



DIVISION OF
CORPORATION FINANCE

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

March 19, 2012

Via E-mail

Mr. John Botdorf, Chief Financial Officer
ZenVault Medical Corporation
450 East Happy Canyon Road
Castle Rock, Colorado 80108

**Re: ZenVault Medical Corporation
Amendment No. 6 to Offering Statement on Form 1-A
Filed March 5, 2012
File No. 024-10291**

Dear Mr. Botdorf:

We have reviewed your amended offering 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 offering 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 offering statement and the information you provide in response to these comments, we may have additional comments.

Amendment No. 6 to Form 1-A, filed on March 5, 2012

Part I - Notification

Item 4. Jurisdictions in Which the Securities Are to be Offered

1. We reissue comment three of our letter dated February 13, 2012. Please revise to discuss the method by which the securities are being offered in the jurisdictions listed. In this regard, we ask that you address exemption and/or registration with the various states.

Item 5. Unregistered Securities Issued or Sold Within One Year

2. We note your revised disclosure in response to comment four of our letter dated February 13, 2012. However, we are unable to locate disclosure related to the Series B Preferred Stock mentioned in subsection (c) of this Item and subject to an exemption by Section

4(2) of the Securities Act. Please revise to provide Item 1(a) disclosure for the Series B Preferred Stock issuance or advise.

Part II – Offering Circular

The Healthcare Market, page 3

3. We note your revised disclosure and reissue comment seven of our letter dated February 13, 2012 with respect to the reference to the European Union on page 47. Without additional clarifying disclosure, the company's plans to expand into markets outside the United States are unclear.

Summary Selected Unaudited Financial Information, page 7

4. We note your response to our prior comment 22. Your response did not address our comment in its entirety, thus the comment will be partially reissued. Please revise the head note here to clarify how the rescission offer is contemplated in your pro forma balance sheet data presentation.

Dilution, page 27

5. We note you have included the amount capitalized related to the PHR Portal software in your calculations of net tangible book value before the offering. Please revise to exclude this intangible asset in your calculations.
6. Please revise your description of the rescission offer here and in various other places in your offering statement to appropriately describe it as a rescission offer versus a "recession" offer.
7. Please provide us with your calculation supporting the \$0.03 change to dilution in a minimum offering scenario assuming prior subscribers choose not to accept the rescission offer.

Use of Proceeds, page 30

8. We note your revised disclosure in response to comment 12 of our letter dated February 13, 2012. Please clarify the terms of the agreement to defer fees for general corporate work until such time as you have received proceeds sufficient to pay such fees. For instance, clarify whether they have agreed to receive a specific amount based upon the amount of proceeds received. If not, it is unclear why the total amount would not become due once the minimum has been received, since that amount equals the total fees.

9. We reissue comment 14 of our letter dated February 13, 2012. The amounts allocated to the line items of the minimum, \$1.85 million, and \$3 million levels of proceeds are greater than the total gross proceeds. In addition, the listed total gross proceeds for the minimum offering is inconsistent with disclosure throughout the offering circular. Lastly, the first sentence of this statement refers to net proceeds if the maximum is reached of \$4.450 million. This amount is incorrect. Please revise.
10. We reissue comment 16 of our letter dated February 13, 2012. Please tell us how you calculated the amount to be allocated to ZeroNines in the event the offering raises \$1.85 million. The disclosure in this section indicates that you are obligated to pay Z9 Services Group 50% of the net proceeds from the offering until the amount is paid in full. However, the amount in the table does not appear to match such calculation. In addition, the disclosure in this section regarding how the amount is calculated is inconsistent with disclosure elsewhere in the offering circular. For example, we direct your attention to the disclosure on page five, which states that “if the minimum proceeds are received in this offering, we will pay \$90,000 to Z9, and will increase this payment by \$50,000 for each \$100,000 in net proceeds we obtain from this offering.” Please reconcile the disclosure, as previously requested.

Capitalization, page 32

11. We reviewed your revised disclosure in response to our prior comment 18. You disclose here and on page 34 that pro forma capitalization would change by an immaterial amount if prior subscribers choose not to accept the rescission offer. Tell us how you determined this change would be immaterial considering approximately \$340,000 would be added to your capitalization in each pro forma scenario.
12. We note your response to our prior comment 21. Tell us why you believe it is appropriate to include 150,000 shares granted to Mr. Claus in the balance of issued and outstanding shares throughout your offering statement if (i) the vesting conditions have not been satisfied and (ii) such shares are not reflected as issued and outstanding in your financial statements. Please advise or revise.

Management’s Discussion and Analysis of Financial Condition and Results of Operations, page 35

ZenVault Events and Milestones, page 36

13. We note your response to comment 24 of our letter dated February 13, 2012 and we reissue the comment. Please disclose the estimated expenses associated with each milestone. The use of proceeds section generally discusses where the amounts are allocated, but this is different from the milestones, which may include milestones that are not covered by the proceeds.

Business, page 41

14. We note your response to comment 25 of our letter dated February 13, 2012 that the license agreement is included as Exhibit 6.10. The exhibits index in Amendments 4 and 5 listed Exhibit 6.10 as a license agreement between ZeroNines and MDe Solutions. In addition, we reissue comment 27. The current exhibits index lists Exhibit 6.10 as a license agreement between the company and MDe Solutions. However, the agreement actually filed is the reseller distribution agreement and the date of the agreement in the exhibits index differs from the date in the exhibit itself. Please reconcile. Lastly, please be consistent in the references to this exhibit throughout. We note references to both strategic license agreement and reseller distribution agreement, which can create confusion to investors as to whether there are two agreements or only one.
15. We note your revised disclosure in response to comment 28 of our letter dated February 13, 2012 and we partially reissue the comment. In this regard, we note that prior to August 17, 2010, ZeroNines spent \$88,059 on research and development activities. We further note that since that date, ZeroNines has conducted additional development activities. We again ask you to disclose the amount spent by ZeroNines and/or Z9 for the additional development activities and clarify the amount that you have paid or will pay, if any, for such development.

