



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

July 10, 2009

Mail Stop 4631

Mr. James C. Katzaroff, President
Advanced Medical Isotope Corporation
8131 W. Grandridge Blvd., Suite 101
Kennewick, WA 99336

Re: Advanced Medical Isotope Corporation
Amendment No. 3 to Registration Statement on Form 10
Amendment No. 1 to Form 10-K for the Fiscal Year Ended December 31, 2008
Filed on June 24, 2009
Form 10-Q for the Quarterly Period Ended March 31, 2009
Filed on May 20, 2009
File No. 0-53497

Dear Mr. Katzaroff:

We have reviewed your filings and have the following comments.

Amendment No. 3 to Form 10

General

1. Where we ask for revisions to your disclosure in the registration statement, please make similar revisions in the applicable places in your Form 10-K and Form 10-Q.

Item 1. Description of Business, page 4

2. We note that you added disclosure on page 18 stating that in 2008 your management concluded the patent license for the Neutron Generator was no longer of value to the company and wrote off the net unamortized portion balance of \$643,917 early. Further, in 2008 your management concluded the intangible assets acquired from Isonics were no longer of value and wrote off the total net unamortized portion balance of \$259,618 early. Where you discuss the patent license and intangible assets throughout the filing, please also update your disclosure to discuss the related write-offs and the reasons why management concluded they were of no value; for example, on pages 4, 7 and 8.

Item 1A. Risk Factors, page 9

3. We note your response to comment 2 in our letter dated April 21, 2009. Please also describe the track record of public companies affiliated with UTEK, including whether any such company has not achieved profitability, implemented its business plan or is delinquent in its periodic reporting obligations. For example, we note the disclosure in UTEK's Form 10-K regarding the write down of other investments in UTEK's portfolio, some of which are public companies.

Item 2. Financial Information – Liquidity and Capital Resources, page 18

4. We note the disclosure in your Form 10, Form 10-K, and Form 10-Q that based on the current cash run rate, approximately \$1 million will be needed to fund your operations for an additional year. Please expand your disclosure and reconcile this statement with the disclosure in the going concern note in your financial statements. Specifically, the going concern note reflects that you anticipate a requirement of \$3 million in funds over the next twelve months to maintain current operation activities.

Item 5. Directors and Officers, page 23

5. We note that you added Dr. Michael Korenko as a director. Please update the tables on pages 22 and 23 accordingly.

Item 6. Executive Compensation, page 25

Narrative to Summary Compensation Table, page 25

6. We note your response to comment 4 in our letter dated April 21, 2009. However, some of the amounts in the table still do not reconcile to your narrative disclosure. Please provide footnote disclosure explaining why Dr. Fu Min-Su's employment agreement provides that his annual salary is \$90,000, but \$74,615 is reflected under his applicable salary column in the table, and explain how the bonus and awards reflected in the table were determined. With respect to William J. Stokes, please describe the employment agreement you refer to in footnote (1) to the table.

Item 10. Recent Sales of Unregistered Securities, page 32

7. We note in your response to comment 7 in our letter dated April 21, 2009 that you have listed numerous private offerings with investors. Please disclose the number of investors in each private offering, identify the persons or the class of persons to whom the securities were sold, and briefly describe the facts relied upon to make

the Section 4(2) exemption available for these offerings. See Item 701(b) and (d) of Regulation S-K.

8. Please provide the information required by Item 701 of Regulation S-K for the convertible notes described in the last two paragraphs in this section, including the names of the investors and the exemption from registration claimed.

Financial Statements

Note 2 – Summary of Significant Accounting Policies, page F-9

9. We have reviewed your response to comment 8 in our letter dated April 21, 2009. You state that the factors that led to impairment charges related to certain unamortized license fees and intangible assets do not apply to your fixed assets. Please disclose what these factors were and how you determined that they do not apply to your fixed assets. Your response indicates that you did not test any fixed assets for impairment, please confirm. If you did test for impairment, we encourage you to provide qualitative and quantitative descriptions of the material assumptions used to determine fair value in your impairment analyses and a sensitivity analysis of those assumptions used based upon reasonably likely changes. For any asset groups for which the carrying value was close to the fair value, please consider disclosing the carrying value of the asset groups.

