[Letterhead of Marshall Edwards, Inc.]

February 16, 2011

VIA EDGAR

Securities and Exchange Commission 100 F Street, N.E.

Washington, D.C. 20549

Attention: Jeffrey P. Riedler, Assistant Director

Sebastian Gomez Abero

Re: Marshall Edwards, Inc.

Registration Statement on Form S-4 (File No. 333-172006)

Ladies and Gentlemen:

This letter is being filed in response to comments from the staff (the "Staff") of the Securities and Exchange Commission (the "Commission") transmitted by letter dated February 10, 2011, to the undersigned Daniel P. Gold, PhD, Chief Executive Officer of Marshall Edwards, Inc. (the "Company"), with respect to the above-referenced Registration Statement on Form S-4 (the "Form S-4") filed with the Commission on February 1, 2011.

This letter recites each Staff comment and then provides the Company's response to that comment.

General

1. Comment: Please revise your registration statement to include with respect to both Marshal[l] Edwards, Inc. and Novogen Limited pro forma financial statements giving effect to the transaction. Alternatively, please provide us with a detailed analysis supporting your conclusion that you are not required to include such pro forma financial statements.

Response:

Article 11 of Regulation S-X requires pro forma financial information to be presented under specified circumstances, including when a significant business combination has occurred or is probable and/or when consummation of other events or transactions has occurred for which disclosure of pro forma financial information would be material to investors. The Company has determined that inclusion of pro forma information is not required in its Form S-4 for the Isoflavone Transaction because the transaction does not constitute a business combination and that disclosure of pro forma financial information would not be material to investors.

As described in the Form S-4, the Isoflavone Transaction involves the Company's purchase of certain intellectual property (the "Isoflavone-related Assets") related to isoflavone technology that is currently owned by its majority stockholder Novogen Limited ("Novogen"), and some of which is licensed from Novogen by the Company, in exchange for 1,000 shares of Series A Convertible Preferred Stock, par value \$0.01 per share, of the Company. As explained below, the Company has determined that the assets being acquired do not constitute a "business" and therefore the transaction is not a "business combination" under Rule 11-01 of Regulation S-X or under generally accepted accounting principles.

Securities and Exchange Commission February 16, 2011 Page 2 of 4

The Isoflavone-related Assets being acquired by the Company do not constitute a separate entity, a subsidiary or a division of Novogen for which Rule 11-01(d) states that a presumption of being a "business" would exist. Rule 11-01(d) further states that in evaluating whether an acquisition of a lesser component of an entity constitutes a business the following facts and circumstances, among others, should be considered:

- (1) Whether the nature of the revenue producing activity of the component will remain generally the same as before the transaction. The Isoflavone-related Assets comprise intellectual property rights relating to a wide range of isoflavone plant compounds, the vast majority of which have not been under development for any use. As such, the Isoflavone-related Assets have not historically produced any revenue for Novogen, other than license fees paid by the Company for limited uses of a small portion of such intellectual property relating solely to the potential development of cancer treatment applications. These license agreements (which are the only license agreements Novogen has entered into for any of the Isoflavone-related Assets) will be terminated upon consummation of the transaction. The Isoflavone-related Assets do not include any products approved for commercial use and the Company does not expect the Isoflavone-related Assets to produce any revenues unless and until the Company is able to obtain regulatory approval for commercial use of drug candidates based on such assets. The Company's current development plans related to the drug candidates based on certain of the Isoflavone-related Assets are in their pre-clinical stage of development and regulatory approval for commercial use is not expected to be received in the short term. Furthermore, the Company has not entered into any joint development, license or marketing agreements with third parties.
- (2) Whether any of the following attributes remain with a component after the transaction: (i) physical facilities, (ii) employee base, (iii) market distribution system, (iv) sales force, (v) customer base, (vi) operating rights, (vii) production techniques and (viii) trade names. As a collection of intellectual property for which no commercial use has been approved by regulators (nor as described above is any such approval expected in the short term), none of these attributes are applicable to the Isoflavone-related Assets. Specifically, the Isoflavone-related Assets do not include physical facilities, an employee base, market distribution system, sales force, customer base, operating rights, production techniques or trade names.

Based on the factors discussed above, the Company does not believe that the Isoflavone-related Assets constitute a business and therefore the Company does not believe that the Isoflavone Transaction constitutes a business combination.

In addition, as discussed below, the Company does not believe the presentation of such pro forma financial information would be material to investors in either the Company or Novogen so as to warrant disclosure in accordance with Rule 11-01(a) (8) of Regulation S-X. Rather, the Company intends to add additional narrative discussion in the Form S-4 in the sections entitled "Summary—Anticipated Accounting Treatment" on page 6 and "The Isoflavone Transaction—Anticipated Accounting Treatment" on page 47 to help readers better understand the impact of this transaction. This is explained below.

Presentation of pro forma financial statements would not be material to investors due to there being no impact on the financial statements of the Company or Novogen for the year ended June 30, 2010 or the six months ended December 31, 2010 other than the elimination of \$1,500,000 of license fees expensed and paid to Novogen by the Company during the fiscal year ended June 30, 2010. Furthermore, the Company will record the Isoflavone-related Assets acquired as a result of the Isoflavone Transaction at their historical carrying amounts, as originally recorded by Novogen, which were zero (\$0), because the transaction is between entities under common control. The Company will record as a reduction in shareholders equity, the excess of the fair

Securities and Exchange Commission February 16, 2011 Page 3 of 4

value of the 1,000 shares of the Series A Convertible Preferred Stock to be issued as consideration over the zero (\$0) carrying amounts of the assets acquired. The fair value of the 1,000 shares of the Series A Convertible Preferred Stock to be issued as consideration in the transaction will be recorded as an increase in shareholders' equity, offsetting the reduction in shareholders' equity recorded on acquisition of the assets and consequently resulting in no overall adjustment to the Company's balance sheet. Novogen will fully eliminate the effect of the Isoflavone Transaction on consolidation as it is a transaction between entities under common control and therefore no adjustments to assets or liabilities will be required in its financial statements.

