COMPANY CONTACT: **Vion Pharmaceuticals, Inc.**
Alan Kessman, Chief Executive Officer
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VION REPORTS 2007 FOURTH QUARTER AND YEAR-END RESULTS

NEW HAVEN, CT, March 17, 2008 – VION PHARMACEUTICALS, INC. (NASDAQ CAPITAL MARKET: VIOND) today announced financial results for the fourth quarter and year-end of 2007.

The Company reported a net loss of $34.0 million, or $5.05 per share, for the year ended December 31, 2007, compared with a net loss of $25.3 million, or $3.83 per share, for 2006. Weighted-average common shares outstanding for the years ended December 31, 2007 and December 31, 2006 were 6.7 million and 6.6 million, respectively. The net loss increased in 2007 by $8.7 million over the previous year, primarily as a result of non-cash expenses including: (i) $5.1 million of interest expense related to Vion's convertible senior notes and (ii) $2.5 million of higher stock-based compensation expense. In addition, costs associated with clinical, regulatory and pre-commercialization activities for the Company's lead product candidate, Cloretazine® (VNP40101M) increased year-over-year.

The Company reported ending the year with $61.1 million in cash and cash equivalents.

Alan Kessman, Chief Executive Officer, commented, "Based on our current operating plan, we are funded through the third quarter of 2009. We continue to make progress on preparing a New Drug Application for our lead anticancer agent Cloretazine® (VNP40101M) for filing with the U.S. Food and Drug Administration in 2008."

A net loss of $8.2 million, or $1.18 per share, was reported for the fourth quarter of 2007, compared with a net loss of $6.1 million, or $0.92 per share, for the same period in 2006. Weighted-average common shares outstanding for the three months ended December 31, 2007 and 2006 were 6.9 million and 6.6 million, respectively.

On February 20, 2008, the Company implemented a one-for-ten reverse split of all outstanding shares of its common stock and a corresponding decrease in the number of shares of authorized common stock. Share and per share amounts contained herein are provided on a post-split basis.

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) 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 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 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 Form 10-K for the year ended December 31, 2006 and the Company's Form 10-Q for the quarter ended September 30, 2007. 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.

--Financial Statements Follow--

VION PHARMACEUTICALS, INC.
(A Development Stage Company)

CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS

(In thousands, except per share data)	Three Months Ended December 31, 2007	2006	Year Ended December 31, 2007	2006
	(Unaudited)			
Technology license fee revenue	$50	$6	$66	$22
Operating expenses:				
Clinical trials	2,846	3,087	13,627	13,070
Other research and development	2,673	1,900	10,571	8,414
Total research and development	5,519	4,987	24,198	21,484
Marketing, general and administrative	2,042	1,527	8,429	5,787
Total operating expenses	7,561	6,514	32,627	27,271
Loss from operations	(7,511)	(6,508)	(32,561)	(27,249)
Interest income	787	434	3,390	1,994
Interest expense	(1,483)	--	(5,135)	--
Other expense, net	(26)	(19)	(30)	(50)
Loss before income taxes	(8,233)	(6,093)	(34,336)	(25,305)
Income tax provision (benefit)	(74)	8	(343)	42
Net loss	($8,159)	($6,101)	($33,993)	($25,347)
Basic and diluted loss per share[1]	($1.18)	($0.92)	($5.05)	($3.83)
Weighted-average number of shares of common stock outstanding[1]	6,898	6,628	6,737	6,620

[1] Adjusted for all periods presented to reflect the Company's one-for-ten reverse stock split effected February 20, 2008.

CONDENSED CONSOLIDATED BALANCE SHEET DATA

(In thousands)	December 31, 2007	2006
Cash and cash equivalents	$61,067	$30,914
Total assets	63,195	31,856
Convertible senior notes	54,275	--
Total liabilities	61,988	6,402
Shareholders' equity	1,207	25,454

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