

Mail Stop 6010

May 18, 2007

Jeff Krstich
Chief Executive Officer
International Stem Cell Corporation
2595 Jason Court
Oceanside, CA 92056

**Re: International Stem Cell Corporation
Registration Statement on Form SB-2, Amendment 1
Filed April 24, 2007
File No. 333-142048**

Dear Mr. Krstich:

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 8-K FILED 12/29/06

Exhibit 99.2: Financial Statements of Lifeline Cell Technology, LLC

1. Please amend the filing to provide an auditor report which opines on the cumulative financial information.

FORM SB-2/A1

General

2. Please update your financial information to include the quarter ended March 31, 2007 as required under Item 310(g) of Regulation S-B.

Prospectus Cover Page

3. Please state the price of the common stock on the OTC Bulletin Board as of the date of the prospectus.

Prospectus Summary, page 1

4. Please disclose in the Prospectus Summary that you do not currently have any products on the market.

Risk Factors, page 2

5. Please delete the following: “The risks and uncertainties described below are not, however, the only ones that we may face. Additional risks and uncertainties not currently known to us, or that we currently believe are not material, could also materially adversely affect our business, financial condition or operating results.” You should discuss in your document all material risks, and it is inappropriate to refer to risks that are not disclosed. Under the same rationale, please delete the reference to “unknown risks and uncertainties” on page 11.

Our business is at an early stage of development . . . , page 2

6. We note the statement that you do not have any products in late-stage clinical trials. Please revise this statement herein and elsewhere throughout the prospectus to say that you have no products in clinical trials. Also, if you have no prospects of beginning clinical trials in the reasonable future, state that fact.

We have a history of operating losses . . . , page 2

7. Please disclose your accumulated deficit, both in the risk factor and in the Prospectus Summary.

We will need additional capital to conduct our operations . . . , page 2

8. All of the discussion in this risk factor following “Additional equity financing could result in significant dilution . . .” addresses the separate risk of the

drawbacks of the various forms of financing. Please put this disclosure in a new, separate risk factor with an appropriate heading.

Patents obtained by other persons may result in infringement claims . . . , page 3

9. To the extent you are aware that you have any intellectual property that is being infringed upon or that you have been notified of a third party's belief that you are infringing on their intellectual property, please revise to disclose the situation and potential consequences in this risk factor, the next one, or "We may not be able to protect our proprietary technology . . ." on page 5, as applicable.

We may not be able to adequately protect against piracy . . . , page 3

10. Please disclose the nature of your intellectual property.

Our competition include fully integrated biotechnology and pharmaceutical . . . , page 4

11. Please identify your principal competitors.

If we fail to meet our obligations under our license agreement . . . , page 4

12. Please identify your material license agreements. Also, identify and discuss the "payment obligations and obligations to diligently pursue development of commercial products," as well as any other material obligations.

To the extent we utilize governmental grants . . . , page 5

13. Please revise this risk factor so it is more specific to your situation. Identify the material licensors, governmental entities, and technologies that are being addressed, and explain how each could have an impact on your business.

Our business is highly dependent upon maintaining licenses . . . , page 6

14. Please state when each of your material license agreements expire. Also disclose which, if any, are terminable at will by the licensor.

We depend on our collaborators to help us develop . . . , page 6

15. Please identify your material collaboration agreements. If you do not yet have any, state that fact.

We depend on key personnel for our continued operations . . . , page 8

16. Please state whether you have employment contracts with and key-man life insurance for Mr. Krstich, Mr. Janus, and Dr. Revazova.

The market price for our common stock may be particularly volatile . . . , page 9

17. Please state your stock's highest and lowest prices since January 8, 2007, when it began trading on the OTC BB.

Shares eligible for future sale may adversely affect the market.

18. Please state the number of shares currently subject to Rule 144 restrictions and when those restrictions expire.

Compliance with the rules established by the SEC pursuant to Section 404 . . . , page 11

19. As currently worded, this risk factor could apply to any issuer. Please revise it so it relates to your specific situation.

