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Press Release

NovaSterilis Awarded Patent for Novel Vaccine Technology Using Supercritical

(Lansing, NY; April 18th, 2011) – NovaSterilis Inc., a leader in the development and commercialization of supercritical carbon dioxide technology, has been granted US Patent 7,919,096. The patent, dated April 5th 2011, is entitled "Inactivating Organisms Using Carbon Dioxide At or Near Supercritical Pressure and Temperature Conditions."

The patent describes the use of a novel sterilization apparatus together with chemical additives to create and produce sterile, immunogenic preparations having reduced or no infectivity. Using the NovaSterilis technology, whole bacterial pathogens were inactivated at or near CO_2 supercritical pressure and temperature conditions, then utilized in experiments to assess immunogenicity. Data accumulated from the research indicated that the technology was capable of producing an effective yet non-infective vaccine "surrogate" for the bacterial pathogens.

"Clearly, the US Patent Office recognized the novelty and importance of this invention," commented David Burns, President of NovaSterilis. "We are excited that this technology may hold the key to developing an immediate therapeutic response to infectious agents, providing the scientific community with another tool to respond to pandemics or biologic threats"

Besides sterilizing and inactivating the pathogen, the NovaSterilis technology caused no adverse reactive response, and the test subject demonstrated accumulated antibodies (immune recognition) upon a challenge. A key benefit is the speed with which the technology inactivated the pathogen without altering physical structures vital to the immune response. This technique could be used to provide a quick response vaccine to a bacterial threat.

NovaSterilis is currently commercializing other patents, including terminal sterilization of biomedical materials using supercritical CO_2.

About NovaSterilis

NovaSterilis currently markets terminal sterilization technology and equipment related to their supercritical carbon dioxide platform. The supercritical or the fluid phase of CO_2 occurs at low pressure (72.9 atm) and moderate temperatures (31.1° C). Supercritical CO_2 retains advantageous properties of the gas and liquid phases of carbon dioxide making it an ideal fluid for manufacturing processes. The company currently markets the Nova 2200, a 20 liter fully automated supercritical CO_2 terminal sterilization chamber and is in final development of an 80 liter unit. NovaSterilis is a privately held biotechnology company located in Lansing New York. NovaSterilis is the recipient of a 2007 Presidential Green Chemistry Challenge Award presented by the Environmental Protection Agency.

For more information on NovaSterilis and supercritical carbon dioxide visit www.novasterilis.com