

July 10, 2008

U.S. Securities and Exchange Commission
Division of Corporation Finance
450 Fifth Street, N.W.
Washington, DC 20549
Attn: Jay Webb, Reviewing Accountant

VIA EDGAR and Facsimile

Re: Intuitive Surgical, Inc.
Form 10-K for the year ended December 31, 2007
Filed February 14, 2008
Form 10-Q for the quarter ended March 31, 2008, filed April 18, 2008
File No. 000-30713

Dear Mr. Webb:

We received your letter dated June 26, 2008 (the "Letter"), setting forth the comments of the staff (the "Staff") of the Securities and Exchange Commission (the "Commission") on our above-referenced reports filed under the Securities Exchange Act of 1934, as amended. Our responses to the specific comments are set forth below. For the convenience of the Staff, each comment from the Letter is restated in italics prior to the response to such comment.

Form 10-K for the year ended December 31, 2007

Item 1. Business, page 3

- In an appropriate location in your disclosure, please clarify whether the surgeons using your products need to be certified or trained in laparoscopic surgery and whether such surgeons would need to be further certified or trained in robotic procedures in order to use your products. Clarify how much time must be invested in such certification or training and what, if any, limitations such certifications or training present to your future growth opportunities. Expand your risk factor disclosure as appropriate.*

In response to the Staff's comment, surgeons using our products are not required to be certified or trained in laparoscopic surgery. In fact, many of the surgeons currently performing robotic surgery were not laparoscopic surgeons prior to adopting the da Vinci System for surgery. Further, no certification is required by outside agencies to perform robotic surgery. Although Intuitive Surgical, Inc. (Intuitive or the Company) does not require certification of surgeons prior to their performing robotic surgery, the Company does strongly suggest that surgeons obtain da Vinci System training from Intuitive or other users and that surgeons obtain proctoring from skilled robotic surgeons before performing surgery on their own. Da Vinci System training takes approximately one to two days and is offered by Intuitive, although customers may seek such training from other da Vinci System users. Some of our customers (hospitals) require their surgeons to obtain da Vinci System training and to be proctored for a specified number of surgeries (the number being set by the hospital) before performing surgery on their own. However these are requirements over which Intuitive has no influence. Training and proctoring of surgeons has been readily available to our customers and has not had a significant impact on the rate of procedure adoption or the Company's sales cycle; nor is it expected to impact the Company's future growth opportunities. As a result, we respectfully submit that we do not believe that additional disclosures are necessary. If certifications are ever imposed such that they affect our growth or the availability of proctoring or training were to affect our growth, we will provide appropriate disclosures in the future.

Item IA. Risk Factors, page 21

The investment of our substantial cash balance and our investments in marketable debt securities are subject to risks which may cause losses and affect the liquidity of these investments., page 32

2. *Your risk factor herein indicated that some of your investments are subject to general credit, liquidity, market and interest rate risks, which may be exacerbated by U.S. sub-prime mortgage defaults. Because your investments appear to be significant to your financial statements, please provide us with the amount of your investments that are connected to or impacted by sub-prime lending. Also provide a detailed description of whether you believe your financial condition, results of operations, or liquidity will be adversely affected by your investments connected to or impacted by sub-prime lending, if applicable. If an adverse impact is considered remote, please support that conclusion in your response. Also in this regard, please expand your Management's Discussion and Analysis, in future filings, to address our concern.*

In response to the Staff's comments, we note that our investment portfolio does not contain any securities or underlying assets whose value is directly correlated to sub-prime debt. We note that through March 31, 2008, we had not realized any significant losses on our investment portfolio. However, our risk factor was intended to acknowledge that the sub-prime mortgage defaults may adversely affect the financial markets and may cause credit and liquidity issues in other sectors of the financial markets in the future.

However, as disclosed in our 10-K, in February 2008, auction markets began failing related to our municipal notes investments, which are primarily comprised of student loans backed by the federal government. This occurrence affected the liquidity of those investments, which represented \$95 million of our \$635 million cash and investments as of December 31, 2007. We do not believe that this liquidity impact had any significant adverse consequences on our financial statements as of the filing of our 10-K for the fiscal year ended December 31, 2007, due to the following: 1) the high credit quality (AAA rated) of the underlying issuers; 2) the rate of returns on these investments approximated market rates of returns, and 3) the Company's ability to hold these investments until liquidity returns to the municipal note auction market or to their stated maturities. In future filings, we will clarify our risk factor to confirm that we do not hold investments connected to or impacted by sub-prime lending.

Item 7. Management's Discussion and Analysis, page 36

Procedure adoption, page 38

3. *We note your disclosure that the da Vinci Prostatectomy and the da Vinci Hysterectomy have historically driven a significant portion of your growth and that you have identified the growth rates for those procedures. In your future filings, please also identify the other procedures that have accounted for a material portion of the procedures for which your system has been used and provide similar data for the procedure adoption rates for those other procedures.*

In response to the Staff's comment, we note that da Vinci Prostatectomy and da Vinci Hysterectomy accounted for over 80% of total procedures in 2007 and no other individual procedure has constituted a material portion of procedures performed on the da Vinci System. However, in future filings, if any individual procedure becomes a material portion of total procedures, we will disclose the procedure and provide similar data.

