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Vion Pharmaceuticals Reaches Midpoint of Patient Accrual to Cloretazine® (VNP40101M) Phase III Trial

NEW HAVEN, CT, November 13, 2006 – VION PHARMACEUTICALS, INC. (NASDAQ CAPITAL MARKET: VION) today announced that it had accrued 210 patients to the Phase III trial of its lead anticancer agent Cloretazine® (VNP40101M). The trial is evaluating Cloretazine® (VNP40101M) in combination with cytarabine for the treatment of relapsed acute myelogenous leukemia (AML).

The protocol for this international Phase III randomized study includes a planned interim analysis on the first 210 patients. With the time required for treating and following these patients for a response assessment, the Company believes that these data should be available for review by the Data Safety Monitoring Board for the trial in March or April of 2007.

The trial is designed to accrue 420 patients if it continues to full accrual. The Company believes that full accrual to the trial can be completed by late 2007 or early 2008.

Ann Cahill, Vice President, Clinical Development of Vion said, "We are proud to have reached the halfway point of accrual to our Phase III trial of Cloretazine® (VNP40101M). Together with our pivotal Phase II trial of Cloretazine® (VNP40101M) as a single agent in elderly patients with *de novo* poor-risk AML, our Phase III trial represents an important evaluation of Cloretazine® (VNP40101M)'s role in the treatment of AML, a life-threatening disease for many people."

Vion Pharmaceuticals, Inc. is committed to extending the lives and improving the quality of life of cancer patients worldwide by developing and commercializing innovative cancer therapeutics. Vion has two agents in clinical trials. Cloretazine® (VNP40101M), a unique alkylating agent, is being evaluated in: (i) a Phase III trial in combination with cytarabine in relapsed acute myelogenous leukemia and (ii) a Phase II pivotal trial as a single agent in elderly patients with previously untreated *de novo* poor-risk acute myelogenous leukemia. Additional trials of Cloretazine® (VNP40101M) as a single agent in pediatric brain tumors, small cell lung cancer, and in combination with temozolomide in hematologic malignancies, are also underway. Triapine®, a potent inhibitor of a key step in DNA synthesis, is being evaluated in clinical trials sponsored by the National Cancer Institute. In preclinical studies, Vion is also evaluating VNP40541, a hypoxia-selective compound. The Company also is seeking development

partners for TAPET®, its modified *Salmonella* vector used to deliver anticancer agents directly to tumors. For additional information on Vion and its product development programs, visit the Company's Internet web site at www.vionpharm.com.

This news release contains forward-looking statements. Such statements are subject to certain risk factors which may cause Vion's plans to differ or results to vary from those expected, including Vion's ability to secure external sources of funding to continue its operations, the inability to access capital and funding on favorable terms, continued operating losses and the inability to continue operations as a result, its dependence on regulatory approval for its products, delayed or unfavorable results of drug trials, the possibility that favorable results of earlier clinical trials are not predictive of safety and efficacy results in later clinical trials, the need for additional research and testing, and a variety of other risks set forth from time to time in Vion's filings with the Securities and Exchange Commission, including but not limited to the risks discussed in Vion's Annual Report on Form 10-K for the year ended December 31, 2005. Except in special circumstances in which a duty to update arises under law when prior disclosure becomes materially misleading in light of subsequent events, Vion does not intend to update any of these forward-looking statements to reflect events or circumstances after the date hereof or to reflect the occurrence of unanticipated events.