AVEO Oncology Announces Receipt of USPTO Notice of Allowance Related to AV-353

CAMBRIDGE, Mass. – May 8, 2017 – AVEO Oncology (NASDAQ: AVEO) today announced that it received a Notice of Allowance from the United States Patent and Trademark Office (USPTO) for U.S. patent application number 14/653,684, entitled "notch binding agents and antagonists and methods of use thereof." Allowed under the application are composition of matter and method of use claims related to the Company's humanized anti-Notch 3 antibodies, including AV-353. The U.S. patent scheduled to issue from this application will expire December 19, 2032, with the potential for extension to December 19, 2037.

AV-353 is a potent inhibitory antibody specific to Notch 3, a pathway implicated in multiple diseases, including Pulmonary Arterial Hypertension (PAH). In preclinical studies, AV-353 has demonstrated the ability to potentially reverse the PAH disease phenotype, which would represent a potential disease-modifying approach to treatment. PAH is a rare and life-threatening disorder that affects approximately 250,000 people worldwide and is caused by enlargement of the arterial walls in small arteries between the heart and the lungs, resulting in restricted blood flow.

"AV-353's disease modifying properties have the potential to transform the future treatment of PAH, a debilitating disorder for which current therapies target only symptoms," said Michael Bailey, president and chief executive officer of AVEO. "AV-353's selectivity and high affinity to Notch 3, which are unique from other approaches targeting the Notch pathway, have enabled us to build an increasingly broad patent estate around the program. Consistent with our strategic focus on oncology, we continue to engage with potential partners around the worldwide development of this important therapeutic candidate."

About AVEO

AVEO Oncology (AVEO) is a biopharmaceutical company dedicated to advancing a broad portfolio of targeted therapeutics for oncology and other areas of unmet medical need. The Company is focused on seeking to develop and commercialize its lead candidate tivozanib, a potent, selective, long half-life inhibitor of vascular endothelial growth factor 1, 2 and 3 receptors, in North America as a treatment for renal cell carcinoma and other cancers. AVEO is leveraging multiple partnerships aimed at developing and commercializing tivozanib in oncology indications outside of North America, and at progressing its pipeline of novel therapeutic candidates in cancer and cachexia (wasting syndrome). For more information, please visit the company's website at www.aveooncology.com.

Cautionary Note Regarding Forward-Looking Statements

This press release contains forward-looking statements of AVEO that involve substantial risks and uncertainties. All statements, other than statements of historical fact, contained in this press release are forward-looking statements. The words "anticipate," "believe," "expect," "intend,"

"may," "plan," "could," "should," "seek," or the negative of these terms or other similar expressions, are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. These forward-looking statements include, among others, statements about: the qualities, uniqueness, expected benefits and potential of AV-353; the potential for AV-353 to be a disease-modifying treatment; the potential for AV-353 to transform treatment paradigms; AVEO's plans to partner AV-353 and AVEO's focus on developing oncology therapeutics. Actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements that AVEO makes due to a number of important factors, including risks relating to: AVEO's ability to enter into new partnerships and maintain its licensing agreements, including for AV-353, and its ability, and the ability of its licensees, to achieve development and commercialization objectives under these arrangements; AVEO's ability, and the ability of its licensees, to demonstrate to the satisfaction of applicable regulatory agencies the safety, efficacy and clinically meaningful benefit of AVEO's product candidates; AVEO's ability to successfully implement its strategic plans; AVEO's ability to successfully enroll and complete clinical trials of its product candidates; AVEO's ability to achieve and maintain compliance with all regulatory requirements applicable to its product candidates; AVEO's ability to obtain and maintain adequate protection for intellectual property rights relating to its product candidates and technologies; developments, expenses and outcomes related to AVEO's ongoing shareholder litigation; AVEO's ability to raise the substantial additional funds required to achieve its goals; unplanned capital requirements; adverse general economic and industry conditions; competitive factors; and those risks discussed in the section titled "Risk Factors" in AVEO's most recent Annual Report on Form 10-K, its quarterly reports on Form 10-Q and its other filings with the SEC. The forward-looking statements in this press release represent AVEO's views as of the date of this press release. AVEO anticipates that subsequent events and developments may cause its views to change. While AVEO may elect to update these forward-looking statements at some point in the future, it specifically disclaims any obligation to do so. You should, therefore, not rely on these forward-looking statements as representing AVEO's views as of any date other than the date of this press release.

AVEO Contact:
David Pitts, Argot Partners
(212) 600-1902
aveo@argotpartners.com