



COMPANY CONTACT:

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**VION PHARMACEUTICALS RECEIVES COMPLETE RESPONSE LETTER FOR ONRIGIN™
FROM THE U.S. FOOD AND DRUG ADMINISTRATION**

The Company Engages Roth Capital Partners for Assistance with Evaluating Strategic Alternatives

NEW HAVEN, CT, December 14, 2009 – VION PHARMACEUTICALS, INC. (OTC BULLETIN BOARD: VION) today announced that it had received a complete response letter from the U.S. Food and Drug Administration (“FDA”) related to its New Drug Application (“NDA”) for Onrigin™ (laromustine) injection submitted in February 2009. The letter indicates that the FDA cannot approve the Company’s NDA in its present form and provides recommendations to address remaining issues.

Alan Kessman, Chief Executive Officer, responded, “Based on the previously disclosed results of the Oncologic Drug Advisory Committee Meeting in September, we expected that the FDA would ask us to conduct an additional randomized study of Onrigin™ prior to approval. The complete response letter confirms our expectation.”

The complete response letter advised that the Company complete a randomized study or studies to define the efficacy and safety of Onrigin™ in the patient population proposed for the indication, and that the study or studies should be designed to demonstrate a survival benefit that is clearly attributable to Onrigin™ with an acceptable safety profile in a well-characterized patient population. In addition to clinical and statistical recommendations, the letter also addressed clinical pharmacology and manufacturing issues. The complete response letter also requested that the Company provide an update on Onrigin™ safety information when the issues above had been addressed.

In connection with its previously disclosed review of strategic alternatives, the Company also announced that it had terminated its agreement with Merriman Curhan Ford & Co. and that it had retained Roth Capital Partners, LLP as its advisor to assist the Company in its evaluation of strategic alternatives. As previously announced, the Company does not have sufficient capital to fund a new randomized study of Onrigin™ and if the Company is not successful in achieving a sale of assets, restructuring, financing or any combination thereof, the Company will have to curtail or cease operations, liquidate its assets or file for bankruptcy. The Company expects to make decisions in the near future.

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 being unsuccessful in achieving its strategic alternatives, including any combination of a restructuring of the Company and its debt, a sale of the Company or its assets, and raising new capital, in which case it will curtail or cease operations, liquidate its assets or file for bankruptcy, the FDA requiring Vion to conduct a new randomized trial for Onrigin™ (laromustine) Injection prior to regulatory approval, Vion's potential inability to obtain regulatory approval for its products, particularly Onrigin™, delays in the regulatory approval process, particularly for Onrigin™, delays or unfavorable results of drug trials, the possibility that favorable results of earlier preclinical studies, clinical trials or interim clinical trial data are not confirmed by safety and efficacy results in later or final clinical trials, the need for additional research and testing, including the need for a randomized trial of Onrigin™ prior to regulatory approval, the inability to manufacture product, 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, 2008 and Vion's Form 10-Q for the quarter ended September 30, 2009. 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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