Theravance Biopharma
Medicines That Make a Difference®
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Data From New Studies Confirm In Vitro Potency of VIBATIV(R) (Telavancin) Against Gram-Positive Bacteria, Including MRSA

In Vitro Potency Results Presented at 2015 ICAAC Demonstrate Advantage for VIBATIV Against Difficult-to-Treat Infections as Compared to Vancomycin, Daptomycin and Linezolid

DUBLIN, IRELAND -- (Marketwired) -- 09/21/15 -- Theravance Biopharma, Inc. (NASDAQ: TBPH) ("Theravance Biopharma" or the "Company") today announced new positive data from several studies of VIBATIV® (telavancin) confirming the product's *in vitro* potency against isolates from a range of difficult-to-treat infections. The findings further supplement the extensive and well-documented evidence demonstrating greater *in vitro* activity for VIBATIV against methicillin-resistant *Staphylococcus aureus* (MRSA) and other difficult-to-treat clinical pathogens as compared to antibiotics such as vancomycin, daptomycin and linezolid. Results from these studies were presented at the Interscience Conference on Antimicrobial Agents and Chemotherapy (ICAAC) held in San Diego, CA, on September 17 - 21, 2015.

"The new VIBATIV data presented at ICAAC provides additional important support for the product's profile as one of the industry's most potent antibiotics against susceptible Gram-positive pathogens," said Frank Pasqualone, Senior Vice President, Development and Operations at Theravance Biopharma. "These study findings confirm the *in vitro* activity of VIBATIV and highlight the promise of the antibiotic in difficult-to-treat infections for which there is a significant medical need, particularly in light of the growing epidemic of antibiotic resistance."

Highlights from data presentations include:

- Researchers showed that VIBATIV possessed the greatest *in vitro* activity of all antibiotics evaluated against a broad collection of contemporary Gram-positive clinical isolates that caused complicated skin and skin structure infections (cSSSIs) in U.S. hospitals. Data showed that the minimum inhibitory concentrations (MICs) for VIBATIV were eight-fold lower than for daptomycin and 16-fold lower than for vancomycin and linezolid against all *Staphylococcus aureus* (*S. aureus*) strains, including MRSA and methicillin-susceptible *Staphylococcus aureus* (MSSA) subsets. MICs are a common measure used to express an antibiotic's *in vitro* potency.

- Data from a second study demonstrated that VIBATIV possessed the greatest *in vitro* activity of all antibiotics evaluated against a broad collection of contemporary Gram-positive cocci from Canadian hospitals. VIBATIV showed greater *in vitro* potency than vancomycin, daptomycin and linezolid against such pathogens as MRSA, vancomycin-intermediate *Staphylococcus aureus* (VISA) and heterogeneous vancomycin-intermediate *Staphylococcus aureus* (hVISA).

- Data from additional studies highlighted the potential of VIBATIV in addressing serious infection types with significant unmet medical need and critical treatment challenges. For example, VIBATIV demonstrated greater *in vitro* activity against biofilm-producing MRSA, as compared to vancomycin, daptomycin, teicoplanin, and ceftaroline. Furthermore, results showed VIBATIV to be significantly more effective than vancomycin and daptomycin in animal models of infective endocarditis (IE) caused by MRSA. In these IE models, VIBATIV was significantly better than daptomycin at reducing the levels of MRSA found in target tissues and producing a significantly higher percentage of target tissues that were classified as culture-negative. Vancomycin was relatively ineffective in both of these areas.

"This collection of new, compelling data provides additional support for our belief that VIBATIV represents a critically important antibiotic option for physicians as a range of life-threatening, Gram-positive infections continue to become more difficult to treat," stated Jon Bruss, M.D., Vice President Clinical Development & Medical Affairs at Theravance Biopharma. "By continuing to demonstrate greater *in vitro* potency against such challenging pathogens, as compared vancomycin, daptomycin and linezolid, we are further supplementing our extensive collection of data that support the competitive profile of the product."

