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Vion Pharmaceuticals Presents Initial Data from a Phase II trial of Cloretazine® (VNP40101M) in Patients with Relapsed or Refractory Small Cell Lung Cancer

NEW HAVEN, CT, October 26, 2006 - VION PHARMACEUTICALS, INC. (NASDAQ CAPITAL MARKET: VION) will present data today at The Fourth International Chicago Symposium on Malignancies of the Chest and Head & Neck in a poster session on its lead anticancer agent Cloretazine® (VNP40101M) as a single agent in a Phase II trial in patients with relapsed or refractory small cell lung cancer. The exhibits are being displayed at The Sheraton Chicago Hotel in the Chicago Ballrooms VIII, IX, & X from 7:30 a.m. to 7:30 p.m.

The Phase II trial evaluates Cloretazine® (VNP40101M) in two separate subpopulations of small cell lung cancer: (i) sensitive relapsed disease and (ii) refractory disease. Sensitive relapsed disease is defined as relapse after three months of first-line therapy and refractory disease is defined as relapse within three months of first-line therapy. Data are presented on a total of 36 evaluable patients: (i) 19 patients in the sensitive relapsed arm and (ii) 17 patients in the refractory arm.

Patients on the trial initially received 125 mg/m^2 of Cloretazine® (VNP40101M) weekly for three weeks, every six weeks. This dose was later reduced by protocol amendment to 100 mg/m^2 weekly for three weeks every six weeks due to significant thrombocytopenia at the initial dose level.

Of the evaluable patients on the sensitive relapsed arm, there have been 5 patients with partial response and one patient awaiting confirmation of response (overall, 32% response rate), and 2 patients have stable disease. Of those patients with refractory disease treated with Cloretazine® (VNP40101M), 1 patient achieved a partial response and 3 patients have demonstrated stable disease.

Grade 3 and 4 thrombocytopenia has been the most serious toxicity observed, and delayed additional treatment in several patients. Early results suggest that the reduced dose of Cloretazine® (VNP40101M) causes less thrombocytopenia (no grade 3 or 4 thromobocytopenia in the first four patients at this dose) but maintains disease activity.

The trial is a Simon two-stage design. Both arms of the trial met the criteria for advancement to the second stage and continue to accrue patients. If both arms complete full accrual, there will be a total of 50 patients on the sensitive relapsed arm and 37 patients on the refractory arm of the trial.

Dr. F. Anthony Greco, Director of the Sarah Cannon Research Institute in Nashville, Tennessee, commented, "Cloretazine® (VNP40101M) has impressive activity to date in the second-line small cell lung cancer setting. These data provide a strong rationale for further study of this drug."

Ann Cahill, Vion's Vice President of Clinical Development, said, "We are pleased that these preliminary data suggest that Cloretazine® (VNP40101M) is active as a single agent in a solid tumor. Small cell lung cancer accounts for up to 20% of all lung cancer cases according to the American Cancer Society. It is an aggressive cancer and at relapse has a median survival typically less than 4 months." Ms. Cahill concluded, "The data presented indicate that Cloretazine® (VNP40101M) warrants further investigation as a potential improvement on treatment options for patients with this life-threatening disease."

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.

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