We do not expect to pay cash dividends in the foreseeable future, page 11

20. Please state that since you do not plan to pay dividends, any investment gains will need to come through appreciation in the stock price, which might not occur.

Management's Discussion and Analysis of Financial Condition and Results of Operations, page 12

21. Please refer to the Division of Corporation Finance "Current Issues and Rulemaking Projects Quarterly Update" under section VIII – Industry Specific Issues – Accounting and Disclosure by Companies Engaged in Research and Development Activities. You can find it at the following website address:
<http://www.sec.gov/divisions/corpfin/cfcrq032001.htm#secviii>.
22. Please disclose the following information for each of your major research and development projects:
- The current status of the project;
 - The costs incurred during each period presented and to date on the project;
 - The nature, timing and estimated costs of the efforts necessary to complete the project;
 - The anticipated completion dates;

- e. The risks and uncertainties associated with completing development on schedule, and the consequences to operations, financial position and liquidity if the project is not completed timely; and finally
- f. The period in which material net cash inflows from significant projects are expected to commence.

Regarding b., if you do not maintain any research and development costs by project, disclose that fact and explain why management does not maintain and evaluate research and development costs by project. Provide other quantitative or qualitative disclosure that indicates the amount of the company's resources being used on the project.

Regarding c. and d., disclose the amount or range of estimated costs and timing to complete the phase in process and each future phase. To the extent that information is not estimable, disclose those facts and circumstances indicating the uncertainties that preclude you from making a reasonable estimate.

Results of Operations, page 13

- 23. Please provide additional analysis with regards to the increase in general and administrative and research and development expenses from 2005 to 2006.

Liquidity and Capital Resources, page 13

- 24. Please discuss the reason for material increases/decreases for items such as the cash provided by operations, investing, and financing as required by Item 303(b)(1) of Regulation S-B. For instance, your accounts payable increased significantly in 2006 from 2005.
- 25. Please provide a discussion related to your contractual obligations pursuant to Item 303 of Regulation S-B (i.e. the amount and timing of milestone commitments related to your patents).

Description of Business, page 15

Business Overview, page 15

- 26. We note your products will treat diabetes, liver disease, and retinal disease through cell transplant therapy. Please clarify what cell transplant therapy is and how it is administered. For example, is it done by injection, surgery, pill, etc.? If the technology is not yet developed enough for you to know this information, state that fact.

27. We note the cells you work with are “comparable” to embryonic stem cells, but they do “not require the use of fertilized eggs or the destruction of any embryos created through fertilization.” Please explain where your cells come from.
28. We note that the sale of your “research products is expected to provide [you] with revenue to support the development of therapeutic products.” However, during 2006, you earned just \$2,828 in revenues, and the cost of sales associated with these products was \$30,825. We further note that your total development expenses for 2006 were \$5,687,723.
- Considering that (a) the products themselves are not profitable and (b) the level of sales is significantly less than your expenses, please clarify how you anticipate that the products will provide you with revenue to support the development of your therapeutic products. How do you plan to change the current situation?
 - Also, do you anticipate that the research products will eventually be able to fund your development efforts entirely, or will you still need to rely on other sources of funds to develop your therapeutic products?

History, page 16

29. Please state when BTHC III, LLC was formed and what type of business it was in. It appears from your response to comment 3 in your April 24, 2007 letter that it operated nursing homes. Also, since you state that your company initially conducted no operations, state what happened to the assets of BTHC III, LLC. For example, were they distributed to debtors in the reorganization?
30. We note BTHC III, LLC’s reincorporation was part of a plan of reorganization. We further note from page 31 that the reorganization involved “certain limited liability companies.” Please identify these limited liability companies, and describe their relationship to BTHC III. Also, explain the rationale for reincorporating BTHC III. That is, what benefit did the reincorporation provide in the overall plan of reorganization?

