



DIVISION OF
CORPORATION FINANCE

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

June 10, 2010

Jane H. Hollingsworth
Chief Executive Officer
NuPathe Inc.
227 Washington St., Suite 200
Conshohocken, PA 19428

**Re: NuPathe Inc.
Registration Statement on Form S-1
Filed May 14, 2010
File No. 333-166825**

Dear Ms. Hollingsworth:

We have reviewed your registration statement and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by amending your registration statement and providing the requested information. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your registration statement and the information you provide in response to these comments, we may have additional comments.

Form S-1

General

1. Please note that where we provide examples to illustrate what we mean by our comments, they are examples and not exhaustive lists. If our comments are applicable to portions of the filing that we have not cited as examples, make the appropriate changes in accordance with our comments.
2. Please note that when you file a pre-effective amendment containing pricing-related information, we may have additional comments. As you are likely aware, you must file this amendment prior to circulating the prospectus.
3. Please note that when you file a pre-effective amendment that includes your price range, it must be bona fide. We interpret this to mean that your ranges may not exceed \$2 if you price below \$20 and 10% if you price above \$20.

4. Please file your exhibits as promptly as possible. We will need time to review these documents once they are filed.
5. Please provide us with proofs of all graphic, visual or photographic information you will provide in the printed prospectus prior to its use, for example in a preliminary prospectus. Please note that we may have comments regarding this material.

Cover Page

6. Please delete the phrase “Joint Book-Running Managers” from your cover page.

Prospectus Summary, page 1

7. We note that your registration statement includes numerous references to data attributed to IMS Health, Inc. Please briefly describe who IMS Health is. In addition, please disclose what your relationship is to IMS Health and whether the information attributed to IMS Health was compiled on your behalf.
8. On page 3 you have stated that you have not independently verified the statistical, industry and market data included in the registration statement. It is not appropriate to disclaim information included in your filing. Please delete this paragraph.

Risk Factors, page 8

“If we are not successful in attracting and retaining highly qualified personnel...” page 28

9. To the extent you have experienced problems attracting and retaining highly qualified personnel in the recent past, please revise to describe these problems.

Financial Overview

Research and Development Expenses, page 42

10. Your statement on page 43 with regard to your inability to determine the completion costs of your development projects appears inconsistent with your discussion on page 34 where you state “[a]pproximately \$__ million to complete the clinical development of, seek marketing approval for, and if approved, commercially launch Zelrix in the U.S.” To the extent that you are able to estimate the completion costs or a range of estimated completion costs, disclose the costs for each project rather than providing a blanket statement for all projects.

Critical Accounting Policies and Use of Estimates
Stock-Based Compensation, page 44

11. You disclose that you determine the aggregate equity value using a market-based approach and an asset-based approach. Please tell us why it is appropriate to use an asset-based approach given the high likelihood of an initial public offering transaction. Please also tell us the amount and percentage of the aggregate equity value that was determined under the asset-based approach.
12. Please disclose the criteria used to identify “similar” companies in applying the market-based approach to determine the fair value of your common stock. Please provide an explanation for any material fluctuations between the fair value of the common stock underlying the equity-based instruments issued in 2010, if any, and the most recent issuances to the mid-point of your estimated IPO price range. If no significant events transpired during 2010 to support the difference between the fair value of the common stock underlying the equity-based instruments and to the mid-point of the estimated IPO price range, consider the following:
 - Whether the preference and the dividend rights are sufficient to support the fair value difference between the common and the preferred stocks;
 - Why the fair value of your common stock did not increase in July 2009 upon successful completion of the Phase III clinical trial for Zelrix; and,
 - Whether the companies you utilized in applying the market-based approach are truly similar to you.

Liquidity and capital Resources
Contractual Obligations, page 53

13. Please revise your footnote here and on page F-20 to quantify the number of products licensed under the patent license agreement with the University of Pennsylvania. In addition, please include the minimum annual research and development commitment of \$250,000 in your contractual obligations table, based on the minimum duration of your agreement (i.e. expiration of the last Penn patent).

Similarly, please disclose here and in your notes to financial statements the number of covered products under your license agreement with SurModics and the amount of milestone payments you are obligated to pay upon regulatory approval.

Business, page 56

14. We note your reliance on agreements with third-party clinical research organizations to conduct your clinical trials. It appears that you may be substantially dependent on some or all of these agreements. If you are, please file copies and describe the material terms of the agreements within your Business section. If you do not believe that you are

substantially dependent on them, please provide an analysis supporting your determination.

