, a cancer includes a gastrointestinal cancer including, without limitation, an anal cancer, an appendix cancer, a cholangiocarcinoma, a colon cancer, an extrahepatic bile duct cancer, a gallbladder cancer, a gastric (stomach) cancer, a gastrointestinal carcinoid tumor, a gastrointestinal stromal tumor (GIST), a hepatocellular cancer, an islet cell cancer, a pancreatic cancer, and a rectal cancer.

[0154] In aspects of this embodiment, a cancer includes a genitourinary or gynecologic cancer including, without limitation, a bladder cancer, a cervical cancer, an endometrial cancer, an extragonadal germ cell tumor, a gestational trophoblastic cancer, an ovarian cancer, an ovarian epithelial cancer (surface epithelial-stromal tumor), an ovarian germ cell cancer, a penile cancer, a renal cell carcinoma, a prostate cancer, a transitional cell cancer (renal pelvis to ureter or ureter and renal pelvis), a testicular cancer, an urethral cancer, an uterine sarcoma, a vaginal cancer, a vulvar cancer, and a Wilms tumor.

[0155] In aspects of this embodiment, a cancer includes a head and neck cancer including, without limitation, an esophageal cancer, a head cancer, a hypopharyngeal cancer, a neck cancer, a nasopharyngeal carcinoma, an oral cancer, an oropharyngeal cancer, a paranasal sinus and nasal cavity cancer, a pharyngeal cancer, a salivary gland cancer.

[0156] In aspects of this embodiment, a cancer includes a hematopoietic cancer including, without limitation, an acute biphenotypic leukemia, an acute eosinophilic leukemia, an acute lymphoblastic leukemia, an acute myeloid leukemia, an acute myeloid dendritic cell leukemia, an AIDS-related lymphoma, an anaplastic large cell lymphoma, an angioimmunoblastic T-cell lymphoma, a B-cell prolymphocytic leukemia, a Burkitt's lymphoma, a chronic lymphocytic leukemia, a chronic myelogenous leukemia, a cutaneous T-cell lymphoma, a diffuse large B-cell lymphoma, a follicular lymphoma, a hairy cell leukemia, a hepatosplenic T-cell lymphoma, a Hodgkin's lymphoma, an intravascular large B-cell lymphoma, a large granular lymphocytic leukemia, a lymphoplasmacytic lymphoma, a lymphomatoid granulomatosis, a mantle cell lymphoma, a marginal zone B-cell lymphoma, a mast cell leukemia, a mediastinal large B cell lymphoma, a multiple myeloma/plasma cell neoplasm, a myelodysplastic syndrome, a mucosa-associated lymphoid tissue lymphoma, a mycosis fungoides lymphoma, a nodal marginal zone B cell lymphoma, a non-Hodgkin lymphoma, a precursor B lymphoblastic leukemia, a primary central nervous system

lymphoma, a primary cutaneous follicular lymphoma, a primary cutaneous immunocytoma, a primary effusion lymphoma, a plasmablastic lymphoma, a Sézary syndrome, a splenic marginal zone lymphoma, and a T-cell prolymphocytic leukemia.

[0157] In aspects of this embodiment, a cancer includes a skin cancer including, without limitation, a basal cell carcinoma, a dermatofibrosarcoma protuberans sarcoma, a melanoma, a Merkel cell carcinoma, a sebaceous carcinoma, a skin adnexal tumor, and a squamous cell carcinoma.

[0158] In aspects of this embodiment, a cancer includes a thoracic or respiratory cancer including, without limitation, a bronchial adenoma/carcinoid, a laryngeal cancer, a mesothelioma, a non-small cell lung cancer, a pleuropulmonary blastoma, a small cell lung cancer, a thymoma, and a thymic carcinoma.

[0159] In aspects of this embodiment, a cancer includes a HIV/AIDS related cancer including, without limitation, a AIDS-related cancer and a Kaposi sarcoma.

[0160] In aspects of this embodiment, a cancer includes an epithelioid hemangioendothelioma (EHE), a desmoplastic small round cell tumor, and a liposarcoma.

[0161] Aspects of the present specification disclose, in part, a disease or disorder that is a chronic inflammation. Inflammation involves the activation of the immune system in response to harmful stimuli, such as, *e.g.*, a pathogen, infection, irritant, or damage to cells. As a stereotyped response, inflammation is a mechanism of innate immunity, as compared to adaptive immunity, which is specific for each pathogen. Inflammation can be classified as either acute or chronic. Generally speaking, acute inflammation is mediated by granulocytes, while chronic inflammation is mediated by mononuclear cells such as monocytes and lymphocytes.

[0162] Acute inflammation is an initial protective response of the body to remove an injurious stimulus by maintaining tissue integrity and contributing to tissue repair. It is a part of the body's natural defense system against injury and disease, and in the absence of acute inflammation, wounds and infections would never heal and progressive destruction of the tissue would compromise the survival of the organism.

[0163] The process of acute inflammation is initiated by cells already present in all tissues, mainly resident macrophages, dendritic cells, histiocytes, Kupffer cells, mastocytes, vascular endothelial cells, and vascular smooth muscle cells. At the onset of a harmful stimulus, these cells undergo activation and release inflammatory mediating and sensitizing molecules, such as, *e.g.*, pro-inflammatory cytokines, pro-inflammatory prostaglandins, leukotrienes, histamine, serotonin, neutral proteases, bradykinin and nitric oxide. These inflammatory molecules modulate a complex series of biological events involving cellular and acellular components of the local vascular system, the immune system, and the injured tissue site to propagate and mature the inflammatory response. These events are responsible for eliciting an acute inflammatory response, typically characterized by 1) vasodilatation which increases blood flow into the tissue thereby causing erythema (redness and warmth), which may extend beyond this site (the flare response); 2) blood vessel permeability which increases plasma leakage into the tissue thereby causing

edema (swelling); 3) alter the excitability of certain sensory neurons causing hypersensitivity and pain; 4) stimulate the release of inflammation inducing molecules such as, *e.g.*, neuropeptides like substance P (SP) and calcitonin gene-related peptide (CGRP), prostaglandins, and amino acids like glutamate, from the peripheral nerve endings; and 5) increase migration of leukocytes, mainly granulocytes, from the blood vessels into the tissue. An acute inflammatory response requires constant stimulation to be sustained and must be actively terminated when no longer needed. Hence, acute inflammation ceases once the injurious stimulus has been removed.

[0164] However, severe or prolonged noxious stimulation results in a chronic inflammatory response that leads to a progressive shift in the type of cells present at the site of tissue injury. Chronic inflammation may be characterized as the simultaneous destruction and healing of tissue from the inflammatory process, with the net result of provoking injury rather than mediating repair. As such, chronic inflammation is a disease. As an inflammatory response can occur anywhere in the body, chronic inflammation has been implicated in the pathophysiology of a wide range of seemingly unrelated disorders which underlay a large and varied group of human diseases. For example, chronic inflammation is involved in diseases as diverse as cardiovascular diseases, cancers, allergies, obesity, diabetes, digestive system diseases, degenerative diseases, auto-immune disorders, and Alzheimer's disease.

[0165] Chronic inflammation symptoms include, without limitation, edema, hyperemia, erythema, bruising, tenderness, stiffness, swollenness, fever, chills, stuffy nose, stuffy head, breathing problems, fluid retention, blood clots, loss of appetite, increased heart rate, formation of granulomas, fibrinous, pus, non-viscous serous fluid, or ulcer and pain. The actual symptoms associated with a chronic inflammation are well known and can be determined by a person of ordinary skill in the art by taking into account factors, including, without limitation, the location of the inflammation, the cause of the inflammation, the severity of the inflammation, the tissue or organ affected, and the associated disorder.

[0166] Specific patterns of chronic inflammation are seen during particular situations that arise in the body, such as when inflammation occurs on an epithelial surface, or pyogenic bacteria are involved. For example, granulomatous inflammation is an inflammation resulting from the formation of granulomas arising from a limited but diverse number of diseases, include, without limitation, tuberculosis, leprosy, sarcoidosis, and syphilis. Purulent inflammation is an inflammation resulting in large amount of pus, which consists of neutrophils, dead cells, and fluid. Infection by pyogenic bacteria such as staphylococci is characteristic of this kind of inflammation. Serous inflammation is an inflammation resulting from copious effusion of non-viscous serous fluid, commonly produced by mesothelial cells of serous membranes, but may be derived from blood plasma. Skin blisters exemplify this pattern of inflammation. Ulcerative inflammation is an inflammation resulting from the necrotic loss of tissue from the epithelial surface, exposing lower layers and forming an ulcer.

[0167] A chronic inflammation symptom can be associated with a large, unrelated group of disorders which underlay a variety of diseases and disorders. The immune system is often involved with chronic inflammatory disorders, demonstrated in both allergic reactions and some myopathies, with many immune system disorders resulting in abnormal inflammation. Non-immune diseases with etiological origins in

chronic inflammatory processes include cancer, atherosclerosis, and ischaemic heart disease. Non-limiting examples of disorders exhibiting chronic inflammation as a symptom include, without limitation, acne, acid reflux/heartburn, age related macular degeneration (AMD), allergy, allergic rhinitis, Alzheimer's disease, amyotrophic lateral sclerosis, anemia, appendicitis, arteritis, arthritis, asthma. atherosclerosis, autoimmune disorders, balanitis, blepharitis, bronchiolitis, bronchitis, a bullous pemphigoid, burn, bursitis, cancer, cardiac arrest, carditis, celiac disease, cellulitis, cervicitis, cholangitis, cholecystitis, chorioamnionitis, chronic obstructive pulmonary disease (COPD), cirrhosis, colitis, congestive heart failure, conjunctivitis, cyclophosphamide-induced cystitis, cystic fibrosis, cystitis, common cold, dacryoadenitis, dementia, dermatitis, dermatomyositis, diabetes, diabetic neuropathy, diabetic retinopathy, diabetic nephropathy, diabetic ulcer, digestive system disease, eczema, emphysema, encephalitis, endocarditis, endometritis, enteritis, enterocolitis, epicondylitis, epididymitis, fasciitis, fibromyalgia, fibrosis, fibrositis, gastritis, gastroenteritis, gingivitis, glomerulonephritis, glossitis, heart disease, heart valve dysfunction, hepatitis, hidradenitis suppurativa, Huntington's disease, hyperlipidemic pancreatitis, hypertension, ileitis, infection, inflammatory bowel disease, inflammatory cardiomegaly, insulin resistance, interstitial cystitis, interstitial nephritis, iritis, ischemia, ischemic heart disease, keratitis, keratoconjunctivitis, laryngitis, lupus nephritis, mastitis, mastoiditis, meningitis, metabolic syndrome (syndrome X), a migraine, multiple sclerosis, myelitis, myocarditis, myositis, nephritis, non-alcoholic steatohepatitis, obesity, omphalitis, oophoritis, orchitis, osteochondritis, osteopenia, osteomyelitis, osteoporosis, osteitis, otitis, pancreatitis, Parkinson's disease, parotitis, pelvic inflammatory disease, pemphigus vularis, pericarditis, peripheral neuropathy, peritonitis, pharyngitis, phlebitis, pleuritis, pneumonitis, polycystic nephritis, proctitis, prostatitis, psoriasis, pulpitis, pyelonephritis, pylephlebitis, renal failure, reperfusion injury, retinitis, rheumatic fever, rhinitis, salpingitis, sarcoidosis, sialadenitis, sinusitis, spastic colon, stenosis, stomatitis, stroke, surgical complication, synovitis, tendonitis, tendinosis, tenosynovitis, thrombophlebitis, tonsillitis, trauma, traumatic brain injury, transplant rejection, trigonitis, tuberculosis, tumor, urethritis, ursitis, uveitis, vaginitis, vasculitis, and vulvitis. See also, Eric R. First, *Application of Botulinum Toxin to the Management of Neurogenic Inflammatory Disorders*, U.S. Patent 6,063,768, which is hereby incorporated by reference in its entirety.

[0168] In one embodiment, a chronic inflammation comprises a tissue inflammation. Tissue inflammation is a chronic inflammation that is confined to a particular tissue or organ. In aspect of this embodiment, a tissue inflammation comprises, *e.g.*, a skin inflammation, a muscle inflammation, a tendon inflammation, a ligament inflammation, a bone inflammation, a cartilage inflammation, a lung inflammation, a heart inflammation, a liver inflammation, a pancreatic inflammation, a kidney inflammation, a bladder inflammation, a stomach inflammation, an intestinal inflammation, a neuronal inflammation, and a brain inflammation.

[0169] In another embodiment, a chronic inflammation comprises a systemic inflammation. Although the processes involved are identical to tissue inflammation, systemic inflammation is not confined to a particular tissue but in fact overwhelms the body, involving the endothelium and other organ systems. When it is due to infection, the term sepsis is applied, with the terms bacteremia being applied specifically for bacterial sepsis and viremia specifically to viral sepsis. Vasodilation and organ dysfunction are serious problems associated with widespread infection that may lead to septic shock and death.

[0170] In another embodiment, a chronic inflammation comprises an arthritis. Arthritis includes a group of conditions involving damage to the joints of the body due to the inflammation of the synovium including, without limitation osteoarthritis, rheumatoid arthritis, juvenile idiopathic arthritis, spondyloarthropathies like ankylosing spondylitis, reactive arthritis (Reiter's syndrome), psoriatic arthritis, enteropathic arthritis associated with inflammatory bowel disease, Whipple disease and Behcet disease, septic arthritis, gout (also known as gouty arthritis, crystal synovitis, metabolic arthritis), pseudogout (calcium pyrophosphate deposition disease), and Still's disease. Arthritis can affect a single joint (monoarthritis), two to four joints (oligoarthritis) or five or more joints (polyarthritis) and can be either an auto-immune disease or a non-autoimmune disease.

[0171] In another embodiment, a chronic inflammation comprises an autoimmune disorder. Autoimmune diseases can be broadly divided into systemic and organ-specific autoimmune disorders, depending on the principal clinico-pathologic features of each disease. Systemic autoimmune diseases include, without limitation, systemic lupus erythematosus (SLE), Sjögren's syndrome, Scleroderma, rheumatoid arthritis, and polymyositis. Local autoimmune diseases may be endocrinologic (Diabetes Mellitus Type 1, Hashimoto's thyroiditis, Addison's disease etc.), dermatologic (pemphigus vulgaris), hematologic (autoimmune haemolytic anemia), neural (multiple sclerosis) or can involve virtually any circumscribed mass of body tissue. Types of autoimmune disorders include, without limitation, acute disseminated encephalomyelitis (ADEM), Addison's disease, an allergy or sensitivity, amyotrophic lateral sclerosis, anti-phospholipid antibody syndrome (APS), arthritis, autoimmune hemolytic anemia, autoimmune hepatitis, autoimmune inner ear disease, autoimmune pancreatitis, bullous pemphigoid, celiac disease, Chagas disease, chronic obstructive pulmonary disease (COPD), diabetes mellitus type 1 (IDDM), endometriosis, fibromyalgia, Goodpasture's syndrome, Graves' disease, Guillain-Barré syndrome (GBS), Hashimoto's thyroiditis, hidradenitis suppurativa, idiopathic thrombocytopenic purpura, inflammatory bowel disease, interstitial cystitis, lupus (including discoid lupus erythematosus, drug-induced lupus erythematosus. lupus nephritis, neonatal lupus, subacute cutaneous lupus erythematosus and systemic lupus erythematosus), morphea, multiple sclerosis (MS), myasthenia gravis, myopathies, narcolepsy, neuromyotonia, pemphigus vulgaris, pernicious anaemia, primary biliary cirrhosis, recurrent disseminated encephalomyelitis (multiphasic disseminated encephalomyelitis), rheumatic fever, schizophrenia, scleroderma, Sjögren's syndrome, tenosynovitis, vasculitis, and vitiligo. See Pamela D. Van Schaack & Kenneth L. Tong, *Treatment of Autoimmune Disorder with a Neurotoxin*, U.S. Patent Publication 2006/138059, which is hereby incorporated by reference in its entirety.

[0172] In another embodiment, a chronic inflammation comprises a myopathy. Myopathies are caused when the immune system inappropriately attacks components of the muscle, leading to inflammation in the muscle. A myopathy includes an inflammatory myopathy and an auto-immune myopathy. Myopathies include, without limitation, dermatomyositis, inclusion body myositis, and polymyositis.

[0173] In another embodiment, a chronic inflammation comprises a vasculitis. Vasculitis is a varied group of disorders featuring inflammation of a vessel wall including lymphatic vessels and blood vessels like veins

(phlebitis), arteries (arteritis) and capillaries due to leukocyte migration and resultant damage. The inflammation may affect any size blood vessel, anywhere in the body. It may affect either arteries and/or veins. The inflammation may be focal, meaning that it affects a single location within a vessel; or it may be widespread, with areas of inflammation scattered throughout a particular organ or tissue, or even affecting more than one organ system in the body. Vasculitis include, without limitation, Buerger's disease (thromboangiitis obliterans), cerebral vasculitis (central nervous system vasculitis), Churg-Strauss arteritis, cryoglobulinemia, essential cryoglobulinemic vasculitis, giant cell (temporal) arteritis, Golfer's vasculitis, Henoch-Schonlein purpura, hypersensitivity vasculitis (allergic vasculitis), Kawasaki disease, microscopic polyarteritis/polyangiitis, polyarteritis nodosa, polymyalgia rheumatica (PMR), rheumatoid vasculitis, Takayasu arteritis, Wegener's granulomatosis, and vasculitis secondary to connective tissue disorders like systemic lupus erythematosus (SLE), rheumatoid arthritis (RA), relapsing polychondritis, Behçet's disease, or other connective tissue disorders, vasculitis secondary to viral infection.

[0174] In another embodiment, a chronic inflammation comprises a skin disorder. Skin disorders include, without limitation, an acne, including acne vulgaris, a bullous phemigoid, a dermatitis, including atopic dermatitis and chronic actinic dermatitis, an eczema like atopic eczema, contact eczema, xerotic eczema, seborrhoeic dermatitis, dyshidrosis, discoid eczema, venous eczema, dermatitis herpetiformis, neurodermatitis, and autoeczematization, and statis dermatitis, hidradenitis suppurativa, lichen planus, psoriasis including plaqure psoriasis, nail psoriasis, guttate psoriasis, scalp psoriasis, inverse psoriasis, pustular psoriasis, erythrodermis psoriasis, and psoriatic arthritis, rosacea and scleroderma including morphea.

[0175] In another embodiment, a chronic inflammation comprises a gastrointestinal disorder. A gastrointestinal disorder includes, without limitation, irritable bowel disease, an inflammatory bowel disease including Crohn's disease and an ulcerative colitis like ulcerative proctitis, left-sided colitis, pancolitis and fulminant colitis.

[0176] In another embodiment, a chronic inflammation comprises a cardiovascular disease. When LDL cholesterol becomes embedded in arterial walls, it can invoke an immune response. Chronic inflammation eventually can damage the arteries, which can cause them to burst. Cardiovascular disease is any of a number of specific diseases that affect the heart itself and/or the blood vessel system, especially the veins and arteries leading to and from the heart. There are more than 60 types of cardiovascular disorders including, without limitation, a hypertension, endocarditis, myocarditis, heart valve dysfunction, congestive heart failure, myocardial infarction, a diabetic cardiac conditions, blood vessel inflammation like arteritis, phlebitis, vasculitis; arterial occlusive disease like arteriosclerosis and stenosis, inflammatory cardiomegaly, a peripheral arterial disease; an aneurysm; an embolism; a dissection; a pseudoaneurysm; a vascular malformation; a vascular nevus; a thrombosis; a thrombphlebitis; a varicose veins; a stroke. Symptoms of a cardiovascular disorder affecting the heart include, without limitation, chest pain or chest discomfort (angina), pain in one or both arms, the left shoulder, neck, jaw, or back, shortness of breath, dizziness, faster heartbeats, nausea, abnormal heartbeats, feeling fatigued. Symptoms of a cardiovascular disorder affecting the brain include, without limitation, sudden numbness or weakness of the face, arm, or leg,

especially on one side of the body, sudden confusion or trouble speaking or understanding speech, sudden trouble seeing in one or both eyes, sudden dizziness, difficulty walking, or loss of balance or coordination, sudden severe headache with no known cause. Symptoms of a cardiovascular disorder affecting the legs, pelvis and/or arm include, without limitation, claudication, which is a pain, ache, or cramp in the muscles, and cold or numb feeling in the feet or toes, especially at night.

[0177] In another embodiment, a chronic inflammation comprises a cancer. Inflammation orchestrates the microenvironment around tumors, contributing to proliferation, survival, and migration. For example, fibrinous inflammation results from a large increase in vascular permeability which allows fibrin to pass through the blood vessels. If an appropriate procoagulative stimulus is present, such as cancer cells, a fibrinous exudate is deposited. This is commonly seen in serous cavities, where the conversion of fibrinous exudate into a scar can occur between serous membranes, limiting their function. In another example, a cancer is an inflammatory cancer like a NF-κB-driven inflammatory cancer.

[0178] In another embodiment, a chronic inflammation comprises a pharmacologically induced inflammation. Certain drugs or exogenic chemical compounds are known to affect inflammation. For example, Vitamin A deficiency causes an increase in an inflammatory response. Certain illicit drugs such as cocaine and ecstasy may exert some of their detrimental effects by activating transcription factors intimately involved with inflammation (*e.g.* NF-κB).

[0179] In another embodiment, a chronic inflammation comprises an infection. An infectious organism can escape the confines of the immediate tissue via the circulatory system or lymphatic system, where it may spread to other parts of the body. If an organism is not contained by the actions of acute inflammation, it may gain access to the lymphatic system via nearby lymph vessels. An infection of the lymph vessels is known as lymphangitis, and infection of a lymph node is known as lymphadenitis. A pathogen can gain access to the bloodstream through lymphatic drainage into the circulatory system. Infections include, without limitation, bacterial cystitis, bacterial encephalitis, pandemic influenza, viral encephalitis, and viral hepatitis (A, B and C).

[0180] In another embodiment, a chronic inflammation comprises a tissue or organ injury. Tissue or organ injuries include, without limitation, a burn, a laceration, a wound, a puncture, or a trauma.

[0181] In another embodiment, a chronic inflammation comprises a transplant rejection. Transplant rejection occurs when a transplanted organ or tissue is not accepted by the body of the transplant recipient because the immune system of the recipient attacks the transplanted organ or tissue. An adaptive immune response, transplant rejection is mediated through both T cell mediated and humoral immune (antibodies) mechanisms. A transplant rejection can be classified as a hyperacute rejection, an acute rejection, or a chronic rejection. Chronic rejection of a transplanted organ or tissue is where the rejection is due to a poorly understood chronic inflammatory and immune response against the transplanted tissue. Also included in the term “transplant rejection” is a graft-versus-host disease (GVHD). GVHD is a common complication of allogeneic bone marrow transplantation in which functional immune cells in the transplanted

marrow recognize the recipient as "foreign" and mount an immunologic attack. It can also take place in a blood transfusion under certain circumstances. GVHD is divided into acute and chronic forms. Acute and chronic GVHD appear to involve different immune cell subsets, different cytokine profiles, somewhat different host targets, and respond differently to treatment.

[0182] In another embodiment, a chronic inflammation comprises a Th1-mediated inflammatory disease. In a well-functioning immune system, an immune response should result in a well-balanced pro-inflammatory Th1 response and anti-inflammatory Th2 response that is suited to address the immune challenge. Generally speaking, once a pro-inflammatory Th1 response is initiated, the body relies on the anti-inflammatory response invoked by a Th2 response to counteract this Th1 response. This counteractive response includes the release of Th2 type cytokines such as, *e.g.*, IL-4, IL-5, and IL-13 which are associated with the promotion of IgE and eosinophilic responses in atopy, and also IL-10, which has an anti-inflammatory response. A Th1-mediated inflammatory disease involves an excessive pro-inflammatory response produced by Th1 cells that leads to chronic inflammation. The Th1-mediated disease may be virally, bacterially or chemically (e.g. environmentally) induced. For example, a virus causing the Th1-mediated disease may cause a chronic or acute infection, which may cause a respiratory disorder or influenza.

[0183] Neuroinflammation is an inflammatory response of the nervous tissue and can be both acute and chronic. Acute neuroinflammatory responses are a well-established defense against harmful conditions, such as infections, toxins, and neuronal cell injury. With respect to the peripheral nervous system (PNS), a neuroinflammatory response is handled in a manner similar to an inflammatory response. The central nervous system (CNS) is considered an immunologically privileged site since the blood–brain barrier (BBB) typically prevents peripheral immune cells from entering the CNS. Instead, in response to an inflammatory trigger, resident glia cells, called microglia, become activated to destroy infectious agents before they damage neural tissue, and as such, are main form of active immune defense in the CNS. However, when there is a disruption in the equilibrium of anti-inflammatory and proinflammatory signaling, microglia become chronically activated, leading to overproduction of proinflammatory factors (i.e., cytokines) and a progression of neurodegenerative changes (e.g., atrophy and loss of function of neurons). Activation of chronic neuroinflammation further triggers the infiltration of immune cells from the periphery across the BBB, accelerating neuroinflammation and the neurodegenerative process. Much research has focused on the central role of neuroinflammation in the pathogenesis of many conditions relating to the CNS, including e.g., traumatic brain injury, stroke, Alzheimer's disease, post-operative cognitive decline/perioperative neurocognitive disorder and now even long-term cognitive side effects from SARS-CoV-2. Attempts to treat neuroinflammation have however been met with limited success which is largely because NSAIDs have typically been formulated for minimal blood brain barrier penetration. Therefore, compounds, compositions, uses, and methods that can successfully deliver an anti-inflammatory agent to the brain would be highly desirable for the treatment of neuroinflammation.

[0184] In another embodiment, a chronic inflammation comprises a chronic neurogenic inflammation. Chronic neurogenic Inflammation refers to an inflammatory response initiated and/or maintained through

the release of inflammatory molecules like SP or CGRP which released from peripheral sensory nerve terminals (*i.e.*, an efferent function, in contrast to the normal afferent signaling to the spinal cord in these nerves). Chronic neurogenic inflammation includes both primary inflammation and secondary neurogenic inflammation. As used herein, the term "primary" neurogenic inflammation refers to tissue inflammation (inflammatory symptoms) that is initiated by, or results from, the release of substances from primary sensory nerve terminals (such as C and A-delta fibers). As used herein, the term "secondary" neurogenic inflammation" refers to tissue inflammation initiated by non-neuronal sources (*e.g.*, extravasation from vascular bed or tissue interstitium-derived, such as from mast cells or immune cells) of inflammatory mediators, such as peptides or cytokines, stimulating sensory nerve terminals and causing a release of inflammatory mediators from the nerves. The net effect of both forms (primary and secondary) of chronic neurogenic inflammation is to have an inflammatory state that is maintained by the sensitization of the peripheral sensory nerve fibers. The physiological consequence of the resulting chronic neurogenic inflammation depends on the tissue in question, producing, such as, *e.g.*, cutaneous pain (allodynia, hyperalgesia), joint pain and/or arthritis, visceral pain and dysfunction, pulmonary dysfunction (asthma, COPD), and bladder dysfunction (pain, overactive bladder).

[0185] Neuroinflammation includes both acute neuroinflammation and chronic neuroinflammation. Acute neuroinflammation usually follows injury to the central nervous system immediately, and is characterized by rapid activation of microglia, release of inflammatory molecules, endothelial cell activation, platelet deposition, and tissue edema. Chronic neuroinflammation is the sustained activation of glial cells and recruitment of other immune cells into the brain. However, over time, chronic inflammation causes the degradation of tissue and of the BBB and reactive oxygen species generated and inflammatory signals released by microglia recruit peripheral immune cells to assist in mounting a neuroimmune response.

[0186] Chronic inflammation is typically associated with neurodegenerative diseases. A neurodegenerative disease is caused by the progressive loss of structure or function of neurons, in the process known as neurodegeneration. Such neuronal damage may ultimately involve cell death. Neurodegeneration can be found in the brain at many different levels of neuronal circuitry, ranging from molecular to systemic. Because there is no known way to reverse the progressive degeneration of neurons, these diseases are considered to be incurable. The two major contributing factors to neurodegeneration are oxidative stress and neuroinflammation. Non-limiting examples of a neurodegenerative disease associated with neuroinflammation include Alzheimer's disease, amyotrophic lateral sclerosis, aneurysm, anxiety, aphasia, Asperger's syndrome, ataxia, attention deficit hyperactivity disorder, bipolar disorder, brain cancer, cancer-related or chemotherapy-related cognitive impairment, cerebral ischemia, cerebral palsy, chronic fatigue syndrome, CNS neuropathy, Creutzfeldt-Jakob disease, dementia, depression, encephalitis, epilepsy, fibromyalgia, functional neurological disorder, Guillain-Barre syndrome, headaches, idiopathic intracranial hypertension, migraine, multiple sclerosis, Parkinson's disease, pediatric neuroinflammatory disorder, peri-operative neurocognitive disorder, post-operative cognitive decline, post-traumatic stress disorder, SARS-CoV-2 infection, schizophrenia, stroke, substance abuse derived neuroinflammation, traumatic brain injury, Tourette syndrome.

[0187] Aspects of the present specification disclose, in part, a disease or disorder that is an idiopathic pulmonary fibrosis.

[0188] Aspects of the present specification disclose, in part, a disease or disorder that is a renal disease or disorder.

[0189] A composition or compound is administered to an individual. An individual is typically a human being. Typically, any individual who is a candidate for a conventional chronic inflammation and/or a neuroinflammation treatment is a candidate for a disease or disorder treatment disclosed herein. Pre-operative evaluation typically includes routine history and physical examination including biomarker evaluation in addition to thorough informed consent disclosing all relevant risks and benefits of the procedure.

[0190] A pharmaceutical composition disclosed herein may comprise a therapeutic compound in a therapeutically effective amount. As used herein, the term "effective amount" is synonymous with "therapeutically effective amount", "effective dose", or "therapeutically effective dose" and when used in reference to treating a disease or disorder refers to the minimum dose of a therapeutic compound disclosed herein necessary to achieve the desired therapeutic effect and includes a dose sufficient to reduce a symptom associated with a disease or disorder. The effectiveness of a therapeutic compound disclosed herein in treating a disease or disorder can be determined by observing an improvement in an individual based upon one or more clinical symptoms, and/or physiological indicators associated with the condition. An improvement in a disease or disorder also can be indicated by a reduced need for a concurrent therapy.

[0191] The appropriate effective amount of a therapeutic compound disclosed herein to be administered to an individual for a particular chronic inflammation and/or a neuroinflammation can be determined by a person of ordinary skill in the art by taking into account factors, including, without limitation, the type of chronic inflammation and/or a neuroinflammation, the location of the chronic inflammation and/or a neuroinflammation, the cause of the chronic inflammation and/or a neuroinflammation, the severity of the chronic inflammation and/or a neuroinflammation, the degree of relief desired, the duration of relief desired, the particular therapeutic compound used, the pharmacokinetic properties of the particular therapeutic compound used including liberation, absorption, distribution, metabolism, and excretion, the pharmacodynamic properties of the particular therapeutic compound used including mechanism of action, dose-response relationship, desired activity, undesirable side effects, therapeutic window and duration of action, the nature of the other compounds to be included in the composition, the particular formulation, the particular route of administration, the particular characteristics, history and risk factors of the patient, such as, *e.g.*, age, weight, general health and the like, or any combination thereof. It is known by a person of ordinary skill in the art that an effective amount of a therapeutic compound disclosed herein can be extrapolated from in-vitro assays and in-vivo administration studies using animal models prior to administration to humans. In addition, variations in the necessary effective amount are to be expected in view of the differing efficiencies of the various routes of administration. For instance, oral administration of a therapeutic compound disclosed herein generally would be expected to require higher dosage levels than

intravenous administration. Similarly, systemic administration of a therapeutic compound disclosed herein would be expected to require higher dosage levels than a local administration. Variations in these dosage levels can be adjusted using standard empirical routines of optimization, which are well-known to a person of ordinary skill in the art. One skilled in the art will also recognize that the condition of the individual can be monitored throughout the course of a method or use disclosed herein and that the effective amount of a therapeutic compound disclosed herein that is administered can be adjusted accordingly. Thus, the precise therapeutically effective dosage levels and patterns are preferably determined by the attending healthcare professional in consideration of the above-identified factors.

[0192] In some embodiments, a therapeutically effective amount of a therapeutic compound disclosed herein reduces a symptom associated with a disease or disorder by, *e.g.*, at least 10%, at least 15%, at least 20%, at least 25%, at least 30%, at least 35%, at least 40%, at least 45%, at least 50%, at least 55%, at least 60%, at least 65%, at least 70%, at least 75%, at least 80%, at least 85%, at least 90%, at least 95% or at least 100%. In other aspects of this embodiment, a therapeutically effective amount of a therapeutic compound disclosed herein reduces a symptom associated with a disease or disorder by, *e.g.*, at most 10%, at most 15%, at most 20%, at most 25%, at most 30%, at most 35%, at most 40%, at most 45%, at most 50%, at most 55%, at most 60%, at most 65%, at most 70%, at most 75%, at most 80%, at most 85%, at most 90%, at most 95% or at most 100%. In yet other aspects of this embodiment, a therapeutically effective amount of a therapeutic compound disclosed herein reduces a symptom associated with a disease or disorder by, *e.g.*, about 10% to about 100%, about 10% to about 90%, about 10% to about 80%, about 10% to about 70%, about 10% to about 60%, about 10% to about 50%, about 10% to about 40%, about 20% to about 100%, about 20% to about 90%, about 20% to about 80%, about 20% to about 20%, about 20% to about 60%, about 20% to about 50%, about 20% to about 40%, about 30% to about 100%, about 30% to about 90%, about 30% to about 80%, about 30% to about 70%, about 30% to about 60%, or about 30% to about 50%.

[0193] In some embodiments, a therapeutically effective amount of a therapeutic compound disclosed herein generally is in the range of about 0. 01 mg/kg to about 10 mg/kg. In aspects of these embodiments, an effective amount of a therapeutic compound disclosed herein may be, *e.g.*, at least 0.01 mg/kg, at least 0.05 mg/kg, at least 0.1 mg/kg, at least 0.5 mg/kg, at least 1.0 mg/kg, at least 2.0 mg/kg, at least 3.0 mg/kg, at least 4.0 mg/kg, at least 5.0 mg/kg, at least 6.0 mg/kg, at least 7.0 mg/kg, at least 8.0 mg/kg, at least 9.0 mg/kg, or at least 10 mg/kg. In other aspects of these embodiments, an effective amount of a therapeutic compound disclosed herein may be, *e.g.*, at most 0.01 mg/kg, at most 0.05 mg/kg, at most 0.1 mg/kg, at most 0.5 mg/kg, at most 1.0 mg/kg, at most 2.0 mg/kg, at most 3.0 mg/kg, at most 4.0 mg/kg, at most 5.0 mg/kg, at most 6.0 mg/kg, at most 7.0 mg/kg, at most 8.0 mg/kg, at most 9.0 mg/kg, or at most 10 mg/kg. In yet other aspects of these embodiments, an effective amount of a therapeutic compound disclosed herein may be in the range of, *e.g.*, about 0.01 mg/kg to about 0.05 mg/kg, about 0.01 mg/kg to about 0.1 mg/kg, about 0.01 mg/kg to about 0.5 mg/kg, about 0.01 mg/kg to about 1.0 mg/kg, about 0.01 mg/kg to about 2.0 mg/kg, about 0.01 mg/kg to about 3.0 mg/kg, about 0.01 mg/kg to about 4.0 mg/kg, about 0.01 mg/kg to about 5.0 mg/kg, about 0.01 mg/kg to about 6.0 mg/kg, about 0.01 mg/kg to about 7.0 mg/kg, about 0.01 mg/kg to about 8.0 mg/kg, about 0.01 mg/kg to about 9.0 mg/kg, about 0.01 mg/kg to about 10 mg/kg,

about 0.1 mg/kg to about 0.5 mg/kg, about 0.1 mg/kg to about 1.0 mg/kg, about 0.1 mg/kg to about 2.0 mg/kg, about 0.1 mg/kg to about 3.0 mg/kg, about 0.1 mg/kg to about 4.0 mg/kg, about 0.1 mg/kg to about 5.0 mg/kg, about 0.1 mg/kg to about 6.0 mg/kg, about 0.1 mg/kg to about 7.0 mg/kg, about 0.1 mg/kg to about 8.0 mg/kg, about 0.1 mg/kg to about 9.0 mg/kg, about 0.1 mg/kg to about 10 mg/kg, about 0.5 mg/kg to about 1.0 mg/kg, about 0.5 mg/kg to about 2.0 mg/kg, about 0.5 mg/kg to about 3.0 mg/kg, about 0.5 mg/kg to about 4.0 mg/kg, about 0.5 mg/kg to about 5.0 mg/kg, about 0.5 mg/kg to about 6.0 mg/kg, about 0.5 mg/kg to about 7.0 mg/kg, about 0.5 mg/kg to about 8.0 mg/kg, about 0.5 mg/kg to about 9.0 mg/kg, about 0.5 mg/kg to about 10 mg/kg, about 1.0 mg/kg to about 2.0 mg/kg, about 1.0 mg/kg to about 3.0 mg/kg, about 1.0 mg/kg to about 4.0 mg/kg, about 1.0 mg/kg to about 5.0 mg/kg, about 1.0 mg/kg to about 6.0 mg/kg, about 1.0 mg/kg to about 7.0 mg/kg, about 1.0 mg/kg to about 8.0 mg/kg, about 1.0 mg/kg to about 9.0 mg/kg, or about 1.0 mg/kg to about 10 mg/kg.

[0194] In some embodiments, a therapeutically effective amount of a therapeutic compound disclosed herein generally is in the range of about 0. 01 mg/kg/day to about 10 mg/kg/day. In aspects of these embodiments, an effective amount of a therapeutic compound disclosed herein may be, *e.g.*, at least 0.01 mg/kg/day, at least 0.05 mg/kg/day, at least 0.1 mg/kg/day, at least 0.5 mg/kg/day, at least 1.0 mg/kg/day, at least 2.0 mg/kg/day, at least 3.0 mg/kg/day, at least 4.0 mg/kg/day, at least 5.0 mg/kg/day, at least 6.0 mg/kg/day, at least 7.0 mg/kg/day, at least 8.0 mg/kg/day, at least 9.0 mg/kg/day, or at least 10 mg/kg/day. In other aspects of these embodiments, an effective amount of a therapeutic compound disclosed herein may be, *e.g.*, at most 0.01 mg/kg/day, at most 0.05 mg/kg/day, at most 0.1 mg/kg/day, at most 0.5 mg/kg/day, at most 1.0 mg/kg/day, at most 2.0 mg/kg/day, at most 3.0 mg/kg/day, at most 4.0 mg/kg/day, at most 5.0 mg/kg/day, at most 6.0 mg/kg/day, at most 7.0 mg/kg/day, at most 8.0 mg/kg/day, at most 9.0 mg/kg/day, or at most 10 mg/kg/day. In yet other aspects of these embodiments, an effective amount of a therapeutic compound disclosed herein may be in the range of, *e.g.*, about 0.01 mg/kg/day to about 0.05 mg/kg/day, about 0.01 mg/kg/day to about 0.1 mg/kg/day, about 0.01 mg/kg/day to about 0.5 mg/kg/day, about 0.01 mg/kg/day to about 1.0 mg/kg/day, about 0.01 mg/kg/day to about 2.0 mg/kg/day, about 0.01 mg/kg/day to about 3.0 mg/kg/day, about 0.01 mg/kg/day to about 4.0 mg/kg/day, about 0.01 mg/kg/day to about 5.0 mg/kg/day, about 0.01 mg/kg/day to about 6.0 mg/kg/day, about 0.01 mg/kg/day to about 7.0 mg/kg/day, about 0.01 mg/kg/day to about 8.0 mg/kg/day, about 0.01 mg/kg/day to about 9.0 mg/kg/day, about 0.01 mg/kg/day to about 10 mg/kg/day, about 0.1 mg/kg/day to about 0.5 mg/kg/day, about 0.1 mg/kg/day to about 1.0 mg/kg/day, about 0.1 mg/kg/day to about 2.0 mg/kg/day, about 0.1 mg/kg/day to about 3.0 mg/kg/day, about 0.1 mg/kg/day to about 4.0 mg/kg/day, about 0.1 mg/kg/day to about 5.0 mg/kg/day, about 0.1 mg/kg/day to about 6.0 mg/kg/day, about 0.1 mg/kg/day to about 7.0 mg/kg/day, about 0.1 mg/kg/day to about 8.0 mg/kg/day, about 0.1 mg/kg/day to about 9.0 mg/kg/day, about 0.1 mg/kg/day to about 10 mg/kg/day, about 0.5 mg/kg/day to about 1.0 mg/kg/day, about 0.5 mg/kg/day to about 2.0 mg/kg/day, about 0.5 mg/kg/day to about 3.0 mg/kg/day, about 0.5 mg/kg/day to about 4.0 mg/kg/day, about 0.5 mg/kg/day to about 5.0 mg/kg/day, about 0.5 mg/kg/day to about 6.0 mg/kg/day, about 0.5 mg/kg/day to about 7.0 mg/kg/day, about 0.5 mg/kg/day to about 8.0 mg/kg/day, about 0.5 mg/kg/day to about 9.0 mg/kg/day, about 0.5 mg/kg/day to about 10 mg/kg/day, about 1.0 mg/kg/day to about 2.0 mg/kg/day, about 1.0 mg/kg/day to about 3.0 mg/kg/day, about 1.0 mg/kg/day to about 4.0 mg/kg/day, about 1.0 mg/kg/day to about 5.0 mg/kg/day, about 1.0 mg/kg/day to about 6.0 mg/kg/day,

about 1.0 mg/kg/day to about 7.0 mg/kg/day, about 1.0 mg/kg/day to about 8.0 mg/kg/day, about 1.0 mg/kg/day to about 9.0 mg/kg/day, or about 1.0 mg/kg/day to about 10 mg/kg/day.

[0195] Dosing can be single dosage or cumulative (serial dosing), and can be readily determined by one skilled in the art. For instance, treatment of a disease or disorder may comprise a one-time administration of an effective dose of a pharmaceutical composition disclosed herein. Alternatively, treatment of a disease or disorder may comprise multiple administrations of an effective dose of a pharmaceutical composition carried out over a range of time periods, such as, *e.g.*, once daily, twice daily, trice daily, once every few days, or once weekly. The timing of administration can vary from individual to individual, depending upon such factors as the severity of an individual's symptoms. For example, an effective dose of a pharmaceutical composition disclosed herein can be administered to an individual once daily for an indefinite period of time, or until the individual no longer requires therapy. A person of ordinary skill in the art will recognize that the condition of the individual can be monitored throughout the course of treatment and that the effective amount of a pharmaceutical composition disclosed herein that is administered can be adjusted accordingly.

[0196] In one embodiment, upon administration to an individual, a pharmaceutical composition comprising a therapeutic compound disclosed herein results in a bio-distribution of the therapeutic compound different than a bio-distribution of the therapeutic compound included in the same pharmaceutical composition, except without the one or more digestion enhancers disclosed herein.

[0197] In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of one or more protein kinase inhibitors, about 25% to about 35% by weight of one or more hard fats, about 30% to about 55% by weight of one or more liquid fats, and about 15% to about 35% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of one or more protein kinase inhibitors, about 25% to about 35% by weight of one or more hard fats, about 30% to about 55% by weight of one or more liquid fats, about 15% to about 35% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of one or more protein kinase inhibitors, about 25% to about 35% by weight of one or more hard fats, about 30% to about 55% by weight of one or more liquid fats, about 2% to about 6% by weight of one or more bile acids, about 15% to about 35% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 10 mg/mL to about 150 mg/mL of one or more protein kinase inhibitors, about 25% to about 35% by weight of one or more hard fats, about 30% to about 55% by weight of one or more liquid fats, and about 15% to about 35% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 10 mg/mL to about 150 mg/mL of one or more protein kinase inhibitors, about 25% to about 35% by weight of one or more hard fats, about 30% to about 55% by weight of one or more liquid fats, about 15% to about 35% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 10 mg/mL

to about 150 mg/mL of one or more protein kinase inhibitors, about 25% to about 35% by weight of one or more hard fats, about 30% to about 55% by weight of one or more liquid fats, about 2% to about 6% by weight of one or more bile acids, about 15% to about 35% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, the protein kinase inhibitor in the above embodiments comprises a serine/threonine kinase inhibitor, a tyrosine kinase inhibitor, or both. In some embodiments, the serine/threonine kinase inhibitor in the above embodiments comprises a MAPK kinase inhibitor, ROCK 2 kinase inhibitor, or both. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the oleate alkali metal or alkali earth metal salt in the above embodiments is a sodium oleate, the stearate alkali metal or alkali earth metal salt in the above embodiments is a sodium stearate, and the linoleate alkali metal or alkali earth metal salt in the above embodiments is a sodium linoleate.

[0198] In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of one or more protein kinase inhibitors, about 25% to about 35% by weight of one or more hard fats comprising glycerolipids, about 30% to about 55% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, and about 15% to about 35% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of one or more protein kinase inhibitors, about 25% to about

35% by weight of one or more hard fats comprising glycerolipids, about 30% to about 55% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, about 15% to about 35% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of one or more protein kinase inhibitors, about 25% to about 35% by weight of one or more hard fats comprising glycerolipids, about 30% to about 55% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, about 2% to about 6% by weight of one or more bile acids, about 15% to about 35% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 10 mg/mL to about 150 mg/mL of one or more protein kinase inhibitors, about 25% to about 35% by weight of one or more hard fats comprising glycerolipids, about 30% to about 55% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, and about 15% to about 35% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 10 mg/mL to about 150 mg/mL of one or more protein kinase inhibitors, about 25% to about 35% by weight of one or more hard fats comprising glycerolipids, about 30% to about 55% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, about 15% to about 35% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 10 mg/mL to about 150 mg/mL of one or more protein kinase inhibitors, about 25% to about 35% by weight of one or more hard fats comprising glycerolipids, about 30% to about 55% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, about 2% to about 6% by weight of one or more bile acids, about 15% to about 35% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, the protein kinase inhibitor in the above embodiments comprises a serine/threonine kinase inhibitor, a tyrosine kinase inhibitor, or both. In some embodiments, the serine/threonine kinase inhibitor in the above embodiments comprises a MAPK kinase inhibitor, ROCK 2 kinase inhibitor, or both. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some

embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the oleate alkali metal or alkali earth metal salt in the above embodiments is a sodium oleate, the stearate alkali metal or alkali earth metal salt in the above embodiments is a sodium stearate, and the linoleate alkali metal or alkali earth metal salt in the above embodiments is a sodium linoleate.

[0199] In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of one or more protein kinase inhibitors, about 25% to about 35% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 30% to about 55% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, and about 15% to about 35% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of one or more protein kinase inhibitors, about 25% to about 35% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 30% to about 55% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, about 15% to about 35% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of one or more protein kinase inhibitors, about 25% to about 35% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 30% to about 55% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, about 2% to about 6% by weight of one or more bile acids, about 15% to about 35% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 10 mg/mL to about 150 mg/mL of one or more protein kinase inhibitors, about 25% to about 35% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 30% to about 55% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, and about 15% to about 35% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 10 mg/mL to about 150 mg/mL of one or more protein kinase inhibitors, about 25% to about 35% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 30% to about 55% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, about 15% to about 35% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight

of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 10 mg/mL to about 150 mg/mL of one or more protein kinase inhibitors, about 25% to about 35% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 30% to about 55% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, about 2% to about 6% by weight of one or more bile acids, about 15% to about 35% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, the protein kinase inhibitor in the above embodiments comprises a serine/threonine kinase inhibitor, a tyrosine kinase inhibitor, or both. In some embodiments, the serine/threonine kinase inhibitor in the above embodiments comprises a MAPK kinase inhibitor, ROCK 2 kinase inhibitor, or both. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the oleate alkali metal or alkali earth metal salt in the above embodiments is a sodium oleate, the stearate alkali metal or alkali earth metal salt in the above embodiments is a sodium stearate, and the linoleate alkali metal or alkali earth metal salt in the above embodiments is a sodium linoleate.

[0200] In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of one or more protein kinase inhibitors, about 25% to about 35% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 30% to

about 55% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, about 2% to about 6% by weight of one or more bile acids, about 15% to about 35% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of one or more protein kinase inhibitors, about 25% to about 35% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 30% to about 55% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, and about 15% to about 35% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of one or more protein kinase inhibitors, about 25% to about 35% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 30% to about 55% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, about 15% to about 35% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 10 mg/mL to about 150 mg/mL of one or more protein kinase inhibitors, about 25% to about 35% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 30% to about 55% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, and about 15% to about 35% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 10 mg/mL to about 150 mg/mL of one or more protein kinase inhibitors, about 25% to about 35% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 30% to about 55% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, about 15% to about 35% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 10 mg/mL to about 150 mg/mL of one or more protein kinase inhibitors, about 25% to about 35% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 30% to about 55% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, about 2% to about 6% by weight of one or more bile acids, about 15% to about 35% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, the protein kinase inhibitor in the above embodiments comprises a serine/threonine kinase inhibitor, a tyrosine kinase inhibitor, or both. In some embodiments, the serine/threonine kinase inhibitor in the above embodiments comprises a MAPK kinase inhibitor, ROCK 2 kinase inhibitor, or both. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali

metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the oleate alkali metal or alkali earth metal salt in the above embodiments is a sodium oleate, the stearate alkali metal or alkali earth metal salt in the above embodiments is a sodium stearate, and the linoleate alkali metal or alkali earth metal salt in the above embodiments is a sodium linoleate.