Ethical Issues, page 18

31. In this section, you seem to be contrasting your technology, which appears to be parthenogenesis, with Somatic Cell Nuclear Transfer. However, it is unclear how these two technologies differ. The principal feature of both technologies appears to be that no fertilized human eggs are used and no fertilized human embryo is created or destroyed. Please clarify where the two technologies diverge.
32. We note you own the worldwide rights to Somatic Cell Nuclear Transfer. You state on page 19 that you hold a license for this technology. Please identify the

licensor, file the licensing agreement as an exhibit, and discuss the material terms of the agreement in the body of your filing.

Our Technology, page 19

33. We note Somatic Cell Nuclear Transfer is not currently your primary area of focus. Please state what your focus is, and ensure it is clearly disclosed throughout your document, including in the first paragraph of the “Our Company” discussion in the Prospectus Summary.

Our Products, page 19

34. Please disclose in the second paragraph on page 20, if true, that none of the institutions to which you sell research products currently has any product in clinical trials, and it is possible that they will never have a product in clinical trials.
35. We note from the fourth paragraph on page 20 that you will manufacture and sell embryonic stem cell products developed by Advanced Cell Technology. Please explain how the products you will sell under this agreement differ from your current products. Also, if this licensing agreement is different from the three agreements discussed on page 22, please file it as an exhibit, identify and describe the licensed technology, and discuss the material terms of the agreement.

Our Markets, page 20

36. We note your objective for retinal disease is to manufacture retinal cells derived from hES cells to replace the limited supply of donor derived cells for therapeutic use. Your objective for diabetes is to increase the availability of pancreatic islet cells by inducing stem cells derived from our parthenogenic cells lines to grow and become islets or the individual cells found in the islets. Your objective for liver disease is to provide an alternate source of liver cells for the treatment of liver disease through cell transplant therapy. In each of these respective discussions, please state where you currently stand in relation to your objectives, and discuss the steps—both preclinical and clinical—that you will need to complete to meet your objectives.

Intellectual Property, page 22

Patents, page 22

37. We note you have 30 families of patents consisting of over 110 separate patents. Please describe each of the patents that you consider to be material to your

business, identify the country in which each was issued, and state when each expires.

License Agreements, page 22

38. We note you discuss three license agreements with Advanced Cell Technology that you entered into during May 2005. None of the exhibits listed in the exhibit index appears to have that date, although we note that exhibits 10.12, 10.13, and 10.14 are dated May 2004. Please file the three May 2005 agreements as exhibits and discuss the material terms of the May 2004 agreements in the body of your filing. Alternatively, if your filing says May 2005 in error, please make the correction.
39. We note you identify one “significant feature of the licensed technology.” Please describe all material technology that you licensed from Advanced Cell Technology. We note the discussion at the top of page 23, but this discussion is in very general terms, and it is unclear from this discussion what you are getting from Advanced Cell Technology that you could not get on your own.
40. We note you are required to make a payment of \$75,000 in May 2007. Since May 2007 has already begun, please update this disclosure as appropriate.
41. We note that the agreements with Advanced Cell Technology continue until the expiration of the last valid claim within the licensed patent rights. Please state when this expiration currently is scheduled to occur with respect to each of the three agreements.

Research Agreements, page 23

42. Please state the consideration for all parties in the UCI and Emory University agreements. Also state the duration and termination provisions of both agreements.

Certain Relationships and Related Transactions, page 31

43. We note the interest rate for the management fees owed to Mr. Aldrich and Mr. Adams was 10% until June 1, 2006. Please state what the interest rate is currently. Also, please file this agreement as an exhibit.

Change in Accountants, page 34

44. Please state whether S.W. Hatfield resigned, declined to stand for re-election, or was dismissed. See Item 304(a)(1)(i) of Regulation S-B.

