



## **TAXIS Pharmaceuticals to Present Pipeline Update at Biotech in Europe Forum**

### ***President and CEO Gregory Mario to Highlight Progress in Antibiotic Drug Development Focusing on Efflux Pump Inhibition and Modulation of FtsZ and MreB Proteins***

**NORTH BRUNSWICK, N.J., September 28, 2017** – TAXIS Pharmaceuticals, a development-stage drug-discovery company researching new classes of antibiotic agents to treat life-threatening, multidrug-resistant bacterial infections, announced that it will present an update on its developmental pipeline today at the Sachs Associates 17<sup>th</sup> Annual Biotech in Europe Forum in Basel, Switzerland.

In his presentation today, TAXIS President and Chief Executive Officer Gregory Mario will summarize the company's progress in its efforts to reduce, or possibly eliminate, the threat of current and emerging antibiotic resistance across a wide range of infectious diseases. The company's pipeline includes several investigational antibiotics with novel mechanisms of action including efflux pump inhibition (EPI), inhibition of the bacterial protein FtsZ, and modulation of another bacterial protein, MreB.

"Over the past few years we have been expanding our portfolio of drug candidates by focusing on disrupting the foundation of bacterial cell wall architecture -- including construction, maintenance and growth -- to address elemental drug resistance mechanisms," said Mr. Mario. "Our proprietary molecular chemistry is designed to facilitate treatment of patients suffering from antibiotic-resistant strains of bacteria by enabling re-use of many of the most widely prescribed and resistance-prone generic antibiotics. In addition, TAXIS' novel technology enables lower antibiotic doses while achieving the same pathogen kill rates, thus enhancing treatment cost-effectiveness while also reducing the risk of current and future antibiotic resistance."

TAXIS's EPI drug development platform focuses on blocking the action of efflux pumps, which are multi-protein complexes that span bacterial wall membranes. Efflux pumps control the process of efflux, or outward flow, by which foreign substances are transported out of the cell. As foreign compounds, such as antibiotics, penetrate the bacterial cell wall, the efflux pumps recognize them and pump them out. As a result, the antibiotics never reach sufficiently high concentrations inside the cell to kill the bacteria, thereby resulting in antibiotic resistance.

TAXIS has filed 13 patents arising from its EPI drug discovery program. Since the program's initiation in 2014, the company has identified seven viable EPI candidate compounds, and expects to identify clinical candidates by the end of this year. The platform, which includes pathogen-specific as well as broad-spectrum EPI candidates, appears to impact a wide range of antibiotic classes, including macrolides, cephalosporins, monobactams, sulfanomides, tetracyclines and fluoroquinolones. TAXIS' investigational EPIs have exhibited potent synergy with 12 antibiotics thus far. The company is developing pathogen-specific EPI candidates that target *Pseudomonas aeruginosa*, *Klebsiella pneumoniae*, *Acinetobacter Baumannii* and *Escherichia coli* species; one of these candidates, TXY9155, has demonstrated durable, validated *in vivo* efficacy in combination with a cephalosporin in a murine septicemia model of *P. aeruginosa* infection.

TAXIS' lead clinical candidate, TXA709, targets acute bacterial skin and skin structure infections (ABSSSI) caused by *Staphylococcus aureus*, including methicillin-resistant strains (MRSA). TXA709 is a prodrug (a biologically inactive compound that can be metabolized in the body to produce a drug) of TXA707, a derivative of benzoic acid that disrupts the form and function of

FtsZ, which plays an essential role in bacterial cell division. A second-generation FtsZ inhibitor, TXA707 induces bacterial cell death more rapidly than that observed with standard-of-care antibiotics such as vancomycin. The inhibition of FtsZ is considered a novel mechanism of action, enhancing the appeal of TXA709 as an important tool for addressing the public health crisis stemming from the growing threat of antibiotic resistance.

In September 2016, the U.S. Food and Drug Administration (FDA) designated TXA709 a Qualified Infectious Disease Product (QIDP), a status that grants TAXIS regulatory incentives including eligibility for fast track designation, priority review, and five additional years of marketing exclusivity. Created under the Generating Antibiotics Incentives Now (GAIN) Act of 2012, the QIDP designation seeks to encourage the development of new antimicrobial drugs to combat the rising threat of multidrug-resistant bacteria.

Mr. Mario's Biotech in Europe presentation will also touch upon TAXIS' MreB modulation drug discovery program, which is in its early stages. Inhibition of MreB appears to undermine bacterial cell shape integrity, polar protein localization and/or chromosome segregation, presenting a potentially large market opportunity for antibiotic agents with this novel mechanism of action.

"We are honored to present our pipeline update at the Sachs Biotech in Europe Forum, a prestigious event held in one of the world's leading biopharma hubs," commented Mr. Mario. "By enhancing the visibility of our pipeline, we hope this forum helps us accelerate our antibiotic drug development programs, while advancing our mission of combating the global scourge of antibiotic resistance."

### **About TAXIS**

TAXIS Pharmaceuticals develops novel antibiotics to combat multidrug-resistant bacteria. TAXIS has identified and patented multiple new classes of proprietary antibiotic agents that exploit a novel mechanism of bactericidal action distinct from any other antibiotic in clinical use today. For more information visit [www.TAXISpharma.com](http://www.TAXISpharma.com).

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