

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

August 5, 2010

J. Michael French Director, President, and Chief Executive Officer Marina Biotech, Inc. 3830 Monte Villa Parkway Bothell, Washington 98021

Re: Marina Biotech, Inc. formerly MDRNA, Inc.

Form 10-K for the Fiscal Year Ended December 31, 2009

Form 10-Q for the Quarter Ended March 31, 2010

File No. 000-13789

Dear Mr. French:

We have reviewed your July 12, 2010 response to our June 28, 2010 letter and have the following comments. In our comments, we ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by providing the requested information or by advising us when you will provide the requested response. Where a comment requests you to revise disclosure, the information you provide should show us what the revised disclosure will look like and identify the annual or quarterly filing, as applicable, in which you intend to first include it. If you do not believe a comment applies to your facts and circumstances, please tell us why in your response. Please furnish us a letter on EDGAR under the form type label CORRESP that keys your responses to our comments.

After reviewing the information provided, we may raise additional comments and/or request that you amend your filings.

Form 10-K for the Fiscal Year Ended December 31, 2009

Item 1. Business

1. In response to prior comments 2 and 4, you indicate that you will file a copy of your agreement with Ribotask ApS and your January 2009 amendment to your 2006 License Agreement with Amylin Pharmaceuticals, respectively. Please note that we will not be able to clear these comments until you have filed copies of these agreements.

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<u>Item 7. Management's Discussion and Analysis</u>
<u>Critical Accounting Policies and Estimates</u>
Fair Value Liability for Price Adjustable Warrants, page 32

2. Refer to your response to prior comment five. Please tell us why you believe the fair value you have assigned to the warrants complies with GAAP given that a Black-Scholes option pricing model is not designed to attribute fair value to the price adjustment feature of your warrants. Binomial or lattice models are better suited to handle this feature.

<u>Item 8. Financial Statements and Supplementary Data</u>
<u>Notes to Consolidated Financial Statements</u>

Note 9 – Intellectual Property and Contractual Agreements, page 64

3. Refer to your response to prior comment six. You disclose that you acquired intellectual property from Valeant Pharmaceuticals in consideration of payment of a non-refundable licensing fee due in equal portions in April and July 2010. You also disclose that Valeant is entitled to receive additional milestone fees, earn-outs and other payments based upon future progress of the development of a therapeutic product and future commercial sales. Please revise your disclosure to include the amount of the non-refundable licensing fee due in April and July 2010, as well as the amounts of additional milestone fees, earn-outs and other payments that Valeant is entitled to receive. At a minimum, disclose the aggregate payments due under your Valeant agreement, their timing, and events triggering their payment. Where uncertainties prevent making a reasonable estimate of the obligations, disclose those uncertainties.

Please contact Staci Shannon, Staff Accountant, at (202) 551-3374 or Joel Parker, Accounting Branch Chief, at (202) 551-3651 if you have any questions regarding the processing of your response, as well as any questions regarding comments on the financial statements and related matters. You may contact Jennifer Riegel, Staff Attorney, at (202) 551-3575 with questions on comment one. In this regard, do not hesitate to contact me at (202) 551-3679 with any other questions.

Sincerely,

Jim B. Rosenberg Senior Assistant Chief Accountant