15. Throughout the registration statement you cite various estimates, statistics, and other figures. For example:

- On page 56: “Current non-oral migraine treatments, limited to nasal spray and injectable formulations, are often poorly tolerated...;”
- On page 59: “Based on data from multiple published third party clinical trials, we believe patients’ failure to respond consistently results from...;”
- On page 59: “The incidence of triptan adverse events is 47% for injection and 14% for oral sumatriptan;”
- On page 65: “Some scientist believe that intermittent dosing may hasten the progression of Parkinson’s...;”
- On page 65: “Multiple third party studies suggest that continuous medication delivery can alleviate the symptoms of Parkinson’s disease...”

Please attribute these statements and other similar statements to the source from which you obtained the information. In addition, where you cite your own estimate, please explain how you arrived at those estimates and identify any third party sources you relied upon.

License and Development Agreements, page 68

16. Please revise your disclosure to describe any termination provisions under your asset purchase and license agreement with Travanti Pharma Inc. that would terminate the parties’ license rights.
17. Please revise your disclosure to disclose the sum of amounts paid to date under your development and license agreement with LTS Lohman Therapie-Systeme AG.
18. Please revise your disclosure to provide the expected expiration date of the last patent included under your patent license agreement with the University of Pennsylvania.

Executive Compensation, page 84

19. We note that you have not included any disclosure in response to Item 402(s) of Regulation S-K. Please advise us of the basis for your conclusion that disclosure is not necessary and describe the process you undertook to reach that conclusion.
20. We note that you have entered into employment agreements with several executive officers. Please identify these executive officers and provide a description of the material terms of the agreements. In addition, please file each of the employment agreement as an exhibit pursuant to Item 601(b)(10)(iii)(A) of Regulation S-K.

Annual Performance Bonus Compensation, page 86

21. Please revise your disclosure to identify which of the 2009 individual performance goals for your NEOs, aside from Ms. Hollingsworth, were achieved and which were not.
22. We note that your employment agreements with several executive officers provide for severance and continuation of benefits in the event of termination without cause, including a change of control. As such, please revise your Compensation Discussion and Analysis to include the disclosure required under Item 402(j) of Regulation S-K.

Transactions with Related Persons, page 102

23. We note that on page F-21 you disclose that a former director and current shareholder of the Company is chairman of a company that received \$454,337 for clinical development services in 2009. To the extent that this person is a related person under Item 404(a) of Regulation S-K, please identify this individual and provide a description of the material terms of the agreement. In addition, please file any underlying agreement as an exhibit.

Investor Rights Agreement and Stockholders Agreement, page 104

24. Please describe all of the material terms of the Investor Rights Agreement, to the extent not already described in your discussion of registration rights on pages 112-113.

Recent sale of unregistered securities, page II-2

25. For each of the unregistered sales of securities you have identified, please indicate the section of the Securities Act or the rule of the Commission under which exemption from registration was claimed and state briefly the facts relied upon to make the exemption available.

Financial Statements

General

26. Please update your financial statements through March 31, 2010 as required by Rule 3-12 of Regulation S-X.
27. Please provide a disclosure of your material subsequent events as required under ASC 855-10-50.

Financial Statements

Statements of Operations, page F-4

28. You disclose on page F-20 that you paid \$5.5 million to purchase a patent application. Since this does not represent the purchase of a business please cite for us the accounting

literature that supports the classification of this expense as acquired in-process research and development expenses as opposed to research and development expenses.

(6) Debt

(a) Convertible Notes, page F-13

29. Please revise your disclosure to state the current conversion price of April 2010 convertible promissory notes. In addition, if the conversion price is adjustable for any events other than an IPO as you already have described, describe those events and how the conversion price will be adjusted.

(7) Capital Structure

(a) Redeemable convertible Preferred Stock, page F-15

30. On your Statements of Redeemable convertible Preferred Stock and Stockholders' Deficit, you accrete the preferred stock balance to its liquidation value. Please revise your disclosure to explain the difference between the preferred stock carrying amount and its liquidation value.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Act of 1933 and all applicable Securities Act rules require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

Notwithstanding our comments, in the event you request acceleration of the effective date of the pending registration statement please provide a written statement from the company acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Please refer to Rules 460 and 461 regarding requests for acceleration. We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under

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the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

You may contact Keira Nakada at (202) 551-3659 or Gus Rodriguez at (202) 551-3752 if you have questions regarding comments on the financial statements and related matters. Please contact Bryan Pitko at (202) 551-3203 or Daniel Greenspan at (202) 551-3623 with any other questions. In this regard, please also feel free to contact me at (202) 551-3715.

Sincerely,

Jeffrey P. Riedler
Assistant Director

cc: Michael N. Peterson, Esq.
James W. McKenzie, Jr., Esq.
Morgan, Lewis & Bockius LLP
1701 Market Street
Philadelphia, PA 19103