Notes to the Consolidated Financial Statements, page 59

Note 2. Summary of Significant Accounting Policies, page 59

Revenue Recognition, page 62

4. *We note your multiple arrangements generally do not contain a general right of return. If that is the case, then please clarify to us what you mean by a "general right of return" and how you recognize revenue when your multiple arrangements contain a general right of return. Revise your disclosure to address our concerns in future filings. Please provide us with your proposed disclosure.*

In response to the Staff's comment, we note that our multiple element arrangements do not contain a general right of return. Therefore, we will omit the reference to the term "generally" in future filings, beginning with our 10-Q for our second quarter ended June 30, 2008.

Stock-Based Compensation, page 73

5. *There does not appear to be any basis or context in U.S. GAAP for computing the per share effects of a form of compensation after the year of adoption of SFAS 123(R). Accordingly, in future filings, please remove share-based compensation effects on earnings per share from the financial statements or explain to us why such presentation is appropriate.*

In response to the Staff's comment, we will remove the share-based compensation effects on earnings per share from the financial statements, beginning with our 10-Q for our second quarter ended June 30, 2008.

Item 10. Directors and Executive Officers of the Registrant, page 83

6. *In future filings, please clearly provide the business experience requested in Item 401(e)(1) of Regulation S-K. We note for example it is unclear when Mr. Rubash worked at each of the disclosed companies and for Mr. Meltzer which of the identified companies he worked at during the past five years.*

In response to the Staff's comments we will clearly provide the business experience requested in Item 401(e)(1) of Regulation S-K in future filings

Board Committees, page 85

7. *We note your disclosure about one director not attending at-least 75 percent of the board and audit committee meetings. In future filings, please name any director who did not attend 75% of meetings as required by Item 407(b)(1) of Regulation S-K.*

In response to the Staff's comments, we will name any director who did not attend 75% of meetings as required by Item 407(b)(1) of Regulation S-K in future filings

Item 11. Executive Compensation, page 88

Review of External Data, page 89

8. *We note your references to the Top Five MEDIC Executive Compensation survey. In future filings, please identify the surveys you used and their components, including the component companies identified in those surveys. Also, please disclose the adjustments you made to the surveys, as you describe at the end of the first paragraph.*

In response to the Staff's comments, in future filings, we will identify the surveys used and their components, including representative companies identified in the surveys. We will also disclose the adjustments made to surveys, if applicable, for that year.

Bonuses, page 90

9. *We note that you have not disclosed the necessary corporate financial performance goals to be achieved in order for your named executive officers to earn their annual cash incentive bonuses. Please provide such disclosure in your future filings, as applicable. To the extent you believe that disclosure of the information, on a historical basis, would result in competitive harm such that the information could be excluded under Instruction 4 to Item 402(b) of Regulation S-K, please provide us with a detailed explanation supporting your conclusion. To the extent that it is appropriate to omit specific targets or performance objectives, you are required to provide appropriate disclosure pursuant to Instruction 4 to Item 402(b) of Regulation S-K. Refer also to Question 3.04 of the Item 402 of Regulation S-K Interpretations available on our website at www.sec.gov. In discussing how difficult or likely it will be to achieve the target levels or other factors, you should provide as much detail as necessary without disclosing information that poses a reasonable risk of competitive harm.*

In response to the Staff's comments, we note that our Plan is based on a two-step structure. The first step is comprised of an overall Plan funding goal tied to operating income, excluding stock option expense. The plan begins funding at the previous years operating income level, excluding stock option expense, to a maximum funding at a predetermined increase in operating income, excluding stock option expense. In the second step, amounts funded in the first step are paid to employees based on goals established in the areas of product and market development, manufacturing and quality, efficiency and cost performance and other areas directed at long-term shareholder value enhancement. We believe the operating income, excluding stock option expense, goal in the first step and the specific goals in the second step are of a nature that if disclosed, they would result in competitive harm to our Company and shareholders. As such, we believe that this information can be excluded in accordance with instruction 4 to item 402(b) of Regulation S-K and as further clarified in Question 3.04 of the Interpretations to Item 402 of Regulation S-K.

In further response to the Staff's comments, in future filings, we will discuss how difficult or likely it will be to achieve the undisclosed goals of the Plan, providing as much detail as possible without disclosing information that poses a reasonable risk of competitive harm. In addition, we will more clearly define the two-step structure of the Plan outlined above.

Grants of Plan-Based Awards page 94

10. *It appears that threshold, target and maximum amounts related to your annual cash incentive bonuses should have been disclosed pursuant to Item 402(d)(2)(iii) of Regulation S -K in your Grants of Plan-Based Awards table. Please provide such disclosure in your future filings, as applicable, or provide us with your analysis as to why such information should not have been included in that table.*

In response to the Staff's comments, in future filings, we will clearly provide the threshold, target, and maximum amounts related to our annual cash incentive bonuses pursuant to Item 402(d)(2)(iii) of Regulation S-K.

