



DIVISION OF
CORPORATION FINANCE

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

March 13, 2024

Michael Heltzen
Chief Executive Officer
Invizyne Technologies Inc.
750 Royal Oaks Drive, Suite 106
Monrovia, CA 91016

**Re: Invizyne Technologies Inc.
Amendment No. 1 to Registration Statement on Form S-1
Filed February 14, 2024
File No. 333-276987**

Dear Michael Heltzen:

We have reviewed 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.

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

Cover Page

1. We note disclosures on page F-6 and F-22 that you elected to opt out of the extended transition period for applying new or revised accounting standards. Please revise the cover page of your filing to check the box indicating your election to not use the extended transition period for complying with new or revised financial accounting standards.
2. We note your disclosure on page 21 that the listing of the company's common stock on Nasdaq is a closing condition to the offering under the underwriting agreement. Please revise the cover page to disclose that the offering is contingent upon the listing.
3. Please revise the cover page to state that MDB Capital Holdings, LLC is the parent company of Invizyne. In this regard we note your statement on page F-6 that the company "is a technology development subsidiary of MDB Capital Holdings, LLC."

Table of Contents, page i

4. We refer to the second sentence of the second paragraph following your table of contents. Please revise this sentence to remove the double negative as the current drafting implies you have authorized third-parties to provide information differing from the disclosures in this prospectus.

Prospectus Summary

Overview, page 1

5. Please revise the Summary to present a balanced view of the company by stating that you are a pre-revenue, development stage company without a history of manufacturing, product development, or marketing endeavors. Please also state that as of the date of the prospectus the company's technology is still largely in development and products are being produced at lab scale quantities only, with no assurance that products in development will ever reach commercial scale quantities or become commercially viable, as disclosed elsewhere.
6. Please revise both the Summary and Business sections generally to eliminate puffery and marketing language used to describe the company and its SimplePath platform, as many of the assertions appear premature based on your stage of development. Alternatively, provide support for all such assertions. By way of example only, we note the following:
 - Your statement that Invizyne is "redefining" biomanufacturing.
 - Your statement that Invizyne has developed a new technology that you believe has the potential to "revolutionize the way molecules are created" and "revolutionize the production of many valuable chemicals, drive industry expansion, and shape a more sustainable future".
 - Your statement that the process "radically simplifies" the biobased process of synthesizing a new molecule and "eliminates many of the inherent limitations and bottlenecks of legacy technologies".
 - Descriptions of SimplePath as "groundbreaking".
 - Your statement that Invizyne has the "potential to decarbonize the chemical sector".
 - The following statement on page 37: "Much like how plastics transformed our society in the 1960's, we believe that our Biomanufacturing 2.0 platform, SimplePath™, is the future of how everyday products will be delivered."
7. Please tell us your basis for your assertion that SimplePath is more "efficient, environmentally friendly, and cost-effective" than traditional methods of sourcing molecules. Please disclose if you or any third-parties have conducted studies to confirm these claims.
8. Please revise this section to explain what your current commercialization plans are for your cannabinoid applications of your SimplePath platform. In your revisions, please clarify if you intend to out-license potential APIs, collaborate with third-parties or conduct

clinical development on your own.

9. Please revise your disclosure to explain the basis for your statements here and elsewhere that you have "successfully demonstrated" in the laboratory the feasibility of manufacturing chemicals using SimplePath and that you believe your processes can be "scaled up to achieve commercial production capabilities". In this regard we note your risk factor disclosure that you have may never reach commercial scale quantities or become commercially viable.

Summary of Risk Factors, page 3

10. We note the statement on page 4 and elsewhere that the company is a smaller reporting company within the meaning of the Securities Act. Please revise the front page of the registration statement to check the smaller reporting company box accordingly.
11. Please revise the last bullet point on page 4 to quantify the immediate dilution per share in the net tangible book value of the common stock an investor may purchase in the offering, as disclosed on pages 23 and 25.

