



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

DIVISION OF
CORPORATION FINANCE

April 1, 2011

Via Email

Robert Melamede
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 response letter dated February 1, 2011 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

General

1. As indicated in our opening paragraphs, your next response to our comments should include an amendment to the information statement. For example, we would expect to see your response to prior comments 2, 3 and 5 from our letter, dated January 18, 2011 in your amendment.

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

2. We are still considering your response to prior comment 1 from our letter, dated January 18, 2011, and may have further comments shortly.
3. We note your response to prior comment 2 from our letter, dated January 18, 2011. Please advise why you have not reserved any Class B common stock that are issuable upon the conversion of the Class A common stock.

Reasons for the New Class of Common Stock, page 5

4. We note your response to prior comment 3 from our letter, dated January 18, 2011. Please address the following:
 - In response subpart (i), it appears that the “increased dividend participation” referenced in your filing actually means that the new Class A shares would receive a greater amount of any total declared dividend *as compared to* the Class B shares. Clarify that any current shareholders would receive essentially the same dividend before and after the recapitalization (as current shareholders would hold both Class A and Class B common stock that totals 97% + 3% = 100% participation), but that any new issuances of Class A common stock would have increased dividend participation *as compared to* current shareholders.
 - Given that your current common stock has traded at approximately \$0.03 to \$0.12 in recent months, explain in better detail the reasoning behind your belief in response subpart (iii) that the Class A common stock price would be over \$1.00. Support your assumption that, after the recapitalization, the share price of the Class B common stock would remain the same and that the Class A common stock would trade at a multiple of approximately 30 times that price. Given that the size and financials of your company would remain constant before and after the recapitalization, but that you would have more shares of common stock outstanding after the recapitalization, explain why the market would not view the recapitalization as equivalent to a stock split and adjust the price of the Class B common stock downward accordingly.
 - In response subpart (ii), it appears that the “higher price” referenced in your filing actually means a higher price for the Class A *as compared to* the Class B common stock, rather than a higher price in the absolute.

As requested in the staff’s conversation with company’s counsel on March 30, 2011, please explain in better detail the reasons for the recapitalization.

Dr. Robert Melamede
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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,

/s/ A.N. Parker

Anne Nguyen Parker
Branch Chief

cc: Saiyaz Dean
Dean Law Corp.