

Via Facsimile and U.S. Mail  
Mail Stop 4720

February 26, 2010

Mr. Marcel Urbanc  
Chief Financial Officer  
AlphaRx, Inc.  
168 Konrad Crescent, Suite 200  
Markham, Ontario, Canada L3R 9T9

**Re: AlphaRx, Inc.**  
**Form 10-K for the Fiscal Year Ended September 30, 2009**  
**Form 10-Q for the Quarterly Period Ended December 31, 2009**  
**File No. 000-30813**

Dear Mr. Urbanc:

We have reviewed your filings and have the following comments. We have limited our review to only your financial statements and related disclosures and do not intend to expand our review to other portions of your documents. In our comments, we ask you to provide us with information to better understand your disclosure. Where indicated, we think you should revise your documents in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision unnecessary. After reviewing the information provided, we may raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

**Form 10-K for the Fiscal Year Ended September 30, 2009**

Item 8A. Controls and Procedures, page 29

1. It is unclear from your disclosures whether or not your certifying officers have performed an assessment of internal control over financial reporting as of September 30, 2009. Please refer to Exchange Act Rules 13a-15 and 15d-15 and Item 308(T) of Regulation S-K. If your officers have not yet performed an assessment, we ask that you complete your evaluation and amend your filing within 30 calendar days to provide the required management's report on internal

control over financial reporting. In performing your evaluation, you may find the following documents helpful:

- the Commission's release *Amendments to Rules Regarding Management's Report on Internal Control Over Financial Reporting* (Securities Act Release 8809/Financial Reporting Release 76). You can find this release at: <http://www.sec.gov/rules/final/2007/33-8809.pdf>;
- the Commission's release *Commission Guidance Regarding Management's Report on Internal Control Over Financial Reporting Under Section 13(a) or 15(d) of the Securities Exchange Act of 1934* (Securities Act Release 8010/Financial Reporting Release 77). You can find this release at <http://sec.gov/rules/interp/2007/33-8810.pdf>; and
- the "Sarbanes-Oxley Section 404 – A Guide for Small Business" brochure at: (<http://www.sec.gov/info/smallbus/404guide.shtml>).

If an assessment was performed as required, please revise your disclosure to clarify, in clear and unqualified language the conclusions reached by your certifying officers on the effectiveness of the company's internal control over financial reporting as of September 30, 2009. Your disclosure should identify the framework used by your certifying officers to conduct their assessment.

2. Your disclosure does not appear to comply with the language in Item 307 of Regulation S-K. You disclose that your certifying officers concluded that your disclosure controls and procedures, as defined in Exchange Act Rules 13a-15(e) and 15d-15(e), were effective as of September 30, 2009, with the exception of one identified material weakness. Please revise your disclosure to definitively state whether your disclosure controls and procedures were effective or ineffective the end of the period covered by the report. To the extent you believe your disclosure controls and procedures were effective, please ensure your disclosure clearly indicates why your material weakness does not render these controls ineffective. In addition, please revise your December 31, 2009 Form 10-Q to clearly disclose why your material weakness does not render your disclosure controls and procedures ineffective at December 31, 2009.
3. In light of the weaknesses identified in your disclosure controls and procedures and in your internal control over financial reporting, please include a risk factor in your amended filing to alert investors to your ineffective disclosure controls and procedures and to your ineffective internal control over financial reporting. The risk factor should identify the material weaknesses in your disclosure controls and procedures and in your internal control over financial reporting and should disclose all material risks resulting from the weaknesses identified. In this regard, consider addressing the risk if you are unable to adequately correct the weaknesses identified. If you determine that a risk factor is unnecessary, advise of the basis for your conclusion.

Exhibits 31: Certifications Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

4. Please revise your certificates, here and in your December 31, 2009 Form 10-Q, to be exactly as prescribed in Item 601(b)(31) of Regulation S-K. In this regard, please ensure your revised certifications:
  - Do not include the title of your certifying officer and your company name in the introductory phrase;
  - Do not describe the applicable periodic reports as “annual” or “quarterly;”
  - Include the phrase, “The registrant’s other certifying officer(s) and,” at the beginning of the fourth certification;
  - Include the reference to internal control over financial reporting in the fourth certification and add certification 4(b);
  - Indicate that your evaluation of disclosure controls and procedures was performed as of the end of the period covered by the report, not within 90 days prior to the filing date of the report;
  - Remove certification 4(c) as presented and replace it with that required in Item 601(b)(31) of Regulation S-K; and
  - Remove the sixth certification and add certification 4(d).

\* \* \* \*

Please amend your filing and respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a cover letter with your amendment that keys your responses to our comments and provide the requested information. Detailed letters greatly facilitate our review. Please furnish your letter on EDGAR under the form type label CORRESP.

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 all information required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. 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.

In connection with responding to our comments, please provide, in your letter, a statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and

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- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filing or in response to our comment on your filing.

You may contact Ibolya Ignat, Staff Accountant at (202) 551-3656, or Mark Brunhofer, Senior Staff Accountant, at (202) 551-3638 if you have questions regarding these comments. In this regard, do not hesitate to contact me, at (202) 551-3679.

Sincerely,

Jim B. Rosenberg  
Senior Assistant Chief Accountant