Mail Stop 6010

August 7, 2007

Dr. Gil Van Bokkelen
Chief Executive Officer
BTHC VI, Inc.
3201 Carnegie Avenue
Cleveland, Ohio 44115-2634

Re: BTHC VI, Inc.
Registration Statement on Form S-1
Filed July 10, 2007
File No. 333-144433

Dear Dr. Van Bokkelen:

We have reviewed your filing and have the following comments. Where indicated, we think you should revise your document in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, 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 any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

FORM S-1

Prospectus Summary

Our Business, page 1

1. Please state the following in this section:

   - you do not have any approved products,
   - your accumulated deficit, and

- your history of losses and expectation of continuing losses for the next several years.

2. Rather than stating in the first paragraph that you have "a pipeline" of products that you intend to advance into clinical trials during 2007 and 2008, state the precise number of products that you expect to advance into clinical trials during this time period, and identify the products by name. Similarly revise the corresponding disclosure on page 42.

3. We note in the first paragraph that "ATHX-105 has been shown in preclinical testing in animal models to reduce food intake and body weight by suppressing appetite without appearing to cause the adverse side effects that have been observed with other weight loss drugs." Please state that the results might be different in human trials.

4. We note in the second paragraph that you intend to begin the phase I clinical trial on ATHX-105 "as soon as possible." Please provide a more objective and specific estimate as to when you expect to begin this trial, and identify the obstacles that are preventing you from beginning it.

5. You state in the third paragraph that the company's orally active pharmaceutical products are "novel." Please either explain how these products are novel, or delete the word "novel" regarding these products throughout the prospectus.

6. Please provide a more specific description of the MultiStem product. For example, is it a drug, device, biologic, or a combination of all or some of these? Is it one product for multiple indications or does it lead to multiple products for separate indications? Is separate clinical testing required for each product or indication? Also, please disclose on page 1 the stage of development of MultiStem.

7. In the last paragraph on page 1 and on page 49, you state that have "developed" RAGE. This wording may create the impression RAGE is a commercial product. Please revise the disclosure to remove this language and also to clarify the stage of development of RAGE.

8. You also state that RAGE gives you the ability to "produce humans cell lines that express specific, biologically well validated drug targets" and that you "have produced cell lines that express drug targets in a range of disease areas." Please describe the product in plain English so that a reader can understand the implications. Is RAGE a tool for drug development? Do you intend to use it to develop your own drug candidates, or do you provide this technology to other companies that are developing their own drugs?

9. On page 1, you identify your collaborative partner for MultiStem but not for ATHX-105, the "novel orally active pharmaceutical products for the treatment of central nerve system disorders," or RAGE. Please identify your partners or explain how you are developing these products independently and where you acquired any of the necessary technology.

10. In the Business section, please describe in detail any collaboration agreements related to the acquisition of MultiStem, ATHX-105, the "novel orally active pharmaceutical products for the treatment of central nerve system disorders," and RAGE, and file these agreements as exhibits.

Recent Developments, page 2

11. In the last paragraph of this discussion, you identify the "lead investors" as the Radius entities, noting that they invested $10 million. We note from the Securities Purchase Agreement, filed as exhibit 10.33 to a Form 8-K filed on June 14, 2007, that Caduceus Private Investment III, L.P. invested $14,858,490 and RA Capital Biotech Fund, L.P. invested $5,894,400. Please disclose this information in the "Recent Developments" section. Also, identify the natural persons who beneficially own the shares held by the Radius entities, Caduceus, and RA Capital.

Risk Factors, page 6

12. Many of the risk factors are related and overlap. Please either consolidate them or revise them so that each risk factor discusses a separate risk. The following groups of risk factors are related or overlapping:

    - "We may not successfully maintain . . ." on page 8 and "If our collaborators do not devote sufficient time . . ." on page 9;
    - "Our products are in an early stage . . ." on page 8, "Even if we or our collaborators receive . . ." on page 10, "We may experience delays in clinical trials . . ." on page 10, and "If our pharmaceutical product candidates . . ." on page 11;
    - "We may not have adequate protection . . ." on page 14, "Our ability to compete in the biopharmaceutical market . . ." on page 14, "Many of the patent applications we and our licensors have filed . . ." on page 15, and "If patent applications for our owned . . ." on page 16; and
    - "We expect that our results of operations will fluctuate . . ." on page 18 and "The price of our common stock is expected to be volatile . . ." on page 21.

We will need substantial additional funding to develop our products . . . , page 6

13. We note that you believe your "planned capital needs will be met for approximately three years." Do you mean that your cash on hand after the completed private placements will be sufficient for three years? Please clarify and also disclose your current monthly cash burn rate and your expectation as to whether this level of spending will stay the same or increase in the future in the risk factor and in the "Liquidity and Capital Resources" section in Management's Discussion and Analysis.

The results seen in animal testing of our product candidates . . . , page 7

14. Please define pharmacokinetics and pharmacodynamics.

We may not successfully maintain our existing collaborative . . . , page 8

15. Please do the following with respect to each of your material collaborative and licensing agreements:

    - Identify them;
    - State their termination dates;
    - State which, if any, are terminable at will by either party;
    - Discuss the obligations, if any, that the company might have difficulty in meeting that could cause the company to be in breach of its collaboration agreements and place it at risk for termination; and
    - Ensure you have filed all material collaborative and licensing agreements.

