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Vion Pharmaceuticals To Present Clinical Data on Cloretazine® (VNP40101M) at the ASCO® Annual Meeting

NEW HAVEN, CT, May 30, 2008 – VION PHARMACEUTICALS, INC. (NASDAQ CAPITAL MARKET: VION) today announced that data from two clinical trials of its lead anticancer agent Cloretazine® (VNP40101M) in acute myelogenous leukemia (AML) would be presented in posters at the 2008 American Society of Clinical Oncology (ASCO®) Annual Meeting in Chicago, Illinois.

The poster (Abstract #7051) entitled "A double blind placebo-controlled randomized phase III study of high-dose continuous infusion cytosine arabinoside (araC) with or without VNP40101M in patients with first relapse of AML" will be presented at McCormick Place, South Hall A1, Board 38E from 8:00 a.m. to 12:00 p.m. on Saturday, May 31, 2008. A copy of the poster will be available on Vion Pharmaceuticals' website, www.vionpharm.com, on May 31, 2008 at 7:00 a.m. Eastern Time.

The poster (Abstract #7025) entitled "A phase II study of VNP40101M in elderly patients with *de novo* poor risk AML" will be presented at McCormick Place, Room E450a, Board 15 from 2:00 p.m. to 6:00 p.m. on Monday June 2, 2008. A poster discussion will take place at 5:30 p.m. in Room E354a. A copy of the poster will be available on Vion Pharmaceuticals' website, www.vionpharm.com, on June 2, 2008 at 1:00 p.m. Eastern Time.

About Vion
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 a Phase II pivotal trial as a single agent in elderly patients with previously untreated *de novo* poor-risk acute myelogenous leukemia. Clinical trials of Cloretazine® (VNP40101M) with cytarabine in acute myelogenous leukemia, with temozolomide in brain tumors, and with stem cell transplantation in advanced hematologic malignancies, are also being conducted. Triapine®, a potent inhibitor of a key step in DNA synthesis, is being evaluated in clinical trials sponsored by the National Cancer Institute. 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 potential inability to obtain regulatory approval for its products, particularly Cloretazine® (VNP40101M), delayed or unfavorable results of drug trials, the possibility that favorable results of earlier preclinical studies, clinical trials or interim clinical trial data are not predictive of safety and efficacy results in later or final clinical trials, the need for additional research and testing, the inability to manufacture product, the potential inability to secure external sources of funding to continue operations, the inability to access capital and funding on favorable terms, continued operating losses and the inability to continue operations as a result, the possible delisting of the Company's common stock from the NASDAQ Capital Market 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 attendant to the forward-looking statements included under Item 1A, "Risk Factors" in Vion's Form 10-K for the year ended December 31, 2007 and Form 10-Q for the quarter ended March 31, 2008. In particular, there can be no assurance as to the results of any of the Vion's clinical trials, that any of these trials will continue to full accrual, or that any of these trials will not be discontinued, modified, delayed or ceased altogether. 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.

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