[0201] In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of one or more protein kinase inhibitors, about 35% to about 55% by weight of one or more hard fats, about 20% to about 40% by weight of one or more liquid fats, and about 20% to about 55% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of one or more protein kinase inhibitors, about 35% to about 55% by weight of one or more hard fats, about 20% to about 40% by weight of one or more liquid fats, about 20% to about 55% by weight of one or more free C_{14-24} fatty acids, and about 2% to about 7% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of one or more protein kinase inhibitors, about 35% to about 55% by weight of one or more hard fats, about 20% to about 40% by weight of one or more liquid fats, about 1% to about 6% by weight of one or more bile acids, about 20% to about 55% by weight of one or more free C_{14-24} fatty acids, and about 2% to about 7% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 10 mg/mL to about 150 mg/mL of one or more protein kinase inhibitors, about 35% to about 55% by weight of one or more hard fats, about 20% to about 40% by weight of one or more liquid fats, and about 20% to about 55% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 10 mg/mL to about 150 mg/mL of one or more protein kinase inhibitors, about 35% to about 55% by weight of one or more hard fats, about 20% to about 40% by weight of one or more liquid fats, and about 20% to about 55% by

weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 10 mg/mL to about 150 mg/mL of one or more protein kinase inhibitors, about 35% to about 55% by weight of one or more hard fats, about 20% to about 40% by weight of one or more liquid fats, about 20% to about 55% by weight of one or more free C_{14-24} fatty acids, and about 2% to about 7% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 10 mg/mL to about 150 mg/mL of one or more protein kinase inhibitors, about 35% to about 55% by weight of one or more hard fats, about 20% to about 40% by weight of one or more liquid fats, about 1% to about 6% by weight of one or more bile acids, about 20% to about 55% by weight of one or more free C_{14-24} fatty acids, and about 2% to about 7% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, the protein kinase inhibitor in the above embodiments comprises a serine/threonine kinase inhibitor, a tyrosine kinase inhibitor, or both. In some embodiments, the serine/threonine kinase inhibitor in the above embodiments comprises a MAPK kinase inhibitor, ROCK 2 kinase inhibitor, or both. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the oleate alkali metal or alkali earth metal salt in the above embodiments is a sodium oleate, the stearate alkali metal or alkali earth metal salt in the above embodiments is a sodium stearate, and the linoleate alkali metal or alkali earth metal salt in the above embodiments is a sodium linoleate.

[0202] In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of one or more protein kinase inhibitors, about 35% to about 55% by weight of one or more hard fats comprising glycerolipids, about 20% to about 40% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, and about 20% to about 55% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of one or more protein kinase inhibitors, about 35% to about 55% by weight of one or more hard fats comprising glycerolipids, about 20% to about 40% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, about 20% to about 55% by weight of one or more free C_{14-24} fatty acids, and about 2% to about 7% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of one or more protein kinase inhibitors, about 35% to about 55% by weight of one or more hard fats comprising glycerolipids, about 20% to about 40% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, about 1% to about 6% by weight of one or more bile acids, about 20% to about 55% by weight of one or more free C_{14-24} fatty acids, and about 2% to about 7% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 10 mg/mL to about 150 mg/mL of one or more protein kinase inhibitors, about 35% to about 55% by weight of one or more hard fats comprising glycerolipids, about 20% to about 40% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, and about 20% to about 55% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 10 mg/mL to about 150 mg/mL of one or more protein kinase inhibitors, about 35% to about 55% by weight of one or more hard fats comprising glycerolipids, about 20% to about 40% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, about 20% to about 55% by weight of one or more free C_{14-24} fatty acids, and about 2% to about 7% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 10 mg/mL to about 150 mg/mL of one or more protein kinase inhibitors, about 35% to about 55% by weight of one or more hard fats comprising glycerolipids, about 20% to about 40% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, about 1% to about 6% by weight of one or more bile acids, about 20% to about 55% by weight of one or more free C_{14-24} fatty acids, and about 2% to about 7% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, the protein kinase inhibitor in the above embodiments comprises a serine/threonine kinase inhibitor, a tyrosine kinase inhibitor, or both. In some embodiments, the serine/threonine kinase inhibitor in the above embodiments comprises a MAPK kinase inhibitor, ROCK 2 kinase inhibitor, or both. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments

comprises cholic acid and the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the oleate alkali metal or alkali earth metal salt in the above embodiments is a sodium oleate, the stearate alkali metal or alkali earth metal salt in the above embodiments is a sodium stearate, and the linoleate alkali metal or alkali earth metal salt in the above embodiments is a sodium linoleate.

[0203] In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of one or more protein kinase inhibitors, about 35% to about 55% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 20% to about 40% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, and about 20% to about 55% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of one or more protein kinase inhibitors, about 35% to about 55% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 20% to about 40% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, about 20% to about 55% by weight of one or more free C_{14-24} fatty acids, and about 2% to about 7% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of one or more protein kinase inhibitors, about 35% to about 55% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 20% to about 40% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, about 1% to about 6% by weight of one or more bile acids, about 20% to about 55% by weight of one or more free C_{14-24} fatty acids, and about 2% to about 7% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 10 mg/mL to about 150 mg/mL of one or more protein kinase inhibitors, about 35% to about 55% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 20% to about 40% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-

C_{24} triglycerides, and about 20% to about 55% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 10 mg/mL to about 150 mg/mL of one or more protein kinase inhibitors, about 35% to about 55% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 20% to about 40% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, about 20% to about 55% by weight of one or more free C_{14-24} fatty acids, and about 2% to about 7% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 10 mg/mL to about 150 mg/mL of one or more protein kinase inhibitors, about 35% to about 55% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 20% to about 40% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, about 1% to about 6% by weight of one or more bile acids, about 20% to about 55% by weight of one or more free C_{14-24} fatty acids, and about 2% to about 7% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, the protein kinase inhibitor in the above embodiments comprises a serine/threonine kinase inhibitor, a tyrosine kinase inhibitor, or both. In some embodiments, the serine/threonine kinase inhibitor in the above embodiments comprises a MAPK kinase inhibitor, ROCK 2 kinase inhibitor, or both. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the oleate alkali metal or alkali earth metal salt in the above embodiments is a sodium oleate, the stearate alkali metal or alkali earth metal salt in the above

embodiments is a sodium stearate, and the linoleate alkali metal or alkali earth metal salt in the above embodiments is a sodium linoleate.

[0204] In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of one or more protein kinase inhibitors, about 35% to about 55% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 20% to about 40% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, and about 20% to about 55% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of one or more protein kinase inhibitors, about 35% to about 55% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 20% to about 40% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, about 20% to about 55% by weight of one or more free C_{14-24} fatty acids, and about 2% to about 7% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of one or more protein kinase inhibitors, about 35% to about 55% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 20% to about 40% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, about 1% to about 6% by weight of one or more bile acids, about 20% to about 55% by weight of one or more free C_{14-24} fatty acids, and about 2% to about 7% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 10 mg/mL to about 150 mg/mL of one or more protein kinase inhibitors, about 35% to about 55% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 20% to about 40% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, and about 20% to about 55% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 10 mg/mL to about 150 mg/mL of one or more protein kinase inhibitors, about 35% to about 55% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 20% to about 40% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, about 20% to about 55% by weight of one or more free C_{14-24} fatty acids, and about 2% to about 7% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 10 mg/mL to about 150 mg/mL of one or more protein kinase inhibitors, about 35% to about 55% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 20% to about 40% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, about 1% to about 6% by weight of one or more bile acids, about 20% to about 55% by weight of one or more free C_{14-24} fatty acids, and about 2% to about 7% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, the protein kinase inhibitor in the above embodiments comprises a serine/threonine kinase inhibitor, a tyrosine kinase inhibitor, or both. In some embodiments, the serine/threonine kinase inhibitor in the above

embodiments comprises a MAPK kinase inhibitor, ROCK 2 kinase inhibitor, or both. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the oleate alkali metal or alkali earth metal salt in the above embodiments is a sodium oleate, the stearate alkali metal or alkali earth metal salt in the above embodiments is a sodium stearate, and the linoleate alkali metal or alkali earth metal salt in the above embodiments is a sodium linoleate.

[0205] In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of one or more protein kinase inhibitors, about 25% to about 55% by weight of one or more hard fats, about 20% to about 35% by weight of one or more liquid fats, and about 20% to about 55% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of one or more protein kinase inhibitors, about 25% to about 55% by weight of one or more hard fats, about 20% to about 35% by weight of one or more liquid fats, about 20% to about 55% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of one or more protein kinase inhibitors, about 25% to about 55% by weight of one or more hard fats, about 20% to about 35% by weight of one or more liquid fats, about 1% to about 7% by weight of one or more bile acids, about 20% to about 55% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In

some embodiments, a pharmaceutical composition comprises about 30 mg/mL to about 300 mg/mL of one or more protein kinase inhibitors, about 25% to about 55% by weight of one or more hard fats, about 20% to about 35% by weight of one or more liquid fats, and about 20% to about 55% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 30 mg/mL to about 300 mg/mL of one or more protein kinase inhibitors, about 25% to about 55% by weight of one or more hard fats, about 20% to about 35% by weight of one or more liquid fats, about 20% to about 55% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 30 mg/mL to about 300 mg/mL of one or more protein kinase inhibitors, about 25% to about 55% by weight of one or more hard fats, about 20% to about 35% by weight of one or more liquid fats, about 1% to about 7% by weight of one or more bile acids, about 20% to about 55% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, the protein kinase inhibitor in the above embodiments comprises a serine/threonine kinase inhibitor, a tyrosine kinase inhibitor, or both. In some embodiments, the serine/threonine kinase inhibitor in the above embodiments comprises a MAPK kinase inhibitor, ROCK 2 kinase inhibitor, or both. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the oleate alkali metal or alkali earth metal salt in the above embodiments is a sodium oleate, the stearate alkali metal or

alkali earth metal salt in the above embodiments is a sodium stearate, and the linoleate alkali metal or alkali earth metal salt in the above embodiments is a sodium linoleate.

[0206] In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of one or more protein kinase inhibitors, about 25% to about 55% by weight of one or more hard fats comprising glycerolipids, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, and about 20% to about 55% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of one or more protein kinase inhibitors, about 25% to about 55% by weight of one or more hard fats comprising glycerolipids, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, about 20% to about 55% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of one or more protein kinase inhibitors, about 25% to about 55% by weight of one or more hard fats comprising glycerolipids, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, about 1% to about 7% by weight of one or more bile acids, about 20% to about 55% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 30 mg/mL to about 300 mg/mL of one or more protein kinase inhibitors, about 25% to about 55% by weight of one or more hard fats comprising glycerolipids, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, and about 20% to about 55% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 30 mg/mL to about 300 mg/mL of one or more protein kinase inhibitors, about 25% to about 55% by weight of one or more hard fats comprising glycerolipids, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, about 20% to about 55% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 30 mg/mL to about 300 mg/mL of one or more protein kinase inhibitors, about 25% to about 55% by weight of one or more hard fats comprising glycerolipids, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, about 1% to about 7% by weight of one or more bile acids, about 20% to about 55% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, the protein kinase inhibitor in the above embodiments comprises a serine/threonine kinase inhibitor, a tyrosine kinase inhibitor, or both. In some embodiments, the serine/threonine kinase inhibitor in the above embodiments comprises a MAPK kinase inhibitor, ROCK 2 kinase inhibitor, or both. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one

or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the oleate alkali metal or alkali earth metal salt in the above embodiments is a sodium oleate, the stearate alkali metal or alkali earth metal salt in the above embodiments is a sodium stearate, and the linoleate alkali metal or alkali earth metal salt in the above embodiments is a sodium linoleate.

[0207] In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of one or more protein kinase inhibitors, about 25% to about 55% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, and about 20% to about 55% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of one or more protein kinase inhibitors, about 25% to about 55% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, about 20% to about 55% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of one or more protein kinase inhibitors, about 25% to about 55% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, about 1% to about 7% by weight of one or more bile acids, about 20% to about 55% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 30 mg/mL

to about 300 mg/mL of one or more protein kinase inhibitors, about 25% to about 55% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, and about 20% to about 55% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 30 mg/mL to about 300 mg/mL of one or more protein kinase inhibitors, about 25% to about 55% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, about 20% to about 55% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 30 mg/mL to about 300 mg/mL of one or more protein kinase inhibitors, about 25% to about 55% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, about 1% to about 7% by weight of one or more bile acids, about 20% to about 55% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, the protein kinase inhibitor in the above embodiments comprises a serine/threonine kinase inhibitor, a tyrosine kinase inhibitor, or both. In some embodiments, the serine/threonine kinase inhibitor in the above embodiments comprises a MAPK kinase inhibitor, ROCK 2 kinase inhibitor, or both. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth

metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the oleate alkali metal or alkali earth metal salt in the above embodiments is a sodium oleate, the stearate alkali metal or alkali earth metal salt in the above embodiments is a sodium stearate, and the linoleate alkali metal or alkali earth metal salt in the above embodiments is a sodium linoleate.

[0208] In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of one or more protein kinase inhibitors, about 25% to about 55% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, and about 20% to about 55% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of one or more protein kinase inhibitors, about 25% to about 55% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, about 20% to about 55% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of one or more protein kinase inhibitors, about 25% to about 55% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, about 1% to about 7% by weight of one or more bile acids, about 20% to about 55% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 30 mg/mL to about 300 mg/mL of one or more protein kinase inhibitors, about 25% to about 55% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, and about 20% to about 55% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 30 mg/mL to about 300 mg/mL of one or more protein kinase inhibitors, about 25% to about 55% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, about 20% to about 55% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 30 mg/mL to about 300 mg/mL of one or more protein kinase inhibitors, about 25% to about 55% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, about 1% to about 7% by weight of one or more bile acids, about 20% to about 55% by weight of one or more free C_{14-24} fatty acids, and

about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, the protein kinase inhibitor in the above embodiments comprises a serine/threonine kinase inhibitor, a tyrosine kinase inhibitor, or both. In some embodiments, the serine/threonine kinase inhibitor in the above embodiments comprises a MAPK kinase inhibitor, ROCK 2 kinase inhibitor, or both. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the oleate alkali metal or alkali earth metal salt in the above embodiments is a sodium oleate, the stearate alkali metal or alkali earth metal salt in the above embodiments is a sodium stearate, and the linoleate alkali metal or alkali earth metal salt in the above embodiments is a sodium linoleate.

[0209] In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of one or more protein kinase inhibitors, about 30% to about 40% by weight of one or more hard fats, about 20% to about 35% by weight of one or more liquid fats, and about 30% to about 40% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of one or more protein kinase inhibitors, about 30% to about 40% by weight of one or more hard fats, about 20% to about 35% by weight of one or more liquid fats, about 30% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of one or more protein kinase inhibitors, about 30% to about 40% by

weight of one or more hard fats, about 20% to about 35% by weight of one or more liquid fats, about 0.5% to about 6% by weight of one or more bile acids, about 30% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 30 mg/mL to about 300 mg/mL of one or more protein kinase inhibitors, about 30% to about 40% by weight of one or more hard fats, about 20% to about 35% by weight of one or more liquid fats, and about 30% to about 40% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 30 mg/mL to about 300 mg/mL of one or more protein kinase inhibitors, about 30% to about 40% by weight of one or more hard fats, about 20% to about 35% by weight of one or more liquid fats, about 30% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 30 mg/mL to about 300 mg/mL of one or more protein kinase inhibitors, about 30% to about 40% by weight of one or more hard fats, about 20% to about 35% by weight of one or more liquid fats, about 0.5% to about 6% by weight of one or more bile acids, about 30% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, the protein kinase inhibitor in the above embodiments comprises a serine/threonine kinase inhibitor, a tyrosine kinase inhibitor, or both. In some embodiments, the serine/threonine kinase inhibitor in the above embodiments comprises a MAPK kinase inhibitor, ROCK 2 kinase inhibitor, or both. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate

alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the oleate alkali metal or alkali earth metal salt in the above embodiments is a sodium oleate, the stearate alkali metal or alkali earth metal salt in the above embodiments is a sodium stearate, and the linoleate alkali metal or alkali earth metal salt in the above embodiments is a sodium linoleate.

[0210] In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of one or more protein kinase inhibitors, about 30% to about 40% by weight of one or more hard fats comprising glycerolipids, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, and about 30% to about 40% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of one or more protein kinase inhibitors, about 30% to about 40% by weight of one or more hard fats comprising glycerolipids, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, about 30% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of one or more protein kinase inhibitors, about 30% to about 40% by weight of one or more hard fats comprising glycerolipids, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, about 0.5% to about 6% by weight of one or more bile acids, about 30% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 30 mg/mL to about 300 mg/mL of one or more protein kinase inhibitors, about 30% to about 40% by weight of one or more hard fats comprising glycerolipids, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, and about 30% to about 40% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 30 mg/mL to about 300 mg/mL of one or more protein kinase inhibitors, about 30% to about 40% by weight of one or more hard fats comprising glycerolipids, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, about 30% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 30 mg/mL to about 300 mg/mL of one or more protein kinase inhibitors, about 30% to about 40% by weight of one or more hard fats comprising glycerolipids, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, about 0.5% to about 6% by weight of one or more bile acids, about 30% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, the protein kinase inhibitor in the above embodiments comprises a serine/threonine kinase inhibitor, a tyrosine kinase inhibitor, or both. In some embodiments, the serine/threonine kinase inhibitor in the above embodiments comprises a MAPK kinase inhibitor, ROCK 2 kinase inhibitor, or both. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more

free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the oleate alkali metal or alkali earth metal salt in the above embodiments is a sodium oleate, the stearate alkali metal or alkali earth metal salt in the above embodiments is a sodium stearate, and the linoleate alkali metal or alkali earth metal salt in the above embodiments is a sodium linoleate.

[0211] In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of one or more protein kinase inhibitors, about 30% to about 40% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, and about 30% to about 40% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of one or more protein kinase inhibitors, about 30% to about 40% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, about 30% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of one or more protein kinase inhibitors, about 30% to about 40% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, about 0.5% to about 6% by weight of one or more bile acids, about 30% to about 40% by

weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 30 mg/mL to about 300 mg/mL of one or more protein kinase inhibitors, about 30% to about 40% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, and about 30% to about 40% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 30 mg/mL to about 300 mg/mL of one or more protein kinase inhibitors, about 30% to about 40% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, about 30% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 30 mg/mL to about 300 mg/mL of one or more protein kinase inhibitors, about 30% to about 40% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, about 0.5% to about 6% by weight of one or more bile acids, about 30% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, the protein kinase inhibitor in the above embodiments comprises a serine/threonine kinase inhibitor, a tyrosine kinase inhibitor, or both. In some embodiments, the serine/threonine kinase inhibitor in the above embodiments comprises a MAPK kinase inhibitor, ROCK 2 kinase inhibitor, or both. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric

acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the oleate alkali metal or alkali earth metal salt in the above embodiments is a sodium oleate, the stearate alkali metal or alkali earth metal salt in the above embodiments is a sodium stearate, and the linoleate alkali metal or alkali earth metal salt in the above embodiments is a sodium linoleate.

[0212] In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of one or more protein kinase inhibitors, about 30% to about 40% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, and about 30% to about 40% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of one or more protein kinase inhibitors, about 30% to about 40% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, about 30% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of one or more protein kinase inhibitors, about 30% to about 40% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, about 0.5% to about 6% by weight of one or more bile acids, about 30% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 30 mg/mL to about 300 mg/mL of one or more protein kinase inhibitors, about 30% to about 40% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, and about 30% to about 40% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 30 mg/mL to about 300 mg/mL of one or more protein kinase inhibitors, about 30% to about 40% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, about 30% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 30 mg/mL to about 300 mg/mL of one or more protein kinase inhibitors, about 30% to about 40% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides

including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, about 0.5% to about 6% by weight of one or more bile acids, about 30% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, the protein kinase inhibitor in the above embodiments comprises a serine/threonine kinase inhibitor, a tyrosine kinase inhibitor, or both. In some embodiments, the serine/threonine kinase inhibitor in the above embodiments comprises a MAPK kinase inhibitor, ROCK 2 kinase inhibitor, or both. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the oleate alkali metal or alkali earth metal salt in the above embodiments is a sodium oleate, the stearate alkali metal or alkali earth metal salt in the above embodiments is a sodium stearate, and the linoleate alkali metal or alkali earth metal salt in the above embodiments is a sodium linoleate.

[0213] In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of one or more protein kinase inhibitors, about 30% to about 40% by weight of one or more hard fats, about 20% to about 35% by weight of one or more liquid fats, and about 20% to about 40% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of one or more protein kinase inhibitors, about 30% to about 40% by weight of one or more hard fats, about 20% to about 35% by weight of one or more liquid fats, about 20% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one

or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of one or more protein kinase inhibitors, about 30% to about 40% by weight of one or more hard fats, about 20% to about 35% by weight of one or more liquid fats, about 0.5% to about 6% by weight of one or more bile acids, about 20% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 30 mg/mL to about 300 mg/mL of one or more protein kinase inhibitors, about 30% to about 40% by weight of one or more hard fats, about 20% to about 35% by weight of one or more liquid fats, and about 20% to about 40% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 30 mg/mL to about 300 mg/mL of one or more protein kinase inhibitors, about 30% to about 40% by weight of one or more hard fats, about 20% to about 35% by weight of one or more liquid fats, about 20% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 30 mg/mL to about 300 mg/mL of one or more protein kinase inhibitors, about 30% to about 40% by weight of one or more hard fats, about 20% to about 35% by weight of one or more liquid fats, about 0.5% to about 6% by weight of one or more bile acids, about 20% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, the protein kinase inhibitor in the above embodiments comprises a serine/threonine kinase inhibitor, a tyrosine kinase inhibitor, or both. In some embodiments, the serine/threonine kinase inhibitor in the above embodiments comprises a MAPK kinase inhibitor, ROCK 2 kinase inhibitor, or both. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid

surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the oleate alkali metal or alkali earth metal salt in the above embodiments is a sodium oleate, the stearate alkali metal or alkali earth metal salt in the above embodiments is a sodium stearate, and the linoleate alkali metal or alkali earth metal salt in the above embodiments is a sodium linoleate.

[0214] In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of one or more protein kinase inhibitors, about 30% to about 40% by weight of one or more hard fats comprising glycerolipids, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, and about 20% to about 40% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of one or more protein kinase inhibitors, about 30% to about 40% by weight of one or more hard fats comprising glycerolipids, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, about 20% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of one or more protein kinase inhibitors, about 30% to about 40% by weight of one or more hard fats comprising glycerolipids, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, about 0.5% to about 6% by weight of one or more bile acids, about 20% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 30 mg/mL to about 300 mg/mL of one or more protein kinase inhibitors, about 30% to about 40% by weight of one or more hard fats comprising glycerolipids, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, and about 20% to about 40% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 30 mg/mL to about 300 mg/mL of one or more protein kinase inhibitors, about 30% to about 40% by weight of one or more hard fats comprising glycerolipids, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, about 20% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 30 mg/mL to about 300 mg/mL of one or more protein kinase inhibitors, about 30% to about 40% by weight of one or more hard fats comprising glycerolipids, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, about 0.5% to about 6% by weight of one or more bile acids, about 20% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, the protein kinase inhibitor in the above embodiments comprises a serine/threonine kinase inhibitor, a tyrosine kinase inhibitor, or both. In some embodiments, the serine/threonine kinase inhibitor in the above embodiments comprises a MAPK kinase inhibitor, ROCK 2 kinase inhibitor, or both. In some

embodiments, the one or more bile acids in the above embodiments comprises cholic acid. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the oleate alkali metal or alkali earth metal salt in the above embodiments is a sodium oleate, the stearate alkali metal or alkali earth metal salt in the above embodiments is a sodium stearate, and the linoleate alkali metal or alkali earth metal salt in the above embodiments is a sodium linoleate.

[0215] In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of one or more protein kinase inhibitors, about 30% to about 40% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, and about 20% to about 40% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of one or more protein kinase inhibitors, about 30% to about 40% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, about 20% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of one or more protein kinase inhibitors, about 30% to about 40% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 20% to about 35% by weight of one or more liquid

fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, about 0.5% to about 6% by weight of one or more bile acids, about 20% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 30 mg/mL to about 300 mg/mL of one or more protein kinase inhibitors, about 30% to about 40% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, and about 20% to about 40% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 30 mg/mL to about 300 mg/mL of one or more protein kinase inhibitors, about 30% to about 40% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, about 20% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 30 mg/mL to about 300 mg/mL of one or more protein kinase inhibitors, about 30% to about 40% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, about 0.5% to about 6% by weight of one or more bile acids, about 20% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, the protein kinase inhibitor in the above embodiments comprises a serine/threonine kinase inhibitor, a tyrosine kinase inhibitor, or both. In some embodiments, the serine/threonine kinase inhibitor in the above embodiments comprises a MAPK kinase inhibitor, ROCK 2 kinase inhibitor, or both. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the

one or more bile acids in the above embodiments comprises cholic acid, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the oleate alkali metal or alkali earth metal salt in the above embodiments is a sodium oleate, the stearate alkali metal or alkali earth metal salt in the above embodiments is a sodium stearate, and the linoleate alkali metal or alkali earth metal salt in the above embodiments is a sodium linoleate.

[0216] In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of one or more protein kinase inhibitors, about 30% to about 40% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, and about 20% to about 40% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of one or more protein kinase inhibitors, about 30% to about 40% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, about 20% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of one or more protein kinase inhibitors, about 30% to about 40% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, about 0.5% to about 6% by weight of one or more bile acids, about 20% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 30 mg/mL to about 300 mg/mL of one or more protein kinase inhibitors, about 30% to about 40% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, and about 20% to about 40% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 30 mg/mL to about 300 mg/mL of one or more protein kinase inhibitors, about 30% to about 40% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, about 20% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 30 mg/mL to about 300 mg/mL of one or more protein kinase inhibitors, about 30% to about 40% by weight of one or

more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, about 0.5% to about 6% by weight of one or more bile acids, about 20% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, the protein kinase inhibitor in the above embodiments comprises a serine/threonine kinase inhibitor, a tyrosine kinase inhibitor, or both. In some embodiments, the serine/threonine kinase inhibitor in the above embodiments comprises a MAPK kinase inhibitor, ROCK 2 kinase inhibitor, or both. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the oleate alkali metal or alkali earth metal salt in the above embodiments is a sodium oleate, the stearate alkali metal or alkali earth metal salt in the above embodiments is a sodium stearate, and the linoleate alkali metal or alkali earth metal salt in the above embodiments is a sodium linoleate.

[0217] In some embodiments, a pharmaceutical composition comprises a ROCK 2 kinase inhibitor, one or more hard fats, one or more liquid fats, and one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises a ROCK 2 kinase inhibitor, one or more hard fats, one or more liquid fats, one or more free C_{14-24} fatty acids, and one or more free C_{14-24} fatty acid surfactants. In some embodiments, the ROCK 2 kinase inhibitor in the above embodiments comprises [6-[4-[[4-(1H-Pyrazol-4-

yl)phenyl]amino]pyrimidin-2-yl]-1-methyl-1H-indol-2-yl] (3,3-difluoroazetidin-1-yl)methanone, monohydrochloride, monohydrate. In some embodiments, a pharmaceutical composition comprises a ROCK 2 kinase inhibitor, one or more hard fats, one or more liquid fats, one or more bile acids, one or more free C_{14-24} fatty acids, and one or more free C_{14-24} fatty acid surfactants. In some embodiments, the ROCK 2 kinase inhibitor in the above embodiments comprises [6-[4-[[4-(1H-Pyrazol-4-yl)phenyl]amino]pyrimidin-2-yl]-1-methyl-1H-indol-2-yl] (3,3-difluoroazetidin-1-yl)methanone, monohydrochloride, monohydrate. In some embodiments, the ROCK 2 kinase inhibitor in the above embodiments comprises [6-[4-[[4-(1H-Pyrazol-4-yl)phenyl]amino]pyrimidin-2-yl]-1-methyl-1H-indol-2-yl] (3,3-difluoroazetidin-1-yl)methanone, monohydrochloride, monohydrate. In some embodiments, a pharmaceutical composition comprises a ROCK 2 kinase inhibitor, one or more hard fats, one or more liquid fats, one or more bile acids, one or more free C_{14-24} fatty acids, and one or more free C_{14-24} fatty acid surfactants. In some embodiments, the ROCK 2 kinase inhibitor in the above embodiments comprises [6-[4-[[4-(1H-Pyrazol-4-yl)phenyl]amino]pyrimidin-2-yl]-1-methyl-1H-indol-2-yl] (3,3-difluoroazetidin-1-yl)methanone, monohydrochloride, monohydrate. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the oleate alkali metal or alkali earth metal salt in the above embodiments is a sodium oleate, the stearate alkali metal or alkali earth metal salt in the above embodiments is a sodium stearate, and the linoleate alkali metal or alkali earth metal salt in the above embodiments is a sodium linoleate.

[0218] In some embodiments, a pharmaceutical composition comprises about a ROCK 2 kinase inhibitor, about 25% to about 35% by weight of one or more hard fats, about 30% to about 55% by weight of one or more liquid fats, and about 15% to about 35% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises a ROCK 2 kinase inhibitor, about 25% to about 35% by weight of one or more hard fats, about 30% to about 55% by weight of one or more liquid fats, about 15% to about 35% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises a ROCK 2 kinase inhibitor, about 25% to about 35% by weight of one or more hard fats, about 30% to about 55% by weight of one or more liquid fats, about 2% to about 6% by weight of one or more bile acids, about 15% to about 35% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, the ROCK 2 kinase inhibitor in the above embodiments comprises [6-[4-[[4-(1H-Pyrazol-4-yl)phenyl]amino]pyrimidin-2-yl]-1-methyl-1H-indol-2-yl] (3,3-difluoroazetidin-1-yl)methanone, monohydrochloride, monohydrate. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the oleate alkali metal or alkali earth metal salt in the above embodiments is a sodium oleate, the stearate alkali metal or alkali earth metal salt in the above embodiments is a sodium stearate, and the linoleate alkali metal or alkali earth metal salt in the above embodiments is a sodium linoleate.

[0219] In some embodiments, a pharmaceutical composition comprises a ROCK 2 kinase inhibitor, about 25% to about 35% by weight of one or more hard fats comprising glycerolipids, about 30% to about 55% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, and about 15% to about 35% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises a ROCK 2 kinase inhibitor, about 25% to about 35% by weight of one or more hard fats comprising glycerolipids, about 30% to about 55% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, about 15% to about 35% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises a ROCK 2 kinase inhibitor, about 25% to about 35% by weight of one or more hard fats comprising glycerolipids, about 30% to about 55% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, about 2% to about 6% by weight of one or more bile acids, about 15% to about 35% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, the ROCK 2 kinase inhibitor in the above embodiments comprises [6-[4-[[4-(1H-Pyrazol-4-yl)phenyl]amino]pyrimidin-2-yl]-1-methyl-1H-indol-2-yl] (3,3-difluoroazetidin-1-yl)methanone, monohydrochloride, monohydrate. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the oleate alkali metal or alkali earth metal salt in the above embodiments is a sodium

oleate, the stearate alkali metal or alkali earth metal salt in the above embodiments is a sodium stearate, and the linoleate alkali metal or alkali earth metal salt in the above embodiments is a sodium linoleate.

[0220] In some embodiments, a pharmaceutical composition comprises a ROCK 2 kinase inhibitor, about 25% to about 35% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 30% to about 55% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, and about 15% to about 35% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises a ROCK 2 kinase inhibitor, about 25% to about 35% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 30% to about 55% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, about 15% to about 35% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises a ROCK 2 kinase inhibitor, about 25% to about 35% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 30% to about 55% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, about 2% to about 6% by weight of one or more bile acids, about 15% to about 35% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, the ROCK 2 kinase inhibitor in the above embodiments comprises [6-[4-[[4-(1H-Pyrazol-4-yl)phenyl]amino]pyrimidin-2-yl]-1-methyl-1H-indol-2-yl] (3,3-difluoroazetidin-1-yl)methanone, monohydrochloride, monohydrate. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and

the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the oleate alkali metal or alkali earth metal salt in the above embodiments is a sodium oleate, the stearate alkali metal or alkali earth metal salt in the above embodiments is a sodium stearate, and the linoleate alkali metal or alkali earth metal salt in the above embodiments is a sodium linoleate.

[0221] In some embodiments, a pharmaceutical composition comprises a ROCK 2 kinase inhibitor, about 25% to about 35% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 30% to about 55% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, and about 15% to about 35% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises a ROCK 2 kinase inhibitor, about 25% to about 35% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 30% to about 55% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, about 15% to about 35% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises a ROCK 2 kinase inhibitor, about 25% to about 35% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 30% to about 55% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, about 2% to about 6% by weight of one or more bile acids, about 15% to about 35% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, the ROCK 2 kinase inhibitor in the above embodiments comprises [6-[4-[[4-(1H-Pyrazol-4-yl)phenyl]amino]pyrimidin-2-yl]-1-methyl-1H-indol-2-yl] (3,3-difluoroazetidin-1-yl)methanone, monohydrochloride, monohydrate. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the

one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the oleate alkali metal or alkali earth metal salt in the above embodiments is a sodium oleate, the stearate alkali metal or alkali earth metal salt in the above embodiments is a sodium stearate, and the linoleate alkali metal or alkali earth metal salt in the above embodiments is a sodium linoleate.

[0222] In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of a ROCK 2 kinase inhibitor, about 25% to about 35% by weight of one or more hard fats, about 30% to about 55% by weight of one or more liquid fats, and about 15% to about 35% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of a ROCK 2 kinase inhibitor, about 25% to about 35% by weight of one or more hard fats, about 30% to about 55% by weight of one or more liquid fats, about 15% to about 35% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of a ROCK 2 kinase inhibitor, about 25% to about 35% by weight of one or more hard fats, about 30% to about 55% by weight of one or more liquid fats, about 2% to about 6% by weight of one or more bile acids, about 15% to about 35% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 10 mg/mL to about 150 mg/mL of a ROCK 2 kinase inhibitor, about 25% to about 35% by weight of one or more hard fats, about 30% to about 55% by weight of one or more liquid fats, and about 15% to about 35% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 10 mg/mL to about 150 mg/mL of a ROCK 2 kinase inhibitor, about 25% to about 35% by weight of one or more hard fats, about 30% to about 55% by weight of one or more liquid fats, about 15% to about 35% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 10 mg/mL to about 150 mg/mL of a ROCK 2 kinase inhibitor, about 25% to about 35% by weight of one or more hard fats, about 30% to about 55% by weight of one or more liquid fats, about 2% to about 6% by weight of one or more bile acids, about 15% to about 35% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, the ROCK 2 kinase inhibitor in the above embodiments comprises [6-[4-[[4-(1H-Pyrazol-4-yl)phenyl]amino]pyrimidin-2-yl]-1-methyl-1H-indol-2-yl](3,3-difluoroazetidin-1-yl)methanone, monohydrochloride, monohydrate. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more

free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the oleate alkali metal or alkali earth metal salt in the above embodiments is a sodium oleate, the stearate alkali metal or alkali earth metal salt in the above embodiments is a sodium stearate, and the linoleate alkali metal or alkali earth metal salt in the above embodiments is a sodium linoleate.

[0223] In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of a ROCK 2 kinase inhibitor, about 25% to about 35% by weight of one or more hard fats comprising glycerolipids, about 30% to about 55% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, and about 15% to about 35% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of a ROCK 2 kinase inhibitor, about 25% to about 35% by weight of one or more hard fats comprising glycerolipids, about 30% to about 55% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, about 15% to about 35% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of a ROCK 2 kinase inhibitor, about 25% to about 35% by weight of one or more hard fats comprising glycerolipids, about 30% to about 55% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, about 2% to about 6% by weight of one or more bile acids, about 15% to about 35% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 10 mg/mL to about 150 mg/mL of

a ROCK 2 kinase inhibitor, about 25% to about 35% by weight of one or more hard fats comprising glycerolipids, about 30% to about 55% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, and about 15% to about 35% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 10 mg/mL to about 150 mg/mL of a ROCK 2 kinase inhibitor, about 25% to about 35% by weight of one or more hard fats comprising glycerolipids, about 30% to about 55% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, about 15% to about 35% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 10 mg/mL to about 150 mg/mL of a ROCK 2 kinase inhibitor, about 25% to about 35% by weight of one or more hard fats comprising glycerolipids, about 30% to about 55% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, about 2% to about 6% by weight of one or more bile acids, about 15% to about 35% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, the ROCK 2 kinase inhibitor in the above embodiments comprises [6-[4-[[4-(1H-Pyrazol-4-yl)phenyl]amino]pyrimidin-2-yl]-1-methyl-1H-indol-2-yl] (3,3-difluoroazetidin-1-yl)methanone, monohydrochloride, monohydrate. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the oleate alkali metal or alkali earth metal salt in the above embodiments is a sodium

oleate, the stearate alkali metal or alkali earth metal salt in the above embodiments is a sodium stearate, and the linoleate alkali metal or alkali earth metal salt in the above embodiments is a sodium linoleate.

[0224] In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of a ROCK 2 kinase inhibitor, about 25% to about 35% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 30% to about 55% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, and about 15% to about 35% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of a ROCK 2 kinase inhibitor, about 25% to about 35% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 30% to about 55% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, about 15% to about 35% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of a ROCK 2 kinase inhibitor, about 25% to about 35% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 30% to about 55% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, about 2% to about 6% by weight of one or more bile acids, about 15% to about 35% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 10 mg/mL to about 150 mg/mL of a ROCK 2 kinase inhibitor, about 25% to about 35% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 30% to about 55% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, and about 15% to about 35% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 10 mg/mL to about 150 mg/mL of a ROCK 2 kinase inhibitor, about 25% to about 35% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 30% to about 55% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, about 15% to about 35% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 10 mg/mL to about 150 mg/mL of a ROCK 2 kinase inhibitor, about 25% to about 35% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 30% to about 55% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, about 2% to about 6% by weight of one or more bile acids, about 15% to about 35% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, the ROCK 2 kinase inhibitor in the above embodiments comprises [6-[4-[[4-(1H-Pyrazol-4-yl)phenyl]amino]pyrimidin-2-yl]-1-methyl-1H-indol-2-yl] (3,3-difluoroazetidin-1-yl)methanone, monohydrochloride, monohydrate. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acid surfactants

in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the oleate alkali metal or alkali earth metal salt in the above embodiments is a sodium oleate, the stearate alkali metal or alkali earth metal salt in the above embodiments is a sodium stearate, and the linoleate alkali metal or alkali earth metal salt in the above embodiments is a sodium linoleate.

[0225] In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of a ROCK 2 kinase inhibitor, about 25% to about 35% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 30% to about 55% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, and about 15% to about 35% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of a ROCK 2 kinase inhibitor, about 25% to about 35% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 30% to about 55% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, about 15% to about 35% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of a ROCK 2 kinase inhibitor, about 25% to about 35% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 30% to about 55% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, about 2% to about 6% by weight of one or more bile acids, about 15% to about 35% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by

weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 10 mg/mL to about 150 mg/mL of a ROCK 2 kinase inhibitor, about 25% to about 35% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 30% to about 55% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, and about 15% to about 35% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 10 mg/mL to about 150 mg/mL of a ROCK 2 kinase inhibitor, about 25% to about 35% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 30% to about 55% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, about 15% to about 35% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 10 mg/mL to about 150 mg/mL of a ROCK 2 kinase inhibitor, about 25% to about 35% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 30% to about 55% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, and about 15% to about 35% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 10 mg/mL to about 150 mg/mL of a ROCK 2 kinase inhibitor, about 25% to about 35% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 30% to about 55% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, about 15% to about 35% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 10 mg/mL to about 150 mg/mL of a ROCK 2 kinase inhibitor, about 25% to about 35% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 30% to about 55% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, about 2% to about 6% by weight of one or more bile acids, about 15% to about 35% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, the ROCK 2 kinase inhibitor in the above embodiments comprises [6-[4-[[4-(1H-Pyrazol-4-yl)phenyl]amino]pyrimidin-2-yl]-1-methyl-1H-indol-2-yl](3,3-difluoroazetidin-1-yl)methanone, monohydrochloride, monohydrate. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one

or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the oleate alkali metal or alkali earth metal salt in the above embodiments is a sodium oleate, the stearate alkali metal or alkali earth metal salt in the above embodiments is a sodium stearate, and the linoleate alkali metal or alkali earth metal salt in the above embodiments is a sodium linoleate.

[0226] In some embodiments, a pharmaceutical composition comprises a mebendazole, one or more hard fats, one or more liquid fats, and one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises a mebendazole, one or more hard fats, one or more liquid fats, one or more free C_{14-24} fatty acids, and one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises a mebendazole, one or more hard fats, one or more liquid fats, one or more bile acids, one or more free C_{14-24} fatty acids, and one or more free C_{14-24} fatty acid surfactants. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18}

fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the oleate alkali metal or alkali earth metal salt in the above embodiments is a sodium oleate, the stearate alkali metal or alkali earth metal salt in the above embodiments is a sodium stearate, and the linoleate alkali metal or alkali earth metal salt in the above embodiments is a sodium linoleate.

[0227] In some embodiments, a pharmaceutical composition comprises about a mebendazole, about 40% to about 55% by weight of one or more hard fats, about 20% to about 30% by weight of one or more liquid fats, and about 20% to about 30% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises a mebendazole, about 40% to about 55% by weight of one or more hard fats, about 20% to about 30% by weight of one or more liquid fats, about 20% to about 30% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises a mebendazole, about 40% to about 55% by weight of one or more hard fats, about 20% to about 30% by weight of one or more liquid fats, about 2% to about 6% by weight of one or more bile acids, about 20% to about 30% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments

comprises cholic acid, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the oleate alkali metal or alkali earth metal salt in the above embodiments is a sodium oleate, the stearate alkali metal or alkali earth metal salt in the above embodiments is a sodium stearate, and the linoleate alkali metal or alkali earth metal salt in the above embodiments is a sodium linoleate.

[0228] In some embodiments, a pharmaceutical composition comprises a mebendazole, about 40% to about 55% by weight of one or more hard fats comprising glycerolipids, about 20% to about 30% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, and about 20% to about 30% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises a mebendazole, about 40% to about 55% by weight of one or more hard fats comprising glycerolipids, about 20% to about 30% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, about 20% to about 30% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises a mebendazole, about 40% to about 55% by weight of one or more hard fats comprising glycerolipids, about 20% to about 30% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, about 2% to about 6% by weight of one or more bile acids, about 20% to about 30% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the

one or more bile acids in the above embodiments comprises cholic acid, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the oleate alkali metal or alkali earth metal salt in the above embodiments is a sodium oleate, the stearate alkali metal or alkali earth metal salt in the above embodiments is a sodium stearate, and the linoleate alkali metal or alkali earth metal salt in the above embodiments is a sodium linoleate.

[0229] In some embodiments, a pharmaceutical composition comprises a mebendazole, about 40% to about 55% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 20% to about 30% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, and about 20% to about 30% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises a mebendazole, about 40% to about 55% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 20% to about 30% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, about 20% to about 30% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises a mebendazole, about 40% to about 55% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 20% to about 30% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, about 2% to about 6% by weight of one or more bile acids, about 20% to about 30% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or

alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the oleate alkali metal or alkali earth metal salt in the above embodiments is a sodium oleate, the stearate alkali metal or alkali earth metal salt in the above embodiments is a sodium stearate, and the linoleate alkali metal or alkali earth metal salt in the above embodiments is a sodium linoleate.

[0230] In some embodiments, a pharmaceutical composition comprises a mebendazole, about 40% to about 55% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 20% to about 30% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, and about 20% to about 30% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises a mebendazole, about 40% to about 55% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 20% to about 30% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, about 20% to about 30% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises a mebendazole, about 40% to about 55% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 20% to about 30% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, about 2% to about 6% by weight of one or more bile acids, about 20% to about 30% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt,

or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the oleate alkali metal or alkali earth metal salt in the above embodiments is a sodium oleate, the stearate alkali metal or alkali earth metal salt in the above embodiments is a sodium stearate, and the linoleate alkali metal or alkali earth metal salt in the above embodiments is a sodium linoleate.

[0231] In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of a mebendazole, about 35% to about 55% by weight of one or more hard fats, about 20% to about 40% by weight of one or more liquid fats, and about 20% to about 55% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of a mebendazole, about 35% to about 55% by weight of one or more hard fats, about 20% to about 40% by weight of one or more liquid fats, about 20% to about 55% by weight of one or more free C_{14-24} fatty acids, and about 2% to about 7% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of a mebendazole, about 35% to about 55% by weight of one or more hard fats, about 20% to about 40% by weight of one or more liquid fats, about 1% to about 6% by weight of one or more bile acids, about 20% to about 55% by weight of one or more free C_{14-24} fatty acids, and about 2% to about 7% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 10 mg/mL to about 150 mg/mL of a mebendazole, about 35% to about 55% by weight of one or more hard fats, about 20% to about 40% by weight of one or more liquid fats, and about 20% to about 55% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 10 mg/mL to about 150 mg/mL of a mebendazole, about 35% to about 55% by weight of one or more hard fats, about 20% to about 40% by weight of one or more liquid fats, about 20% to about 55% by weight of one or more free C_{14-24} fatty acids, and about 2% to about 7% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 10 mg/mL to about 150 mg/mL of a mebendazole, about 35% to about 55% by weight of one or more hard fats, about 20% to about 40% by weight of one or more liquid fats, and about 20% to about 55% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 10 mg/mL to about 150 mg/mL of a mebendazole, about 35% to about 55% by weight of one or more hard fats, about 20% to about 40% by weight of one or more liquid fats, about 20% to about 55% by weight of one or more free C_{14-24} fatty acids, and about 2% to about 7% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 10 mg/mL to about 150 mg/mL of a mebendazole, about 35% to about 55% by weight of one or more hard fats, about 20% to

about 40% by weight of one or more liquid fats, about 1% to about 6% by weight of one or more bile acids, about 20% to about 55% by weight of one or more free C_{14-24} fatty acids, and about 2% to about 7% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the oleate alkali metal or alkali earth metal salt in the above embodiments is a sodium oleate, the stearate alkali metal or alkali earth metal salt in the above embodiments is a sodium stearate, and the linoleate alkali metal or alkali earth metal salt in the above embodiments is a sodium linoleate.

[0232] In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of a mebendazole, about 35% to about 55% by weight of one or more hard fats comprising glycerolipids, about 20% to about 40% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, and about 20% to about 55% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of a mebendazole, about 35% to about 55% by weight of one or more hard fats comprising glycerolipids, about 20% to about 40% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, about 20% to about 55% by weight of one or more free C_{14-24} fatty acids, and about 2% to about 7% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about

0.5% to about 20% by weight of a mebendazole, about 35% to about 55% by weight of one or more hard fats comprising glycerolipids, about 20% to about 40% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, about 1% to about 6% by weight of one or more bile acids, about 20% to about 55% by weight of one or more free C_{14-24} fatty acids, and about 2% to about 7% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 10 mg/mL to about 150 mg/mL of a mebendazole, about 35% to about 55% by weight of one or more hard fats comprising glycerolipids, about 20% to about 40% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, and about 20% to about 55% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 10 mg/mL to about 150 mg/mL of a mebendazole, about 35% to about 55% by weight of one or more hard fats comprising glycerolipids, about 20% to about 40% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, about 20% to about 55% by weight of one or more free C_{14-24} fatty acids, and about 2% to about 7% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 10 mg/mL to about 150 mg/mL of a mebendazole, about 35% to about 55% by weight of one or more hard fats comprising glycerolipids, about 20% to about 40% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, about 1% to about 6% by weight of one or more bile acids, about 20% to about 55% by weight of one or more free C_{14-24} fatty acids, and about 2% to about 7% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments

comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the oleate alkali metal or alkali earth metal salt in the above embodiments is a sodium oleate, the stearate alkali metal or alkali earth metal salt in the above embodiments is a sodium stearate, and the linoleate alkali metal or alkali earth metal salt in the above embodiments is a sodium linoleate.

[0233] In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of a mebendazole, about 35% to about 55% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 20% to about 40% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, and about 20% to about 55% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of a mebendazole, about 35% to about 55% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 20% to about 40% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, about 20% to about 55% by weight of one or more free C_{14-24} fatty acids, and about 2% to about 7% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of a mebendazole, about 35% to about 55% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 20% to about 40% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, about 1% to about 6% by weight of one or more bile acids, about 20% to about 55% by weight of one or more free C_{14-24} fatty acids, and about 2% to about 7% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 10 mg/mL to about 150 mg/mL of a mebendazole, about 35% to about 55% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 20% to about 40% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, and about 20% to about 55% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 10 mg/mL to about 150 mg/mL of a mebendazole, about 35% to about 55% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 20% to about 40% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, about 20% to about 55% by weight of one or more free C_{14-24} fatty acids, and about 2% to about 7% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 10 mg/mL to about 150 mg/mL of a mebendazole, about 35% to about 55% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 20% to about 40% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, about 1% to about 6% by weight of one or more bile acids, about 20% to about 55% by weight of one or more free C_{14-24} fatty acids, and about 2% to about 7% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid,

or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the oleate alkali metal or alkali earth metal salt in the above embodiments is a sodium oleate, the stearate alkali metal or alkali earth metal salt in the above embodiments is a sodium stearate, and the linoleate alkali metal or alkali earth metal salt in the above embodiments is a sodium linoleate.

