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Vion Pharmaceuticals Completes Private Placement of Convertible Notes and Warrants

NEW HAVEN, CT, February 20, 2007 – VION PHARMACEUTICALS, INC. (NASDAQ CAPITAL MARKET: VION) today announced it has completed the previously announced private placement of $60 million aggregate principal amount of its 7.75% Convertible Senior Notes due 2012 and warrants to purchase an aggregate of up to 7,800,000 shares of common stock.

The notes are convertible into Vion's common stock at an initial conversion rate of 520.833 shares of common stock per $1,000 principal amount of notes (equivalent to a conversion price of $1.92 per share). For each $1,000 principal amount of the notes, investors received three-year warrants to purchase 130 shares of Vion common stock at an initial exercise price of $2.00 per share.

The net proceeds from the private placement will be used for general corporate purposes.

This press release does not constitute an offer to sell, or the solicitation of an offer to buy, any security and shall not constitute an offer, solicitation or sale in any jurisdiction in which such offering would be unlawful.

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 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 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.

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