



### **Goodwin Biotechnology was Selected by Panacea Pharmaceuticals for a Highly Specialized Vaccine Fill / Finish Project**

**May, 2015 -- Plantation, Florida --** Goodwin Biotechnology, Inc., a biological Contract Development and Manufacturing Organization (CDMO) that specializes in bioprocess development and GMP manufacturing of biopharmaceuticals utilizing Mammalian Cell Culture expression systems and Bioconjugation technologies, was selected by Panacea Pharmaceuticals, Inc. to complete a novel Fill / Finish project, as well as Quality Control release and stability testing for a therapeutic, nanoparticle cancer vaccine based on the Human Aspartyl (Asparaginy)  $\beta$ -Hydroxylase (HAAH) tumor-specific protein to support Phase I clinical trials in patients with various solid tumor cancers.

“Over the last year, we partnered with Goodwin Biotechnology on a bioconjugation project and have found them to be extremely responsive and flexible. They had an innovative approach to address some rather significant challenges in an effort to move our project forward,” noted Dr. Steven A. Fuller, Ph.D., Chief Operating Officer at Panacea Pharmaceuticals. “When we identified the need to select a company for our Fill / Finish project that involves a unique injector cartridge filling procedure for our other lead compound, we evaluated Goodwin’s capabilities and we were pleased to find out that their approach to niche Fill / Finish projects was just as flexible and solutions oriented. When coupling that with the sophistication of their quality system they’ve put in place and the technical expertise of their staff, the decision became obvious.”

“We are pleased to have Panacea Pharmaceuticals work with us on their two lead compounds,” said SooYoung S. Lee, Ph.D., Chief Operating Officer at Goodwin Biotechnology. “While being selected for a Bioconjugation or Cell Culture-based project is typical, based on the many years of successful track records and our commitment to bring advances to those fields, it is more rewarding to know that our investment to build and offer the comprehensive infrastructure required to deliver ready-for-clinical-trials, Final Vial Product (FVP) and provide integrated solutions to meet specific and unique requirements of our clients has been helpful for Panacea. Our staff takes great pride in their respective skill sets and, as a team, we all place a great level of emphasis on quality and being responsive to our client’s needs to enhance the value of our clients’ drug candidates.”

Goodwin Biotechnology operates an ISO5 cGMP filling suite that can accommodate liquid filling of a wide range of configurations to meet specific and unique clients’ requirement. For more than 20 years, Goodwin Biotechnology has been manufacturing Bulk Drug Substance and performing Fill / Finish services for small startup ventures to large, multi-national companies as well as government agencies and medical institutions. Goodwin has successfully completed numerous traditional Fill / Finish and Drug Product manufacturing projects, as well as customized, specialized Fill / Finish projects for small volume fills, light sensitive products, and extremely fragile biological drugs for which large-scale, automated fill systems are not appropriate.

#### **About Goodwin Biotechnology, Inc.**

**Goodwin Biotechnology** is a uniquely qualified CDMO that offers a Single Source Solution™ for our clients from cell line development, exploratory proof of concept projects through process development and cGMP contract manufacturing of monoclonal antibodies, recombinant proteins, vaccines, and Biologic Drug Conjugates including Antibody Drug Conjugates (ADCs) for early and late stage clinical trials. By working with Goodwin Biotechnology, clients can enhance the value of their product candidates with clear development and manufacturing strategies, as well as a road map to meet the appropriate quality requirements from the milligram and gram range to kilogram quantities as the product candidates move along the clinical development pathway in a cost-effective, timely, and cGMP compliant manner to enhance patients’ lives. With over 20 years of experience as an independent

integrated contract manufacturer, Goodwin Biotechnology has worked as a strategic partner with companies of all sizes from small university spin-offs to major research institutes, government agencies and large, established and multi-national biopharmaceutical companies. Based on the impressive track record, Goodwin Biotechnology was recently awarded Frost & Sullivan's Customer Value and Leadership Award for Best Practices in Mammalian Contract Manufacturing! Additional information may be found at <http://www.GoodwinBio.com>.

**About Panacea Pharmaceuticals, Inc.**

**Panacea Pharmaceuticals, Inc.** was founded in 1999 to discover, develop, and commercialize novel therapeutic and diagnostic products for oncology and diseases of the central nervous system. Since its inception, the Company's primary approach to cancer treatment has been immunotherapy and development of companion diagnostics for comprehensive patient management. The Company's lead drug product candidate is a nanoparticle-based therapeutic cancer vaccine that targets a novel patented tumor-specific protein, Human Aspartyl (Asparaginyl) beta-Hydroxylase (HAAH). The company enjoys a close collaboration with Brown University/Rhode Island Hospital in Providence, Rhode Island where teams of researchers are continuing advances on the Company's core technologies. For more information, visit the company's Web site at [www.panaceapharma.com](http://www.panaceapharma.com).

**For more information, please contact:**

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