FOR IMMEDIATE RELEASE

Investor Contact:  
Monique Allaire,  
AVEO Pharmaceuticals, Inc.  
(617) 299-5810

Media Contact:  
Caton Lovett,  
Pure Communications, Inc.  
(910) 232-7166

Data on AVEO Pharmaceuticals’ Tivozanib and AV-203 to be Presented at AACR Annual Meeting 2012

AVEO’s Novel, Internally-Discovered ErbB3 Inhibitory Antibody, AV-203, Entering Clinic This Year

CAMBRIDGE, MASS., March 27, 2012 – AVEO Pharmaceuticals, Inc. (Nasdaq: AVEO) today announced that previously reported clinical data on tivozanib, AVEO’s lead product candidate designed to optimally block the VEGF pathway by inhibiting all three VEGF receptors, and preclinical data on AV-203, AVEO’s ErbB3 inhibitory antibody, will be presented during poster sessions at the American Association for Cancer Research (AACR) Annual Meeting 2012 being held March 31-April 4, 2012 in Chicago.

“We look forward to sharing these data among our peers in the oncology research community at this year’s AACR meeting as we prepare to initiate clinical development with AV-203, our internally-discovered ErbB3 inhibitory antibody, in the first half of this year,” said Jeno Gyuris, Ph.D., senior vice president and chief scientific officer at AVEO. “ErbB3 is widely expressed in many human cancers and its over-expression is often associated with poor prognosis in patients. An increasing body of evidence implicates the activation of ErbB3 in tumorigenesis and the development of resistance to anti-cancer agents. AV-203 has demonstrated high affinity binding to ErbB3 and the ability to potently inhibit both ligand-dependent and ligand-independent ErbB3 signaling in vitro and in vivo.”

The schedule for AVEO’s poster presentations is as follows:

**Date & Time:** Sunday, April 1, 2012 from 1:00 to 5:00 p.m. (CDT)
**Poster Title:** The effect of food on the pharmacokinetics of tivozanib
**Abstract:** #752
**Location:** McCormick Place West, Hall F, Poster Section 28, #6

**Date & Time:** Monday, April 2, 2012 from 1:00 to 5:00 p.m. (CDT)
**Poster Title:** AV-203, a humanized ErbB3 inhibitory antibody inhibits ligand-dependent and ligand-independent ErbB3 signaling in vitro and in vivo
**Abstract:** #2509
**Location:** McCormick Place West, Hall F, Poster Section 19, #4

**Date & Time:** Tuesday, April 3, 2012 from 8:00 a.m. to 12:00 p.m. (CDT)
**Poster Title:** Pharmacokinetics and pharmacodynamics of AV-203, a humanized anti-ErbB3 antibody
**Abstract:** #3787
**Location:** McCormick Place West, Hall F, Poster Section 30, #22
Following the meeting, the AVEO posters will be available in the publications section of the AVEO website at investor.aveopharma.com.

About AVEO
AVEO Pharmaceuticals (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 www.aveopharma.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 facts, contained in this press release are forward-looking statements, within the meaning of The Private Securities Litigation Reform Act of 1995. 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. These forward-looking statements include, among others, statements about: initiation of clinical development of AV-203, and ErbB3’s effect on activation of tumorigenesis and resistance to anti-cancer agents. 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: difficulties, delays or failures in AVEO’s ability to successfully research, develop or obtain and maintain regulatory approvals for AVEO’s programs; potential delays in the initiation of clinical trials; adverse general economic and industry conditions and those risks discussed in the section titled “Risk Factors” and elsewhere in AVEO’s most recent Quarterly Report on Form 10-Q and in its other filings with the Securities and Exchange Commission. 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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