

Mail Stop 3561

March 5, 2007

Paul A Brooke  
Chairman and Chief Executive Officer  
Ithaka Acquisition Corp.  
100 South Pointe Drive, 23rd Floor  
Miami, Florida 33139

**RE: Ithaka Acquisition Corp.  
Preliminary Proxy Statement  
Filed January 16, 2007  
File No. 000-51362**

Dear Mr. Brooke:

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 supplemental information so we may better understand your disclosure. After reviewing this information, we may or may not 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.

General

1. We note the amended requirement for investors to provide their certificates to the transfer agent prior to the meeting and vote. Please provide clear disclosure throughout the proxy statement regarding this additional step and explain the process for complying with this

step. In addition, explain the reason for requiring this before the meeting, when there is no guarantee that conversion will occur, and explain the basis for making this a requirement of conversion. Clarify the amount of time that will be provided between the mailing of the proxy and the date when the shares must be tendered for conversion rights. Please provide a detailed discussion of the risks to investors as a result of this change in the conversion terms. We may have further comment.

2. We note that these additional steps to conversion were not set forth in the Form S-1. Please explain how these additional steps to conversion are consistent with the disclosure set forth in the Form S-1. If you conclude that they are not, please disclose the potential consequences, including any liabilities, to the company and its stockholders.
3. Clarify whether there is any cost associated with tendering the physical shares or other requirements to elect conversion. For example, is there a cost associated with converting shares held in street name into physical shares? We may have further comment.
4. We note the Form 8-K filed on December 6, 2006 includes a Revised Investor Presentation and indicates that the Investor Presentation will be distributed to the company's stockholders as well as other persons interested in purchasing Ithaka securities. We note that the company addresses the worldwide estimated annual incidence, worldwide annual disposable market opportunities for cleared and off-label uses, a leveraged sales model indicating projections for 2007 (covering hospitals, installed systems, catheters/system/month, total catheters and average price/catheter), a targeted financial performance showing 70+% gross margin and 20+% operating margin and an investment highlight of \$3 billion total addressable market worldwide based on intended future clearances and indications. It appears that this information may be material to Ithaka's stockholders. We also note that the noted information does not appear in the proxy statement filed on January 16, 2007. Please advise us or revise to make the appropriate changes. We may have further comment.
5. We note that the disclosure relating to Alsius' financial projections throughout your preliminary proxy assume the consummation of the merger and availability of Ithaka funding and, further, that such projections were used for various purposes by various parties, including valuation of Alsius and determination that the 80% test was met. Please disclose how such an assumption is consistent with the disclosure in Ithaka's IPO prospectus, which indicated that the company acquired would have a value of at least 80% of net assets, not that the combined company would meet this 80% test. Please advise. To the extent that it is inconsistent, please disclose the potential consequences, including any liabilities, to the company and its stockholders. We may have further comment.
6. We note your response and the amended disclosure relating thereto throughout your preliminary proxy with respect to Mr. Brooke's profit interest in the investments of the MPM funds, but that was not the disclosure requested by the Staff. We therefore reissue

comment two from our letter of December 15, 2006 and expand upon it.

We note your disclosure that the "Ithaka board of directors concluded that the merger agreement with Alsius is in the best interests of Ithaka's stockholders." We also note that Ithaka's Chairman and CEO was at the time of negotiating the proposed merger with Alsius a venture partner of an entity that manages the 33% owner of Alsius.

At every instance of the assertion that Ithaka's board of directors has concluded that the merger agreement with Alsius is "in the best interests of Ithaka's stockholders," including your letter to shareholders, please disclose the amount of consideration to be paid to all entities in which Mr. Brooke and each of your other officers and directors carries a direct or indirect economic interest on both an individual and aggregate basis, both in terms of shares to be received and the market value of such shares based upon the most recent closing price of Ithaka's common stock prior to the filing of your next amendment.

Additionally, include the value of shares acquired, both pre- and post-IPO, as well as the value of all warrants, based on the last closing price of Ithaka's common stock prior to filing your next amendment.

Please supply the Staff with the basis for such calculations, including the names of all entities and a specific description of the particular economic interest in each case, specifically identifying whether each round of bridge financing consummated in 2006 (as well as any that have been consummated in 2007) is reflected in such amounts.

7. We also note your disclosure on page 48 that "Mr. Brooke was not aware of the...investments of the MPM funds in Alsius at the time of Ithaka's IPO. By the time that discussions between Ithaka and Alsius were initiated in July 2006, Mr. Brooke had learned of the investments of the MPM funds in Alsius but did not know of their extent or detail nor did he have any knowledge about Alsius or its business."

