



DIVISION OF  
CORPORATION FINANCE

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

February 23, 2024

Neil Maresky  
Chief Executive Officer  
Pysence Biomedical Ltd.  
21 Richmond Street West  
Penthouse Suite 1300  
Toronto, Ontario MK5 2K1

**Re: Pysence Biomedical Ltd.**  
**Registration Statement on Form F-1**  
**Filed February 9, 2024**  
**File No. 333-276973**

Dear Neil Maresky:

We have conducted a limited review of your registration statement and have the following comments.

Please respond to this letter by amending your registration statement and providing the requested information. If you do not believe a comment applies 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 this letter, we may have additional comments.

Registration Statement on Form F-1 filed February 9, 2024

Prospectus Cover Page, page 1

1. Please revise the cover page to disclose the total shares redeemed in connection with the business combination, expressed as a percentage. Please also disclose the balance remaining in the Trust Account as a result of the redemptions, that the Minimum Cash Condition and PIPE Investment Conditions were both waived in order to close the business combination, and that the company did not secure a PIPE in relation to the transaction, if true.
2. Please revise the cover page to disclose 1) the effective price of the 18,750,000 common shares issued pursuant to the First Tranche Notes, and 2) the "nominal fee" paid for the 3,000,000 Founder Shares.
3. We note the significant number of redemptions of your common stock in connection with

the business combination and that as of the closing of the business combination on January 25, 2024, a total of 13,390,659 shares of common stock were outstanding, only 119,659 of which were held by public shareholders. As such, the 22,496,000 shares being registered for resale constitute vastly more than the company's public float and total shares outstanding. We also note a substantial majority of the shares being registered for resale may have been purchased by the Investors and the Sponsor for prices considerably below the current market price of the common stock. Revise your disclosure to reflect these facts and highlight the significant negative impact sales of shares pursuant to this registration statement could have on the public trading price of the common stock.

4. Please clarify whether the 18,750,000 shares being offered by the Investors in relation to the First Tranche Notes include the 1,300,000 Structuring Shares issued at the initial closing of the financing and concurrently with the closing of the business combination.

Prospectus Summary, page 6

5. Please expand your discussion here to reflect the fact that this offering involves the potential sale of more than the company's total outstanding shares for resale and discuss how such sales could impact the market price of the company's common stock.

Securities Purchase Agreement, page 8

6. We note your disclosure regarding the Conversion Price adjustments included in the First Tranche Notes. Please revise this disclosure to include a discussion of the material terms and reset dates related to such adjustments.
7. We note your discussion of the inducement in the form of Structuring Shares given to the Investors in exchange for entering into the Securities Purchase Agreement and the Notes, which states that the remaining 1,700,000 Structuring Shares to be paid are subject to the terms of Call Option Agreements, by and among the Investors and certain members of the Sponsor. Please revise your disclosure to describe the material terms of the Call Option Agreements and file a copy as an exhibit to the registration statement.

Risk Factors, page 17

8. Include an additional risk factor highlighting the negative pressure potential sales of shares pursuant to this registration statement could have on the public trading price of the common shares. To illustrate this risk, disclose the purchase price of the securities being registered for resale and the percentage that these shares currently represent of the total number of shares outstanding. Also disclose that even though the current trading price is significantly below the SPAC IPO price, the private investors have an incentive to sell because they will still profit on sales because of the lower price at which they purchased their shares compared to the public investors.
9. Please include a risk factor disclosing the dilution risks associated with the outstanding Private Warrants. In this risk factor, quantify the number of shares that may be issued

upon exercise of the Private Warrants and disclose the exercise price compared to the market price of the underlying securities. In relation to the number of shares that may be issued upon exercise, please contrast this figure with the total number of shares outstanding as of the closing of the business combination.

10. You state on page 35 that you "expect" that your shares will be listed on Nasdaq, and that as a result such securities will be covered securities. Please revise to update this disclosure, as the company's common shares and warrants are now listed on Nasdaq.

Management's Discussion and Analysis of Financial Conditions and Results of Operations  
Liquidity and Capital Resources, page 47

11. We note your statement on page 17 that you expect that the proceeds from the business combination as well as existing cash will be sufficient to fund operations for 18 months. However, in your Form F-4/A filed November 13, 2023, you projected that the combined company would require an estimated \$13.4 million for the first 12 months following the closing of the transaction. We also note that both the Minimum Cash Condition and PIPE Investment Condition were waived at closing and that post-redemptions the Trust Account contained only \$1.38 million. Please revise your Liquidity and Capital Resources discussion to address the above and provide further information regarding how the company believes that the proceeds and its existing cash is sufficient to fund operations for the next 18 months. If the company is likely to have to seek additional capital, discuss the effect of this offering on the company's ability to raise additional capital.

Unaudited Pro Forma Condensed Combined Financial Information  
Note 6 - Net Earnings (Loss) per Share, page 64

12. We note that the unaudited pro forma condensed combined financial information was prepared to provide an understanding of the company upon consummation of the business combination for illustrative purposes. We also note the table in Note 6 which sets out the share ownership of the company following closing on a pro forma basis, which includes a line item for 2,000,000 shares held by "PIPE Investors". Because it appears that no PIPE was obtained in connection with the closing, please explain the inclusion of this line item.

General

13. Revise your prospectus to disclose the price that each selling shareholder paid for the shares being registered for resale. Highlight any differences in the current trading price, the prices at which the other selling shareholders acquired their shares and warrants, and the price that the public shareholders paid to acquire their shares and warrants. Disclose that while the other selling shareholders may experience a positive rate of return based on the current trading price, the public shareholders may not experience a similar rate of return on the shares they purchased due to differences in the purchase prices and the current trading price. Please also disclose on an individual basis the potential profit the selling shareholders will earn based on the current trading price. Lastly, please include

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appropriate risk factor disclosure regarding each of these points.

We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

Refer to Rules 460 and 461 regarding requests for acceleration. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

Please contact Tamika Sheppard at 202-551-8346 or Laura Crotty at 202-551-7614 with any other questions.

Sincerely,

Division of Corporation Finance  
Office of Life Sciences

cc: Ben Reichel