

CORRECTED VERSION

(19) World Intellectual Property Organization
International Bureau



(10) International Publication Number
WO 2019/227085 A8

(43) International Publication Date
28 November 2019 (28.11.2019)

(51) International Patent Classification:

A23L 33/135 (2016.01) A61K 35/742 (2015.01)
A61K 35/74 (2015.01) A61P 1/00 (2006.01)
A61K 35/741 (2015.01) C12N 1/20 (2006.01)

(21) International Application Number:

PCT/US2019/034069

(22) International Filing Date:

24 May 2019 (24.05.2019)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

62/676,236 24 May 2018 (24.05.2018) US

(71) Applicant: SERES THERAPEUTICS, INC. [US/US];
200 Sidney Street, Cambridge, Massachusetts 02139 (US).

(72) Inventors: MARTINEZ, Asuncion; 200 Sidney Street,
Cambridge, Massachusetts 02139 (US). O'BRIEN, Ed-
ward J.; 200 Sidney Street, Cambridge, Massachusetts
02139 (US). SIMMONS, Sheri Lynn; 200 Sidney Street,
Cambridge, Massachusetts 02139 (US). COOK, David;
200 Sidney Street, Cambridge, Massachusetts 02139 (US).
HENN, Matthew R.; 200 Sidney Street, Cambridge, Mas-
sachusetts 02139 (US). FORD, Christopher B.; 200 Sid-
ney Street, Cambridge, Massachusetts 02139 (US). BAL-
ASUBRAMANIAN, Divya; 200 Sidney Street, Cam-
bridge, Massachusetts 02139 (US). PIÑA, Ambar; 200

Sidney Street, Cambridge, Massachusetts 02139 (US).
DIAO, Liyang; 200 Sidney Street, Cambridge, Massachu-
setts 02139 (US). CHAFFEE, Meghan; 200 Sidney Street,
Cambridge, Massachusetts 02139 (US). VULIC, Marin;
200 Sidney Street, Cambridge, Massachusetts 02139 (US).
NANDAKUMAR, Madhumitha; 7 Garden Ct. Apt 3, Bel-
mont California 94002 (US). DATTA, Sumon; 200 Sidney
Street, Cambridge, Massachusetts 02139 (US). JAYARA-
MAN, Latta; 200 Sidney Street, Cambridge, Massachusetts
02139 (US).

(74) Agent: FRUEAUF, Jeremiah B. et al.; Sterne, Kessler,
Goldstein & Fox P.L.L.C, 1100 New York Avenue, N.W.,
Washington, District of Columbia 20005 (US).

(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, CZ, DE, DJ, DK, DM, DO,
DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN,
HR, HU, ID, IL, IN, IR, IS, JO, JP, KE, KG, KH, KN, KP,
KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME,
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, SM, ST, SV, SY, TH, TJ, TM, TN,
TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ,

(54) Title: DESIGNED BACTERIAL COMPOSITIONS AND USES THEREOF

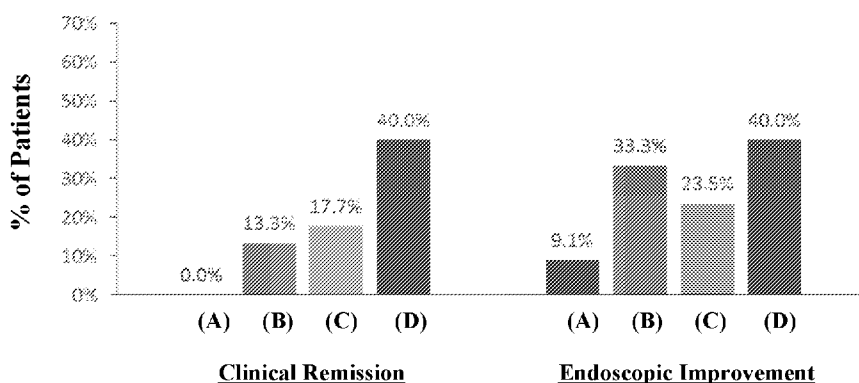


FIG. 1

(57) Abstract: Provided herein are bacterial compositions that are useful for treating and preventing complications and side effects associated with a disease or disorder, such as those associated with dysbiosis of a gastrointestinal tract. The bacterial compositions disclosed herein are designed to exhibit one or more functional features that are useful for the treatment of such diseases and disorders.



WO 2019/227085 A8

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, 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).

Published:

- *with international search report (Art. 21(3))*
- *with sequence listing part of description (Rule 5.2(a))*

(48) Date of publication of this corrected version:

18 March 2021 (18.03.2021)

(15) Information about Correction:

see Notice of 18 March 2021 (18.03.2021)