



DIVISION OF
CORPORATION FINANCE

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

July 19, 2019

Stavros G. Vizirgianakis
President and Chief Executive Officer
Misonix, Inc.
1938 New Highway
Farmingdale, New York 11735

**Re: New Misonix, Inc.
Amendment No. 1 to Registration Statement on Form S-4
Filed July 5, 2019
File No. 333-231797**

Dear Mr. Vizirgianakis:

We have reviewed your amended registration statement and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by amending your registration statement and providing the requested information. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your registration statement and the information you provide in response to these comments, we may have additional comments. Unless we note otherwise, our references to prior comments are to comments in our June 26, 2019 letter.

Amendment No. 1 to Registration Statement on Form S-4

What indemnification obligations..., page 9

1. If the breach of some representations and warranties would trigger the indemnification obligation even if losses are less than the \$1,000,000 that you disclose here, please revise your disclosure to clarify.

Description of the Support Agreements, page 21

2. Please expand your response to prior comment 3 to tell us with specificity who signed the support agreements, and show us how the percentages disclosed in this section are reconcilable to the beneficial ownership disclosure on pages 163-166.

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Risk Factors, page 30

3. We note your response to prior comment 2. Please add a risk factor to address the potential personal liability of the Solsys members, and the extent to which this liability differs from the liability they currently have for Solsys' liabilities as members of Solsys.

New Misonix may not be able to effectively protect its intellectual property rights, page 44

4. We note your response to prior comment 6. Please tell us where you have disclosed when the patents related to the business of Misonix expire, and tell us the significance of the patents that expire in the near future.

Background of the Transactions, page 71

5. We note your response to prior comment 10; however, from your revised disclosure, it remains unclear how the amount of 5,954,543 shares was determined to be the amount for the offer. Please revise as appropriate.
6. We note your response to prior comment 12. It is unclear from your response why none of the presentations or materials provided by Canaccord on January 8, 2019, January 14, 2019, January 26, 2019, March 27, 2019 or April 3, 2019, the May 2, 2019 "advice and assistance" of Canaccord, the presentation to the Misonix board provided by J.P. Morgan on March 5, 2019, J.P. Morgan's financial analysis mentioned on page 81, or the analyses mentioned on page 74 are a report, opinion or appraisal relating to the transaction as contemplated by Form S-4 Item 4(b). Please revise your response to clarify the basis for your conclusions regarding the applicability of that Item, citing authority on which you rely, or provide the disclosure required by the Item.

Negative Factors, page 88

7. We note your revisions in response to prior comment 13. However, we continue to note your reference to the cost savings, synergies and other benefits that possibly could be obtained as a result of the transactions. Please provide more detailed disclosure about the cost savings, synergies and other benefits that could be achieved as a result of the transactions, particularly in light of the transaction structure.

Miscellaneous, page 100

8. Please address that part of prior comment 16 relating to the fees for the services mentioned in the second paragraph of this section.

Certain Unaudited Prospective Financial Information Regarding Misonix and Solsys, page 100

9. We note your response to the second bullet point of prior comment 18; however, it remains unclear how the disclaimer of any association with the information is consistent with your disclosure on page 101 that J.P. Morgan reviewed information and that

Canaccord assisted with the preparation. It is also unclear how your disclosure on page 101 that J.P. Morgan reviewed information is consistent with your disclosure on page 102 that J.P. Morgan did not examine the information. Please revise as appropriate, and provide us your analysis of whether the consent of the entities must be filed with your registration statement.

Selected Unaudited Prospective Financial Information, page 103

10. Regarding your response to prior comment 20:
- Please clarify the last paragraph on page 74 with the substance of the penultimate sentence of your response, as appropriate.
 - Address that part of the comment related to the key cash flow items mentioned in what is now the first paragraph on page 95. Also disclose the projections through 2029 mentioned on page 98.
 - Clarify where you provide the revised projections regarding cash flow and cash needs, and the projections that facilitate a more direct comparison of fiscal years mentioned in the last paragraph on page 77 and the first full paragraph on page 78.

Material U.S. Federal Income Tax Consequences of the Mergers, page 108

11. We note your responses to prior comments 22 and 23, and the uncertainty regarding the tax consequences referenced in your disclosure. For example, your disclosure on page 109 regarding what consequences are intended rather than what the consequences are, and your disclosure on page 111 regarding what the consequences "should" be or what is "not expected." We may have further comments after you file exhibits 8.1 and 8.2. For guidance, please see Staff Legal Bulletin No. 19 (October 14, 2011) Sections III.C.1 and 4 available on the Commission's website.