The Company therefore believes that pro forma disclosure would not be material to investors in either the Company or Novogen, however, in order to enhance the reader's understanding of the Isoflavone Transaction the Company proposes to add the following disclosure at the end of the section entitled "Summary—Anticipated Accounting Treatment" on page 6 of the Form S-4 and the section entitled "The Isoflavone Transaction—Anticipated Accounting Treatment" on page 47 of the Form S-4:

If pro forma effect were given to the Isoflavone Transaction, the impact on the statement of operations of Marshall Edwards for the year ended June 30, 2010 would be to reduce operating expenses relating to license fees by \$1,500,000 and there would be no impact on the statement of operations for the six months ended December 31, 2010. The impact on the balance sheet of Marshall Edwards as of June 30, 2010 would be to increase Marshall Edwards' cash balance by \$1,500,000 related to the license fee mentioned above and there would be no other impact on the balance sheet as of December 31, 2010. If pro forma effect were given to the Isoflavone Transaction, there would be no impact on Novogen's statement of financial position as of June 30, 2010 and December 31, 2010 and no impact on Novogen's statement of comprehensive income for the year and six months ended June 30, 2010 and December 31, 2010 respectively, as the transaction is between entities under common control and would eliminate on consolidation.

2. Comment: Please revise your registration statement to provide the information required by Part I.C (Information about the Company being Acquired) for Novogen Limited or, alternatively, please provide us with a detailed analysis supporting your conclusion that such information is not required.

Response:

The Company does not believe that the information specified in Part I.C of Form S-4 is required to be included in the Form S-4 relating to the Isoflavone Transaction. Part I.C of Form S-4 ("Information About the Company Being Acquired") requires certain information regarding a company ("whose securities are") being acquired by the registrant, including financial statements and other financial and operational information.

In the subject transaction, the Company is not acquiring a company, or the securities of a company, but rather is acquiring certain assets of Novogen consisting of intellectual property relating to isoflavones (the "Isoflavone-Related Assets"). The Isoflavone-related Assets, and the license agreements that the Company has with Novogen for certain uses of some of these assets, including the license fees historically paid and payable in the future by the Company thereunder, are described in the Form S-4, including on pages 6, 48, 95 to 100, F-13 to F-16 and F-28 to F-31. As stated on page 29 of the Form S-4, following the consummation of the transaction Novogen will retain isoflavone assets relating to soy and red clover compounds, as well as its consumer health business, majority interest in Glycotex Inc. and other assets, including its equity interests in the Company.

As described above in response to the Staff's first comment, the Isoflavone-related Assets being acquired by the Company do not comprise an entity or constitute a "business" under Rule 11.01(d) of Regulation S-X and, accordingly, historical financial statements with respect to such assets are not required under Rule 3-05(a) of

Securities and Exchange Commission February 16, 2011 Page 4 of 4

Regulation S-X and, as also noted above in response to comment no. 1, pro forma financial information would not be material to investors in any event. In addition, the Company does not believe that the other information called for by Part I.C of Form S-4 is required in its Form S-4 as no company or business is being acquired and, moreover, the information called for by Part I.C of Form S-4 is not material for intellectual property assets such as the Isoflavone-related Assets with no revenue producing activity or integrated operations that would allow the financial information, MD&A or other Part I.C information to be prepared or to render it meaningful.

The Company respectfully advises the Staff that the Company has used Form S-4 in connection with this transaction in accordance with General Instruction A.1 to Form S-4 and Rule 145(a)(3) under the Securities Act of 1933 which requires registration of a transaction involving a vote of the seller's shareholders and a subsequent distribution of the securities to be issued in the transaction to the voting shareholders of the seller in certain circumstances. As stated on page 6 and elsewhere in the Form S-4, although no determination has been made, the Company understands that among the various strategic alternatives which may be contemplated by Novogen are possible distributions of Company securities held by Novogen, including the shares of common stock issuable upon the conversion of the Series A Convertible Preferred Stock to be issued in the Isoflavone Transaction, to the Novogen shareholders. No distribution of Marshall Edwards securities held by Novogen will be made unless the Novogen board of directors first determines to make such distribution and Novogen shareholders subsequently approve such distribution in the form determined by the Novogen board of directors. Any such distribution would not be subject to the consent of the Company. Novogen may elect not to, or may be unable, to pursue or consummate any such transaction.

If you have any questions concerning responses to these comments, please contact the undersigned at (858) 792-0865 or Thomas M. Zech at (858) 369-7111.

Very truly yours,

/s/ Daniel P. Gold

Daniel P. Gold President and Chief Executive Officer

Steven A. Navarro Finnbarr D. Murphy Morgan, Lewis & Bockius LLP 101 Park Avenue New York. New York 10178

cc:

Simon Coulton BDO Audit (NSW-Vic) Pty Limited Level 19, Market St. Sydney, NSW 2000 Australia