Description of Capital Stock, page 72

16. We partially reissue comment 32 of our letter dated February 13, 2012. Please disclose the different between choosing the cash or the stock in the liquidation event. By this, we mean that a liquidation event appears to be an event that will dissolve or wind up the company. Therefore, if an investor were to choose stock in the liquidation event, given the winding up of the company, the stock would likely ultimately settled in cash. Therefore, in the examples provided, it would appear that the ultimate cash per share to be paid, if any, in a liquidation event, would be a factor in determining whether to choose cash or stock. Please revise to clarify. Similarly, clarify in your discussion of the default choice if an investor does not make an election, whether the amount will be paid in cash or stock.
17. Please reconcile the time period that has lapsed in the first example in the table on page 74. The table reflects four years, but the sentence immediately before the table refers to five years.
18. We note your revised disclosure in response to comment 34 of our letter dated February 13, 2012. Please revise the hypothetical illustration for Series B preferred stock and founding stockholders using similar assumptions to those for Series A stock. You may provide a second, separate example, indicating what would happen in the event the company is sold. This would allow an investor to understand and compare the similarities and differences in how the proceeds would be distributed in the same set of

facts. In addition, please provide the example similar to that for Series A stock, as the table provided on page 75 is for the class as a whole and offers no specific information for the individual investor.

Financial Statements

General

19. We note you have restated your financial statements for the fiscal year ended December 31, 2010. Please clarify why you have marked your financial statements as “reclassified” in addition to restated or revise to remove the reclassification designation.

Notes to the Financial Statements

(10) Stock Option Plan, page F-20

20. We note you issued 72,000 stock options on a monthly basis throughout the last twelve months at an exercise price of \$0.01. Considering you sold Series A Preferred Stock at \$0.50 per share through April 2011 and you expect a \$0.50 per share price for this offering, please address the following:
 - Tell us how you determined the fair value of these options to be \$0.10 at each issuance date;
 - Tell us if valuations were completed to support such fair value determinations and for which option issuance dates;
 - Tell us how you determined a volatility factor of 0% is an appropriate input to your fair value model and how selection of such factor is consistent with FASB ASC 718-10-55-51 to 58;
 - Tell us if a lack of marketability discount was used. If so, please provide the amount for each valuation in 2011 and the basis for your determination;
 - Tell us about the events and factors that resulted in the increase in your valuation from \$0.10 to the disclosed offering price of \$.50 and how those factors related to any changes in valuation assumptions.

Exhibits

21. We reissue comment 42 of our letter dated February 13, 2012. Revise your legality opinion to indicate that opinion opines upon Colorado law or revise to clarify that you are opining under the Colorado Business Corporation Act including the statutory provisions, all applicable provisions of the Colorado Constitution and reported judicial decisions interpreting those laws. In addition, please file the executed legality opinion rather than the form of the opinion, as referenced in the exhibits index.

22. We reissue comment 43 of our letter dated February 13, 2012. We note that you will inform us of whether the Proposed Ad Slick 2010 has been used by the company when you determine whether or not it has.
23. Please remove the representation from page 14 of the subscription agreement that “the undersigned has received satisfactory answers to all such questions to the extent deemed appropriate in order to evaluate the merits and risks of an investment in the Shares.”
24. We reissue comment 46 of our letter dated February 13, 2012. Exhibit 6.7 (now Exhibit 6.12), as filed with Amendment 3, was entered into on December 15, 2010. However, the exhibits index with the latest amendment lists Exhibit 6.12 as having been entered into on August 30, 2011. In addition, the definition of “Offering” included in Exhibit 6.7, as filed, means the 500,000 share minimum and 9.2 million share maximum. This does not reflect the initial plan of the company when it filed the Form 1-A, and instead reflects the reduction in the offering due to the rescission offer. Hence, it appears that the original agreement dated December 15, 2010 was amendment and revised. Please file the original agreement and file any amendments to the agreement separately, or advise.
25. We reissue comment 47 of our letter dated February 13, 2012. Please file the executed Exhibit 3.4.
26. We partially reissue comment 48 of our letter dated February 13, 2012. We note that Exhibit 6.11 is missing a number of pages in comparison to the prior filing. In addition, we are unable to locate the ZenVault Executive Summary. Lastly, please clearly label the exhibits to Exhibit 6.11.

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 the information the Securities Act of 1933 and all applicable Securities Act rules require. 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 you request acceleration of the qualification date of the pending offering statement please provide a written statement from the company acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing qualified, 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 qualified, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and

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- the company may not assert staff comments and the declaration of qualification as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Please refer to Rules 460 and 461 regarding requests for acceleration. We will consider a written request for acceleration of the qualification date of the offering 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 offering statement. Please allow adequate time for us to review any amendment prior to the requested qualification date of the offering statement.

You may contact Jamie Kessel at (202) 551-3727 or Brian Bhandari at (202) 551-3390 if you have questions regarding comments on the financial statements and related matters. Please contact Erin Wilson at (202) 551-6047 or Pamela Howell at (202) 551-3357 with any other questions.

Sincerely,

/s/ Pamela Howell
for

John Reynolds
Assistant Director