Risk Factors, page 8

12. Please revise the risk factors section to include a risk factor regarding the conflict of interest between the company and Public Ventures, LLC as the underwriter of the offering.
13. Please revise this section to include a risk factor regarding the dilution that may be experienced as a result of the selling security holder offering. Your discussion should include the number of shares to be offered by the selling security holder versus the number of shares being offered by the company directly.

Our systems rely on the need for purified enzymes and co-factors for the conversions of input feedstock into final products. , page 11

14. We note your discussion of "co-factors" and "feedstock" both here and elsewhere in the prospectus. Please revise your disclosure to explain the meaning of these terms in the context discussed.
15. We note the following statement on page 11: "We have observed continuous conversion of input feedstock into product for a time period of at least seven days." Please revise this risk factor to explain the significance of this statement and the disclosure that follows.

We currently have limited accounting personnel with the background in public company accounting and reporting., page 19

16. Please revise this risk factor to explain the material risk presented by potential future material weaknesses in the company's controls and procedures.

Dividend Policy, page 24

17. Please revise your disclosure in this section to note the share dividend declared and paid on February 7, 2024.

Dilution, page 25

18. Please tell us and revise your filing as necessary to explain how you have determined the net tangible book value of \$3.0 million, or \$0.30 per share of Common Stock as of September 30, 2023 and pro forma as adjusted net tangible book value as of September 30, 2023, of approximately \$3.0 million, or \$0.24 per share of Common Stock. Additionally, please reconcile the disclosures in the first two paragraphs of net tangible book value per share and pro forma as adjusted net tangible book value per share with the dilution table on page 25.

Management's Discussion and Analysis of Financial Condition and Results of Operations
Critical Accounting Estimates
Stock Based Compensation, page 32

19. Please explain to us how you determined the fair value of the common stock underlying your equity issuances and the reasons for any differences between the recent valuations of your common stock leading up to the initial public offering and the estimated offering price. This information will help facilitate our review of your accounting for equity issuances including stock compensation. Please discuss with the staff how to submit your response.

Business
Overview, page 35

20. We note your disclosure stating that you have received grants from two non-governmental sources in addition to the grants from the DOE and NIH. Please revise your disclosure to provide more background on these grants, including a discussion of what the grants were for, any material terms of the grants and the names of the non-governmental parties.

Opportunity for Cell-Free Multi-Step Enzyme Biocatalysis, page 35

21. Please define the term "enzyme cascade" at first use.

Our Solution, page 37

22. We note your references both here and elsewhere to "green" solutions, manufacturing systems, and operating conditions. Please revise your disclosure to clarify the meaning you are attributing to the term as used, including a discussion of related regulatory standards.

Current Lead Applications of SimplePath

Cannabinoids as APIs, page 38

23. We note your references to "therapeutic" applications for cannabinoids. Please revise to clarify whether the cannabinoid compounds that you discuss when incorporated into products would require clinical testing and FDA approval prior to commercialization. If not, please clarify how and in what types of products such compounds would be used.
24. We note your disclosure stating that you believe you will be able to "more efficiently" develop your cannabinoids for testing in certain indications. Please revise to clarify what is meant by the term "indication" in this context. To the extent you are referring to the use of your cannabinoid products for treating a particular disease or condition, please remove any implication that you will be able to "more efficiently" develop your cannabinoids.

Intellectual Property, page 40

25. Please revise your disclosure to include the type of patent protection (e.g., composition of matter, method of use or process) and expiration dates or potential expiration dates, if granted, for the ten patents and patent applications discussed in this section. Please disclose the same information in relation to the six patents licensed from UCLA.

Our Business Model, page 40

26. Please revise here, or wherever else appropriate, to discuss the material terms of your joint venture with Neuractas Therapeutics. Please also file this agreement as an exhibit to your registration statement or tell us why you believe such a filing is not necessary.
27. Please explain what is meant by the phrase "key-to-the-kingdom."