Note 10 – Capital Lease Obligations, page F-20

10. We have reviewed your response to comment 10 in our letter dated April 21, 2009. You indicate that you believe this obligation should be classified as non-current since it is probable that you will cure the default before the end of 2009. Based on review of your March 31, 2009 balance sheet, it appears that you have presented this obligation as current as of December 31, 2008 and March 31, 2009; however, based on review of your audited December 31, 2008 balance sheet, it appears that you have continued to present this obligation as non-current. Please advise as to the apparent inconsistencies between the presentation included in your December 31, 2008 and March 31, 2009 financial statements, as well as in your response to prior comment 10. If you now believe that this obligation should be presented as current as of December 31, 2008, please tell us what consideration you gave to paragraphs 25 and 26 of SFAS 154.

Form 10-K/A for the Fiscal Year Ended December 31, 2008

11. Please amend your Form 10-K to address the comments in this letter.

Item 9A(T). Controls and Procedures, page 22

12. Although your response to comment 15 in our letter dated April 21, 2009 states you have amended the Form 10-K to provide the disclosure controls and procedures information required by Item 307 of Regulation S-K, this information is not included in your Form 10-K. Please revise. Note that Item 307 relates to disclosure controls and procedures and the information you currently provide relates to internal control over financial reporting, as set forth in Item 308T of Regulation S-K.

Signatures, page 33

13. We note your response to comment 19 in our letter dated April 21, 2009. The Form 10-K should also be signed by the company's principal accounting officer or controller whose title should be shown on the signature page. Therefore, under the title for Bruce Jolliff, please indicate that he is also the company's principal accounting officer. See General Instruction D to Form 10-K.

Exhibits 31.1 and 31.2 – Certifications

14. We note your response to comment 20 in our letter dated April 21, 2009; however, the revision in the first bullet point of our comment is not reflected in the certifications. The certifying individuals included their titles in the introductory sentence of the certifications required by Item 601(b)(31) of Regulation S-K. Please remove their titles from the introductory sentence of the certifications.

Form 10-Q for the Quarterly Period Ended March 31, 2009

15. Please amend your Form 10-Q to address the comments in this letter.

Item 4T. Controls and Procedures, page 25

16. Please revise your disclosure throughout this section to clarify whether you are referring to disclosure controls or procedures or internal control over financial reporting. See Item 307 and Item 308T of Regulation S-K.
17. You disclose "this annual report does not include an attestation report by our registered public accounting firm regarding our internal controls over financial reporting." Since this is not an annual report, please remove this disclosure in future Form 10-Q filings.

Mr. James C. Katzaroff
Advanced Medical Isotope Corporation
July 10, 2009
Page 5

Exhibits 31.1 and 31.2 – Certifications

18. Please file an amendment to the Form 10-Q that includes the entire periodic report and new, corrected certifications. Revise your certifications to reflect the exact form set forth in Item 601(b)(31) of Regulation S-K. In that regard, please make the applicable revisions set forth in comment 20 in our letter dated April 21, 2009. Also ensure that the revised certifications refer to the Form 10-Q/A and are currently dated.

Please respond to these comments 10 business days or tell us when you will provide us with a response. Please provide us with a response letter that keys your responses to our comments and provides any requested information. Detailed letters greatly facilitate our review. Please file your response on EDGAR as a correspondence file. Please understand that we may have additional comments after reviewing your responses to our comments.

You may contact Jeffrey Gordon, Accountant, at (202) 551-3866 or Nudrat Salik, Reviewing Accountant, at (202) 551-3692 if you have questions regarding comments on the financial statements and related matters. Please contact Dorine H. Miller, Financial Analyst, at (202) 551-3711 or Brigitte Lippmann, Senior Staff Attorney, at (202) 551-3713 with any other questions.

Sincerely,

Pamela A. Long
Assistant Director

cc: Andrea Cataneo, Esq.
Sichenzia Ross Friedman Ference LLP
61 Broadway, 32nd Floor
New York, NY 10006