ImmunoGen, Inc. 830 Winter Street Waltham, MA 02451

February 13, 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

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 February 3, 2009 (the "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"). For reference purposes, the text of each comment in your letter has been reproduced herein with responses below each numbered comment.

Outlicenses and Collaborations, page 10

1. Please file your agreements with Amgen and Centocor. Alternatively, provide us with an analysis supporting your determination that you are not required to file these agreements.

Response 1:

Amgen Agreement

Please note that a redacted version of the agreement with Amgen referenced on page 12 of the 2008 Form 10-K was filed as Exhibit 10.11 to the 2008 Form 10-K through incorporation by reference to Exhibit 10.1 to our Current Report on Form 8-K/A, filed on October 20, 2000. Please note that Amgen is a successor-in-interest to Abgenix, Inc. under this agreement, and this will be appropriately noted when listing this Exhibit in future filings.

Centocor Agreements

As described on page 3 of the 2008 Form 10-K, we have developed a Tumor-Activated Prodrug ("TAP") technology that uses antibodies to deliver a potent cytotoxic agent specifically to cancer

cells. We develop our own anticancer compounds using this technology (*e.g.*, IMGN901, IMGN242 and IMGN388) and also out-license the technology to third parties. As described on page 13 of the 2008 Form 10-K, "[f]rom time to time we may in-license certain rights to targets or technologies in conjunction with our internal efforts to develop both TAP and naked-antibody products and related technologies." In this regard, we have licensed certain intellectual property rights from Centocor under the 2007 agreement with Centocor referenced on page 14 of the 2008 Form 10-K (the "2007 Centocor Agreement") in connection with the development of our IMGN388 compound. This compound is in early stage Phase I clinical trials, and in light of the development status of our other internal drug candidates as well as those of our third party collaborators, the Company's business at this time is not substantially dependent on the development of IMGN388, and therefore the Company's business at this time is not substantially dependent on the 2007 Centocor Agreement. Therefore, we do not believe that the 2007 Centocor Agreement is required to be filed on the basis that this contract was entered into in the ordinary course of our business, and does not fall within any of the categories of agreements described in paragraphs (ii)(A), (B), (C) or (D) of Item 601(b)(10) of Regulation S-K that are required to be filed.

We entered into the 2004 agreement with Centocor referenced on page 14 of the 2008 Form 10-K (the "2004 Centocor Agreement") in the ordinary course of our business and we are not substantially dependent on this agreement. Moreover, the 2007 Centocor Agreement reallocates the parties' respective responsibilities and financial obligations from the 2004 Centocor Agreement, as described on page 14 of the 2008 Form 10-K. Therefore, we do not believe that the 2004 Centocor Agreement is required to be filed on the basis that this contract was entered into in the ordinary course of business, and does not fall within any of the categories of agreements described in paragraphs (ii)(A), (B), (C) or (D) of Item 601(b)(10) of Regulation S-K that are required to be filed.

In the event we determine that the Company has become substantially dependent on either the 2007 Centocor Agreement or the 2004 Centocor Agreement, then we will make the required filings at that time.

2. Please revise the discussion of the Amgen agreement to quantify the aggregate amount of potential milestone payments.

Response 2:

We note the Staff's comment and will comply with its request in applicable future filings, beginning with our Annual Report on Form 10-K for the fiscal year ending June 30, 2009. We note that under the Amgen agreement, Amgen is entitled to license our TAP technology to develop products directed to

specific targets, and that potential milestone payments arise under these separate development licenses. To date, Amgen has not taken any development licenses under this agreement.

Other Agreements, page 14

3. We note the agreements with Cytovance Biologics and Laureate Pharma are described in this section and in the notes to the financial statements, however these agreements have not been filed as exhibits. Additionally, please provide us with an analysis supporting your determination that the agreements are not required to be filed as exhibits pursuant to Item 601(b)(10) of Regulation S-K.

Response 3:

As described in Response 1 above, in the ordinary course of our business we develop our own anticancer compounds utilizing our TAP technology. We have contracted with Cytovance Biologics and Laureate Pharma to develop processes for cGMP production of our huN901 and huC242 antibodies for potential use in pivotal trials and commercial applications of IMGN901 and IMGN242, respectively. Our business is not substantially dependent on these agreements because there are alternatives available to us on commercially reasonable terms for the services provided by each of these vendors, and any such change of such vendors would not materially disrupt our business. Moreover, our business is not at this time substantially dependent on our ability to obtain antibodies for use in pivotal trials and commercial applications of either of these compounds, both of which are currently in early to mid-stage clinical trials. Therefore, we do not believe that the agreements with Cytovance Biologics and Laureate Pharma referenced on page 14 of the 2008 Form 10-K are required to be filed on the basis that these contracts were entered into in the ordinary course of our business, and do not fall within any of the categories of agreements described in paragraphs (ii)(A), (B), (C) or (D) of Item 601(b)(10) of Regulation S-K that are required to be filed.