Key terms of the license agreement with UCLA, page 41

28. Please revise the discussion of your licensing agreement with UCLA to disclose the royalty rates, or royalty rate ranges not to exceed ten percentage points, and quantify the minimum annual royalties and potential aggregate milestone payments due under this agreement. Please also disclose the aggregate amount of all payments made to date and add a risk factor disclosing that when you begin commercial sales your royalty obligations under this agreement may exceed your revenues from product sales. Please file the agreement as an exhibit to your registration statement. Refer to Item 601(b) of Regulation S-K.

Regulation, page 41

29. Please revise this section to provide a more fulsome discussion of the regulatory regimes that govern commercial sales of your products. For example only, please discuss the regulations surrounding using cannabinoids, and other cannabis derived products, in the therapeutic or medical context.

Executive Compensation, page 49

30. Please disclose if you have entered into employment agreements with each of your named executive officers. If you have entered into employment agreements with these executive officers, please file the agreements as exhibits to your registration statement. Refer to Item 601(b)(10) of Regulation S-K for guidance.
31. Please revise the compensation table on page 49 to include the principal position of each listed individual.

Certain Relationships and Related Party Transactions, page 51

32. Please revise this section to include disclosure of all information required by Item 404(d) of Regulation S-K.

Principal Stockholders, page 51

33. Please revise the table on page 52 to identify the natural person(s) with voting and/or dispositive control over the shares held by MBD Capital Holdings, LLC.

Unaudited Financial Statements for the Interim Period Ended September 30, 2023

Notes to the Consolidated Financial Statements

8. Exclusive License Agreement (Invizyne), page F-12

34. Please revise your disclosure to identify the type of milestone (i.e. regulatory, development, sales, etc.) that the company has not yet achieved. Additionally, disclose a cumulative quantitative amount for each category of milestones.

Consolidated Audited Financial Statements for the Years Ended December 31, 2022 and 2021

Consolidated Balance Sheets, page F-17

35. Please revise your presentation for the years ended December 31, 2022 and 2021 to add a line before the sub-total for current liabilities.

Item 16. Exhibits and Financial Statement Schedules, page II-3

36. Please refile your exhibits in the proper text-searchable format. Refer to Item 301 of Regulation S-T for guidance.
37. Please file the executed SAFE agreements dated July 3, 2023, as it appears that you have only filed the form of such agreements as Exhibit 4.2.

General

38. Please revise the cover page of the selling security holder prospectus to clarify the timing of the resale offering. In this regard, we note that the primary offering may not commence unless the Nasdaq listing is obtained. Please clearly state whether the resale may occur simultaneously with the initial public offering of shares by Public Ventures, LLC on behalf of the company if the listing is approved, or whether the resale may only commence once the initial public offering has closed.
39. As it appears the conversion of the SAFE investments pursuant to their terms will not occur until the consummation of the initial public offering, revise to remove the securities issued pursuant to the conversion of the SAFEs from the selling security holder prospectus. Refer to Securities Act Section 5 C&DI 139.11.
40. Given the company will bear all fees and expenses incident to the resale registration statement, the fact that the resale component appears necessary to create a market for the company's listing, and your statements that the company is a subsidiary of the selling security holder and your references to the selling security holder as the parent of the company, it appears that the resale portion of the offering should be deemed an indirect primary being conducted by or on behalf of the issuer. As such, please name the selling security holder as an underwriter and fix a price at which the resale shares will sell for the duration of the offering.
41. Please revise the cover page of the selling security holder prospectus to clearly state how many shares underlying warrants are included in the offering and the exercise price of the warrants.
42. Please supplementally provide us with copies of all written communications, as defined in Rule 405 under the Securities Act, that you, or anyone authorized to do so on your behalf, present to potential investors in reliance on Section 5(d) of the Securities Act, whether or not they retain copies of the communications.

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 Christine Torney at 202-551-3652 or Lynn Dicker at 202-551-3616 if you have questions regarding comments on the financial statements and related matters. Please contact Tyler Howes at 202-551-3370 or Laura Crotty at 202-551-7614 with any other questions.

Michael Heltzen
Invizyne Technologies Inc.
March 13, 2024
Page 8

Sincerely,

Division of Corporation Finance
Office of Life Sciences

cc: Andrew Hudders, Esq.