



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

DIVISION OF
CORPORATION FINANCE

July 27, 2012

Via E-mail

Mr. Louis Scafuri
Chief Executive Officer
Syneron Medical Ltd.
Industrial Zone, Tavor Building P.O. B. 550
Yokneam Illit 20692 ISRAEL

**Re: Syneron Medical Ltd.
Form 20-F for the Fiscal Year Ended December 31, 2011
Filed March 29, 2012
File No. 0-50867**

Dear Mr. Scafuri:

We have reviewed your filing and have the following 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 within ten business days by amending your filing, by providing the requested information, or by advising us when you will provide the requested response. 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 any amendment to your filing and the information you provide in response to these comments, we may have additional comments.

Form 20-F for the Fiscal Year Ended December 31, 2011

Key Information, page 1

Risk Factors, page 3

1. We see disclosures herein that global economic instability and uncertainty, including the sovereign debt crisis in certain European countries, has had an adverse effect on your results of operations. Please note that Management's Discussion and Analysis should quantify and disclose the nature of each item that causes significant changes to your operating results. Accordingly, in future filings, including any amendments, please revise your Management's Discussion and Analysis to quantify the effect of global economic

instability and uncertainty, including the sovereign debt crisis in certain European countries, on your financial statements. For further guidance, please refer to Item 303 and the related instructions in Regulation S-K as well as SEC Interpretive Release No. 34-48960 (December 19, 2003).

Operating and Financial Review and Prospects, page 46

Results of Operations, page 57

2. Your disclosure should include a discussion and analysis of your results of operations and the factors that affected your various line items. For example, your results of operations disclosure does not provide a narrative discussion of the extent to which the FY 2011 revenue increase was attributable to increases in prices or to increases in the volume of amount of goods or services sold or to the introduction of new products and services, etc.. See Regulation S-K Item 303(a)(3)(iii). With respect to your cost of revenues disclosure, your disclosure in the third sentence under the heading does not quantify the extent to which each of the identified factors contributed to the cost decrease as a percentage of your revenues. Please confirm that you will revise future filings, as applicable, to include a quantitative and qualitative discussion and analysis of your results of operations. In your correspondence, please also provide us draft disclosure that discusses and analyses your results of operations for the fiscal year ended December 31, 2011 as compared to fiscal year ended December 31, 2010.

Supplemental Non-GAAP Income Data, page 60

3. We note that you present non-GAAP measures in the form of non-GAAP Statements of Income. This format may attach undue prominence to the non-GAAP information and be confusing to investors as it also reflects several non-GAAP measures, which have not been described to investors. Please amend this filing to remove the non-GAAP Statements of Income and instead disclose only those non-GAAP measures used by management that you wish to highlight for investors, with the appropriate reconciliations. Alternatively, explain to us why you believe your current non-GAAP disclosures are appropriate and compliant with Item 10 (e) of Regulation S-K and Question 102.10 of the Compliance and Disclosure Interpretations on non-GAAP financial measures, which can be found at

<http://www.sec.gov/divisions/corpfin/guidance/nongaapinterp.htm>.

4. Notwithstanding the comment above, please note that you are required to provide all of the disclosures required by Item 10(e)(1)(i) of Regulation S-K for **each** non-GAAP financial measure presented. While we note separate reconciliations, we do not see where you have provided a specific discussion of the usefulness of each non-GAAP financial measure. If you elect to present non-GAAP financial measures in future filings, including

the requested amendment, please revise to provide the required disclosures for each non-GAAP financial measure presented.