Directors and Officers of New Misonix, page 113

12. We note your response to prior comment 26; however, clause (i) in this section indicates that all Misonix directors will become New Misonix directors. Please reconcile that disclosure with clause (ii) in this section.

Consideration in the Solsys Merger, page 114

13. Regarding your response to prior comment 27:
- Please clarify the effect of the transactions on warrants.
 - Reconcile your disclosure here regarding the the allocation of consideration based on the price of Misonix stock during the 10 days prior to the third day prior to closing with your disclosure on page 90 that the shares issued for the Series F profit interest awards is based on the price of Misonix stock as of the closing date.

- We note your disclosure that consents will be due at least 5 business days prior to closing. Please disclose the anticipated time period between the date consents are due and closing, rather than merely the minimum time period.
- Please expand your response regarding partnership liabilities being based on each unit holder's basis to clarify whether the amount of liabilities attributable to each unit within a class will differ. It is unclear how investors can evaluate the consideration and the risk on page 32 if you do not disclose the amount of such liabilities allocated to each unit.
- Revise your disclosure in the second bullet point regarding "percentage interest" to clarify how the percentage is calculated. For example, do you mean percentage of the number of all outstanding units?
- Tell us how you determined the range and intervals to present in the table on page 116, and what consideration you gave to presenting columns in the table to reflect the price at which each class would receive no consideration.
- Clarify whether the Series F profits interest awards mentioned in the table on page 116 differ from the Series F preferred units mentioned on page 76. From page A-5, it appears that there may be profits interests that differ from the Series F units.

Certain Representations and Warranties, page 116

14. We note your response to prior comment 24 and your disclosure that assertions were made solely for purposes of the contract. However, to the extent these representations and warranties are included in your disclosure, please revise to remove any potential implication that the referenced information does not constitute public disclosure under the federal securities laws.

Description of the Lock-Up Agreement, page 130

15. We note your response to prior comment 28. Please disclose the number of New Misonix shares that will be locked-up. Include shares held by investors who will sign lock-up agreements and investors who will be subject to the lock-up due to the number of shares they will receive as mentioned on page 125; disclose any material differences between those lock-up provisions.

Unaudited Pro Forma Condensed Consolidated Combined Statement of Operations, page 135

16. We note that in response to comment 35, you corrected the "Pro Forma Adjusted" column to reduce interest expense for the elimination of Solsys' financing exit fees. However, please revise the "Pro Forma Adjustments" column to show \$643,322 as the corrected net amount of adjustments (j) and (n).

Business of Solsys, page 141

17. Please expand your response to prior comment 36 to address all studies, publications and data mentioned in this section. We note for example the market research mentioned on page 146. Also:
- Clarify what you mean by "key opinion leaders" on page 144, and the compensation Solsys pays those key opinion leaders.
 - Clarify the purpose of the names that you mention in connection with studies, as at the beginning of each bullet point on pages 144 and 145. Include in your response the basis for your conclusion that consent of the named persons need not be filed with your registration statement.

Dependence of LifeNet, page 147

18. We note your response to prior comment 37. Please specify in this section the date which is the "sixth anniversary of the effective date of the agreement." Also, given your reference to "certain net sales" and a "threshold amount" of net sales, it is unclear how investors can determine the significance and risks of these provisions; please clarify as appropriate.

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

Results of Operations, page 153

19. We note that in response to prior comment 38 you quantified combined unit sales volume of TheraSkin and this amount is equal to total sales of TheraSkin by Solsys and LifeNet. Please revise the filing to clarify what combined unit sales volume represents and explain its relationship to total sales of TheraSkin.
20. Please address that part of prior comment 39 seeking a description of known trends related to contractual prices, shipping and handling costs, or otherwise as required by Regulation S-K Item 303.

Liquidity and Capital Resources, page 155

21. Please expand your response to prior comment 41 to address how the obligation affects your disclosure in this section regarding your liquidity and capital resources, like on page 157.

Summary Compensation Table, page 160

22. Please expand your response to prior comment 43 to clarify how the Notes you cite provide the disclosure required by Regulation S-K Item 402.