Please include such statements in your letter to shareholders directly behind the statements to be added in response to comment **six**, above.

8. We refer to the disclosure contained on page 48 quoted in the preceding comment. Please disclose the manner by which Mr. Brooke became aware of the MPM investments, including the date and name(s) of the parties from whom he was first made aware.
9. In light of Mr. Brooke's having been a venture partner of MPM Capital, please discuss in both your preliminary proxy the reasons why "Mr. Brooke was not aware of the investments of the MPM funds in Alsius at the time of Ithaka's IPO" as you disclose throughout your document. Were there no materials provided to him as a partner of MPM Capital that noted the investments?
10. We again refer to your disclosure that "Mr. Brooke was not aware of the investments of

the MPM funds in Alsius at the time of Ithaka's IPO." We also note that Mr. Brooke is designated to retain his position as Chairman of the Board upon any consummation of the proposed merger.

Please provide affirmative disclosure in your preliminary proxy as to the potential for conflicts of interest and related party transactions arising in the future as a result of the proposal to retain Mr. Brooke in his position as Chairman, especially in light of the occurrence of such conflicts of interest and related party transactions presented by Mr. Brooke's dual role in the proposed transaction with Alsius.

11. We note your response to comment three from our letter of December 15, 2006. Please discuss in your preliminary proxy the dates of all communications between Paul Brooke, your chairman and chief executive officer since inception, and Kurt Wheeler, one of Alsius' directors, with respect to Alsius. We note Messrs. Brooke's and Wheeler's common relation through the MPM.
12. We reissue comment four from our letter of December 15, 2006. We note the amended disclosure which you cross reference in your response to this comment but such amended disclosure does not appear to cover the relation between Messrs. Brooke and Wheeler.

Please disclose all affiliations, relationships, connections, or otherwise between any officer, director, and shareholder of Ithaka with any officer, director, and shareholder of Alsius in both the letter to shareholders to be attached to the Schedule 14A and the summary section of such document. We may have further comment.

13. We note your response to comment five from our letter of December 15, 2006 that "No affiliations or other material relationships as described in Item 404(b) of Regulation S-B exist between any officer, director or, to Ithaka's or Alsius's knowledge, shareholder of either Ithaka or Alsius with any officer, director or shareholder of Leerink Swann & Co. Inc."

Since Item 404(b) is an exclusion from disclosure, clarify your response. Additionally, please advise the Staff of all affiliations, relationships, connections, or otherwise between any officer, director, and shareholder of each Ithaka and Alsius with any officer, director, and shareholder of Leerink Swann & Co., Inc. whether covered by Item 404(b) or not.

14. We reissue comment six from our letter of December 15, 2006. We note your response, as well as the amended disclosure contained in your preliminary proxy but are unable to reconcile them when considered together.

For example, your disclosure states: "as a result of a conference call held on June 23, 2006, Alsius requested that Leerink Swann & Co., Inc. ("LSC"), one of the underwriters for the proposed initial public offering, contact specified purpose acquisition companies (SPACs), such as Ithaka, to solicit expressions of interest in a potential business

combination transaction.

Following a further conference call on June 28, 2006 between Alsius and the underwriters to discuss market conditions, LSC contacted, in accordance with Alsius's directives, representatives of a number of SPACs, including Paul Brooke, one of our directors. Mr. Brooke was initially contacted on July 5, 2006 by means of a conference call at which a brief overview of Alsius and its business model were discussed."

However, we additionally note that the engagement letter between Leerink Swann and Alsius was executed on July 14, 2006, apparently nine days after, as you disclose, "Mr. Brooke was initially contacted" with respect to Alsius, an entity in which he knew he already held a financial interest.

Accordingly, we reissue and expand.

In light of Mr. Brooke's affiliation with Alsius which apparently existed prior to Ithaka's IPO, please disclose the reason(s) Leerink was engaged as a "financial advisor" for the transaction. Specify in detail the services for which Leerink was engaged and explain why it was necessary to engage Leerink since it appears Mr. Brooke was already affiliated with Alsius, had already been introduced to Alsius, and was already aware of his and his firm's financial interest in Alsius.

We may have further comment.

15. In light of the apparent conflicts of interest and related party transactions present in the proposed merger with Alsius, please clarify the basis for use of the term "arms-length" at every instance of such term in your preliminary proxy.
16. We note a number of blank spaces throughout the prospectus. Please fill in such information that is currently known and update as necessary in subsequent amendments. We direct your attention to the market price, conversion price, and holders of record as examples.
17. We note your response to comment 17. Supplementally advise us how under Ithaka's by-laws and state law, addressing the appropriate sections of state law, the directors have the power to postpone the meeting prior to its being convened.
18. We reissue comment 10 from our letter of December 15, 2006. We note your response that the Merger Agreement is being amended but it does not appear that you have included the amended agreement with your preliminary proxy materials or announced that it was to be amended in any filing made by the company. Accordingly, we reissue and expand.

