Title: COMPOSITION FOR DETECTION AND/OR TREATMENT OF LESIONS & TUMOURS

Abstract: A composition capable of detection and/or treatment of cancers; the composition including zinc ions in solution, capable of dissociation from a zinc compound; an acid capable of maintaining a predetermined level of disassociated zinc ions; and at least one carrier substance; wherein the composition has a predetermined pH within the range of 0.1-6.
COMPOSITION FOR DETECTION AND/OR TREATMENT OF LESIONS & TUMOURS

BACKGROUND

The present invention relates to a composition and formulations of the composition for the detection and treatment of cancers and more particularly relates to the development and progressive refinement of a new chemical formulation aimed at the detection, treatment and cure of benign and malignant skin cancer and other skin lesions and tumors, with potential also for adaptation for use orally and as a serum for internal treatment, as well as topically for clearing skin blemishes in a cosmetic sense. More than a million cases of cancer are diagnosed in a year. Well over a trillion dollars have been spent on finding a cure for cancer and although there are many treatments available, to this date no cure has been found.

PRIOR ART

Cancer is one of Medicine's most serious diseases and presents in many forms, in a variety of tissues and organs. Although there are various treatments available for cancer, not all cancer responds to such treatments sometimes with fatal consequences.

As every patient has unique biochemical makeup, the patterns of diseases such as cancer differ with the individual. This makes cancer a still more difficult disease to treat and it is therefore hard to determine the prognosis for each cancer patient.

The prognosis for cancer will often depend on early diagnosis and appropriate treatment.

The most common treatments for cancers are surgery, radiation, chemotherapy, or a combination of those treatments.

In the case of skin cancers, surgery may be an effective treatment, if the cancer is detected early. Skin cancers, like most cancers, are potentially life-threatening and must be treated to prevent spread by invasion, or metastases.
The most common forms of skin cancer are Basal Cell Carcinoma (BBC), Squamous Cell Carcinoma (SCC) and Melanoma. These cancers usually start with precursors (such as Bowens disease in the case of SCC), which, if untreated, can advance to become life-threatening. Skin cancers can be recognized by body changes, such as a scaly patch, a sore that won't heal and/or which bleeds, any change in a wart or mole, or a redness of the skin.

In the very early stages, skin cancers are often difficult to detect, as they are hard to see.

A BBC, for instance, may present as a tiny, scaly patch on the skin, which can be felt, but which is almost imperceptible to the eye.

The conventional method of treatment for skin cancers is local excision, which, in many cases, will constitute a complete cure, provided the cancer has been fully excised. Histological examination determines whether the cancer has been fully excised or is invasive. Surgery is traumatic and involves some risks. So, it would be beneficial to provide an alternative to the traditional methods of cancer treatment, and particularly skin cancer treatments. Historically, zinc compounds have been used with some success in the treatment of cancers, especially skin cancers. The success realized by such treatments was not fully understood, since wide variations in the effectiveness of each product on any particular cancer could not be explained.

PCT publication number WO 00/48541 recognizes the use of zinc chloride paste as a treatment for melanoma, skin cancer and other skin diseases. The disclosures in that patent are incorporated herein by reference. The patent recognizes that the
vast majority of modern medical practitioners are unaware of a proper dosage of zinc chloride paste required in the treatment of the aforesaid skin cancers. The rationale for using zinc chloride has to date been poorly understood. Experts have previously speculated that zinc chloride paste acted as an immune adjuvant inducing specific host cell mediated resistance to the immunogenic K1735p melanoma. The zinc chloride paste was thought to kill cancer cells and fix the tumour. It was observed that zinc chloride reduced the tumour to which it was applied, but the mechanism of action was not fully understood by practitioners. It was also recognized that the paste was unstable and could become liquefied in humid conditions or dry to a hardened mass during dry conditions making preparation ineffective. Zinc chloride is a potent and deeply penetrating agent and must be applied carefully. An improper dosage can result in a deep ulcerated wound requiring months to heal. Although precise dosages are necessary they are difficult to achieve. Patent WO 00/48541 does not address the mechanisms by which zinc chloride act against tumours but recognizes that whatever they may be they are poorly understood. The patent in fact addresses the peripheral problem of physical application dosages rather than the mechanisms of action. Also the patent does not disclose compounds for cancer treatment other than zinc chloride.

THE INVENTION

The invention provides alternative compositions for the treatment of a variety of skin lesions and/or tumours, both malignant and benign and more particularly compositions which may be formulated according to prescription recognizing the precise modes of action in attack of cancer cells.

In one broad form the invention comprises compositions capable of both detecting and treating skin and other cancers; the compositions comprising a wide range of prescribed formulations wherein each formulation has a predetermined pH within the range 0–6 and includes a maintained stabilized level of zinc ions.

According to a preferred embodiment, active ingredients of the compound when combined in a predetermined sequence form a product that is capable of activating
the immune system of warm blooded animals to "recognize" cancer, destroy the
cancer and the animals. The immune system prompts the individual cells to expel
the cancer from the animals system through the skin, the bowels and/or the urine or
be absorbed into the system. According to one embodiment the compound
includes zinc which forms zinc ions in a process that splits zinc ions from the zinc
compound. The compounds may be formed from but are not limited to compounds
formed with acetate, chloride, oxide, salts, stearate, sulfate, etc.

In another embodiment, the compositions include botanically derived constituents
having different modes of action of attack of cancer cells, but which may act
cumulatively or synergistically with other active or carrier ingredients of the
compound.

Studies in residue analysis of tumours have been performed in which detected
levels of zinc ions were as high as 0.9% indicating that zinc in the ionic phase is
accumulating in the cancer tissues. The zinc ions not only "mark" the cancer, but
based on studies performed are responsible for killing the cancer. Free ions, which
may be zinc or another element are the most important component in the
formulation in the over all mode of attack on the cancer. This action by zinc ions
was not previously known or exploited in the formulation of a suitable composition
for cancer detection and treatment. Cancer detection using the treatment
compositions of the present invention has been achieved due to a new finding as to
the modes of action of zinc based compounds. Increased uptake of specific
ingredients in the formulations of the invention and an understand of how this
occurs enabled the inventors to prescribe a range of patient and tumour specific
formulations with predictable results for detection and treatment of cancers. Also
the action of

The compositions and prescribed formulations to be described herein attach to the
cancer and kill the cells through different modes of action to be described causing
degradation of the growth and death of the cancer cells, much like anti-bodies do to
any foreign body during an immune response.
It is believed that cancer is not recognized by the immune system as a threat to the body such as an object, like a splinter, wherein the anti-bodies attack the pathogens and the splinter itself when an immune system activates in a warm-blooded animal. According to the invention the prescribed compositions expose the cancer as a foreign body to the immune system that attacks the cancer, activates the immune response causing the body to destroy and/or expel and/or absorb the cancer.

It is believed that the compositions according to the invention when exposed to the cancer allows the body to recognize the cancer as a foreign body and prompt an immune response. Warm-blooded animals without an immune system will not act in the same manner concerning the immune response. However, the formulations of each composition have cytotoxic effects that can kill the cancer in immune resistant animals.

Compositions according to the invention are capable of expelling intact skin cancers from the body in the form of a boil or cyst that breaks and pours forth the cancer in a sheath (mass), while not affecting non-malignant growths. This method of cancer detection is fast, easy to administer and almost 100% effective. For example, in trials conducted to date a 95% success rate has been realized in removing skin cancers.

In other cases, the treated cancers cause a reaction at the site of the cancers, including, but not limited to, swelling, redness, softening of the tumour, formation of a cyst and/or a reduction of the size of the tumour. The product may also be absorbed into the system and the amino acids, etc. rearranged or the products of the degradation expelled from the body.

