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Oragenics Announces Positive Results in Several Lantibiotics Compounds Against MRSA and VRE

Potentially Addresses Life-Threatening Antibiotic-Resistant Infections

TAMPA, Fla.--(BUSINESS WIRE)-- **Oragenics, Inc. (NYSE American: OGEN) ("Oragenics" or the "Company"),** a biotechnology company dedicated to fighting infectious diseases, today reports favorable findings from third party laboratory testing of several compounds in Oragenics' lantibiotics platform to combat multiple pathogens despite the resistance of those pathogens to standard-of-care antibiotics. Lantibiotics are a novel class of antibiotics with the potential to treat serious, life-threatening infections.

Oragenics' lantibiotics platform is focused on the development of new antibiotics effective against certain pathogens including vancomycin-resistant *Enterococci* (VRE) and methicillin-resistant *Staphylococcus aureus* (MRSA). This preclinical testing was conducted through Oragenics' collaboration with Linnaeus Bioscience Inc.

Testing by Linnaeus Bioscience demonstrated that the MRSA and VRE strains and clinical isolates remained sensitive to several Oragenics' lantibiotic structures analyzed despite their resistance to so-called drugs of last resort such as oxacillin, methicillin, vancomycin and/or daptomycin.

Kim Murphy, President and Chief Executive Officer of Oragenics, commented, "We previously reported that cross-resistance does not appear to emerge with our novel class of antibiotics because of their unique mechanism of action. We are encouraged by the outcomes of our recent collaboration with Linnaeus, which verify that life-threatening pathogens that are resistant to drugs of last resort – including vancomycin and daptomycin – remain sensitive to several of our lantibiotic compounds. This is another significant step in efforts to identify a new lead compound to advance into the clinic toward the development of novel therapies to fight infectious diseases."

Marc Sharp, Ph.D., Chief Scientific Officer of Linnaeus Bioscience and an expert on antibiotic mechanism of action, stated, "Antimicrobial resistance continues to be a significant and increasingly serious clinical problem. Through this collaboration with Oragenics we demonstrated that clinically-relevant representative strains and contemporary clinical isolates remain sensitive to several lantibiotics despite the multidrug-resistance phenotype of those bacterial species. Vancomycin and daptomycin in particular are among the drugs that are used for treating severe healthcare-associated MRSA infections."

More than 2.8 million antibiotic-resistant infections occur in the U.S. each year, and more than 35,000 people die as a result. Oragenics is focused on addressing this unmet medical need through its novel lantibiotics platform, and the results of its work with Linnaeus Bioscience advance Oragenics' long-term mission to become a provider of effective treatments for infectious diseases. Oragenics remains committed to fighting infectious diseases through the development of its lantibiotics pipeline against MRSA and VRE pathogens.

About Linnaeus Bioscience Inc.

At Linnaeus Bioscience Inc., our mission is to speed up drug discovery through the exploration, advancement and application of innovative technologies. Established in 2012, Linnaeus was founded to commercialize the Bacterial Cytological Profiling (BCP) platform first developed at the University of California San Diego. BCP enables us to rapidly understand the mechanism of action of antibiotics by performing the equivalent of an autopsy on bacterial cells. We apply this cutting-edge technology to develop our own internal pipeline of molecules that target Gram-negative bacteria and provide access to BCP on a fee-for-service basis. For further details about Linnaeus Bioscience Inc., please visit our website at www.linnaeusbio.com.

About Oragenics, Inc.

Oragenics, Inc. is a development-stage company dedicated to fighting infectious diseases, including those caused by coronaviruses and multidrug-resistant organisms. Its lead product is NT-CoV2-1, an intranasal vaccine candidate to prevent COVID-19 and variants of the SARS-CoV-2 virus. The NT-CoV2-1 program leverages coronavirus spike protein research licensed from the National Institutes of Health (NIH) and the National Research Council of Canada (NRC) with a focus on reducing viral transmission and offering a more patient-friendly intranasal administration. Its lantibiotics program features a novel class of antibiotics against bacteria that have developed resistance to commercial antibiotics. For more information about Oragenics, please visit www.oragenics.com.

Forward-Looking Statements

This communication contains "forward-looking statements" within the meaning of the safe harbor provisions of the U.S. Private Securities Litigation Reform Act of 1995. These forward-looking statements are based on management's beliefs and assumptions and information currently available. The words "believe," "expect," "anticipate," "intend," "estimate," "project" and similar expressions that do not relate solely to historical matters identify forward-looking statements. Investors should be cautious in relying on forward-looking statements because they are subject to a variety of risks, uncertainties, and other factors that could cause actual results to differ materially from those expressed in any such forward-looking statements. These factors include, but are not limited to, the following: the Company's ability to obtain necessary funding, non-dilutive or otherwise, for the development of the vaccine and lantibiotic product candidates; the Company's ability to advance the development of its vaccine candidate and lantibiotics candidate under the timelines and in accord with the milestones it projects; the regulatory application process, research and development stages, and future clinical data and analysis relating to vaccines and lantibiotics, including any meetings, decisions by regulatory authorities, such as the FDA and Canadian regulatory authorities and investigational review boards, whether favorable or

unfavorable; the potential application of our vaccine candidate to variants and other coronaviruses; the Company's ability to obtain, maintain and enforce necessary patent and other intellectual property protection and license agreements; the nature of competition and development relating to COVID-19 immunization and therapeutic treatments and demand for vaccines and antibiotics; the Company's expectations as to the outcome of preclinical studies, nasal administration, transmission, manufacturing, storage and distribution; other potential adverse impacts such as delays in regulatory review, manufacturing delays and supply chain issues, adverse impacts on healthcare systems and disruption of the global economy; the ability to sustain compliance with our exchange listing requirements; and general economic and market conditions and risks, as well as other uncertainties described in our filings with the U.S. Securities and Exchange Commission. All information set forth in this press release is as of the date hereof. You should consider these factors in evaluating the forward-looking statements included in this press release and not place undue reliance on such statements. We do not assume any obligation to publicly provide revisions or updates to any forward-looking statements, whether as a result of new information, future developments or otherwise, should circumstances change, except as otherwise required by law.

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