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**Vion Pharmaceuticals Extends Manufacturing Agreement
with SAFC for Cloretazine[®] (VNP40101M)**

NEW HAVEN, CT, March 22, 2007 – VION PHARMACEUTICALS, INC. (NASDAQ CAPITAL MARKET: VION) today announced that it had extended its manufacturing agreement with SAFC, a member of the Sigma-Aldrich Group, for its lead anticancer agent Cloretazine[®] (VNP40101M) to September 2009. SAFC will continue to manufacture Cloretazine[®] (VNP40101M) active pharmaceutical ingredient (API).

Alan Kessman, Chief Executive Officer, commented, “We are pleased to be able to extend our relationship with SAFC to manufacture Cloretazine[®] (VNP40101M) API. We have had an excellent relationship with SAFC since 2003 and look forward to continuing to work with them on our lead anticancer agent as it gets closer to a potential registration.”

In December 2006, the Company announced that it had entered into a manufacturing agreement for Cloretazine[®] (VNP40101M) finished drug product with Ben Venue Laboratories. Ben Venue will manufacture Cloretazine[®] (VNP40101M) finished drug product using API manufactured by SAFC.

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.

SAFC is the custom manufacturing group within the Sigma-Aldrich Group that focuses on both biochemical production and the manufacturing of complex, multi-step organic synthesis of APIs and key intermediates. SAFC has manufacturing facilities around the world dedicated to providing manufacturing services for companies requiring a reliable partner to produce their custom manufactured materials. SAFC has four operating segments – SAFC Pharma, SAFC Supply Solutions, SAFC Biosciences, and SAFC Hitech - and had annual sales of nearly \$500 million in 2006. SAFC is one of the world's 10 largest fine chemical businesses.

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. 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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