The present invention not only activates the immune system into recognizing/detecting cancers by causing an immune reaction much like an infection which can differentiate a skin cancer vs. a non-malignant growth, the
formulation has components that provide a multi-prong attack (immune response and cytotoxic response) that also kills the cancer. The inventors found that zinc compounds varied in effectiveness and that the ionic form of zinc plays a major role in cancer treatments with over a 95% success rate in removal of skin cancers in a sample of over 40 people. This phenomenon involving zinc ions was not previously known in the literature or understood.

In one broad form, the present invention comprises; a composition for the detection and/or treatment of benign and malignant skin lesions and / or tumours; the composition including a blend selected from Zinc Chloride, Sanguinaria Canadensis, Larrea Mexicana, Annona Muricata, Tabevia Avellaneda, Comimphora Mol-Mol, Thuja Occidentalis, Maranta Arondinaceae & Cetomacrogol Cream and an acid; wherein the pH of the composition falls within the range of 0.1-6.

According to a preferred embodiment, the composition may include pharmaceutically acceptable carriers, diluents, cream bases, hydroscopic additives, and detergents. For a therapeutically effective dosage.

In another broad form, the invention comprises a composition for the detection and treatment of benign and malignant skin lesions and / or tumours; the composition comprising a blend of constituent ingredients selected from; Zinc Chloride Sanguinaria Canadensis, Larrea Mexicana, Annona Muricata, Tabebuia Avellaneda, and an acid wherein the pH of the composition falls within the range of 0.1-6, but usually a pH of 3.0 or below.
In an alternative embodiment, the compositions further includes Comiphora Mol-Mol, Thuja Occidentalis, Maranta Arondinaceae & Cetomacrogol Cream.

In another broad form, the invention comprises a method for preparation of a composition for the treatment of benign and malignant skin lesions and / or tumours; the method of mixing comprising the steps of:

1. mixing ingredients selected from; Zinc Chloride Sanguinaria Canadensis, Larrea Mexicana, Annona Muricata, Tabebuia Avellaneda, and an acid wherein the pH of the composition falls within the range of 0.1-6, measured in predetermined quantities, and in some cases, either as extract, or tincture;

2. placing this mixture in a stainless-steel boiler and heating to boiling-point for 15 minutes, stirring all the while;

3. simmering and reducing the mixture down to a set consistency / quantity, in proportion to the ingredient quantities used;

4. allowing the mixture cool and, when cool, adding one further remaining ingredient, stirring in thoroughly until the resultant mixture thickens;

5. cooling the mixture again and then adding in the final ingredient, mixing and then storing in a cool, dark place (i.e. at a temperature of below 30 degrees Celsius, away from light).

As a preferred form of the mixing method, during the heating step, the mix is stabilized at a predetermined maximum temperature for a predetermined period of time. Preferably, the temperature does not exceed 100 degrees Celsius and the time period is within 30 - 35 minutes.
According to one embodiment, the compound is prepared in a paste consistency and is applied topically.

In another broad form, the invention comprises a composition, for the treatment of benign and malignant skin lesions and / or tumours; the composition comprising a blend of the following ingredients in the following proportions:

1. Zinc Chloride 360gm
2. Sanguinaria Canadensis extract 200ml
3. Larrea Mexicana extract 200ml
4. Annona Muricata extract 250ml
5. Tabeuia Avellaneda extract 250ml
6. Commiphora Mol-Mol tincture 1:5 100ml
7. Thuja Occidentalis tincture 1:5 100ml
8. Maranta Arundinaceae 35gm
9. Cetomacrogol Cream 1000gm;

and an acid wherein the pH of the composition falls within the range of 0.1-6. Preferably the compound is prepared as a paste.

In a more specific form, the invention comprises a method for mixing a composition for the treatment of benign and malignant skin lesions and / or tumours; wherein the compound is selected from the following ingredients;

1. Zinc Chloride 360gm
2. Sanguinaria Canadensis extract 200ml
3. Larrea Mexicana extract 200ml
4. Annona Muricata extract 250ml
5. Tabebuia Avellanedea extract 250ml
6. Commiphora Mol-Mol tincture 1:5 100ml
7. Thuja Occidentalis tincture 1:5 100ml
8. Maranta Arundinaceae 35gm
9. Cetomacrogol Cream 1000gm

and an acid wherein the pH of the composition falls within the range of 0.1-6.

the method of mixing comprising the steps of:
1. adding together the ingredients "1" - "7" above, measured in the quantities stated above; so that the resultant composition has a pH of between 0.1-6;

2. placing this composition formulation in a stainless-steel boiler and heating to boiling-point for 15 minutes while stirring;

3. simmering and reducing the mixture down to a set consistency / quantity, in proportion to the ingredient quantities used preferably in this instance, to 1000ml;

4. letting the mixture cool and, when cool, adding one other ingredient, ingredient "8" above, stirring in thoroughly then heating until the resultant mixture thickens;

5. cooling the mixture again and then adding in a final ingredient, ingredient "9" above, mixing properly and storing in a cool, dark place (ie. at a temperature of below 30 degrees Celsius, away from light).

Preferably, the pH of each formulation of the composition is 3.0 or below 3.0.

DETAILLED DESCRIPTION

The invention will now be described according to preferred but non-limiting embodiments and with reference to its treatment and effect when applied.
The compound described herein was developed as a topical treatment and cure for a variety of cutaneous and sub-cutaneous skin diseases, which include Basal Cell Carcinomas, Squamous Cell Carcinomas, Melanomas, and benign and malignant lesions and / or tumours, including both precancerous and cancerous.

The compound has also been used successfully and is considered applicable for the treatment of cosmetic defects, and other superficial skin conditions. Its cosmetic potential in this respect attaches to skin lesions that are precancerous (such as but not limited to Bowens disease melanocytic naevii), that are benign hyperpigmentations, and / or that are viral in origin (e.g. warts, etc.) A typical treatment may involve application of a prescribed composition formulation in paste form, as a thin layer of around 2-3 mm over the lesion of diseased skin. The paste is preferably covered to protect against drying out during the treatment. Some patients, who have sensitive skins, may also require a protective masking treatment in the regions surrounding the lesion or tumour, as the case may be. This will prevent any unwanted action or irritation to healthy tissue adjacent to the diseased location under treatment with the paste.

Preferably, once the paste is applied it is left for 24 hours, whereupon the covering dressing is carefully removed to ensure no disturbance to the treated area. The paste must be left until there is a separation of the lesion or tumour from the surrounding healthy tissue. If treatment is not completed, diseased tissue could be left behind, which is not ready to separate from healthy tissue.

A completed treatment can be recognized by the appearance of a scab, and this is particularly so in the case of a cancerous lesion. The scab would normally be
expected to fall off of its own volition within 8-14 days. Some conditions may take longer and may require additional treatments. This may be the case, for instance, with larger or deeper tumours. Once removed, the lesions or tumour will be replaced with normal skin. The paste selectively destroys, with anti-tumour action, both precancerous and cancerous tissue and reduces or eliminates cancerous lesions.

The means by which the paste operates is understood to be a form of caustic, immune reaction, stimulating an immune system recognition of diseased tissue. The paste also has cytotoxic properties and antioxidant properties which protect surrounding healthy tissue. The paste further provides an antiseptic effect on surrounding healthy tissue.

As well, it is believed that an immune attractant, specifically, neutrophils, form(s) a barrier around cancerous or otherwise diseased tissue. Preliminary studies indicate cures for various conditions, some of which were diagnosed as incurable before application of the paste.

