ImmunoGen, Inc. 830 Winter Street Waltham, MA 02451

March 27, 2009

VIA EDGAR

Securities and Exchange Commission Division of Corporation Finance 100 F Street, N.E. Washington, D.C. 20549 Attention: Jeffrey Riedler

Assistant Director

Re: ImmunoGen, Inc.

Form 10-K for the fiscal year ended June 30, 2008

File No. 000-17999

Supplemental response submitted February 13, 2009

Dear Mr. Riedler:

This letter is submitted on behalf of ImmunoGen, Inc. (the "Company" or "we") in response to the comments of the staff (the "Staff") of the Securities and Exchange Commission (the "Commission") as set forth in your letter to Daniel M. Junius dated March 17, 2009 (the "Second Comment Letter") with respect to the Company's Annual Report on Form 10-K for the fiscal year ended June 30, 2008 (the "2008 Form 10-K"). Reference is also made in this response to your letter to Mr. Junius dated February 3, 2009 (the "First Comment Letter") and to our supplemental response to the First Comment Letter submitted February 13, 2009 (the "First Supplemental Response"). For reference purposes, the text of each comment in the Second Comment Letter has been reproduced herein with responses below each numbered comment.

1. We note your response to comment 4 [of the First Comment Letter] and reissue the comment. As previously requested, please provide us with a draft of the presentation you propose to include in your next Form 10-K relative to your patents. It may be helpful to present the information in a chart that discloses, in addition to expiration dates, the material patents or groups of patents; the jurisdiction(s) where patent protection has been obtained; the products, product candidate(s) or technology that is dependent upon the patent(s); and whether you hold or license the patent(s).

Response 1:

In response to this comment, we will revise the presentation in our Annual Report on Form 10-K for the fiscal year ending June 30, 2009 relative to our patents to provide substantially the following disclosure:

We have a strategy of obtaining patent protection for our proprietary technologies and product candidates. As of June 30, 2009, our patent portfolio had a total of [xx] issued patents and [xx] patent applications worldwide that we own or license from third parties.

We have issued and pending patents related to monoclonal antibodies. These antibodies may be a component of a TAP compound or may be developed as a "naked" antibody anticancer therapeutic. Among these patents is an issued U.S. patent claiming a method of humanizing murine antibodies to avoid their detection by the human immune system. This patent covers certain technology that we have licensed to sanofi-aventis on a non-exclusive basis, as described elsewhere in this annual report on Form 10-K under the heading "Outlicenses and Collaboration – *sanofiaventis*." We have received comparable patents in other jurisdictions, primarily in the major countries of Europe and in Japan. These patents will expire between 2013 and 2014.

Of the [eleven] product candidates listed in the table on page [6] of this annual report on Form 10-K that are being developed by us or by our collaboration partners, [two] are naked antibodies and [nine] are TAP compounds that contain our proprietary maytansinoid cell-killing agents. We seek to protect our maytansinoids and TAP compounds through a multi-pronged approach. As of June 30, 2009, we owned [xx] issued U.S. patents specifically related to our maytansinoids, as follows: claiming composition and use of certain maytansinoids; claiming conjugates composed of maytansinoids and cell-binding agents; claiming a process for the preparation of certain maytansinoids; and claiming methods of preparation of conjugates composed of maytansinoids and cell-binding agents. In all cases we have received or are applying for comparable patents in other jurisdictions, primarily in the major countries of Europe and in Japan. We also have submitted patent applications in the U.S., Europe, Japan and elsewhere covering other aspects of our TAP technology, including methods of attachment of cell-killing molecules to antibodies and the antibody component of TAP compounds as discussed above, as well as the use of some of these product candidates and inventions for certain diseases. We expect our work will lead to other patent applications. In all such cases, we will either be the assignee or owner of such patents or have an exclusive license to the technology covered by the patents.

Typically, multiple issued and pending patents can apply for each TAP compound, and the patents that apply can vary among the TAP compounds and over time. For example, we have issued patents that extend beyond 2020 that cover aspects of the manufacturing of the maytansinoid cell-killing agents used to make trastuzumab-DM1, IMGN901, IMGN242, and other TAP compounds. We have issued patents covering our DM1 and DM4 maytansinoid cell-killing agents that expire in 2010 and 2024, respectively, and a pending patent covering conjugates using our SMCC thioether linker which, if issued as filed, would cover antibody-maytansinoid conjugates using this linker, such as trastuzumab-DM1.

As of June 30, 2009, we also owned issued patents covering proprietary derivatives of non-maytansinoid cell-killing molecules. These additional patent families are currently not material to our business.

As described elsewhere in this annual report on Form 10-K under the heading "In-Licenses – *Centocor, Inc.*," we have in-licensed certain technology from Centocor in connection with the development of our IMGN388 product candidate. In addition, we have in-licensed intellectual property relating to our IMGN901 and IMGN242 product candidates from Dana-Farber Cancer Institute and Pfizer Inc., respectively. We do not believe that the terms of either of these licenses are material to our business or prospects.

We cannot provide assurance that the patent applications will issue as patents or that any patents, if issued, will provide us with adequate protection against competitors with respect to the covered products, technologies or processes.

We note the Staff's suggestion regarding the presentation of the foregoing information in a chart. We believe that this type of presentation would be premature for development-stage product candidates for which the final formulation, manufacturing processes and allowed uses are not yet fixed; however, as these product candidates become approved products we will reconsider the usefulness of a tabular presentation of this information.