[0234] In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of a mebendazole, about 35% to about 55% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 20% to about 40% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, and about 20% to about 55% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of a mebendazole, about 35% to about 55% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 20% to about 40% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, about 20% to about 55% by weight of one or more free C_{14-24} fatty acids, and about 2% to about 7% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of a mebendazole, about 35% to about 55% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 20% to about 40% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, about 1% to about 6% by weight of one or more bile acids, about 20%

to about 55% by weight of one or more free C_{14-24} fatty acids, and about 2% to about 7% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 10 mg/mL to about 150 mg/mL of a mebendazole, about 35% to about 55% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 20% to about 40% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, and about 20% to about 55% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 10 mg/mL to about 150 mg/mL of a mebendazole, about 35% to about 55% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 20% to about 40% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, about 20% to about 55% by weight of one or more free C_{14-24} fatty acids, and about 2% to about 7% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 10 mg/mL to about 150 mg/mL of a mebendazole, about 35% to about 55% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 20% to about 40% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, and about 20% to about 55% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 10 mg/mL to about 150 mg/mL of a mebendazole, about 35% to about 55% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 20% to about 40% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, about 20% to about 55% by weight of one or more free C_{14-24} fatty acids, and about 2% to about 7% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 10 mg/mL to about 150 mg/mL of a mebendazole, about 35% to about 55% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 20% to about 40% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, about 1% to about 6% by weight of one or more bile acids, about 20% to about 55% by weight of one or more free C_{14-24} fatty acids, and about 2% to about 7% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth

metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the oleate alkali metal or alkali earth metal salt in the above embodiments is a sodium oleate, the stearate alkali metal or alkali earth metal salt in the above embodiments is a sodium stearate, and the linoleate alkali metal or alkali earth metal salt in the above embodiments is a sodium linoleate.

[0235] In some embodiments, a pharmaceutical composition comprises an olaparib, one or more hard fats, one or more liquid fats, and one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises an olaparib, one or more hard fats, one or more liquid fats, ne or more free C_{14-24} fatty acids, and one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises an olaparib, one or more hard fats, one or more liquid fats, one or more bile acids, one or more free C_{14-24} fatty acids, and one or more free C_{14-24} fatty acid surfactants. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid, the one or more

free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the oleate alkali metal or alkali earth metal salt in the above embodiments is a sodium oleate, the stearate alkali metal or alkali earth metal salt in the above embodiments is a sodium stearate, and the linoleate alkali metal or alkali earth metal salt in the above embodiments is a sodium linoleate.

[0236] In some embodiments, a pharmaceutical composition comprises about an olaparib, about 28% to about 38% by weight of one or more hard fats, about 28% to about 38% by weight of one or more liquid fats, and about 28% to about 38% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises an olaparib, about 28% to about 38% by weight of one or more hard fats, about 28% to about 38% by weight of one or more liquid fats, about 28% to about 38% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises an olaparib, about 28% to about 38% by weight of one or more hard fats, about 28% to about 38% by weight of one or more liquid fats, about 2% to about 6% by weight of one or more bile acids, about 28% to about 38% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably

an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the oleate alkali metal or alkali earth metal salt in the above embodiments is a sodium oleate, the stearate alkali metal or alkali earth metal salt in the above embodiments is a sodium stearate, and the linoleate alkali metal or alkali earth metal salt in the above embodiments is a sodium linoleate.

[0237] In some embodiments, a pharmaceutical composition comprises an olaparib, about 28% to about 38% by weight of one or more hard fats comprising glycerolipids, about 28% to about 38% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, and about 28% to about 38% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises an olaparib, about 28% to about 38% by weight of one or more hard fats comprising glycerolipids, about 28% to about 38% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, about 28% to about 38% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises an olaparib, about 28% to about 38% by weight of one or more hard fats comprising glycerolipids, about 28% to about 38% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, about 2% to about 6% by weight of one or more bile acids, about 28% to about 38% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments

comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the oleate alkali metal or alkali earth metal salt in the above embodiments is a sodium oleate, the stearate alkali metal or alkali earth metal salt in the above embodiments is a sodium stearate, and the linoleate alkali metal or alkali earth metal salt in the above embodiments is a sodium linoleate.

[0238] In some embodiments, a pharmaceutical composition comprises an olaparib, about 28% to about 38% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 28% to about 38% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, and about 28% to about 38% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises an olaparib, about 28% to about 38% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 28% to about 38% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, about 28% to about 38% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises an olaparib, about 28% to about 38% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 28% to about 38% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, about 2% to about 6% by weight of one or more bile acids, about 28% to about 38% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or

more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the oleate alkali metal or alkali earth metal salt in the above embodiments is a sodium oleate, the stearate alkali metal or alkali earth metal salt in the above embodiments is a sodium stearate, and the linoleate alkali metal or alkali earth metal salt in the above embodiments is a sodium linoleate.

[0239] In some embodiments, a pharmaceutical composition comprises an olaparib, about 28% to about 38% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 28% to about 38% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, and about 28% to about 38% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises an olaparib, about 28% to about 38% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 28% to about 38% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, about 28% to about 38% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises an olaparib, about 28% to about 38% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 28% to about 38% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, about 2% to about 6% by weight of one or more bile acids, about 28% to about 38% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or

alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the oleate alkali metal or alkali earth metal salt in the above embodiments is a sodium oleate, the stearate alkali metal or alkali earth metal salt in the above embodiments is a sodium stearate, and the linoleate alkali metal or alkali earth metal salt in the above embodiments is a sodium linoleate.

[0240] In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of an olaparib, about 25% to about 55% by weight of one or more hard fats, about 20% to about 35% by weight of one or more liquid fats, and about 20% to about 55% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of an olaparib, about 25% to about 55% by weight of one or more hard fats, about 20% to about 35% by weight of one or more liquid fats, about 20% to about 55% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of an olaparib, about 25% to about 55% by weight of one or more hard fats, about 20% to about 35% by weight of one or more liquid fats, about 1% to about 7% by weight of one or more bile acids, about 20% to about 55% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 30 mg/mL to about 300 mg/mL of an olaparib, about 25% to about 55% by weight of one or more hard fats, about 20% to about 35% by weight of one or more liquid fats, and about 20% to about 55% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 30 mg/mL to about 300 mg/mL of an olaparib, about 25% to about 55% by weight of one or more hard fats, about 20% to about 35% by weight of one or more liquid fats, about 20% to about 55% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 30 mg/mL to about 300 mg/mL of an olaparib, about 25% to about 55% by weight of one or more hard fats, about 20% to about 35% by weight of one or more liquid fats, about 1% to about 7% by weight of one or more bile acids, about 20% to about 55% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid,

or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the oleate alkali metal or alkali earth metal salt in the above embodiments is a sodium oleate, the stearate alkali metal or alkali earth metal salt in the above embodiments is a sodium stearate, and the linoleate alkali metal or alkali earth metal salt in the above embodiments is a sodium linoleate.

[0241] In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of an olaparib, about 25% to about 55% by weight of one or more hard fats comprising glycerolipids, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, and about 20% to about 55% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of an olaparib, about 25% to about 55% by weight of one or more hard fats comprising glycerolipids, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, about 20% to about 55% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of an olaparib, about 25% to about 55% by weight of one or more hard fats comprising glycerolipids, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, about 1% to about 7% by weight of one or more bile acids, about 20% to about 55% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 30 mg/mL to about 300 mg/mL of an olaparib, about 25% to about 55% by weight of one or more hard fats comprising glycerolipids, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, and about 20% to about 55% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 30 mg/mL to about 300 mg/mL of an olaparib, about 25% to about 55% by weight of one or more hard fats comprising glycerolipids, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and

triglycerides, about 20% to about 55% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 30 mg/mL to about 300 mg/mL of an olaparib, about 25% to about 55% by weight of one or more hard fats comprising glycerolipids, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, about 1% to about 7% by weight of one or more bile acids, about 20% to about 55% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the oleate alkali metal or alkali earth metal salt in the above embodiments is a sodium oleate, the stearate alkali metal or alkali earth metal salt in the above embodiments is a sodium stearate, and the linoleate alkali metal or alkali earth metal salt in the above embodiments is a sodium linoleate.

[0242] In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of an olaparib, about 25% to about 55% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, and about 20% to about 55% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of an olaparib, about 25% to about 55% by

weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, about 20% to about 55% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of an olaparib, about 25% to about 55% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, about 1% to about 7% by weight of one or more bile acids, about 20% to about 55% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 30 mg/mL to about 300 mg/mL of an olaparib, about 25% to about 55% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, and about 20% to about 55% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 30 mg/mL to about 300 mg/mL of an olaparib, about 25% to about 55% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, about 20% to about 55% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 30 mg/mL to about 300 mg/mL of an olaparib, about 25% to about 55% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, about 1% to about 7% by weight of one or more bile acids, about 20% to about 55% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments

comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the oleate alkali metal or alkali earth metal salt in the above embodiments is a sodium oleate, the stearate alkali metal or alkali earth metal salt in the above embodiments is a sodium stearate, and the linoleate alkali metal or alkali earth metal salt in the above embodiments is a sodium linoleate.

[0243] In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of an olaparib, about 25% to about 55% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, and about 20% to about 55% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of an olaparib, about 25% to about 55% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, about 20% to about 55% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of an olaparib, about 25% to about 55% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, about 1% to about 7% by weight of one or more bile acids, about 20% to about 55% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 30 mg/mL to about 300 mg/mL of an olaparib, about 25% to about 55% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, and about 20% to about 55% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 30 mg/mL to about 300 mg/mL of an olaparib, about 25% to about 55% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, about 20% to about 55% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 30 mg/mL to about 300 mg/mL of an

olaparib, about 25% to about 55% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, about 1% to about 7% by weight of one or more bile acids, about 20% to about 55% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the oleate alkali metal or alkali earth metal salt in the above embodiments is a sodium oleate, the stearate alkali metal or alkali earth metal salt in the above embodiments is a sodium stearate, and the linoleate alkali metal or alkali earth metal salt in the above embodiments is a sodium linoleate.

[0244] In some embodiments, a pharmaceutical composition comprises a nintedanib free base, one or more hard fats, one or more liquid fats, and one or more free C_{14-24} fatty acids In some embodiments, a pharmaceutical composition comprises a nintedanib free base, one or more hard fats, one or more liquid fats, one or more free C_{14-24} fatty acids, and one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises a nintedanib free base, one or more hard fats, one or more liquid fats, one or more bile acids, one or more free C_{14-24} fatty acids, and one or more free C_{14-24} fatty acid surfactants. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid. In some embodiments, the one or more free C_{14-24} fatty acids in the above

embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the oleate alkali metal or alkali earth metal salt in the above embodiments is a sodium oleate, the stearate alkali metal or alkali earth metal salt in the above embodiments is a sodium stearate, and the linoleate alkali metal or alkali earth metal salt in the above embodiments is a sodium linoleate.

[0245] In some embodiments, a pharmaceutical composition comprises a nintedanib free base, about 30% to about 40% by weight of one or more hard fats, about 20% to about 35% by weight of one or more liquid fats, and about 30% to about 40% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises a nintedanib free base, about 30% to about 40% by weight of one or more hard fats, about 20% to about 35% by weight of one or more liquid fats, about 30% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises a nintedanib free base, about 30% to about 40% by weight of one or more hard fats, about 20% to about 35% by weight of one or more liquid fats, about 0.5% to about 6% by weight of one or more bile acids, about 30% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate

alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the oleate alkali metal or alkali earth metal salt in the above embodiments is a sodium oleate, the stearate alkali metal or alkali earth metal salt in the above embodiments is a sodium stearate, and the linoleate alkali metal or alkali earth metal salt in the above embodiments is a sodium linoleate.

[0246] In some embodiments, a pharmaceutical composition comprises a nintedanib free base, about 30% to about 40% by weight of one or more hard fats comprising glycerolipids, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, and about 30% to about 40% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises a nintedanib free base, about 30% to about 40% by weight of one or more hard fats comprising glycerolipids, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, about 30% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises a nintedanib free base, about 30% to about 40% by weight of one or more hard fats comprising glycerolipids, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, about 0.5% to about 6% by weight of one or more bile acids, about 30% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one

or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the oleate alkali metal or alkali earth metal salt in the above embodiments is a sodium oleate, the stearate alkali metal or alkali earth metal salt in the above embodiments is a sodium stearate, and the linoleate alkali metal or alkali earth metal salt in the above embodiments is a sodium linoleate.

[0247] In some embodiments, a pharmaceutical composition comprises a nintedanib free base, about 30% to about 40% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, and about 30% to about 40% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises a nintedanib free base, about 30% to about 40% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, about 30% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises a nintedanib free base, about 30% to about 40% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, about 0.5% to about 6% by weight of one or more bile acids, about 30% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid,

steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the oleate alkali metal or alkali earth metal salt in the above embodiments is a sodium oleate, the stearate alkali metal or alkali earth metal salt in the above embodiments is a sodium stearate, and the linoleate alkali metal or alkali earth metal salt in the above embodiments is a sodium linoleate.

[0248] In some embodiments, a pharmaceutical composition comprises a nintedanib free base, about 30% to about 40% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, and about 30% to about 40% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises a nintedanib free base, about 30% to about 40% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, about 30% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises a nintedanib free base, about 30% to about 40% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, about 0.5% to about 6% by weight of one or more bile

acids, about 30% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the oleate alkali metal or alkali earth metal salt in the above embodiments is a sodium oleate, the stearate alkali metal or alkali earth metal salt in the above embodiments is a sodium stearate, and the linoleate alkali metal or alkali earth metal salt in the above embodiments is a sodium linoleate.

[0249] In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of a nintedanib free base, about 30% to about 40% by weight of one or more hard fats, about 20% to about 35% by weight of one or more liquid fats, and about 30% to about 40% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of a nintedanib free base, about 30% to about 40% by weight of one or more hard fats, about 20% to about 35% by weight of one or more liquid fats, about 30% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of a nintedanib free base, about 30% to about 40% by weight of one or more hard fats, about 20% to about 35% by weight of one or more liquid fats, about 0.5% to about 6% by weight of one or more bile acids, about 30% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about

5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 30 mg/mL to about 300 mg/mL of a nintedanib free base, about 30% to about 40% by weight of one or more hard fats, about 20% to about 35% by weight of one or more liquid fats, and about 30% to about 40% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 30 mg/mL to about 300 mg/mL of a nintedanib free base, about 30% to about 40% by weight of one or more hard fats, about 20% to about 35% by weight of one or more liquid fats, about 30% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 30 mg/mL to about 300 mg/mL of a nintedanib free base, about 30% to about 40% by weight of one or more hard fats, about 20% to about 35% by weight of one or more liquid fats, about 0.5% to about 6% by weight of one or more bile acids, about 30% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the oleate alkali metal or alkali earth metal salt in the above embodiments is a sodium oleate, the stearate alkali metal or alkali earth metal salt in the above embodiments is a sodium stearate, and the linoleate alkali metal or alkali earth metal salt in the above embodiments is a sodium linoleate.

[0250] In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of a nintedanib free base, about 30% to about 40% by weight of one or more hard fats comprising glycerolipids, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, and about 30% to about 40% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of a nintedanib free base, about 30% to about 40% by weight of one or more hard fats comprising glycerolipids, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, about 30% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of a nintedanib free base, about 30% to about 40% by weight of one or more hard fats comprising glycerolipids, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, about 0.5% to about 6% by weight of one or more bile acids, about 30% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 30 mg/mL to about 300 mg/mL of a nintedanib free base, about 30% to about 40% by weight of one or more hard fats comprising glycerolipids, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, and about 30% to about 40% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 30 mg/mL to about 300 mg/mL of a nintedanib free base, about 30% to about 40% by weight of one or more hard fats comprising glycerolipids, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, about 30% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 30 mg/mL to about 300 mg/mL of a nintedanib free base, about 30% to about 40% by weight of one or more hard fats comprising glycerolipids, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, about 0.5% to about 6% by weight of one or more bile acids, about 30% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18}

fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the oleate alkali metal or alkali earth metal salt in the above embodiments is a sodium oleate, the stearate alkali metal or alkali earth metal salt in the above embodiments is a sodium stearate, and the linoleate alkali metal or alkali earth metal salt in the above embodiments is a sodium linoleate.

[0251] In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of a nintedanib free base, about 30% to about 40% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, and about 30% to about 40% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of a nintedanib free base, about 30% to about 40% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, about 30% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of a nintedanib free base, about 30% to about 40% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, about 0.5% to about 6% by weight of one or more bile acids, about 30% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 30 mg/mL to about 300 mg/mL of a nintedanib free base, about 30% to about 40% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, and about 30% to about 40% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 30 mg/mL to about 300 mg/mL of a nintedanib free base, about 30% to about 40% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-

, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, about 30% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 30 mg/mL to about 300 mg/mL of a nintedanib free base, about 30% to about 40% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, about 0.5% to about 6% by weight of one or more bile acids, about 30% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the oleate alkali metal or alkali earth metal salt in the above embodiments is a sodium oleate, the stearate alkali metal or alkali earth metal salt in the above embodiments is a sodium stearate, and the linoleate alkali metal or alkali earth metal salt in the above embodiments is a sodium linoleate.

[0252] In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of a nintedanib free base, about 30% to about 40% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, and about 30% to about 40% by weight of one or more free

C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of a nintedanib free base, about 30% to about 40% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, about 30% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of a nintedanib free base, about 30% to about 40% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, about 0.5% to about 6% by weight of one or more bile acids, about 30% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 30 mg/mL to about 300 mg/mL of a nintedanib free base, about 30% to about 40% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, and about 30% to about 40% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 30 mg/mL to about 300 mg/mL of a nintedanib free base, about 30% to about 40% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, about 30% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 30 mg/mL to about 300 mg/mL of a nintedanib free base, about 30% to about 40% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, about 0.5% to about 6% by weight of one or more bile acids, about 30% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acid surfactants in the above embodiments

comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the oleate alkali metal or alkali earth metal salt in the above embodiments is a sodium oleate, the stearate alkali metal or alkali earth metal salt in the above embodiments is a sodium stearate, and the linoleate alkali metal or alkali earth metal salt in the above embodiments is a sodium linoleate.

[0253] In some embodiments, a pharmaceutical composition comprises a nintedanib salt, one or more hard fats, one or more liquid fats, and one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises a nintedanib salt, one or more hard fats, one or more liquid fats, one or more free C_{14-24} fatty acids, and one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises a nintedanib salt, one or more hard fats, one or more liquid fats, one or more bile acids, one or more free C_{14-24} fatty acids, and one or more free C_{14-24} fatty acid surfactants. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some

embodiments, the one or more bile acids in the above embodiments comprises cholic acid, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the oleate alkali metal or alkali earth metal salt in the above embodiments is a sodium oleate, the stearate alkali metal or alkali earth metal salt in the above embodiments is a sodium stearate, and the linoleate alkali metal or alkali earth metal salt in the above embodiments is a sodium linoleate.

[0254] In some embodiments, a pharmaceutical composition comprises a nintedanib salt, about 30% to about 40% by weight of one or more hard fats, about 20% to about 35% by weight of one or more liquid fats, and about 20% to about 40% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises a nintedanib salt, about 30% to about 40% by weight of one or more hard fats, about 20% to about 35% by weight of one or more liquid fats, about 20% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises a nintedanib salt, about 30% to about 40% by weight of one or more hard fats, about 20% to about 35% by weight of one or more liquid fats, about 0.5% to about 6% by weight of one or more bile acids, about 20% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and

the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the oleate alkali metal or alkali earth metal salt in the above embodiments is a sodium oleate, the stearate alkali metal or alkali earth metal salt in the above embodiments is a sodium stearate, and the linoleate alkali metal or alkali earth metal salt in the above embodiments is a sodium linoleate.

[0255] In some embodiments, a pharmaceutical composition comprises a nintedanib salt, about 30% to about 40% by weight of one or more hard fats comprising glycerolipids, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, and about 20% to about 40% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises a nintedanib salt, about 30% to about 40% by weight of one or more hard fats comprising glycerolipids, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, about 20% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises a nintedanib salt, about 30% to about 40% by weight of one or more hard fats comprising glycerolipids, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, about 0.5% to about 6% by weight of one or more bile acids, about 20% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably

oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the oleate alkali metal or alkali earth metal salt in the above embodiments is a sodium oleate, the stearate alkali metal or alkali earth metal salt in the above embodiments is a sodium stearate, and the linoleate alkali metal or alkali earth metal salt in the above embodiments is a sodium linoleate.

[0256] In some embodiments, a pharmaceutical composition comprises a nintedanib salt, about 30% to about 40% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, and about 20% to about 40% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises a nintedanib salt, about 30% to about 40% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, about 20% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises a nintedanib salt, about 30% to about 40% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, about 0.5% to about 6% by weight of one or more bile acids, about 20% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the

above embodiments comprises cholic acid, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the oleate alkali metal or alkali earth metal salt in the above embodiments is a sodium oleate, the stearate alkali metal or alkali earth metal salt in the above embodiments is a sodium stearate, and the linoleate alkali metal or alkali earth metal salt in the above embodiments is a sodium linoleate.

[0257] In some embodiments, a pharmaceutical composition comprises a nintedanib salt, about 30% to about 40% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, and about 20% to about 40% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises a nintedanib salt, about 30% to about 40% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, about 20% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises a nintedanib salt, about 30% to about 40% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, about 0.5% to about 6% by weight of one or more bile acids, about 20% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid,

or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the oleate alkali metal or alkali earth metal salt in the above embodiments is a sodium oleate, the stearate alkali metal or alkali earth metal salt in the above embodiments is a sodium stearate, and the linoleate alkali metal or alkali earth metal salt in the above embodiments is a sodium linoleate.

[0258] In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of a nintedanib salt, about 30% to about 40% by weight of one or more hard fats, about 20% to about 35% by weight of one or more liquid fats, and about 20% to about 40% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of a nintedanib salt, about 30% to about 40% by weight of one or more hard fats, about 20% to about 35% by weight of one or more liquid fats, about 20% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of a nintedanib salt, about 30% to about 40% by weight of one or more hard fats, about 20% to about 35% by weight of one or more liquid fats, about 0.5% to about 6% by weight of one or more bile acids, about 20% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 30 mg/mL to about 300 mg/mL of a nintedanib salt, about 30% to about 40% by weight of one or more hard fats, about 20% to about 35% by weight of one or more liquid fats, and about 20% to about 40% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 30 mg/mL to about 300 mg/mL of a nintedanib salt, about 30% to about 40% by weight of one or more hard fats, about 20% to about 35% by weight of one or more liquid fats, about 20% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 30 mg/mL to about 300 mg/mL of a nintedanib salt, about 30% to about 40% by weight of one or more hard fats, about 20% to about 35% by weight of one or more liquid fats, about 0.5% to about 6% by weight of one or more bile acids, about 20% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali

earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the oleate alkali metal or alkali earth metal salt in the above embodiments is a sodium oleate, the stearate alkali metal or alkali earth metal salt in the above embodiments is a sodium stearate, and the linoleate alkali metal or alkali earth metal salt in the above embodiments is a sodium linoleate.

[0259] In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of a nintedanib salt, about 30% to about 40% by weight of one or more hard fats comprising glycerolipids, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, and about 20% to about 40% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of a nintedanib salt, about 30% to about 40% by weight of one or more hard fats comprising glycerolipids, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, about 20% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of a nintedanib salt, about 30% to about 40% by weight of one or more hard fats comprising glycerolipids, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, about 0.5% to about 6% by weight of one or more bile acids, about 20% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 30 mg/mL to about 300 mg/mL of a nintedanib salt, about 30% to about 40% by weight of one or more hard fats comprising glycerolipids, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids

including a mixture of mono-, di- and triglycerides, and about 20% to about 40% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 30 mg/mL to about 300 mg/mL of a nintedanib salt, about 30% to about 40% by weight of one or more hard fats comprising glycerolipids, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, about 20% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 30 mg/mL to about 300 mg/mL of a nintedanib salt, about 30% to about 40% by weight of one or more hard fats comprising glycerolipids, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed glycerolipids including a mixture of mono-, di- and triglycerides, about 0.5% to about 6% by weight of one or more bile acids, about 20% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the oleate alkali metal or alkali earth metal salt in the above embodiments is a sodium oleate, the stearate alkali metal or alkali earth metal salt in the above embodiments is a sodium stearate, and the linoleate alkali metal or alkali earth metal salt in the above embodiments is a sodium linoleate.

[0260] In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of a nintedanib salt, about 30% to about 40% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, and about 20% to about 40% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of a nintedanib salt, about 30% to about 40% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, about 20% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of a nintedanib salt, about 30% to about 40% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, about 0.5% to about 6% by weight of one or more bile acids, about 20% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 30 mg/mL to about 300 mg/mL of a nintedanib salt, about 30% to about 40% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, and about 20% to about 40% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 30 mg/mL to about 300 mg/mL of a nintedanib salt, about 30% to about 40% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, about 20% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 30 mg/mL to about 300 mg/mL of a nintedanib salt, about 30% to about 40% by weight of one or more hard fats comprising C_{10}-C_{24} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{10}-C_{24} mono-, C_{10}-C_{24} di- and C_{10}-C_{24} triglycerides, about 0.5% to about 6% by weight of one or more bile acids, about 20% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more bile acids in the above

embodiments comprises cholic acid and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the oleate alkali metal or alkali earth metal salt in the above embodiments is a sodium oleate, the stearate alkali metal or alkali earth metal salt in the above embodiments is a sodium stearate, and the linoleate alkali metal or alkali earth metal salt in the above embodiments is a sodium linoleate.

[0261] In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of a nintedanib salt, about 30% to about 40% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, and about 20% to about 40% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of a nintedanib salt, about 30% to about 40% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, about 20% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 0.5% to about 20% by weight of a nintedanib salt, about 30% to about 40% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, about 0.5% to about 6% by weight of one or more bile acids, about 20% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 30 mg/mL to about 300 mg/mL of a nintedanib salt, about 30% to about 40% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, and about 20% to

about 40% by weight of one or more free C_{14-24} fatty acids. In some embodiments, a pharmaceutical composition comprises about 30 mg/mL to about 300 mg/mL of a nintedanib salt, about 30% to about 40% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, about 20% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, a pharmaceutical composition comprises about 30 mg/mL to about 300 mg/mL of a nintedanib salt, about 30% to about 40% by weight of one or more hard fats comprising a mixture of saturated C_{10}-C_{18} triglycerides and/or saturated C_{12}-C_{18} triglycerides, about 20% to about 35% by weight of one or more liquid fats comprising partially hydrolyzed triglycerides including a mixture of C_{16}-C_{18} mono-, C_{16}-C_{18} di- and C_{16}-C_{18} triglycerides, about 0.5% to about 6% by weight of one or more bile acids, about 20% to about 40% by weight of one or more free C_{14-24} fatty acids, and about 0.5% to about 5% by weight of one or more free C_{14-24} fatty acid surfactants. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the one or more bile acids in the above embodiments comprises cholic acid, the one or more free C_{14-24} fatty acids in the above embodiments comprises one or more free C_{14-18} fatty acids, preferably oleic acid, steric acid, linoleic acid, or any combination thereof, and the one or more free C_{14-24} fatty acid surfactants in the above embodiments comprises one or more free C_{14-18} fatty acid surfactants, preferably an oleate alkali metal or alkali earth metal salt, a stearate alkali metal or alkali earth metal salt, a linoleate alkali metal or alkali earth metal salt, or any combination thereof. In some embodiments, the oleate alkali metal or alkali earth metal salt in the above embodiments is a sodium oleate, the stearate alkali metal or alkali earth metal salt in the above embodiments is a sodium stearate, and the linoleate alkali metal or alkali earth metal salt in the above embodiments is a sodium linoleate.

[0262] Aspects of the present specification can also be described by the following embodiments:

1. A pharmaceutical composition, the pharmaceutical composition comprising a) one or more therapeutic compounds, b) one or more glycerolipids, and c) one or more digestion enhancers.
2. The pharmaceutical composition of embodiment 1, wherein the one or more therapeutic compounds comprise a protein kinase inhibitor or a PARP inhibitor.
3. The pharmaceutical composition of embodiment 1 or 2, wherein the one or more therapeutic compounds are in an amount of about 0.05% to about 1%, about 0.05% to about 2.5%, about 0.05% to about 5%, about 0.05% to about 7.5%, about 0.05% to about 10%, about 0.05% to about 12.5%, about 0.05% to about 15%, about 0.05% to about 17.5%, about 0.05% to about 20%, about 0.05% to about 22.5%, about 0.05% to about 25%, about 0.05% to about 30%, about 0.05% to about 40%, about 0.05% to about 50%, about 0.1% to about 1%, about 0.1% to about 2.5%, about 0.1% to about 5%, about 0.1% to about 7.5%, about 0.1% to about 10%, about 0.1% to about 12.5%, about 0.1% to about 15%, about 0.1% to about 17.5%, about 0.1% to about 20%, about 0.1% to about 22.5%, about 0.1% to about 25%, about 0.1% to about 30%, about 0.1% to about 40%, about 0.1% to about 50%, about 1% to about 2.5%, about 1% to about 5%, about 1% to about 7.5%, about 1% to about 10%, about 1% to about 12.5%, about 1% to about 15%, about 1% to about 17.5%, about 1% to about 20%, about 1% to about 22.5%, about 1% to about 25%, about 1% to about 30%, about 1% to about 40%, about 1% to about 50%, about 5% to about 10%, about 5% to about 20%, about 5% to about 30%, about 5% to about 40%, about 5% to about 50%, about 10% to about 20%, about 10% to about 30%, about 10% to about 40%, about 10% to about 50%, about 20% to about 30%, about 20% to about 40%, about 20% to about 50%, about 30% to about 40%, about 30% to about 50%, or about 40% to about 50% by weight.
4. The pharmaceutical composition of any one of embodiments 1-3, wherein the one or more therapeutic compounds are in an amount of about 10 mg/mL to about 25 mg/mL, about 10 mg/mL to about 50 mg/mL, about 10 mg/mL to about 75 mg/mL, about 10 mg/mL to about 100 mg/mL, about 10 mg/mL to about 125 mg/mL, about 10 mg/mL to about 150 mg/mL, about 10 mg/mL to about 200 mg/mL, about 10 mg/mL to about 250 mg/mL, about 10 mg/mL to about 300 mg/mL, about 25 mg/mL to about 50 mg/mL, about 25 mg/mL to about 75 mg/mL, about 25 mg/mL to about 100 mg/mL, about 25 mg/mL to about 125 mg/mL, about 25 mg/mL to about 150 mg/mL, about 25 mg/mL to about 200 mg/mL, about 25 mg/mL to about 250 mg/mL, about 25 mg/mL to about 300 mg/mL, about 50 mg/mL to about 100 mg/mL, about 50 mg/mL to about 150 mg/mL, about 50 mg/mL to about 200 mg/mL, about 50 mg/mL to about 250 mg/mL, about 50 mg/mL to about 300 mg/mL, about 75 mg/mL to about 100 mg/mL, about 75 mg/mL to about 150 mg/mL, about 75 mg/mL to about 200 mg/mL, about 75 mg/mL to about 250 mg/mL, about 75 mg/mL to about 300 mg/mL, about 100 mg/mL to about 150 mg/mL, about 100 mg/mL to about 200 mg/mL, about 100 mg/mL to about 250 mg/mL, about 100 mg/mL to about 300 mg/mL, about 125 mg/mL to about 150 mg/mL, about 125 mg/mL to about 200 mg/mL, about 125 mg/mL to about 250 mg/mL, about 125 mg/mL to about 300 mg/mL, about 150 mg/mL to about 200 mg/mL, about 150 mg/mL to about 250 mg/mL, about 150 mg/mL to about 300 mg/mL, about 200 mg/mL to about 250 mg/mL, about 200 mg/mL to about 300 mg/mL, or about 250 mg/mL to about 300 mg/mL.
5. The pharmaceutical composition of any one of embodiments 1-4, wherein the one or more glycerolipids are in an amount of at least 40% by weight, at least 45% by weight, at least 50% by weight, at least

55% by weight, at least 60% by weight, at least 65% by weight, at least 70% by weight, at least 75% by weight, at least 80% by weight, at least 85% by weight, at least 90% by weight, or at least 95% by weight and/or at most 40% by weight, at most 45% by weight, at most 50% by weight, at most 55% by weight, at most 60% by weight, at most 65% by weight, at most 70% by weight, at most 75% by weight, at most 80% by weight, at most 85% by weight, at most 90% by weight, or at most 95% by weight or between about 40% to about 50%, about 40% to about 55%, about 40% to about 60%, about 40% to about 65%, about 40% to about 70%, about 40% to about 75%, about 40% to about 80%, about 40% to about 85%, about 40% to about 90%, about 40% to about 95%, about 45% to about 55%, about 45% to about 60%, about 45% to about 65%, about 45% to about 70%, about 45% to about 75%, about 45% to about 80%, about 45% to about 85%, about 45% to about 90%, about 45% to about 95%, about 50% to about 55%, about 50% to about 60%, about 50% to about 65%, about 50% to about 70%, about 50% to about 75%, about 50% to about 80%, about 50% to about 85%, about 50% to about 90%, about 50% to about 95%, about 55% to about 60%, about 55% to about 65%, about 55% to about 70%, about 55% to about 75%, about 55% to about 80%, about 55% to about 85%, about 55% to about 90%, about 55% to about 95%, about 60% to about 65%, about 60% to about 70%, about 60% to about 75%, about 60% to about 80%, about 60% to about 85%, about 60% to about 90%, about 60% to about 95%, about 65% to about 70%, about 65% to about 75%, about 65% to about 80%, about 65% to about 85%, about 65% to about 90%, about 65% to about 95%, about 70% to about 75%, about 70% to about 80%, about 70% to about 85%, about 70% to about 90%, about 70% to about 95%, about 75% to about 80%, about 75% to about 85%, about 75% to about 90%, about 75% to about 95%, about 80% to about 85%, about 80% to about 90%, about 80% to about 95%, about 85% to about 90%, about 85% to about 95%, or about 90% to about 95% by weight.

6. The pharmaceutical composition of any one of embodiments 1-5, wherein the one or more glycerolipids comprises one or more hard fats and one or more liquid fats.
7. The pharmaceutical composition of embodiment 6, wherein the one or more hard fats include one or more triglycerides.
8. The pharmaceutical composition of embodiment 7, wherein the one or more triglycerides include a mixture of saturated C_{10}-C_{18} triglycerides, a mixture of saturated C_{10}-C_{20} triglycerides, a mixture of saturated C_{10}-C_{22} triglycerides, a mixture of saturated C_{10}-C_{24} triglycerides, a mixture of saturated C_{12}-C_{18} triglycerides, a mixture of saturated C_{12}-C_{20} triglycerides, a mixture of saturated C_{12}-C_{22} triglycerides, a mixture of saturated C_{12}-C_{24} triglycerides, a mixture of saturated C_{14}-C_{18} triglycerides, a mixture of saturated C_{14}-C_{20} triglycerides, a mixture of saturated C_{14}-C_{22} triglycerides, a mixture of saturated C_{14}-C_{24} triglycerides, a mixture of saturated C_{16}-C_{18} triglycerides, a mixture of saturated C_{16}-C_{20} triglycerides, a mixture of saturated C_{16}-C_{22} triglycerides, a mixture of saturated C_{16}-C_{24} triglycerides, a mixture of saturated C_{18}-C_{20} triglycerides, a mixture of saturated C_{18}-C_{22} triglycerides, a mixture of saturated C_{18}-C_{24} triglycerides, a mixture of saturated C_{20}-C_{22} triglycerides, or a mixture of saturated C_{22}-C_{24} triglycerides.
9. The pharmaceutical composition of embodiment 7, wherein the one or more triglycerides include a mixture of unsaturated C_{10}-C_{18} triglycerides, a mixture of unsaturated C_{10}-C_{20} triglycerides, a mixture of unsaturated C_{10}-C_{22} triglycerides, a mixture of unsaturated C_{10}-C_{24} triglycerides, a mixture of unsaturated C_{12}-C_{18} triglycerides, a mixture of unsaturated C_{12}-C_{20} triglycerides, a mixture of

unsaturated C_{12}-C_{22} triglycerides, a mixture of unsaturated C_{12}-C_{24} triglycerides, a mixture of unsaturated C_{14}-C_{18} triglycerides, a mixture of unsaturated C_{14}-C_{20} triglycerides, a mixture of unsaturated C_{14}-C_{22} triglycerides, a mixture of unsaturated C_{14}-C_{24} triglycerides, a mixture of unsaturated C_{16}-C_{18} triglycerides, a mixture of unsaturated C_{16}-C_{20} triglycerides, a mixture of unsaturated C_{16}-C_{22} triglycerides, a mixture of unsaturated C_{16}-C_{24} triglycerides, a mixture of unsaturated C_{18}-C_{20} triglycerides, a mixture of unsaturated C_{18}-C_{22} triglycerides, a mixture of unsaturated C_{18}-C_{24} triglycerides, a mixture of unsaturated C_{20}-C_{22} triglycerides, or a mixture of unsaturated C_{22}-C_{24} triglycerides.

10. The pharmaceutical composition of embodiment 7, wherein the one or more triglycerides include a mixture of saturated and unsaturated C_{10}-C_{18} triglycerides, a mixture of saturated and unsaturated C_{10}-C_{20} triglycerides, a mixture of saturated and unsaturated C_{10}-C_{22} triglycerides, a mixture of saturated and unsaturated C_{10}-C_{24} triglycerides, a mixture of saturated and unsaturated C_{12}-C_{18} triglycerides, a mixture of saturated and unsaturated C_{12}-C_{20} triglycerides, a mixture of saturated and unsaturated C_{12}-C_{22} triglycerides, a mixture of saturated and unsaturated C_{12}-C_{24} triglycerides, a mixture of saturated and unsaturated C_{14}-C_{18} triglycerides, a mixture of saturated and unsaturated C_{14}-C_{20} triglycerides, a mixture of saturated and unsaturated C_{14}-C_{22} triglycerides, a mixture of saturated and unsaturated C_{14}-C_{24} triglycerides, a mixture of saturated and unsaturated C_{16}-C_{18} triglycerides, a mixture of saturated and unsaturated C_{16}-C_{20} triglycerides, a mixture of saturated and unsaturated C_{16}-C_{22} triglycerides, a mixture of saturated and unsaturated C_{16}-C_{24} triglycerides, a mixture of saturated and unsaturated C_{18}-C_{20} triglycerides, a mixture of saturated and unsaturated C_{18}-C_{22} triglycerides, a mixture of saturated and unsaturated C_{18}-C_{24} triglycerides, a mixture of saturated and unsaturated C_{20}-C_{22} triglycerides, or a mixture of saturated and unsaturated C_{22}-C_{24} triglycerides.
11. The pharmaceutical composition of any one of embodiments 7-10, wherein the one or more hard fats are in an amount of at least 10% by weight, at least 15% by weight, at least 20% by weight, at least 25% by weight, at least 30% by weight, at least 35% by weight, at least 40% by weight, at least 45% by weight, at least 50% by weight, at least 55% by weight, at least 60% by weight, and/or at most 10% by weight, at most 15% by weight, at most 20% by weight, at most 25% by weight, at most 30% by weight, at most 35% by weight, at most 40% by weight, at most 45% by weight, at most 50% by weight, at most 55% by weight, at most 60% by weight, or between about 10% to about 20%, about 10% to about 25%, about 10% to about 30%, about 10% to about 35%, about 10% to about 40%, about 10% to about 45%, about 10% to about 50%, about 10% to about 55%, about 10% to about 60%, about 15% to about 20%, about 15% to about 25%, about 15% to about 30%, about 15% to about 35%, about 15% to about 40%, about 15% to about 45%, about 15% to about 50%, about 15% to about 55%, about 15% to about 60%, about 20% to about 25%, about 20% to about 30%, about 20% to about 35%, about 20% to about 40%, about 20% to about 45%, about 20% to about 50%, about 20% to about 55%, about 20% to about 60%, about 25% to about 30%, about 25% to about 35%, about 25% to about 40%, about 25% to about 45%, about 25% to about 50%, about 25% to about 55%, about 25% to about 60%, about 30% to about 35%, about 30% to about 40%, about 30% to about 45%, about 30% to about 50%, about 30% to about 55%, about 30% to about 60%, about 35% to about 40%, about 35% to about 45%, about 35% to about 50%, about 35% to about 55%, about 35% to about 60%, about 40% to about 45%, about 40% to about 50%, about 40% to about 55%, about 40% to about 60%, about 45% to about 50%, about 45%

to about 55%, about 45% to about 60%, about 50% to about 55%, about 50% to about 60%, about 55% to about 60% by weight.

12. The pharmaceutical composition of any one of embodiments 6-11, wherein the one or more liquid fats include one or more partially hydrolyzed glycerolipids, one or more monoglycerides, or a combination thereof.
13. The pharmaceutical composition of embodiment 12, wherein the one or more partially hydrolyzed glycerolipids comprise a mixture of mono-, di- and triglycerides.
14. The pharmaceutical composition of embodiment 12, wherein the one or more partially hydrolyzed glycerolipids comprise a mixture of unsaturated C_{10}-C_{18} monoglycerides, C_{10}-C_{18} diglycerides, and C_{10}-C_{18} triglycerides, a mixture of unsaturated C_{10}-C_{20} monoglycerides, C_{10}-C_{20} diglycerides, and C_{10}-C_{20} triglycerides, a mixture of unsaturated C_{10}-C_{22} monoglycerides, C_{10}-C_{22} diglycerides, and C_{10}-C_{22} triglycerides, a mixture of unsaturated C_{10}-C_{24} monoglycerides, C_{10}-C_{24} diglycerides, and C_{10}-C_{24} triglycerides, a mixture of unsaturated C_{12}-C_{18} monoglycerides, C_{12}-C_{18} diglycerides, and C_{12}-C_{18} triglycerides, a mixture of unsaturated C_{12}-C_{20} monoglycerides, C_{12}-C_{20} diglycerides, and C_{12}-C_{20} triglycerides, a mixture of unsaturated C_{12}-C_{22} monoglycerides, C_{12}-C_{22} diglycerides, and C_{12}-C_{22} triglycerides, a mixture of unsaturated C_{12}-C_{24} monoglycerides, C_{12}-C_{24} diglycerides, and C_{12}-C_{24} triglycerides, a mixture of unsaturated C_{14}-C_{18} monoglycerides, C_{14}-C_{18} diglycerides, and C_{14}-C_{18} triglycerides, a mixture of unsaturated C_{14}-C_{20} monoglycerides, C_{14}-C_{20} diglycerides, and C_{14}-C_{20} triglycerides, a mixture of unsaturated C_{14}-C_{22} monoglycerides, C_{14}-C_{22} diglycerides, and C_{14}-C_{22} triglycerides, a mixture of unsaturated C_{14}-C_{24} monoglycerides, C_{14}-C_{24} diglycerides, and C_{14}-C_{24} triglycerides, a mixture of unsaturated C_{16}-C_{18} monoglycerides, C_{16}-C_{18} diglycerides, and C_{16}-C_{18} triglycerides, a mixture of unsaturated C_{16}-C_{20} monoglycerides, C_{16}-C_{20} diglycerides, and C_{16}-C_{20} triglycerides, a mixture of unsaturated C_{16}-C_{22} monoglycerides, C_{16}-C_{22} diglycerides, and C_{16}-C_{22} triglycerides, a mixture of unsaturated C_{16}-C_{24} monoglycerides, C_{16}-C_{24} diglycerides, and C_{16}-C_{24} triglycerides, a mixture of unsaturated C_{18}-C_{20} monoglycerides, C_{18}-C_{20} diglycerides, and C_{18}-C_{20} triglycerides, a mixture of unsaturated C_{18}-C_{22} monoglycerides, C_{18}-C_{22} diglycerides, and C_{18}-C_{22} triglycerides, a mixture of unsaturated C_{18}-C_{24} monoglycerides, C_{18}-C_{24} diglycerides, and C_{18}-C_{24} triglycerides, a mixture of unsaturated C_{20}-C_{22} monoglycerides, C_{20}-C_{22} diglycerides, C_{20}-C_{22} triglycerides, or a mixture of unsaturated C_{22}-C_{24} monoglycerides, C_{22}-C_{24} diglycerides, and C_{22}-C_{24} triglycerides.
15. The pharmaceutical composition of embodiment 12, wherein the one or more partially hydrolyzed glycerolipids comprise a mixture of saturated C_{10}-C_{18} monoglycerides, C_{10}-C_{18} diglycerides, and C_{10}-C_{18} triglycerides, a mixture of saturated C_{10}-C_{20} monoglycerides, C_{10}-C_{20} diglycerides, and C_{10}-C_{20} triglycerides, a mixture of saturated C_{10}-C_{22} monoglycerides, C_{10}-C_{22} diglycerides, and C_{10}-C_{22} triglycerides, a mixture of saturated C_{10}-C_{24} monoglycerides, C_{10}-C_{24} diglycerides, and C_{10}-C_{24} triglycerides, a mixture of saturated C_{12}-C_{18} monoglycerides, C_{12}-C_{18} diglycerides, and C_{12}-C_{18} triglycerides, a mixture of saturated C_{12}-C_{20} monoglycerides, C_{12}-C_{20} diglycerides, and C_{12}-C_{20} triglycerides, a mixture of saturated C_{12}-C_{22} monoglycerides, C_{12}-C_{22} diglycerides, and C_{12}-C_{22} triglycerides, a mixture of saturated C_{12}-C_{24} monoglycerides, C_{12}-C_{24} diglycerides, and C_{12}-C_{24} triglycerides, a mixture of saturated C_{14}-C_{18} monoglycerides, C_{14}-C_{18} diglycerides, and C_{14}-C_{18} triglycerides, a mixture of saturated C_{14}-C_{20} monoglycerides, C_{14}-C_{20} diglycerides, and C_{14}-C_{20}

triglycerides, a mixture of saturated C_{14}-C_{22} monoglycerides, C_{14}-C_{22} diglycerides, and C_{14}-C_{22} triglycerides, a mixture of saturated C_{14}-C_{24} monoglycerides, C_{14}-C_{24} diglycerides, and C_{14}-C_{24} triglycerides, a mixture of saturated C_{16}-C_{18} monoglycerides, C_{16}-C_{18} diglycerides, and C_{16}-C_{18} triglycerides, a mixture of saturated C_{16}-C_{20} monoglycerides, C_{16}-C_{20} diglycerides, and C_{16}-C_{20} triglycerides, a mixture of saturated C_{16}-C_{22} monoglycerides, C_{16}-C_{22} diglycerides, and C_{16}-C_{22} triglycerides, a mixture of saturated C_{16}-C_{24} monoglycerides, C_{16}-C_{24} diglycerides, and C_{16}-C_{24} triglycerides, a mixture of saturated C_{18}-C_{20} monoglycerides, C_{18}-C_{20} diglycerides, and C_{18}-C_{20} triglycerides, a mixture of saturated C_{18}-C_{22} monoglycerides, C_{18}-C_{22} diglycerides, and C_{18}-C_{22} triglycerides, a mixture of saturated C_{18}-C_{24} monoglycerides, C_{18}-C_{24} diglycerides, and C_{18}-C_{24} triglycerides, a mixture of saturated C_{20}-C_{22} monoglycerides, C_{20}-C_{22} diglycerides, C_{20}-C_{22} triglycerides, or a mixture of saturated C_{22}-C_{24} monoglycerides, C_{22}-C_{24} diglycerides, and C_{22}-C_{24} triglycerides.

16. The pharmaceutical composition of embodiment 12, wherein the one or more partially hydrolyzed glycerolipids comprise a mixture of saturated and unsaturated C_{10}-C_{18} monoglycerides, C_{10}-C_{18} diglycerides, and C_{10}-C_{18} triglycerides, a mixture of saturated and unsaturated C_{10}-C_{20} monoglycerides, C_{10}-C_{20} diglycerides, and C_{10}-C_{20} triglycerides, a mixture of saturated and unsaturated C_{10}-C_{22} monoglycerides, C_{10}-C_{22} diglycerides, and C_{10}-C_{22} triglycerides, a mixture of saturated and unsaturated C_{10}-C_{24} monoglycerides, C_{10}-C_{24} diglycerides, and C_{10}-C_{24} triglycerides, a mixture of saturated and unsaturated C_{12}-C_{18} monoglycerides, C_{12}-C_{18} diglycerides, and C_{12}-C_{18} triglycerides, a mixture of saturated and unsaturated C_{12}-C_{20} monoglycerides, C_{12}-C_{20} diglycerides, and C_{12}-C_{20} triglycerides, a mixture of saturated and unsaturated C_{12}-C_{22} monoglycerides, C_{12}-C_{22} diglycerides, and C_{12}-C_{22} triglycerides, a mixture of saturated and unsaturated C_{12}-C_{24} monoglycerides, C_{12}-C_{24} diglycerides, and C_{12}-C_{24} triglycerides, a mixture of saturated and unsaturated C_{14}-C_{18} monoglycerides, C_{14}-C_{18} diglycerides, and C_{14}-C_{18} triglycerides, a mixture of saturated and unsaturated C_{14}-C_{20} monoglycerides, C_{14}-C_{20} diglycerides, and C_{14}-C_{20} triglycerides, a mixture of saturated and unsaturated C_{14}-C_{22} monoglycerides, C_{14}-C_{22} diglycerides, and C_{14}-C_{22} triglycerides, a mixture of saturated and unsaturated C_{14}-C_{24} monoglycerides, C_{14}-C_{24} diglycerides, and C_{14}-C_{24} triglycerides, a mixture of saturated and unsaturated C_{16}-C_{18} monoglycerides, C_{16}-C_{18} diglycerides, and C_{16}-C_{18} triglycerides, a mixture of saturated and unsaturated C_{16}-C_{20} monoglycerides, C_{16}-C_{20} diglycerides, and C_{16}-C_{20} triglycerides, a mixture of saturated and unsaturated C_{16}-C_{22} monoglycerides, C_{16}-C_{22} diglycerides, and C_{16}-C_{22} triglycerides, a mixture of saturated and unsaturated C_{16}-C_{24} monoglycerides, C_{16}-C_{24} diglycerides, and C_{16}-C_{24} triglycerides, a mixture of saturated and unsaturated C_{18}-C_{20} monoglycerides, C_{18}-C_{20} diglycerides, and C_{18}-C_{20} triglycerides, a mixture of saturated and unsaturated C_{18}-C_{22} monoglycerides, C_{18}-C_{22} diglycerides, and C_{18}-C_{22} triglycerides, a mixture of saturated and unsaturated C_{18}-C_{24} monoglycerides, C_{18}-C_{24} diglycerides, and C_{18}-C_{24} triglycerides, a mixture of saturated and unsaturated C_{20}-C_{22} monoglycerides, C_{20}-C_{22} diglycerides, C_{20}-C_{22} triglycerides, or a mixture of saturated and unsaturated C_{22}-C_{24} monoglycerides, C_{22}-C_{24} diglycerides, and C_{22}-C_{24} triglycerides.