INGREDIENT RANGES

Set out below are summaries of the potential variant ranges of some of the identified constituent ingredients of the composition:

**Zinc Chloride**: Used as an example in this formulation and beside having a cytotoxic effect, ZCl determines the speed of action in the composition's process.
The amount used can be increased up to 500gm in the formula to increase speed and aggression in treatment. To slow the treatment the zinc chloride can be reduced to 60gm which will decrease the immediate effectiveness of the treatment. Adjusting the pH of the formulation also aids in determining the speed of treatment. For example, in some cases it is important to lower the amount of zinc in the formulation based on the tumour, the patient, etc. and the effectiveness of the treatment varies with the time the treatment takes. The effectiveness of the treatment is a function of the dosage, time of exposure to the treatment and maintenance in a given formulation calculated on the concentration of zinc ions required for each treatment based on tumour size, type of tumour, etc. This invention reveals that the acid pH of the zinc compound in the formula can be used to regulate the speed and effectiveness of the zinc ions in the treatment.

**Sanguinaria Canadensis:**

The amount used in the formulation as an active ingredient should not be decreased as it may negatively affect the outcome of the treatment. However, the amount used may be increased to 400ml. The increase will need to be kept in balance with the total mass by further reduction to keep the mixture at 1000 ml before centrifuging.

**Larrea Mexicana.** This ingredient is important to the end outcome and can be increased by large amounts to increase the effective strength on a wide range of potential treatments. It should not be reduced but can be increased to 800ml but the mix will need to be kept in a total mass balance as above.
**Annona Muricata.** This ingredient can be varied either way for different problems. Variations from 100ml to 750ml have interesting potential with certain lesions. Total mass balance needs to be observed.

**Tahehjua Avellanadas.** This is also an important ingredient. Its preferred range is 150ml to 500ml taking into account total mass balance by reduction again.

The compositions have a plurality of predetermined formulations aimed at the detection, treatment and cure of skin cancer and other skin lesions and tumours. The composition may be adapted for use as a paste previously described, an oral preparation, in an injection, in transdermal patches and for use topically for cosmetic clearing of skin blemishes. The composition has in trials achieved over a 95% success rate in skin cancer removals.

Studies have found that the effectiveness of each treatment could be measured based on the amount of "free" zinc ions released from each formulation used and the percentage of ionic zinc available to the cancers determined the effectiveness of the treatment. The knowledge that decreasing the pH to a level of 3.0 or below has produced superior results. Studies also indicated that attacking the cancer on a number of fronts using a multi-prong approach (stimulating the immune system and creating a cytotoxic effect) is more effective. The cancer treatment attacks the cancer from the different fronts. It has been found that using botanical extracts and/or synthetically produced extracts of selected plants already proven to be effective against cancer. The investigations using components in the formulation which exhibit different modes of action against the developmental phases of cancer, the blood supply to the cancer, an ingredient that produces an immune response and at the same time has a cytotoxic effect in all probability together produce a synergistic effect. The cumulative effect of all the components in the formulation working in harmony against the survival of the rapidly reproducing cancer cells kills and then expels or absorbs the dead cancer cells. Examples of
treatments on humans (see below) have graphic examples of the treatment and results.

The knowledge concerning the pH factor (lower pH, greater effect) when using zinc compounds has greatly improved the use of zinc over the formulations used in current formulations. The inventors believe that examples of zinc compounds that can be utilized in the formation of zinc ions include, but are not limited to the chloride, sulfate, oxide, salts, stearate, etc. (see references).

The multi-prong approach to the treatment of cancer referred to above includes the use of botanically derived components along with the zinc ion. For example, plant extracts derived from members of the Family Papaveraceae, specifically Sanguinaria canadensis L., including but not limited to Sanguinarine, may be used separately with ionic zinc ion and/or in combination with other botanical extracts from Sanguinaria canadensis and/or synthetically developed compounds identical or chemically close to the extract of Sanguinaria canadensis. Other botanical components of the formulation may include extracts from Kigelia africana, and/or synthetically produced chemicals identical or substantially similar to the extracts in combination with or without various plant extracts including Larrea mexicana, and/or Annona muricata, and/or Tabevia avellanedae and/or the extracts of these plants and/or synthetically produced chemicals identical or substantially similar to the extracts of the plants along with inerts used in the formulation such as surfactants, detergents, hydrosopic compounds such as Cell-U-Wet, and/or other chemicals, some to aid in penetration through the skin and/or for other formulations necessary in manufacture of formulations for injection, tablets, transdermal patches, etc.

The therapeutically effective compositions may be employed in the treatment of cancers such as, but not limited to skin, colon, liver, prostate cancer but each would require different combinations of the above components including certain inerts, made for each specific application, including a formulation for the purpose
of detection of cancer, or for the use as a vaccination for cancer in warm-blooded animals including humans, pets or other animals. and/or other uses to be described. The product(s) includes at least one formulation as detailed below. The compositions may also contain pharmaceutically acceptable carriers, diluents, cream bases, hygroscopic additives, detergents and/or other carriers required for the therapeutically effective dosage to travel to the specific target site for the intended purpose (detection of cancer, treatment of cancer and/or vaccination, etc.). Methods are provided including the steps of therapeutically administering, by topical, oral, parenteral or other methods of application, a therapeutically effective form of the formulation.

FORMULATION AND METHOD OF MANUFACTURE OF PRODUCT

INGREDIENTS:

The ingredients will vary in proportion and some will be present in certain formulations and absent in others.

The inerts or carrier substances used in the formulation will also vary considerably depending on the site of the application (prostate, liver, kidneys, spleen, stomach or intestines etc) and method of administration (skin surface, subcutaneous, interperenial, transdermal, inter-muscular, venous, inter-venous solution.) Certain modifications of the ingredients will occur as further refinement of the actives occurs, especially concerning the technology regarding purification of extracts of the plants mentioned in this ingredient statement. Other actives may be added if the proposed component proves to be beneficial to the formulation. However, the basic ingredients here shown are known to be efficacious without any additional components.

BASIC FORMULATION

PART A

The ingredients in PART A are mixed together prior to the other steps.
1a. The zinc compound used in the formulation is adjusted to the proper pH. The zinc compound is a heterocyclic ring containing a zinc ion attached by coordinate bonds to nonmetal ions in the same molecule. An example of the zinc compound used in the formulation would be zinc chloride where zinc equals 68% of the formulation. The free zinc ion composes 33% of the 68% of the colloidal zinc. Water and other inerts make up the remainder of this component, approximately 67% of the 68%.

2a. Sanguinaria canadensis - A concentrated extract and/or the isolated active constituents are used from Sanguinaria canadensis in proportion to the standardized amount found in the extract, Sanguinarine at 16% as a 2:1 concentrated extract.

3a. Larrea mexicana extract and/or the isolated active constituents from Larrea mexicana is equal to 16% of the formulation, using a 2:1 concentrated extract.

Totals for PART A

Zinc mixture = 68%
Sanguinaria canadensis extract = 16%
Larrea mexicana extract = 16%

Total of PART A = 100%

Note: PART A makes up 44.5% of the total mass of the end product except where specified. All percentages by mass measurements.

PART B

1c. Oil of Syzygium aromaticum

Equal to 2.2% of the total mass of the end product (1c. of oil)

PART C

Ointment base, that may consist of any base used for skin creams, either lipid or aqueous in nature. For example, cetomacrogol cream, emulsifying ointment or formulation using bees wax, lecithin, coconut oil. Glycerine or any other suitable medium for transdermal transport containing or not containing transport enhancing mediums as such, but not confined to Dimethylsulphoxide. Other additives include,
but are not limited to various emulsifiers, detergents, surfactants, products with hydrosopic characteristics, stickers and spreaders. Since the amount of each active may vary from case to case, the total amount of the base will also vary, but make up the difference in volume in the formulation.