In the event we determine that the Company has become substantially dependent on either the agreement with Cytovance Biologics or the agreement with Laureate Pharma, then we will make the required filings at that time.

Patents, Trademarks and Trade Secrets, page 15

4. Please discuss your material patents or groups of related patents. The discussion should identify the jurisdiction(s) where you have obtained patent protection, identify the product(s), product candidate(s) or technology that are dependent on the patent(s), disclose when the patent(s) expires, and disclose whether you hold or license the patent(s).

Response 4:

As is typical for a biotechnology company, the value of our business depends in large part on obtaining patent protection for our proprietary technology and product candidates. As described in the 2008 Form 10-K, currently all but one of our internal and our collaborators' product candidates currently in clinical trials utilize our maytansinoid-based TAP technology. Patents that

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have been issued to us in the U.S. with respect to our maytansinoid-based TAP technology include the following: 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. We also have patents issued to us in the U.S. claiming a method of antibody humanization. In all cases we have received or are applying for comparable patents in other jurisdictions, primarily in Europe and Japan. We also have pending patent applications that may result in the issuance of patents relating to one or more of our internal or our collaborators' product candidates. Our patents relating to our TAP technology platform generally apply to all product candidates employing this technology.

In applicable future filings, beginning with our Annual Report on Form 10-K for the fiscal year ending June 30, 2009, we will note the range of expiration dates for our maytansinoid-based TAP technology patents.

In addition to the in-license covered by the 2007 Centocor Agreement, we have in-licensed intellectual property relating to our IMGN901 and IMGN242 products. We do not believe that the terms of either of these licenses are material to the Company's business or prospects.

Item 11. Executive Compensation

5. We note the discussion under the section of your proxy statement entitled "Annual Executive Bonus Program." Please provide us with more information concerning the performance criteria and target levels for fiscal year 2008 executive compensation in connection with (a) the company performance objectives and goals and (b) the objectives and goals relating to the functional area and individual performance of each particular executive officer. Please explain how the company and individual goals determine each officer's annual bonus.

Response 5:

For fiscal year 2008, target bonus awards as a percentage of base salary were set for our executive officers as follows: Dr. Sayare (CEO) – 50%; Mr. Junius (CFO) – 35%; Dr. Lambert (Senior VP, R&D) – 30%; and Mr. Tagliamonte (VP, Bus. Dev.) – 30% (appropriately pro-rated to reflect his service during fiscal year 2008). For each executive, 70% of the target bonus was tied to the achievement of pre-established corporate objectives, and 30% was tied to individual performance. The corporate performance criteria included certain pre-defined "stretch" goals that, to the extent met, entitled the executives to receive up to an additional 50% of the portion of their target bonuses tied to corporate performance; however, unless corporate goals (including the "stretch goals") representing at least a 50% payout of the target corporate bonus were achieved, no bonuses would have been paid based on corporate performance. As described below, 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 individual performance objectives.

Corporate Performance. The corporate performance criteria were structured into four groups as described in the table below. The table also shows the relative weighting of the areas with specific performance objectives within each group based on target, maximum (assuming achievement of stretch goals); and actual attainment for fiscal year 2008. As shown in the table, based on our management's assessment of its performance against the performance criteria described below, the Compensation Committee determined that 67.5% of the portion of the executives' target bonuses tied to corporate performance had been earned for fiscal year 2008.

Corporate Performance Criteria	Target	Max (w/stretch)	Actual
Internal Product Development	60%	90%	40%
IMGN901 clinical progress	20%	30%	15%
IMGN242 clinical progress	15%	25%	5%
Antibody manufacturing-related activities	20%	20%	10%
Pipeline expansion programs	5%	15%	10%
Financial Performance	17.5%	22.5%	7.5%
Controlling operating expenses	2.5%	2.5%	2.5%
Maintaining a pre-determined cash balance	5%	5%	5%
Raising additional capital	10%	15%	—
Partner Products (1)	17.5%	22.5%	15%
Business Development (2)	5%	15%	—
Total	100%	150%	67.5%

(1) The objectives in this category were tied to specific milestones relating to our support of collaboration partners that have licensed our TAP technology to develop their own products.

(2) The objectives in this category were tied to developing new out-licensing opportunities for our TAP technology, in certain cases relating to specific product candidates in certain markets.

Individual Performance. Based on the non-management directors' evaluation of the individual performance of Dr. Sayare (CEO), in which the Compensation Committee did not consider any pre-established individual performance objectives, the Committee determined that the individual performance of Mr. Junius and Dr. Lambert, in which he did not consider any pre-established individual performance objectives, the Compensation Committee determined that the individual performance objectives, the Compensation of the individual performances of Mr. Junius and Dr. Lambert, in which he did not consider any pre-established individual performance objectives, the Compensation Committee determined that the individual portion of these executives' target bonuses for fiscal year 2008 would be paid out at 100%. Based on Dr. Sayare's evaluation of Mr. Tagliamonte's achievement of certain specific individual performance objectives established by Dr. Sayare, the

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Compensation Committee determined that the individual portion of Mr. Tagliamonte's target bonus would be paid out at 85%.