Many of the patent applications we and our licensors have filed . . . , page 15

16. Please identify any ungranted patent applications that relate to technology that is material to your business, such as technology related to ATHX-105 or MultiStem.

Many potential competitors, including those who have greater resources . . . , page 17

17. Please identify your most significant competitors.

We may be sued for product liability, which could adversely affect our business, page 20

18. Please disclose the amount of your product liability insurance coverage and liability insurance for conducting clinical trials.

If we do not meet the listing standards established by the NASDAQ . . . , page 24

19. Please identify the listing standards that the company does not yet meet.

Forward-Looking Statements, page 25

20. Please remove the reference to the Private Securities Litigation Reform Act of 1995. This reference could be read to imply that the forward-looking statements are within the safe harbor of the PSLRA, which they are not since this is your initial public offering. See Section 27A(b)(2)(D) of the Securities Act.

21. Please delete the last sentence of this section, which states that investors "should not place undue reliance on forward-looking statements contained in this prospectus." Although we do not object to the other cautionary language in this section, this sentence could be read as a disclaimer of the information in your filing.

Dividend Policy, page 26

22. Please insert a new risk factor into the Risk Factors section that discusses the fact that you do not intend to pay dividends. The risk factor should state that any investment gains will need to come through appreciation in the stock price.

Unaudited Pro Forma Statements of Operations, page 29

23. Please tell us how the acceleration of interest and milestone payment meet the nonrecurring criterion of a pro forma adjustment.

24. Disclose here, or in another appropriate place, if the tax loss carryforwards of Athersys continue to be available after the merger.

Management's Discussion and Analysis of Financial Condition and Results of Operations

Overview, page 32

25. Please identify the pharmaceutical company to which Athersys sold assets related to its asthma discovery program. Also, since the final $500,000 was to be received upon delivery of the remaining assets within three months of closing, and since closing was in May, please update this disclosure as appropriate since it has now been almost three months since closing.

Research and Development Expenses, page 34

26. If true, please disclose that you do not keep track of your research and development expenses on a major project basis. Otherwise, disaggregate the costs incurred during each period presented and to date by project.

Liquidity and Capital Resources, page 37

Contractual Obligations, page 38

27. Please revise your contractual obligations table to include the estimated interest payments and the aggregate milestone payments that you may be liable in the future under the existing agreements. These payments appear to represent material future obligations. The amounts that should be disclosed here are not only the balances accrued as of the end of the period presented but your total obligations through the life of the underlying obligations. In addition, provide a footnote to the table that describes the general description of events that will trigger these payments. Refer to Financial Reporting Release 72.

MultiStem for Heart Disease, Stroke & Bone Marrow Transplant . . . , page 47

28. We note from page 49 that before filing an IND for oncology support and beginning your planned phase I/II trial, you are "completing the preclinical requirements that [you] believe will enable [you] to file an IND for this indication." Please explain what these requirements are.

Collaborations and Partnerships, page 53

29. Please state the specific percentage of development costs to be borne by both the company and Angiotech at each stage of development and how commercial revenues will be shared.

30. Please disclose the aggregate amount of potential milestone payments you could receive from Angiotech, as well as the potential additional equity investments from Angiotech.

31. Please state when the Angiotech and Bristol-Myers Squibb agreements expire, and describe these agreements' termination provisions.

32. Please explain how Athersys acquired or developed the RAGE technology, describe any agreements related to the acquisition of this technology, and file all material agreements as exhibits.

33. Please disclose the total license fees and milestone payments received to date from Bristol-Myers Squibb, and disclose the aggregate milestone payments you may receive in the future pursuant to this agreement.

Management, page 55

34. Please state Dr. Floyd D. Loop's business experience from 2004 through June 2007.

Compensation Discussion & Analysis

Discretionary and Performance-Based Bonuses, page 60

35. Please provide an analysis that explains how you arrived at the amounts and why you paid each of the bonuses set forth in the Summary Compensation Table for 2006. It is unclear how the Compensation Committee believes that these amounts are appropriate or what items it considered in making specific compensation decisions.

Employment Agreements and Arrangements, page 61

36. We note the various employment arrangements you have with the named executive officers. In the CD&A, please discuss how these arrangements fit into your overall compensation objectives and affect the decisions you made regarding other compensation elements. Also, provide an analysis explaining why you structured the terms and payment levels of these arrangements as you have.

Certain Relationships and Related Person Transactions, page 70

37. We note that a subsidiary of Athersys forgave a loan owed by Dr. Gil Van Bokkelen, and Athersys paid him $24,000 as a partial gross-up for tax obligations. Please file as exhibits the initial loan agreement and the documentation supporting the loan's forgiveness.

38. We note from footnote C to the financial statements on page F-11 that the company has a note from the former owner of MCL LLC with an unpaid principal balance of $511,000. Since that footnote describes related party transactions, it appears the note should be discussed in this section as well. Please describe the company's relationship with the note holder, describe the transaction through which the note was placed, and file any underlying agreements as exhibits to the registration statement.