PART D

Tabebuia avellanedea extract is used at a 1:1 ratio in PART I to enhance the effect (synergism) of the actives and therefore, reduce the percentage of the active ingredients depending on the required function, but not necessarily to add to the effect of the product.

TOTALS OF THE INGREDIENTS;

PART A

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ionic zinc and additives</td>
<td>68%</td>
</tr>
<tr>
<td>Sanguinaria canadensis</td>
<td>16%</td>
</tr>
<tr>
<td>Larrea mexicana</td>
<td>16%</td>
</tr>
</tbody>
</table>

Sub Total = 100%

PART A makes up 44.5% of the total mass of the end product except where otherwise specified

6.8%

PART B

Syzygium aromaticum

2.2%

PART C

Ointment base

53.3%

PART D

Tabebuia avellanedea (synergist) May or may not be used only in small in

PART A
TOTAL 100.0%

EXAMPLE OF A METHOD OF MANUFACTURE OF PRODUCT FOR DERMAL USE

PART A
Mix PARTS 1a, 2a, and 3a together, adding PART D depending on the formulation. There may be an exothermic reaction.

COMBINING PARTS

If the formulation calls for PART D to be a solid base, then PART D needs to be heated to 35 degrees C or slightly above to liquefy. Then PART A and PART D are heated together to 35 degrees C and mixed thoroughly, cooled slightly keeping the mixture from solidifying. PART B and PART C are then added and blended to form a homogenous mixture.

The product is then allowed to cool to a workable form for packaging and shipment.

EXCEPTION

If PART D is not a solid base and needs no heating to obtain a satisfactory mixing medium, the PART A and PART D can be mixed together without heat. PART B and PART D can then be added. The temperature should be kept below 35 degrees C.

NOTE: Mixing is performed by mechanical means and the process carefully monitored when PART D requires heating.

EXAMPLES OF DERMAL TREATMENT

The product may be used to detect cancerous tissues, treat malignancy or premalignancy tumours or remove the darkening of the skin due to over exposure to the sun.

EXAMPLE OF APPLICATION

DERMAL
Apply a thin layer of the paste to the suspect area. Cover, and confine the treated area for 12 - 48 hours. Remove the covering and the remaining product after 12 - 48 hours and keep the area clean or covered to avoid contamination.

The area will react to the treatment according to the type of lesion present. Cancer will be detected when a strong reaction takes place at the suspect site. No pronounced reaction will take place if the lesion is not cancerous. If cancer is present, the reaction will be pronounced, with swelling and redness in the area.

The cancer lesion(s) treated will exhibit the same symptoms as the detection process. The swelling and redness will persist and the skin may develop a boil which may break or be absorbed into the body. The boils may be hard at first, but eventually become soft before breaking through the skin or being absorbed into the system. The process from treatment to the final disappearance may take from 10 to 20 days.

INJECTION

An injection composition may be formulated from

- Ionic zinc and additives = 68%
- Sanguinaria canadensis = 16%
- Larrea mexicana = 16%

Alternatively an injection composition may be formulated from pro active constituents drawn from:

- Ionic zinc and additives = 68%
- Sanguinaria canadensis = 16%
- Larrea mexicana = 16%

(100% of subtotal)

- Kigelia pinnata 6.8%

- Tabebuia avellanea (synergist)

The injection is administered near or in the tumour.

As an example of the injectable composition preparation the ingredients
Ionic zinc and additives  Sanguinaria canadensis  Larrea mexicana
Alone or in combination with  Kigelia pinnata and/or  Tabbebuia avellanedea
Are centrifuged to remove selected ingredients whereupon the resulting solution is combined with saline or glucose solution used for IV and injected into the tumour.
The tumour will soften over a period of 10 - to 20 days and then break down and disperse.

EXAMPLES

The following are illustrative examples of practical applications the methods, formulations and compositions according to the present invention. The examples utilize variations of the compositions, using selected compounds that enhance the performance of the compositions (detection vs. skin cancer vs. other cancers). Although the examples utilize only selected compounds and formulations, it should be understood that the following examples are illustrative and are not limiting. Therefore, any of the aforementioned combinations of Sanguinaria canadensis, ionized zinc derived from electrolysis or chelation and/or chelation processes using different zinc compounds, Larrea mexicana, Kigelia africana, and clove oil or other substitute as a local anesthetic may be substituted according to the teachings of the present in the following examples.

EXAMPLE 1

A topical skin treatment composition containing the components (formulation) as described for detection of skin cancer and/or other cancers and for the treatment of skin cancers of all types.

EXAMPLE 2

A skin treatment specially formulated and a method of eliminating, controlling, treating or managing cancers in warm-blooded animals, including humans, pets,
food animals and wild animals by directly treating an existing cancer or periodically administering a therapeutically effective dosage of the compositions as described to animals that have cancer or are at a high risk to cancer, including animals pre-disposed to factors such as genetics and/or environmental conditions conducive to cancer induction.

EXAMPLE 3

A method as described in EXAMPLE 2 wherein the composition is administered by injection, including venous injection and/or intravenous solutions into the cancer or cancer infected tissue and/or injected adjacent to the cancer or cancer infected organ.

EXAMPLE 4

A method as described in EXAMPLE 2 wherein the composition is administered orally or sublingually in at least one of gel cap, tablet, powder, food additive, food, drops, liquid, beverage, pill and/or capsule form.

EXAMPLE 5

The method described in EXAMPLE 2 wherein the composition is administered topically by at least one of trans dermal patch, ointment, salve, cream lotion, gel, solution and the like either for treatment of skin cancer, as a vaccination, time release mechanism for internal cancers or other types of cancer.

EXAMPLE 6

The method as described in EXAMPLE 2 wherein the compound is administered internally by at least one of inhalation, suppository or subcutaneous deposit for use in treatment of any of the cancers mentioned in the CLAIMS.

EXAMPLE 7

A veterinary medicine composition for eliminating, controlling, treating and/or managing cancers in warm-blooded animals including dogs, cats, horses and other
pets and food animals such as cattle, sheep, pigs, etc. as described in the above examples, including, but not limited to skin cancers, etc.

HUMAN STUDIES - EXAMPLES OF SUCCESSFUL TREATMENTS

The following table summarizes a series of patient case studies/trials performed by application of a formulation of the composition according to one embodiment of the present invention.

<table>
<thead>
<tr>
<th>Location</th>
<th>Date</th>
<th>Symptom &amp; or Biopsy</th>
<th>Treatment</th>
<th>Result &amp; or 2nd Biopsy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>12/20/99</td>
<td>Skin Cancer</td>
<td>Topical application herbal ointment 101</td>
<td>Symptoms healed</td>
</tr>
<tr>
<td>Australia</td>
<td>12/20/99</td>
<td>Skin Cancer</td>
<td>Topical application herbal ointment 101</td>
<td>Symptoms healed</td>
</tr>
<tr>
<td>Australia</td>
<td>9/14/00</td>
<td>Severe Basal &amp; Squamous Cell Carcinoma</td>
<td>Topical application herbal ointment 101</td>
<td>No cancer found</td>
</tr>
<tr>
<td>Australia</td>
<td>1/9/01</td>
<td>Squamous Cell Carcinoma</td>
<td>Topical application herbal ointment 101</td>
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OTHER CASES WITH SPECIFICS

CASE A
Patient A had developed multiple skin cancers and had two surgically removed. The patients had at least 10 cancers frozen with liquid nitrogen on each of two occasions. The subject's face had become red and blotchy and could not be exposed to the sun without considerable discomfort.

