

COMPANY CONTACT: Vion Pharmaceuticals, Inc.

Alan Kessman, Chief Executive Officer Howard B. Johnson, President & CFO (203) 498-4210 phone

Vion to Present at Bear Stearns and Think Equity Conferences

NEW HAVEN, CT, September 11, 2006 - VION PHARMACEUTICALS, INC. (NASDAQ CAPITAL MARKETS: VION) announced today that it would be making a corporate presentation at the 19th Annual Bear Stearns Healthcare Conference on Monday, September 11, 2006, at 9:30 a.m. EST. The conference is taking place at The Grand Hyatt Hotel in New York City and the presentation will be in the Ballroom E (Manhattan Sky Lounge 2).

The slides from the Bear Stearns presentation will be posted to Vion's website, www.vionpharm.com, at 9:30 a.m. EST on September 11, 2006.

In addition, the Company will be making a corporate presentation at the Think Equity Partners LLC 4th Annual Growth Conference on Wednesday, September 13, 2006 at 3:30 p.m. PST (6:30 p.m. EST). The conference is taking place at The Ritz Carlton Hotel in San Francisco and the presentation will be in the Salon V.

The slides from the Think Equity presentation will be posted to Vion's website, www.vionpharm.com, at 6:30 p.m. EST on September 13, 2006.

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, and hydrazone compounds. 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.