

May 16, 2011



Aeolus Pharmaceuticals Announces Second Quarter Fiscal Year 2011 Results

- Company received a \$118 million research and development contract from BARDA
- Company reported significant survival advantage in non-human primate study of AEOL 10150 as a treatment against lung damage from radiation exposure

MISSION VIEJO, Calif.-- Aeolus Pharmaceuticals, Inc. (OTCQB: AOLS) announced today financial results for the three months ended March 31, 2011. The Company reported net income of approximately \$3,778,000, or \$0.06 per share (undiluted), which includes a non-cash adjustment of approximately \$4,746,000 related to decreases in the fair value of warrants that are included as a component of other income (expenses) in the statement of operations, for the three months ended March 31, 2011, compared to net income of \$6,918,000, or \$0.14 per share (undiluted), which includes a non-cash adjustment of approximately \$7,817,000 related to decreases in the fair value of warrants that are included as a component of other income (expenses) in the statement of operations, for the three months ended March 31, 2010.

"Results for the quarter reflect the positive impact of the \$10.5 million base period of our \$118 million contract with the Biomedical Advanced Research and Development Authority (BARDA). The Company's products are currently the beneficiary of seven research programs supported by the US Government and private foundations that are budgeted to provide in excess of \$140 million in funding over the next five years," stated John L. McManus, President and Chief Executive Officer. "The contract with BARDA will fully fund the development of AEOL 10150 as a treatment for radiation exposure resulting from a nuclear detonation, and puts the Company in a position to potentially file for Emergency Use Authorization as early as July 2013. We now have expanded our level of research and development activity, significantly expanded our management team, and reduced our dependence on internal cash to fund our operations."

Revenue for the three months ended March 31, 2011 was approximately \$785,000, which compares to zero revenue for the three months ended March 31, 2010. The revenue is from the collaboration with BARDA announced on February 11, 2011.

Research and development expenses increased about \$480,000, or 112%, to approximately \$907,000 for the three months ended March 31, 2011 from approximately \$427,000 for the three months ended March 31, 2010. The increase is primarily attributable to work related to the BARDA Contract. We currently have eight development programs in progress: five programs involving AEOL 10150 as a medical countermeasure against the effects of sulfur mustard gas and chlorine gas on the lungs, against the effects

of radiation on the lungs and on the gastro-intestinal tract, and as a treatment for cancer, two programs focused on AEOL 11207 and several other compounds as potential treatments for Parkinson's disease and epilepsy, and one program studying another of our compounds, Hexyl, as protectant against radiation exposure.

General and administrative expenses increased about \$385,000, or 85%, to approximately \$840,000 for the three months ended March 31, 2011 from approximately \$455,000 for the three months ended March 31, 2010. Salaries and wages increased by \$118,000 due to hiring a Chief Financial Officer, a Vice President of Manufacturing and a Director of Quality Assurance and Quality Control during the three months ended March 31, 2011.

The Company had cash and cash equivalents of approximately \$1,686,000 and accounts receivable of approximately \$785,000 on March 31, 2011.

Aeolus is filing today with the SEC its Quarterly Report on Form 10-Q for the quarter ending March 31, 2011. Aeolus urges its investors to read this quarterly filing as well as its amended Annual Report on Form 10-K/A, also filed with the SEC, for further details concerning the Company. The Quarterly Report on Form 10-Q and the amended Annual Report on Form 10-K/A are also available on the Company's website, at <http://www.aeoluspharma.com>.

About AEOL 10150

AEOL 10150 is a broad-spectrum catalytic antioxidant specifically designed to neutralize reactive oxygen and nitrogen species. The neutralization of these species reduces oxidative stress, inflammation, and subsequent tissue damage-signaling cascades resulting from radiation exposure. AEOL 10150 could have a profound beneficial impact on people who have been exposed, or are about to be exposed, to high-doses of radiation in the treatment of oncology.

AEOL 10150 has already performed well in preclinical and non-clinical studies, was well-tolerated in two human clinical trials, and has demonstrated statistically significant survival efficacy in an acute radiation-induced lung injury model. The Company believes it could have a profound beneficial impact on people who have been exposed, or are about to be exposed, to high-doses of radiation, whether from cancer therapy or a nuclear event.

About Aeolus Pharmaceuticals

Aeolus Pharmaceuticals is developing a new class of catalytic antioxidant compounds that protects healthy tissue from the damaging effects of radiation. Its first compound, AEOL 10150, is being developed for oncology indications, where it is used in combination with radiation therapy. It is also being developed, with funding by the US Government, as a medical countermeasure against chemical and radiological weapons, where its initial target indications are as a protective agent against the effects of acute radiation syndrome and delayed effects of acute radiation exposure. Aeolus' strategy is to leverage the substantial investment in toxicology, manufacturing, and preclinical and clinical studies made by US Government agencies in AEOL 10150, including the contract with BARDA valued, with options, at up to \$118 million, to efficiently develop the compound for use in oncology.

Forward-Looking Statements

The statements in this press release that are not purely statements of historical fact are forward-looking statements. Such statements include, but are not limited to, those relating to Aeolus' product candidates, as well as its proprietary technologies and research programs. Such forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause Aeolus' actual results to be materially different from historical results or from any results expressed or implied by such forward-looking statements. Important factors that could cause results to differ include risks associated with uncertainties of progress and timing of clinical trials, scientific research and product development activities, difficulties or delays in development, testing, obtaining regulatory approval, the need to obtain funding for pre-clinical and clinical trials and operations, the scope and validity of intellectual property protection for Aeolus' product candidates, proprietary technologies and their uses, and competition from other biopharmaceutical companies. Certain of these factors and others are more fully described in Aeolus' filings with the Securities and Exchange Commission, including, but not limited to, Aeolus' amended Annual Report on Form 10-K/A for the year ended September 30, 2010. Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date hereof.

AEOLUS PHARMACEUTICALS, INC.

CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS

(Unaudited)

(In thousands, except per share data)

	Three Months Ended		Six Months Ended	
	March 31,		March 31,	
	2011	2010	2011	2010
Revenue				
Miscellaneous Income	\$ 785	\$ -	\$ 1,122	\$ -
Costs and expenses:				
Research and development	907	427	1,097	610
General and administrative	840	455	1,390	862
Total costs and expenses	1,747	882	2,487	1,472
Loss from operations	(962)	(882)	(1,365)	(1,472)
Interest expense, net	(6)	(17)	(21)	(843)
Non-cash financing charges and change in fair value of warrants	4,746	7,817	(2,456)	(6,043)

Net income (loss)	\$ 3,778	\$ 6,918	\$ (3,842)	\$ (8,358)
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Net income (loss) per weighted
share attributable to common
stockholders:

Basic	\$ 0.06	\$ 0.14	\$ (0.07)	\$ (0.18)
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Diluted	\$ 0.03	\$ 0.07	\$ (0.07)	\$ (0.18)
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Weighted average common shares
outstanding:

Basic	59,953	48,224	58,473	47,366
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Diluted	121,640	94,365	58,473	47,366
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Selected Balance Items:

(in thousands)

	March 31, 2010	September 30, 2010
Cash and cash equivalents	\$ 1,686	\$ 2,355
Accounts receivable	\$ 785	-
Total assets	\$ 2,588	\$ 2,433
Stockholders' deficit	\$ (27,988)	\$ (26,736)

Source: Aeolus Pharmaceuticals, Inc.