A composition in accordance with the invention in the form of a paste was applied to 5 suspect spots on the back and neck. After 24 hours only 3 of the 5 sites reacted. Two of the spots fell out within 7 days and healed without a scar. A spot on back of the neck fell out 10 days latter. It produced a scab not unlike a large sunflower seed in shape and size. The scab fell out and the sample was sent for pathological examination. The result of the treatment and all other lesions treated and tested was that the malignant cells were eliminated and were identified with no cell structure at all. At the margins of the site of the original malignancy there were identified a few normal cells that had come away with the malignant tissue. These cells showed normal cell structure thus demonstrating that the treatment selectively destroyed the malignant tissue.

The paste was applied to the blotchy areas on the face one at a time. The patient experienced violent reactions with considerable pain. Each area became inflamed, swollen and became not unlike boils or large pimples. Each developed a scab and fell off leaving a hole, which healed without leaving a scar, except for one on the nose.

The subject had a sore on the inside of the nose for several years that would never heal. Occasionally it would bleed and caused irritation. The paste form of the composition was applied to the outside of the nose to a spot that had previously been frozen with nitrogen. The paste caused a violent reaction and produced a white spot approximately 15mm diameter in size with a black center. The scab fell
off leaving a divot approximately 1.5mm deep. The sore on the inside of the nose healed completely.

The subject also had a wheeze in breathing for many years. A mole site under the left breast was pasted and the subject experienced a violent reaction, the pain extended across the chest from under the left arm to under the right arm. The spot, although not large, became inflamed and swollen. A few days latter the spot fell out and the wheeze in the subject's chest ceased.

There were some areas pasted with no reaction and it is believed these were not cancerous.

The series of events that have occurred in the following case studies follow the same sequence:

1. The cancer was diagnosed as cancer by a medical doctor.
2. A composition with a predetermined formulation made in accordance with the invention was applied to the patent.
3. Results are typical:
   a. Cancerous site begins showing pain.
   b. Non-cancerous sites only demonstrate a mild response.
   c. The cancerous sites either form cysts or the cancer is reduced in size.
   d. The cancer cysts and was expelled from the body or the cancer is absorbed into the surrounding tissue.
4. The patent visits the Doctor and the patient is given a clean bill of health.
5. Over time, some, but not all cancers may reappear.
6. If new cancers develop, this case is the exception and not the rule.
7. Treatment in such cases result in the cancer being removed again.

FURTHER CASES

CASE B
The subject had a small lump in the chest area and problems breathing for approximately seven years prior to treatment. The subject also had problems with lumps on the head that could not be seen, but could be felt.

After having a chest x-ray and a head scan, the subject was told that there was no detectable condition. The subject's condition worsened. The left side of the face became hot and the subject experienced blackouts daily. The subject acquired 10 other cancer like lesions on the legs and back of the knees and was urinating up to fifteen times during the night.

The paste was applied to seventeen lesions upon the subject's head. Only seven spots reacted, two large tumors and five smaller ones. After about fourteen days of pain they (the cancers) all fell out. The paste was also applied to another lump on the chest falling out after fourteen days. The breathing problems and chest pain disappeared.

CASE C

The subject was a 27 years old female.
The subject sun baked in her teenage years and developed moles on the back.
A paste formulation of the composition of the invention was applied to all sites, however only one mole reacted. This mole fell out after 10 days and left a small scar.

In 1995, the subject noticed a hard lump on the right side of the head, approximately 10mm long, 5mm wide, protruding 2mm high. The subject became lethargic and developed impaired vision. The lump was initially diagnosed by a doctor as a cyst, who did not relate this to any of the other symptoms.
Early in year 2000, the paste formulation was applied to the lump. A large area around the lump reacted although the past was not applied to that area. After considerable pain, the lump and the area affected fell out. The area healed. All the subjects previous symptoms have disappeared.

CASE D

The subject was a 59 year old male having lesions which had been burned off with liquid nitrogen. Other lesions had bee surgically removed and some had required skin grafts. As a result the subject’s face had a number of areas where pigmentation had been removed leaving white blotches. The subject had some oozing patches on the face, neck, ears, shoulders and arms. (This was a legacy of a lifetime in the outdoors during his younger years).

A paste formulation was applied the subject’s forehead. There was some initial pain and redness and after 24 hours a white burn formed around the lesion. After about 5-6 days the cancer simply lifted out. There was no infection and the skin underneath was pink and healthy. It rapidly granulated to fill the hole within a few days.

During the period we covered the wound with honey. The dead cancer formed a grayish rubbery plug. There was no bleeding, oozing or infection. The subject had a small patch on the left shoulder which was diagnosed benign and was treated with cortisone ointment. After 4 applications of the paste all the cancer came out and the patch was healed.

CASE E

The subject was a 78 years old male. A cancerous Lesion on the left ear was subject to an excision and skin graft in February 1999 at a Skin Clinic. The cancer re-emerged. The treatment recommended was further surgery with removal of some ear cartilege.
After several applications of the paste over the next few months with a photographic record to keep track of progress the time came to arrange for a final biopsy. This occurred on the 6th June 2002 with 3 biopsy plugs taken. The results proved the ear no longer had cancer cells present. The Biopsy Report, dated 1.06.02 stated there is no malignancy seen in the interior, superior and inferior plugs taken from the right ear.

This treatment was briefly painful but the ultimate result positive.

CASE F

The subject had a suspicious spot on the right inner leg above the ankle.

Result from pathology confirmed a Basal Cell Carcinoma. Surgery was recommended treatment. A paste formulation was applied to the leg under a protective Band-Aid.

A piece of the tumour fell out and the area healed.

Another biopsy was performed and the report stated no Basal Cell carcinoma found.

A second subsequent biopsy and report confirmed no malignancy found.

CASE G

The subject applied the paste to a tumor on his arm. The tumor came out of the arm in 10 days, after one 24 hour treatment. It left a deep hole in which new skin tissue quickly formed to fill the hole.

CASE H

Following a long history of skin cancer treatment, the paste was applied to a lesion on the subjects forehead, around September, 2000. After 5-6 days the cancer simply lifted out.
The treatment was successfully continued, 1 or 2 lesions each time, including a spot on the subject's right temple.

CASE I

The subject a male had suffered from a suspected skin cancer on his chest for 4 years. A paste compound in accordance with the invention was first applied in early March, 2001, and a second time on 14 March 2001. A week later, the suspected cancer was starting to lift out of the subject's chest, and a few days later, it was shed completely.

CASE J

The subject was diagnosed with Basal Cell Carcinoma, having had many of those surgically removed previously. The paste was applied to one such lesion on the leg, and, approximately three weeks later it was shed with a complete recovery.

CASE K

The paste was applied to a spot on the subject's head. There was a noticeable change in the following 24 hours, and the spot fell out 10 days later. Complete healing followed.

CASE L

The paste was applied to a lesion on the neck of the subject who had a history of skin cancers. Later, the subject applied the paste to a Carcinoma (diagnosed by biopsy) on the nose. The Carcinoma fell out in a short time, with new tissue filling the remaining hole. The spot healed quickly.

CASE M

The paste was applied to a sizeable lump on the subject's left lower shin, which was a suspected cancer. The subject was referred for further attention. There was concern that the lump was centered over an artery. A second application was
required, and a week later the lump broke through the skin. The following week the lump fell out.

CASE N
Following the surgical removal of both Basel Cell and Squamous Cell Carcinomas, the subject elected to try the paste on another suspected cancer lesion on the calf of the right leg. About 3 weeks later the lesion dried out and was lifting around the edges. In another 2 weeks, 2 scabs lifted off, and by week 6 the area had healed normally.

CASE O
The subject was treated for a persistent lump on his ear for 2 years. The paste was applied and after a week only a small hole remained in the place of the lump, which later became a small scar.

