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Multi-million Dollar DTRA Funding for Biodefense Research with Aradigm's Inhaled Ciprofloxacin

Liposomal Ciprofloxacin Being Developed as a Broad Spectrum Prophylaxis and Treatment for Multiple Bioterrorism Threats

HAYWARD, Calif.--(BUSINESS WIRE)-- Aradigm Corporation (**NASDAQ: ARDM**) ("Aradigm" or the "Company") announced today that the U.K. Defence Science and Technology Laboratory (Dstl) have received funding of up to \$6.9 million from the U.S. Defense Threat Reduction Agency (DTRA) for a program entitled "Inhalational ciprofloxacin for improved protection against biowarfare agents". The inhalational ciprofloxacin formulations used in this program are Aradigm's proprietary investigational drugs Pulmaquin® and Lipoquin®. The total potential funding provided to Dstl is \$3.2M for the base period and \$3.7M for the option period. The initial funding released is \$1.7M.

Dstl, in conjunction with its key sub-contractors including Aradigm Corporation, will conduct research relating to the efficacy of Pulmaquin and Lipoquin in animal models of *Francisella tularensis* (tularemia), *Burkholderia pseudomallei* (melioidosis), *Burkholderia mallei* (glanders) and *Coxiella burnetii* (Q-fever).

The most likely method for infection with biowarfare agents is via the pulmonary route. The main advantage of the inhaled liposomal ciprofloxacin approach is that it delivers the antibiotic rapidly and directly in high concentrations to the respiratory tract - the area of primary infection - and the liposomal formulation retains it there over a prolonged period of time. The liposomal formulation also facilitates intracellular uptake, essential to treat these life-threatening intracellular infections.

"We have been very pleased with the earlier compelling efficacy findings with Pulmaquin and Lipoquin in rodent models of inhalational tularemia, plague and Q-fever. We have also accumulated a substantial amount of animal and human safety data to date," said James Blanchard, Aradigm's Principal Scientist. "The funding from DTRA will enable us to validate and expand this approach with the goal of providing broad-spectrum prophylaxis and treatment against multiple bioterrorism threats."

About inhaled ciprofloxacin (Pulmaquin and Lipoquin)

Pulmaquin is a formulation composed of a mixture of liposome encapsulated and unencapsulated ciprofloxacin. Ciprofloxacin, available in oral and intravenous formulations, is a widely prescribed antibiotic. It is used to treat acute lung infections and is often preferred because of its broad-spectrum antibacterial activity against various bacteria, such as *Pseudomonas aeruginosa*. Pulmaquin is being evaluated in two ongoing Phase 3 studies to determine its safety and effectiveness as a once-a-day inhaled formulation for the chronic treatment of patients with non-cystic fibrosis bronchiectasis who have chronic lung infections with *Pseudomonas aeruginosa*.

Following Phase 2a development of the liposomal portion of Pulmaquin (Lipoquin) and Phase 1 development of Pulmaquin, the Phase 2b study ORBIT-2 with Pulmaquin was a 24-week multicenter, randomized, double-blind, placebo-controlled trial in 42 adult non-CF BE subjects. This study demonstrated a significant reduction in *P. aeruginosa* sputum activity ($p=0.002$) and a decrease in time to first exacerbation in the per protocol population ($p=0.046$) and the mITT ($p=0.057$) populations in the Pulmaquin treated subjects compared to placebo. Overall, the incidence of all treatment emergent adverse events was similar between groups. The most frequently reported treatment related adverse events (reported by ≥ 3 patients in either treatment group) included product taste abnormal and nausea in the Pulmaquin group and wheezing in the placebo group. No serious adverse events were considered treatment related. There were no deaths reported during ORBIT-2.

Aradigm's inhaled ciprofloxacin formulations are also product candidates for treatment of patients with cystic fibrosis and non-tuberculous mycobacteria.

About Aradigm

Aradigm is an emerging specialty pharmaceutical company focused on the development and commercialization of drugs for the prevention and treatment of severe respiratory diseases. Aradigm is currently in Phase 3 development of Pulmaquin (an investigational proprietary formulation of ciprofloxacin for inhalation) for the treatment of non-cystic fibrosis bronchiectasis. In addition, Aradigm has a pipeline composed of programs to prevent diseases in tobacco smokers through smoking

cessation and a diagnostic program to detect aspirations of gastrointestinal fluid into the respiratory tract.

More information about Aradigm can be found at www.aradigm.com.

Forward-Looking Statements

Except for the historical information contained herein, this news release contains forward-looking statements that involve risk and uncertainties, including those related to the continued receipt of DTRA funding and the ability to continue successful product development of our potential product candidates, including Pulmaquin, as well as the other risks detailed from time to time in the Company's filings with the Securities and Exchange Commission (SEC), including the Company's Annual Report on Form 10-K for the year ended December 31, 2015 filed with the SEC on March 30, 2016, and the Company's Quarterly Reports on Form 10-Q.

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Aradigm Corporation
Nancy Pecota, 510-265-8800
Chief Financial Officer

Source: Aradigm Corporation

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