Form 10-Q for the Quarter Ended March 31, 2008

Notes to the Condensed Consolidated Financial Statements, page 6

Note 3. Fair Value, page 7

11. *We note that the fair value of your investments in municipal bonds are measured based on the unobservable inputs as described in SFAS 157. If that is the case then please disclose in your Management's Discussion and Analysis, in future filings, in a manner most useful to your particular facts and circumstances, how you determined the unobservable inputs and how the resulting fair value of your assets and liabilities and possible changes to those values, impacted or could impact your results of operations, liquidity, and capital resources. For further information, refer to the guidance at our website, <http://www.sec.gov/divisions/corpfin/guidance/fairvalue/tr0308.htm>.*

In response to the Staff's comments, in future filings, beginning with the 10-Q for the second quarter end June 30, 2008, we will disclose in Management's Discussion and Analysis how we determined the unobservable inputs and how changes in those inputs could impact the fair values of our assets and liabilities and impact our results of operations, liquidity, and capital resources.

12. Also in this regard, we note that your investments in municipal bonds contain an auction reset feature, whose underlying assets are generally student loans. We also note that in February 2008, auctions began to fail for these securities. Please address the following:

- *It appears that the fair value of your auction rate securities has declined. If that is the case then please explain to us whether you concluded that such decline in fair value was not other than temporary. Further, if you concluded that the decline in fair value is not other than temporary, please explain to us why you reached such conclusion, citing the applicable U.S. GAAP. Also in this regard, please specifically address how you considered the impact of SAB Topic 5M in your response.*

In response to the Staff's comments, we determined that the decline in the fair value of our auction-rate securities was not other than temporary as of the filing date of our 10-Q. In accordance with SFAS 115 and FSP 115-1 and FSP 124-1, and contemplating the factors described in SAB Topic 5M, we considered the decline to be other than temporary for the following reasons:

- **The fair value of the securities has been less than cost for a short period of time, approximately 2 months and our advisors indicated that there was a chance of recovery within the year.**
- **The financial condition of the issuer and their near-term prospects did not appear to have changed, as the issuers' credit ratings have remained at triple-a as rated by at least one of the major credit rating agencies and their has not been a deterioration of the underlying student loan asset. The decline in value was strictly the result of a lack of liquidity as opposed to credit issues.**
- **We have no intent to sell these investments for a loss and have the ability to hold these investments until they recover.**
- **The investments are currently paying a coupon that approximates a market-rate of return.**

However, we will continue to monitor future events that impact the auction-rate securities market and assess, on an ongoing basis, whether or not any decline in value is other than temporary.

- *Please explain to us what the net settlements of approximately \$ (63,112,000) represent. Please describe the facts and the circumstances about the net settlements and how you accounted for them. Also explain to us where on the income statement and the cash flow statement the net settlement transactions are recorded. Cite the applicable U.S. GAAP that supports your accounting and related presentations.*

The net settlements disclosed in our 10-Q of approximately \$63.1 million were the result of the sales and purchases of auction-rate securities during the quarterly period ended March 31, 2008. We sold approximately \$83.3 million of auction-rate securities and purchased approximately \$20.2 million. The sales of these securities were in amounts equal to their original cost so there was no impact on the income statement. Proceeds from the sale of these securities were invested in other types of securities in accordance with our Investment Policy and classified on the balance sheet in accordance with SFAS 115. The sale and purchase of these securities are also reflected in Investing Activities in the Condensed Consolidated Statements of Cash Flow in accordance with SFAS 95 and SFAS 115.

- *Please also disclose how the interest rate, if any, you receive on those securities is determined if the auctions related to those securities continue to fail.*

The coupon rates earned on our auction rate securities are calculated based on mathematical formulas in accordance with the individual prospectuses of each security. In general, as auctions for these securities have failed, coupon rates are adjusted for default premiums subject to maximum rates. These maximum rates were only slightly higher than the rate we earned on our remaining investment portfolio.

- *Revise your disclosure in future filings to address our concerns.*

In future filings, beginning with our 10-Q for the second quarter of June 30, 2008, we will clearly disclose whether or not declines in fair values of our investments are other than temporary, how coupon rates are determined on the auction-rate securities when auctions fail, and clarify our description of the changes in Level 3 investments.

As requested by the Staff, we acknowledge that:

- We are responsible for the adequacy and accuracy of the disclosure in the filings;
- 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
- We 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.

We appreciate the Staff's comments and request that the Staff contact the undersigned at (408) 523-2160 with any questions or comments regarding this letter.

Sincerely,

/s/ Marshall L. Mohr

Marshall L. Mohr

Senior Vice President and Chief Financial Officer

Cc: Andri Boerman, Division of Corporation Finance
Lonnie M. Smith, Intuitive Surgical, Inc.
Laura Bushnell, Latham & Watkins LLP
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