CASE P
The paste was applied to a scaly patch on the subject's ear. The patch went white, with a piece falling out a few days later. The remaining hole quickly filled with out a scar.

CASE Q
The subject a male applied the paste to spots on his arms and chest, which had become itchy and suspicious. The spots became red but otherwise had little reaction. However other spots flared up, became a scab, and fell off.

CASE R
The paste was applied to a small lesion on the subject's right forearm, which became more raised and enlarged after about a week. The lump then diminished in size, dried out, and fell off. New skin growth replaced the lump. A small lesion on the subject's back was similarly treated successfully. The subject claims that the
treatment has also resulted in an end to aching and numbness in the fingers of his right hand and insomnia.

CASE S

The female subject had a paste formulation applied to a mole on the leg. There was no reaction. A red spot appeared upon the left breast accompanied with a very slight irritation. A second application of the paste was made to the left breast but there was no response. A spot appeared higher on the subject’s chest and once again pasting caused no reaction. Another spot appeared upon the subject’s neck just below the chin. After pasting the spot violently reacted. A boil like sore appeared approximately 15mm in diameter. The sore dried and a scab formed. In approximately 10 days a 5mm deep plug dropped out of the sore and the hole closed quickly leaving a small scar. There have been no other spots appeared. The subject had a family history of cancer.

CASE T

The female subject had been diagnosed with breast cancer for the second time. She had undergone treatments previously, including chemotherapy but reacted badly. The female subject applied paste to her right breast.

The initial reaction was very severe with considerable pain. A large boil erupted around the nipple with a very smelly discharge. Her bowel movement became extremely odorous. Over the following weeks a red scar like tissue developed about the boil and migrated around and under her arm. This scar like line widened down her side and then across her back to just below the shoulder blade. Paste was applied to her side and back. This time the paste application caused the pain to subside.

Throughout this treatment the subject’s blood pressure and other vital signs remained stable. A recent blood test specifically ordered for determining a cancer presence has revealed “no cancer found”.
Medical records and testimonials are available to substantiate the above case studies.

ANIMAL STUDIES

Veterinary examples of treatment using a composition formulation suggest that the same mode of action takes place in farm animals and pets as in man.

Determining the mode of action required testing the theory that the product has cytotoxic effects, attacks the developmental phase of cancer cells, slows the blood supply to the cancer, and/or activates the immune system.

STUDY ONE

Mice with immune systems were given interperneal injections with cancers. Groups were divided into a control group, two treatment groups where topical applications of the formulation were applied, one with a light and the other a heavy portion of the product, and the other group was treated with a treatment control (Cytotoxin).

Results indicated a reaction in the tumours of the test animals that mimic the symptoms experienced by human subjects documented above. The treated areas expressed redness, swelling and a softening of the tumours. Since the application was topical, the formulation was not able to penetrate the epidermis of the mice efficiently. The model used is short-lived and the product had little time to demonstrate a significant response. However, the tumours are scheduled for analysis, specifically looking for zinc. In addition, microscopic slides will be made of the tumours to observe any differences in cellular arrangements in the treated vs. the un-treated. Skin tumours in humans are on the surface. The formulation reacts within an hour on the exposed cancer. This study indicates that the formulation must be injected when the tumours are beneath the epidermis.
STUDY TWO

The same study will be repeated using the same parameters, except that the dosage will be given by sub-cutaneous injection in the near vicinity of the implanted tumours. The control using only the carrier product used with the actives, the control test (Cytotoxin), and the test animals will be treated in the same manner. A more profound reaction is expected and will be compared to STUDY ONE. The lower doses reaching the cancer along with a concentrated dosage may show a trend.

STUDY THREE

The applicants believe that an immune response mechanism is involved in the removal of the tumours. The test designed to indicate a immune response involves treatment of mice as described in STUDY TWO, waiting for the removal of the cancers after treatment, letting the animal rest and then re-inoculating the animal with some tumours. If an immune response is present, then the animal may reject the implanted cancer without further treatment.

STUDY FOUR

A limited in-vitro study will be conducted to determine what cytotoxic effects the formulation has on cancers in such studies. We do not expect outstanding results, although ionic zinc has shown cytotoxic effects. The applicants believe the formulation works best in-viva due to complex physiological mechanisms taking place in the multi-prong approach and the true efficacy of the product cannot be measured outside a living organism.

OTHER STUDIES

The mouse may not be the best model for these studies. Other studies using animals other than mice will be conducted. The human studies to date have demonstrated the formulation is effective. The proper animal model will demonstrate the same effects.
STUDIES ON ANIMALS OTHER THAN MAN

EXAMPLE 1

In September 2001 a horse with multiple melanoma was treated using an injectable form of the formula. Six tumours were selected ranging in size from 25mm diameter to 150mm diameter. All of the tumours swelled and softened over a two week period. All of the tumours except the 150mm tumour dispersed. The large 150mm tumour was treated and it then dispersed within the horse over a six or seven week period. Topical applications were also made on tumours that were on the skin, Some of these were 50mm in diameter and resolved normally over a three to four week period.

MODES OF ACTION

The inventors believe the composition works by the up-take of zinc ions into the cancer. During the destruction of the cancer cells through a cytotoxic reaction and/or a chemical reaction, the process causes the activation of "T" cell antigens which in turn form antibodies which also attack the cancerous tissue. Tests have revealed high concentrations of zinc (as high as 0.9%) in tumours that were expelled from human subjects who were treated with the formulation. The normal levels for zinc in cells is about 3000 times lower. Levels of zinc 3000 times higher than normal are toxic thus demonstrating increased uptake of this type of zinc by cancerous tissue only. It is known that zinc interferes with the up-take of necessary minerals, including but not limited to copper, iron, selenium, etc. and also has a cytotoxic reaction at the levels detected in the analysis. The process of expelling the cancer is believed to be an immune response. Other methods of producing an immune response may be the result of the zinc ions only, but may also be the result of the combination of the plant extracts and/or synthetically produced chemicals identical or closely related to the extract with the ionized zinc. Vaccination of a person or other warm-blooded animal is possible using the latest vaccination technologies with the inventor's formulations. The formulation may include use of
the components described herein with dead or dying cancerous cells and using a modified formulation incorporating the zinc ion and other compounds listed including Sanguinaria Canadensis, Larrea Mexicana, Annona Muricata, Tabebuia Avellanedea.

Inventors believe the formulation with dead or dying cancer cells, or some product of a cancer cell will induce the formation of "T" cell antigens that form antibodies that will attack cancer cells the become active in the future. It may be possible to produce a vaccination that will attack cancer cells that may become active in the future.

Other plants in the Family Papaveraceae have the same chemical composition as occurs in Sanguinaria canadensis, such as Sanguinarine, and other chemicals, most likely an alkaloid or combination of alkaloids, including alcohols, can be utilized in the same manner as the Sanguinaria canadensis for the same purposes as described above.

An analysis of the extracts of the other plants in the Family Papaveraceae will reveal the presence of other compounds which possess anti-cancer capabilities that have the same modes of action as the extracts of Sanguinaria canadensis. Such compounds can be synthesized to produce an active chemical or combination of chemicals that can be utilized in the same manner as described above in the detection, treatment, vaccination and other methods of cancer treatment.

Further, plants in the Family Papaveraceae will have the same active component(s) (possibly an alkaloid or combinations of alkaloids) and/or alcohol(s) that possess the other properties for use as an anti-cancer drug such as in Sanguinaria canadensis. For example, Sanguinaria canadensis has numerous components, including Sanguinarine, a benzophenanthridine alkaloid derived from the rhizomes. It is a catatonic molecule which converts from an iminium ion
form at pH <6 to an alkanolamine form at pH>7. Sanguinarine extract is composed of sanguinarine and five other closely related alkaloids. Other chemical compounds such as the alcohols are also present in the root that may also be active and may not yet been specifically tested for anti-cancer effects. Other plants in the Family Papaveraceae may also include these specific compounds and are therefore being claimed.