17. The pharmaceutical composition of any one or embodiments 12-16, wherein the one or more partially hydrolyzed glycerolipids are in an amount of at least 10% by weight, at least 15% by weight, at least 20% by weight, at least 25% by weight, at least 30% by weight, at least 35% by weight, at least 40% by weight, at least 45% by weight, at least 50% by weight, at least 55% by weight, at least 60% by weight, and/or at most 10% by weight, at most 15% by weight, at most 20% by weight, at most 25% by

weight, at most 30% by weight, at most 35% by weight, at most 40% by weight, at most 45% by weight, at most 50% by weight, at most 55% by weight, at most 60% by weight, or between about 10% to about 20%, about 10% to about 25%, about 10% to about 30%, about 10% to about 35%, about 10% to about 40%, about 10% to about 45%, about 10% to about 50%, about 10% to about 55%, about 10% to about 60%, about 15% to about 20%, about 15% to about 25%, about 15% to about 30%, about 15% to about 35%, about 15% to about 40%, about 15% to about 45%, about 15% to about 50%, about 15% to about 55%, about 15% to about 60%, about 20% to about 25%, about 20% to about 30%, about 20% to about 35%, about 20% to about 40%, about 20% to about 45%, about 20% to about 50%, about 20% to about 55%, about 20% to about 60%, about 25% to about 30%, about 25% to about 35%, about 25% to about 40%, about 25% to about 45%, about 25% to about 50%, about 25% to about 55%, about 25% to about 60%, about 30% to about 35%, about 30% to about 40%, about 30% to about 45%, about 30% to about 50%, about 30% to about 55%, about 30% to about 60%, about 35% to about 40%, about 35% to about 45%, about 35% to about 50%, about 35% to about 55%, about 35% to about 60%, about 40% to about 45%, about 40% to about 50%, about 40% to about 55%, about 40% to about 60%, about 45% to about 50%, about 45% to about 55%, about 45% to about 60%, about 50% to about 55%, about 50% to about 60%, about 55% to about 60% by weight.

18. The pharmaceutical composition of any one of embodiments 12-17, wherein the one or more monoglycerides comprise unsaturated C_{10}-C_{18} monoglycerides, unsaturated C_{10}-C_{20} monoglycerides, unsaturated C_{10}-C_{22} monoglycerides, unsaturated C_{10}-C_{24} monoglycerides, unsaturated C_{12}-C_{18} monoglycerides, unsaturated C_{12}-C_{20} monoglycerides, unsaturated C_{12}-C_{22} monoglycerides, unsaturated C_{12}-C_{24} monoglycerides, unsaturated C_{14}-C_{18} monoglycerides, unsaturated C_{14}-C_{20} monoglycerides, unsaturated C_{14}-C_{22} monoglycerides, unsaturated C_{14}-C_{24} monoglycerides, unsaturated C_{16}-C_{18} monoglycerides, unsaturated C_{16}-C_{20} monoglycerides, unsaturated C_{16}-C_{22} monoglycerides, unsaturated C_{16}-C_{24} monoglycerides, unsaturated C_{18}-C_{20} monoglycerides, unsaturated C_{18}-C_{22} monoglycerides, unsaturated C_{18}-C_{24} monoglycerides, unsaturated C_{20}-C_{22} monoglycerides, or unsaturated C_{22}-C_{24} monoglycerides.
19. The pharmaceutical composition of any one of embodiments 12-17, wherein the one or more monoglycerides comprise saturated C_{10}-C_{18} monoglycerides, saturated C_{10}-C_{20} monoglycerides, saturated C_{10}-C_{22} monoglycerides, saturated C_{10}-C_{24} monoglycerides, saturated C_{12}-C_{18} monoglycerides, saturated C_{12}-C_{20} monoglycerides, saturated C_{12}-C_{22} monoglycerides, saturated C_{12}-C_{24} monoglycerides, saturated C_{14}-C_{18} monoglycerides, saturated C_{14}-C_{20} monoglycerides, saturated C_{14}-C_{22} monoglycerides, saturated C_{14}-C_{24} monoglycerides, saturated C_{16}-C_{18} monoglycerides, saturated C_{16}-C_{20} monoglycerides, saturated C_{16}-C_{22} monoglycerides, saturated C_{16}-C_{24} monoglycerides, saturated C_{18}-C_{20} monoglycerides, saturated C_{18}-C_{22} monoglycerides, saturated C_{18}-C_{24} monoglycerides, saturated C_{20}-C_{22} monoglycerides, or saturated C_{22}-C_{24} monoglycerides.
20. The pharmaceutical composition of any one of embodiments 12-17, wherein the one or more monoglycerides comprise a mixture of saturated and unsaturated C_{10}-C_{18} monoglycerides, a mixture of saturated and unsaturated C_{10}-C_{20} monoglycerides, a mixture of saturated and unsaturated C_{10}-C_{22} monoglycerides, a mixture of saturated and unsaturated C_{10}-C_{24} monoglycerides, a mixture of saturated and unsaturated C_{12}-C_{18} monoglycerides, a mixture of saturated and unsaturated C_{12}-C_{20} monoglycerides, a mixture of saturated and unsaturated C_{12}-C_{22} monoglycerides, a mixture of saturated

and unsaturated C_{12}-C_{24} monoglycerides, a mixture of saturated and unsaturated C_{14}-C_{18} monoglycerides, a mixture of saturated and unsaturated C_{14}-C_{20} monoglycerides, a mixture of saturated and unsaturated C_{14}-C_{22} monoglycerides, a mixture of saturated and unsaturated C_{14}-C_{24} monoglycerides, a mixture of saturated and unsaturated C_{16}-C_{18} monoglycerides, a mixture of saturated and unsaturated C_{16}-C_{20} monoglycerides, a mixture of saturated and unsaturated C_{16}-C_{22} monoglycerides, a mixture of saturated and unsaturated C_{16}-C_{24} monoglycerides, a mixture of saturated and unsaturated C_{18}-C_{20} monoglycerides, a mixture of saturated and unsaturated C_{18}-C_{22} monoglycerides, a mixture of saturated and unsaturated C_{18}-C_{24} monoglycerides, a mixture of saturated and unsaturated C_{20}-C_{22} monoglycerides, or a mixture of saturated and unsaturated C_{22}-C_{24} monoglycerides.

21. The pharmaceutical composition of any one or embodiments 18-20, wherein the one or more monoglycerides are in an amount of at least 10% by weight, at least 15% by weight, at least 20% by weight, at least 25% by weight, at least 30% by weight, at least 35% by weight, at least 40% by weight, at least 45% by weight, at least 50% by weight, at least 55% by weight, at least 60% by weight, and/or at most 10% by weight, at most 15% by weight, at most 20% by weight, at most 25% by weight, at most 30% by weight, at most 35% by weight, at most 40% by weight, at most 45% by weight, at most 50% by weight, at most 55% by weight, at most 60% by weight, or between about 10% to about 20%, about 10% to about 25%, about 10% to about 30%, about 10% to about 35%, about 10% to about 40%, about 10% to about 45%, about 10% to about 50%, about 10% to about 55%, about 10% to about 60%, about 15% to about 20%, about 15% to about 25%, about 15% to about 30%, about 15% to about 35%, about 15% to about 40%, about 15% to about 45%, about 15% to about 50%, about 15% to about 55%, about 15% to about 60%, about 20% to about 25%, about 20% to about 30%, about 20% to about 35%, about 20% to about 40%, about 20% to about 45%, about 20% to about 50%, about 20% to about 55%, about 20% to about 60%, about 25% to about 30%, about 25% to about 35%, about 25% to about 40%, about 25% to about 45%, about 25% to about 50%, about 25% to about 55%, about 25% to about 60%, about 30% to about 35%, about 30% to about 40%, about 30% to about 45%, about 30% to about 50%, about 30% to about 55%, about 30% to about 60%, about 35% to about 40%, about 35% to about 45%, about 35% to about 50%, about 35% to about 55%, about 35% to about 60%, about 40% to about 45%, about 40% to about 50%, about 40% to about 55%, about 40% to about 60%, about 45% to about 50%, about 45% to about 55%, about 45% to about 60%, about 50% to about 55%, about 50% to about 60%, about 55% to about 60% by weight.
22. The pharmaceutical composition of any one or embodiments 6-21, wherein the one or more hard fats and the one or more liquid fats are in a hard fat to liquid fat ratio of about 5:1 to about 4:1, about 5:1 to about 3:1, about 5:1 to about 2:1, about 5:1 to about 1:1, about 4:1 to about 3:1, about 4:1 to about 2:1, about 4:1 to about 1:1, about 3:1 to about 2:1, about 3:1 to about 1:1, or about 2:1 to about 1:1.
23. The pharmaceutical composition of any one or embodiments 6-21, wherein the one or more hard fats and the one or more liquid fats are in a hard fat to liquid fat ratio of about 1:5 to about 1:4, about 1:5 to about 1:3, about 1:5 to about 1:2, about 1:5 to about 1:1, about 1:4 to about 1:3, about 1:4 to about 1:2, about 1:4 to about 1:1, about 1:3 to about 1:2, about 1:3 to about 1:1, or about 1:2 to about 1:1.
24. The pharmaceutical composition of any one of embodiments 1-23, wherein the one or more digestion enhancers are in an amount of at least 1% by weight, at least 2.5% by weight, at least 5% by weight,

at least 7.5% by weight, at least 10 % by weight, at least 12.5% by weight, at least 15 % by weight, at least 17.5% by weight, at least 20% by weight, at least 22.5% by weight, at least 25% by weight, at least 30% by weight, at least 35% by weight, at least 40% by weight, at least 45% by weight, at least 50% by weight, at least 55% by weight, at least 60% by weight, at least 65% by weight, at least 70% by weight, at least 75% by weight, at least 75% by weight and/or at most 1% by weight, at most 2.5% by weight, at most 5% by weight, at most 7.5% by weight, at most 10 % by weight, at most 12.5% by weight, at most 15 % by weight, at most 17.5% by weight, at most 20% by weight, at most 22.5% by weight, at most 25% by weight, at most 30% by weight, at most 35% by weight, at most 40% by weight, at most 45% by weight, at most 50% by weight, at most 55% by weight, at most 60% by weight, at most 65% by weight, at most 70% by weight, at most 75% by weight, or at most 80% by weight, or between about 1% to about 2.5% by weight, about 1% to about 5% by weight, about 1% to about 10% by weight, about 1% to about 15% by weight, about 1% to about 20% by weight, about 1% to about 25% by weight, about 2.5% to about 5% by weight, about 2.5% to about 10% by weight, about 2.5% to about 15% by weight, about 2.5% to about 20% by weight, about 2.5% to about 25% by weight, about 5% to about 10% by weight, about 5% to about 15% by weight, about 5% to about 20% by weight, about 5% to about 25% by weight, about 10% to about 20%, about 10% to about 25%, about 10% to about 30%, about 10% to about 35%, about 10% to about 40%, about 10% to about 45%, about 10% to about 50%, about 10% to about 55%, about 10% to about 60%, about 10% to about 65%, about 10% to about 70%, about 15% to about 20%, about 15% to about 25%, about 15% to about 30%, about 15% to about 35%, about 15% to about 40%, about 15% to about 45%, about 15% to about 50%, about 15% to about 55%, about 15% to about 60%, about 15% to about 65%, about 15% to about 70%, about 20% to about 25%, about 20% to about 30%, about 20% to about 35%, about 20% to about 40%, about 20% to about 45%, about 20% to about 50%, about 20% to about 55%, about 20% to about 60%, about 20% to about 65%, about 20% to about 70%, about 25% to about 30%, about 25% to about 35%, about 25% to about 40%, about 25% to about 45%, about 25% to about 50%, about 25% to about 55%, about 25% to about 60%, about 25% to about 65%, about 25% to about 70%, about 30% to about 35%, about 30% to about 40%, about 30% to about 45%, about 30% to about 50%, about 30% to about 55%, about 30% to about 60%, about 30% to about 65%, about 30% to about 70%, about 35% to about 40%, about 35% to about 45%, about 35% to about 50%, about 35% to about 55%, about 35% to about 60%, about 35% to about 65%, about 35% to about 70%, about 40% to about 45%, about 40% to about 50%, about 40% to about 55%, about 40% to about 60%, about 40% to about 65%, about 40% to about 70%, about 40% to about 75%, about 40% to about 80%, about 45% to about 50%, about 45% to about 55%, about 45% to about 60%, about 45% to about 65%, about 45% to about 70%, about 45% to about 75%, about 45% to about 80%, about 50% to about 55%, about 50% to about 60%, about 50% to about 65%, about 50% to about 70%, about 50% to about 75%, about 50% to about 80%, about 55% to about 60%, about 55% to about 65%, about 55% to about 70%, about 55% to about 75%, about 55% to about 80%, about 60% to about 65%, about 60% to about 70%, about 60% to about 75%, about 60% to about 80%, about 65% to about 70% by weight, about 65% to about 75%, about 65% to about 80%,. about 70% to about 75%, about 70% to about 80%, or about 75% to about 80% by weight.

25. The pharmaceutical composition of embodiment 24, wherein the one or more digestion enhancers include one or more bile acids, one or more phospholipids, one or more free C_{14-24} fatty acids, one or more free C_{14-24} fatty acid surfactants, or any combination thereof.
26. The pharmaceutical composition of embodiment 25, wherein the one or more bile acids includes cholic acid, chenodeoxycholic acid, dafachronic acid, deoxycholic acid, glycocholic acid, glycohenodeoxycholic acid, lithocholic acid, taurochenodeoxycholic acid, taurocholic acid, any stereoisomer thereof, and any combination thereof.
27. The pharmaceutical composition of embodiment 25 or 26, wherein the one or more bile acids are in an amount of at least 0.1% by weight, at least 0.5% by weight, at least 1.0% by weight, at least 1.5% by weight, at least 2.0% by weight, at least 2.5% by weight, at least 3.0% by weight, at least 3.5% by weight, at least 4.0% by weight, at least 4.5% by weight, at least 5.0% by weight, at least 5.5% by weight, at least 6.0% by weight, at least 6.5% by weight, at least 7.0% by weight, at least 7.5% by weight, at least 8.0% by weight, at least 8.5% by weight, at least 9.0% by weight, at least 9.5% by weight, or at least 10.0% by weight and/or at most 0.1% by weight, at most 0.5% by weight, at most 1.0% by weight, at most 1.5% by weight, at most 2.0% by weight, at most 2.5% by weight, at most 3.0% by weight, at most 3.5% by weight, at most 4.0% by weight, at most 4.5% by weight, at most 5.0% by weight, at most 5.5% by weight, at most 6.0% by weight, at most 6.5% by weight, at most 7.0% by weight, at most 7.5% by weight, at most 8.0% by weight, at most 8.5% by weight, at most 9.0% by weight, at most 9.5% by weight, or at most 10.0% by weight or between about 0.1% to about 0.5%, about 0.1% to about 1.0%, about 0.1% to about 2.0%, about 0.1% to about 3.0%, about 0.1% to about 4.0%, about 0.1% to about 5.0%, about 0.1% to about 6.0%, about 0.1% to about 7.0%, about 0.1% to about 8.0%, about 0.1% to about 9.0%, about 0.1% to about 10.0%, about 0.5% to about 1.0%, about 0.5% to about 2.0%, about 0.5% to about 3.0%, about 0.5% to about 4.0%, about 0.5% to about 5.0%, about 0.5% to about 6.0%, about 0.5% to about 7.0%, about 0.5% to about 8.0%, about 0.5% to about 9.0%, about 0.5% to about 10.0%, about 1.0% to about 2.0%, about 1.0% to about 3.0%, about 1.0% to about 4.0%, about 1.0% to about 5.0%, about 1.0% to about 6.0%, about 1.0% to about 7.0%, about 1.0% to about 8.0%, about 1.0% to about 9.0%, about 1.0% to about 10.0%, about 2.0% to about 3.0%, about 2.0% to about 4.0%, about 2.0% to about 5.0%, about 2.0% to about 6.0%, about 2.0% to about 7.0%, about 2.0% to about 8.0%, about 2.0% to about 9.0%, about 2.0% to about 10.0%, about 3.0% to about 4.0%, about 3.0% to about 5.0%, about 3.0% to about 6.0%, about 3.0% to about 7.0%, about 3.0% to about 8.0%, about 3.0% to about 9.0%, about 3.0% to about 10.0%, about 4.0% to about 5.0%, about 4.0% to about 6.0%, about 4.0% to about 7.0%, about 4.0% to about 8.0%, about 4.0% to about 9.0%, about 4.0% to about 10.0%, about 5.0% to about 6.0%, about 5.0% to about 7.0%, about 5.0% to about 8.0%, about 5.0% to about 9.0%, about 5.0% to about 10.0%, about 6.0% to about 7.0%, about 6.0% to about 8.0%, about 6.0% to about 9.0%, about 6.0% to about 10.0%, about 7.0% to about 8.0%, about 7.0% to about 9.0%, about 7.0% to about 10.0%, about 8.0% to about 9.0%, about 8.0% to about 10.0%, or about 9.0% to about 10.0% by weight.
28. The pharmaceutical composition of any one of embodiments 25-27, wherein the one or more phospholipids include one or more phosphoglycerides, one or more phosphosphingolipids, one or more lecithins, or any combination thereof.

29. The pharmaceutical composition of embodiment 28, wherein the one or more phosphoglycerides include a phosphatidic acid (phosphatidate) (PA), a phosphatidylethanolamine (PE), a phosphatidylcholine (PC), a phosphatidylserine (PS), a cardiolipin, a phosphoinositide, or any combination thereof.
30. The pharmaceutical composition of embodiment 28, wherein the one or more phosphosphingolipids include phosphatidylethanolamine (PE), phosphatidylcholine (PC), ceramide phosphorylethanolamine (Cer-PE), ceramide phosphorylcholine (Cer-PC), or any combination thereof.
31. The pharmaceutical composition of embodiment 25 or 28-30, wherein the one or more phospholipids are in an amount of at least 0.1% by weight, at least 0.5% by weight, at least 1.0% by weight, at least 1.5% by weight, at least 2.0% by weight, at least 2.5% by weight, at least 3.0% by weight, at least 3.5% by weight, at least 4.0% by weight, at least 4.5% by weight, at least 5.0% by weight, at least 5.5% by weight, at least 6.0% by weight, at least 6.5% by weight, at least 7.0% by weight, at least 7.5% by weight, at least 8.0% by weight, at least 8.5% by weight, at least 9.0% by weight, at least 9.5% by weight, or at least 10.0% by weight and/or at most 0.1% by weight, at most 0.5% by weight, at most 1.0% by weight, at most 1.5% by weight, at most 2.0% by weight, at most 2.5% by weight, at most 3.0% by weight, at most 3.5% by weight, at most 4.0% by weight, at most 4.5% by weight, at most 5.0% by weight, at most 5.5% by weight, at most 6.0% by weight, at most 6.5% by weight, at most 7.0% by weight, at most 7.5% by weight, at most 8.0% by weight, at most 8.5% by weight, at most 9.0% by weight, at most 9.5% by weight, or at most 10.0% by weight or between about 0.1% to about 0.5%, about 0.1% to about 1.0%, about 0.1% to about 2.0%, about 0.1% to about 3.0%, about 0.1% to about 4.0%, about 0.1% to about 5.0%, about 0.1% to about 6.0%, about 0.1% to about 7.0%, about 0.1% to about 8.0%, about 0.1% to about 9.0%, about 0.1% to about 10.0%, about 0.5% to about 1.0%, about 0.5% to about 2.0%, about 0.5% to about 3.0%, about 0.5% to about 4.0%, about 0.5% to about 5.0%, about 0.5% to about 6.0%, about 0.5% to about 7.0%, about 0.5% to about 8.0%, about 0.5% to about 9.0%, about 0.5% to about 10.0%, about 1.0% to about 2.0%, about 1.0% to about 3.0%, about 1.0% to about 4.0%, about 1.0% to about 5.0%, about 1.0% to about 6.0%, about 1.0% to about 7.0%, about 1.0% to about 8.0%, about 1.0% to about 9.0%, about 1.0% to about 10.0%, about 2.0% to about 3.0%, about 2.0% to about 4.0%, about 2.0% to about 5.0%, about 2.0% to about 6.0%, about 2.0% to about 7.0%, about 2.0% to about 8.0%, about 2.0% to about 9.0%, about 2.0% to about 10.0%, about 3.0% to about 4.0%, about 3.0% to about 5.0%, about 3.0% to about 6.0%, about 3.0% to about 7.0%, about 3.0% to about 8.0%, about 3.0% to about 9.0%, about 3.0% to about 10.0%, about 4.0% to about 5.0%, about 4.0% to about 6.0%, about 4.0% to about 7.0%, about 4.0% to about 8.0%, about 4.0% to about 9.0%, about 4.0% to about 10.0%, about 5.0% to about 6.0%, about 5.0% to about 7.0%, about 5.0% to about 8.0%, about 5.0% to about 9.0%, about 5.0% to about 10.0%, about 6.0% to about 7.0%, about 6.0% to about 8.0%, about 6.0% to about 9.0%, about 6.0% to about 10.0%, about 7.0% to about 8.0%, about 7.0% to about 9.0%, about 7.0% to about 10.0%, about 8.0% to about 9.0%, about 8.0% to about 10.0%, or about 9.0% to about 10.0% by weight.
32. The pharmaceutical composition of any one of embodiments 25-31, wherein the one or more free C_{14-24} fatty acids include unsaturated free C_{14}-C_{16} fatty acids, unsaturated free C_{14}-C_{18} fatty acids, unsaturated free C_{14}-C_{20} fatty acids, unsaturated free C_{14}-C_{22} fatty acids, unsaturated free C_{14}-C_{24} fatty acids, unsaturated free C_{16}-C_{18} fatty acids, unsaturated free C_{16}-C_{20} fatty acids, unsaturated free C_{16}-

C_{22} fatty acids, unsaturated free C_{16}-C_{24} fatty acids, unsaturated free C_{18}-C_{20} fatty acids, unsaturated free C_{18}-C_{22} fatty acids, unsaturated free C_{18}-C_{24} fatty acids, unsaturated free C_{20}-C_{22} fatty acids, or unsaturated free C_{22}-C_{24} fatty acids.

33. The pharmaceutical composition of any one of embodiments 25-31, wherein the one or more free C_{14}-$_{24}$ fatty acids include ω−3 unsaturated free C_{18}-C_{22} fatty acids, ω−5 unsaturated free C_{18}-C_{22} fatty acids, ω−6 unsaturated free C_{18}-C_{22} fatty acids, ω−7 unsaturated free C_{18}-C_{22} fatty acids, ω−9 unsaturated free C_{18}-C_{22} fatty acids, ω−10 unsaturated free C_{18}-C_{22} fatty acids, ω−11 unsaturated free C_{18}-C_{22} fatty acids, or ω−12 unsaturated free C_{18}-C_{22} fatty acids.
34. The pharmaceutical composition of any one of embodiments 25-31, wherein the one or more free C_{14}-$_{24}$ fatty acids include saturated free C_{14}-C_{16} fatty acids, saturated free C_{14}-C_{18} fatty acids, saturated free C_{14}-C_{20} fatty acids, saturated free C_{14}-C_{22} fatty acids, saturated free C_{14}-C_{24} fatty acids, saturated free C_{16}-C_{18} fatty acids, saturated free C_{16}-C_{20} fatty acids, saturated free C_{16}-C_{22} fatty acids, saturated free C_{16}-C_{24} fatty acids, saturated free C_{18}-C_{20} fatty acids, saturated free C_{18}-C_{22} fatty acids, saturated free C_{18}-C_{24} fatty acids, saturated free C_{20}-C_{22} fatty acids, or saturated free C_{22}-C_{24} fatty acids.
35. The pharmaceutical composition of any one of embodiments 25-31, wherein the one or more free C_{14}-$_{24}$ fatty acids include a mixture of saturated and unsaturated free C_{14}-C_{16} fatty acids, a mixture of saturated and unsaturated free C_{14}-C_{18} fatty acids, a mixture of saturated and unsaturated free C_{14}-C_{20} fatty acids, a mixture of saturated and unsaturated free C_{14}-C_{22} fatty acids, a mixture of saturated and unsaturated free C_{14}-C_{24} fatty acids, a mixture of saturated and unsaturated free C_{16}-C_{18} fatty acids, a mixture of saturated and unsaturated free C_{16}-C_{20} fatty acids, a mixture of saturated and unsaturated free C_{16}-C_{22} fatty acids, a mixture of saturated and unsaturated free C_{16}-C_{24} fatty acids, a mixture of saturated and unsaturated free C_{18}-C_{20} fatty acids, a mixture of saturated and unsaturated free C_{18}-C_{22} fatty acids, a mixture of saturated and unsaturated free C_{18}-C_{24} fatty acids, a mixture of saturated and unsaturated free C_{20}-C_{22} fatty acids, or a mixture of saturated and unsaturated free C_{22}-C_{24} fatty acids.
36. The pharmaceutical composition of any one of embodiments 25-31, wherein the one or more free C_{14}-$_{24}$ fatty acids include palmitic acid (hexadecenoic acid), palmitolinolenic acid, palmitidonic acid, palmitovaccenic acid, palmitoleic acid, sapienic acid, 4-Hexadecenoic acid, stearic acid (octadecenoic acid), α-linolenic acid, stearidonic acid, α-eleostearic acid, β-eleostearic acid, pumicic acid, 7,10,13-octadecatrienoic acid, 12-octadecenoic acid, linoleic acid, linolelaidic acid. γ-linolenic acid, calendic acid, pinolenic acid, vaccinic acid, ruminic acid, oleic acid, elaidic acid, petroselinic acid, arachidic acid (eicosanoic acid), dihomo-α-linolenic acid, eicosic acidtraenoic acid, eicosapentaenoic acid, 9,12,15-eicosatrienoic acid, β-eicosic acidtraenoic acid, dihomo-linoleic acid, dihomo-γ-linolenic acid, arachidonic acid, paullinic acid, 7,10,13-eicosatrienoic acid, gondoic acid, 8,11-eicosadienoic acid, meadic acid, gadoleic acid, 8-eicosenoic acid, behenic acid (docosanoic acid), clupanodonic acid, docosahexaenoic acid, adrenic acid, osbondic acid, erucic acid, lignoceric acid (tetracosanic acid), 9,12,15,18,21-Tetracosapentaenoic acid, 6,9,12,15,18,21-Tetracosahexaenoic acid, and nervonic acid.
37. The pharmaceutical composition of any one of embodiments 25-36, wherein the one or more free C_{14}-$_{24}$ fatty acids are in an amount of at least 1% by weight, at least 2.5% by weight, at least 5% by weight, at least 7.5% by weight, at least 10 % by weight, at least 12.5% by weight, at least 15 % by weight, at least 17.5% by weight, at least 20% by weight, at least 22.5% by weight, at least 25% by weight, at

least 30% by weight, at least 35% by weight, at least 40% by weight, at least 50% by weight, at least 60% by weight, at least 70% by weight, at least 75% by weight and/or at most 1% by weight, at most 2.5% by weight, at most 5% by weight, at most 7.5% by weight, at most 10 % by weight, at most 12.5% by weight, at most 15 % by weight, at most 17.5% by weight, at most 20% by weight, at most 22.5% by weight, at most 25% by weight, at most 30% by weight, at most 35% by weight, at most 40% by weight, at most 50% by weight, at most 60% by weight, at most 70% by weight, at most 75% by weight or between about 1% to about 2.5% by weight, about 1% to about 5% by weight, about 1% to about 10% by weight, about 1% to about 15% by weight, about 1% to about 20% by weight, about 1% to about 25% by weight, about 2.5% to about 5% by weight, about 2.5% to about 10% by weight, about 2.5% to about 15% by weight, about 2.5% to about 20% by weight, about 2.5% to about 25% by weight, about 2.5% to about 30% by weight, about 5% to about 10% by weight, about 5% to about 15% by weight, about 5% to about 20% by weight, about 5% to about 25% by weight, about 5% to about 30% by weight, about 10% to about 15% by weight, about 10% to about 20% by weight, about 10% to about 25% by weight, about 10% to about 30% by weight, about 10% to about 40% by weight, about 10% to about 45% by weight, about 10% to about 50% by weight, about 10% to about 60% by weight, about 10% to about 70% by weight, about 15% to about 20% by weight, about 15% to about 25% by weight, about 15% to about 30% by weight, about 15% to about 40% by weight, about 15% to about 45% by weight, about 15% to about 50% by weight, about 15% to about 60% by weight, about 15% to about 70% by weight, about 20% to about 25% by weight, about 20% to about 30% by weight, about 20% to about 40% by weight, about 20% to about 45% by weight, about 20% to about 50% by weight, about 20% to about 60% by weight, about 20% to about 70% by weight, about 30% to about 40% by weight, about 30% to about 50% by weight, about 30% to about 60% by weight, about 30% to about 70% by weight, about 30% to about 75% by weight, about 35% to about 40% by weight, about 35% to about 50% by weight, about 35% to about 60% by weight, about 35% to about 70% by weight, about 35% to about 75% by weight, about 40% to about 50% by weight, about 40% to about 60% by weight, about 40% to about 70% by weight, about 40% to about 75% by weight, about 50% to about 60% by weight, about 50% to about 70% by weight, or about 60% to about 70% by weight.

38. The pharmaceutical composition of any one of embodiments 25-37, wherein the one or more free C_{14-24} fatty acid surfactants include unsaturated free C_{14}-C_{16} fatty acid surfactants, unsaturated free C_{14}-C_{18} fatty acid surfactants, unsaturated free C_{14}-C_{20} fatty acid surfactants, unsaturated free C_{14}-C_{22} fatty acid surfactants, unsaturated free C_{14}-C_{24} fatty acid surfactants, unsaturated free C_{16}-C_{18} fatty acid surfactants, unsaturated free C_{16}-C_{20} fatty acid surfactants, unsaturated free C_{16}-C_{22} fatty acid surfactants, unsaturated free C_{16}-C_{24} fatty acid surfactants, unsaturated free C_{18}-C_{20} fatty acid surfactants, unsaturated free C_{18}-C_{22} fatty acid surfactants, unsaturated free C_{18}-C_{24} fatty acid surfactants, unsaturated free C_{20}-C_{22} fatty acid surfactants, or unsaturated free C_{22}-C_{24} fatty acid surfactants.

39. The pharmaceutical composition of any one of embodiments 25-37, wherein the one or more free C_{14-24} fatty acid surfactants include ω−3 unsaturated free C_{18}-C_{22} fatty acid surfactants, ω−5 unsaturated free C_{18}-C_{22} fatty acid surfactants, ω−6 unsaturated free C_{18}-C_{22} fatty acid surfactants, ω−7 unsaturated free C_{18}-C_{22} fatty acid surfactants, ω−9 unsaturated free C_{18}-C_{22} fatty acid surfactants, ω−10

unsaturated free C_{18}-C_{22} fatty acid surfactants, ω−11 unsaturated free C_{18}-C_{22} fatty acid surfactants, or ω−12 unsaturated free C_{18}-C_{22} fatty acid surfactants.

40. The pharmaceutical composition of any one of embodiments 25-37, wherein the one or more free C_{14}-$_{24}$ fatty acid surfactants include saturated free C_{14}-C_{16} fatty acid surfactants, saturated free C_{14}-C_{18} fatty acid surfactants, saturated free C_{14}-C_{20} fatty acid surfactants, saturated free C_{14}-C_{22} fatty acid surfactants, saturated free C_{14}-C_{24} fatty acid surfactants, saturated free C_{16}-C_{18} fatty acid surfactants, saturated free C_{16}-C_{20} fatty acid surfactants, saturated free C_{16}-C_{22} fatty acid surfactants, saturated free C_{16}-C_{24} fatty acid surfactants, saturated free C_{18}-C_{20} fatty acid surfactants, saturated free C_{18}-C_{22} fatty acid surfactants, saturated free C_{18}-C_{24} fatty acid surfactants, saturated free C_{20}-C_{22} fatty acid surfactants, or saturated free C_{22}-C_{24} fatty acid surfactants.
41. The pharmaceutical composition of any one of embodiments 25-37, wherein the one or more free C_{14}-$_{24}$ fatty acid surfactants include a mixture of saturated and unsaturated free C_{14}-C_{16} fatty acid surfactants, a mixture of saturated and unsaturated free C_{14}-C_{18} fatty acid surfactants, a mixture of saturated and unsaturated free C_{14}-C_{20} fatty acid surfactants, a mixture of saturated and unsaturated free C_{14}-C_{22} fatty acid surfactants, a mixture of saturated and unsaturated free C_{14}-C_{24} fatty acid surfactants, a mixture of saturated and unsaturated free C_{16}-C_{18} fatty acid surfactants, a mixture of saturated and unsaturated free C_{16}-C_{20} fatty acid surfactants, a mixture of saturated and unsaturated free C_{16}-C_{22} fatty acid surfactants, a mixture of saturated and unsaturated free C_{16}-C_{24} fatty acid surfactants, a mixture of saturated and unsaturated free C_{18}-C_{20} fatty acid surfactants, a mixture of saturated and unsaturated free C_{18}-C_{22} fatty acid surfactants, a mixture of saturated and unsaturated free C_{18}-C_{24} fatty acid surfactants, a mixture of saturated and unsaturated free C_{20}-C_{22} fatty acid surfactants, or a mixture of saturated and unsaturated free C_{22}-C_{24} fatty acid surfactants.
42. The pharmaceutical composition of any one of embodiments 25-37, wherein the one or more free C_{14}-$_{24}$ fatty acid surfactants include sodium palmitate (hexadecanoate), sodium palmitolinolenate, sodium palmitidonate, sodium palmitovaccenate, sodium palmitoleate, sodium sapienate, sodium 4-Hexadecenoate, sodium stearate (octadecenoate),sodium α-linolenate, sodium stearidonate, sodium α-eleostearate, sodium β-eleostearate, sodium pumicate, sodium 7,10,13-octadecatrienoate, sodium 12-octadecenoate, sodium linoleate, sodium linolelaidate. Sodium γ-linolenate, sodium calendate, sodium pinolenate, sodium vaccinate, sodium ruminate, sodium oleate, sodium elaidate, sodium petroselinate, sodium arachidate (eicosanoate),sodium dihomo-α-linolenate, sodium eicosatetraenoate, sodium eicosapentaenoate, sodium 9,12,15-eicosatrienoate, sodium β-eicosatetraenoate, sodium dihomo-linoleate, sodium dihomo-γ-linolenate, sodium arachidonate, sodium paullinate, sodium 7,10,13-eicosatrienoate, sodium gondoate, Sodium 8,11-eicosadienoate, sodium meadate, sodium gadoleate, sodium 8-eicosenoate, sodium behenate (docosanoate), sodium clupanodonate, sodium docosahexaenoate, sodium adrenate, sodium osbondate, sodium erucate, sodium lignocerate (tetracosanate), sodium 9,12,15,18,21-Tetracosapentaenoate, sodium 6,9,12,15,18,21-Tetracosahexaenoate, and sodium nervonate.
43. The pharmaceutical composition of any one of embodiments 25-42, wherein the one or more free C_{14}-$_{24}$ fatty acid surfactants are in an amount of at least 0.5% by weight, at least 1.0% by weight, at least 1.5% by weight, at least 2.0% by weight, at least 2.5% by weight, at least 3.0% by weight, at least 3.5% by weight, at least 4.0% by weight, at least 4.5% by weight, at least 5.0% by weight, at least 5.5% by

weight, at least 6.0% by weight, at least 6.5% by weight, at least 7.0% by weight, at least 7.5% by weight, at least 8.0% by weight, at least 8.5% by weight, at least 9.0% by weight, at least 9.5% by weight, at least 10.0% by weight and/or at most 0.1% by weight, at most 0.5% by weight, at most 1.0% by weight, at most 1.5% by weight, at most 2.0% by weight, at most 2.5% by weight, at most 3.0% by weight, at most 3.5% by weight, at most 4.0% by weight, at most 4.5% by weight, at most 5.0% by weight, at most 5.5% by weight, at most 6.0% by weight, at most 6.5% by weight, at most 7.0% by weight, at most 7.5% by weight, at most 8.0% by weight, at most 8.5% by weight, at most 9.0% by weight, at most 9.5% by weight, at most 10.0% by weight or between about 0.1% to about 0.5%, about 0.1% to about 1.0%, about 0.1% to about 2.0%, about 0.1% to about 3.0%, about 0.1% to about 4.0%, about 0.1% to about 5.0%, about 0.1% to about 6.0%, about 0.1% to about 7.0%, about 0.1% to about 8.0%, about 0.1% to about 9.0%, about 0.1% to about 10.0%, about 0.5% to about 1.0%, about 0.5% to about 2.0%, about 0.5% to about 3.0%, about 0.5% to about 4.0%, about 0.5% to about 5.0%, about 0.5% to about 6.0%, about 0.5% to about 7.0%, about 0.5% to about 8.0%, about 0.5% to about 9.0%, about 0.5% to about 10.0%, about 1.0% to about 2.0%, about 1.0% to about 3.0%, about 1.0% to about 4.0%, about 1.0% to about 5.0%, about 1.0% to about 6.0%, about 1.0% to about 7.0%, about 1.0% to about 8.0%, about 1.0% to about 9.0%, about 1.0% to about 10.0%, about 2.0% to about 3.0%, about 2.0% to about 4.0%, about 2.0% to about 5.0%, about 2.0% to about 6.0%, about 2.0% to about 7.0%, about 2.0% to about 8.0%, about 2.0% to about 9.0%, about 2.0% to about 10.0%, about 3.0% to about 4.0%, about 3.0% to about 5.0%, about 3.0% to about 6.0%, about 3.0% to about 7.0%, about 3.0% to about 8.0%, about 3.0% to about 9.0%, about 3.0% to about 10.0%, about 4.0% to about 5.0%, about 4.0% to about 6.0%, about 4.0% to about 7.0%, about 4.0% to about 8.0%, about 4.0% to about 9.0%, about 4.0% to about 10.0%, about 5.0% to about 6.0%, about 5.0% to about 7.0%, about 5.0% to about 8.0%, about 5.0% to about 9.0%, about 5.0% to about 10.0%, about 6.0% to about 7.0%, about 6.0% to about 8.0%, about 6.0% to about 9.0%, about 6.0% to about 10.0%, about 7.0% to about 8.0%, about 7.0% to about 9.0%, about 7.0% to about 10.0%, about 8.0% to about 9.0%, about 8.0% to about 10.0%, or about 9.0% to about 10.0% by weight.

44. The pharmaceutical composition of any one of embodiments 1-43, wherein the protein kinase inhibitor is a tyrosine protein kinase inhibitor, a serine-threonine protein kinase inhibitor, or a nonspecific protein kinase inhibitor.
45. The pharmaceutical composition of embodiment 44, wherein the tyrosine protein kinase inhibitor is a receptor tyrosine kinase inhibitor or a non-receptor tyrosine kinase inhibitor.
46. The pharmaceutical composition of embodiments 44 or 45, wherein the tyrosine protein kinase inhibitor includes a RTK class I inhibitor, a RTK class II inhibitor a RTK class III inhibitor, a RTK class IV inhibitor, a RTK class V inhibitor, a RTK class VI inhibitor, a RTK class VII inhibitor, a RTK class VIII inhibitor, a RTK class IX inhibitor, a RTK class X inhibitor, a RTK class XI inhibitor, a RTK class XII inhibitor, a RTK class XIII inhibitor, a RTK class XIV inhibitor, a RTK class XV inhibitor, a RTK class XVI inhibitor, a RTK class XVII inhibitor, a RTK class XVIII inhibitor, a RTK class XIX inhibitor, a RTK class XX inhibitor, an ABL nRTK inhibitor, an ACK nRTK inhibitor, a CSK nRTK inhibitor, a FAK nRTK inhibitor, a FES nRTK inhibitor, a FRK nRTK inhibitor, a JAK nRTK inhibitor, a SRC nRTK inhibitor, a SYK nRTK inhibitor, or a TEC nRTK inhibitor.

47. The pharmaceutical composition of embodiment 44, wherein the serine-threonine protein kinase inhibitor is a receptor serine-threonine kinase inhibitor or a non-receptor serine-threonine kinase inhibitor.
48. The pharmaceutical composition of embodiments 44 or 47, wherein the serine-threonine protein kinase inhibitor includes a Polo kinase (PLK) inhibitor, a Cyclin-dependent kinase (CDK) inhibitor, a (RNA-polymerase)-subunit kinase (RPS6K) inhibitor, a Mitogen-activated protein kinase (MAPK) inhibitor, a MAPK kinase (MAPKK) inhibitor, a MAPK kinase kinase (MAPKKK or MAP3K) inhibitor, a Tau-protein kinase (TPK) inhibitor, a non-specific serine/threonine protein kinase inhibitor, a Pyruvate dehydrogenase kinase (PDK) inhibitor, a Dephospho-(reductase kinase) kinase inhibitor, a 3-methyl-2-oxobutanoate dehydrogenase (acetyl-transferring) kinase inhibitor, a (isocitrate dehydrogenase (NADP+)) kinase inhibitor, a (tyrosine 3-monooxygenase) kinase inhibitor, a myosin-heavy-chain kinase inhibitor, a Fas-activated serine/threonine kinase inhibitor, a Goodpasture-antigen-binding protein kinase inhibitor, a IκB kinase inhibitor, a cAMP-dependent protein kinase (Protein kinase A) inhibitor, a cGMP-dependent protein kinase (or Protein kinase G) inhibitor, a Protein kinase B (PKB) inhibitor, a Protein kinase C (PKC) inhibitor, a Rhodopsin kinase inhibitor, a Beta adrenergic receptor kinase inhibitor, a G-protein coupled receptor kinase inhibitor, a Ca^{2+}/calmodulin-dependent (CaM) kinase (CAMK) inhibitor, a Myosin light-chain kinase inhibitor, a Phosphorylase kinase inhibitor, an Elongation factor 2 kinase inhibitor,
49. The pharmaceutical composition of any one of embodiments 44, 47 or 48, wherein the serine-threonine protein kinase inhibitor includes a Rho-associated protein kinase (ROCK) kinase inhibitor and a MAPK kinase inhibitor.
50. The pharmaceutical composition of embodiment 49, wherein the ROCK kinase inhibitor includes a ROCK 1 inhibitor and a ROCK 2 inhibitor.
51. The pharmaceutical composition of embodiment 49, wherein the MAPK kinase inhibitor includes a MAPK1 inhibitor, a MAPK3 inhibitor, a MAPK4 inhibitor, a MAPK6 inhibitor, a MAPK7 inhibitor, a MAPK8 inhibitor, a MAPK9 inhibitor, a MAPK10 inhibitor, a MAPK11 inhibitor, a MAPK12 inhibitor, a MAPK13 inhibitor, a MAPK14 inhibitor, and a MAPK15 inhibitor.
52. The pharmaceutical composition of any one of embodiments 1-51, wherein the pharmaceutical composition is not an emulsion or self-emulsifying formulation.
53. A pharmaceutical composition for use in treating a disease or disorder, the pharmaceutic composition being defined by any one of embodiments 1-52.
54. The pharmaceutical composition of embodiment 53, wherein the disease or disorder includes a neoplasm, a cancer, an inflammation, an autoimmune disorder, an idiopathic pulmonary fibrosis, and a renal disease or disorder.
55. A method of treating an individual with an inflammation, the method comprising the step of administering to the individual in need thereof a pharmaceutical composition as defined by any one of embodiments 1-52, wherein administration results in a reduction in a symptom associated with the inflammation, thereby treating the individual.
56. The method of embodiment 55, wherein the disease or disorder includes a neoplasm, a cancer, an inflammation, an autoimmune disorder, an idiopathic pulmonary fibrosis, and a renal disease or disorder.

57. Use of a pharmaceutical composition as defined by any one of embodiments 1-52 in the manufacture of a medicament for the treatment of a disease or disorder.
58. The use of embodiment 57, wherein the disease or disorder includes a neoplasm, a cancer, an inflammation, an autoimmune disorder, an idiopathic pulmonary fibrosis, and a renal disease or disorder.

EXAMPLES

[0263] The following non-limiting examples are provided for illustrative purposes only in order to facilitate a more complete understanding of representative embodiments now contemplated. These examples should not be construed to limit any of the embodiments described in the present specification, including those pertaining to the compounds, pharmaceutical compositions, or methods and uses disclosed herein.

Example 1 Assessing Critical Micellar Concentration Parameters

[0264] One of the key features of the disclosed pharmaceutical compositions is that they are incapable of self-emulsifying. A compound can self-emulsify to form micelles when its concentration reaches its critical micellar concentration (CMC). The lipid components GELUCIRE® 43/01 and MAISINE™ CC have no recorded CMC values, cannot form micelles, and as such are not self-emulsifying compounds. Similarly, while cholic acid is reported to have a CMC of 14.7 mM, below the 0.25 mM or less of cholic acid used in the disclosed pharmaceutical compositions. Likewise sodium stearate is reported to have a CMC of 71 µM, below the 35 µM or less of sodium stearate used in the disclosed pharmaceutical compositions. As such, cholic acid and sodium stearate cannot self-emulsify because their concentrations are insufficient to form micelles. On the other hand, oleic acid is reported to have a CMC of 2.3 mM which is near the up to 2 mM of oleic acid is used in the disclosed pharmaceutical compositions. As such, it was not clear whether oleic acid could act as a self-emulsifying agent as it could conceivably form micelles at the concentrations used in the disclosed pharmaceutical compositions.

[0265] To assess whether oleic acid could self-emulsify at the concentrations used in the disclosed pharmaceutical compositions, experiments was performed that were designed to model dissolution testing according to International Council for Harmonisation (ICH) guidelines. One liter of a dissolution media comprising phosphate buffered saline (PBS) and 2.5% curcumin was warmed to 37°C and constant stirring at 300 rpm maintained. Curcumin was added as a coloring agent and was very effective at visualizing the distribution of lipids through the dissolution media. Miscibility experiments were performed using two concentrations of oleic acid nominally above the CMC concentration for this fatty acid. In one series of experiments, 1 g of 100% oleic acid was added to the dissolution media. The control compound was 1 g of 100% MAISINE™ CC. In a second series of experiments 1 g of 75% oleic acid (diluted with 250 mg of MAISINE™ CC) was added to the dissolution media. The control compound was 1 g of 75% MAISINE™ CC. The miscibility of oleic acid and MAISINE™ CC was assessed by observing the dissolution media for 10 minutes with constant stirring and then 10 minutes without stirring. Photographs were taken at time 0, 1, 2, 3, 4, 5 and 10 minutes during the stirring phase and 2, 4 and 10 minutes after stirring ceased.

[0266] Both oleic acid preparations quickly distributed throughout the PBS in small but clearly defined lipid droplets which were still observable after 10 minutes of stirring. On cessation of stirring, the lipid droplets either adhered to the stirrer or floated to the top of the PBS, with the bulk of the PBS clearing. In contrast, the MAISINE™ CC preparations rapidly dispersed in the dissolution media and this dispersion was maintained after the 10-minute period of no stirring. These results demonstrate that 1 gram of 100% oleic acid and 75% oleic acid were not miscible in the dissolution media, despite being at a concentration that is high enough to theoretically reach the critical micellar concentration. These experiment, modelling ICH dissolution conditions, demonstrate that oleic acid did not form emulsions and shown that this fatty acid cannot self-emulsify into micelles. Moreover, oleic acid is even less likely to self-emulsify, when combined with other lipid components which have no CMC concentration, such as MAISINE™ CC and GELUCIRE® 43/01.

Example 2 Assessing Cholic Acid Parameters

[0267] During the course of developing the disclosed pharmaceutical compositions, it became clear that there was a direct correlation between having cholic acid in the formulation and improved performance. For many drugs, cholic acid is required for solubility in the lipid matrix. As such we wanted to assess the effect of having increased concentrations of cholic in the lipid matrix.