We note that one of the conditions contained in the merger agreement is the effectiveness

of the Form S-4 initially filed on November 1, 2006. In your Schedule 14A, please disclose the impact of the inability to register such shares upon the proposed merger, Alsius, Ithaka, and their respective shareholders.

Further, please provide the Staff with an analysis as to the company's need to disclose that the Merger Agreement with Alsius is to be amended, including the deadline for disclosing such development according to the federal securities laws.

19. We note the addition of Annex D to your preliminary proxy. Please advise the Staff and clarify within the Annex, what the chart contained on page D-2 represents. Provide an aggregate total for such chart. Further, please include a separate chart noting the shares to be paid to parties in which any of your officers and directors have or had a financial interest. Finally, in each chart, please include a column noting the value of such shares based on the last closing price of Ithaka prior to filing your next amendment.

Summary, page 1

20. We reissue comment 20 from our letter of December 15, 2006. We note your response that "the requested disclosure has been made on pages 13, 43, and 67 of the proxy" but the Staff was unable to find any disclosure other than the additional description of those who are to receive the bonuses as being persons "who have provided valuable services to Alsius." Accordingly, we reissue.

We note the disclosure "Upon consummation of the merger, Ithaka will contribute to Alsius \$3,000,000 in cash, to be used for bonus payments to Alsius' management, employees and/or consultants to Alsius as the Alsius' board of directors may determine in its sole judgment" and up to \$2 million additional for the next three years.

We note the disclosure contained in Alsius' amended Form S-1 (on file at the time you disclose that discussions were taking place between Ithaka and Alsius) that it had "not reported an operating profit for any year since [its] inception, and... [had] accumulated losses of \$58.4 million" through December 31, 2005.

We note your disclosure that Alsius had accrued an additional \$12,751,000 loss during the first nine months of 2006, to arrive at a total accumulated deficit of approximately \$71,151,000 as of September 30, 2006.

In light of Alsius' historical financial performance and inability to complete its IPO, please specifically clarify throughout your Schedule 14A the reason(s) why Ithaka has agreed to provide \$3 million cash in bonus payments up front and \$2 million cash over the next three years with respect to each category identified as eligible for such payments.

21. We reissue comment 21 from our letter of December 15, 2006. We note your response

that additional disclosure has been added to the proxy statement but not all individuals were specifically identified. Accordingly, we reissue and expand.

In connection with the preceding comment, please affirmatively clarify the individuals/entities that would be considered for such payments, especially with respect to "consultants." Clarify the categor(ies) ("management, employees, non-employee directors, or consultants") in which each recipient is considered to be.

#### Summary of the Proxy Statement

22. Please revise update your disclosure which indicates the amount of funds remaining outside of the trust and the amount of accounts payable and accrued expenses payable.

#### The Parties, page 9

23. We note your response to comment 24. Please revise the disclosure later in the proxy statement to indicate the basis for your expectation for the off label use to treat cardiac arrest to increase.

#### Ithaka Inside Stockholders, page 12

24. We note your added disclosure on page 12 that any purchases of Ithaka's common stock by Messrs. Brooke and Hecht prior to a vote by shareholders "would be made for the purpose of increasing the Ithaka Insider Stockholder's investment in Ithaka because of his confidence in the Alsius business... [and that they will] vote all shares so purchased in favor of the merger."

In the same location, please disclose all communications sent and received by the company, its representatives, and management with any other party with respect to any stockholder's intention to vote against the proposed transaction with Alsius.

25. In connection with the preceding comment, please disclose how Messrs. Brooke and Hecht may ever be considered to be "not aware of any material nonpublic information regarding Ithaka or its securities" if they have nonpublic information regarding any stockholder's intention with respect to voting on the proposed transaction with Alsius, as you disclose would be a requirement of any purchases by Messrs. Brooke and Hecht pursuant to a 10b5-1 plan.
26. Please specifically disclose how Messrs. Brooke and Hecht may "engage in other permissible public market purchases, as well as private purchases, of Ithaka securities at anytime prior to the special meeting of stockholders" outside of Rule 10b5-1.

27. Please advise the Staff of any such plans, negotiations, agreements, arrangements, or otherwise surrounding purchases outside of Rule 10b5-1.