The synthetic products derived from the analysis of the extracts of the plants named herein and manufactured will provide a wider range of possibilities for use because of ease of handling, formulating, means of administration, purity, etc. New formulations are being developed that contain zinc ions and extracts of the plants discussed in Claim 1 and/or plant extracts and/or synthetic chemicals synthesized to duplicate the plant extracts. The product is much easier to formulate because the proportions are more exacting than the use of only plant extracts in combination with zinc ions. As new plant extracts are discovered, the synthesized extracts will be added to the formulations described herein.

Additional inert ingredients (such as but not limited to creams, ointment bases, moisturizing agents and oils) will provide a base for the formulation and increase the effectiveness of the product(s) by aiding in the absorption of the active ingredients and in some cases provide an additive effect acting much as a synergist. In addition, the invention uses ionic zinc generated through electrolysis, a trade secret chelation and/or another chelation process with the other compounds discussed including Sanguinaria canadensis, Kigelia africana, Larrea mexicana, and/or Annona muricata, and/or Tahehjua avellanedae in various amounts that produce results together that are not possible when only one component is used. The type of cancer treatment depends on the type of cancer, age of the patient, the stage of progression of the cancer and other factors that determine which specific components may or may not be used in specific formulations. The formulation can be applied on a weight to weight basis, but generally only skilled, technically trained personnel are capable of varying the ingredient proportions and/or
concentrations beyond the ranges specified without departing from the overall
spirit and scope of the invention. For example, clove oil and/or another natural or
synthetic products may or may not be used as a local anesthetic in the formulation,
but may not be necessary if a local anesthetic is administered in cases involving
application to the skin or where other sensitive organs are involved. Clove oil is a
volatile oil that contains eugenol along with other components that act as a local
anesthetic and also enhance the up-take of the active ingredients of the
formulation, therefore effecting the speed and efficiency of the formulation
(synergistic reaction). Trained personnel are capable of making such decisions.
The composition of the product(s) to be used to detect the presence of cancer, treat
the various types of cancer and/or to be used in a process of vaccination, etc. may
vary and be administered primarily as a topical application, taken orally, given by
injection or by the use of other methods of treatment discussed in other claims such
as application of the formulation through the incorporated into and/or with a
diluent or as a gel cap, tablet, powder, food additive, drops, liquid, beverage, rinse,
mouthwash, gargle, pill, capsule, lozenge, cough drop, transdermal patch,
ointment, salve, cream, lotion, gel, intravenous drip and/or be adapted for
periodical administering a therapeutically effective dosage at least one of topically,
orally, nasally, parenterally, intravenously and subcutaneously.

FORMULATION AND APPLICATION OF A PRODUCT FOR DETECTION
OF CANCER

An example of the procedure that is followed and the expected results for
application to the skin is set out below:
(1) paste using a pH higher than is used for the treatment (above pH 3.0) is applied
in a thin layer (2-3mm) over the infected area and covered with a bandage for 12 -
48 hours. [the bandage may for instance be Opsite™ or Duroderm™ which
can form a plastic skin and ensure treatment site is sealed from water];
(2), the covering is then removed at that time being careful not to disturb the
lesion;
(3) if the lesion appears, the lesion can be described as cancerous. If the lesion is not cancerous, there may be some skin irritation, but there will not be any significant reaction.

(4) if the lesion is cancerous, a large scab will form or the cancer may be absorbed into the body. Aloe juice may be applied onto the scab a few times daily until the scab falls off and the skin underneath begins to heal. If the lesion is not cancerous, there may be some skin irritation, but there will not be any significant reaction;

(5) if a reaction takes place and scab appears, the area should not be disturbed. A covering may be necessary to prevent disturbance. There should be no attempt to remove the treated lesion at any time as the treatment reaction may still be in progress up to seven days after removal of product. The scab should be allowed to fall out without disturbance.

Thus, it will be appreciated from the foregoing description that as a result of the present invention, a highly effective agent and/or combination of agents are proposed by which the principle objects of detection and cure of cancers is fulfilled. It is contemplated, and will be apparent to those skilled in the art from the preceding description that modifications and/or changes may be made in the prescribed embodiments without departure from the present invention. Accordingly, it is expressly intended that the foregoing description is illustrative of preferred embodiments only, and not limiting with respect to the true spirit and scope of the present invention.
THE CLAIMS DEFINING THE INVENTION ARE AS FOLLOWS:

1. A composition capable of detection and/or treatment of cancers; the composition including zinc ions in solution, capable of dissociation from a zinc compound; an acid capable of maintaining a predetermined level of disassociated zinc ions; and at least one carrier substance; wherein the composition has a predetermined pH within the range of 0.1 – 6.

2. A composition according to claim 1 wherein ionic zinc in the composition is derived from one or more of zinc sulfate, zinc chloride and/or other zinc compounds.

3. A composition according to claim 2 further including: Zinc Chloride Sanguinaria Canadensis, Larrea Mexicana, Annona Muricata, Tabebuia Avellanedea,

4. A composition according to claim 3 further including: compounds from plants in the family Papaveraceae, (including Sanguinaria canadensis L.), in combination with extracts and/or synthetically produced compounds identical or chemically closely related to Larrea mexicana, Tabebuia avellanedea, Annona muricata, Kigelia africana.

5. A composition according to claim 4 wherein the zinc ions are derived from an electrolysis process or chelation process.

6. A composition according to claim 5 further comprising; clove oil containing eugenol and a local anesthetic to enhance up-take of the zinc ions by a cancer cell thereby contributing to a synergistic reaction between compound constituents.

7. A composition according to claim 6 wherein the zinc influences up-take of by a cancer cell of minerals, including copper, iron, selenium.
8 A composition according to claim 7 wherein the zinc causes a cytotoxic reaction in a cancer cell at a predetermined zinc concentration.

9 A composition according to any of the foregoing claims for therapeutic human and/or veterinary use.

10 A composition according to claim 9 administered in a paste form.

11 A composition according to claim 9 administered intravenously.

12 A composition according to claim 9 administered as a transdermal patch.

13 A composition according to claim 9 administered orally.

15 A composition according to claim 9 administered nasally or by inhalation.

16 A composition according to claim 9 administered subcutaneously.

17 A composition according to claim 9 administered parenterally.

18 A composition according to claim 9 wherein the composition is administered internally by suppository.

19 A composition according to claim 10 administered in a therapeutic dosage in at least one of the following forms: ointment, salve, cream, lotion, or gel.

20 A composition according to claim 11 administered as an injection into or adjacent the cancer.

21 A composition according to claim 13 administered in a therapeutic dosage in one of the following forms: as a gel cap, in distilled water, as a tablet, powder, food additive, drops, liquid, beverage, rinse, mouth wash, gargle, capsule, lozenge or cough drop.

22 A composition according to claim 1 wherein the at least one carrier substance is a pharmaceutically acceptable carrier or diluent capable of destroying a cancer
when the formulation is administered by topical application to the site of the cancer.

23 A composition according to any of the foregoing claims wherein the composition when administered induces an immunological response and/or cytotoxic effect at a tumour site.

24 A composition according to claim 23 further comprising selected botanically derived constituents each having different mechanisms of attack of cancer cells, but which may act individually, cumulatively or synergistically with other active or carrier ingredients of the composition.