Security Ownership of Certain Beneficial Owners and Management of Solsys, page 165

23. Regarding your response to prior comment 44:
- Please identify the natural persons who serve as members on the investment committee for each of 1315 Capital Solsys and SV-Solsys Inc. Also, if the individuals identified in the table beneficially own shares held in the name of entities as determined by applicable rules, that beneficial ownership should be included in the table, regardless of whether beneficial ownership is disclaimed.
 - Clarify how you have provided the information required by Regulation S-K Item 403 for each applicable class of equity securities. We note that your first paragraph in this section limits the disclosure to voting securities; however, Regulation S-K Item 403(b) is not limited to voting securities.

Management of New Misonix, page 168

24. Please expand your response to prior comment 45 to clarify how you addressed Regulation S-K Item 407(a) as it applies to committees.

Classified Board; Election and Removal of Directors; Filling Directors, page 173

25. Please clarify how your response response to prior comment 47 addresses the 66 2/3 vote for removal mentioned Section VI.5 of Annex B. Also ensure your disclosure regarding removal of directors on page 187 is consistent in this regard.

Comparison of Shareholder Rights, page 174

26. Please expand your response to prior comment 49 to clarify how you determined that the proxy card separately presents each provision required to be presented separately. In this regard, (1) it is unclear how you considered provisions like the increase in authorized shares and Article VIII.2 of Annex B to the proxy statement, and (2) the proxy card filed as exhibit 99.1 does not appear to present each relevant provision separately. Also, clarify in your disclosure how you will proceed if shareholders approve fewer than all proposed provisions.

Incorporation of Certain Documents by Reference, page 200

27. We note from the disclosure under "Submission of Consents" on page 68 that Solsys has reserved the right to extend the final date for receipt of written consents beyond a date that has yet to be determined, and from the disclosure under "Executing Consents; Revocation of Consents" on page 68 that the holders of Solsys' voting units may change or revoke their consents at any time prior to a date that has yet to be determined. Please expand your response to prior comment 50 to tell us why you should not incorporate by reference the filings made by Misonix prior to the date on which the contemplated transactions are consummated. Address in your response (1) how you will ensure that you will incorporate by reference the appropriate filings of Misonix on or prior to any extension of

the final date for receipt of written consents and on or prior to the date that consents may be revoked, and (2) how the disclosed time for termination of forward of incorporation by reference is consistent with the Form S-4 required duration of forward incorporation by reference. Also, as requested by prior comment 50, please revise the reference to the Form 8-K filed on "January 22, 2019" to reflect its actual filing date.

28. Please expand your response to prior comment 52 to clarify how the documents filed under Rule 425 are incorporated by reference. We note for example the May 8, 2019 filing that appears to include statements that are not incorporated in your registration statement.

Solsys Medical, LLC Financial Statements for the Years Ended December 31, 2018 and December 31, 2017

Note 1 - Nature of Business and Significant Accounting Policies

Revenue Recognition, page F-9

29. We note from your response to prior comment 53 that under the revised supply agreement, Solsys has title to, and liability for, the product while it is in transit to the customer. However, it appears that revenue for these sales is recognized when the product is shipped to customers by LifeNet. Please explain how you concluded that revenues under the revised supply agreement should be recognized at shipment.

Exhibit Index, page II-5

30. Given the last sentence of your response to prior comment 55, it is unclear whether you are seeking to comply with current Regulation S-K Item 601(a)(5) or 601(b)(2). If you are seeking to comply with Item 601(b)(2) and therefore have omitted provisions or terms from schedules, annexes or exhibits to an exhibit, please comply with the marking and disclosure requirements of current Item 601(b)(2). If you are omitting schedules or similar attachments to exhibits in reliance on Item 601(a)(5), please revise your current reference to Item 601(b)(2) to clarify. Also, clarify to which exhibits the footnote to your exhibit refers; for example, are you referring to exhibit 10.1?

Exhibits

31. Please address that part of prior comment 56 regarding filing the employment agreements mentioned on page 23.

Stavros G. Vizirgianakis
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You may contact Eric Atallah at (202) 551-3663 or Lynn Dicker, Senior Accountant, at (202) 551-3616 if you have questions regarding comments on the financial statements and related matters. Please contact Tim Buchmiller at (202) 551-3635 or Russell Mancuso, Legal Branch Chief, at (202) 551-3617 with any other questions.

Sincerely,

Division of Corporation Finance
Office of Electronics and Machinery

cc: Jonn R. Beeson, Esq.