5. We note your disclosures at the top of page 61 regarding the items you exclude from your non-GAAP financial measures. This disclosure states that items are excluded because they are either non-recurring or they do not provide an appropriate basis to extrapolate future results. Please explain to us which of the excluded items that you consider to be non-recurring. For the remaining items, please explain to us in greater detail why you believe they do not provide an appropriate basis to extrapolate future results. In this regard, it is not clear how the explanation that the excluded items do not provide an appropriate basis to extrapolate future results differs from the concept of a “non-recurring” item.
6. We note that your non-GAAP financial measures eliminate recurring items. While there is no *per se* prohibition against removing a recurring item, you must meet the burden of demonstrating the usefulness of any measure that excludes recurring items, especially if the non-GAAP financial measure is used to evaluate performance. Whether a non-GAAP financial measure that eliminates a recurring item or items from the most directly comparable GAAP financial measure is acceptable depends on all of the facts and circumstances. However, if there is a past pattern of the charges, no articulated demonstration that such charges will not continue and no other unusual reason that a company can substantiate to identify the special nature of the charge, it would be difficult for a company to meet the burden of disclosing why such a non-GAAP financial measure is useful to investors. In such circumstances, Item 10(e)(1)(ii)(B) of Regulation S-K would not permit the use of the non-GAAP financial measure. In addition, inclusion of such a measure may be misleading absent the following disclosure, which should be specific to each measure and not a broad overall, vague disclosure:
 - the manner in which management uses the non-GAAP measure to conduct or evaluate its business;
 - the economic substance behind management's decision to use such a measure;
 - the material limitations associated with use of the non-GAAP financial measure as compared to the use of the most directly comparable GAAP financial measure;
 - the manner in which management compensates for these limitations when using the non-GAAP financial measure; and
 - the substantive reasons why management believes the non-GAAP financial measure provides useful information to investors.

Please tell us why you believe your current disclosures are consistent with the guidance at Item 10(e)(1)(ii)(B) of Regulation S-K. Also, when preparing future filings, including the requested amendment, you should consider disclosing the nature as well as the actual or expected impact of any recurring and non-recurring items on your financial statements in Management's Discussion and Analysis.

Index to Consolidated Financial Statements, page F-1

Notes to Consolidated Financial Statements, page F-13

Note 15 - Commitments and Contingencies, page F-52

c. – Legal Claims, page F-54

7. We noted your disclosures on page F-57 indicate your policy is to accrue an amount to cover probable losses from various legal proceedings and other claims. Please tell us what the meaning of the term “other claims” is, and clarify your disclosure in future filings, including any amendments, as to whether this policy also includes unasserted claims that are probable of being asserted.
8. Please tell us and revise future filings, including any amendments, to disclose your policy for the accrual of legal fees to defend yourself against loss contingencies. Please refer to paragraph 450-20-S99-2 of the FASB Accounting Standards Codification.

Form 6-K dated May 9, 2012

9. We note on the first page of this filing you present a section labeled “First Quarter 2012 Year-Over-Year Financial Highlights” in which you highlight certain non-GAAP measures without presenting the equivalent GAAP measures. We also note that you present a section labeled “Non-GAAP Financial Highlights for the Quarter Ended March 31, 2012” on the same page but did not disclose any directly comparable GAAP measurements with greater or equal prominence. In light of the fact this filing is incorporated by reference into various Registration Statements on Form S-8, tell us how your current presentation complies with Item 10(e)(1)(i)(A) of Regulation S-K which requires disclosure of the directly comparable GAAP measure with equal or greater prominence to any non-GAAP disclosures in the filing. Otherwise, please amend the Form 6-K to revise your presentation of non-GAAP disclosures to comply with the guidance at Item 10(e)(1)(i)(A) of Regulation S-K.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. Since the company and its management are in possession of all facts relating to a company’s disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In responding to our comments, please provide a written statement from the company acknowledging that:

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- 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.

You may contact Gary Newberry, Staff Accountant, at (202) 551-3761 or Jay Webb, Reviewing Accountant, at (202) 551-3603 if you have questions regarding comments on the financial statements and related matters. Please contact Joseph McCann, Staff Attorney, at (202) 551-6262, or Tim Buchmiller, Reviewing Attorney, at (202) 551-3635 if you have questions on any other comments. In this regard, do not hesitate to contact me at (202) 551-3643.

Sincerely,

/s/ Jay Webb “for”

Kevin L. Vaughn
Accounting Branch Chief