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

DIVISION OF
CORPORATION FINANCE

September 15, 2011

Via E-mail
Ofir Paz
Chief Executive Officer
InspireMD, Inc.
3 Menorat Hamaor St.
Tel Aviv, Israel 67448

Re: InspireMD, Inc.
Amendment No. 1 to Registration Statement on Form S-1
Filed August 26, 2011
File No. 333-174948

Dear Mr. Paz:

We have reviewed your registration statement 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 by amending your registration statement and providing the requested information. 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 registration statement and the information you provide in response to these comments, we may have additional comments.

Overview, page 1

1. Please note that your disclosure of revenues in the opening paragraph should be balanced by disclosure of your net income or net loss for the completed fiscal year and stub period. Revise accordingly.

2. Revise the prospectus, where appropriate, to expand your discussion of the transactions related to the share exchange, including your transactions with former chief executive officer Lynn Briggs and your escrow arrangement.

3. We note your response to prior comment 2. Please provide marked pages from the journals and articles mentioned in the first and fifth paragraphs of this section supporting your disclosure.

4. Please clarify the reference in the sixth paragraph of this section to "percutaneous coronary intervention."

5. We note your response to prior comment 4, including the final sentence of the third paragraph on page 2. However, your statement that one trademark (MGuard) refers to another (MGuard Prime) is not clear. Therefore, we reissue the comment. With a view to disclosure, please tell us whether you will need to secure an additional CE mark for MGuard Prime.

We expect to derive our revenues from sales of our MGuard stent products, page 5

6. We note that in response to prior comment 5 you expanded the bullet points in this risk factor to include cross-references to other risk factor headings. This response does not address our request that you expand your disclosure of the bulleted risks or provide appropriate discussion of such risks under separate headings. Therefore, we reissue prior comment 5.

We may have violated Israeli securities laws, page 14

7. We note your response to prior comment 8. Please expand this risk factor to disclose when you applied for a no-action determination, the status of your application and the fines and penalties that may be applicable.

Management's Discussion and Analysis, page 18

Results of Operations, page 20

Six Months Ended June 30, 2011 Compared to Six Months Ended June 30, 2010, page 23

8. Please refer to our prior comment 12. We note your revised disclosure that explains that deferred revenue decreased by approximately 80% and this was offset by an increase in gross revenues of 93%, however, your discussion of the changes in deferred revenue to various distributors and the gross revenue to various distributors does not provide investors with the underlying reasons for the changes in revenues between periods. In light of the significant recognition of revenues during the six months period ended June 30, 2011 that were previously deferred, explain what events occurred during the six months period ended June 30, 2011 that resulted in the recognition of the related revenues. In addition, provide insight as to the underlying reasons for the increases in gross revenues to your various distributors during the period. Furthermore, as previously requested, please discuss and quantify each factor that caused the decrease in revenue between the six months ended June 30, 2011 and the six months ended June 30, 2010.

Liquidity and Capital Resources, page 25

9. Please tell us where you have discussed your factoring arrangement in this section.

Our Industry, page 29

10. We note your response to prior comment 15. Please tell us how you confirmed that the market data presented on pages 29, 30 and 38 reflects the most recent available data. Also, please provide marked pages from the reports mentioned in this section supporting your disclosure.

Our Products, page 29

11. Please clarify the references to "myocardial blush grade" and "restenosis rates" in the second and third paragraphs on page 30, respectively. Also, clarify why the results of your clinical studies "suggest" higher levels of MBG and lower rates of adverse cardiac events and why, if true, these findings would give you a competitive advantage.

Product Development and Critical Milestones, page 31
Pre-Clinical Studies, page 31

12. We note that certain information related to FDA Approval, U.S. Sales, Start of Study and End of Study remained "To be determined" as of the date of the initial filing of the registration statement. We also note that in this amendment to the registration statement you have revised your disclosure to reflect that the same information is "Not applicable." With a view to disclosure, please explain the bases for the changed disclosure.