Alsius Bonuses, page 13

28. In order to be consistent with your response to our prior comment 86, please revise your filing here and on pages 43 and 67 to clarify that only \$1.2 million of the \$3 million bonus is earned at the date of the transaction. Also, revise to clarify the nature and term of the future service requirements as well as any recourse held by the company for the \$1.8 million in advance bonus payments. Finally, revise to clearly state that the \$3 million bonus will be paid upon consummation of the transaction, consistent with your disclosure on page 60.

Fairness Opinion, page 14

29. We note the statements in this section regarding the limitations set forth in the fairness opinion and the statements made in the fairness opinion the fairness opinion is addressed only to the board of directors. Because it is inconsistent with the disclosures relating to the opinion, the limitations in the fairness opinion should be deleted. Capitalink has consented to the fairness opinion being included with the proxy statement and therefore shareholders should be able to rely upon such opinion. We may have further comment.

Escrow Agreement, page 14

30. In this section, please provide a detailed discussion of the conflicts inherent in appointing Messrs. Brooke and Hecht to determine whether to assert an indemnification claim against Alsius and the escrow shares.
31. In this section, please provide a detailed discussion of the conflicts inherent in your determination to set aside only 10% of the consideration shares as the sole remedy for the obligation of the security holders of Alsius to indemnify and hold harmless Ithaka for any damages, whether as a result of any third party claim or otherwise.

Interests of Ithaka Directors and Officers in the Merger, page 17

32. We reissue comment 32 from our letter of December 15, 2006. We note your response but it does not fully respond to the Staff's comment. Please provide us with a detailed legal analysis as to the sufficiency of the measures taken to ensure compliance with Rule 10b5-1.



33. We note that Mr. Brooke has a 2.47% ownership interest in MPM Asset Management Investors 2000B LLC which has a less than a 0.5% interest in the shares of Ithaka stock. Please revise to indicate the approximate amount of Mr. Brooke's interest in Ithaka stock through his ownership interest in MPM Asset Management Investors 2000B LLC.
34. We note that the fairness opinion issued by Capitalink, L.C. dated October 3, 2006 previously indicated that that Mr. Brooke has carried an interest in MPM's investment in Alsius and that "Mr. Brooke has agreed to expressly waive his entitlement to any such interest". Please indicate that Mr. Brooke previously waived his entitlement to that interest and also indicate when Mr. Brooke revoked that waiver.

Alsius' Selected Historical Financial Information, page 22

35. We reviewed your revisions in response to our prior comment 34. Please provide us with your calculations supporting the amounts adjusting net income reported to net income available to common shareholders (e.g. deemed dividend, etc.).

Risk Factors, page 25

36. We note your discussion of revenues derived from off-label use by customers on page 25. Please clarify in this section how you may describe the revenues earned from such off-label use as "significant" when you also disclose that you have "no way of ascertaining such revenues."
37. We reviewed your response to our prior comment 37. The risk factor you added did not clearly address the risk identified in our comment, thus the comment will be reissued. Please revise to provide a risk factor to address the fact that the warrant holders may not be able to exercise the warrants during the 30-day period (i.e., measurement period) prior to the redemption date as a prospectus may not be current and the warrants may not be exercisable during that period. Due to these circumstances, the warrant holder may receive much less than fair value for the instrument if redeemed by the company.
38. We note that you deleted the risk factors addressing "The long sales cycle for Alsius's system may cause revenue and operating results to vary significantly quarter to quarter and year to year", "Alsius's success depends on Alsius's ability to manage Alsius's business as its increases the scale of Alsius's operations", "Alsius has no experience manufacturing Alsius's products in large volumes and at a cost that would enable widespread commercial use" and "The funds held in trust and released to Ithaka upon consummation of the merger may not be sufficient for Alsius to operate its business beyond 2007, which may require us to raise additional fund". Please advise us why you no longer consider these factors a risk to the company or revise as appropriate. We may have further comment.

39. We note your discussion of Rule 144 on page 34. Please provide the Staff with a legal analysis supporting your view that one-half the shares to be issued to each security holder of Alsius may be sold in the public market one year after the consummation of the merger, with the remaining to be sold 6 months thereafter.

