

Mail Stop 3561

September 26, 2007

By U.S. Mail and facsimile to (508) 650-8657

James R. Tobin
President and Chief Executive Officer
Boston Scientific Corporation
One Boston Scientific Place
Natick, Massachusetts 01760

**Re: Boston Scientific Corporation
Definitive 14A
Filed on March 27, 2007
File no. 001-11083**

Dear Mr. Tobin:

We have limited our review of your definitive proxy statement to your executive compensation and other related disclosure and have the following comments. Our review of your filing is part of the Division's focused review of executive compensation disclosure.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filings. We look forward to working with you in these respects. We welcome any questions you may have about our comments or any other aspect of our review. Feel free to call me at the telephone number listed at the end of this letter.

In some comments we have asked you to provide us with additional information so we may better understand your disclosure. Please do so within the time frame set forth below. You should comply with the remaining comments in all future filings, as applicable. Please confirm in writing that you will do so and also explain to us how you intend to comply. Please understand that after our review of all of your responses, we may raise additional comments.

If you disagree with any of these comments, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation.

Executive Compensation and Human Resources Committee, page 16

1. You state that you engaged Watson Wyatt and Towers Perrin to provide compensation consulting services in 2006. Please disclose in greater detail the nature and the scope of the consultants' assignments and the material elements of the instructions and directions given to the consultants with respect to the performance of their duties under the engagement. Please refer to Item 407(e)(3)(iii) of Regulation S-K.

Compensation Discussion and Analysis, page 19

Market Referencing, page 19

2. Your disclosure indicates that you refer to "overall guidelines" to establish individual compensation pay levels. Please provide disclosure that not only sets forth the amount of compensation awarded but also provides substantive analysis and insight into how the committee determined the specific payout amounts. Please include in such disclosure a complete analysis of the extent to which target or maximum levels of performance goals were achieved and how achievement of the various corporate financial, strategic and operational objectives and individual goals resulted in specific payouts under each element. Also provide in your disclosure an analysis of the specific factors considered by the committee in ultimately approving particular pieces of each named executive officer's compensation package and disclose the reasons why the committee believes that the amounts paid to each named executive officer are appropriate in light of the various items it considered in making specific compensation decisions. Refer to Item 402(b)(1)(v) of Regulation S-K.

Our Elements of Total Executive Compensation, page 21

3. Please disclose how you determine the award amount of each component of the incentive compensation with respect to the performance metrics that are taken into account for determining compensation. Also disclose how each component amount is determined and, if applicable, whether payments are allocated between the components addressing the factors considered and the relative significance accorded to each factor. Please refer to Item 402(b)(1)(v) of Regulation S-K.
4. You have not provided a quantitative discussion of all of the terms of the necessary performance objectives to be achieved in order for your executive officers to earn their incentive compensation. Please disclose the specific items of company performance and how your incentive awards are specifically structured around such performance goals. See Item 402(b)(2)(v) and Instruction 2 to Item 402(b). To the extent you believe that disclosure of these target levels is not required because it would result in competitive harm such that you may exclude the information under Instruction 4 to Item 402(b) of Regulation S-K, please provide us with your analysis using the standard you would use if requesting confidential treatment. Also disclose

how difficult it would be for the named executive officers to meet those goals or how likely it will be for the company to achieve the undisclosed target levels. General statements regarding the level of difficulty, or ease associated with achieving performance goals, are not sufficient. In discussing how difficult it will be for an executive or how likely it will be for you to achieve the target levels or other factors, provide as much detail as necessary without providing information that would result in competitive harm. Provide insight into the factors considered by the compensation committee prior to the awarding of performance-based compensation.

5. Please disclose how the performance-based incentive compensation is structured and implemented to reflect the named executive officer's individual performance. Disclose the elements of each individual named executive officer's performance and/or contribution that are taken into account in determining performance-based incentive compensation. Refer to Item 402(b)(2)(vii) of Regulation S-K.

Performance Incentives, page 22

6. Your discussion page 23 regarding how you determine the bonus pool is unclear. Please provide in your disclosure substantive analysis regarding how the compensation committee determined the bonus pool and the specific payout amounts under the performance incentive plan.

Annual Equity Incentives, page 24

7. Please disclose how you determine the equity based compensation for a named executive officer including the amount of the equity award, how you determine the allocation between the different types of equity awards and when the awards are granted. Please refer to Item 402(b)(1)(v) and 402(b)(2)(ii) and (iv) of Regulation S-K.

Our Change in Control and Post-Employment Compensation Arrangements, page 27

8. You provide disclosure relating to the various post-employment termination benefits on page 28. Please disclose why you structured the terms and payout levels of these arrangements as you have. Also disclose how these arrangements fit into your overall compensation objectives and affect the decisions you made regarding other compensation elements and the rationale for decisions made in connection with these arrangements. Please refer to Items 402(b)(1)(v) and 402(j)(3) of Regulation S-K.

Summary Compensation Table, page 31

9. Please revise your disclosure of the “Executive Allowance” amounts in “All Other Compensation” to identify and quantify the specific allocations. Please refer to Instruction 4 of Item 402(c)(2)(ix).

Pension Benefits, page 36

10. Please disclose the material factors necessary to an understanding of the plans disclosed in the table. Include in the narrative a discussion of the valuation method and all material assumptions applied in quantifying the present value of the current accrued benefit. Please Item 402(h)(3) and Instruction 2 to Item 402(h)(2) of Regulation S-K.

Nonqualified Deferred Compensation, page 36

11. Please disclose the material factors necessary to an understanding of the plan disclosed in the table. Please refer to Item 402(i)(3) of Regulation S-K.

Director Compensation in Fiscal 2006, page 44

12. Please disclose the grant date fair value of each equity award computed in accordance with FAS 123R. Also disclose the aggregate number of stock awards and the aggregate number of option awards outstanding at fiscal year end. Please refer to the Instruction to Item 402(k)(2)(iii) and (iv) of Regulation S-K and revise footnotes 4 and 5 to the director compensation table accordingly.

Please respond to our comments by October 26, 2007, or tell us by that time when you will provide us with a response.

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 all information required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. 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.

When you respond to our comments, please provide, in writing, a statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;

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- staff comments or changes to disclosure in response to 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.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in connection with our review of your filing or in response to comments.

Please contact me at (202) 551-3315 with any questions.

Sincerely,

Hanna T. Teshome
Special Counsel