

December 5, 2007

Mail Stop 6010

*By U.S. Mail and facsimile to (858) 410-8901*

R. William Bowen  
Senior Vice President and General Counsel  
Gen-Probe Incorporated  
10210 Genetic Center Drive  
San Diego, CA 92121

**Re: Gen-Probe Incorporated  
Definitive 14A  
Filed April 26, 2007  
File No. 001-31279**

Dear Mr. Bowen:

We have reviewed your response letter dated October 10, 2007 and have the following comment. Please respond to our comment by December 19, 2007 or tell us by that time when you will provide us with a response. If the comment requests revised disclosure in future filings, please confirm in writing that you will comply with the comment in your future filings and also explain to us how you intend to comply. We welcome any questions you may have about our comment or any other aspect of our review.

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1. We note your response to our prior comment 5. Please provide a more detailed discussion supporting your conclusion that disclosure of such targets would result in competitive harm. For example, but without limitation, explain in your response letter how a competitor would be able to use the disclosed targets to derive information about your internal profitability, growth strategies and product commercialization and launch objectives and why information about a past fiscal period would cause you competitive harm in the future. With respect to the specific example in your response, how would competitors know the purpose of a particular target or the correlation between the targets and the company's financial assumptions? If the compensation committee were to set a target that reflects only modest growth in income or revenue, might one reason be because the committee set a low threshold for achievement of such target as opposed to

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the company's expectation of only modest growth? Might there not be other reasons as well? Is there a product launch every year? In addition, how would a competitor know what percentage of income revenue or growth is being ascribed to the new product as opposed to existing products, including a decline in growth for existing products? Please address these specific questions as part of your response.

Please contact me at (202) 551-3444 with any questions.

Sincerely,

Perry J. Hindin  
Special Counsel