

## Biosenta announces further advances in research and development of Tri-Filler™

TORONTO and CALGARY, Alberta, Aug. 08, 2023 -- Biosenta Inc. ("Biosenta" or the "Company") (CSE: ZRO) is pleased to announce further advances in research and development of the Tri-Filler™ particle composed of Ca(OH)<sub>2</sub> (calcium hydroxide) core with a CaCO<sub>3</sub> (calcium carbonate) encapsulation. Ongoing development of new methods of production of Tri-Filler™ by Dr. Maen Husein of the Department of Chemical Engineering at the University of Calgary and his team have reduced aggregation and resulted in the production of Tri-Filler™ particles being more uniform in shape and morphology. Additionally, using these new production methods, Tri-Filler™ can now be produced continuously at a higher rate than previously achieved.

The University of Calgary team continues to investigate the mechanism of encapsulation of calcium hydroxide with calcium carbonate with a view to improving Tri-Filler's performance in industrial applications and exploring Tri-Filler's ability to serve as an effective carbon sink. Preliminary testing conducted by SGS Canada Inc. using accelerated aging, indicates that Tri-Filler™ may have a shelf life of up to 99 years.

Dr. Mehdi Mohammadi Ashani, a Postdoctoral Fellow in Microbiology and Bioengineering at the University of Calgary, continues to study Tri-Filler™ on its own and in combination with other materials, to assess its efficacy against a diverse range of microorganisms, encompassing gram-positive and gram-negative bacteria including *S.aureus*, *P.aeruginosa*, and *E.coli* as well as fungi, including *C.albecan* and *C.auris*. Lab testing of Tri-Filler™ as an anti-microbial has shown very promising results. Preliminary testing points to the Tri-Filler™ being effective in inhibiting the growth of both gram-positive and gram-negative bacteria and fungi.

Of note, the addition of Tri-Filler™ in paint has demonstrated the capability to eradicate a broad selection of bacteria and more than 95% of fungi within a brief 10-minute duration. This anti-microbial activity has been shown to be effective to combat *Candida auris* (*C.auris*) fungus. This specific fungus presents a substantial global health risk, given its alarming rate of spread, as identified by the Centers for Disease Control and Prevention (CDC). These preliminary results show a potential for Tri-Filler™ to target *C.auris* infections in hospital and clinic settings. Further investigation by the University of Calgary team, experimentation and refinement of the Tri-Filler™ particle continue.

Tri-Filler™ has been produced and tested in laboratory quantities and settings only. Biosenta and the University of Calgary team are in the process of assembling a bench-scale unit capable of producing Tri-Filler™ in more significant amounts to be used for commercial testing and as a precursor to developing and scaling up to a commercial plant.

Biosenta has identified a number of industry partners with whom Biosenta and the University of Calgary team are in various stages of talks for further research and commercialization. These partnerships will be the subject of future press releases if and as agreements with such industry partners are entered into. For certainty, while the Company has had initial conversations with potential partners, these conversations are preliminary, and the Company has not entered into any definitive agreements with any such partners.

### Biosenta

Biosenta Inc., a ground-breaking pioneer in the field of antimicrobial solutions, is on a mission to revolutionize the material world. We develop cutting-edge chemical compounds designed to eliminate harmful microorganisms such as bacteria, fungi, and viruses for household and industrial uses, while ensuring safety for both humans and the environment. Our aim is to address the escalating global health crisis of Antimicrobial Resistance (AMR).

Our ground-breaking approach has birthed two main offerings:

1. **true™ Disinfectant:** Our pioneering, broad-spectrum, anti-microbial, dual-action disinfectant is recognized by Health Canada for use in the fight against COVID-19. We designed it to be tough on germs but gentle on humans, causing no irritation or harm. With its long-lasting disinfecting power, it effectively kills bacteria, germs, mold, mildew, and viruses. Our true™ technology leads the charge against the threat of superbug pathogens.
2. **Tri-Filler™:** Biosenta's flagship product, Tri-Filler™, symbolizes our commitment to transforming the material world. The "Tri" in Tri-Filler™ represents three key characteristics:
  - i. **Antimicrobial Power:** Tri-Filler™ delivers impressive antimicrobial protection, preventing the regrowth of bacteria, fungi, mold, and viruses. It provides a critical defence against the escalating Antimicrobial Resistance (AMR) global health crisis.
  - ii. **Material Enhancement:** Ingeniously engineered by encapsulating calcium hydroxide with calcium carbonate, Tri-Filler™ is a food-grade, bio-compatible solution. It not only imparts antimicrobial properties but also enhances the strength, fire retardancy, and performance of various materials including plastics, paints, coatings, textiles, drywall and concrete. It fortifies these materials against forces and stresses that could cause damage or failure. Our accelerated aging tests show that this solution can maintain efficacy for up to an impressive 99 years.
  - iii. **Eco-Efficiency:** Tri-Filler™ represents a significant stride towards a greener future. By incorporating CO<sub>2</sub> in the encapsulation process, Tri-Filler™ aids in reducing CO<sub>2</sub> emissions, helping businesses in achieving their

sustainability goals.

Proudly Canadian, Biosenta is at the forefront of reshaping the material world for the better, tackling significant global health and environment challenges. We are committed to making the world a safer and healthier place.

#### Forward-Looking Information

This press release contains forward-looking information within the meaning of applicable securities laws ("forward-looking statements"), including forward-looking statements relating to: anticipated production rates and continuity of production for Tri-Filler™, potential for improving Tri-Filler's performance in industrial applications, use of Tri-Filler™ as a carbon sink, the potential shelf life of Tri-Filler™, Tri-Filler™ being effective in inhibiting the growth of both gram-positive and gram-negative bacteria and fungi targeting *C.auris* infections in hospital and clinic settings, further investigation by the University of Calgary, future publication of results, assembling of a bench-scale unit capable of producing Tri-Filler™ in more significant amounts to be used for commercial testing and the potential to develop and scale up to a commercial plant, identification of industry partners and entering into agreements with these partners.

Such forward-looking statements involve known and unknown risks, uncertainties, assumptions and other factors that may cause the actual results, performance or achievements to differ materially from the anticipated results, performance or achievements or developments expressed or implied by such forward-looking statements. In particular, the results expressed in this press release are based on preliminary testing only, are subject to confirmation in further testing, and have not been tested in real world application or otherwise outside of a laboratory setting.

Such risks, uncertainties, assumptions and factors also include, but are not limited to: future testing may not yield results as promising as initial results, results of testing in a laboratory setting may not be applicable to real life settings, assumptions in respect of developing and scaling up to a commercial plant, the ability of Biosenta to fund continued research and development, the availability of industry partners and the ability to successfully negotiate agreements and consummate transactions with them and the ability to be able to further commercialize Tri-Filler™. If any such assumptions become incorrect, or such risks actually occur, they could materially adversely affect the path to continued commercialization of Tri-Filler™ and, by extension, the Company's business, financial condition or results of operations. In that case, the trading price of the Company's common shares could decline, perhaps materially.

Readers are cautioned not to place undue reliance upon any such forward-looking statements, which speak only as of the date made. Forward-looking statements are provided for the purposes of providing information about management's current expectations and plans relating to the future. Readers are cautioned that such information may not be appropriate for other purposes. The Company does not undertake or accept any obligation or undertaking to release publicly any updates or revisions to any forward-looking statements to reflect any change in the Company's expectations or any change in events, conditions or circumstances on which any such statement is based, except as required by law.

#### Disclaimer

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