2. We note your response to comment 5 [of the First Comment Letter] and have the following comments. Please confirm that the corporate performance criteria chart and discussion on page 5 of your response will be included in your future filings to the extent applicable. In addition, since there were no pre-established individual objectives, please describe the factors the Compensation Committee considered in its decision to pay target bonus of 100% to Messrs. Sayare, Junius and Lambert and a target bonus of 85% to Mr. Tagliamonte.

Response 2:

We note the Staff's comment and confirm that the corporate performance criteria chart and discussion on page 5 of the First Supplemental Response will be included in our future filings to the extent applicable.

As set forth in the First Supplemental Response, in all but one case the portion of the executives' target bonus tied to individual performance was discretionary and not based on the achievement of pre-established objectives, and the Compensation Committee's determination of the individual portion of the target bonuses for these executive officers was based on an evaluation of the respective executive's overall performance and contributions to the Company based on qualitative/subjective factors (e.g., judgment, experience and leadership in setting corporate goals, effectiveness in carrying out responsibilities as members of the Company's senior management team). The Compensation Committee does not specifically allocate or weight these qualitative/subjective factors and generally reviews the entire mix of the executive's performance when determining annual bonus awards. Although the members of the Compensation Committee discuss and analyze the Company's and each executive's performance as a group, members makes their own individual judgment about which factors are important, and how to allocate or weight those factors in reaching a conclusion. It is possible, and likely, under this system, that different members of the Compensation Committee may reach the same determination with

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respect to individual performance for different reasons. To the extent applicable, in future filings, we will disclose the individual performance factors as set forth in the First Supplemental Response and how the Compensation Committee reviews these factors as discussed above.

3. We note your response to comment 6 [of the First Comment Letter]. Your response concludes that the requested disclosure is likely to cause competitive harm without providing an analysis. Therefore, the comment is reissued. Please provide the specific qualitative and quantitative targets or provide a detailed analysis demonstrating that the requested information is not material to investors and likely to cause competitive harm if the information is disclosed.

Response 3:

As set forth in the First Supplemental Response, the corporate performance objectives used in our annual executive bonus program primarily related to internal product development efforts, partner products, the Company's financial performance and business development efforts and Mr. Tagliamonte's individual objectives used in this program related to expanding relationships with existing collaborators, identifying potential new collaborators and enhancing internal business development staffing capabilities. Underlying these objectives are specific quantitative/objective targets designed to measure whether the Company or the individual achieved the overall objective. As set forth in the First Supplemental Response and discussed in greater detail below, we believe that disclosure of the confidential commercial and/or financial information relating to the specific targets underlying the overall objectives would result in competitive harm to the Company, and that such information can be excluded under Instruction 4 to Item 402(b) of Regulation S-K.

We believe that the disclosure of the specific quantitative/objective performance targets that would result in the payment of bonuses would cause the Company competitive harm in that our competitors would know exactly the level of development of our internal and partnered programs and how much in terms of cash-on-hand, expenses, additional capital, new out-licensing opportunities, as well as the number and timing of other specific business development objectives, we would consider to be sufficient to warrant the payment of a cash bonus. Disclosure of the specific targets would offer insight into how optimistic or pessimistic our assumptions are about these components of its strategic plan and business, and could thus allow competitors to adjust their expectations and business planning accordingly, to our detriment, without giving us similar insight into their plans, expectations and strategies.

The specific internal resource allocations and specific development milestones underlying the internal and partner product development targets, the desired amounts of new out-licensing opportunities underlying the business development objectives and the individual business development objectives, if disclosed, would provide competitors with significant insight into our and our partners' research, development and commercialization plans and would reveal otherwise unavailable information regarding the nature and timing of the anticipated development processes and the resources allocated to our internal and external development programs. In addition, disclosure of these targets would provide our partners, potential partners and competitors

information with respect to our costs to develop our products without affording us the same opportunity to analyze similar information regarding their programs. This would place us at a severe competitive disadvantage and provide a windfall to partners, potential partners and competitors. In addition, partners, potential partners and competitors would have access to confidential information regarding our capabilities and potential costs and this information could be used to our disadvantage in future negotiations with partners and competitors could use this information to undercut our development plans. In essence, the disclosure of these targets would provide a valuable roadmap to third parties of our (and in some cases, our partners') research, development and commercialization strategy, and would negatively impact our negotiation strategy with potential partners and other parties with whom we do business.

Disclosure of the specific expense, cash-on-hand and capital raising targets underlying the financial performance objectives, the desired amounts of new out-licensing opportunities underlying the business development objectives and the individual business development objectives would cause competitive harm to the Company. This information would provide the Company's competitors with valuable insight into the Company's views on the state of its markets and its ability to generate revenues, to compete in these markets and to develop new business opportunities. Disclosure of this information would also provide competitors with information that could be used to extrapolate the Company's assumptions underlying its business plan, as well as the Company's expected cash position and operating performance, all of which would allow competitors to adjust their existing and proposed strategies in ways that would undermine the Company's ability to grow its partnering revenue and improve its capital position and business prospects.

For these reasons, the Company respectfully requests that it not be required to disclose the quantitative/objective annual corporate and individual performance targets for the above mentioned objectives in connection with its executive compensation disclosure.

In addition, the Company confirms that pursuant to Instruction 4 to Item 402(b) of Regulation S-K, in applicable future filings, the Company will disclose the degree of difficulty that its expects will be experienced in achieving any undisclosed quantitative/objective performance targets.

As requested in the Comment Letter, the Company acknowledges 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.

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If you should have any questions concerning the enclosed matters, please contact the undersigned at (781) 895-0600.
Sincerely,
/s/ Craig Barrows
Craig Barrows Vice President and General Counsel