[0268] Unless stated otherwise X-ray powder diffraction patterns for the samples were acquired on a Bruker D8 diffractometer using Cu Ka radiation (40 kV, 40 mA) and a θ-2θ goniometer. The incident beam passes through a 2.0 mm divergence slit followed by a 0.2 mm antiscatter slit and knife edge. The diffracted beam passes through an 8.0 mm receiving slit with 2.5° Soller slits followed by the Lynxeye Detector. The software used for data collection and analysis was Diffrac Plus XRD Commander and Diffrac Plus EVA respectively. Samples were run under ambient conditions over an angular range of 2° to 42° 2θ (using a step size of 0.05° 2θ and a step time of 0.5 seconds) as flat plate specimens using powder as received. The sample was prepared on a polished, zero-background (510) silicon wafer by gently pressing onto the flat surface or packed into a cut cavity. The sample was rotated in its own plane. Small D8 disc recess holders were used to prepare sample. Pharmaceutical composition analyzed were 1) a fenofibrate composition disclosed herein comprising 36.5% MAISINE™ CC, 36.5% GELUCIRE® 43/01, 20.3% oleic acid, 6.1% cholic acid, 1.4% sodium stearate, and 0.6% fenofibrate; and 2) an aprepitant composition disclosed herein comprising 31.7% MAISINE™ CC, 26.1% GELUCIRE® 43/01, 31.7% oleic acid, 4.7% cholic acid, and 5.85% aprepitant. In addition, the following vehicles was also analyzed: 1) a vehicle comprising 36.5% MAISINE™ CC, 36.5% GELUCIRE® 43/01, 20.3% oleic acid, 6.1% cholic acid, and 1.4% sodium stearate; and 2) a vehicle comprising 31.7% MAISINE™ CC, 26.1% GELUCIRE® 43/01, 31.7% oleic acid, and 4.7% cholic acid. Controls for both experiments included GELUCIRE® 43/01, cholic acid, and the appropriate therapeutic compound, namely fenofibrate or aprepitant. Controls for MAISINE™ CC, oleic acid, and sodium stearate were not performed as these compounds are liquid at room temperature, and as such, cannot be analyzed using X-ray powder diffraction.

[0269] With respect to pharmaceutical compositions comprising fenofibrate, representative PXRD spectra of GELUCIRE® 43/01 (**FIG. 1A**), cholic acid (**FIG. 1B**), and fenofibrate (**FIG. 1C**), as well as the vehicle (**FIG. 1D**) and the pharmaceutical composition (**FIG. 1E**), each show a distinctive pattern of peaks. Interestingly, when control PXRD spectra are superimposed over the vehicle and pharmaceutical composition PXRD spectra, there is a high degree of coincidental peaks. For example, **FIG. 1F**, is a PXRD spectra of the pharmaceutical composition superimposed with a PXRD spectra of fenofibrate. As shown by the asterisks, the pharmaceutical composition exhibits a peak profile coincident with fenofibrate, indicating that the pharmaceutical composition contains crystalline fenofibrate. This finding is important as it illustrates that the pharmaceutical composition is not a solid solution (or molecular dispersion) transitional phase instead comprises some solid fenofibrate micro to nano-sized particles suspended within the lipid matrix formed during the cooling of the formulation from a fully solubilized state.

[0270] Even more surprising were the results obtained by analyzing the peak profile of cholic acid. **FIG. 1G** shows a PXRD spectra of the Vehicle superimposed with a PXRD spectra of cholic acid. As shown by the asterisks, the pharmaceutical composition exhibits a peak profile coincident with cholic acid, indicating that the pharmaceutical composition contains crystalline cholic acid. Similarly, **FIG. 1H** shows a PXRD spectra of the pharmaceutical composition superimposed with a PXRD spectra of cholic acid. As shown by the asterisks, the pharmaceutical composition exhibited a peak profile coincident with cholic acid, indicating that the pharmaceutical composition contained crystalline cholic acid. This finding was completely unexpected as it shows that pharmaceutical composition comprises solid cholic acid particles suspended within the lipid matrix. Additionally, as these particles were not observed during the formulation of the pharmaceutical composition, it was concluded that the crystalline cholic acid are present as micro to nano-sized particles formed during the cooling of the formulation.

[0271] With respect to pharmaceutical compositions comprising aprepitant, representative PXRD spectra of GELUCIRE® 43/01 (**FIG. 2A**), cholic acid (**FIG. 2B**), and aprepitant (**FIG. 2C**), as well as the vehicle (**FIG. 2D**) and the pharmaceutical composition (**FIG. 2E**), each show a distinctive pattern of peaks. Interestingly, when control PXRD spectra are superimposed over the vehicle and pharmaceutical composition PXRD spectra, a high degree of coincidental peaks was only observed for aprepitant, but not cholic acid. For example, **FIG. 2F**, is a PXRD spectra of the pharmaceutical composition superimposed with a PXRD spectra of aprepitant. As shown by the asterisks, the pharmaceutical composition exhibited a peak profile coincident with fenofibrate, indicating that the pharmaceutical composition contained crystalline aprepitant. This finding is important as it illustrates that the pharmaceutical composition is not a solid solution (or molecular dispersion) transitional phase instead comprises some solid aprepitant micro to nano-sized particles suspended within the lipid matrix formed during the cooling of the formulation from a fully solubilized state.

[0272] With respect to cholic acid, **FIG. 2G** shows a PXRD spectra of the Vehicle superimposed with a PXRD spectra of cholic acid. Unlike for fenofibrate formulations, the vehicle did not exhibit a peak profile coincident with cholic acid, indicating that the pharmaceutical composition contains does not appear to contain crystalline cholic acid. Similarly, **FIG. 2H** shows a PXRD spectra of the pharmaceutical composition

superimposed with a PXRD spectra of cholic acid. Like the vehicle, the pharmaceutical composition did not exhibit a peak profile coincident with cholic acid, indicating that the pharmaceutical composition did not appear to contain crystalline cholic acid.

[0273] Taken together, the results of this analysis demonstrate that a pharmaceutical composition disclosed hereon is a mixed phase solid suspension of solid crystalline fenofibrate, aprepitant and solid crystalline cholic acid embedded within a solid lipid matrix.

[0274] Such mixed phase solid suspensions provide a unique formulation that offers several advantageous. For example, in a single-phase composition, all the components are dissolved and digestion of the lipid matrix by pancreatic juices results in uniform processing of the composition into mixed micelles that are absorbed by the enterocytes. However, in mixed phase solid suspensions, while the dissolved components behave as in a single-phase composition, the solid crystalline compounds can solvent and interact with the aqueous environment of the small intestine to form bile salts. This dual processing scheme affords more opportunity for more complex processes to occur, that is faster, and produces more micellar formations.

Example 3 ROCK 2 Kinase Inhibitor Formulation

[0275] To assess whether the addition of one or more digestion enhancers could improve the solubility of a Rho-associated protein kinase (ROCK) kinase inhibitor, when combined with glycerolipid components, pharmaceutical compositions comprising [6-[4-[[4-(1H-Pyrazol-4-yl)phenyl]amino]pyrimidin-2-yl]-1-methyl-1H-indol-2-yl] (3,3-difluoroazetidin-1-yl)methanone, monohydrochloride, monohydrate, a ROCK 2 kinase inhibitor, were formulated according to Tables 1 and 2 below. GELUCIRE® 43/01, MAISINE™ CC, the fatty acid component, the surfactant component, and the ROCK 2 kinase inhibitor were combined and heated to 120°C to produce a clear yellow solution. The resulting composition produced a clear yellow solution which was then allowed to cool to room temperature (18-20°C) at which time stirring ceased and the composition was transferred to suitable containers where it solidified. The resulting solid composition remelted at 50°C to give a clear yellow solution with no precipitate formation and again solidified on cooling.

Table 1. ROCK 2 Kinase Inhibitor Formulation

Component	ROCF1	ROCF2	ROCF3	ROCF4	ROCF5
MAISINE CC	11.9 g (33.9%)	42.8 g (50.9%)	11.9 g (32.9%)	11.9 g (31.9%)	28.6 g (32.9%)
GELUCIRE® 43/01	10.9 g (31.1%)	26.2 g (31.1%)	10.9 g (31.1%)	10.9 g (29.2%)	26.2 g (30.1%)
Oleic Acid	11.9 g (33.9%)	14.3 g (17.0%)	11.9 g (32.9%)	11.9 g (31.9%)	28.6 g (32.9%)
Sodium Stearate	—	—	—	—	—
Sodium Oleate	—	—	—	1.1 g (3.0%)	2.6 g (3.0%)
Cholic Acid	—	—	1.1 g (3.0%)	1.1 g (3.0%)	—
ROCK 2 KI (free base)	0.39 g (1.1%)	0.94 g (1.1%)	0.39 g (1.1%)	0.39 g (1.1%)	0.94 g (1.1%)

Table 2. ROCK 2 Kinase Inhibitor Formulation

Component	ROCF6	ROCF7	ROCF8	ROCF9	

MAISINE CC	11.9 g (32.9%)	42.8 g (49.3%)	11.9 g (31.9%)	11.9 g (31.9%)	
GELUCIRE® 43/01	10.9 g (30.1%)	26.2 g (30.1%)	10.9 g (29.2%)	10.9 g (29.2%)	
Oleic Acid	11.9 g (32.9%)	14.3 g (16.4%)	11.9 g (31.9%)	11.9 g (31.9%)	
Sodium Stearate	—	—	1.1 g (3.0%)	—	
Sodium Oleate	1.1 g (3.0%)	2.6 g (3.0%)	—	1.1 g (3.0%)	
Cholic Acid	—	—	1.1 g (3.0%)	1.1 g (3.0%)	
ROCK 2 KI (HCl salt)	0.44 g (1.2%)	1.0 g (1.2%)	0.44 g (1.17%)	0.44 g (1.17%)	

[0276] To assess whether the addition of one or more digestion enhancers to glycerolipid admixture comprising a ROCK 2 kinase inhibitor could improve the bioavailability of a ROCK 2 kinase inhibitor, the pharmacokinetics of these formulations were evaluated. Pharmacokinetic analysis will ascertain how an organism affects a ROCK 2 kinase inhibitor and will include experiments designed to determine the amount of a ROCK 2 kinase inhibitor to administer (dose), the peak concentration of a ROCK 2 kinase inhibitor achieved after administration (Cmax), the time it takes a ROCK 2 kinase inhibitor to reach its Cmax (Tmax), the time required for the concentration of a ROCK 2 kinase inhibitor to reach half its Cmax (T1/2), the integral of the concentration-time curve between from time zero to the time of last quantifiable measurement taken during the experiments (AUClast), and the integral of the concentration-time curve from time zero to infinity (AUCinf). In addition, the pharmacodynamics of these formulations will be assessed to determine how a ROCK 2 kinase inhibitor affects an organism.

[0277] In one series of experiments, ROCF1, ROCF2, ROCF3, ROCF4, ROCF5, ROCF6, ROCF7, ROCF8, and ROCF9 were evaluated against Comparator Formulation 1 (CMF1), a suspension comprising 0.3% Polysorbate 80 and a ROCK 2 kinase inhibitor at a concentration of 10 mg/mL. Beagle dog (non-naïve), each with an average weight of about 10 kg, were divided into ten groups of three animals. Animals from each group were oral dosed by gavage as follows: Group 1 animals received a single dose of ROCF1 administered at 10 mg/kg; Group 2 animals received a single dose of ROCF2 administered at 10 mg/kg; Group 3 animals received a single dose of ROCF3 administered at 10 mg/kg; Group 4 animals received a single dose of ROCF4 administered at 10 mg/kg; Group 5 animals received a single dose of ROCF5 administered at 10 mg/kg; Group 6 animals received a single dose of ROCF6 administered at 10 mg/kg; Group 7 animals received a single dose of ROCF7 administered at 10 mg/kg; Group 8 animals received a single dose of ROCF8 administered at 10 mg/kg; Group 9 animals received a single dose of ROCF9 administered at 10 mg/kg; and Group 10 animals received a single dose of CMF1 administered at 10 mg/kg. Samples of whole blood were taken just prior to administration, 0 h, and at the following 9 post-administration time points: 0.083 hr, 0.25 hr, 0.5 hr, 1 hr, 2 hr, 4 hr, 8 hr, 12 hr, and 24 hr. Collected whole blood samples were processed to obtain plasma by adding 800 µL of an internal standard solution (500 ng/ml tolbutamide in acetonitrile) to a diluted blood sample, comprising 100 µL of whole blood, 100 µL of EDTA and 200 µL of water, to precipitate blood proteins. After centrifugation at 18,800 rcf at 4°C for 5 minutes, 50 µL of supernatant was transferred into 50 µL of 0.1% formic acid and stored until analysized. Processed blood supernatants were sent for bioanalysis, utilizing UHPLC-MS/MS with a reverse phase C18 column (50 x 21 mm), 1.7 mm 50°C with a mobile phase gradient between: 0.1% formic acid in water and 0.1% formic acid in acetonitrile, a flow rate of 0.75 mL/min and injection volume 5 µL.

[0278] As shown in Tables 3 and 4, the ROCK 2 kinase inhibitor formulated with lipids and with digestion enhancers, exhibited superior pharmacokinetic properties for the ROCK 2 kinase inhibitor in blood relative to CMF1. In comparison to CMF1 (non-lipid comparator formulation: 1) ROCF2 demonstrated substantially higher absorption levels of mebendazole in blood as indicated by a Cmax that was about 3.2 times greater versus CMF1, with lower clearance over time as indicated by an AUC that was about 3.6 times higher versus CMF1; 2) ROCF6 demonstrated substantially higher absorption levels of the ROCK 2 kinase inhibitor in blood as indicated by a Cmax that was about 3.0 times greater versus CMF1, with lower clearance over time as indicated by an AUC that was about 3.1 times higher versus CMF1; 3) ROCF4 demonstrated higher absorption levels of the ROCK 2 kinase inhibitor in blood as indicated by a Cmax that was about 1.9 times greater versus CMF1, with lower clearance over time as indicated by an AUC that was about 2.2 times higher versus CMF1; 4) ROCF7 demonstrated higher absorption levels of the ROCK 2 kinase inhibitor in blood as indicated by a Cmax that was about 1.7 times greater versus CMF1, with lower clearance over time as indicated by an AUC that was about 2.1 times higher versus CMF1; and 5) ROCF1 demonstrated higher absorption levels of the ROCK 2 kinase inhibitor in blood as indicated by a Cmax that was over 1.6 times greater versus CMF1, with lower clearance over time as indicated by an AUC that was about 1.5 times higher versus CMF1. Overall, ROCF2 and ROCF6 demonstrated the best pharmacokinetic improvements compared to the comparator formulation CMF1.

Table 3. Mean Pharmacokinetics Parameter of Blood ROCK 2 Kinase Inhibitor by Formulation

Parameter	ROCF1	ROCF2	ROCF3	ROCF4	ROCF5
T1/2 (hr)	NA	0.99	0.78	1.00	0.84
Tmax (hr)	3	3.50	2.67	2.00	2.17
Cmax (ng/mL)	1081.58	2119.99	740.52	1290.45	609.24
AUClast (hr*ng/mL)	2993.59	7357.96	2266.07	4457.15	1946.45
AUCinf (hr*ng/mL)	NA	7380.08	3189.57	4596.61	1609.87

NR: No result, insufficient data to reliably determine pharmacokinetic parameter.
NC: No calculation, insufficient data to reliably calculate pharmacokinetic parameter.

Table 4. Mean Pharmacokinetics Parameter of Blood ROCK 2 Kinase Inhibitor by Formulation

Parameter	ROCF6	ROCF7	ROCF8	ROCF9	CMF1
T1/2 (hr)	0.57	0.70	1.92	0.71	0.82
Tmax (hr)	2.67	3.00	2.33	2.67	1.33
Cmax (ng/mL)	2020.71	1138.90	952.35	904.51	663.80
AUClast (hr*ng/mL)	6268.92	4337.72	2821.77	2988.85	2032.13
AUCinf (hr*ng/mL)	6276.95	4213.22	2848.46	3008.04	2047.16

[0279] To assess whether the addition of one or more digestion enhancers to glycerolipid admixture comprising the ROCK 2 kinase inhibitor could improve the efficacy of this therapeutic compound, pharmacodynamic experiments will be conducted. Pharmacodynamic analysis will include experiments design to determine the efficacy of the ROCK 2 kinase inhibitor using an appropriate animal model system, such as a idiopathic pulmonary fibrosis model system or a graft versus host disease model system, designed to mimic an indication or disease state for which this therapeutic compound is being used to alleviate. Initial experiments will ascertain whether a beneficial effect is obtained from a formulation

comprising the ROCK 2 kinase inhibitor, followed by experiments designed to ascertain the dose-response relationship of the ROCK 2 kinase inhibitor and the beneficial effect associated with this compound.

Example 4 Mebendazole Formulation

[0280] Mebendazole is a MAPK kinase inhibitor that works by selectively inhibiting the synthesis of microtubules via binding to the colchicine binding site of β-tubulin, thereby blocking polymerization of tubulin dimers in cells.

[0281] As a preliminary assessment, experiments were performed to assess whether mebendazole, a MAPK kinase inhibitor, could be formulated in the absence of cholic acid. On one series of experiments, 20 g of MAISINE™ CC was heated with stirring to 100°C and 1.375 g mebendazole was then added and stirred for at least 60 minutes. However undissolved mebendazole particles remained clearly visible at all times indicating that this compound failed to completely dissolve in the heated liquid fat. To understand if an additional lipid could improve solubility of mebendazole, GELUCIRE® 43/01 was added in a stepwise fashion of 5 g until the total amount reached 20 g. The mixture was maintaining at 80°C for the entire experiment and for each addition of GELUCIRE® 43/01, and the mixture was stirred for at least 60 minutes before the next addition of GELUCIRE® 43/01 was added. However, mebendazole particles still remained clearly visible. These results show that mebendazole remained insoluble in formulations containing only MAISINE™ CC and MAISINE™ CC/GELUCIRE® 43/01 in ratios of 4:1 to 1:1.

[0282] To assess whether the addition of one or more digestion enhancers could improve the solubility of mebendazole when combined with glycerolipid components, pharmaceutical composition comprising mebendazole was formulated according to Tables 5 and 6 below. MAISINE™ CC, the fatty acid component, and the surfactant component were combined and heated to 130°C to 140°C to produce a clear yellow solution. The temperature of the admixture was then reduced to 100°C and mebendazole was then added to this admixture under constant stirring until a clear solution was produced. The temperature of the admixture was then reduced to 80°C and GELUCIRE® 43/01 was added in a stepwise fashion until the final amount was reached. The resulting composition produced a clear yellow solution which was then allowed to cool to room temperature (18-20°C) at which time stirring ceased and the composition was transferred to suitable containers where it solidified. The resulting solid composition remelted at 50°C to give a clear yellow solution with no precipitate formation and again solidified on cooling.

Table 5. Mebendazole Formulation

Component	MEBF1	MEBF2	MEBF3	MEBF4
MAISINE CC	400 mg (37.2%)	10 g (23.4%)	3 g (24.4%)	1.5 g (24.8%)
GELUCIRE® 43/01	400 mg (37.2%)	20 g (46.8%)	6 g (48.7%)	3.0 g (49.7%)
Oleic Acid	100 mg (9.3%)	10 g (23.4%)	3 g (24.4%)	1.5 g (24.8%)
Sodium Stearate	50 mg (4.7%)	—	—	—
Cholic Acid	—	1.38 g (3.2%)	0.19 g (1.5%)	—
PEG 400	70 mg (6.5%)	—	—	—
Mebendazole	55 mg (5.1%)	1.38 g (3.2%)	0.13 g (1.0%)	0.04 g (0.7%)

Table 6. Mebendazole Formulation				
Component	**MEBF5**	**MEBF6**	**MEBF7**	
MAISINE™ CC	1.5 g (24.1%)	1.5 g (23.4%)	—	
GELUCIRE® 43/01	3.0 g (48.2%)	3.0 g (46.9%)	3.0 g (49.7%)	
Oleic Acid	1.5 g (24.1%)	1.5 g (23.4%)	3.0 g (49.7%)	
Cholic Acid	0.18 g (2.9%)	0.36 g (5.6%)	—	
Mebendazole	0.04 g (0.7%)	0.04 g (0.7%)	0.04 g (0.7%)	

[0283] To assess whether the addition of one or more digestion enhancers to glycerolipid admixture comprising mebendazole could improve the bioavailability of mebendazole, the pharmacokinetics of these formulations were evaluated. Pharmacokinetic analysis will ascertain how an organism affects mebendazole and will include experiments designed to determine the amount of mebendazole to administer (dose), the peak concentration of mebendazole achieved after administration (Cmax), the time it takes mebendazole to reach its Cmax (Tmax), the time required for the concentration of mebendazole to reach half its Cmax (T1/2), the integral of the concentration-time curve between from time zero to the time of last quantifiable measurement taken during the experiments (AUClast), and the integral of the concentration-time curve from time zero to infinity (AUCinf). In addition, the pharmacodynamics of these formulations will be assessed to determine how mebendazole affects an organism.

[0284] In one series of experiments, MEBF4, MEBF5, MEBF6, and MEBF7 were evaluated against Comparator Formulation 1 (CMF1), a suspension comprising 0.5% carboxymethyl cellulose and 0.7% of mebendazole. Swiss CD1 male mice, each with an average weight of between 20 g to 25 g, were divided into five groups of six animals. Animals from each group were oral dosed by gavage as follows: Group 1 animals received a single dose of MEBF4 administered at 30 mg/kg; Group 2 animals received a single dose of MEB5 administered at 30 mg/kg; Group 3 animals received a single dose of MEB6 administered at 30 mg/kg; Group 4 animals received a single dose of MEBF7 administered at 30 mg/kg; and Group 5 animals received a single dose of CMF1 administered at 30 mg/kg. Samples of whole blood were taken just prior to administration, 0 h, and at the following 7 post-administration time points: 0.5 hr, 1 hr, 2 hr, 4 hr, 8 hr, 12 hr, and 24 hr. Samples of brain were taken at 2 post-administration time points (n=3 per time point): 2 hr and 24 hr. Collected whole blood samples were processed to obtain plasma by adding 100 µL of an internal standard solution (250 ng/ml **tolbutamide** in 0.1% formic acid in acetonitrile) and 20 µL of methanol to 20 µL of whole blood to precipitate blood proteins. After centrifugation at 13,000 rcf for 5 minutes, 50 µL of supernatant was transferred into 50 µL of 0.1% formic acid and stored until analysized. Collected brain samples were processed by homogenizing 1 g of brain in 3 mL of PBS, and the resulting homogenate processed in the same manner as the blood samples. Processed blood and brain supernatants were sent for bioanalysis, utilizing UHPLC-MS/MS with a reverse phase C18 column (50 x 21 mm), 1.7 mm 50°C with a mobile phase gradient between: 0.1% formic acid in water and 0.1% formic acid in acetonitrile, a flow rate of 0.75 mL/min and injection volume 5 µL.

[0285] As shown in **FIG. 3** and Table 7, MEBF4, MEBF5, MEBF6, and MEBF7, mebendazole formulated with lipids and with digestion enhancers, exhibited superior pharmacokinetic properties for mebendazole in

blood relative to CMF1. In comparison to CMF1 (non-lipid comparator formulation: 1) MEBF4 demonstrated substantially higher absorption levels of mebendazole in blood as indicated by a Cmax that was about 3.0 times greater versus CMF1, with lower clearance over time as indicated by an AUC that was about 1.3 times higher versus CMF1; 2) MEBF5 demonstrated substantially higher absorption levels of mebendazole in blood as indicated by a Cmax that was about 2.1 times greater versus CMF1, with lower clearance over time as indicated by an AUC that was about 1.6 times higher versus CMF1; 3) MEBF6 demonstrated higher absorption levels of mebendazole in blood as indicated by a Cmax that was about 1.6 times greater versus CMF1, with lower clearance over time as indicated by an AUC that was about 1.4 times higher versus CMF1, and 4) MEBF7 demonstrated higher absorption levels of mebendazole in blood as indicated by a Cmax that was over 1.4 times greater versus CMF1, with lower clearance over time as indicated by an AUC that was about 1.1 times higher versus CMF1. Interestingly, MEBF4, MEBF6, and MEBF7 each exhibited a significantly increased absorbance rate compared to CMF1, showing Tmax values of between 0.5 hr and 1.0 hr, which was at least a quarter of the Tmax value of 4.0 hrs observed for CMF1. Conversely, MEBF5 exhibited a significantly reduced absorbance rate compared to CMF1, showing Tmax values of 8.0 hr, which was double the Tmax value of 4.0 hrs observed for CMF1. Overall, MEB4 and MEBF6 demonstrated the best pharmacokinetic improvements compared to the comparator formulation CMF1.

Table 7. Mean Pharmacokinetics Parameter of Blood Mebendazole by Formulation

Parameter	**MEBF4**	**MEBF5**	**MEBF6**	**MEBF7**	**CMF1**
T1/2 (hr)	NR	NR	NR	NR	NR
Tmax (hr)	0.5	8.0	0.5	1.0	4.0
Cmax (ng/mL)	1180	828	634	572	400
AUClast (hr*ng/mL)	7280	9310	8370	6330	5780
AUCinf (hr*ng/mL)	9200	NC	8410	6350	2800

NR: No result, insufficient data to reliably determine pharmacokinetic parameter.
NC: No calculation, insufficient data to reliably calculate pharmacokinetic parameter.

[0286] As shown in Table 8, MEBF4 and MEBF7 substantially increased the absorption rate of mebendazole in brain over CMF1. In comparison to CMF1: 1) MEBF4 demonstrated substantially higher absorption levels of mebendazole in brain as indicated by a Cmax that was about 1.3 times greater versus CMF1; and 2) MEBF7 demonstrated substantially higher absorption levels of mebendazole in blood as indicated by a Cmax that was about 1.4 times greater versus CMF1. Both MEBF5 and MEBFF6 exhibited absorption levels of mebendazole in brain that were comparable the absorption level observed for CMF1.

Table 8. Mebendazole Blood and Brain Ratios of Mean Cmax by Formulation

Sample	**MEBF4**	**MEBF5**	**MEBF6**	**MEBF7**	**CMF1**
Blood	1180 ng/mL	828 ng/mL	634 ng/mL	572 ng/mL	400 ng/mL
Brain	152 ng/mL	111 ng/mL	111 ng/mL	170 ng/mL	120 ng/mL
Brain:Blood Ratio	0.13	0.13	0.18	0.30	0.30

[0287] Taken together, these results show that MEBF4 exhibited significantly improved pharmacokinetic properties over CMF1, with MEBF7 showing improved pharmacokinetic properties over CMF1 but to a lesser degree relative to MEBF4. MEBF6 showed slightly improved pharmacokinetic properties over

CMF1. Although MEBF5 generally demonstrated improved pharmacokinetic properties over CMF1, the increase in time to achieve Tmax suggests a better use were delayed absorption is desired. Overall, MEBF4 appeared to have the best pharmacokinetic properties of all tested formulations. Compared to all other formulations, MEBF4 demonstrated the best overall balance of pharmacokinetic parameters having both low T1/2 and Tmax values and high Cmax and AUC values, illustrating this formulation reaches maximum concentration in the shortest amount of time with the greatest amount of drug exposure over time. In addition, this data supports the proposition that the inclusion of digestion enhancers increase the extent and speed of absorption of drug in both blood and brain over a non-lipid-based comparator formulation of mebendazole.

[0288] To assess whether the addition of one or more digestion enhancers to glycerolipid admixture comprising mebendazole could improve the efficacy of this therapeutic compound, pharmacodynamic experiments will be conducted. Pharmacodynamic analysis will include experiments design to determine the efficacy of mebendazole using an appropriate animal model system, such as a glioblastoma multiforme xenograft model of cancer, designed to mimic an indication or disease state for which this therapeutic compound is being used to alleviate. Initial experiments will ascertain whether a beneficial effect is obtained from a formulation comprising mebendazole, followed by experiments designed to ascertain the dose-response relationship of mebendazole and the beneficial effect associated with this compound.

Example 5 Olaparib Formulation

[0289] Olaparib is a PARP inhibitor, inhibiting poly ADP ribose polymerase (PARP), an enzyme involved in DNA repair. It acts against cancers in people with hereditary BRCA1 or BRCA2 mutations, which include some ovarian, breast, and prostate cancers. Olaparib is indicated to treat breast cancer, ovarian cancer, fallopian tube cancer, peritoneal cancer, pancreatic cancer, and prostate cancer.

[0290] As a preliminary assessment, experiments were performed to assess whether olaparib, a poly ADP ribose polymerase (PARP) inhibitor, could be formulated in the absence of cholic acid. In one series of experiments, 1 g of MAISINE™ CC was heated to 130°C, and 55 mg olaparib was then added and stirred for at least 60 minutes. However, undissolved olaparib particles remained clearly visible at all times indicating that this compound failed to completely dissolve in the heated liquid fat. In another series of experiments, 1 g of GELUCIRE® 43/01 was heated to 130°C, and 55 mg olaparib was then added and stirred for at least 60 minutes. However, undissolved olaparib particles remained clearly visible at all times indicating that this compound failed to completely dissolve in heated GELUCIRE® 43/01. In third series of experiments, 0.5 g of MAISINE™ CC and 0.5 g of GELUCIRE® 43/01 were combined and heated to 130°C, and 55 mg Olaparib was then added and stirred for at least 60 minutes. However, undissolved olaparib particles remained clearly visible at all times indicating that this compound failed to completely dissolve in heated glycolipid mixture. These results show that olaparib remained insoluble in formulations containing only MAISINE™ CC, only GELUCIRE® 43/01. and an admixture of MAISINE™ CC and GELUCIRE® 43/01.

[0291] To assess whether the addition of one or more digestion enhancers could improve the solubility of olaparib when combined with glycerolipid components, pharmaceutical compositions comprising 6 mg/mL olaparib was formulated according to Tables 9 and 10 below. In one series of experiments, MAISINE™ CC and oleic acid were combined and heated to 130°C to produce a clear yellow solution. While maintaining the temperature at 130°C, olaparib was then added to this admixture under constant stirring until a clear solution was produced. Molten GELUCIRE® 43/01 (130°C) was added and stirred. The resulting composition produced a clear yellow solution which was then allowed to cool to room temperature (18-20°C) at which time stirring ceased and the composition was transferred to suitable containers where it solidified. Upon solidification, it was noted that the resulting composition contained crystalline particles indicating that olaparib precipitated out of solution as the temperature cooled.

[0292] In another series of experiments, MAISINE™ CC, the fatty acid component, and the cholic acid were combined and heated to 130°C to produce a clear yellow solution. While maintaining the temperature at 130°C, olaparib was then added to this admixture under constant stirring until a clear solution was produced. Molten GELUCIRE® 43/01 (130°C) was added and stirred. The resulting composition produced a clear yellow solution which was then allowed to cool to room temperature (18-20°C) at which time stirring ceased and the composition was transferred to suitable containers where it solidified. The resulting solid composition remelted at 50°C to give a clear yellow solution with no precipitate formation and again solidified on cooling. These results show that the presence of cholic acid was required to maintain olaparib in solution and prevent this compound from precipitating out of the glycolipid matrix.

Table 9. Olaparib Formulation

Component	OLPF1	OLPF2	OLPF3	OLPF4	OLPF5
MAISINE™ CC	1 g (26.2%)	1.5 g (24.8%)	1.5 g (24.1%)	1.5 g (23.4%)	—
GELUCIRE® 43/01	1 g (26.2%)	3.0 g (49.7%)	3.0 g (48.2%)	3.0 g (46.9%)	3.0 g (49.7%)
Oleic Acid	1 g (26.2%)	1.5 g (24.8%)	1.5 g (24.1%)	1.5 g (23.4%)	3.0 g (49.7%)
Cholic Acid	0.27 g (7.0%)	—	0.19 g (2.9%)	0.36 g (5.6%)	—
Olaparib	0.55 g (14.4%)	0.04 g (0.7%)	0.06 g (0.7%)	0.06 g (0.7%)	0.04 g (0.7%)

Table 10. Olaparib Formulation

Component	OLPF6	OLPF7	OLPF8	OLPF9	OLPF10
MAISINE™ CC	1.65 g (33.1%)	1.64 g (33.9%)	1.6 g (33.1%)	1.62 g (33.1%)	1.62 g (33.1%)
GELUCIRE® 43/01	1.65 g (33.1%)	1.64 g (33.9%)	1.6 g (33.1%)	1.62 g (33.1%)	1.62 g (33.1%)
Oleic Acid	1.65 g (33.1%)	1.64 g (33.9%)	1.6 g (33.1%)	1.62 g (33.1%)	1.62 g (33.1%)
Sodium Stearate	—	—	—	0.1 g (2.0%)	—
Sodium Oleate	—	—	—	—	0.1 g (2.0%)
Lecithin	—	0.34 g (0.7%)	—	—	—
Cholesterol	—	—	0.15 g (3.1%)	—	—
Olaparib	0.33 g (0.7%)	0.33 g (0.7%)	0.33 g (0.7%)	0.33 g (0.7%)	0.33 g (0.7%)

[0293] To assess whether the addition of one or more digestion enhancers to glycerolipid admixture comprising olaparib could improve the bioavailability of olaparib, the pharmacokinetics of these formulations were evaluated. Pharmacokinetic analysis will ascertain how an organism affects olaparib and will include experiments designed to determine the amount of olaparib to administer (dose), the peak concentration of

olaparib achieved after administration (Cmax), the time it takes olaparib to reach its Cmax (Tmax), the time required for the concentration of olaparib to reach half its Cmax (T1/2), the integral of the concentration-time curve between from time zero to the time of last quantifiable measurement taken during the experiments (AUClast), and the integral of the concentration-time curve from time zero to infinity (AUCinf). In addition, the pharmacodynamics of these formulations will be assessed to determine how olaparib affects an organism.

[0294] In one series of experiments, OLPF2, OLPF3, OLPF4, and OLPF5 were evaluated against Comparator Formulation 1 (CMF1), a suspension comprising 0.5% carboxymethyl cellulose and 0.7% of olaparib. Swiss CD1 male mice, each with an average weight of between 20 g to 25 g, were divided into five groups of six animals. Animals from each group were oral dosed by gavage as follows: Group 1 animals received a single dose of OLPF2 administered at 30 mg/kg; Group 2 animals received a single dose of OLPF3 administered at 30 mg/kg; Group 3 animals received a single dose of OLPF4 administered at 30 mg/kg; Group 4 animals received a single dose of OLPF5 administered at 30 mg/kg; and Group 5 animals received a single dose of CMF1 administered at 30 mg/kg. Samples of whole blood were taken just prior to administration, 0 h, and at the following 7 post-administration time points: 0.5 hr, 1 hr, 2 hr, 4 hr, 8 hr, 12 hr, and 24 hr. Samples of brain were taken at 2 post-administration time points (n=3 per time point): 2 hr and 24 hr. Collected whole blood samples were processed to obtain plasma by adding 100 µL of an internal standard solution (250 ng/ml tolbutamide in 0.1% formic acid in acetonitrile) and 20 µL of methanol to 20 µL of whole blood to precipitate blood proteins. After centrifugation at 13,000 rcf for 5 minutes, 50 µL of supernatant was transferred into 50 µL of 0.1% formic acid and stored until analyzed. Collected brain samples were processed by homogenizing 1 g of brain in 3 mL of PBS, and the resulting homogenate processed in the same manner as the blood samples. Processed blood and brain supernatants were sent for bioanalysis, utilizing UHPLC-MS/MS with a reverse phase C18 column (50 x 21 mm), 1.7 mm 50°C with a mobile phase gradient between: 0.1% formic acid in water and 0.1% formic acid in acetonitrile, a flow rate of 0.75 mL/min and injection volume 5 µL.

[0295] As shown in **FIG. 4**, **FIG. 5**, and Table 11, OLPF2, OLPF3, OLPF4, and OLPF5, olaparib formulated with lipids and with digestion enhancers, exhibited superior pharmacokinetic properties for olaparib in blood relative to CMF1. In comparison to CMF1 (non-lipid comparator formulation: 1) OLPF2 demonstrated lower clearance of olaparib over time as indicated by an AUC that was 1.5 times higher versus CMF1; 2) OLPF3 demonstrated lower clearance of olaparib over time as indicated by an AUC that was about 1.1 times higher versus CMF1; and 3) OLPF5 demonstrated substantially lower clearance of olaparib over time as indicated by an AUC that was about 1.6 times higher versus CMF1. Additionally, as shown in **FIG. 4** and **FIG. 5**, OLPF2, OLPF3, OLPF4, and OLPF5 each exhibited significantly increased exposure of Olaparib. For example, at 12 hours post-dose, mean olaparib concentrations in animals administered OLPF2, OLPF3, OLPF4, and OLPF5 were all over 10 ng/mL while that of CMF1 five-fold less (2 ng/mL). **FIG. 4** and **FIG. 5** also shows that while CMF1 demonstrated higher absorption levels of olaparib in blood, the concentration of Olaparib decreased rapidly in these animals relative to OLPF2, OLPF3, OLPF4, and OLPF5. Overall, OLPF2, OLPF3, OLPF4, and OLPF5 demonstrated significant pharmacokinetic improvements compared to the comparator formulation CMF1.

Table 11. Mean Pharmacokinetics Parameter of Blood Olaparib by Formulation					
Parameter	**OLPF2**	**OLPF3**	**OLPF4**	**OLPF5**	**CMF1**
T1/2 (hr)	NR	NR	NR	NR	NR
Tmax (hr)	0.25	0.25	1	0.5	0.5
Cmax (ng/mL)	445	351	254	517	889
AUClast (hr*ng/mL)	2230	1560	1350	2410	1480
AUCinf (hr*ng/mL)	2260	1600	1360	2410	1490
NR: No result, insufficient data to reliably determine pharmacokinetic parameter.					

[0296] As shown in Table 12, although the overall Olaparib absorption levels were not substantially higher in OLPF2, OLPF3, OLPF4, and OLPF5 relative to CMF1, the proportion of olaparib entering the brain, as shown by the brain to blood ratios, was equivalent to CMF1. For example, the Cmax value of OLPF2 in the blood was 445 ng/mL while in the brain maximum absorption level was 9.0 ng/mL, whereas the Cmax value of CMF1 in the blood was 889 ng/mL while in the brain maximum absorption level was 8.8 ng/mL. Thus, even though the overall amount of olaparib absorbed was higher in the blood using CMF1 versus OLPF2, the amount of olaparib absorbed in the brain using CMF1 was equivalent to that observed using OLPF2. Similar observations are seen with OLPF3, OLPF4, and OLPF5. One explanation for these finding is that the lipid-formulations of OLPF2, OLPF3, OLPF4, and OLPF5 slow down the clearance rate of Olaparib in the blood, and thus enabling olaparib remain in blood at levels high enough to facilitate its entry into the brain, *i.e.*, the lipid-based formulations of OLPF2, OLPF3, OLPF4, and OLPF5 protect olaparib so that this compound can be transported into the brain.

Table 12. Olaparib Blood and Brain Ratios of Mean Cmax by Formulation					
Sample	**OLPF2**	**OLPF3**	**OLPF4**	**OLPF5**	**CMF1**
Blood	445 ng/mL	351 ng/mL	254 ng/mL	517 ng/mL	889 ng/mL
Brain	9.0 ng/mL	4.4 ng/mL	2.54 ng/mL	4.8 ng/mL	8.8 ng/mL
Brain:Blood Ratio	0.02	0.01	0.01	0.01	0.01

[0297] Taken together, these results show that OLPF2, OLPF3, OLPF4, and OLPF5 exhibited significantly improved pharmacokinetic properties over CMF1 in terms of lower clearance levels, longer exposure drug exposure time, increased brain absorption levels. Compared to all other formulations, OLPF2 demonstrated the best overall balance of pharmacokinetic parameters having both low T1/2 and Tmax values and high AUC values, illustrating this formulation reaches maximum concentration in the shortest amount of time with the greatest amount of drug exposure over time. Overall, this data supports the proposition that the inclusion of digestion enhancers increase the extent and speed of absorption of drug in both blood and brain over a non-lipid-based comparator formulation of olaparib.

[0298] In another series of experiments, OLPF6, OLPF7, OLPF8, OLPF9, and OLPF10 were evaluated against Comparator Formulation 1 (CMF1), a suspension comprising 0.5% carboxymethyl cellulose and 0.7% of a commercially available Olaparib grounded into a fine powder. Swiss CD1 male mice, each with an average weight of between 20 g to 25 g, were divided into five groups of six animals. Animals from each group were oral dosed by gavage as follows: Group 1 animals received a single dose of OLPF6

administered at 30 mg/kg; Group 2 animals received a single dose of OLPF7 administered at 30 mg/kg; Group 3 animals received a single dose of OLPF8 administered at 30 mg/kg; Group 4 animals received a single dose of OLPF9 administered at 30 mg/kg; Group 5 animals received a single dose of OLPF10 administered at 30 mg/kg; and Group 6 animals received a single dose of CMF1 administered at 30 mg/kg. Samples of whole blood were taken just prior to administration, 0 h, and at the following 7 post-administration time points: 0.25 hr, 0.5 hr, 1 hr, 2 hr, 4 hr, 8 hr, 12 hr, and 24 hr. Collected whole blood samples were processed to obtain plasma by adding 100 µL of an internal standard solution (250 ng/ml **tolbutamide** in 0.1% formic acid in acetonitrile) and 20 µL of methanol to 20 µL of whole blood to precipitate blood proteins. After centrifugation at 13,000 rcf for 5 minutes, 50 µL of supernatant was transferred into 50 µL of 0.1% formic acid and stored until analyzed. Processed blood supernatants were sent for bioanalysis, utilizing UHPLC-MS/MS with a reverse phase C18 column (50 x 21 mm), 1.7 mm 50°C with a mobile phase gradient between: 0.1% formic acid in water and 0.1% formic acid in acetonitrile, a flow rate of 0.75 mL/min and injection volume 5 µL.

[0299] As shown in **FIG. 6** and Table 13, OLPF6, OLPF7, OLPF8, OLPF9, and OLPF10, olaparib formulated with lipids and with digestion enhancers, exhibited superior pharmacokinetic properties for olaparib in blood relative to CMF1 (compare data from Table 43 with CMF1 data from Table 41). In comparison to CMF1 (non-lipid comparator formulation: 1) OLPF6 demonstrated lower clearance of olaparib over time as indicated by an AUClast that was 2.3 times higher versus CMF1; 2) OLPF7 demonstrated lower clearance of olaparib over time as indicated by an AUClast that was about 1.7 times higher versus CMF1; 3) OLPF8 demonstrated substantially lower clearance of olaparib over time as indicated by an AUClast that was about 1.4 times higher versus CMF1; 4) OLPF9 demonstrated substantially lower clearance of olaparib over time as indicated by an AUClast that was about 1.6 times higher versus CMF1; and 5) OLPF10 demonstrated substantially lower clearance of olaparib over time as indicated by an AUClast that was about 1.9 times higher versus CMF1. In addition, when compared with the pharmacokinetic properties of OLPF5, OLPF6, OLPF7, and OLPF10 each demonstrated lower clearance of olaparib over time as indicated by an AUClast that was 1.1 to 1.4 times higher versus OLPF5 (compare data from Table 43 with OLBF5 data from Table 41). Both OLPF8 and OLPF9 had higher clearance of olaparib than OLPF5 but still significantly lower clearance of olaparib than CMF1. Overall, OLPF6, OLPF7, OLPF8, OLPF9, and OLPF10 demonstrated significant pharmacokinetic improvements compared to the comparator formulation CMF1. Compared to all other formulations, OLPF10 demonstrated the best overall balance of pharmacokinetic parameters having both lower Cmax values, which facilitates avoidance of toxicity side effects, and high AUC values, to ensure maximal efficacy.

Table 13. Mean Pharmacokinetics Parameter of Blood Olaparib by Formulation

Parameter	**OLPF6**	**OLPF7**	**OLPF8**	**OLPF9**	**OLPF10**
T1/2 (hr)	NR	NR	NR	NR	NR
Tmax (hr)	0.25	2	0.5	1	2
Cmax (ng/mL)	744	637	334	538	333
AUClast (hr*ng/mL)	3430	2540	1970	2340	2750
AUCinf (hr*ng/mL)	3460	2560	2000	2390	2840
NR: No result, insufficient data to reliably determine pharmacokinetic parameter.					

[0300] To assess whether the addition of one or more digestion enhancers to glycerolipid admixture comprising olaparib could improve the efficacy of this therapeutic compound, pharmacodynamic experiments will be conducted. Pharmacodynamic analysis will include experiments design to determine the efficacy of olaparib using an appropriate animal model system, such as an ovarian xenograft cancer model, designed to mimic an indication or disease state for which this therapeutic compound is being used to alleviate. Initial experiments will ascertain whether a beneficial effect is obtained from a formulation comprising olaparib, followed by experiments designed to ascertain the dose-response relationship of olaparib and the beneficial effect associated with this compound.

Example 6 Nintedanib Formulation

[0301] Nintedanib competitively inhibits both nRTKs and RTKs. nRTK targets of nintedanib include Lck, Lyn, and Src while RTK targets of nintedanib include platelet-derived growth factor receptor (PDGFR) α and β; fibroblast growth factor receptor (FGFR) 1, 2, and 3; vascular endothelial growth factor receptor (VEGFR) 1, 2, and 3; and FLT3. Nintedanib is an oral medication used for the treatment of idiopathic pulmonary fibrosis and some types of non-small-cell lung cancer.

[0302] As a preliminary assessment, experiments were performed to assess whether nintedanib could be formulated in the absence of cholic acid. In one series of experiments, 1 g of a liquid fat (MAISINE CC) was heated to 60°C, and 250 mg nintedanib was then added and stirred for at least 60 minutes. However, undissolved nintedanib particles remained clearly visible at all times indicating that this compound failed to completely dissolve in the heated liquid fat. To understand if additional lipid could affect solubility of nintedanib, a hard fat (GELUCIRE® 43/01) was added in a stepwise fashion of 0.5 g until the total amount reached 2 g. The mixture was maintaining at 60°C for the entire experiment and for each addition of GELUCIRE® 43/01, the mixture was stirred for at least 60 minutes before the next addition of GELUCIRE® 43/01 was added. However, nintedanib crystals still remained clearly visible. These results show that nintedanib remained insoluble in formulations containing only MAISINE™ CC and MAISINE™ CC/ GELUCIRE® 43/01 in ratios of 2:1 to 1:2.

[0303] In another series of experiments, 40 mg of nintedanib esylate was added to 1.0 g of a liquid fat (MAISINE CC) and one of the following combinations of digestion enhancers was added to the glycerolipid admixture: 1) 1.5 g oleic acid and 100 mg of sodium oleate; 2) 1.5 g oleic acid and 150 mg of sodium oleate; 3) 1.5 g oleic acid and 100 mg of sodium stearate; and 4) 1.5 g oleic acid and 150 mg of sodium stearate. After heating to about 130°C, the nintedanib esylate failed to incorporate into any of these four heated glycerolipid mixtures. In second series of experiments, 40 mg of nintedanib esylate was added to 1.0 g of a liquid fat (MAISINE CC) and one of the following combinations of digestion enhancers was added to the glycerolipid admixture: 1) 1.5 g oleic acid, 100 mg of sodium oleate, and 30 mg of cholic acid or 30 mg lecithin; 2) 1.5 g oleic acid, 150 mg of sodium oleate, and 30 mg of cholic acid or 30 mg lecithin; 3) 1.5 g oleic acid, 100 mg of sodium stearate, and 30 mg of cholic acid or 30 mg lecithin; and 4) 1.5 g oleic acid, 150 mg of sodium stearate, and 30 mg of cholic acid or 30 mg lecithin. Upon heating to about 130°C, all

four glycerolipid mixtures containing cholic acid or lecithin produced a clear yellowish green solution indicating that nintedanib esylate became soluble and incorporated into these mixtures. The subsequent addition of 1.5 g of a hard fat (GELUCIRE® 43/01) still resulted in clear yellowish green solutions. The resulting solid composition remelted at 40°C to give a clear yellowish green solution with no precipitate formation and again solidified on cooling.

[0304] To assess whether the addition of one or more digestion enhancers could improve the solubility of nintedanib when combined with glycerolipid components, a pharmaceutical composition comprising nintedanib was formulated according to Tables 14-45 below. Nintedanib (either organosulfonate salt or free base form) was added to MAISINE™ CC and the fatty acid component, and the surfactant component were then combined and heated to 130°C to produce a clear yellowish green solution. While maintaining the temperature at 60°C, GELUCIRE® 43/01 was added in a stepwise fashion until the final amount was reached. The resulting composition produced a clear yellowish green solution which was then allowed to cool to room temperature (18-20°C) at which time stirring ceased and the composition was transferred to suitable containers where it solidified. The resulting solid composition remelted at 40°C to give a clear yellowish green solution with no precipitate formation and again solidified on cooling.

