

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

January 18, 2011

Robert Melamede, Ph.D.
President and CEO
Cannabis Science, Inc.
6946 North Academy Boulevard
Suite B # 254
Colorado Springs, Colorado 80918

Re: Cannabis Science, Inc.

Information Statement on Schedule 14C

Filed December 21, 2010

File No. 0-28911

Dear Dr. Melamede:

We have reviewed your filing 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 within ten business days by amending your filing, by providing the requested information, or by advising us when you will provide the requested response. 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 filing and the information you provide in response to these comments, we may have additional comments.

Information Statement on Schedule 14C

Action: Create New Class of Common Stock and Issue Dividend, page 5

1. Please furnish the information required by Item 13(a) or provide us with an analysis as to why this information is not required. In this regard, we note that Instruction 1 to Item 13 allows for the omission of information required by Item 13(a) if such information is not material for the exercise of prudent judgment in regard to the matter to be acted upon. While the instruction states that "[i]n the *usual* case...the information is not deemed to material where the matter to be acted upon is the authorization or issuance of common stock" (emphasis added), please tell us why this information is not material to the exercise of prudent judgment in this case. In this regard, we note that the Class A common stock has features very similar to that of your Series A Preferred Stock, in that it has increased voting rights per share.

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- 2. For clarity, please provide in tabular format the following information, reflecting information immediately prior to and also immediately after the creation of the new class of common stock and the issuance of the warrant dividend:
 - The number of shares of Class B common stock authorized;
 - The total number of shares of Class B common stock issued, and include a footnote disclosing any additional shares reserved for issuance;
 - The percentage of voting power represented by the shares of Class B common stock issued, calculated based on all common stock outstanding and also on all voting stock outstanding (common and preferred);
 - The total of number of shares of Class B common stock authorized but not issued or reserved for issuance;
 - The number of shares of Class A common stock authorized;
 - The total number of shares of Class A common stock issued, and include a footnote disclosing any additional shares reserved for issuance (including those shares reserved pursuant to the purchase warrants being issued);
 - The percentage of voting power represented by the shares of Class A common stock issued, calculated based on all common stock outstanding and also on all voting stock outstanding (common and preferred);
 - The total of number of shares of Class A common stock authorized but not issued or reserved for issuance:
 - The number of shares of preferred stock authorized;
 - The total number of shares of preferred stock issued and reserved for issuance, and the percentage of voting power calculated based on all voting stock outstanding (common and preferred);
 - The total of number of shares of preferred stock authorized but not issued or reserved for issuance.

Reasons for the New Class of Common Stock, page 5

- 3. Please disclose how the creation of a new class of common stock would result in the following reasons:
 - increase "dividend participation,"
 - enable issuance of shares at a higher price, and
 - "greater flexibility in seeking capital and potential acquisition targets."

Also, please advise as to how the above referenced reasons would be in the shareholders' best interests.

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Anti-Takeover, page 6

4. Please discuss whether the creation of the new class of common stock has anti-takeover effects.

Additional Information, page 8

5. Please use the Commission's current address.

Closing 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 the information the Securities Exchange Act of 1934 and all applicable Exchange 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.

In responding to our comments, please provide a written statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Please contact Caroline Kim at (202) 551-3878 or me at (202) 551-3611 with any questions.

Sincerely,

Anne Nguyen Parker Branch Chief

cc: Saiwaz Dean Dean Law Corp.

Facsimile: (206) 493-2777