Selling Security Holders, page 35

45. We note from the fourth paragraph of this section that “[e]xcept as noted herein, none of the selling stockholders is a broker-dealer . . . or is an affiliate of such a broker-dealer.” We further note that the Selling Security Holders table does not identify any seller as a broker-dealer or affiliate. If any sellers are broker-dealers or affiliates, identify them as such. If they are not, please revise this statement to say that none of the sellers is a broker-dealer or affiliate.
46. Please note that if any selling security holder is a broker-dealer, the prospectus must state that the seller is an underwriter. The only exception to this rule is if the broker-dealer received the securities as compensation for underwriting activities.
47. In addition, if a selling security holder is an affiliate of a broker-dealer, the prospectus must 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.

48. Please identify the natural persons who are the beneficial owners of the shares held by all institutional investors.

Financial Statements

49. Please revise your balance sheet to present your accumulated deficit caption with a descriptive caption such as “deficit accumulated during the development stage” as required under paragraph 11 a. of FAS 7.
50. Payment of offering costs on the cash flow statement should exclude non-cash amounts disclosed on page F-14. Ensure that non-cash transactions are not included on the statement of cash flows.
51. Please clarify what “conversion of members’ contribution” on the statement of cash flows is and confirm that it was a cash transaction or revise the statement accordingly.

Note 1. Organization and Significant Accounting Policies, page F-7

52. Please disclose your revenue recognition and cost of sales accounting policies.

53. Please disclose your accounting policy for research and development expenses.

Note 3. Patent Licenses

54. Please disclose where you have classified the amortization of patent rights. Please tell us why it is not appropriate to classify the amortization of these patent rights within cost of sales. Disclose how you are using these assets and why capitalization was appropriate instead of expensing as research and development expense.

Note 8. Stock Options and Warrants, page F-13

55. Please reconcile the number of warrants presented in this footnote to your disclosure under "Selling Security Holders" on page 35, paragraph 2. For instance, this footnote states that the number of warrants issued to the placement agent is 1,976,190 however the same reference on page 35 indicates 2,250,190. In addition, footnote 8 does not reference warrants to purchase 1,202,856 shares of common stock issued between February and August 2006 by Lifeline.

56. Please discuss the registration rights agreement in the footnotes and clearly outline its requirements and the related damages that may be incurred. Tell us how you viewed and accounted for the registration rights agreement and the related warrants. The EITF deliberated the impact of liquidated damages clauses and the effect on the accounting and classification of instruments subject to the scope of EITF 00-19 in EITF 05-4 *The Effect of a Liquidated Damages Clause on a Freestanding Financial Instrument Subject to Issue No. 00-19*. Disclose the effect that FASB Staff Position No. EITF 00-19-2 will have on your financial statements. Please also refer to the Division of Corporation Finance "Current Accounting and Disclosure Issues" Section II(B) - Classification and Measurement of Warrants and Embedded Conversion Features (New).

57. Please explain your basis for recording the warrants with an entry to additional paid in capital. It appears that the registration rights agreement requires you to deliver registered shares upon exercise of your warrants. Refer to paragraphs 14 – 18 of EITF 00-19, which discuss the accounting treatment when a contract is not permitted to be settled in unregistered shares. It appears the warrants may be required to be classified as a liability under EITF 00-19 at fair value, with changes in fair value recorded in earnings (similar to a derivative under SFAS 133).

Note 9. Commitments and Contingencies, page F-15

58. Please tell us how you accounted for the 15.5 million shares received from American Stem Cell Corporation in 2005.

Note 10. Subsequent Events

59. Reconcile your statement here that you raised \$11,250,950 in February 2007 to the cash flow statement in your Form 10-Q for March 31, 2007.

Item 27: Exhibits, page II-2

60. We note that certain exhibits are not yet filed. Please be aware that we may have comments on these exhibits when they are filed, and all comments will need to be resolved prior to effectiveness.
61. Please discuss in the body of your filing the material terms of the settlement agreement filed as exhibit 10.7.
62. A currently dated and signed consent from your independent accountant should be filed with each registration statement and amendment thereto.

* * *

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 Sasha Parikh at (202) 551-3627 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: Eric A. Klein, Esq.
Sheri Watts, Esq.
Katten Muchin Rosenman LLP
2029 Century Park East, Suite 2600
Los Angeles, CA 90067