Table 14. Nintedanib Formulation

Component	NINF1	NINF2	NINF3	NINF4	NINF5
MAISINE™ CC	1.0 g (24.0%)	1.0 g (23.7%)	1.0 g (23.4%)	1.0 g (23.7%)	1.0 g (24.0%)
GELUCIRE® 43/01	1.5 g (36.0%)	1.5 g (35.5%)	1.5 g (35.1%)	1.5 g (35.5%)	1.5 g (36.0%)
Oleic Acid	1.5 g (36.0%)	1.5 g (35.5%)	1.5 g (35.1%)	1.5 g (35.5%)	1.5 g (36.0%)
Cholic Acid	0.03 g (0.72%)	0.03 g (0.71%)	—	—	0.03 g (0.72%)
Deoxycholic Acid	—	—	—	—	—
Lecithin	—	—	0.03 g (0.7%)	0.03 g (0.71%)	—
Sodium Oleate	0.1 g (2.4%)	0.15 g (3.5%)	0.1 g (2.3%)	0.15 g (3.5%)	—
Sodium Stearate	—	—	0.1 g (2.3%)	—	0.1 g (2.4%)
Cholesterol	—	—	—	—	—
Nintedanib (salt)	0.04 g (0.96%)	0.04 g (0.95%)	0.04 g (0.94%)	0.04 g (0.95%)	0.04 g (0.96%)
Nintedanib (free base)	—	—	—	—	—

Table 15. Nintedanib Formulation

Component	NINF6	NINF7	NINF8	NINF9	NINF10
MAISINE™ CC	1.0 g (23.7%)	1.0 g (24.0%)	1.0 g (23.7%)	1.0 g (24.2 g)	1.0 g (24.4%)
GELUCIRE® 43/01	1.5 g (35.5%)	1.5 g (36.0%)	1.5 g (35.5%)	2.0 g (48.3%)	1.5 g (36.6%)
Oleic Acid	1.5 g (35.5%)	1.5 g (36.0%)	1.5 g (35.5%)	1.0 g (24.2 g)	1.5 g (36.6%)
Cholic Acid	0.03 g (0.71%)	—	—	0.04 g (1.0%)	0.06 g (1.5%)
Deoxycholic Acid	—	—	—	—	—
Lecithin	—	0.03 g (0.72%)	0.03 g (0.71%)	—	—
Sodium Oleate	—	—	—	—	—
Sodium Stearate	0.15 g (3.5%)	0.1 g (2.4%)	0.15 g (3.5%)	—	—
Cholesterol	—	—	—	—	—
Nintedanib (salt)	0.04 g (0.95%)	0.04 g (0.96%)	0.04 g (0.95%)	0.1 g (2.3%)	—
Nintedanib (free base)	—	—	—	—	0.04 g (0.98%)

Table 16. Nintedanib Formulation					
Component	**NINF11**	**NINF12**	**NINF13**	**NINF14**	**NINF15**
MAISINE™ CC	1.0 g (24.4%)	1.0 g (24.6%)	1.0 g (24.9%)	1.0 g (24.2%)	3.3 g (33.1%)
GELUCIRE® 43/01	1.5 g (36.6%)	1.5 g (36.9%)	1.5 g (37.4%)	1.5 g (36.2%)	3.3 g (33.1%)
Oleic Acid	1.5 g (36.6%)	1.5 g (36.9%)	1.5 g (37.4%)	1.5 g v	3.3 g (33.1%)
Cholic Acid	—	—	—	—	—
Deoxycholic Acid	0.06 g (1.5%)	—	—	—	—
Lecithin	—	0.03 g (0.74%)	—	—	—
Sodium Oleate	—	—	—	—	—
Sodium Stearate	—	—	0.01 g (0.25%)	—	—
Cholesterol	—	—	—	0.1 g (2.4%)	—
Nintedanib (salt)	—	—	—	—	—
Nintedanib (free base)	0.04 g (0.98%)	0.04 g (0.98%)	0.04 g (1.0%)	0.04 g (0.97%)	0.07 g (0.7%)

Table 17. Nintedanib Formulation				
Component	**NINF16**	**NINF17**	**NINF18**	
MAISINE™ CC	3.3 g (32.1%)	3.3 g (32.8%)	3.3 g (32.8%)	
GELUCIRE® 43/01	3.3 g (32.1%)	3.3 g (32.8%)	3.3 g (32.8%)	
Oleic Acid	3.3 g (32.1%)	3.3 g (32.8%)	3.3 g (32.8%)	
Cholic Acid	0.3 g (2.9%)	—	—	
Deoxycholic Acid	—	—	—	
Lecithin	—	—	—	
Sodium Oleate	—	0.1 g (0.99%)	—	
Sodium Stearate	—	—	0.1 g (0.99%)	
Cholesterol	—	—	—	
Nintedanib (salt)	—	0.07 g (0.7%)	0.07 g (0.7%)	
Nintedanib (free base)	0.07 g (0.68%)	—	—	

[0305] To assess whether the addition of one or more digestion enhancers to glycerolipid admixture comprising nintedanib could improve the bioavailability of nintedanib, the pharmacokinetics of these formulations will be assessed in a manner similar to the pharmacokinetic analysis described in Example 3 for curcumin, Example 4 for fenofibrate, or Example 5 for cannabidiol. Pharmacokinetic analysis will include experiments designed to determine the amount of nintedanib administer (dose), the peak concentration of nintedanib achieved after administration (Cmax), the time it takes nintedanib to reach its Cmax (Tmax), the time required for the concentration of nintedanib to reach half its Cmax (T1/2), the integral of the concentration-time curve between from time zero to the time of last quantifiable measurement taken during the experiments (AUClast), and the integral of the concentration-time curve from time zero to infinity (AUCinf).

[0306] To assess whether the addition of one or more digestion enhancers to glycerolipid admixture comprising nintedanib could improve the efficacy of this therapeutic compound, pharmacodynamic experiments will be conducted. Pharmacodynamic analysis will include experiments design to determine the efficacy of nintedanib using an appropriate animal model system, such as a bleomycin induced lung fibrosis model, designed to mimic an indication or disease state for idiopathic pulmonary fibrosis which this therapeutic compound is being used to alleviate. Initial experiments will ascertain whether a beneficial

effect is obtained from a formulation comprising nintedanib, followed by experiments designed to ascertain the dose-response relationship of nintedanib and the beneficial effect associated with this compound.

Example 7 Clinical Studies Demonstrate Efficacy of Therapeutic Compound

[0307] In the preclinical pharmacokinetic studies conducted, formulations had the best therapeutic compound exposure in blood based on pharmacokinetic data, pharmacodynamic data, or both will be selected to be developed for human clinical pharmacokinetic and pharmacodynamic studies. As the preclinical studies used a dose strength appropriate for the animal model, the appropriate dose for human clinical studies will be selected based on at least the following two factors. First, since the mean weigh of an animal is significantly lower than the mean weight of a human (about 75 kg), a higher dose strength will be required for the clinical studies due to the much higher weight of an average human. Additionally, if the therapeutic compound is already in use for humans, then the dose strength used in the clinical studies will bracket the unit dose strengths already in use. Consequently, accounting for the weight differential and to bracket these known oral doses, appropriate unit dose strengths of the therapeutic compound can be selected, and pharmaceutical compositions comprising the therapeutic compound prepared to assess human exposure for the therapeutic compound in subsequent clinical studies.

[0308] Phase I clinical studies will be conducted to evaluate the safety and systemic availability of a disclosed pharmaceutical composition comprising the therapeutic compound compared to a standard therapeutic compound formulation (STND) as the comparator. In a first clinical study, approximately 32 healthy volunteers will be recruited and equally divided into four groups. The first group will receive a single dose of the disclosed pharmaceutical composition comprising the therapeutic compound administered in an amount below the anticipated efficacious dose; the second group will receive a single dose of the disclosed pharmaceutical composition comprising the therapeutic compound administered in an amount at the anticipated efficacious dose; the third group will receive a single dose of the disclosed pharmaceutical composition comprising the therapeutic compound administered in an amount above the anticipated efficacious dose; and the fourth group will receive a single dose of STND (or placebo) administered in an effective amount currently approved by a regulatory agency. The pharmacokinetic results of this first clinical study are expected to demonstrate that administration of the disclosed pharmaceutical composition comprising the therapeutic compound is safe.

[0309] In a second Phase I clinical study, in approximately 32 healthy volunteers will be recruited and equally divided into five groups. The first group will receive multiple doses of the disclosed pharmaceutical composition comprising the therapeutic compound administered at one dose level; the second group will receive multiple doses of the disclosed pharmaceutical composition comprising the therapeutic compound administered at a second dose level ; the third group will receive multiple doses of the disclosed pharmaceutical composition comprising the therapeutic compound administered at a third dose level; the fourth group will receive multiple doses of STND (or placebo) administered at an effective dose currently approved by a regulatory agency. The results of this second clinical study are expected to demonstrate that administration of the disclosed pharmaceutical composition comprising the therapeutic compound is safe.

[0310] Phase II clinical studies will be conducted to demonstrate dose finding, safety, and the efficacy of the disclosed pharmaceutical composition comprising the therapeutic compound to protect patients. In this double-blind study, 120 to 150 patients will be recruited and equally divided into three groups. The first group will receive a dose level of the disclosed pharmaceutical composition comprising the therapeutic compound administered in an amount determined to be an efficacious dose in the Phase I clinical studies; the second group will receive two doses of the disclosed pharmaceutical composition comprising the therapeutic compound administered in an amount determined to be an efficacious dose in the Phase I clinical studies; and the third group will receive a single dose of STND/placebo administered in an effective amount currently approved by a regulatory agency. Patients will be followed for up for the appropriate amount of time. The results of this Phase II clinical study are expected to demonstrate that administration of the disclosed pharmaceutical composition comprising the therapeutic compound is safe and provide some evidence of effective.

[0311] Phase III clinical studies will be conducted in to demonstrate safety and efficacy of the disclosed pharmaceutical composition comprising the therapeutic compound to protect patients. In this double-blind study, approximately 300 patients will be recruited and equally divided into two groups. The first group will receive a dose level of the disclosed pharmaceutical composition comprising the therapeutic compound administered at an amount determined to be an efficacious dose in the Phase II clinical study; the second group will receive a dose level of STND/placebo administered in an effective amount currently approved by a regulatory agency. Patients will be followed for 12 weeks post-surgery. The results of this Phase III clinical study are expected to demonstrate that administration of the disclosed pharmaceutical composition comprising the therapeutic compound is safe and effective.

[0312] In closing, foregoing descriptions of embodiments of the present invention have been presented for the purposes of illustration and description. It is to be understood that, although aspects of the present invention are highlighted by referring to specific embodiments, one skilled in the art will readily appreciate that these described embodiments are only illustrative of the principles comprising the present invention and such examples are not limiting thereto. As such, the specific embodiments are not intended to be exhaustive or to limit the invention to the precise forms disclosed. The use of any and all examples or exemplary language (e.g., “such as”) provided herein is intended merely to better illuminate the present invention and does not pose a limitation on the scope of the invention otherwise claimed. No language in the present specification should be construed as indicating any non-claimed element essential to the practice of the invention.

[0313] In addition, groupings of alternative embodiments, elements, steps and/or limitations of the present invention are not to be construed as limitations. Each such grouping may be referred to and claimed individually or in any combination with other groupings disclosed herein. It is anticipated that one or more alternative embodiments, elements, steps and/or limitations of a grouping may be included in, or deleted from, the grouping for reasons of convenience and/or patentability. When any such inclusion or deletion occurs, the specification is deemed to contain the grouping as modified, thus fulfilling the written description

of all Markush groups used in the appended claims. In addition, all methods described herein can be performed in any suitable order unless otherwise indicated herein or otherwise clearly contradicted by context. Therefore, it should be understood that embodiments of the disclosed subject matter are in no way limited to a particular element, compound, composition, component, article, apparatus, methodology, use, protocol, step, and/or limitation described herein, unless expressly stated as such.

[0314] While aspects of the invention have been described with reference to at least one exemplary embodiment, it is to be clearly understood by those skilled in the art that the invention is not limited thereto. Furthermore, those of ordinary skill in the art will recognize that certain changes, modifications, permutations, alterations, additions, subtractions, and sub-combinations thereof can be made in accordance with the teachings herein without departing from the spirit of the present invention. It is intended that the following appended claims and claims hereafter introduced are interpreted to include all such changes, modifications, permutations, alterations, additions, subtractions, and sub-combinations as are within their true spirit and scope. Accordingly, the scope of the present invention is not to be limited to that precisely as shown and described by this specification. Rather, the scope of the invention is to be interpreted only in conjunction with the appended claims and it is made clear, here, that the inventor(s) believe that the claimed subject matter is the invention.

[0315] Certain embodiments of the present invention are described herein, including the best mode known to the inventors for conducting the invention. Of course, variations on these described embodiments will become apparent to those of ordinary skill in the art upon reading the foregoing description. The inventor expects skilled artisans to employ such variations as appropriate, and the inventors intend for the present invention to be practiced otherwise than specifically described herein. Accordingly, this invention includes all modifications and equivalents of the subject matter recited in the claims appended hereto as permitted by applicable law. Moreover, any combination of the above-described embodiments in all possible variations thereof is encompassed by the invention unless otherwise indicated herein or otherwise clearly contradicted by context.

[0316] The words, language, and terminology used in this specification is for the purpose of describing particular embodiments, elements, steps and/or limitations only and is not intended to limit the scope of the present invention, which is defined solely by the claims. In addition, such words, language, and terminology are to be understood not only in the sense of their commonly defined meanings, but to include by special definition in this specification structure, material or acts beyond the scope of the commonly defined meanings. Thus, if an element, step, or limitation can be understood in the context of this specification as including more than one meaning, then its use in a claim must be understood as being generic to all possible meanings supported by the specification and by the word itself.

[0317] The definitions and meanings of the elements, steps or limitations recited in a claim set forth below are, therefore, defined in this specification to include not only the combination of elements, steps or limitations which are literally set forth, but all equivalent structure, material or acts for performing substantially the same function in substantially the same way to obtain substantially the same result. In this

sense it is therefore contemplated that an equivalent substitution of two or more elements, steps and/or limitations may be made for any one of the elements, steps or limitations in a claim set forth below or that a single element, step, or limitation may be substituted for two or more elements, steps and/or limitations in such a claim. Although elements, steps or limitations may be described above as acting in certain combinations and even initially claimed as such, it is to be expressly understood that one or more elements, steps and/or limitations from a claimed combination can in some cases be excised from the combination and that the claimed combination may be directed to a sub-combination or variation of a sub-combination. As such, notwithstanding the fact that the elements, steps and/or limitations of a claim are set forth below in a certain combination, it must be expressly understood that the invention includes other combinations of fewer, more, or different elements, steps and/or limitations, which are disclosed in above combination even when not initially claimed in such combinations. Furthermore, insubstantial changes from the claimed subject matter as viewed by a person with ordinary skill in the art, now known or later devised, are expressly contemplated as being equivalently within the scope of the claims. Therefore, obvious substitutions now or later known to one with ordinary skill in the art are defined to be within the scope of the defined elements. Accordingly, the claims are thus to be understood to include what is specifically illustrated and described above, what is conceptually equivalent, what can be obviously substituted and also what essentially incorporates the essential idea of the invention.

[0318] Unless otherwise indicated, all numbers expressing a characteristic, item, quantity, parameter, property, term, and so forth used in the present specification and claims are to be understood as being modified in all instances by the term "about." As used herein, the term "about" means that the characteristic, item, quantity, parameter, property, or term so qualified encompasses a range of plus or minus ten percent above and below the value of the stated characteristic, item, quantity, parameter, property, or term. Similarly, as used herein, unless indicated to the contrary, the term "substantially" is a term of degree intended to indicate an approximation of the characteristic, item, quantity, parameter, property, or term so qualified, encompassing a range that can be understood and construed by those of ordinary skill in the art. Accordingly, unless indicated to the contrary, the numerical parameters set forth in the specification and attached claims are approximations that may vary. At the very least, and not as an attempt to limit the application of the doctrine of equivalents to the scope of the claims, each numerical indication should at least be construed in light of the number of reported significant digits and by applying ordinary rounding techniques.

[0319] Notwithstanding that the numerical ranges and values setting forth the broad scope of the invention are approximations, the numerical ranges and values set forth in the specific examples are reported as precisely as possible. Any numerical range or value, however, inherently contains certain errors necessarily resulting from the standard deviation found in their respective testing measurements. Unless the context dictates the contrary, all ranges set forth herein should be interpreted as being inclusive of their endpoints and open-ended ranges should be interpreted to include only commercially practical values. Recitation of numerical ranges of values herein is merely intended to serve as a shorthand method of referring individually to each separate numerical value falling within the range. Unless otherwise indicated herein, each individual value of a numerical range is incorporated into the present specification as if it were

individually recited herein. Similarly, all lists of values should be considered as inclusive of intermediate values unless the context indicates the contrary.

[0320] Use of the terms "may" or "can" in reference to an embodiment or aspect of an embodiment also carries with it the alternative meaning of "may not" or "cannot." As such, if the present specification discloses that an embodiment or an aspect of an embodiment may be or can be included as part of the inventive subject matter, then the negative limitation or exclusionary proviso is also explicitly meant, meaning that an embodiment or an aspect of an embodiment may not be or cannot be included as part of the inventive subject matter. In a comparable manner, use of the term "optionally" in reference to an embodiment or aspect of an embodiment means that such embodiment or aspect of the embodiment may be included as part of the inventive subject matter or may not be included as part of the inventive subject matter. Whether such a negative limitation or exclusionary proviso applies will be based on whether the negative limitation or exclusionary proviso is recited in the claimed subject matter.

[0321] The terms "a," "an," "the" and similar references used in the context of describing the present invention (especially in the context of the following claims) are to be construed to cover both the singular and the plural, unless otherwise indicated herein or clearly contradicted by context. Further, ordinal indicators – such as, e.g., "first," "second," "third," etc. – for identified elements are used to distinguish between the elements, and do not indicate or imply a required or limited number of such elements, and do not indicate a particular position or order of such elements unless otherwise specifically stated.

[0322] When used in the claims, whether as filed or added per amendment, the open-ended transitional term "comprising", variations thereof such as, e.g., "comprise" and "comprises", and equivalent open-ended transitional phrases thereof like "including", "containing" and "having", encompass all the expressly recited elements, limitations, steps, integers, and/or features alone or in combination with unrecited subject matter; the named elements, limitations, steps, integers, and/or features are essential, but other unnamed elements, limitations, steps, integers, and/or features may be added and still form a construct within the scope of the claim. Specific embodiments disclosed herein may be further limited in the claims using the closed-ended transitional phrases "consisting of" or "consisting essentially of" (or variations thereof such as, e.g., "consist of", "consists of", "consist essentially of", and "consists essentially of") in lieu of or as an amendment for "comprising." When used in the claims, whether as filed or added per amendment, the closed-ended transitional phrase "consisting of" excludes any element, limitation, step, integer, or feature not expressly recited in the claims. The closed-ended transitional phrase "consisting essentially of" limits the scope of a claim to the expressly recited elements, limitations, steps, integers, and/or features and any other elements, limitations, steps, integers, and/or features that do not materially affect the basic and novel characteristic(s) of the claimed subject matter. Thus, the meaning of the open-ended transitional phrase "comprising" is being defined as encompassing all the specifically recited elements, limitations, steps and/or features as well as any optional, additional unspecified ones. The meaning of the closed-ended transitional phrase "consisting of" is being defined as only including those elements, limitations, steps, integers, and/or features specifically recited in the claim, whereas the meaning of the closed-ended transitional phrase "consisting essentially of" is being defined as only including those elements, limitations, steps, integers,

and/or features specifically recited in the claim and those elements, limitations, steps, integers, and/or features that do not materially affect the basic and novel characteristic(s) of the claimed subject matter. Therefore, the open-ended transitional phrase "comprising" (and equivalent open-ended transitional phrases thereof) includes within its meaning, as a limiting case, claimed subject matter specified by the closed-ended transitional phrases "consisting of" or "consisting essentially of." As such, the embodiments described herein or so claimed with the phrase "comprising" expressly and unambiguously provide description, enablement, and support for the phrases "consisting essentially of" and "consisting of."

[0323] It should be apparent to those skilled in the art that many more modifications besides those already described are possible without departing from the inventive concepts herein. The inventive subject matter, therefore, is not to be restricted except in the spirit of the appended claims. Moreover, in interpreting both the specification and the claims, all terms should be interpreted in the broadest possible manner consistent with the context. In particular, the terms "comprises" and "comprising" should be interpreted as referring to elements, components, or steps in a non-exclusive manner, indicating that the referenced elements, components, or steps may be present, or utilized, or combined with other elements, components, or steps that are not expressly referenced. Where the specification claims refers to at least one of something selected from the group consisting of A, B, C .... and N, the text should be interpreted as requiring only one element from the group, not A plus N, or B plus N, etc.

[0324] Any claims intended to be treated under 35 U.S.C. §112(f) will begin with the words "means for," but use of the term "for" in any other context is not intended to invoke treatment under 35 U.S.C. §112(f). Accordingly, Applicant reserves the right to pursue additional claims after filing this application, in either this application or in a continuing application.

[0325] It should be understood that the methods and the order in which the respective elements of each method are performed are purely exemplary. Depending on the implementation, they may be performed in any order or in parallel, unless indicated otherwise in the present disclosure.

[0326] Finally, all patents, patent publications, and other references cited and identified in the present specification are individually and expressly incorporated herein by reference in their entirety to the same extent as if each individual publication or patent application were specifically and individually indicated to be incorporated by reference. These publications are provided solely for their disclosure prior to the filing date of the present application. The reference to any prior art in this specification is not, and should not be taken as, an acknowledgement or any form of suggestion that the prior art forms part of the common general knowledge from any country. In addition, where a definition or use of a term in an incorporated reference is inconsistent or contrary to the definition of that term provided herein, the definition of that term provided herein applies and the definition of that term in the reference does not apply. Lastly, nothing in this regard is or should be construed as an admission that the inventors are not entitled to antedate such disclosure by virtue of prior invention or for any other reason. All statements as to the date or representation as to the contents of these documents are based on the information available to the applicant and do not constitute any admission as to the correctness of the dates or contents of these documents.

CLAIMS

1. A pharmaceutical composition, the pharmaceutical composition comprising a) one or more therapeutic compounds, b) one or more glycerolipids, and c) one or more digestion enhancers.
2. The pharmaceutical composition of claim 1, wherein the one or more therapeutic compounds comprise a protein kinase inhibitor or a PARP inhibitor.
3. The pharmaceutical composition of claim 1 or 2, wherein the one or more therapeutic compounds are in an amount of about 0.05% to about 1%, about 0.05% to about 2.5%, about 0.05% to about 5%, about 0.05% to about 7.5%, about 0.05% to about 10%, about 0.05% to about 12.5%, about 0.05% to about 15%, about 0.05% to about 17.5%, about 0.05% to about 20%, about 0.05% to about 22.5%, about 0.05% to about 25%, about 0.05% to about 30%, about 0.05% to about 40%, about 0.05% to about 50%, about 0.1% to about 1%, about 0.1% to about 2.5%, about 0.1% to about 5%, about 0.1% to about 7.5%, about 0.1% to about 10%, about 0.1% to about 12.5%, about 0.1% to about 15%, about 0.1% to about 17.5%, about 0.1% to about 20%, about 0.1% to about 22.5%, about 0.1% to about 25%, about 0.1% to about 30%, about 0.1% to about 40%, about 0.1% to about 50%, about 1% to about 2.5%, about 1% to about 5%, about 1% to about 7.5%, about 1% to about 10%, about 1% to about 12.5%, about 1% to about 15%, about 1% to about 17.5%, about 1% to about 20%, about 1% to about 22.5%, about 1% to about 25%, about 1% to about 30%, about 1% to about 40%, about 1% to about 50%, about 5% to about 10%, about 5% to about 20%, about 5% to about 30%, about 5% to about 40%, about 5% to about 50%, about 10% to about 20%, about 10% to about 30%, about 10% to about 40%, about 10% to about 50%, about 20% to about 30%, about 20% to about 40%, about 20% to about 50%, about 30% to about 40%, about 30% to about 50%, or about 40% to about 50% by weight.
4. The pharmaceutical composition of any one of claims 1-3, wherein the one or more therapeutic compounds are in an amount of about 10 mg/mL to about 25 mg/mL, about 10 mg/mL to about 50 mg/mL, about 10 mg/mL to about 75 mg/mL, about 10 mg/mL to about 100 mg/mL, about 10 mg/mL to about 125 mg/mL, about 10 mg/mL to about 150 mg/mL, about 10 mg/mL to about 200 mg/mL, about 10 mg/mL to about 250 mg/mL, about 10 mg/mL to about 300 mg/mL, about 25 mg/mL to about 50 mg/mL, about 25 mg/mL to about 75 mg/mL, about 25 mg/mL to about 100 mg/mL, about 25 mg/mL to about 125 mg/mL, about 25 mg/mL to about 150 mg/mL, about 25 mg/mL to about 200 mg/mL, about 25 mg/mL to about 250 mg/mL, about 25 mg/mL to about 300 mg/mL, about 50 mg/mL to about 100 mg/mL, about 50 mg/mL to about 150 mg/mL, about 50 mg/mL to about 200 mg/mL, about 50 mg/mL to about 250 mg/mL, about 50 mg/mL to about 300 mg/mL, about 75 mg/mL to about 100 mg/mL, about 75 mg/mL to about 150 mg/mL, about 75 mg/mL to about 200 mg/mL, about 75 mg/mL to about 250 mg/mL, about 75 mg/mL to about 300 mg/mL, about 100 mg/mL to about 150 mg/mL, about 100 mg/mL to about 200 mg/mL, about 100 mg/mL to about 250 mg/mL, about 100 mg/mL to about 300 mg/mL, about 125 mg/mL to about 150 mg/mL, about 125 mg/mL to about 200 mg/mL, about 125 mg/mL to about 250 mg/mL, about 125 mg/mL to about 300 mg/mL, about 150 mg/mL to about 200 mg/mL, about 150 mg/mL to about 250 mg/mL, about 150 mg/mL to about 300 mg/mL, about 200 mg/mL to about 250 mg/mL, about 200 mg/mL to about 300 mg/mL, or about 250 mg/mL to about 300 mg/mL.
5. The pharmaceutical composition of any one of claims 1-4, wherein the one or more glycerolipids are in an amount of at least 40% by weight, at least 45% by weight, at least 50% by weight, at least 55% by

weight, at least 60% by weight, at least 65% by weight, at least 70% by weight, at least 75% by weight, at least 80% by weight, at least 85% by weight, at least 90% by weight, or at least 95% by weight and/or at most 40% by weight, at most 45% by weight, at most 50% by weight, at most 55% by weight, at most 60% by weight, at most 65% by weight, at most 70% by weight, at most 75% by weight, at most 80% by weight, at most 85% by weight, at most 90% by weight, or at most 95% by weight or between about 40% to about 50%, about 40% to about 55%, about 40% to about 60%, about 40% to about 65%, about 40% to about 70%, about 40% to about 75%, about 40% to about 80%, about 40% to about 85%, about 40% to about 90%, about 40% to about 95%, about 45% to about 55%, about 45% to about 60%, about 45% to about 65%, about 45% to about 70%, about 45% to about 75%, about 45% to about 80%, about 45% to about 85%, about 45% to about 90%, about 45% to about 95%, about 50% to about 55%, about 50% to about 60%, about 50% to about 65%, about 50% to about 70%, about 50% to about 75%, about 50% to about 80%, about 50% to about 85%, about 50% to about 90%, about 50% to about 95%, about 55% to about 60%, about 55% to about 65%, about 55% to about 70%, about 55% to about 75%, about 55% to about 80%, about 55% to about 85%, about 55% to about 90%, about 55% to about 95%, about 60% to about 65%, about 60% to about 70%, about 60% to about 75%, about 60% to about 80%, about 60% to about 85%, about 60% to about 90%, about 60% to about 95%, about 65% to about 70%, about 65% to about 75%, about 65% to about 80%, about 65% to about 85%, about 65% to about 90%, about 65% to about 95%, about 70% to about 75%, about 70% to about 80%, about 70% to about 85%, about 70% to about 90%, about 70% to about 95%, about 75% to about 80%, about 75% to about 85%, about 75% to about 90%, about 75% to about 95%, about 80% to about 85%, about 80% to about 90%, about 80% to about 95%, about 85% to about 90%, about 85% to about 95%, or about 90% to about 95% by weight.

6. The pharmaceutical composition of any one of claims 1-5, wherein the one or more glycerolipids comprises one or more hard fats and one or more liquid fats.
7. The pharmaceutical composition of claim 6, wherein the one or more hard fats include one or more triglycerides.
8. The pharmaceutical composition of claim 7, wherein the one or more triglycerides include a mixture of saturated C_{10}-C_{18} triglycerides, a mixture of saturated C_{10}-C_{20} triglycerides, a mixture of saturated C_{10}-C_{22} triglycerides, a mixture of saturated C_{10}-C_{24} triglycerides, a mixture of saturated C_{12}-C_{18} triglycerides, a mixture of saturated C_{12}-C_{20} triglycerides, a mixture of saturated C_{12}-C_{22} triglycerides, a mixture of saturated C_{12}-C_{24} triglycerides, a mixture of saturated C_{14}-C_{18} triglycerides, a mixture of saturated C_{14}-C_{20} triglycerides, a mixture of saturated C_{14}-C_{22} triglycerides, a mixture of saturated C_{14}-C_{24} triglycerides, a mixture of saturated C_{16}-C_{18} triglycerides, a mixture of saturated C_{16}-C_{20} triglycerides, a mixture of saturated C_{16}-C_{22} triglycerides, a mixture of saturated C_{16}-C_{24} triglycerides, a mixture of saturated C_{18}-C_{20} triglycerides, a mixture of saturated C_{18}-C_{22} triglycerides, a mixture of saturated C_{18}-C_{24} triglycerides, a mixture of saturated C_{20}-C_{22} triglycerides, or a mixture of saturated C_{22}-C_{24} triglycerides.
9. The pharmaceutical composition of claim 7, wherein the one or more triglycerides include a mixture of unsaturated C_{10}-C_{18} triglycerides, a mixture of unsaturated C_{10}-C_{20} triglycerides, a mixture of unsaturated C_{10}-C_{22} triglycerides, a mixture of unsaturated C_{10}-C_{24} triglycerides, a mixture of unsaturated C_{12}-C_{18} triglycerides, a mixture of unsaturated C_{12}-C_{20} triglycerides, a mixture of

unsaturated C_{12}-C_{22} triglycerides, a mixture of unsaturated C_{12}-C_{24} triglycerides, a mixture of unsaturated C_{14}-C_{18} triglycerides, a mixture of unsaturated C_{14}-C_{20} triglycerides, a mixture of unsaturated C_{14}-C_{22} triglycerides, a mixture of unsaturated C_{14}-C_{24} triglycerides, a mixture of unsaturated C_{16}-C_{18} triglycerides, a mixture of unsaturated C_{16}-C_{20} triglycerides, a mixture of unsaturated C_{16}-C_{22} triglycerides, a mixture of unsaturated C_{16}-C_{24} triglycerides, a mixture of unsaturated C_{18}-C_{20} triglycerides, a mixture of unsaturated C_{18}-C_{22} triglycerides, a mixture of unsaturated C_{18}-C_{24} triglycerides, a mixture of unsaturated C_{20}-C_{22} triglycerides, or a mixture of unsaturated C_{22}-C_{24} triglycerides.

10. The pharmaceutical composition of claim 7, wherein the one or more triglycerides include a mixture of saturated and unsaturated C_{10}-C_{18} triglycerides, a mixture of saturated and unsaturated C_{10}-C_{20} triglycerides, a mixture of saturated and unsaturated C_{10}-C_{22} triglycerides, a mixture of saturated and unsaturated C_{10}-C_{24} triglycerides, a mixture of saturated and unsaturated C_{12}-C_{18} triglycerides, a mixture of saturated and unsaturated C_{12}-C_{20} triglycerides, a mixture of saturated and unsaturated C_{12}-C_{22} triglycerides, a mixture of saturated and unsaturated C_{12}-C_{24} triglycerides, a mixture of saturated and unsaturated C_{14}-C_{18} triglycerides, a mixture of saturated and unsaturated C_{14}-C_{20} triglycerides, a mixture of saturated and unsaturated C_{14}-C_{22} triglycerides, a mixture of saturated and unsaturated C_{14}-C_{24} triglycerides, a mixture of saturated and unsaturated C_{16}-C_{18} triglycerides, a mixture of saturated and unsaturated C_{16}-C_{20} triglycerides, a mixture of saturated and unsaturated C_{16}-C_{22} triglycerides, a mixture of saturated and unsaturated C_{16}-C_{24} triglycerides, a mixture of saturated and unsaturated C_{18}-C_{20} triglycerides, a mixture of saturated and unsaturated C_{18}-C_{22} triglycerides, a mixture of saturated and unsaturated C_{18}-C_{24} triglycerides, a mixture of saturated and unsaturated C_{20}-C_{22} triglycerides, or a mixture of saturated and unsaturated C_{22}-C_{24} triglycerides.

11. The pharmaceutical composition of any one of claims 7-10, wherein the one or more hard fats are in an amount of at least 10% by weight, at least 15% by weight, at least 20% by weight, at least 25% by weight, at least 30% by weight, at least 35% by weight, at least 40% by weight, at least 45% by weight, at least 50% by weight, at least 55% by weight, at least 60% by weight, and/or at most 10% by weight, at most 15% by weight, at most 20% by weight, at most 25% by weight, at most 30% by weight, at most 35% by weight, at most 40% by weight, at most 45% by weight, at most 50% by weight, at most 55% by weight, at most 60% by weight, or between about 10% to about 20%, about 10% to about 25%, about 10% to about 30%, about 10% to about 35%, about 10% to about 40%, about 10% to about 45%, about 10% to about 50%, about 10% to about 55%, about 10% to about 60%, about 15% to about 20%, about 15% to about 25%, about 15% to about 30%, about 15% to about 35%, about 15% to about 40%, about 15% to about 45%, about 15% to about 50%, about 15% to about 55%, about 15% to about 60%, about 20% to about 25%, about 20% to about 30%, about 20% to about 35%, about 20% to about 40%, about 20% to about 45%, about 20% to about 50%, about 20% to about 55%, about 20% to about 60%, about 25% to about 30%, about 25% to about 35%, about 25% to about 40%, about 25% to about 45%, about 25% to about 50%, about 25% to about 55%, about 25% to about 60%, about 30% to about 35%, about 30% to about 40%, about 30% to about 45%, about 30% to about 50%, about 30% to about 55%, about 30% to about 60%, about 35% to about 40%, about 35% to about 45%, about 35% to about 50%, about 35% to about 55%, about 35% to about 60%, about 40% to about 45%, about 40% to about 50%, about 40% to about 55%, about 40% to about 60%, about 45% to about 50%, about 45% to about 55%,

about 45% to about 60%, about 50% to about 55%, about 50% to about 60%, about 55% to about 60% by weight.

12. The pharmaceutical composition of any one of claims 6-11, wherein the one or more liquid fats include one or more partially hydrolyzed glycerolipids, one or more monoglycerides, or a combination thereof.
13. The pharmaceutical composition of claim 12, wherein the one or more partially hydrolyzed glycerolipids comprise a mixture of mono-, di- and triglycerides.
14. The pharmaceutical composition of claim 12, wherein the one or more partially hydrolyzed glycerolipids comprise a mixture of unsaturated C_{10}-C_{18} monoglycerides, C_{10}-C_{18} diglycerides, and C_{10}-C_{18} triglycerides, a mixture of unsaturated C_{10}-C_{20} monoglycerides, C_{10}-C_{20} diglycerides, and C_{10}-C_{20} triglycerides, a mixture of unsaturated C_{10}-C_{22} monoglycerides, C_{10}-C_{22} diglycerides, and C_{10}-C_{22} triglycerides, a mixture of unsaturated C_{10}-C_{24} monoglycerides, C_{10}-C_{24} diglycerides, and C_{10}-C_{24} triglycerides, a mixture of unsaturated C_{12}-C_{18} monoglycerides, C_{12}-C_{18} diglycerides, and C_{12}-C_{18} triglycerides, a mixture of unsaturated C_{12}-C_{20} monoglycerides, C_{12}-C_{20} diglycerides, and C_{12}-C_{20} triglycerides, a mixture of unsaturated C_{12}-C_{22} monoglycerides, C_{12}-C_{22} diglycerides, and C_{12}-C_{22} triglycerides, a mixture of unsaturated C_{12}-C_{24} monoglycerides, C_{12}-C_{24} diglycerides, and C_{12}-C_{24} triglycerides, a mixture of unsaturated C_{14}-C_{18} monoglycerides, C_{14}-C_{18} diglycerides, and C_{14}-C_{18} triglycerides, a mixture of unsaturated C_{14}-C_{20} monoglycerides, C_{14}-C_{20} diglycerides, and C_{14}-C_{20} triglycerides, a mixture of unsaturated C_{14}-C_{22} monoglycerides, C_{14}-C_{22} diglycerides, and C_{14}-C_{22} triglycerides, a mixture of unsaturated C_{14}-C_{24} monoglycerides, C_{14}-C_{24} diglycerides, and C_{14}-C_{24} triglycerides, a mixture of unsaturated C_{16}-C_{18} monoglycerides, C_{16}-C_{18} diglycerides, and C_{16}-C_{18} triglycerides, a mixture of unsaturated C_{16}-C_{20} monoglycerides, C_{16}-C_{20} diglycerides, and C_{16}-C_{20} triglycerides, a mixture of unsaturated C_{16}-C_{22} monoglycerides, C_{16}-C_{22} diglycerides, and C_{16}-C_{22} triglycerides, a mixture of unsaturated C_{16}-C_{24} monoglycerides, C_{16}-C_{24} diglycerides, and C_{16}-C_{24} triglycerides, a mixture of unsaturated C_{18}-C_{20} monoglycerides, C_{18}-C_{20} diglycerides, and C_{18}-C_{20} triglycerides, a mixture of unsaturated C_{18}-C_{22} monoglycerides, C_{18}-C_{22} diglycerides, and C_{18}-C_{22} triglycerides, a mixture of unsaturated C_{18}-C_{24} monoglycerides, C_{18}-C_{24} diglycerides, and C_{18}-C_{24} triglycerides, a mixture of unsaturated C_{20}-C_{22} monoglycerides, C_{20}-C_{22} diglycerides, C_{20}-C_{22} triglycerides, or a mixture of unsaturated C_{22}-C_{24} monoglycerides, C_{22}-C_{24} diglycerides, and C_{22}-C_{24} triglycerides.
15. The pharmaceutical composition of claim 12, wherein the one or more partially hydrolyzed glycerolipids comprise a mixture of saturated C_{10}-C_{18} monoglycerides, C_{10}-C_{18} diglycerides, and C_{10}-C_{18} triglycerides, a mixture of saturated C_{10}-C_{20} monoglycerides, C_{10}-C_{20} diglycerides, and C_{10}-C_{20} triglycerides, a mixture of saturated C_{10}-C_{22} monoglycerides, C_{10}-C_{22} diglycerides, and C_{10}-C_{22} triglycerides, a mixture of saturated C_{10}-C_{24} monoglycerides, C_{10}-C_{24} diglycerides, and C_{10}-C_{24} triglycerides, a mixture of saturated C_{12}-C_{18} monoglycerides, C_{12}-C_{18} diglycerides, and C_{12}-C_{18} triglycerides, a mixture of saturated C_{12}-C_{20} monoglycerides, C_{12}-C_{20} diglycerides, and C_{12}-C_{20} triglycerides, a mixture of saturated C_{12}-C_{22} monoglycerides, C_{12}-C_{22} diglycerides, and C_{12}-C_{22} triglycerides, a mixture of saturated C_{12}-C_{24} monoglycerides, C_{12}-C_{24} diglycerides, and C_{12}-C_{24} triglycerides, a mixture of saturated C_{14}-C_{18} monoglycerides, C_{14}-C_{18} diglycerides, and C_{14}-C_{18} triglycerides, a mixture of saturated C_{14}-C_{20} monoglycerides, C_{14}-C_{20} diglycerides, and C_{14}-C_{20} triglycerides, a mixture of saturated C_{14}-C_{22} monoglycerides, C_{14}-C_{22} diglycerides, and C_{14}-C_{22}

triglycerides, a mixture of saturated C_{14}-C_{24} monoglycerides, C_{14}-C_{24} diglycerides, and C_{14}-C_{24} triglycerides, a mixture of saturated C_{16}-C_{18} monoglycerides, C_{16}-C_{18} diglycerides, and C_{16}-C_{18} triglycerides, a mixture of saturated C_{16}-C_{20} monoglycerides, C_{16}-C_{20} diglycerides, and C_{16}-C_{20} triglycerides, a mixture of saturated C_{16}-C_{22} monoglycerides, C_{16}-C_{22} diglycerides, and C_{16}-C_{22} triglycerides, a mixture of saturated C_{16}-C_{24} monoglycerides, C_{16}-C_{24} diglycerides, and C_{16}-C_{24} triglycerides, a mixture of saturated C_{18}-C_{20} monoglycerides, C_{18}-C_{20} diglycerides, and C_{18}-C_{20} triglycerides, a mixture of saturated C_{18}-C_{22} monoglycerides, C_{18}-C_{22} diglycerides, and C_{18}-C_{22} triglycerides, a mixture of saturated C_{18}-C_{24} monoglycerides, C_{18}-C_{24} diglycerides, and C_{18}-C_{24} triglycerides, a mixture of saturated C_{20}-C_{22} monoglycerides, C_{20}-C_{22} diglycerides, C_{20}-C_{22} triglycerides, or a mixture of saturated C_{22}-C_{24} monoglycerides, C_{22}-C_{24} diglycerides, and C_{22}-C_{24} triglycerides.

16. The pharmaceutical composition of claim 12, wherein the one or more partially hydrolyzed glycerolipids comprise a mixture of saturated and unsaturated C_{10}-C_{18} monoglycerides, C_{10}-C_{18} diglycerides, and C_{10}-C_{18} triglycerides, a mixture of saturated and unsaturated C_{10}-C_{20} monoglycerides, C_{10}-C_{20} diglycerides, and C_{10}-C_{20} triglycerides, a mixture of saturated and unsaturated C_{10}-C_{22} monoglycerides, C_{10}-C_{22} diglycerides, and C_{10}-C_{22} triglycerides, a mixture of saturated and unsaturated C_{10}-C_{24} monoglycerides, C_{10}-C_{24} diglycerides, and C_{10}-C_{24} triglycerides, a mixture of saturated and unsaturated C_{12}-C_{18} monoglycerides, C_{12}-C_{18} diglycerides, and C_{12}-C_{18} triglycerides, a mixture of saturated and unsaturated C_{12}-C_{20} monoglycerides, C_{12}-C_{20} diglycerides, and C_{12}-C_{20} triglycerides, a mixture of saturated and unsaturated C_{12}-C_{22} monoglycerides, C_{12}-C_{22} diglycerides, and C_{12}-C_{22} triglycerides, a mixture of saturated and unsaturated C_{12}-C_{24} monoglycerides, C_{12}-C_{24} diglycerides, and C_{12}-C_{24} triglycerides, a mixture of saturated and unsaturated C_{14}-C_{18} monoglycerides, C_{14}-C_{18} diglycerides, and C_{14}-C_{18} triglycerides, a mixture of saturated and unsaturated C_{14}-C_{20} monoglycerides, C_{14}-C_{20} diglycerides, and C_{14}-C_{20} triglycerides, a mixture of saturated and unsaturated C_{14}-C_{22} monoglycerides, C_{14}-C_{22} diglycerides, and C_{14}-C_{22} triglycerides, a mixture of saturated and unsaturated C_{14}-C_{24} monoglycerides, C_{14}-C_{24} diglycerides, and C_{14}-C_{24} triglycerides, a mixture of saturated and unsaturated C_{16}-C_{18} monoglycerides, C_{16}-C_{18} diglycerides, and C_{16}-C_{18} triglycerides, a mixture of saturated and unsaturated C_{16}-C_{20} monoglycerides, C_{16}-C_{20} diglycerides, and C_{16}-C_{20} triglycerides, a mixture of saturated and unsaturated C_{16}-C_{22} monoglycerides, C_{16}-C_{22} diglycerides, and C_{16}-C_{22} triglycerides, a mixture of saturated and unsaturated C_{16}-C_{24} monoglycerides, C_{16}-C_{24} diglycerides, and C_{16}-C_{24} triglycerides, a mixture of saturated and unsaturated C_{18}-C_{20} monoglycerides, C_{18}-C_{20} diglycerides, and C_{18}-C_{20} triglycerides, a mixture of saturated and unsaturated C_{18}-C_{22} monoglycerides, C_{18}-C_{22} diglycerides, and C_{18}-C_{22} triglycerides, a mixture of saturated and unsaturated C_{18}-C_{24} monoglycerides, C_{18}-C_{24} diglycerides, and C_{18}-C_{24} triglycerides, a mixture of saturated and unsaturated C_{20}-C_{22} monoglycerides, C_{20}-C_{22} diglycerides, C_{20}-C_{22} triglycerides, or a mixture of saturated and unsaturated C_{22}-C_{24} monoglycerides, C_{22}-C_{24} diglycerides, and C_{22}-C_{24} triglycerides.

17. The pharmaceutical composition of any one or claims 12-16, wherein the one or more partially hydrolyzed glycerolipids are in an amount of at least 10% by weight, at least 15% by weight, at least 20% by weight, at least 25% by weight, at least 30% by weight, at least 35% by weight, at least 40% by weight, at least 45% by weight, at least 50% by weight, at least 55% by weight, at least 60% by weight, and/or at most 10% by weight, at most 15% by weight, at most 20% by weight, at most 25% by weight, at most 30% by weight, at most 35% by weight, at most 40% by weight, at most 45% by weight,

at most 50% by weight, at most 55% by weight, at most 60% by weight, or between about 10% to about 20%, about 10% to about 25%, about 10% to about 30%, about 10% to about 35%, about 10% to about 40%, about 10% to about 45%, about 10% to about 50%, about 10% to about 55%, about 10% to about 60%, about 15% to about 20%, about 15% to about 25%, about 15% to about 30%, about 15% to about 35%, about 15% to about 40%, about 15% to about 45%, about 15% to about 50%, about 15% to about 55%, about 15% to about 60%, about 20% to about 25%, about 20% to about 30%, about 20% to about 35%, about 20% to about 40%, about 20% to about 45%, about 20% to about 50%, about 20% to about 55%, about 20% to about 60%, about 25% to about 30%, about 25% to about 35%, about 25% to about 40%, about 25% to about 45%, about 25% to about 50%, about 25% to about 55%, about 25% to about 60%, about 30% to about 35%, about 30% to about 40%, about 30% to about 45%, about 30% to about 50%, about 30% to about 55%, about 30% to about 60%, about 35% to about 40%, about 35% to about 45%, about 35% to about 50%, about 35% to about 55%, about 35% to about 60%, about 40% to about 45%, about 40% to about 50%, about 40% to about 55%, about 40% to about 60%, about 45% to about 50%, about 45% to about 55%, about 45% to about 60%, about 50% to about 55%, about 50% to about 60%, about 55% to about 60% by weight.

18. The pharmaceutical composition of any one of claims 12-17, wherein the one or more monoglycerides comprise unsaturated C_{10}-C_{18} monoglycerides, unsaturated C_{10}-C_{20} monoglycerides, unsaturated C_{10}-C_{22} monoglycerides, unsaturated C_{10}-C_{24} monoglycerides, unsaturated C_{12}-C_{18} monoglycerides, unsaturated C_{12}-C_{20} monoglycerides, unsaturated C_{12}-C_{22} monoglycerides, unsaturated C_{12}-C_{24} monoglycerides, unsaturated C_{14}-C_{18} monoglycerides, unsaturated C_{14}-C_{20} monoglycerides, unsaturated C_{14}-C_{22} monoglycerides, unsaturated C_{14}-C_{24} monoglycerides, unsaturated C_{16}-C_{18} monoglycerides, unsaturated C_{16}-C_{20} monoglycerides, unsaturated C_{16}-C_{22} monoglycerides, unsaturated C_{16}-C_{24} monoglycerides, unsaturated C_{18}-C_{20} monoglycerides, unsaturated C_{18}-C_{22} monoglycerides, unsaturated C_{18}-C_{24} monoglycerides, unsaturated C_{20}-C_{22} monoglycerides, or unsaturated C_{22}-C_{24} monoglycerides.
19. The pharmaceutical composition of any one of claims 12-17, wherein the one or more monoglycerides comprise saturated C_{10}-C_{18} monoglycerides, saturated C_{10}-C_{20} monoglycerides, saturated C_{10}-C_{22} monoglycerides, saturated C_{10}-C_{24} monoglycerides, saturated C_{12}-C_{18} monoglycerides, saturated C_{12}-C_{20} monoglycerides, saturated C_{12}-C_{22} monoglycerides, saturated C_{12}-C_{24} monoglycerides, saturated C_{14}-C_{18} monoglycerides, saturated C_{14}-C_{20} monoglycerides, saturated C_{14}-C_{22} monoglycerides, saturated C_{14}-C_{24} monoglycerides, saturated C_{16}-C_{18} monoglycerides, saturated C_{16}-C_{20} monoglycerides, saturated C_{16}-C_{22} monoglycerides, saturated C_{16}-C_{24} monoglycerides, saturated C_{18}-C_{20} monoglycerides, saturated C_{18}-C_{22} monoglycerides, saturated C_{18}-C_{24} monoglycerides, saturated C_{20}-C_{22} monoglycerides, or saturated C_{22}-C_{24} monoglycerides.
20. The pharmaceutical composition of any one of claims 12-17, wherein the one or more monoglycerides comprise a mixture of saturated and unsaturated C_{10}-C_{18} monoglycerides, a mixture of saturated and unsaturated C_{10}-C_{20} monoglycerides, a mixture of saturated and unsaturated C_{10}-C_{22} monoglycerides, a mixture of saturated and unsaturated C_{10}-C_{24} monoglycerides, a mixture of saturated and unsaturated C_{12}-C_{18} monoglycerides, a mixture of saturated and unsaturated C_{12}-C_{20} monoglycerides, a mixture of saturated and unsaturated C_{12}-C_{22} monoglycerides, a mixture of saturated and unsaturated C_{12}-C_{24} monoglycerides, a mixture of saturated and unsaturated C_{14}-C_{18} monoglycerides, a mixture of saturated

and unsaturated C_{14}-C_{20} monoglycerides, a mixture of saturated and unsaturated C_{14}-C_{22} monoglycerides, a mixture of saturated and unsaturated C_{14}-C_{24} monoglycerides, a mixture of saturated and unsaturated C_{16}-C_{18} monoglycerides, a mixture of saturated and unsaturated C_{16}-C_{20} monoglycerides, a mixture of saturated and unsaturated C_{16}-C_{22} monoglycerides, a mixture of saturated and unsaturated C_{16}-C_{24} monoglycerides, a mixture of saturated and unsaturated C_{18}-C_{20} monoglycerides, a mixture of saturated and unsaturated C_{18}-C_{22} monoglycerides, a mixture of saturated and unsaturated C_{18}-C_{24} monoglycerides, a mixture of saturated and unsaturated C_{20}-C_{22} monoglycerides, or a mixture of saturated and unsaturated C_{22}-C_{24} monoglycerides.