VIBATIV is a bactericidal, once-daily, injectable lipoglycopeptide antibiotic with *in vitro* potency and a dual mechanism of action whereby telavancin both inhibits bacterial cell wall synthesis and disrupts bacterial cell membrane function. The drug's proven efficacy against difficult-to-treat Gram-positive infections has been demonstrated in several large, multinational registrational studies, which involved one of the largest cohorts of patients with MRSA infections studied to date. Additionally, there is extensive and well-documented evidence of the drug's *in vitro* potency and *in vivo* activity against a broad collection of Gram-positive bacterial pathogens, including those that are considered difficult-to-treat and multidrug-resistant.

About VIBATIV® (telavancin)

VIBATIV® was discovered internally in a research program dedicated to finding new antibiotics for serious infections due to *Staphylococcus aureus* and other Gram-positive bacteria, including MRSA. VIBATIV is a bactericidal, once-daily, injectable lipoglycopeptide antibiotic with *in vitro* potency and a dual mechanism of action whereby telavancin both inhibits bacterial cell wall synthesis and disrupts bacterial cell membrane function. VIBATIV for injection is approved in the U.S. for the treatment of hospital-acquired and ventilator-associated bacterial pneumonia (HABP/VABP) caused by susceptible isolates of *Staphylococcus aureus* when alternative treatments are not suitable. In addition, VIBATIV is approved in the U.S. for the treatment of adult patients with complicated skin & skin structure infections (cSSSI) caused by susceptible isolates of Gram-positive bacteria, including *Staphylococcus aureus*, both methicillin-susceptible (MSSA) and methicillin-resistant (MRSA) strains.

In addition to the U.S., VIBATIV is approved for use in several markets around the world including Europe, Canada and Russia. The specific approved indications in these markets vary by region. Theravance Biopharma plans to market VIBATIV outside the U.S. through a network of partners. To date, the company has secured partners for VIBATIV in the following geographies -- Europe, Canada, Middle East, North Africa, Israel, Russia, and China.

VIBATIV® Important Safety Information (U.S.)

Mortality

Patients with pre-existing moderate/severe renal impairment (CrCl ≤ 50 mL/min) who were treated with VIBATIV® for hospital-acquired bacterial pneumonia/ventilator-associated bacterial pneumonia had increased mortality observed versus vancomycin. Use of VIBATIV in patients with pre-existing moderate/severe renal impairment (CrCl ≤ 50 mL/min) should be considered only when the anticipated benefit to the patient outweighs the potential risk.

Nephrotoxicity

New onset or worsening renal impairment occurred in patients who received VIBATIV. Renal adverse events were more likely to occur in patients with baseline comorbidities known to predispose patients to kidney dysfunction and in patients who received concomitant medications known to affect kidney function. Monitor renal function in all patients receiving VIBATIV prior to initiation of treatment, during treatment, and at the end of therapy. If renal function decreases, the benefit of continuing VIBATIV versus discontinuing and initiating therapy with an alternative agent should be assessed.

Fetal Risk

Women of childbearing potential should have a serum pregnancy test prior to administration of VIBATIV. Avoid use of VIBATIV during pregnancy unless the potential benefit to the patient outweighs the potential risk to the fetus. Adverse developmental outcomes observed in three animal species at clinically relevant doses raise concerns about potential adverse developmental outcomes in humans. If not already pregnant, women of childbearing potential should use effective contraception during VIBATIV treatment.

Contraindication

Intravenous unfractionated heparin sodium is contraindicated with VIBATIV administration due to artificially prolonged activated partial thromboplastin time (aPTT) test results for up to 18 hours after VIBATIV administration.

VIBATIV is contraindicated in patients with a known hypersensitivity to the drug.

Hypersensitivity Reactions

Serious and potentially fatal hypersensitivity reactions, including anaphylactic reactions, may occur after first or subsequent doses. VIBATIV should be used with caution in patients with known hypersensitivity to vancomycin.

Geriatric Use

Telavancin is substantially excreted by the kidney, and the risk of adverse reactions may be greater in patients with impaired renal function. Because elderly patients are more likely to have decreased renal function, care should be taken in dose selection in this age group.

Infusion Related Reactions

VIBATIV is a lipoglycopeptide antibacterial agent and should be administered over a period of 60 minutes to reduce the risk of

infusion-related reactions. Rapid intravenous infusions of the glycopeptide class of antimicrobial agents can cause "Red-man Syndrome" like reactions including: flushing of the upper body, urticaria, pruritus, or rash.

