

COMPANY CONTACT:

Vion Pharmaceuticals, Inc.

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Vion Pharmaceuticals is Delisted from Nasdaq Stock Market

NEW HAVEN, CT, August 14, 2008 - VION PHARMACEUTICALS, INC. (NASDAQ CAPITAL MARKET: VION) today announced that the Company had received a letter from NASDAQ on August 13, 2008 informing the Company that it would be delisted from the Nasdaq Stock Market and trading in its shares would be suspended effective the open of business on August 15, 2008.

The Company expects that its common stock will be quoted on the OTC Bulletin Board in the near future. Quotes for OTC Bulletin Board stocks can be found at OTCBB.com.

The Company will continue to maintain its status as a reporting company with the Securities and Exchange Commission and update its shareholders on material events and financial information as required.

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* poorrisk acute myelogenous leukemia. Clinical trials of Cloretazine® (VNP40101M) with cytarabine in elderly patients with 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 file a New Drug Application or 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 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 June 30, 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.