Background of the Merger, page 44

40. We reissue comment 49 from our letter of December 15, 2006. We note your response and the added disclosure contained on page 44: "As a result of our reviews and investigations, including preliminary discussions with such companies' management that were held variously from September 2005 through September, 2006." Please provide more specificity as to when you began the "efforts and...research" that identified over 100 companies.
41. We reissue comment 51 from our letter of December 15, 2006. We note your response and the added disclosure contained on page 44: "preliminary discussions with such companies' management that were held variously from September 2005 through September, 2006." Please provide more specificity as to when such discussions took place.
42. We note your response to comment 53. We note your disclosure indicates that preliminary discussions were held from September 2005 through September 2006 and you also indicate that you submitted letters of intent to six companies from January 2006 through August 2006. Please revise to provide a detailed time line concerning Ithaka's contacts with prospective targets.
43. Please revise to disclose in further detail the matters discussed on the July 13, 2006 and July 17, 2006 conference calls and the meeting held on July 20, 2006.
44. Discuss the negotiations between Ithaka and Alsius between August 17, 2006 and October 3, 2006 in more detail.
45. Please revise to indicate when the company's directors reviewed the summaries prepared by its own attorney's of Alsius's material agreements.
46. We note your response to comment 63 from our letter of December 15, 2006 that you have provided a copy of the projections to the Staff as supplemental information however no such copy appears to have been included with the supplemental packet received. Please advise.

Projections Furnished by Alsius to Ithaka, page 48

47. In response to our prior comment 63, we note you included the projections of Alsius in your filing in lieu of providing them supplementally. We also note that these projections include non-GAAP financial measures. Please revise to reconcile each of your non-GAAP financial measures (e.g. gross profit, operating expenses, EBITDA based on non-GAAP measures, etc.) to the most directly comparable financial measure in accordance with Item 10 of Regulation S-K.

Aggregate Consideration Analysis, page 60

48. We note your response to comment 82 from our letter of December 15, 2006. At each mention throughout your proxy, please identify the financing company whose debt will be assumed.

Comparable Company Analysis, page 61

49. We reissue comment 83 from our letter of December 15, 2006. We note your response ("Capitalink also noted that none of the comparable companies discusses the off-label use of Alsius's products in its most recent filings. Accordingly, no revisions to the disclosure have been made.") but it does not appear to address the issue raised by the Staff. Accordingly, we reissue.

We note the disclosure on page 61 that "Capitalink identified...nine companies that it deemed comparable to Alsius with respect to their industry sector and operating model. All of the comparable companies provide medial devices for use in acute care settings." Please disclose which of these companies, if any, earn "significant" revenues from off label use of their products, as you disclose Alsius does.

50. We reissue comment 84 from our letter of December 15, 2006. We note your response ("Additional disclosure has been added beginning on page 45 of the proxy statement.") but it is not specific enough to demonstrate how the Staff's comment has been addressed. Accordingly, we reissue.

We note the disclosure on page 62 that all of the comparable companies are larger than Alsius in terms of revenue. Disclose how management determined that comparisons with such companies would be relevant in light of Alsius' revenues being, at best, 2.3 times less than the smallest of the comparables and, at worst, 113.8 times smaller than the largest of the noted comparables.

Unaudited Pro Forma Financial Statements

Notes to Unaudited Pro Forma Condensed Consolidated Financial Statements

Note 2 – Pro Forma Adjustments, page 83

51. We reviewed your response to our prior comment 87. Your response did not appropriately clarify how adjustment “i” is directly attributable to the merger transaction. We note that the warrants may become exercisable upon consummation of the merger, but their cashless exercise is not directly attributable to the merger agreement. This adjustment should be removed from the face of your pro forma income statements. The staff will not object to including this adjustment in a note to your pro forma financial statements with related disclosure indicating this adjustment is not included in your pro forma financial statements.

Alsius Management’s Discussion and Analysis of Financial Condition and Results of Operations

Results of Operations, page 119

52. We reviewed your revised disclosure in response to our prior comment 94. In order to further an investor’s understanding of your cost of revenues, please revise to disclose the percentage of cost of revenue attributed to fixed and partially fixed costs for each period presented.

Financial Statements

General

53. Please update your financial statements in accordance with Rule 3-12 of Regulation S-X.

Exchange Act Filings

54. Your current Form 10-K, Forms 10-Q, and other Exchange Act Filings should also be revised to comply with these comments as applicable, specifically those related to enhance disclosure of your warrants and unit purchase option.

Closing Comments

As appropriate, please amend your filing and respond to these comments within 10 business days or tell us when you will provide us with a response. You may wish to provide us

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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.

You may contact Brian Bhandari (202) 551-3390 if you have questions regarding comments on the financial statements and related matters. Questions on other disclosure issues may be directed to John Zitko at (202) 551-3399, or David Link, who supervised the review of your filing, at (202) 551-3790.

Sincerely,

John Reynolds  
Assistant Director

cc: David Miller (by facsimile)  
212.818.8881