



Oragenics Signs Process Development and Manufacturing Agreement With Avid Bioservices for Coronavirus Vaccine

August 20, 2020

Avid Well Positioned to Meet Significant Scale-Up Requirements for NIH-Licensed SARS-CoV-2 Spike Protein Vaccine Candidate

TAMPA, Fla. & TUSTIN, Calif.--(BUSINESS WIRE)--Aug. 20, 2020-- Oragenics, Inc. (NYSE American: OGEN) and Avid Bioservices, Inc. (NASDAQ:CDMO) (NASDAQ:CDMOP), today announced that the companies have entered into a process development and drug substance manufacturing agreement. Under terms of the agreement, Avid will provide Oragenics with analytical method development, process development and drug substance manufacturing services to support development of Oragenics' novel SARS CoV-2 (COVID-19) spike protein vaccine candidate, Terra CoV-2.

Avid and Oragenics will immediately commence the initial phase of the project, which includes analytical method feasibility and qualification activities. Following completion of these initial activities the companies plan to advance to upstream and downstream process development and CGMP drug substance manufacturing of Terra CoV-2 within Avid's state-of-the-art Myford facility. These activities are designed to support Oragenics' goal of advancing its Terra CoV-2 vaccine candidate into human clinical trials by early 2021.

"Avid specializes in recombinant protein production, a critical component in the development and potential commercialization of our lead coronavirus vaccine candidate, Terra CoV-2," said Alan Joslyn, Ph.D., president and chief executive officer of Oragenics. "With Avid's existing manufacturing infrastructure, which includes three 2000L single-use bioreactors and considerable space for expansion, they are the right manufacturing partner to scale-up to the significant levels of bulk vaccine substance that would be required to combat COVID-19, should our vaccine be approved by regulatory authorities."

"We are delighted by Oragenics' selection of Avid Bioservices to provide essential CDMO services to support the company's development of its COVID-19 vaccine candidate. As the COVID-19 pandemic continues to have a tremendous impact around the world, there is a critical need for reliable, high-quality development and manufacturing services for potential vaccines that may offer protection against the novel coronavirus. At Avid, we believe that our 27 years of experience in manufacturing complex biologics and track record of excellence in meeting customers' CDMO needs positions us to make an important contribution to the global coronavirus response," said Timothy Compton, chief commercial officer of Avid.

About Terra CoV-2

In March 2020, Oragenics, acquired a non-exclusive license from the National Institutes of Health (NIH) for its stabilized prefusion Terra CoV-2 spike protein. Oragenics recently announced that its spike protein had been successfully inserted into Chinese Hamster Ovary ("CHO") cells and "mini-pool" production and analytical development are underway. CHO cells are used to produce a number of FDA-approved recombinant proteins.

About Oragenics, Inc.

Oragenics, Inc. is focused on the creation of the Terra CoV-2 vaccine candidate to combat the novel coronavirus pandemic and the further development of effective treatments for novel antibiotics against infectious disease. Through Noachis Terra, a wholly-owned subsidiary of Oragenics, the Company is dedicated to the development and commercialization of a vaccine candidate providing specific immunity from novel coronavirus. The Terra CoV-2 immunization leverages coronavirus spike protein research conducted by the National Institute of Health. In addition, Oragenics also has an exclusive worldwide channel collaboration with ILH Holdings, Inc. (n/k/a Eleszto Genetika, Inc.) relating to the development of novel antibiotics.

For more information about Oragenics, please visit www.oragenics.com.

About Avid Bioservices, Inc.

Avid Bioservices is a dedicated contract development and manufacturing organization (CDMO) focused on development and CGMP manufacturing of biopharmaceutical drug substances derived from mammalian cell culture. The company provides a comprehensive range of process development, CGMP clinical and commercial manufacturing services for the biotechnology and biopharmaceutical industries. With 27 years of experience producing monoclonal antibodies and recombinant proteins, Avid's services include CGMP clinical and commercial drug substance manufacturing, bulk packaging, release and stability testing and regulatory submissions support. For early-stage programs the company provides a variety of process development activities, including upstream and downstream development and optimization, analytical methods development, testing and characterization. The scope of our services ranges from standalone process development projects to full development and manufacturing programs through commercialization. www.avidbio.com

Safe Harbor Statement

Under the Private Securities Litigation Reform Act of 1995: This release includes forward-looking statements that reflect management's current views with respect to future events and performance. 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 advance the development of Terra CoV-2 under the timelines and in accord with the milestones it projects; the Company's ability to obtain funding for the development of Noachis Terra's Terra CoV-2 vaccine, whether through its own cash on hand, a grant from BARDA, or another alternative source; the regulatory application process,

research and development stages, and future clinical data and analysis relating to Terra CoV-2, including any decisions by regulatory authorities, such as the FDA and investigational review boards, whether favorable or unfavorable; the Company's ability to obtain, maintain and enforce necessary patent and other intellectual property protection; the nature of competition and development relating to COVID-19 immunization and therapeutic treatments; other potential adverse impacts due to the global COVID-19 pandemic, such as delays in regulatory review, interruptions to manufacturers and supply chains, adverse impacts on healthcare systems and disruption of the global economy; and general economic and market conditions risks, as well as other uncertainties described in our filings with the U.S. Securities and Exchange Commission. Oragenics assumes no responsibility to update any forward-looking statements contained in this press release or with respect to the matters described herein.

View source version on [businesswire.com](https://www.businesswire.com/news/home/20200820005319/en/): <https://www.businesswire.com/news/home/20200820005319/en/>

Oragenics, Inc.
Michael Sullivan
Chief Financial Officer
813-286-7900
msullivan@oragenics.com

John Marco (Investors)
Managing Director
CORE IR
516-222-2560
johnm@coreir.com

Jules Abraham (Media)
CORE IR
917-885-7378
julesa@coreir.com

Avid Bioservices, Inc.
Stephanie Diaz (Investors)
Vida Strategic Partners
415-675-7401
sdiaz@vidasp.com

Tim Brons (Media)
Vida Strategic Partners
415-675-7402
tbrons@vidasp.com

Source: Oragenics, Inc. and Avid Bioservices, Inc.