21. The pharmaceutical composition of any one or claims 18-20, wherein the one or more monoglycerides are in an amount of at least 10% by weight, at least 15% by weight, at least 20% by weight, at least 25% by weight, at least 30% by weight, at least 35% by weight, at least 40% by weight, at least 45% by weight, at least 50% by weight, at least 55% by weight, at least 60% by weight, and/or at most 10% by weight, at most 15% by weight, at most 20% by weight, at most 25% by weight, at most 30% by weight, at most 35% by weight, at most 40% by weight, at most 45% by weight, at most 50% by weight, at most 55% by weight, at most 60% by weight, or between about 10% to about 20%, about 10% to about 25%, about 10% to about 30%, about 10% to about 35%, about 10% to about 40%, about 10% to about 45%, about 10% to about 50%, about 10% to about 55%, about 10% to about 60%, about 15% to about 20%, about 15% to about 25%, about 15% to about 30%, about 15% to about 35%, about 15% to about 40%, about 15% to about 45%, about 15% to about 50%, about 15% to about 55%, about 15% to about 60%, about 20% to about 25%, about 20% to about 30%, about 20% to about 35%, about 20% to about 40%, about 20% to about 45%, about 20% to about 50%, about 20% to about 55%, about 20% to about 60%, about 25% to about 30%, about 25% to about 35%, about 25% to about 40%, about 25% to about 45%, about 25% to about 50%, about 25% to about 55%, about 25% to about 60%, about 30% to about 35%, about 30% to about 40%, about 30% to about 45%, about 30% to about 50%, about 30% to about 55%, about 30% to about 60%, about 35% to about 40%, about 35% to about 45%, about 35% to about 50%, about 35% to about 55%, about 35% to about 60%, about 40% to about 45%, about 40% to about 50%, about 40% to about 55%, about 40% to about 60%, about 45% to about 50%, about 45% to about 55%, about 45% to about 60%, about 50% to about 55%, about 50% to about 60%, about 55% to about 60% by weight.
22. The pharmaceutical composition of any one or claims 6-21, wherein the one or more hard fats and the one or more liquid fats are in a hard fat to liquid fat ratio of about 5:1 to about 4:1, about 5:1 to about 3:1, about 5:1 to about 2:1, about 5:1 to about 1:1, about 4:1 to about 3:1, about 4:1 to about 2:1, about 4:1 to about 1:1, about 3:1 to about 2:1, about 3:1 to about 1:1, or about 2:1 to about 1:1.
23. The pharmaceutical composition of any one or claims 6-21, wherein the one or more hard fats and the one or more liquid fats are in a hard fat to liquid fat ratio of about 1:5 to about 1:4, about 1:5 to about 1:3, about 1:5 to about 1:2, about 1:5 to about 1:1, about 1:4 to about 1:3, about 1:4 to about 1:2, about 1:4 to about 1:1, about 1:3 to about 1:2, about 1:3 to about 1:1, or about 1:2 to about 1:1.
24. The pharmaceutical composition of any one of claims 1-23, wherein the one or more digestion enhancers are in an amount of at least 1% by weight, at least 2.5% by weight, at least 5% by weight, at least 7.5% by weight, at least 10 % by weight, at least 12.5% by weight, at least 15 % by weight, at least 17.5% by weight, at least 20% by weight, at least 22.5% by weight, at least 25% by weight, at

least 30% by weight, at least 35% by weight, at least 40% by weight, at least 45% by weight, at least 50% by weight, at least 55% by weight, at least 60% by weight, at least 65% by weight, at least 70% by weight, at least 75% by weight, at least 75% by weight and/or at most 1% by weight, at most 2.5% by weight, at most 5% by weight, at most 7.5% by weight, at most 10 % by weight, at most 12.5% by weight, at most 15 % by weight, at most 17.5% by weight, at most 20% by weight, at most 22.5% by weight, at most 25% by weight, at most 30% by weight, at most 35% by weight, at most 40% by weight, at most 45% by weight, at most 50% by weight, at most 55% by weight, at most 60% by weight, at most 65% by weight, at most 70% by weight, at most 75% by weight, or at most 80% by weight, or between about 1% to about 2.5% by weight, about 1% to about 5% by weight, about 1% to about 10% by weight, about 1% to about 15% by weight, about 1% to about 20% by weight, about 1% to about 25% by weight, about 2.5% to about 5% by weight, about 2.5% to about 10% by weight, about 2.5% to about 15% by weight, about 2.5% to about 20% by weight, about 2.5% to about 25% by weight, about 5% to about 10% by weight, about 5% to about 15% by weight, about 5% to about 20% by weight, about 5% to about 25% by weight, about 10% to about 20%, about 10% to about 25%, about 10% to about 30%, about 10% to about 35%, about 10% to about 40%, about 10% to about 45%, about 10% to about 50%, about 10% to about 55%, about 10% to about 60%, about 10% to about 65%, about 10% to about 70%, about 15% to about 20%, about 15% to about 25%, about 15% to about 30%, about 15% to about 35%, about 15% to about 40%, about 15% to about 45%, about 15% to about 50%, about 15% to about 55%, about 15% to about 60%, about 15% to about 65%, about 15% to about 70%, about 20% to about 25%, about 20% to about 30%, about 20% to about 35%, about 20% to about 40%, about 20% to about 45%, about 20% to about 50%, about 20% to about 55%, about 20% to about 60%, about 20% to about 65%, about 20% to about 70%, about 25% to about 30%, about 25% to about 35%, about 25% to about 40%, about 25% to about 45%, about 25% to about 50%, about 25% to about 55%, about 25% to about 60%, about 25% to about 65%, about 25% to about 70%, about 30% to about 35%, about 30% to about 40%, about 30% to about 45%, about 30% to about 50%, about 30% to about 55%, about 30% to about 60%, about 30% to about 65%, about 30% to about 70%, about 35% to about 40%, about 35% to about 45%, about 35% to about 50%, about 35% to about 55%, about 35% to about 60%, about 35% to about 65%, about 35% to about 70%, about 40% to about 45%, about 40% to about 50%, about 40% to about 55%, about 40% to about 60%, about 40% to about 65%, about 40% to about 70%, about 40% to about 75%, about 40% to about 80%, about 45% to about 50%, about 45% to about 55%, about 45% to about 60%, about 45% to about 65%, about 45% to about 70%, about 45% to about 75%, about 45% to about 80%, about 50% to about 55%, about 50% to about 60%, about 50% to about 65%, about 50% to about 70%, about 50% to about 75%, about 50% to about 80%, about 55% to about 60%, about 55% to about 65%, about 55% to about 70%, about 55% to about 75%, about 55% to about 80%, about 60% to about 65%, about 60% to about 70%, about 60% to about 75%, about 60% to about 80%, about 65% to about 70% by weight, about 65% to about 75%, about 65% to about 80%,. about 70% to about 75%, about 70% to about 80%, or about 75% to about 80% by weight.

25. The pharmaceutical composition of claim 24, wherein the one or more digestion enhancers include one or more bile acids, one or more phospholipids, one or more free C_{14-24} fatty acids, one or more free C_{14-24} fatty acid surfactants, or any combination thereof.

26. The pharmaceutical composition of claim 25, wherein the one or more bile acids includes cholic acid, chenodeoxycholic acid, dafachronic acid, deoxycholic acid, glycocholic acid, glycohenodeoxycholic acid, lithocholic acid, taurochenodeoxycholic acid, taurocholic acid, any stereoisomer thereof, and any combination thereof.
27. The pharmaceutical composition of claim 25 or 26, wherein the one or more bile acids are in an amount of at least 0.1% by weight, at least 0.5% by weight, at least 1.0% by weight, at least 1.5% by weight, at least 2.0% by weight, at least 2.5% by weight, at least 3.0% by weight, at least 3.5% by weight, at least 4.0% by weight, at least 4.5% by weight, at least 5.0% by weight, at least 5.5% by weight, at least 6.0% by weight, at least 6.5% by weight, at least 7.0% by weight, at least 7.5% by weight, at least 8.0% by weight, at least 8.5% by weight, at least 9.0% by weight, at least 9.5% by weight, or at least 10.0% by weight and/or at most 0.1% by weight, at most 0.5% by weight, at most 1.0% by weight, at most 1.5% by weight, at most 2.0% by weight, at most 2.5% by weight, at most 3.0% by weight, at most 3.5% by weight, at most 4.0% by weight, at most 4.5% by weight, at most 5.0% by weight, at most 5.5% by weight, at most 6.0% by weight, at most 6.5% by weight, at most 7.0% by weight, at most 7.5% by weight, at most 8.0% by weight, at most 8.5% by weight, at most 9.0% by weight, at most 9.5% by weight, or at most 10.0% by weight or between about 0.1% to about 0.5%, about 0.1% to about 1.0%, about 0.1% to about 2.0%, about 0.1% to about 3.0%, about 0.1% to about 4.0%, about 0.1% to about 5.0%, about 0.1% to about 6.0%, about 0.1% to about 7.0%, about 0.1% to about 8.0%, about 0.1% to about 9.0%, about 0.1% to about 10.0%, about 0.5% to about 1.0%, about 0.5% to about 2.0%, about 0.5% to about 3.0%, about 0.5% to about 4.0%, about 0.5% to about 5.0%, about 0.5% to about 6.0%, about 0.5% to about 7.0%, about 0.5% to about 8.0%, about 0.5% to about 9.0%, about 0.5% to about 10.0%, about 1.0% to about 2.0%, about 1.0% to about 3.0%, about 1.0% to about 4.0%, about 1.0% to about 5.0%, about 1.0% to about 6.0%, about 1.0% to about 7.0%, about 1.0% to about 8.0%, about 1.0% to about 9.0%, about 1.0% to about 10.0%, about 2.0% to about 3.0%, about 2.0% to about 4.0%, about 2.0% to about 5.0%, about 2.0% to about 6.0%, about 2.0% to about 7.0%, about 2.0% to about 8.0%, about 2.0% to about 9.0%, about 2.0% to about 10.0%, about 3.0% to about 4.0%, about 3.0% to about 5.0%, about 3.0% to about 6.0%, about 3.0% to about 7.0%, about 3.0% to about 8.0%, about 3.0% to about 9.0%, about 3.0% to about 10.0%, about 4.0% to about 5.0%, about 4.0% to about 6.0%, about 4.0% to about 7.0%, about 4.0% to about 8.0%, about 4.0% to about 9.0%, about 4.0% to about 10.0%, about 5.0% to about 6.0%, about 5.0% to about 7.0%, about 5.0% to about 8.0%, about 5.0% to about 9.0%, about 5.0% to about 10.0%, about 6.0% to about 7.0%, about 6.0% to about 8.0%, about 6.0% to about 9.0%, about 6.0% to about 10.0%, about 7.0% to about 8.0%, about 7.0% to about 9.0%, about 7.0% to about 10.0%, about 8.0% to about 9.0%, about 8.0% to about 10.0%, or about 9.0% to about 10.0% by weight.
28. The pharmaceutical composition of any one of claims 25-27, wherein the one or more phospholipids include one or more phosphoglycerides, one or more phosphosphingolipids, one or more lecithins, or any combination thereof.
29. The pharmaceutical composition of claim 28, wherein the one or more phosphoglycerides include a phosphatidic acid (phosphatidate) (PA), a phosphatidylethanolamine (PE), a phosphatidylcholine (PC), a phosphatidylserine (PS), a cardiolipin, a phosphoinositide, or any combination thereof.

30. The pharmaceutical composition of claim 28, wherein the one or more phosphosphingolipids include phosphatidylethanolamine (PE), phosphatidylcholine (PC), ceramide phosphorylethanolamine (Cer-PE), ceramide phosphorylcholine (Cer-PC), or any combination thereof.
31. The pharmaceutical composition of claim 25 or 28-30, wherein the one or more phospholipids are in an amount of at least 0.1% by weight, at least 0.5% by weight, at least 1.0% by weight, at least 1.5% by weight, at least 2.0% by weight, at least 2.5% by weight, at least 3.0% by weight, at least 3.5% by weight, at least 4.0% by weight, at least 4.5% by weight, at least 5.0% by weight, at least 5.5% by weight, at least 6.0% by weight, at least 6.5% by weight, at least 7.0% by weight, at least 7.5% by weight, at least 8.0% by weight, at least 8.5% by weight, at least 9.0% by weight, at least 9.5% by weight, or at least 10.0% by weight and/or at most 0.1% by weight, at most 0.5% by weight, at most 1.0% by weight, at most 1.5% by weight, at most 2.0% by weight, at most 2.5% by weight, at most 3.0% by weight, at most 3.5% by weight, at most 4.0% by weight, at most 4.5% by weight, at most 5.0% by weight, at most 5.5% by weight, at most 6.0% by weight, at most 6.5% by weight, at most 7.0% by weight, at most 7.5% by weight, at most 8.0% by weight, at most 8.5% by weight, at most 9.0% by weight, at most 9.5% by weight, or at most 10.0% by weight or between about 0.1% to about 0.5%, about 0.1% to about 1.0%, about 0.1% to about 2.0%, about 0.1% to about 3.0%, about 0.1% to about 4.0%, about 0.1% to about 5.0%, about 0.1% to about 6.0%, about 0.1% to about 7.0%, about 0.1% to about 8.0%, about 0.1% to about 9.0%, about 0.1% to about 10.0%, about 0.5% to about 1.0%, about 0.5% to about 2.0%, about 0.5% to about 3.0%, about 0.5% to about 4.0%, about 0.5% to about 5.0%, about 0.5% to about 6.0%, about 0.5% to about 7.0%, about 0.5% to about 8.0%, about 0.5% to about 9.0%, about 0.5% to about 10.0%, about 1.0% to about 2.0%, about 1.0% to about 3.0%, about 1.0% to about 4.0%, about 1.0% to about 5.0%, about 1.0% to about 6.0%, about 1.0% to about 7.0%, about 1.0% to about 8.0%, about 1.0% to about 9.0%, about 1.0% to about 10.0%, about 2.0% to about 3.0%, about 2.0% to about 4.0%, about 2.0% to about 5.0%, about 2.0% to about 6.0%, about 2.0% to about 7.0%, about 2.0% to about 8.0%, about 2.0% to about 9.0%, about 2.0% to about 10.0%, about 3.0% to about 4.0%, about 3.0% to about 5.0%, about 3.0% to about 6.0%, about 3.0% to about 7.0%, about 3.0% to about 8.0%, about 3.0% to about 9.0%, about 3.0% to about 10.0%, about 4.0% to about 5.0%, about 4.0% to about 6.0%, about 4.0% to about 7.0%, about 4.0% to about 8.0%, about 4.0% to about 9.0%, about 4.0% to about 10.0%, about 5.0% to about 6.0%, about 5.0% to about 7.0%, about 5.0% to about 8.0%, about 5.0% to about 9.0%, about 5.0% to about 10.0%, about 6.0% to about 7.0%, about 6.0% to about 8.0%, about 6.0% to about 9.0%, about 6.0% to about 10.0%, about 7.0% to about 8.0%, about 7.0% to about 9.0%, about 7.0% to about 10.0%, about 8.0% to about 9.0%, about 8.0% to about 10.0%, or about 9.0% to about 10.0% by weight.
32. The pharmaceutical composition of any one of claims 25-31, wherein the one or more free C_{14-24} fatty acids include unsaturated free C_{14}-C_{16} fatty acids, unsaturated free C_{14}-C_{18} fatty acids, unsaturated free C_{14}-C_{20} fatty acids, unsaturated free C_{14}-C_{22} fatty acids, unsaturated free C_{14}-C_{24} fatty acids, unsaturated free C_{16}-C_{18} fatty acids, unsaturated free C_{16}-C_{20} fatty acids, unsaturated free C_{16}-C_{22} fatty acids, unsaturated free C_{16}-C_{24} fatty acids, unsaturated free C_{18}-C_{20} fatty acids, unsaturated free C_{18}-C_{22} fatty acids, unsaturated free C_{18}-C_{24} fatty acids, unsaturated free C_{20}-C_{22} fatty acids, or unsaturated free C_{22}-C_{24} fatty acids.

33. The pharmaceutical composition of any one of claims 25-31, wherein the one or more free C_{14-24} fatty acids include ω−3 unsaturated free C_{18}-C_{22} fatty acids, ω−5 unsaturated free C_{18}-C_{22} fatty acids, ω−6 unsaturated free C_{18}-C_{22} fatty acids, ω−7 unsaturated free C_{18}-C_{22} fatty acids, ω−9 unsaturated free C_{18}-C_{22} fatty acids, ω−10 unsaturated free C_{18}-C_{22} fatty acids, ω−11 unsaturated free C_{18}-C_{22} fatty acids, or ω−12 unsaturated free C_{18}-C_{22} fatty acids.
34. The pharmaceutical composition of any one of claims 25-31, wherein the one or more free C_{14-24} fatty acids include saturated free C_{14}-C_{16} fatty acids, saturated free C_{14}-C_{18} fatty acids, saturated free C_{14}-C_{20} fatty acids, saturated free C_{14}-C_{22} fatty acids, saturated free C_{14}-C_{24} fatty acids, saturated free C_{16}-C_{18} fatty acids, saturated free C_{16}-C_{20} fatty acids, saturated free C_{16}-C_{22} fatty acids, saturated free C_{16}-C_{24} fatty acids, saturated free C_{18}-C_{20} fatty acids, saturated free C_{18}-C_{22} fatty acids, saturated free C_{18}-C_{24} fatty acids, saturated free C_{20}-C_{22} fatty acids, or saturated free C_{22}-C_{24} fatty acids.
35. The pharmaceutical composition of any one of claims 25-31, wherein the one or more free C_{14-24} fatty acids include a mixture of saturated and unsaturated free C_{14}-C_{16} fatty acids, a mixture of saturated and unsaturated free C_{14}-C_{18} fatty acids, a mixture of saturated and unsaturated free C_{14}-C_{20} fatty acids, a mixture of saturated and unsaturated free C_{14}-C_{22} fatty acids, a mixture of saturated and unsaturated free C_{14}-C_{24} fatty acids, a mixture of saturated and unsaturated free C_{16}-C_{18} fatty acids, a mixture of saturated and unsaturated free C_{16}-C_{20} fatty acids, a mixture of saturated and unsaturated free C_{16}-C_{22} fatty acids, a mixture of saturated and unsaturated free C_{16}-C_{24} fatty acids, a mixture of saturated and unsaturated free C_{18}-C_{20} fatty acids, a mixture of saturated and unsaturated free C_{18}-C_{22} fatty acids, a mixture of saturated and unsaturated free C_{18}-C_{24} fatty acids, a mixture of saturated and unsaturated free C_{20}-C_{22} fatty acids, or a mixture of saturated and unsaturated free C_{22}-C_{24} fatty acids.
36. The pharmaceutical composition of any one of claims 25-31, wherein the one or more free C_{14-24} fatty acids include palmitic acid (hexadecenoic acid), palmitolinolenic acid, palmitidonic acid, palmitovaccenic acid, palmitoleic acid, sapienic acid, 4-Hexadecenoic acid, stearic acid (octadecenoic acid), α-linolenic acid, stearidonic acid, α-eleostearic acid, β-eleostearic acid, pumicic acid, 7,10,13-octadecatrienoic acid, 12-octadecenoic acid, linoleic acid, linolelaidic acid. γ-linolenic acid, calendic acid, pinolenic acid, vaccinic acid, ruminic acid, oleic acid, elaidic acid, petroselinic acid, arachidic acid (eicosanoic acid), dihomo-α-linolenic acid, eicosic acidtraenoic acid, eicosapentaenoic acid, 9,12,15-eicosatrienoic acid, β-eicosic acidtraenoic acid, dihomo-linoleic acid, dihomo-γ-linolenic acid, arachidonic acid, paullinic acid, 7,10,13-eicosatrienoic acid, gondoic acid, 8,11-eicosadienoic acid, meadic acid, gadoleic acid, 8-eicosenoic acid, behenic acid (docosanoic acid), clupanodonic acid, docosahexaenoic acid, adrenic acid, osbondic acid, erucic acid, lignoceric acid (tetracosanic acid), 9,12,15,18,21-Tetracosapentaenoic acid, 6,9,12,15,18,21-Tetracosahexaenoic acid, and nervonic acid.
37. The pharmaceutical composition of any one of claims 25-36, wherein the one or more free C_{14-24} fatty acids are in an amount of at least 1% by weight, at least 2.5% by weight, at least 5% by weight, at least 7.5% by weight, at least 10 % by weight, at least 12.5% by weight, at least 15 % by weight, at least 17.5% by weight, at least 20% by weight, at least 22.5% by weight, at least 25% by weight, at least 30% by weight, at least 35% by weight, at least 40% by weight, at least 50% by weight, at least 60% by weight, at least 70% by weight, at least 75% by weight and/or at most 1% by weight, at most 2.5% by weight, at most 5% by weight, at most 7.5% by weight, at most 10 % by weight, at most 12.5% by

weight, at most 15 % by weight, at most 17.5% by weight, at most 20% by weight, at most 22.5% by weight, at most 25% by weight, at most 30% by weight, at most 35% by weight, at most 40% by weight, at most 50% by weight, at most 60% by weight, at most 70% by weight, at most 75% by weight or between about 1% to about 2.5% by weight, about 1% to about 5% by weight, about 1% to about 10% by weight, about 1% to about 15% by weight, about 1% to about 20% by weight, about 1% to about 25% by weight, about 2.5% to about 5% by weight, about 2.5% to about 10% by weight, about 2.5% to about 15% by weight, about 2.5% to about 20% by weight, about 2.5% to about 25% by weight, about 2.5% to about 30% by weight, about 5% to about 10% by weight, about 5% to about 15% by weight, about 5% to about 20% by weight, about 5% to about 25% by weight, about 5% to about 30% by weight, about 10% to about 15% by weight, about 10% to about 20% by weight, about 10% to about 25% by weight, about 10% to about 30% by weight, about 10% to about 40% by weight, about 10% to about 45% by weight, about 10% to about 50% by weight, about 10% to about 60% by weight, about 10% to about 70% by weight, about 15% to about 20% by weight, about 15% to about 25% by weight, about 15% to about 30% by weight, about 15% to about 40% by weight, about 15% to about 45% by weight, about 15% to about 50% by weight, about 15% to about 60% by weight, about 15% to about 70% by weight, about 20% to about 25% by weight, about 20% to about 30% by weight, about 20% to about 40% by weight, about 20% to about 45% by weight, about 20% to about 50% by weight, about 20% to about 60% by weight, about 20% to about 70% by weight, about 30% to about 40% by weight, about 30% to about 50% by weight, about 30% to about 60% by weight, about 30% to about 70% by weight, about 30% to about 75% by weight, about 35% to about 40% by weight, about 35% to about 50% by weight, about 35% to about 60% by weight, about 35% to about 70% by weight, about 35% to about 75% by weight, about 40% to about 50% by weight, about 40% to about 60% by weight, about 40% to about 70% by weight, about 40% to about 75% by weight, about 50% to about 60% by weight, about 50% to about 70% by weight, or about 60% to about 70% by weight.

38. The pharmaceutical composition of any one of claims 25-37, wherein the one or more free C_{14-24} fatty acid surfactants include unsaturated free C_{14}-C_{16} fatty acid surfactants, unsaturated free C_{14}-C_{18} fatty acid surfactants, unsaturated free C_{14}-C_{20} fatty acid surfactants, unsaturated free C_{14}-C_{22} fatty acid surfactants, unsaturated free C_{14}-C_{24} fatty acid surfactants, unsaturated free C_{16}-C_{18} fatty acid surfactants, unsaturated free C_{16}-C_{20} fatty acid surfactants, unsaturated free C_{16}-C_{22} fatty acid surfactants, unsaturated free C_{16}-C_{24} fatty acid surfactants, unsaturated free C_{18}-C_{20} fatty acid surfactants, unsaturated free C_{18}-C_{22} fatty acid surfactants, unsaturated free C_{18}-C_{24} fatty acid surfactants, unsaturated free C_{20}-C_{22} fatty acid surfactants, or unsaturated free C_{22}-C_{24} fatty acid surfactants.

39. The pharmaceutical composition of any one of claims 25-37, wherein the one or more free C_{14-24} fatty acid surfactants include ω−3 unsaturated free C_{18}-C_{22} fatty acid surfactants, ω−5 unsaturated free C_{18}-C_{22} fatty acid surfactants, ω−6 unsaturated free C_{18}-C_{22} fatty acid surfactants, ω−7 unsaturated free C_{18}-C_{22} fatty acid surfactants, ω−9 unsaturated free C_{18}-C_{22} fatty acid surfactants, ω−10 unsaturated free C_{18}-C_{22} fatty acid surfactants, ω−11 unsaturated free C_{18}-C_{22} fatty acid surfactants, or ω−12 unsaturated free C_{18}-C_{22} fatty acid surfactants.

40. The pharmaceutical composition of any one of claims 25-37, wherein the one or more free C_{14-24} fatty acid surfactants include saturated free C_{14}-C_{16} fatty acid surfactants, saturated free C_{14}-C_{18} fatty acid

surfactants, saturated free C_{14}-C_{20} fatty acid surfactants, saturated free C_{14}-C_{22} fatty acid surfactants, saturated free C_{14}-C_{24} fatty acid surfactants, saturated free C_{16}-C_{18} fatty acid surfactants, saturated free C_{16}-C_{20} fatty acid surfactants, saturated free C_{16}-C_{22} fatty acid surfactants, saturated free C_{16}-C_{24} fatty acid surfactants, saturated free C_{18}-C_{20} fatty acid surfactants, saturated free C_{18}-C_{22} fatty acid surfactants, saturated free C_{18}-C_{24} fatty acid surfactants, saturated free C_{20}-C_{22} fatty acid surfactants, or saturated free C_{22}-C_{24} fatty acid surfactants.

41. The pharmaceutical composition of any one of claims 25-37, wherein the one or more free $C_{14\text{-}24}$ fatty acid surfactants include a mixture of saturated and unsaturated free C_{14}-C_{16} fatty acid surfactants, a mixture of saturated and unsaturated free C_{14}-C_{18} fatty acid surfactants, a mixture of saturated and unsaturated free C_{14}-C_{20} fatty acid surfactants, a mixture of saturated and unsaturated free C_{14}-C_{22} fatty acid surfactants, a mixture of saturated and unsaturated free C_{14}-C_{24} fatty acid surfactants, a mixture of saturated and unsaturated free C_{16}-C_{18} fatty acid surfactants, a mixture of saturated and unsaturated free C_{16}-C_{20} fatty acid surfactants, a mixture of saturated and unsaturated free C_{16}-C_{22} fatty acid surfactants, a mixture of saturated and unsaturated free C_{16}-C_{24} fatty acid surfactants, a mixture of saturated and unsaturated free C_{18}-C_{20} fatty acid surfactants, a mixture of saturated and unsaturated free C_{18}-C_{22} fatty acid surfactants, a mixture of saturated and unsaturated free C_{18}-C_{24} fatty acid surfactants, a mixture of saturated and unsaturated free C_{20}-C_{22} fatty acid surfactants, or a mixture of saturated and unsaturated free C_{22}-C_{24} fatty acid surfactants.

42. The pharmaceutical composition of any one of claims 25-37, wherein the one or more free $C_{14\text{-}24}$ fatty acid surfactants include sodium palmitate (hexadecanoate), sodium palmitolinolenate, sodium palmitidonate, sodium palmitovaccenate, sodium palmitoleate, sodium sapienate, sodium 4-Hexadecenoate, sodium stearate (octadecenoate),sodium α-linolenate, sodium stearidonate, sodium α-eleostearate, sodium β-eleostearate, sodium pumicate, sodium 7,10,13-octadecatrienoate, sodium 12-octadecenoate, sodium linoleate, sodium linolelaidate. Sodium γ-linolenate, sodium calendate, sodium pinolenate, sodium vaccinate, sodium ruminate, sodium oleate, sodium elaidate, sodium petroselinate, sodium arachidate (eicosanoate),sodium dihomo-α-linolenate, sodium eicosatetraenoate, sodium eicosapentaenoate, sodium 9,12,15-eicosatrienoate, sodium β-eicosatetraenoate, sodium dihomo-linoleate, sodium dihomo-γ-linolenate, sodium arachidonate, sodium paullinate, sodium 7,10,13-eicosatrienoate, sodium gondoate, Sodium 8,11-eicosadienoate, sodium meadate, sodium gadoleate, sodium 8-eicosenoate, sodium behenate (docosanoate), sodium clupanodonate, sodium docosahexaenoate, sodium adrenate, sodium osbondate, sodium erucate, sodium lignocerate (tetracosanate), sodium 9,12,15,18,21-Tetracosapentaenoate, sodium 6,9,12,15,18,21-Tetracosahexaenoate, and sodium nervonate.

43. The pharmaceutical composition of any one of claims 25-42, wherein the one or more free $C_{14\text{-}24}$ fatty acid surfactants are in an amount of at least 0.5% by weight, at least 1.0% by weight, at least 1.5% by weight, at least 2.0% by weight, at least 2.5% by weight, at least 3.0% by weight, at least 3.5% by weight, at least 4.0% by weight, at least 4.5% by weight, at least 5.0% by weight, at least 5.5% by weight, at least 6.0% by weight, at least 6.5% by weight, at least 7.0% by weight, at least 7.5% by weight, at least 8.0% by weight, at least 8.5% by weight, at least 9.0% by weight, at least 9.5% by weight, at least 10.0% by weight and/or at most 0.1% by weight, at most 0.5% by weight, at most 1.0% by weight, at most 1.5% by weight, at most 2.0% by weight, at most 2.5% by weight, at most 3.0% by

weight, at most 3.5% by weight, at most 4.0% by weight, at most 4.5% by weight, at most 5.0% by weight, at most 5.5% by weight, at most 6.0% by weight, at most 6.5% by weight, at most 7.0% by weight, at most 7.5% by weight, at most 8.0% by weight, at most 8.5% by weight, at most 9.0% by weight, at most 9.5% by weight, at most 10.0% by weight or between about 0.1% to about 0.5%, about 0.1% to about 1.0%, about 0.1% to about 2.0%, about 0.1% to about 3.0%, about 0.1% to about 4.0%, about 0.1% to about 5.0%, about 0.1% to about 6.0%, about 0.1% to about 7.0%, about 0.1% to about 8.0%, about 0.1% to about 9.0%, about 0.1% to about 10.0%, about 0.5% to about 1.0%, about 0.5% to about 2.0%, about 0.5% to about 3.0%, about 0.5% to about 4.0%, about 0.5% to about 5.0%, about 0.5% to about 6.0%, about 0.5% to about 7.0%, about 0.5% to about 8.0%, about 0.5% to about 9.0%, about 0.5% to about 10.0%, about 1.0% to about 2.0%, about 1.0% to about 3.0%, about 1.0% to about 4.0%, about 1.0% to about 5.0%, about 1.0% to about 6.0%, about 1.0% to about 7.0%, about 1.0% to about 8.0%, about 1.0% to about 9.0%, about 1.0% to about 10.0%, about 2.0% to about 3.0%, about 2.0% to about 4.0%, about 2.0% to about 5.0%, about 2.0% to about 6.0%, about 2.0% to about 7.0%, about 2.0% to about 8.0%, about 2.0% to about 9.0%, about 2.0% to about 10.0%, about 3.0% to about 4.0%, about 3.0% to about 5.0%, about 3.0% to about 6.0%, about 3.0% to about 7.0%, about 3.0% to about 8.0%, about 3.0% to about 9.0%, about 3.0% to about 10.0%, about 4.0% to about 5.0%, about 4.0% to about 6.0%, about 4.0% to about 7.0%, about 4.0% to about 8.0%, about 4.0% to about 9.0%, about 4.0% to about 10.0%, about 5.0% to about 6.0%, about 5.0% to about 7.0%, about 5.0% to about 8.0%, about 5.0% to about 9.0%, about 5.0% to about 10.0%, about 6.0% to about 7.0%, about 6.0% to about 8.0%, about 6.0% to about 9.0%, about 6.0% to about 10.0%, about 7.0% to about 8.0%, about 7.0% to about 9.0%, about 7.0% to about 10.0%, about 8.0% to about 9.0%, about 8.0% to about 10.0%, or about 9.0% to about 10.0% by weight.

44. The pharmaceutical composition of any one of claims 1-43, wherein the protein kinase inhibitor is a tyrosine protein kinase inhibitor, a serine-threonine protein kinase inhibitor, or a nonspecific protein kinase inhibitor.
45. The pharmaceutical composition of claim 44, wherein the tyrosine protein kinase inhibitor is a receptor tyrosine kinase inhibitor or a non-receptor tyrosine kinase inhibitor.
46. The pharmaceutical composition of claims 44 or 45, wherein the tyrosine protein kinase inhibitor includes a RTK class I inhibitor, a RTK class II inhibitor a RTK class III inhibitor, a RTK class IV inhibitor, a RTK class V inhibitor, a RTK class VI inhibitor, a RTK class VII inhibitor, a RTK class VIII inhibitor, a RTK class IX inhibitor, a RTK class X inhibitor, a RTK class XI inhibitor, a RTK class XII inhibitor, a RTK class XIII inhibitor, a RTK class XIV inhibitor, a RTK class XV inhibitor, a RTK class XVI inhibitor, a RTK class XVII inhibitor, a RTK class XVIII inhibitor, a RTK class XIX inhibitor, a RTK class XX inhibitor, an ABL nRTK inhibitor, an ACK nRTK inhibitor, a CSK nRTK inhibitor, a FAK nRTK inhibitor, a FES nRTK inhibitor, a FRK nRTK inhibitor, a JAK nRTK inhibitor, a SRC nRTK inhibitor, a SYK nRTK inhibitor, or a TEC nRTK inhibitor.
47. The pharmaceutical composition of claim 44, wherein the serine-threonine protein kinase inhibitor is a receptor serine-threonine kinase inhibitor or a non-receptor serine-threonine kinase inhibitor.
48. The pharmaceutical composition of claims 44 or 47, wherein the serine-threonine protein kinase inhibitor includes a Polo kinase (PLK) inhibitor, a Cyclin-dependent kinase (CDK) inhibitor, a (RNA-polymerase)-subunit kinase (RPS6K) inhibitor, a Mitogen-activated protein kinase (MAPK) inhibitor, a

MAPK kinase (MAPKK) inhibitor, a MAPK kinase kinase (MAPKKK or MAP3K) inhibitor, a Tau-protein kinase (TPK) inhibitor, a non-specific serine/threonine protein kinase inhibitor, a Pyruvate dehydrogenase kinase (PDK) inhibitor, a Dephospho-(reductase kinase) kinase inhibitor, a 3-methyl-2-oxobutanoate dehydrogenase (acetyl-transferring) kinase inhibitor, a (isocitrate dehydrogenase (NADP+)) kinase inhibitor, a (tyrosine 3-monooxygenase) kinase inhibitor, a myosin-heavy-chain kinase inhibitor, a Fas-activated serine/threonine kinase inhibitor, a Goodpasture-antigen-binding protein kinase inhibitor, a IκB kinase inhibitor, a cAMP-dependent protein kinase (Protein kinase A) inhibitor, a cGMP-dependent protein kinase (or Protein kinase G) inhibitor, a Protein kinase B (PKB) inhibitor, a Protein kinase C (PKC) inhibitor, a Rhodopsin kinase inhibitor, a Beta adrenergic receptor kinase inhibitor, a G-protein coupled receptor kinase inhibitor, a Ca^{2+}/calmodulin-dependent (CaM) kinase (CAMK) inhibitor, a Myosin light-chain kinase inhibitor, a Phosphorylase kinase inhibitor, an Elongation factor 2 kinase inhibitor,

49. The pharmaceutical composition of any one of claims 44, 47 or 48, wherein the serine-threonine protein kinase inhibitor includes a Rho-associated protein kinase (ROCK) kinase inhibitor and a MAPK kinase inhibitor.
50. The pharmaceutical composition of claim 49, wherein the ROCK kinase inhibitor includes a ROCK 1 inhibitor and a ROCK 2 inhibitor.
51. The pharmaceutical composition of claim 49, wherein the MAPK kinase inhibitor includes a MAPK1 inhibitor, a MAPK3 inhibitor, a MAPK4 inhibitor, a MAPK6 inhibitor, a MAPK7 inhibitor, a MAPK8 inhibitor, a MAPK9 inhibitor, a MAPK10 inhibitor, a MAPK11 inhibitor, a MAPK12 inhibitor, a MAPK13 inhibitor, a MAPK14 inhibitor, and a MAPK15 inhibitor.
52. The pharmaceutical composition of any one of claims 1-51, wherein the pharmaceutical composition is not an emulsion or self-emulsifying formulation.
53. A pharmaceutical composition for use in treating a disease or disorder, the pharmaceutic composition being defined by any one of claims 1-52.
54. The pharmaceutical composition of claim 53, wherein the disease or disorder includes a neoplasm, a cancer, an inflammation, an autoimmune disorder, an idiopathic pulmonary fibrosis, and a renal disease or disorder.
55. A method of treating an individual with an inflammation, the method comprising the step of administering to the individual in need thereof a pharmaceutical composition as defined by any one of claims 1-52, wherein administration results in a reduction in a symptom associated with the inflammation, thereby treating the individual.
56. The method of claim 55, wherein the disease or disorder includes a neoplasm, a cancer, an inflammation, an autoimmune disorder, an idiopathic pulmonary fibrosis, and a renal disease or disorder.
57. Use of a pharmaceutical composition as defined by any one of claims 1-52 in the manufacture of a medicament for the treatment of a disease or disorder.
58. The use of claim 57, wherein the disease or disorder includes a neoplasm, a cancer, an inflammation, an autoimmune disorder, an idiopathic pulmonary fibrosis, and a renal disease or disorder.

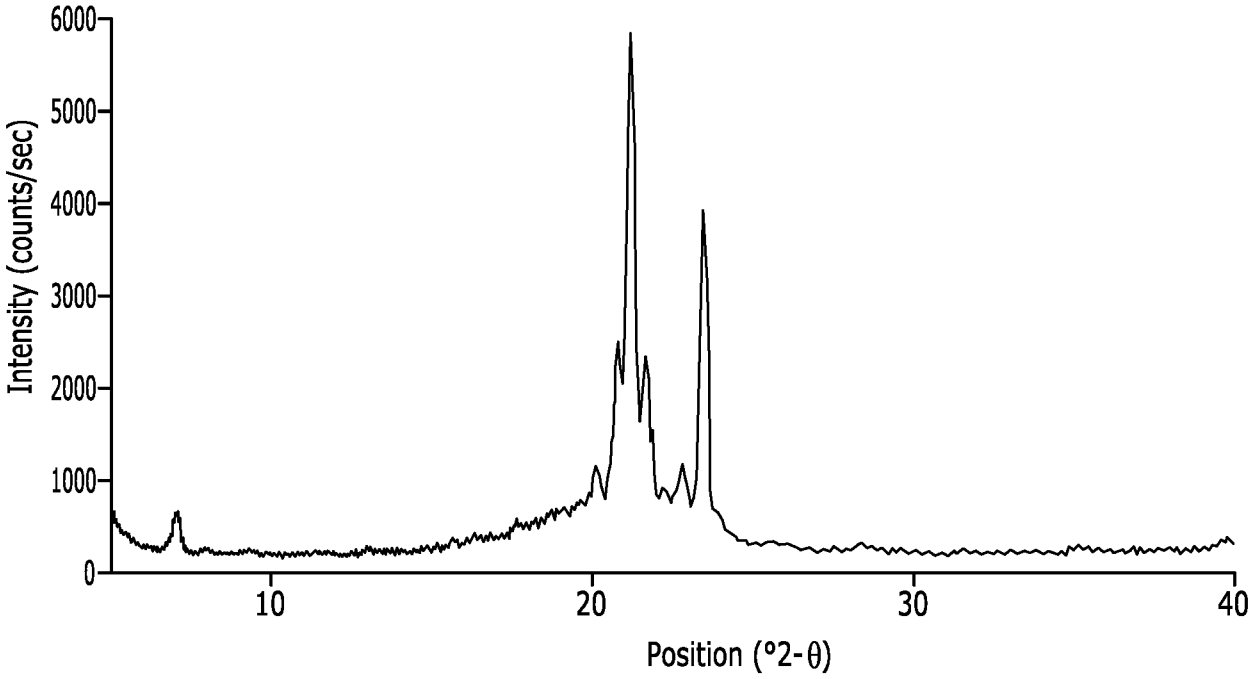

6000
5000
4000
3000
2000
1000
0
Intensity (counts/sec)
10
20
30
40
Position (°2-θ)

FIG. 1A

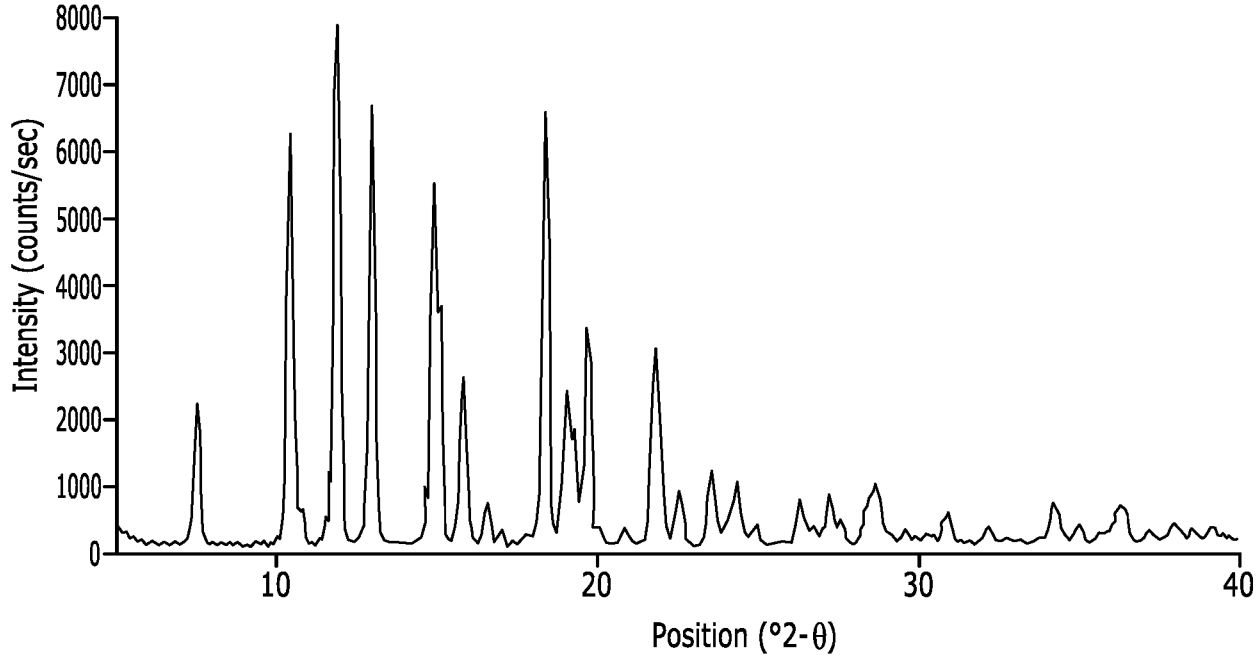

8000
7000
6000
5000
4000
3000
2000
1000
0
Intensity (counts/sec)
10
20
30
40
Position (°2-θ)

FIG. 1B

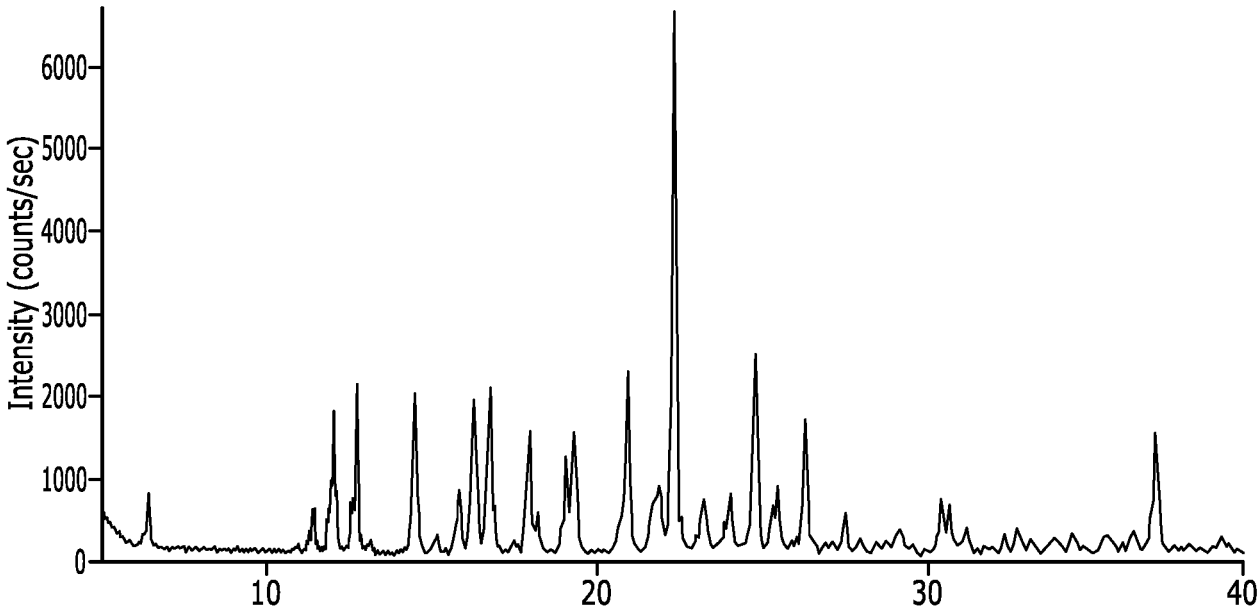

Intensity (counts/sec)
6000
5000
4000
3000
2000
1000
0
10
20
30
40
Position (°2-θ)

FIG. 1C

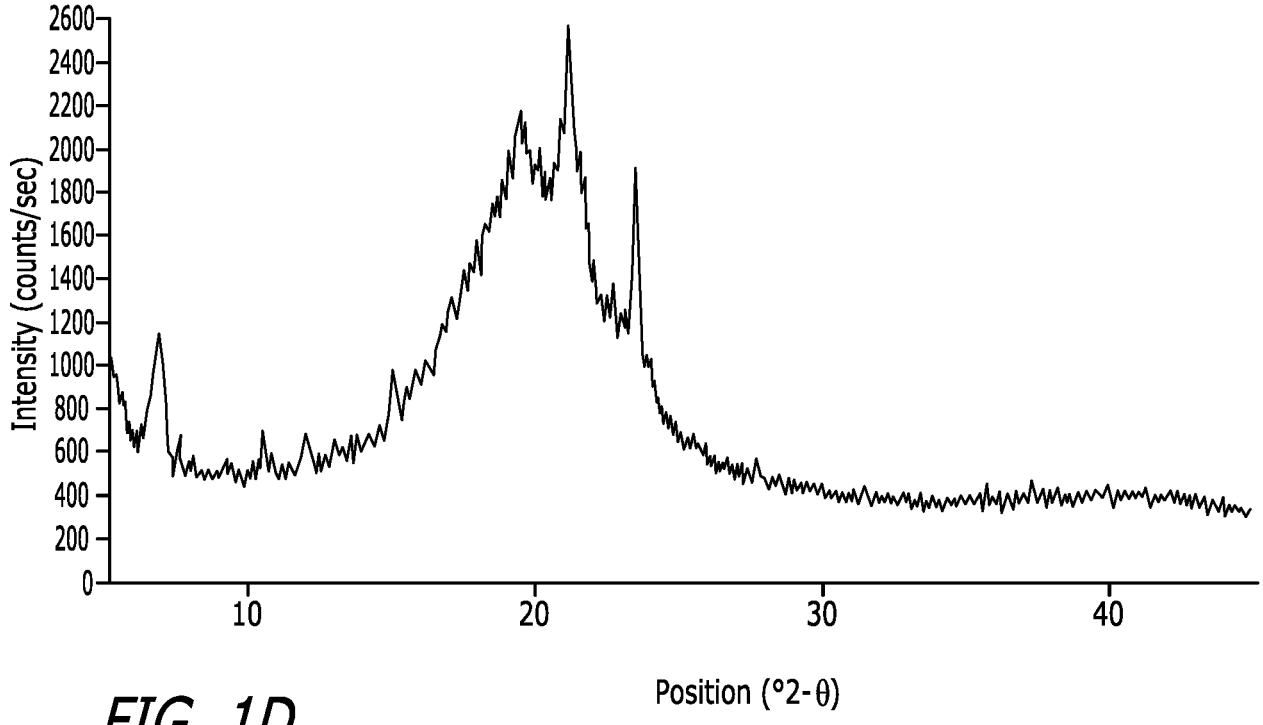

Intensity (counts/sec)
2600
2400
2200
2000
1800
1600
1400
1200
1000
800
600
400
200
0
10
20
30
40
Position (°2-θ)

