



DIVISION OF  
CORPORATION FINANCE

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549

August 30, 2013

Via E-mail  
Ori Hadomi  
Chief Executive Officer  
Mazor Robotics Ltd.  
7 Haeshel Street  
Caesarea Industrial Park South  
38900 Israel

**Re: Mazor Robotics Ltd.  
Confidential Draft Registration Statement on Form F-1  
Submitted August 5, 2013  
CIK No. 0001566844**

Dear Mr. Hadomi:

We have limited our review of your draft registration statement to those issues we have addressed in our comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by providing the requested information and either submitting an amended draft registration statement or publicly filing your registration statement on EDGAR. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing the information you provide in response to these comments and your amended draft registration statement or filed registration statement, we may have additional comments.

Confidential Draft Registration Statement

1. Please revise to include all information other than that which can be omitted as provided by Rule 430A when you file your Form F-1. For example, we note the blanks currently on the prospectus cover.
2. Please include the names of the lead underwriters in the next amended draft registration statement or filed registration statement. Please be advised that we will defer our review of any amended draft registration statement or filed registration statement that does not include the names of the lead underwriters and will proceed with our review only when the lead underwriters are named in an amended draft registration statement or filed registration statement.

Prospectus Summary, page 4

3. Please discuss briefly your history of net losses, accumulated deficit and that you anticipate that you will continue to incur substantial net losses for at least the next two years. We note the disclosure in the risk factor on page 11.
4. Please revise to avoid the use of compound annual growth rates, as the limited information about two points in time may obscure important information about the intervening period. In addition, where you present your revenue numbers in the summary, please also provide the associated income or loss number for the period presented.

If we, or the other parties from whom we license intellectual property, page 23

5. Since you have entered into a distribution agreement resulting in sales to your distributors in China, disclose that China has historically provided less protection to a company's intellectual property than the United States.

We may lose our foreign private issuer status in the future, page 40

6. Clarify that Form 20-F permits a foreign private issuer to disclose compensation information on an aggregate basis only if executive compensation disclosure on an individual basis is not required or otherwise has not been provided in the issuer's home jurisdiction. See Form 20-F Item 6.B. In addition, please revise your disclosure throughout to make clear whether you are taking advantage of the ability to disclose compensation in this manner.

Risks relating to an investment in our ADSs and this offering, page 35

7. Add a risk factor that discloses the risks resulting from the fact that, because an ADS holder's voting and distribution rights are governed by the deposit agreement, an ADS holder may not have, or may not be able to exercise, the same voting and distribution rights as an ordinary shareholder.

Price Range of Ordinary Shares, page 42

8. Provide the high and low closing sale prices of your ordinary shares on the TASE for each of the most recent six months. See Form 20-F Item 9.A.4.(c).

Use of Proceeds, page 43

9. Please disclose the portion of the proceeds that you intend to use for each of the purposes mentioned in the first sentence of the second paragraph. If you do not have a specific

plan for a significant portion of the proceeds, please say so clearly and discuss the principal reasons for the offering.

Capitalization, page 45

10. The capitalization table should not function as a balance sheet. Therefore, either delete the reference to “cash and cash equivalents,” or else present the “cash and cash equivalents” item separately from the liabilities and shareholders’ equity items in the capitalization table.

Dilution, page 47

11. Please revise to disclose how the data in the tables on page 47 would change assuming the exercise of all warrants and options.

Selling and marketing expenses, page 54

12. Please expand the disclosure in this section to disclose the amount of the excise tax fee that is included within sales and marketing expenses. We note the disclosure in the first paragraph on page 140 regarding the medical devices excise tax.

Corporate governance practices, page 101

13. Since you apparently intend to meet the Nasdaq rule requiring that a majority of a listed company’s board be independent, identify those board members that satisfy this requirement.

Description of Ordinary Shares, page 120

14. Clarify whether Israeli law or your articles of association allow for:
  - cumulative voting;
  - a shareholder’s right of inspection of corporate records; and
  - the issuance of preferred stock or the adoption of other "poison pill" measures that could prevent a takeover attempt and thereby preclude shareholders from realizing a potential premium over the market value of their shares.

Underwriting, page 141

15. Please explain the significance of the phrase “joint book-running” to investors.

Ori Hadomi  
Mazor Robotics Ltd.  
August 30, 2013  
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If you intend to respond to these comments with an amended draft registration statement, please submit it and any associated correspondence in accordance with the guidance we provide in the Division's October 11, 2012 announcement on the SEC website at <http://www.sec.gov/divisions/corpfin/cfannouncements/drsfilingprocedures101512.htm>.

Please keep in mind that we may publicly post filing review correspondence in accordance with our December 1, 2011 policy (<http://www.sec.gov/divisions/corpfin/cfannouncements/edgarcorrespondence.htm>). If you intend to use Rule 83 (17 CFR 200.83) to request confidential treatment of information in the correspondence you submit on EDGAR, please properly mark that information in each of your confidential submissions to us so we do not repeat or refer to that information in our comment letters to you.

Please contact Tom Jones at (202) 551-3602 or me at (202) 551-3528 with any questions.

Sincerely,

/s/ Amanda Ravitz

Amanda Ravitz  
Assistant Director

cc (via e-mail): Edwin L. Miller, Jr.