Security Ownership of Certain Beneficial Owners and Management, page 73

39. Please identify the natural persons who beneficially own the shares held by OrbiMed Advisors, RA Capital, and Hambrecht & Quist.

Selling Stockholders, page 81

40. Please identify the natural persons who beneficially own the shares held by all institutional selling shareholders.

41. We note that the sellers described in footnotes 11, 13, 14, 45, 67, 95, 110, and 191 are affiliates of broker-dealers. Please revise those footnotes to state that:

    - the selling security holder purchased in the ordinary course of business; and
    - at the time of the purchase of the securities to be resold, the selling security holder had no agreement or understanding, directly or indirectly, with any person to distribute the securities.

    If a selling security holder is an affiliate of a broker-dealer and you are not able to make these statements in the prospectus, the prospectus must state that the selling security holder is an underwriter. Please revise the prospectus as appropriate.

42. It appears that the Selling Stockholders table lists 18,819,772 shares as being offered. You are registering the resale of only 18,508,251 shares. Please reconcile.

Consolidated Financial Statements, page F-1

A. Background and Accounting Policies, page F-7

Revenue Recognition, page F-7

43. Revise your discussion here to provide a more detailed description of recognizing license revenues. If you recognize revenues prior to the beginning of the licensed term, please tell us how your policy complies with SAB 104.

C. Notes Receivable from Related Parties, page F-11

44. Disclose the number of shares that the former owner of MCL owns as of the most recent balance sheet date that may be sold to settle this note.

E. Convertible Notes, page F-13

45. Please provide disclosures for the collaboration agreement entered in 2006 as required by SFAS 68 or explain why you believe such disclosures are not necessary.

46. Please clarify whether the notes were convertible prior to the "next bona fide equity financing." If so, disclose the original conversion price and, if applicable,

the adjusted conversion price as of the most recent balance sheet date. In addition, please tell us how you accounted for the conversion feature of these notes and cite the applicable accounting literature. If you did not consider EITF 98-5 and EITF 00-27 to account for the conversion feature, explain why they are not applicable.

47. Please tell us why it is appropriate to allocate value to the warrants that were issued in conjunction with the $2.5 million bridge financing based on the relative fair value of the notes and the warrants, rather than at the warrant's fair value. Cite the relevant accounting literature, which you relied upon.

48. Please disclose the number of shares that the warrants were exercisable into as of the latest balance sheet date. In addition, explain in further detail the formula to which the number of exercisable shares is based.

I. Convertible Preferred Stock, page F-15

49. Please explain how the initial recognition of dividends in the amount of $6 million has met the definition of an error as specified in SFAS 154. Otherwise, please tell us why it is appropriate to reverse the dividend accrued by restating the prior year financial statements.

J. Stock Option Plans and Restructurings, page F-16

50. Please ensure that you have provided discloses as required under paragraph A240, sections (c), (d), and (h) of SFAS 123R.

L. Acquisition Agreement

51. Disclose the nature of events that would trigger the milestone payments.

N. Restatement Related to Merger, page F-19

52. Please supplementally provide us a reconciliation of 10,168,231 preferred shares issued and outstanding as of December 31, 2006 to the converted 1,912,356 shares of common stock immediately prior to the consummation of the Merger. Then, reconcile 1,912,356 shares of converted common stock and 293,770 shares of common stock outstanding as of December 31, 2006 to 3,505,725 shares held by Athersys after the merger. If the variance results from the inconsistent reflection of the merger's equity effect, please make the revisions for a consistent presentation.

Item 16. Exhibits and Financial Statement Schedules, page II-4

53. We note that some exhibits are not yet filed. Please note that we will need time to review these exhibits once they are filed, and we may have comments on them. All comments will need to be resolved prior to effectiveness.

54. We note from the footnote that you have submitted a confidential treatment request with respect to certain exhibits. Any comments we have on the confidential treatment request will be sent under separate cover, and all comments will need to be resolved prior to effectiveness.

* * *

As appropriate, please amend your registration statement in response to these comments. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your amendment that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendment and responses to our comments.

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 Act of 1933 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.

Notwithstanding our comments, in the event the company requests acceleration of the effective date of the pending registration statement, it should furnish a letter, at the time of such request, 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.

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 connection with our review of your filing or in response to our comments on your filing.

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 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. We will act on the request and, pursuant to delegated authority, grant acceleration of the effective date.

We direct your attention to Rules 460 and 461 regarding requesting acceleration of a registration statement. Please allow adequate time after the filing of any amendment for further review before submitting a request for acceleration. Please provide this request at least two business days in advance of the requested effective date.

You may contact Keira Ino at (202) 551-3659 or Lisa Vanjoske at (202) 551-3614 if you have questions regarding comments on the financial statements and related matters. Please contact Greg Belliston at (202) 551-3861 or me at (202) 551-3715 with any other questions.

Sincerely,

Jeffrey Riedler
Assistant Director

cc: Christopher M. Kelly
Jones Day
North Point
901 Lakeside Avenue
Cleveland, Ohio 44114