QTc Prolongation

Caution is warranted when prescribing VIBATIV to patients taking drugs known to prolong the QT interval. In a study involving healthy volunteers, VIBATIV prolonged the QTc interval. Use of VIBATIV should be avoided in patients with congenital long QT syndrome, known prolongation of the QTc interval, uncompensated heart failure, or severe left ventricular hypertrophy.

Most Common Adverse Reactions

The most common adverse reactions (greater than or equal to 10% of patients treated with VIBATIV) were diarrhea, taste disturbance, nausea, vomiting, and foamy urine.

Full Prescribing Information, including Boxed Warning and Medication Guide in the U.S., is available at www.VIBATIV.com.

About Theravance Biopharma

The mission of Theravance Biopharma (NASDAQ: TBPH) is to create value from a unique and diverse set of assets: an approved product; a development pipeline of late-stage assets; and a productive research platform designed for long-term growth.

Our pipeline of internally discovered product candidates includes potential best-in-class opportunities in underserved markets in the acute care setting, representing multiple opportunities for value creation. VIBATIV® (telavancin), our first commercial product, is a once-daily dual-mechanism antibiotic approved in the U.S., Europe and certain other countries for certain difficult-to-treat infections. Revefenacin (TD-4208) is an investigational long-acting muscarinic antagonist (LAMA) being developed as a potential once-daily, nebulized treatment for COPD. Axelopran (TD-1211) is an investigational potential once-daily, oral treatment for opioid-induced constipation (OIC). Our earlier-stage clinical assets represent novel approaches for potentially treating diseases of the lung and gastrointestinal tract and infectious disease. In addition, we have an economic interest in future payments that may be made by GlaxoSmithKline plc pursuant to its agreements with Theravance, Inc. relating to certain drug development programs, including the combination of fluticasone furoate, umeclidinium and vilanterol (the "Closed Triple").

With our successful drug discovery and development track record, commercial infrastructure, experienced management team and efficient corporate structure, we believe that we are well positioned to create value for our shareholders and make a difference in the lives of patients.

For more information, please visit www.theravance.com.

This press release contains certain "forward-looking" statements as that term is defined in the Private Securities Litigation Reform Act of 1995 regarding, among other things, statements relating to goals, plans, objectives and future events. Theravance Biopharma intends such forward-looking statements to be covered by the safe harbor provisions for forward-looking statements contained in Section 21E of the Securities Exchange Act of 1934 and the Private Securities Litigation Reform Act of 1995. Examples of such statements include statements relating to: the Company's strategies, plans and objectives, the Company's regulatory strategies and timing and results of clinical studies, the potential benefits and mechanisms of action of the Company's product and product candidates and the Company's expectations for product candidates through development and commercialization. These statements are based on the current estimates and assumptions of the management of Theravance Biopharma as of the date of the press release and are subject to risks, uncertainties, changes in circumstances, assumptions and other factors that may cause the actual results of Theravance Biopharma to be materially different from those reflected in the forward-looking statements. Important factors that could cause actual results to differ materially from those indicated by such forward-looking statements include, among others, risks related to: delays or difficulties in commencing or completing clinical studies, the potential that results from clinical or non-clinical studies indicate the Company's product candidates are unsafe or ineffective, the feasibility of undertaking future clinical trials for our product candidates based on FDA policies and feedback, dependence on third parties to conduct clinical studies, delays or failure to achieve and maintain regulatory approvals for product candidates, risks of collaborating with third parties to discover, develop and commercialize product and product candidates and risks associated with establishing and maintaining sales, marketing and distribution capabilities with appropriate expertise and supporting infrastructure. Other risks affecting Theravance Biopharma are described under the heading "Risk Factors" contained in Theravance Biopharma's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission (SEC) on August 13, 2015. In addition to the risks described above and in Theravance Biopharma's other filings with the SEC, other unknown or unpredictable factors also could affect Theravance Biopharma's results. No forward-looking statements can be guaranteed and actual results may differ materially from such statements. Given these

uncertainties, you should not place undue reliance on these forward-looking statements. Theravance Biopharma assumes no obligation to update its forward-looking statements on account of new information, future events or otherwise, except as required by law.

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