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CONTACT:
Ginny Dunn
Associate Director, Corporate Communications & Investor Relations
EntreMed, Inc.
240.864.2643

DATA FOR ENMD-2076 PHASE 1 STUDIES IN MULTIPLE MYELOMA AND LEUKEMIA PRESENTED AT ASH

ROCKVILLE, MD, December 7, 2010 – EntreMed, Inc. (Nasdaq: ENMD), today announced the presentation of data for its Phase 2 oncology drug candidate, ENMD-2076 an Aurora A/angiogenic kinase inhibitor. Data from the Phase 1 studies with ENMD-2076 in patients with multiple myeloma and relapsed or refractory leukemia were presented by EntreMed investigators during poster sessions at the 2010 American Society of Hematology (ASH) Annual Meeting being held December 4-7 in Orlando, Florida. The ongoing multi-center Phase 2 study with ENMD-2076 in ovarian cancer patients is progressing as planned.

Interim results from the Phase 1 study with ENMD-2076 in relapsed or refractory multiple myeloma (MM) patients were presented by principal investigator, Dr. Sherif Farag, Indiana University Simon Cancer Center. Data showed that daily oral administration of ENMD-2076 was well tolerated. No dose limiting toxicities (DLT) were observed in this heavily pre-treated patient population. Of the nine evaluable patients, three patients had stable disease and one patient achieved a partial response. Pharmacodynamic studies in this trial are ongoing and include examination of the effects of ENMD-2076 on markers of angiogenesis as well as on key survival pathways important in MM progression such as the PI3 kinase pathway.

Results for the ENMD-2076 Phase 1 study in patients with relapsed or refractory leukemia were presented by principal investigator, Dr. Karen Yee, Princess Margaret Hospital, Toronto. Data for 20 evaluable patients demonstrated that daily oral administration of ENMD-2076 was associated with reductions in bone marrow blast counts of 11%, 14%, 23%, and 65%. One patient achieved a CRi (complete remission with incomplete hematological recovery) and three patients achieved a morphologic leukemia-free state (MLFS). Analysis of signaling pathways in residual blast cells of the patient exhibiting a CRi indicate a striking inhibition of constitutive pSTAT5, consistent with inhibition of mutant FLT3 signaling, as well as significant inhibition of stem cell factor-activated kinase S6, ERK, and Akt, all of which are consistent with c-Kit inhibition during treatment with ENMD-2076.

"These data will be instrumental in evaluating additional indications for Phase 2 trials beyond our ongoing Phase 2 study in ovarian cancer patients," commented Dr. Carolyn F. Sidor, EntreMed's Vice President and Chief Medical Officer. "The Phase 1 data in both our hematological and solid tumor studies demonstrate ENMD-2076's potential therapeutic value in a variety of tumor types. In the Phase 1 studies, ENMD-2076 has shown responses in patients with AML, multiple myeloma, and ovarian cancer. Other patients have had tumor reductions or prolonged stable disease with a variety of cancers including hepatocellular, renal cell, neuroendocrine, breast, melanoma and colorectal cancer supporting the activity of ENMD-2076 in treating many types of cancer."

About ENMD-2076

ENMD-2076 is an orally-active, Aurora A/angiogenic kinase inhibitor with a unique kinase selectivity profile and multiple mechanisms of action. Preclinical studies with ENMD-2076 demonstrated significant antitumor activity, including tumor regression, in multiple solid and hematological malignancies. ENMD-2076 has been shown to inhibit a distinct profile of angiogenic tyrosine kinase targets in addition to the Aurora A kinase. Aurora kinases are key regulators of mitosis (cell division), and are often over-expressed in human cancers. ENMD-2076 also targets the VEGFR, Flt-3 and FGFR3 kinases which have been shown to play important roles in the pathology of several cancers. While ENMD-2076 is currently in a Phase 2 trial in ovarian cancer, preclinical and clinical activities are ongoing in assessing the compound's applicability in other forms of cancer.

About EntreMed

EntreMed, Inc. is a clinical-stage pharmaceutical company committed to developing ENMD-2076, a selective angiogenic kinase inhibitor, for the treatment of cancer. ENMD-2076 is currently in a multi-center Phase 2 study in ovarian cancer and in several Phase 1 studies in solid tumors, multiple myeloma, and leukemia. Additional information about EntreMed is available on the Company's web site at www.entremed.com and in various filings with the Securities and Exchange Commission.

Forward Looking Statements

This release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act with respect to the outlook for expectations for future financial or business performance, strategies, expectations and goals. Forward-looking statements are subject to numerous assumptions, risks and uncertainties, which change over time. Forward-looking statements speak only as of the date they are made, and no duty to update forward-looking statements is assumed. Actual results could differ materially from those currently anticipated due to a number of factors, including those set forth in Securities and Exchange Commission filings under "Risk Factors," including the risk that we may be unable to continue as a going concern as a result of our inability to raise sufficient capital for our operational needs; the possibility that we may be delisted from trading on the Nasdaq Capital Market; the volatility of our common stock; risks relating to the need for additional capital and the uncertainty of securing additional funding on favorable terms; the failure to consummate a transaction to monetize the royalty stream for any reason, including our inability to obtain the required third-party consents; declines in actual sales of Thalomid® resulting in reduced revenues; risks associated with the Company's product candidates; the early-stage products under development; results in preclinical models are not necessarily indicative of clinical results; uncertainties relating to preclinical and clinical trials, including delays to the commencement of such trials; success in the clinical development of any products; dependence on third parties; future capital needs; and risks relating to the commercialization, if any, of the Company's proposed products (such as marketing, safety, regulatory, patent, product liability, supply, competition and other risks).

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