

July 25, 2008

U.S. Securities and Exchange Commission
Division of Corporation Finance
450 Fifth Street, N.W.
Washington, DC 20549
Attn: Tim Buchmiller, Senior Attorney

VIA EDGAR and Facsimile

**Re: Intuitive Surgical, Inc.
Annual Report on Form 10-K for the year ended December 31, 2007
Filed February 14, 2008
File No. 000-30713**

Dear Mr. Buchmiller:

We received your letter dated July 21, 2008 (the "Letter"), setting forth further comments of the staff (the "Staff") of the Securities and Exchange Commission (the "Commission") on our above-referenced report filed under the Securities Exchange Act of 1934, as amended. Our responses to the additional 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.

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

Procedure adoption, page 38

- 1. We have reviewed your response to prior comment 3. In addition to your undertaking in the last sentence of that response, please confirm that your applicable future filings will include the substance of the first sentence of that response, that the da Vinci Prostatectomy and da Vinci Hysterectomy procedures accounted for over 80% of total procedures in 2007 and that no other individual procedure constituted a material portion of procedures performed using your system, as updated for your then current data.*

In response to the Staff's comment, we intend to include the following disclosure in our Form 10 Q for the second quarter ended June 30, 2008: "dVP and dVH represent approximately 80% of the procedures performed and no other procedure represents a significant part of our business at this time." Furthermore, we will provide similar disclosures, as appropriate, in future filings.

Item 11. Executive Compensation, page 88

Bonuses, page 90

- 2. We have reviewed your response to prior comment 9. In future filings, as applicable, please provide as much detail as necessary so that it is clear how the threshold and maximum amounts of the incentive pool were determined with reference to the achievement of your operating income goals. Please also disclose the target, as a percentage of base salary, for each named executive officer's performance bonus.*

In response to the Staff's comments, in applicable future filings, we will clearly provide how threshold and maximum amounts of the incentive pool were determined for achieved operating income goals. In addition, we will also disclose the target as a percentage of base salary for each named executive officer's performance bonus.

We also 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: Jay Mumford, Division of Corporation Finance
Lonnie M. Smith, Intuitive Surgical, Inc.
Laura Bushnell, Latham & Watkins LLP
Nick Prior, Ernst & Young LLP