COMPANY CONTACT: **Vion Pharmaceuticals, Inc.**
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Vion Pharmaceuticals Receives Notice from Nasdaq

NEW HAVEN, CT, September 18, 2007 – VION PHARMACEUTICALS, INC. (NASDAQ CAPITAL MARKET: VION) today announced that it received a letter, dated September 17, 2007, from the Nasdaq Stock Market, Inc., notifying the Company that during the proceeding 30 consecutive trading days, the bid price of Vion's common stock had closed below the minimum bid price of $1.00 per share as required by the Nasdaq Stock Market under Marketplace Rule 4310(c)(4). The letter stated that, in accordance with Marketplace Rule 4310(c)(8)(D), the Company has until March 17, 2008 to demonstrate compliance with the rule (i.e. the bid price of Vion's common stock must close at $1.00 per share or more for a minimum of 10 consecutive trading days, and under certain circumstances, more than 10 trading days).

If the Company is not in compliance with Marketplace Rule 4310(c)(4) by March 17, 2008, it may be granted an additional 180 calendar day compliance period if it meets the Nasdaq Capital Market initial listing criteria as set forth in Marketplace Rule 4310(c), except for the bid price requirement. If it is not eligible for an additional compliance period, Nasdaq will notify the Company that its securities will be delisted. At that time, the Company may appeal the decision to a Nasdaq Listing Qualifications Panel.

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) in small cell lung cancer and adult brain tumors 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. In preclinical studies, Vion is also evaluating VNP40541, a hypoxia-selective compound, and hydrazone compounds. The Company 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 potential inability to obtain

regulatory approval for its products, delayed or unfavorable results of drug trials, the possibility that favorable results of earlier preclinical studies or clinical trials are not predictive of safety and efficacy results in later clinical trials, the need for additional research and testing, 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, 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 Annual Report on Form 10-K for the year ended December 31, 2006 and the Company's Form 10-Q for the quarter ended June 30, 2007. In particular, there can be no assurance as to the results of any of the Company'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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