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# Vion Pharmaceuticals Proceeding to Second Stage of Pivotal Phase II Trial of Cloretazine® (VNP40101M) in Elderly AML

**NEW HAVEN, CT, January 25, 2007 – VION PHARMACEUTICALS, INC. (NASDAQ CAPITAL MARKET: VION)** today announced that it will proceed to the second stage of accrual to its pivotal Phase II trial of Cloretazine® (VNP40101M) in previously untreated elderly patients with *de novo* poor-risk acute myelogenous leukemia (AML).

Vion Pharmaceuticals' trial CLI-043 is being conducted in over twenty North American and European sites. The trial is evaluating Cloretazine® (VNP40101M) as a single agent in previously untreated AML patients over the age of 60 with *de novo* poor-risk AML. Patients are eligible for this trial if they are at least 60 years of age with *de novo* AML and have one of the following additional risk factors: (i) unfavorable cytogenetics; (ii) an ECOG performance status of 2 or greater; or (iii) a co-morbid condition that precludes them from receiving cytotoxic therapy with cytarabine and an anthracycline. Patients over the age of 70 with *de novo* AML who do not have favorable cytogenetics are also eligible. The primary endpoint for this trial is to determine the complete response rate. Secondary endpoints include overall survival, disease-free survival and progression-free survival. The trial is designed to continue to a total accrual of 85 patients if there have been at least nine responses in the first 42 patients.

The Company announced that there had been at least nine responses recorded in the trial and therefore the trial would continue to full accrual.

Alan Kessman, Chief Executive Officer, commented, "We are pleased to continue enrollment to this pivotal trial." He added, "This is an important milestone for our Cloretazine® (VNP40101M) clinical development program in AML. Acute myeloid leukemia is a devastating disease in older patients who have few treatment options for remission. We are now focused on fully enrolling this trial as quickly as possible and confirming Cloretazine® (VNP40101M)'s efficacy and tolerability in this patient population."

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. An additional trial of Cloretazine® (VNP40101M) as a single agent in small cell lung cancer is 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. In particular, there can be no assurance as to the results of the CLI-043 trial, that the CLI-043 trial will continue to full accrual, or that the trial will not be delayed, modified or ceased. 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.*