25 A composition according to any one of the foregoing claims wherein the concentration of "free" zinc ions released from each formulation used and the percentage of ionic zinc available to the cancers determine the effectiveness of the detection and/or treatment.

26 A composition according to claim 25 wherein the composition is immunotherapeutic or haemotherapeutic.

27 A composition according to claim 26 wherein a dosage of the composition for detection or treatment is the same for animals and humans.

28 A composition according to claim 11 administered as an injection formulated from

<table>
<thead>
<tr>
<th>Ionic zinc and additives</th>
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29 A composition according to claim 11 administered as an injection formulated from

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</tbody>
</table>

(100% of subtotal)
Kigelia pinnata 6.8%
Tabbebuia avellanedea (synergist).

30 A composition according to claim 11 administered as an injection formulated from ionic zinc and additives, Sanguinaria canadensis Larrea mexicana alone or in combination with Kigelia pinnata and/or Tabbebuia avellanedea.

31 A composition according to claim 30 administered as an injection and formulated by centrifuging the composition to remove selected ingredients whereupon the resulting solution is combined with saline or glucose solution used for IV and injected into the tumour.

32 A composition capable of detecting and treating benign and malignant tumors wherein the composition includes;
   a zinc compound,
   an acid which allows the maintenance of a predetermined concentration of zinc ions in the composition;
   a carrier substance and/or
   plant extracts;
   the composition having a pH within the range of 0.1-6.

33 A composition according to claim 32 wherein the plant extracts are derived from Sanguinaria Canadensis, Larrea Mexicana, Annona Muricata, Tabebuia Avellanedea.

34 A composition according to claim 32 wherein the carrier substance may be selected from Cetomacrogol cream, Emulsifying ointment, ointment bases, moisturizing agents, oils, dimethylsulphoxide and volatile oil that increase the uptake of actives.
35 A composition for the treatment of benign and malignant skin lesions and/or tumours; the composition comprising:

- a blend of ingredients selected from Sanguinaria Canadensis, Zinc Chloride, Larrea Mexicana, Annona Muricata, Tabebuia Avellaneda, Comiphora Mol-Mol, Thuja Occidentalis, Maranta Arundinacea & Cetomacrogol Cream;

- an acid; wherein the pH of the composition falls within the range of 0.1-6.

36 A method for preparation of a composition for the treatment of benign and malignant skin lesions and/or tumours; the method of mixing comprising the steps of:

1. mixing ingredients selected from; Zinc Chloride Sanguinaria Canadensis, Larrea Mexicana, Annona Muricata, Tabebuia Avellaneda, and an acid wherein the pH of the composition falls within the range of 0.1-6, measured in predetermined quantities, and, either as extract or tincture;

2. placing this mixture in a stainless-steel boiler and heating to boiling-point for 15 minutes, stirring all the while;

3. simmering and reducing the mixture down to a set consistency/quantity, in proportion to the ingredient quantities used;

4. allowing the mixture to cool and when cool, adding one further remaining ingredient, stirring in said remaining ingredient thoroughly until the resultant mixture thickens;

5. cooling the mixture again and then adding in the final ingredient, mixing and then storing in a cool, dark place (ie. at a temperature of below 30 degrees Celsius, away from light).
37 A method according to claim 36 wherein during the heating step, the mix is stabilized at a predetermined maximum temperature for a predetermined period of time.

38 A method according to claim 37 wherein, the temperature does not exceed 100 degrees Celsius and the time period is within 30 - 35 minutes.

39 A composition, for the treatment of benign and malignant skin lesions and / or tumours; the composition comprising a blend of the following ingredients in the following proportions:

1. Zinc Chloride 360gm

2. Sanguinaria Canadensis extract 200ml

3. Larrea Mexicana extract 200ml

4. Annona Muricata extract 250ml

5. Tabebuia Avellanedea extract 250ml

6. Commiphora Mol-Mol tincture 1:5 100ml

7. Thuja Occidentalis tincture 1:5 100ml

8. Maranta Arundinacea 35gm

9. Cetomacrogol Cream 1OOOgm

40 A method for mixing a composition for the treatment of benign and malignant skin lesions and / or tumours; wherein the compound is mixed using the following selected ingredients;

1. Zinc Chloride 360gm

2. Sanguinaria Canadensis extract 200ml
3. Larrea Mexicana extract 200ml
4. Annona Muricata extract 250ml
5. Tabebuia Avellanedea extract 250ml
6. Commiphora Mol-Mol tincture 1:5 100ml
7. Thuja Occidentalis tincture 1:5 100ml
8. Maranta Arundinaceae 35gm
9. Cetomacrogol Cream 1000gm

41 A method according to claim 40 comprising the steps of:

1. adding together the ingredients "1" - "7" above, measured in the quantities stated above; so that the resultant composition has a pH of between 0.1 - 6;

2. placing this composition formulation in a stainless-steel boiler and heating to boiling-point for 15 minutes while stirring;

3. simmering and reducing the mixture down to a set consistency / quantity, in proportion to the ingredient quantities used preferably in this instance, to 1000ml;

4. letting the mixture cool and, when cool, adding one other ingredient, ingredient "8" above, stirring in thoroughly then heating until the resultant mixture thickens;

5. cooling the mixture again and then adding in a final ingredient, ingredient "9" above, mixing properly and storing in a cool, dark place (ie. at a temperature of below 30 degrees Celsius, away from light).
42 A method of administering a composition capable of detection and treatment of cancers;

the composition including zinc ions capable of dissociation from a zinc compound;

an acid capable of maintaining a predetermined level of disassociated zinc ions;

and a carrier substance;

wherein the compound has a predetermined pH within the range of 0.1 – 6;

the method comprising the steps of;

a) applying the composition as a paste in a thin layer (2-3mm) over an affected area of skin having a lesion;

b) covering said affected area with a bandage and leaving for 12 -48 hours;

c) removing the bandage without disturbing the lesion;

d) allowing the lesion to fall out of its own volition;

43 A composition according to any of the foregoing claims wherein zinc ions equal 68% of a formulation of the composition with free zinc ions comprising 33% or higher of the 68% of colloidal zinc depending on the compound used.

44 A composition according to claim 43 wherein water and other inerts make up the remainder of the composition up to 67% of the 68% and the remainder of the composition comprises;

Sanguinarine at 16% as a 2:1 concentrated extract.

Larrea mexicana extract and/or the isolated active constituents from Larrea mexicana equal to 16% of the formulation, using a 2:1 concentrated extract.

45 A composition according to any of the foregoing claims wherein the pH of the composition is below 3.0.
**INTERNATIONAL SEARCH REPORT**

**A. CLASSIFICATION OF SUBJECT MATTER**

Int. Cl.: A61 K 33/30, 35/78, A61P 35/00

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic database consulted during the international search (name of database and, where practicable, search terms used): DWPI, CAPLUS and MEDLINE. Keywords: Zinc, Sanguinaria, Larrea, Annona, Tabebuia, Papaverac

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

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<td>US 4 515 779 A (ELLIOT) 7 May 1985 Whole document</td>
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<td>EP 0 025 649 B (OREWA INC) 26 October 1983 Column 2, lines 10-15, column 4, lines 40-45</td>
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Further documents are listed in the continuation of Box C

See patent family annex

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* Special categories of cited documents:
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- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
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Date of the actual completion of the international search: 15 October 2002

Date of mailing of the international search report: 18 OCT 2002

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Form PCT/ISA/210 (second sheet) (July 1998)
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<td>EP 0 565 495 A (KEMIPROGRESS s.r.l.) 13 October 1993 Page 2, lines 54 - page 3</td>
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<td>WO 01/03662 A (VITA-MYR INT. CORP.) 18 January 2001 Abstract</td>
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