FOR IMMEDIATE RELEASE

AVEO Announces Complete Response Letter Received for Tivozanib New Drug Application in Renal Cell Carcinoma

CAMBRIDGE, Mass., June 10, 2013 - AVEO Oncology (NASDAQ: AVEO) today announced that it has received a Complete Response letter from the U.S. Food and Drug Administration (FDA) informing the company that the FDA will not approve in its present form the New Drug Application (NDA) for AVEO’s investigational agent tivozanib for the treatment of patients with advanced renal cell carcinoma (RCC).

In the letter, the FDA stated that the inconsistent progression-free survival and overall survival results and imbalance in post-study treatments make the TIVO-1 results uninterpretable and inconclusive when making a risk-benefit assessment necessary for drug approval, and recommended that AVEO conduct an additional clinical study to support approval of tivozanib for the treatment of advanced RCC. The FDA also stated that the proposed dissolution acceptance criterion was not supported by the provided dissolution data, and would need to be updated and resubmitted.

“In follow up to our conference call last week regarding AVEO’s restructuring, we will convene a conference call tomorrow to discuss the Complete Response letter and recent ODAC meeting,” said Tuan Ha-Ngo, president and chief executive of AVEO. “We hope this will be an opportunity to address questions our investors may have about the FDA’s review of the tivozanib NDA in RCC.”

AVEO Conference Call Tuesday, June 11 at 8:00 a.m. ET
The AVEO management team will host a conference call on Tuesday, June 11, 2013 at 8:00 a.m. ET. The call can be accessed by dialing 1-877-299-4454 (domestic) or 1-617-597-5447 (international) five minutes prior to the start of the call and providing the passcode 15119983. A replay of the call will be available approximately two hours after the completion of the call and can be accessed by dialing 1-888-286-8010 (domestic) or 1-617-801-6888 (international), providing the passcode 90604841. The replay will be available for two weeks from the date of the call.

A webcast of the conference call can also be accessed by visiting the investors section of the AVEO website at investor.aveooncology.com. A replay of the webcast will be archived on the company’s website for two weeks following the call.

About the AVEO/Astellas Collaboration
In February 2011, AVEO and Astellas Pharma Inc. entered into an agreement to develop and commercialize tivozanib outside of Asia for the treatment of a broad range of cancers.
About AVEO
AVEO Oncology (NASDAQ: AVEO) is a cancer therapeutics company committed to
discovering, developing and commercializing targeted therapies to impact patients' lives.
AVEO’s proprietary Human Response Platform™ provides the company unique insights into
cancer biology and is being leveraged in the discovery and clinical development of its cancer
therapeutics. For more information, please visit the company's website at

Cautionary Note Regarding Forward-Looking Statements
This press release contains forward-looking statements within the meaning of The Private
Securities Litigation Reform Act of 1995 that involve substantial risks and uncertainties. All
statements, other than statements of historical facts, contained in this press release are forward
looking statements. The words “anticipate,” “believe,” “estimate,” “expect,” “intend,” “may,”
“plan,” “target,” “potential,” “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. 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 those risks
discussed in the section titled “Risk Factors” and elsewhere in AVEO’s quarterly report on
Form 10-Q for the quarter ended March 31, 2013 as filed with the SEC, and in other filings it
makes with the Securities and Exchange Commission from time to time. 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 will cause its views to change.
However, 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 subsequent to the date
of this press release.

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