13. We note your disclosure on pages 9 and 10 of your Form 8-K filed on April 6, 2011. However, your tabular disclosure in this section appears to indicate that the start and end of the studies have been delayed. With a view to disclosure, please explain the reasons for the delays.

Ongoing Clinical Trials, page 34

14. We note your response to prior comment 19 and reissue. With a view to disclosure, please provide the staff with a clear explanation as to the differing results of your 2005 and 2006 studies.

15. We note that on page 34 you disclose the number of patients in your studies as of June 1, 2011. We also note that you have disclosed on page 36 your plan to launch a study in the second fiscal quarter of 2011. Please revise the prospectus to update your disclosure.

Future Clinical Trials, page 36

16. We note your response to prior comments 16. We also note your revised disclosure under "Government Regulation" on page 41. Please reconcile your disclosure of the countries in which you will seek approval and provide a discussion of the necessary steps and timeline for approval in these countries, including applicable local requirements.

17. In this regard, it is unclear why you have elected not to discuss your plans for product approval in China given your disclosure in the prospectus that you are "aggressively pursuing additional registrations" in China as well as other countries. We also note your disclosure that you have filed for intellectual property protection in China. Please revise your prospectus accordingly.

Manufacturing and Suppliers, page 42

18. We note your response to prior comments 17 and 24. Please expand your discussion of the material terms of your license agreement to include a description of term, termination and indemnification provisions, if any. To the extent there are additional material provisions, please describe. Also, provide similarly expanded discussion of the material terms of the other manufacturing and supply agreements disclosed in this section.

Selling Stockholders, page 51

19. We note your response to prior comment 27. Given the nature of the transaction being registered, please advise the staff of the company's basis for determining that the transaction is appropriately characterized as a transaction that is eligible to be made on a shelf basis under Rule 415(a)(1)(i).

Financial Statements for the Years Ended December 31, 2010 and 2009

Note 2 – Significant Accounting Policies, page F-8

l. Revenue Recognition, page F-10

20. We note from your response to our prior comment 33 that you provide free products as incentives to certain distributors but see you indicate you will provide disclosures of credits, rebates, price protection and other similar incentives if relevant. We also note from the Addendum to the Distribution Agreement with Hand-Prod (filed as exhibit 10.28) that it appears that you offer this distributor free stents as indicated in the tabular summary. Please explain if these incentives are material and explain your response that you will disclose if relevant.

21. In this regard, we note from the tabular summary provided as part of the Addendum to the Distribution Agreement that the stents will be placed in a special warehouse and

shipped when the order to send the stents is received. Please tell us more about the storage and delivery process and specify at which point you recognize revenue for the stents. Please refer to the applicable guidance in SAB 104 as part of your response.

22. Additionally, we note from the tabular summary provided as part of the Addendum to the Distribution Agreement that Hand Prod will pre pay for orders or pay after the invoice is received. Please tell us if these payments are for multiple deliverables or are only for the stents.

Note 8 – Long-Term Loan, page F-17

23. Please refer to our prior comment 37. While we see your disclosure that the bank asked you to grant additional fixed liens in November 2010, we do not see where you explain the underlying reason for that request. As previously requested, please revise your disclosure accordingly.

Note 10 – Commitments and Contingent Liabilities, page F-20

c. Litigation, page F-21

24. Please refer to our prior comment 38. While we note your revised disclosure in 10.c. 1) and other similar subsequent listings in this litigation disclosure section that you have not recorded an expense related to damages because management is of the opinion that a loss is neither probable nor estimable, in our prior comment we specifically referred to the disclosure requirements regarding a reasonably possible loss or range of loss. For each claim that no accrual is made for loss contingency or an exposure to loss exists in excess of the amount accrued, please explain to us if there is at least a reasonable possibility that a loss or an additional loss may have been incurred and your reasons for such conclusion. Please note that for unrecognized contingencies associated to each claim listed on page F-21 and F-46 that meet the criteria in paragraph 3 of ASC 450-20-50 you are required to disclose (i) the nature of the contingency, and (ii) the possible loss or range of loss or provide a statement that such an estimate cannot be made. Please revise your disclosure accordingly.

