



UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549-0404

March 6, 2009

Mail Stop 7010

Via U.S. mail and facsimile

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. 1 to Registration Statement on Form 10-12G/A
Filed on February 17, 2009
File No. 0-53497

Dear Mr. Katzaroff:

We have reviewed your filing and have the following additional comments.

General

1. As we indicated in comment 1 in our letter dated December 9, 2008, since you did not withdraw the registration statement, it became effective by operation of law 60 days after you initially filed it (January 12, 2009). Please note that in addition to responding to our comments on the Form 10 you are subject to the reporting requirements of the Exchange Act. Therefore, please file your December 31, 2008 Form 10-K by March 31, 2009.
2. As previously requested, please provide, in writing, a statement directly from the company acknowledging that:
 - the company is responsible for the adequacy and accuracy of the disclosure in their filings;
 - 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
 - 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.

Item 1. Description of Business, page 4

3. The third paragraph states that the registrant acquired the assets of Neu-Hope Technologies and \$310,000 from UTEK Corporation. Please reconcile this statement with the disclosure in your response to comment 2 in our letter dated December 9, 2008 that the company acquired the assets of Neu-Hope Technologies and \$335,000 from UTEK Corporation. Also clarify the relationship between NHTI and UTEK, and whether the 100,000 preferred stock issued to UTEK and Aware Capital Corporation was the purchase price for the acquisition of the cash and the assets of NHTI.
4. Please describe Aware Capital Corporation in greater detail and disclose any relationship between it and UTEK Corporation. Also, explain why Aware Capital received 5,000 of UTEK's 100,000 Series A Preferred Stock.
5. We note your response to comment 6 in our letter dated December 9, 2008. Please include your response in this section of the filing.

Item 1A. Risk Factors

We have increasing cash requirements, page 10

6. Note that the registrant anticipates a \$10 million requirement over the next twelve months to fund its planned business operations. The company currently has approximately \$54,508 in cash on hand as noted in Note 1 of the Notes to Consolidated Financial Statements. Discuss the potential risk to the company's plan of operations as discussed in the liquidity section of MD&A on page 17.

Item 2 – Financial Information, page 16

Management's Discussion and Analysis of Financial Condition and Results of Operation, page 16

Results of Operations, page 16

7. We remind you to discuss your results of operations with respect to the most recent fiscal year-to-date period for which an income statement is provided compared to the corresponding year-to-date period of the preceding fiscal year. You should also discuss the results of operations for the most recent fiscal quarter compared to the corresponding fiscal quarter in the preceding fiscal year. Please revise as necessary. Refer to Item 303(b)(2) of Regulation S-K.

Liquidity and Capital Resources, page 17

8. You disclose on page 17 that you “experienced negative cash flow from operations of \$737,786, and [you] expended \$1,515,232 for investing activities while adding \$2,221,507 from financing activities” during the nine months ended September 30, 2008. It appears that these amounts actually relate to the six months ended June 30, 2008. As such, please update to reflect the amounts for the nine months ended September 30, 2008.

Item 4. Security Ownership of Certain Beneficial Owners and Management, page 22

9. We note your response to comment 27 in our letter dated December 9, 2008. Please reconcile the shares held by UTEK in the table of 8,609,041 to the 8,309,399 amount in footnote (2) or explain the difference in the footnote.

Item 6. Executive Compensation

Narrative to Summary Compensation Table, page 25

10. In addition to the terms of the employment agreements which you have disclosed, the narrative discussion should include the material terms of the bonuses awarded to the named executive officers during the last completed fiscal year, including a general description of the formula or criteria to be applied in determining the amounts payable and vesting schedule.
11. The narrative discussion should also disclose the material terms of each option award as required by Item 402(o)(4) of Regulation S-K.
12. As previously requested, for each transaction please identify the person(s) to whom the options were granted. In the first paragraph, describe the type of consulting services performed by the consultant during April, 2007.

Item 7. Certain Relationships and Related Transactions, page 31

Indebtedness from related parties, page 31

13. Disclose the purpose(s) of the loans from the employee. Please confirm supplementally that the employee was not an affiliate of any officer or principal shareholder of the company.

Item 15 – Financial Statements and Exhibits, page 36

Financial Statements for the Year Ended December 31, 2007

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

General

14. We reissue prior comment 49. Your disclosures on pages F-10 and F-11 indicate that you did not consider the expected future operating cash flows in assessing your assets for impairment because they were purchased recently. Please further advise how you made this determination in accordance with SFAS 144, or as previously requested, please enhance your disclosure to identify each of the significant assumptions used in your analysis and explain the basis for each such assumption. Please also expand your disclosure to provide additional insight on how you perform your impairment analysis under SFAS 144 to include the following:

- Please clarify how you determine when to test for impairment. Please expand your discussion to state the types of events and circumstances that you believe indicate impairment. Please address how frequently you evaluate for these types of events and circumstances; and
- Please discuss the specific valuation methods used to determine fair value. You should discuss how sensitive the fair value estimates are to each of these significant estimates and assumptions used as well as whether certain estimates and assumptions are more subjective than others.

Note 10 – Capital Lease Obligations, page F-20

15. We have reviewed your response to prior comment 47. Given that you were not in compliance with the minimum debt service coverage ratio of 1:1 as of December 31, 2007, please revise your disclosure to clearly disclose the actual ratio achieved as of each reporting date. Please also consider showing the specific computations used to arrive at the actual ratios/amounts with corresponding reconciliations to US GAAP amounts, if necessary. See Sections I.D and IV.C of the SEC Interpretive Release No. 33-8350 and Question 10 of our FAQ Regarding the Use of Non-GAAP Financial Measures dated June 13, 2003. In addition, please confirm that the capital lease is your only class of debt that contains covenants.

16. We have reviewed your response to prior comment 57. It is still unclear what the initial amounts were for which you recorded an asset and obligation in September 2007 related to each of the capital leases pursuant to paragraph 10 of SFAS 13 as well as how you determined these amounts. Please revise your disclosure accordingly.

Preferred Stock, page F-23

17. We have reviewed your responses to prior comments 60 and 61. We continue to have difficulty understanding your accounting of the preferred stock. Please provide us with a comprehensive explanation of your accounting which addresses the following:

- Please tell us what consideration you gave to SFAS 133 and EITF 00-19 in accounting for the conversion feature, with specific reference to paragraphs 20 through 24 of EITF 00-19. Please clearly state how you accounted for and determined the appropriate accounting for the conversion feature. If you recorded a liability amount related to this feature, please tell us how you determined the amount to record;
- Based on your response, it is unclear what the Preferred Stock Redeemable line item represents given that it does not appear that the preferred stock is redeemable for cash or other assets. Please confirm that the preferred stock is not redeemable for cash or other assets. Please help us understand how your presentation complies with SFAS 150 or EITF D-98; and
- It is not clear how you determined the amount to be recorded as preferred stock in your stockholders' equity section. Please advise and also tell us what accounting literature you referenced to support your conclusion.

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.

Mr. James C. Katzaroff
Advanced Medical Isotope Corporation
March 6, 2009
Page 6

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 P. 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