FIG. 1D

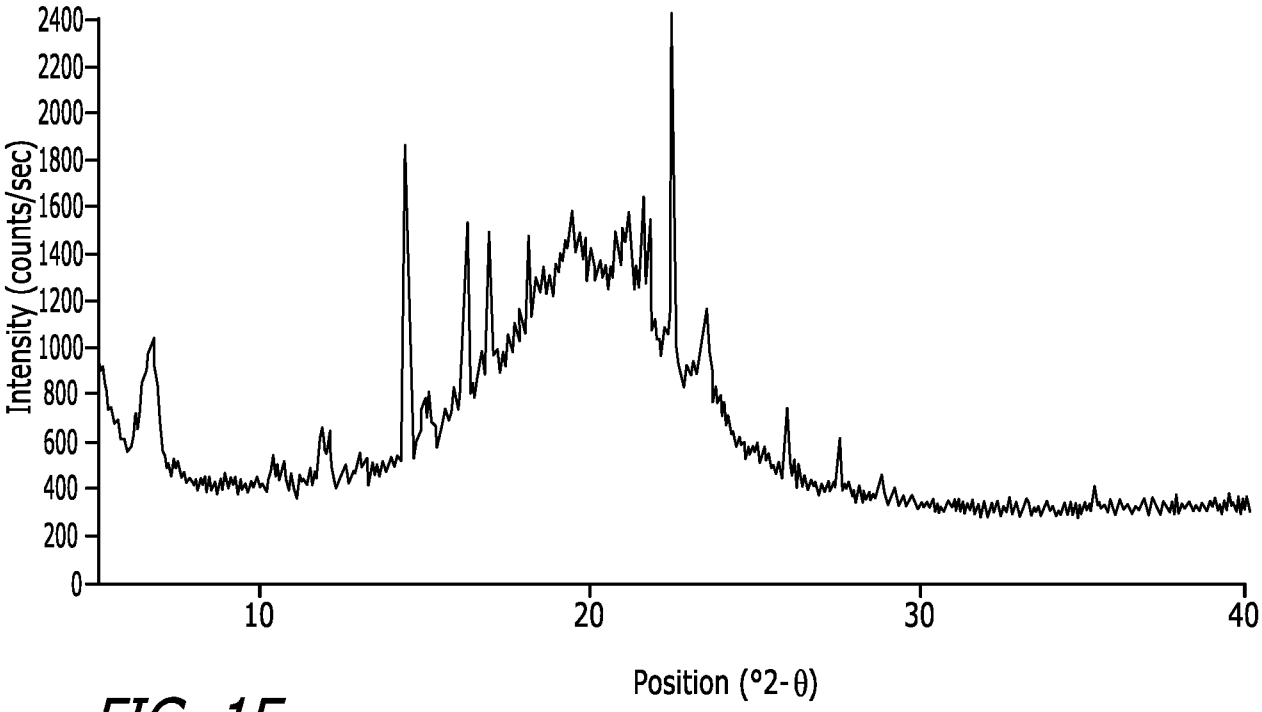

Intensity (counts/sec)
2400
2200
2000
1800
1600
1400
1200
1000
800
600
400
200
0
10
20
30
40
Position (°2-θ)

FIG. 1E

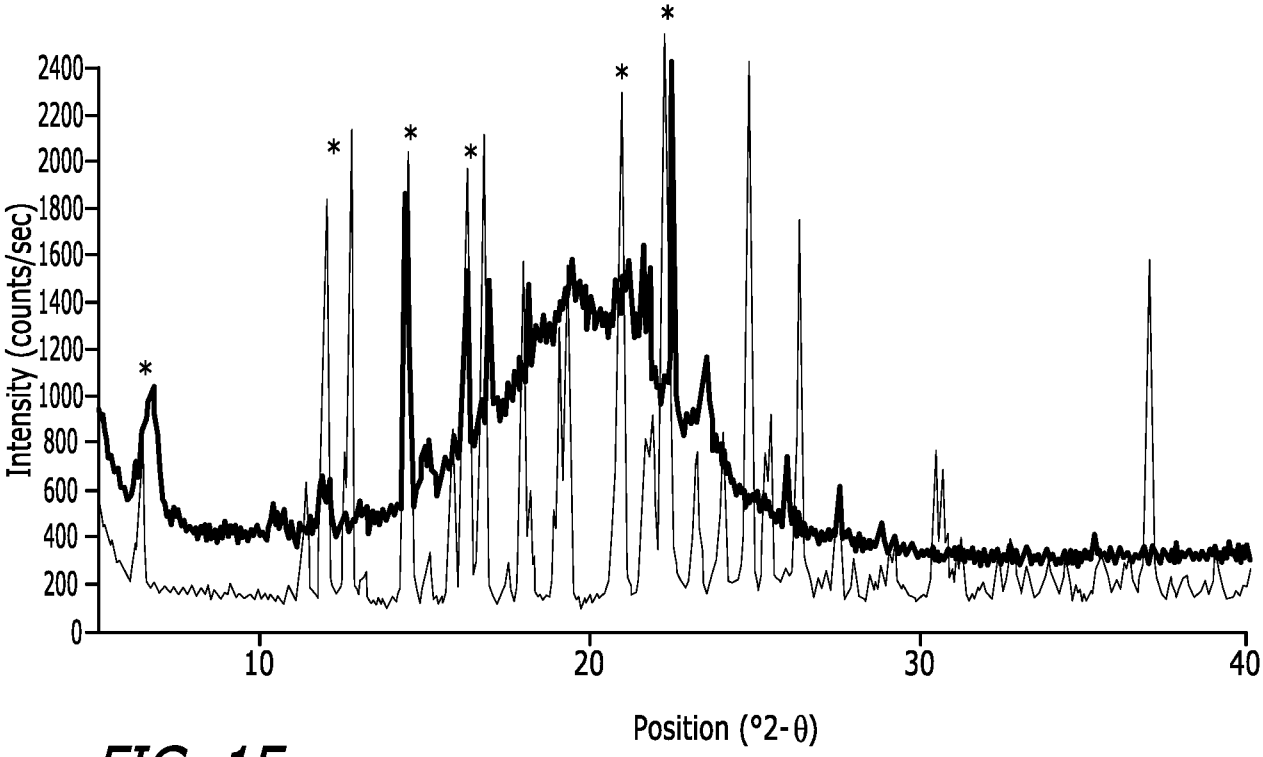

Intensity (counts/sec)
2400
2200
2000
1800
1600
1400
1200
1000
800
600
400
200
0
10
20
30
40
Position (°2-θ)
*
*
*
*
*
*

FIG. 1F

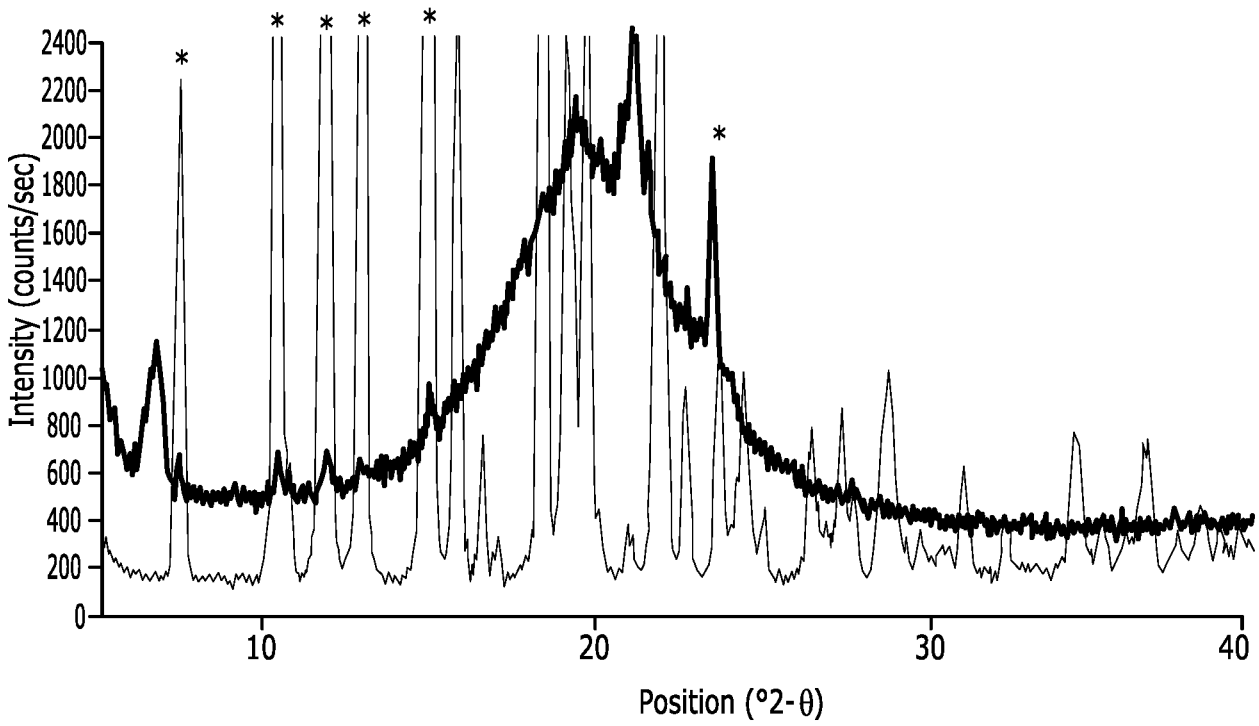

Intensity (counts/sec)
2400
2200
2000
1800
1600
1400
1200
1000
800
600
400
200
0
10
20
30
40
Position (°2-θ)

FIG. 1G

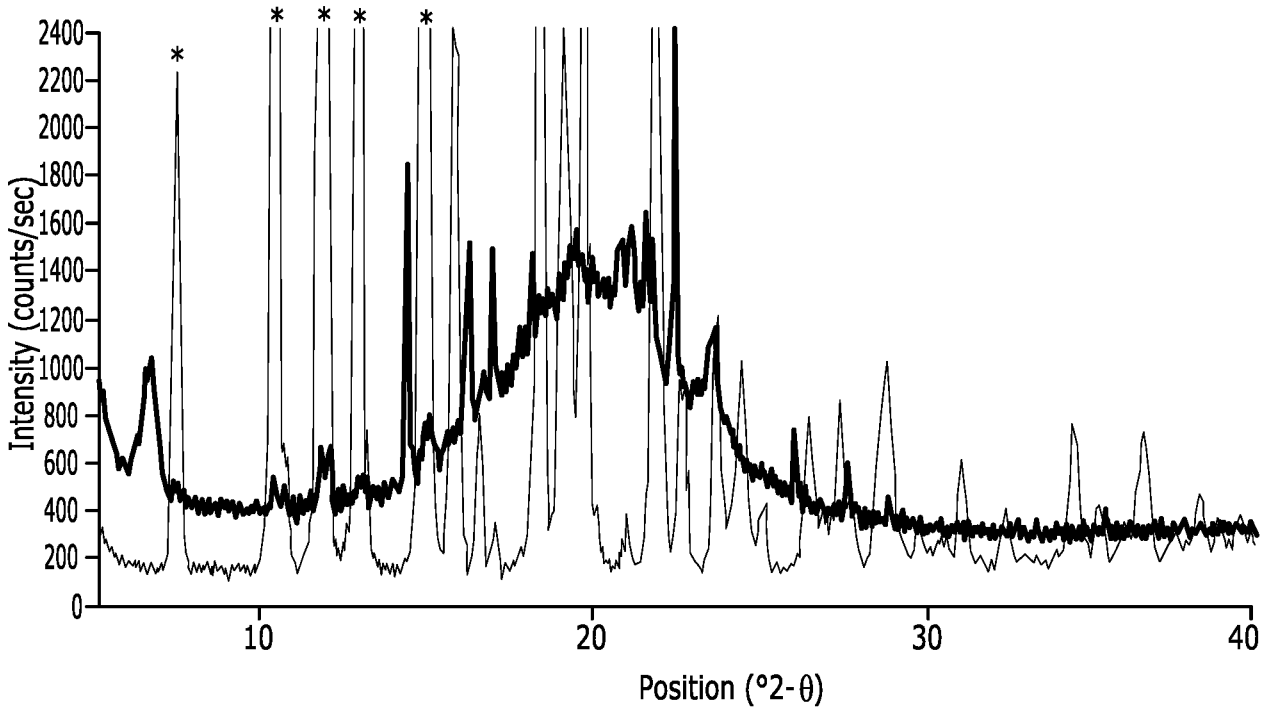

Intensity (counts/sec)
2400
2200
2000
1800
1600
1400
1200
1000
800
600
400
200
0
10
20
30
40
Position (°2-θ)

FIG. 1H

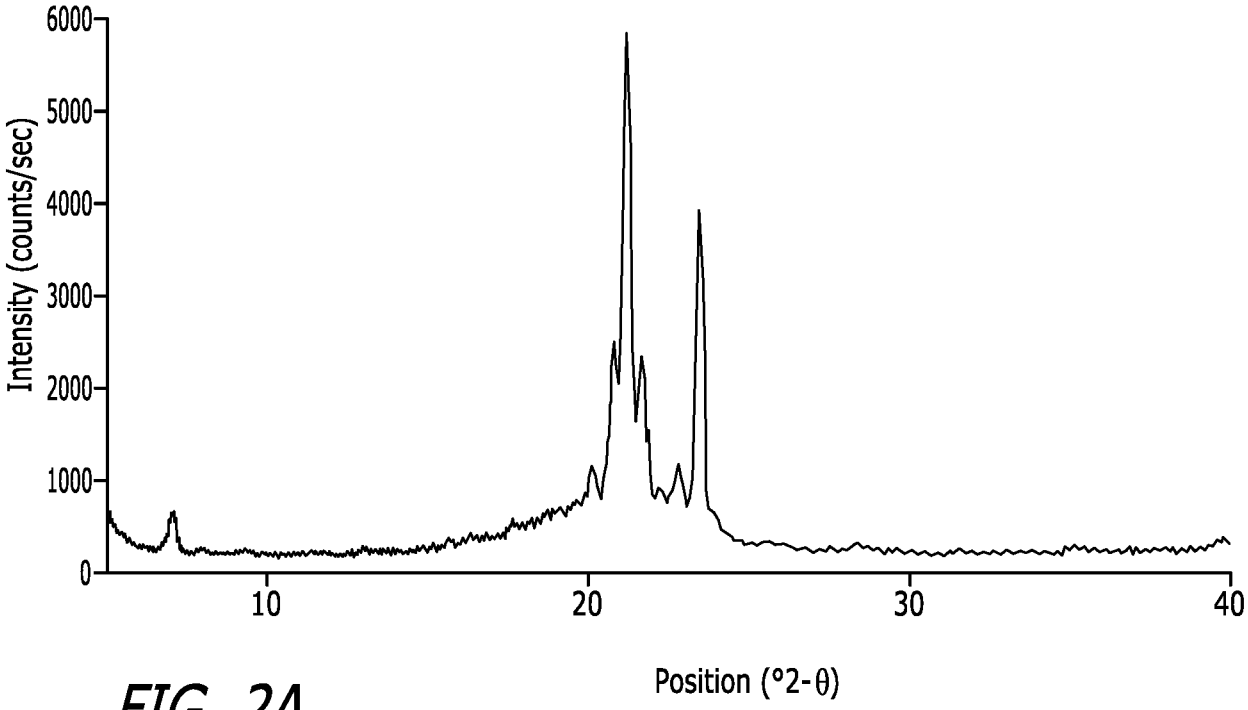

6000
5000
4000
3000
2000
1000
0
Intensity (counts/sec)
10
20
30
40
Position (°2-θ)

FIG. 2A

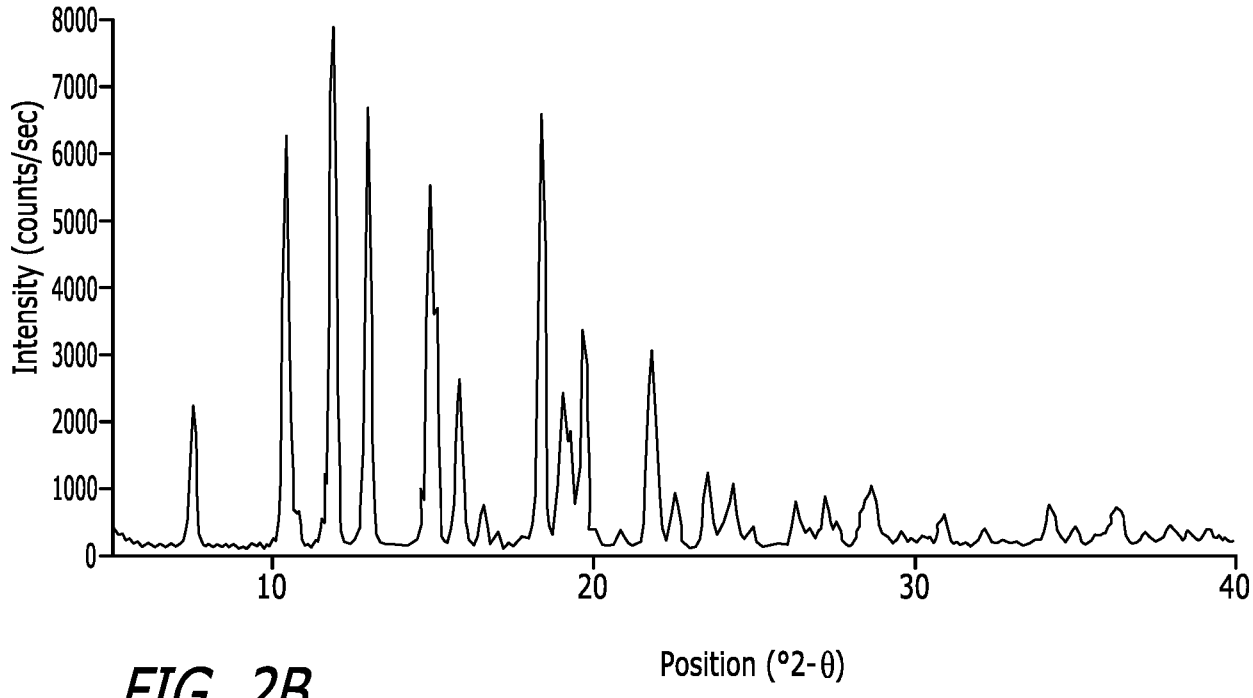

8000
7000
6000
5000
4000
3000
2000
1000
0
Intensity (counts/sec)
10
20
30
40
Position (°2-θ)

FIG. 2B

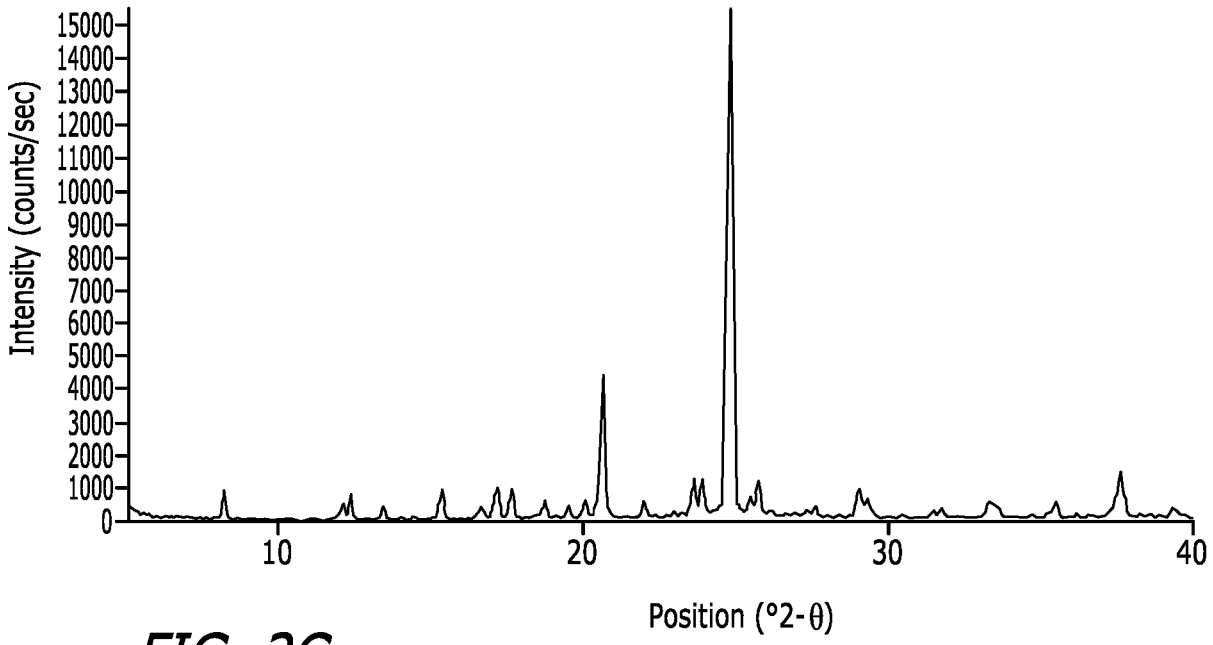

Intensity (counts/sec)
15000
14000
13000
12000
11000
10000
9000
8000
7000
6000
5000
4000
3000
2000
1000
0
10
20
30
40
Position (°2-θ)

FIG. 2C

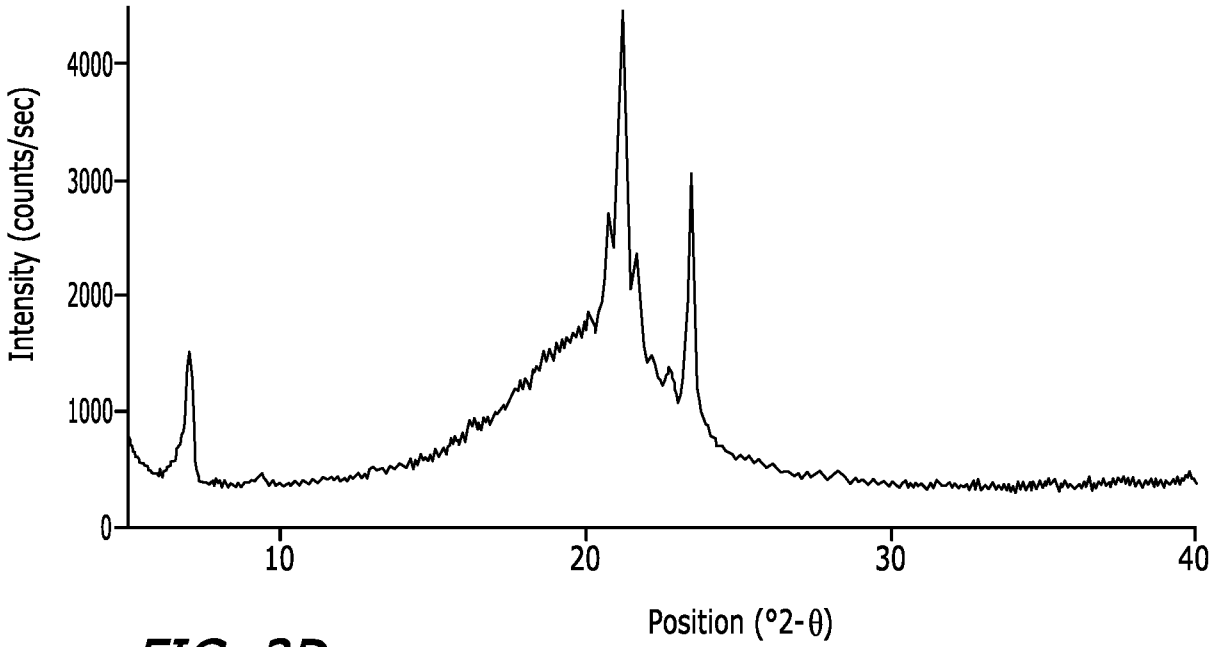

Intensity (counts/sec)
4000
3000
2000
1000
0
10
20
30
40
Position (°2-θ)

FIG. 2D

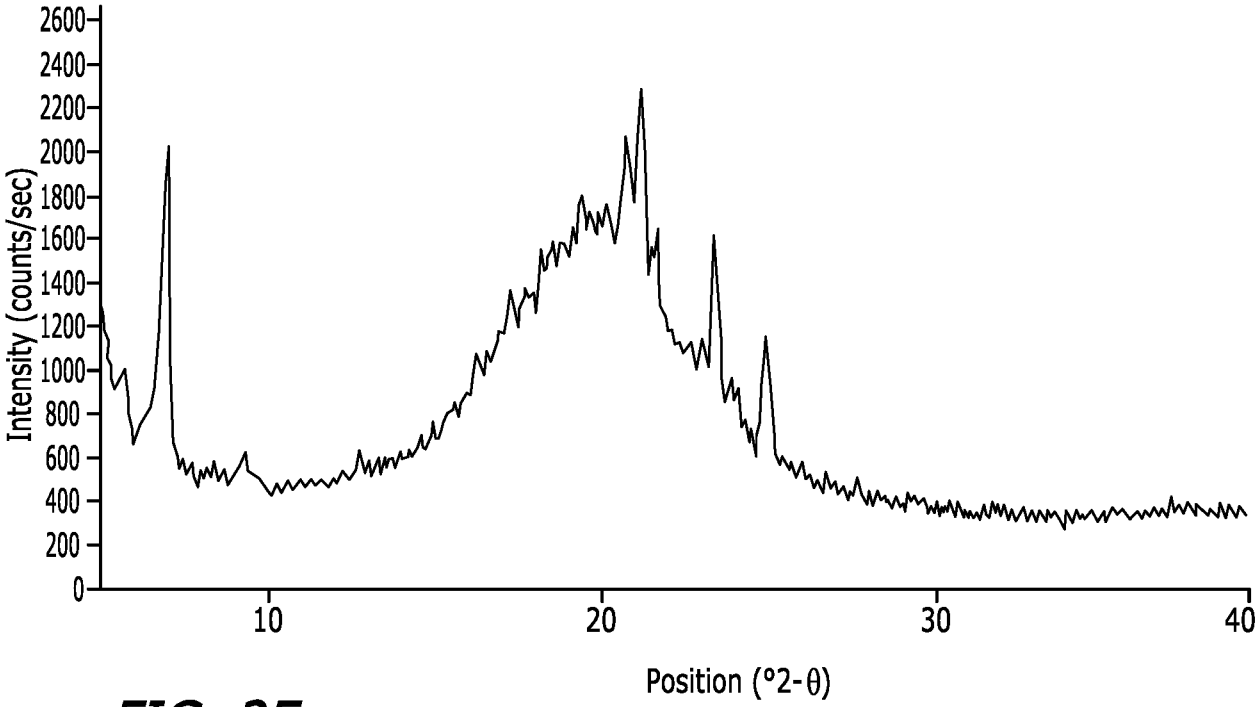

Intensity (counts/sec)
2600
2400
2200
2000
1800
1600
1400
1200
1000
800
600
400
200
0
10
20
30
40
Position (°2-θ)

FIG. 2E

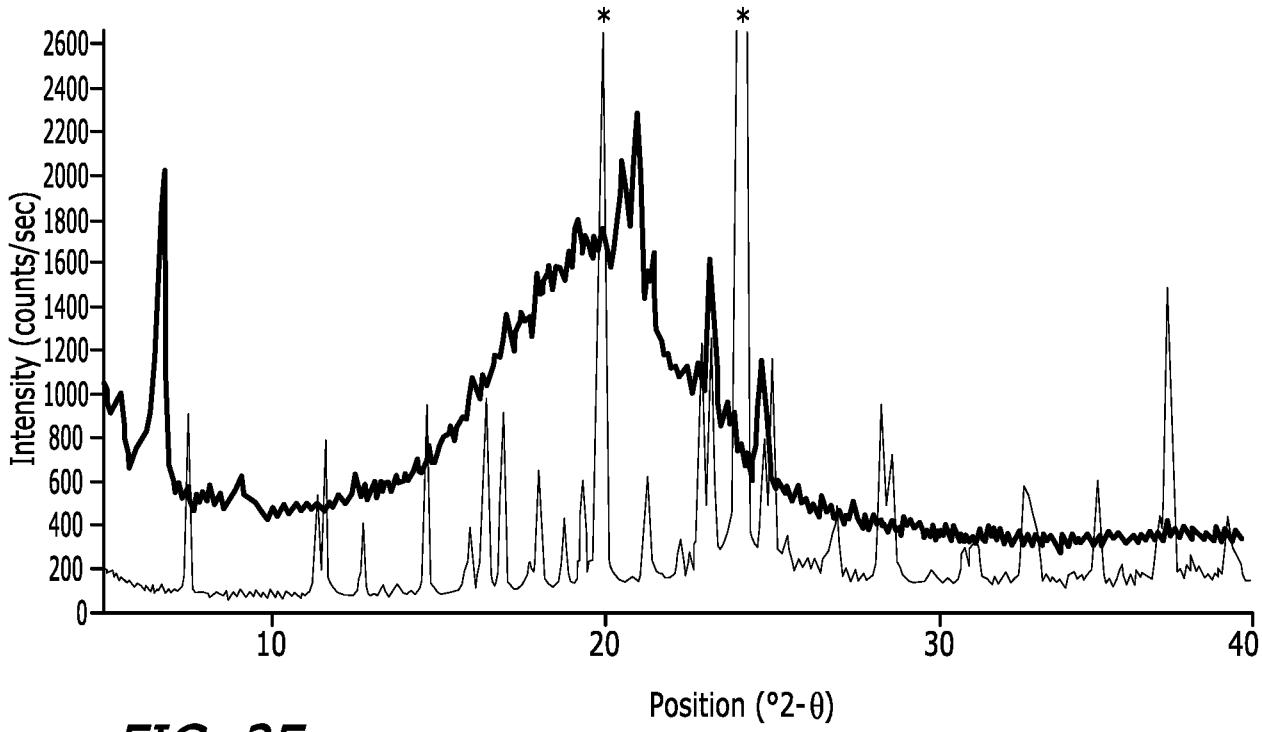

*
*
Intensity (counts/sec)
2600
2400
2200
2000
1800
1600
1400
1200
1000
800
600
400
200
0
10
20
30
40
Position (°2-θ)

FIG. 2F

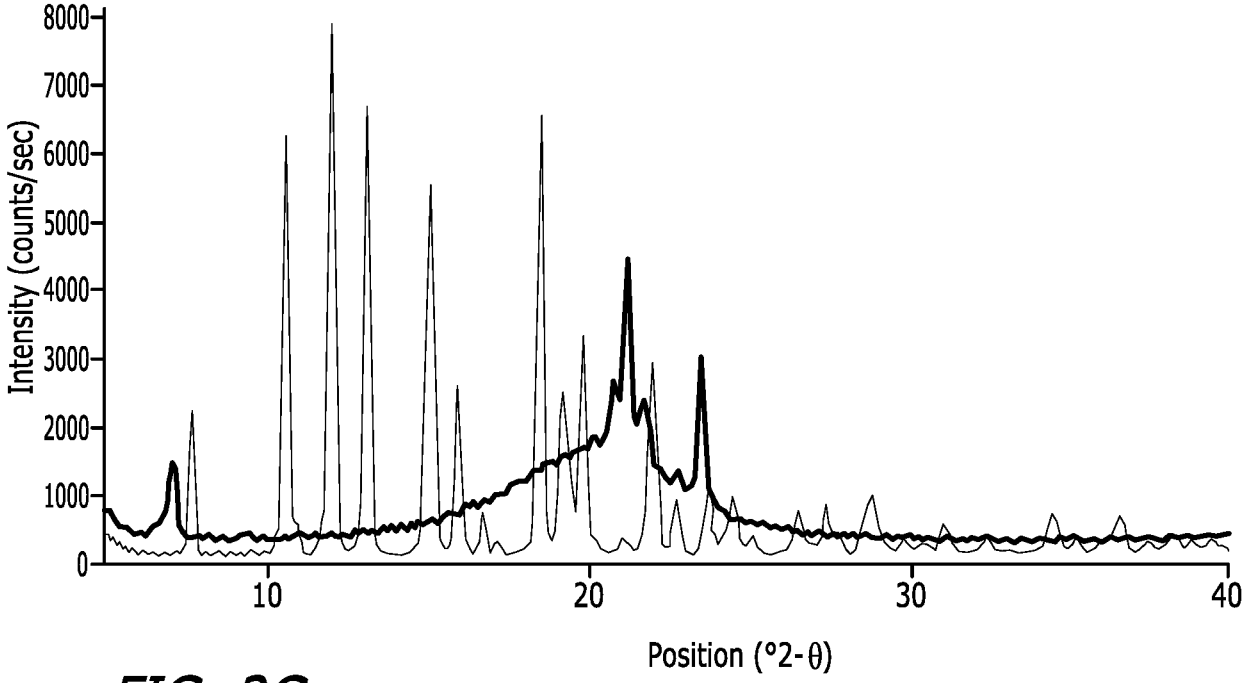

8000
7000
6000
5000
4000
3000
2000
1000
0
Intensity (counts/sec)
10
20
30
40
Position (°2-θ)

FIG. 2G

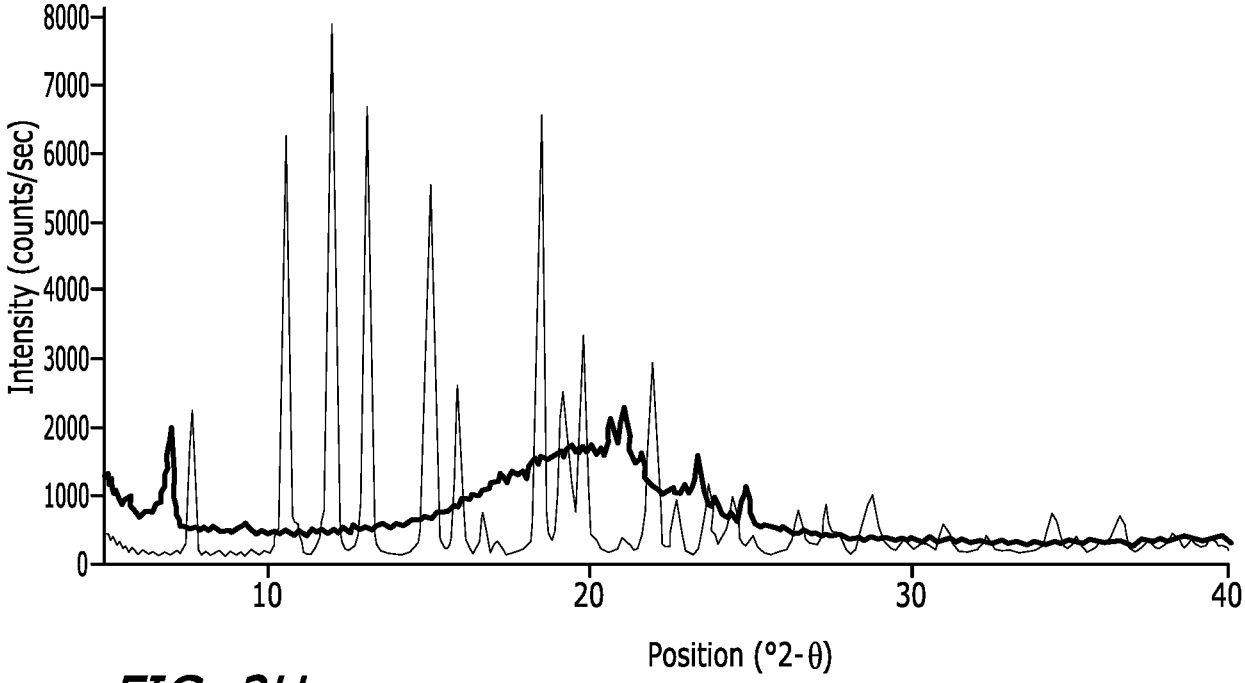

8000
7000
6000
5000
4000
3000
2000
1000
0
Intensity (counts/sec)
10
20
30
40
Position (°2-θ)

FIG. 2H

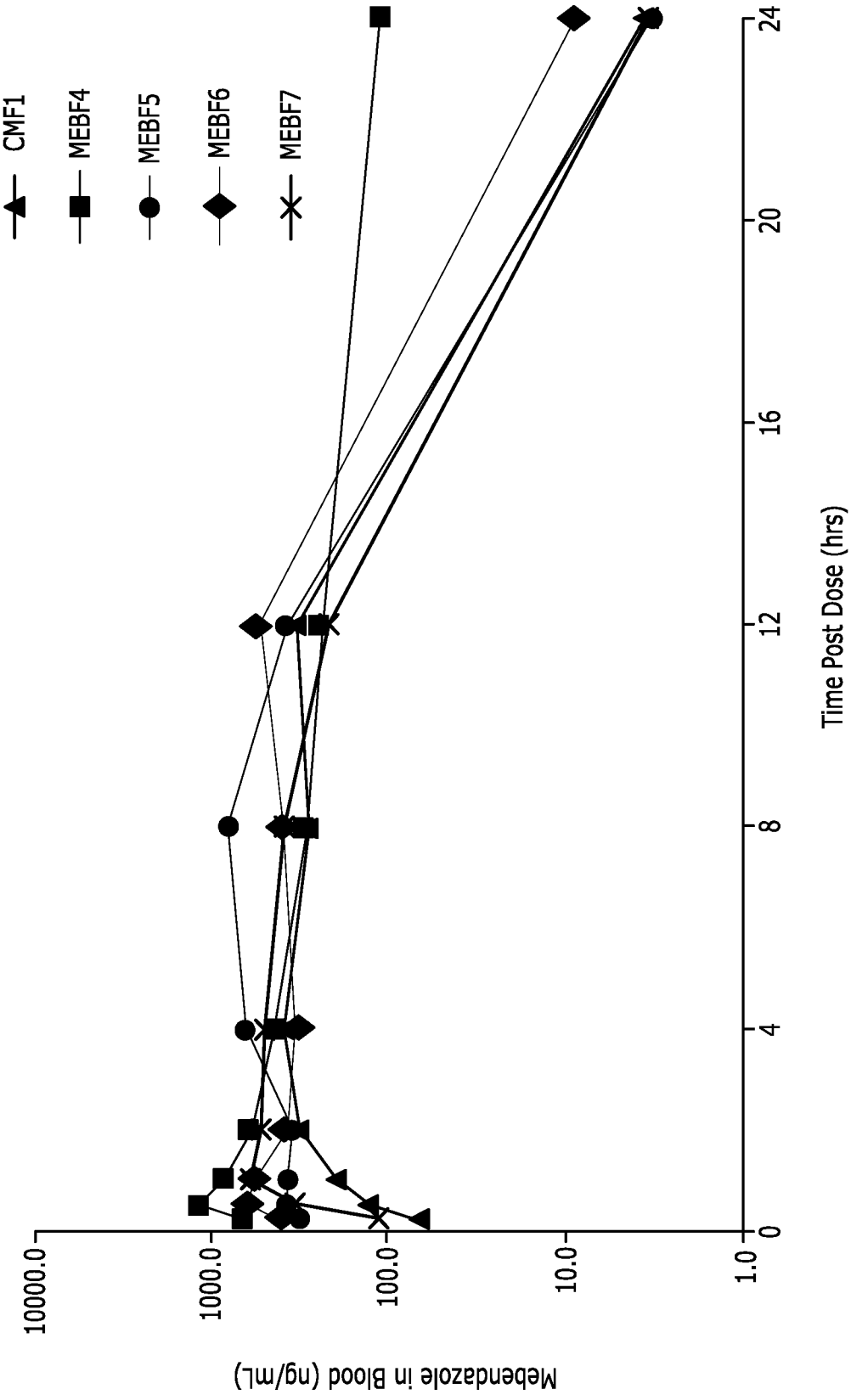

CMF1
MEBF4
MEBF5
MEBF6
MEBF7
10000.0
1000.0
100.0
10.0
1.0
Mebendazole in Blood (ng/mL)
0
4
8
12
16
20
24
Time Post Dose (hrs)

FIG. 3

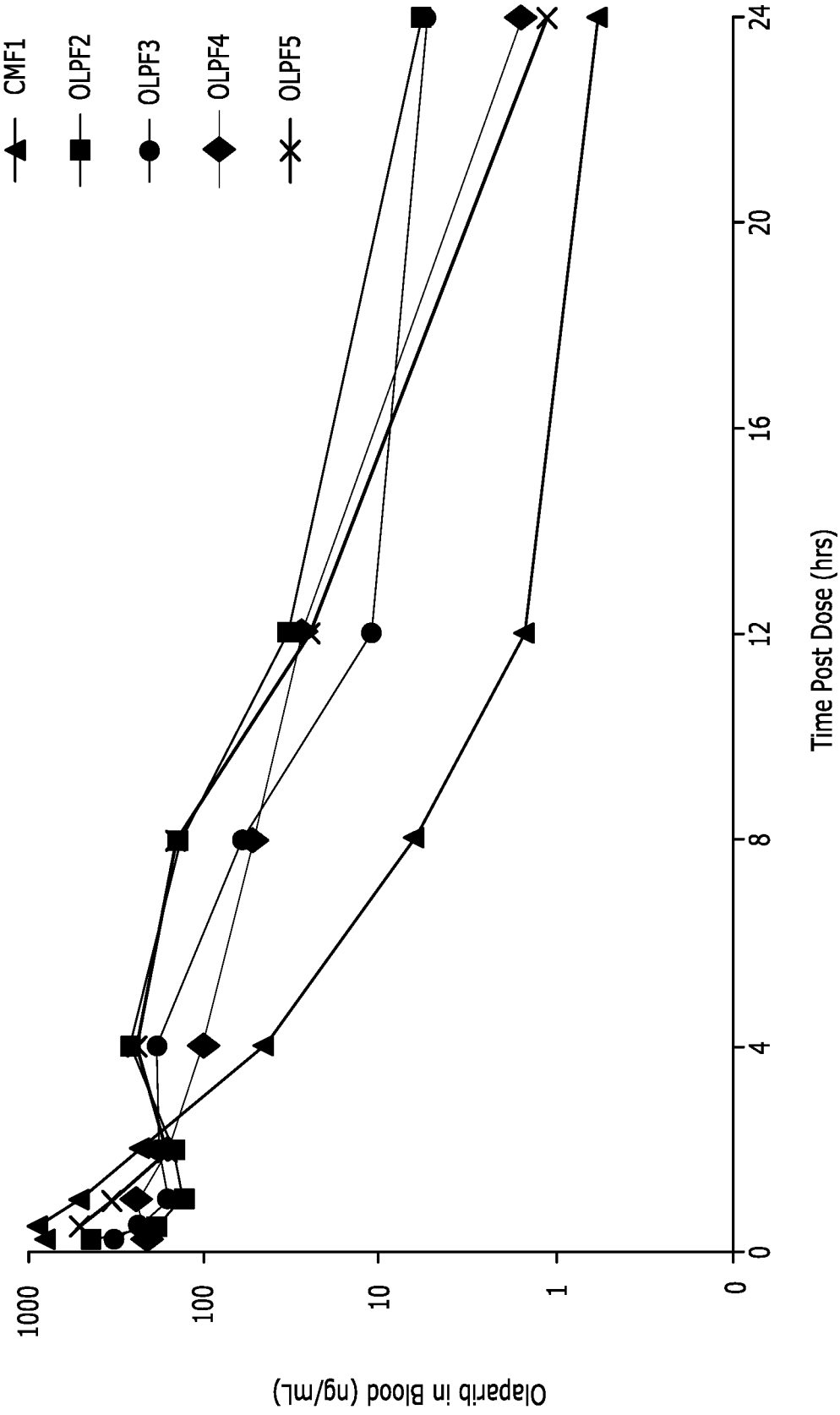

CMF1
OLPF2
OLPF3
OLPF4
OLPF5
Olaparib in Blood (ng/mL)
1000
100
10
1
0
0
4
8
12
16
20
24
Time Post Dose (hrs)

FIG. 4

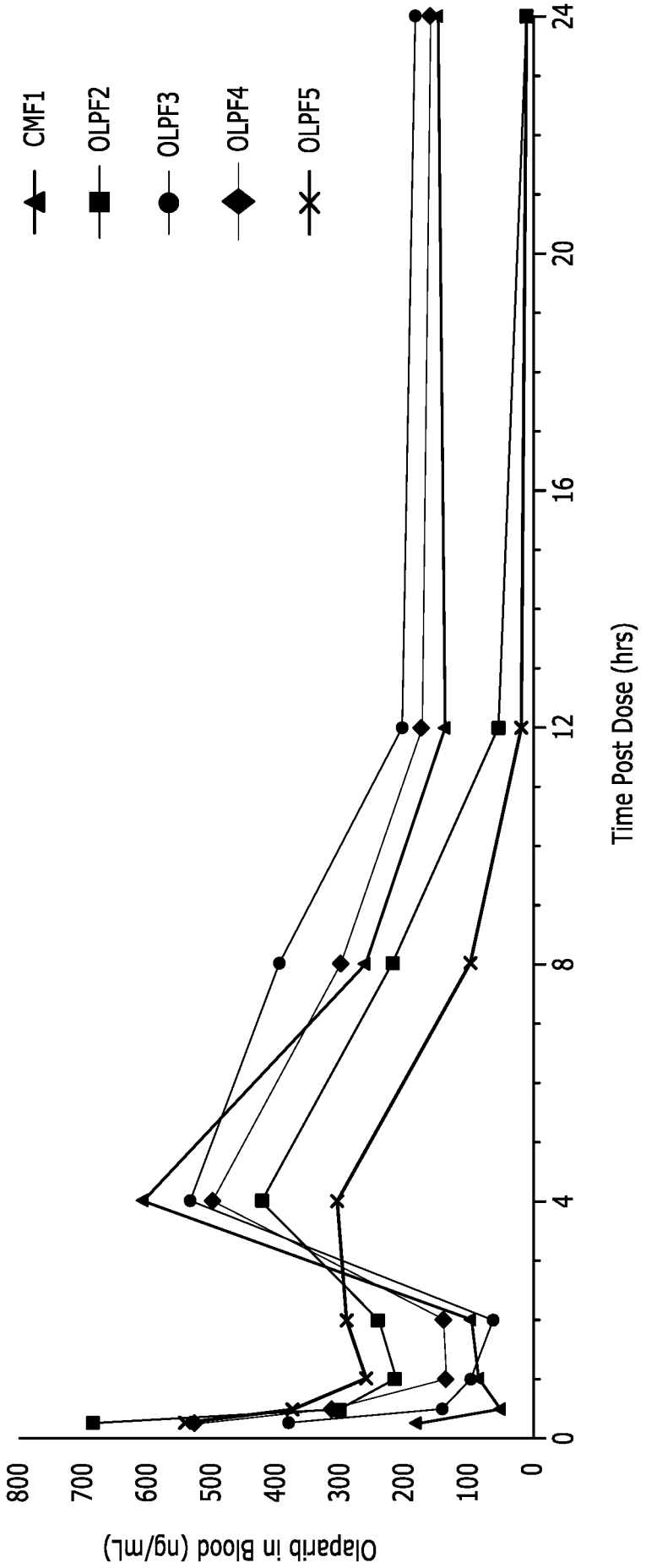

CMF1
OLPF2
OLPF3
OLPF4
OLPF5
Olaparib in Blood (ng/mL)
0
100
200
300
400
500
600
700
800
0
4
8
12
16
20
24
Time Post Dose (hrs)

FIG. 5

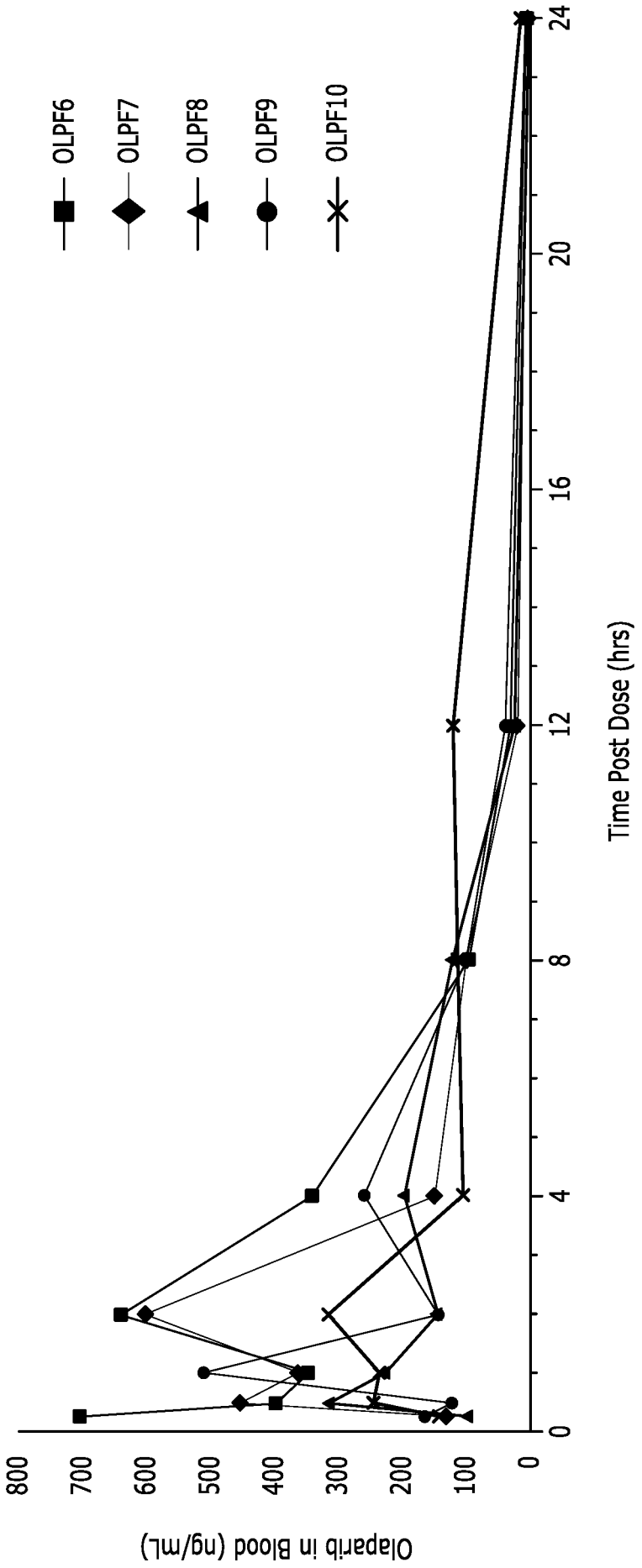

OLPF6
OLPF7
OLPF8
OLPF9
OLPF10
Olaparib in Blood (ng/mL)
800
700
600
500
400
300
200
100
0
0
4
8
12
16
20
24
Time Post Dose (hrs)

FIG. 6