25. Please refer to our prior comment 39. Please further explain why you allocated the $134,000 expense to the year ended December 31, 2006 when the claim was submitted in November 2010. In this regard, please tell us how much of the total expense was recorded in 2005 and 2006, and explain why you believe it is appropriate to adjust prior financial statements to record this expense when the claim was submitted in November 2010. Please provide a similar explanation as it relates to Note 10 c. 6. We also noted that your revised disclosures in c.5) and c.6) eliminated the date the claim was filed, i.e. November 2010. Please explain your rationale for this revision. We will continue to review your response to our prior comment 39 upon receipt of the aforementioned information.

26. We note from your response to our prior comment 39 that the fair value of the stock options with respect to the litigation described in Note 10c.4 was $2.5 million using the Black-Scholes valuation model, as of May 2009, which was the period for which the claimant claims these stock options. In this regard, please explain to us how you accounted for these stock options at the initial recognition of this claim and your accounting or planned accounting between the initial recognition of this claim and the date that the actual stock options are granted. Please provide references to the authoritative literature, which supports your accounting. Additionally, please clarify for us if any of the stock options have been granted, providing as part of your response the grant dates and number of stock options. Please provide a similar explanation as it relates to the stock options discussed in Note 10c.3 and 10c.5.

27. Please refer to our prior comment 40. It appears you have revised this disclosure to change the $1,020 thousands in claims to $20,000. Please explain.

28. We note that you have recorded provisions relating to claims made against you based upon the opinion of your legal counsel. We also see that you have not recorded an expense related to damages in connection with certain other matters because management, after consultation with legal counsel, is of the opinion that the ultimate resolution of these claims will not result in a loss to the Company. Please refer to Question 233.02 of the Compliance and Disclosure Interpretations on Securities Act Rules, which can be found at http://www.sec.gov/divisions/corpfin/guidance/securitiesactrules-interps.htm and describe to us and revise this note to clarify the nature and extent of your reliance on legal counsel in determining whether a liability was required and the amount of each of the provisions you recorded. In particular, please differentiate between those instances where you relied exclusively on the opinion of legal counsel to provide you the amount of the required liability versus the instances where the opinion of legal counsel was one of other factors considered by management in reaching its conclusion.

Note 13 – Supplementary Financial Statement Information, page F-30

f. Financial expenses (income), net, page F-31

29. Please refer to our prior comment 41. We note from your disclosure in footnote 7 that your initial valuation of the beneficial conversion feature was $308,000. Please further explain in your disclosure how you determined that the intrinsic value of the beneficial conversion feature at the time of extinguishment was equal to the original beneficial conversion feature in the amount of $308,000. Additionally, tell us whether you made any prior payments on the loan, and how you included this as part of your analysis.

30. In this regard, based on the guidance of FASB ASC 470-20-40-3, it appears that any gain recognized should be recorded as a gain or loss on extinguishment of the convertible debt security. Please revise your disclosures accordingly.

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 Act of 1933 and all applicable Securities 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.

Notwithstanding our comments, in the event you request acceleration of the effective date of the pending registration statement please provide a written statement from the company acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;

- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and

- the company may not assert staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Please refer to Rules 460 and 461 regarding requests for acceleration. We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

You may contact Julie Sherman at (202) 551-3640 or Jeffrey Jaramillo, Accounting Branch Chief, at (202) 551-3212 if you have questions regarding comments on the financial statements and related matters. Please contact Tom Jones at (202) 551-3602 or Daniel Morris, Special Counsel, at (202) 551-3314 with any other questions.

Sincerely,

/s/ Daniel Morris for

Amanda Ravitz
Assistant Director

cc (via e-mail): Rick A. Werner, Esq.