The Compensation Committee's determination of the individual portion of the target bonus for Dr. Sayare was based on the non-management directors' overall evaluation of his judgment, experience and leadership in setting corporate goals, the performance of his responsibilities as the Company's primary spokesman, and of his effectiveness in carrying out his other management responsibilities. The Committee's determination of the individual portions of the target bonuses for Mr. Junius and Dr. Lambert was based on Dr. Sayare's evaluation of their respective overall contributions to setting corporate goals as well as their effectiveness in carrying out their respective responsibilities as members of the Company's senior management team. In each case the Committee did not assign any weighting to the individual factors considered. With respect to the portion of Mr. Tagliamonte's target bonus tied to individual performance, the Committee's determination was based on Dr. Sayare's evaluation of Mr. Tagliamonte's accomplishment of specific actions relating to expanding relationships with existing collaborators, identifying potential new collaborators, and staff development in business development, all of which were designed to further the corporate performance criteria related to business development.

Based on the foregoing, the executives' bonuses for fiscal year 2008, as shown in the Summary Compensation Table in the 2008 annual meeting proxy statement, constituted the following percentages of the executives' annual base salary: Dr. Sayare -38.6%; Mr. Junius -27%; Dr. Lambert -23.2%; and Mr. Tagliamonte -22.5%.

6. Please identify the specific qualitative or quantitative target that each corporate and individual goal was designed to achieve, and state whether these targets were achieved. To the extent you believe disclosure of these targets is not required because it would cause competitive harm, provide us on a supplemental basis a comprehensive analysis supporting your determination that disclosure of the information is likely to cause competitive harm and that it is not material to investors. If disclosure of performance-related factors would cause competitive harm, please discuss further how difficult it would be for the named executive officer or how likely it will be for you to achieve the target levels or other factors.

Response 6:

Corporate Performance. With respect to the annual executive bonus program for fiscal year 2008, we have provided a more detailed description of the corporate objectives in Response 5. We respectfully submit that any more specific information with respect to the corporate objectives than as described in Response 5 constitutes confidential and sensitive information that, if disclosed, could hinder our ability to effectively compete against our competitors, or put us at a significant competitive disadvantage in negotiations with third parties. We respectfully submit that, because the disclosure of this

confidential information could result in competitive harm to the Company, it may be omitted from our Compensation Discussion and Analysis disclosure pursuant

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to Instruction 4 to Item 402(b) of Regulation S-K. The Company believes that public disclosure of more detailed information concerning our corporate objectives is not necessary for, or relevant to the protection of, our investors and that, although significant to our Board of Directors and management, this information is not material to our investors' general understanding of our business or prospects.

The Compensation Committee establishes the corporate performance criteria with the expectation that the Company can achieve 100% of the target; however, the criteria are sufficiently difficult that such achievement is not assured at the time such objectives are set. For example, in fiscal years 2006 and 2007, only 85% of the portion of the executives' target bonuses tied to corporate performance was earned, and as described above, in fiscal year 2008, only 67.5% of the portion of the executives' target bonuses tied to corporate performance was earned. In applicable future filings, beginning with our Annual Report on Form 10-K for the fiscal year ending June 30, 2009 (or our 2009 annual meeting proxy statement, to the extent the Form 10-K incorporates information by reference to that proxy statement), we will similarly disclose how likely it would have been for the Company to achieve the corporate performance criteria in the annual executive bonus program at the time such objectives were set.

Individual Performance. As described in Response 5, the Compensation Committee did not consider any pre-established individual performance objectives in determining the amounts to be paid out with respect to the individual portion of the target bonuses for Dr. Sayare, Mr. Junius and Dr. Lambert for fiscal year 2008. The Compensation Committee considered the individual performance portion of these executives' target bonuses to be discretionary, and the factors considered by the Committee with respect to each executive are described in Response 5.

We have provided a more detailed description of Mr. Tagliamonte's individual performance objectives in Response 5. We respectfully submit that any more specific information with respect to these objectives than as described in Response 5 constitutes confidential and sensitive information that, if disclosed, could put us at a significant disadvantage in negotiations with third parties. We respectfully submit that, because the disclosure of this confidential information could result in competitive harm to the Company, it may be omitted from our Compensation Disclosure and Analysis disclosure pursuant to Instruction 4 to Item 402(b) of Regulation S-K. The Company believes that public disclosure of more detailed information concerning specific individual performance objectives is not necessary for or relevant to the protection of, our investors and that, although significant to our Board of Directors and management, this information is not material to our investors' general understanding of our business or prospects. In applicable future filings, beginning with our Annual Report on Form 10-K for the fiscal year ending June 30, 2009 (or our 2009 annual meeting proxy statement, to the extent the Form 10-K incorporates information by reference to that proxy statement), we will disclose how difficult it would have been for our executives to achieve the portion of their target bonuses tied to established individual performance objectives, if any, at the time such objectives were set.

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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.

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

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