



DIVISION OF  
CORPORATION FINANCE

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

February 28, 2013

Via E-mail

Mr. Matthew Harbaugh  
Vice President and Chief Financial Officer, Pharmaceutical Products  
Covidien  
675 James S. McDonnell Blvd.  
Hazelwood, MO 63042

**Re: Mallinckrodt plc  
Registration Statement on Form 10  
Filed February 1, 2013  
File No. 001-35803**

Dear Mr. Harbaugh:

We have reviewed your registration statement on Form 10 filed on February 1, 2013 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.

General

1. We note that there are a number of additional exhibits that still need to be filed. Please provide these exhibits as promptly as possible. Please note that we may have comments on these materials once they are provided.
2. Unless otherwise indicated, references to page references and captions in this letter are to the information statement filed as exhibit 99.1.
3. Throughout your filing, you reference the possibility of entering into financing or credit line agreements or issuing debt instruments. Please be advised that you should file any such credit line agreements, financing transaction documents or debt instrument arrangements as exhibits to your filing and revise your filing to include a description of the material terms of these arrangements.

EXHIBIT 99.1 Information Statement  
General

4. Please provide updated interim financial statements, pro forma and related financial information for the Quarterly Period ending December 28, 2012, pursuant to Rule 3-12 of Regulation S-X.

Summary

The Separation, page 14

Reasons for the Separation, page 14

5. To balance this discussion, please include an equally prominent bullet point list of the negative factors the Covidien board considered in evaluating the separation.

Risk Factors, page 18

Risks Related to Our Business, page 18

The DEA regulates the availability of controlled substances...., page 18

6. Please describe any delays or refusals to date by the DEA to establish or modify your quota requests and the impact on your business.

The manufacture of our products is highly exacting and complex...., page 18

7. Please describe any significant manufacturing or supply problems to date.

The global supply of fission-produced Mo-99...., 19

8. Here and in the Business section, please expand your disclosure regarding Mo-99 to provide a more fulsome description of what this substance is, how it is produced and why it is a critical ingredient of your Tc-99m generators.
9. Here and in the Business section, please identify the two suppliers upon which you primarily rely for production of Mo-99, describe the material terms of your supply arrangements and file the agreements as exhibits to your Form 10. Alternatively, please provide us with a supplemental analysis supporting your determination that these agreements are not material to your business.
10. Please revise your disclosure to include the information contained in the last paragraph of this risk factor in a separately-captioned stand-alone risk factor addressing the risks associated with converting from HEU targets to LEU targets. This appears to be a separate and distinct risk from the supply risks discussed in the rest of the current risk factor.

We may be unable to protect our intellectual property rights..., page 21

11. Please expand your disclosure in this risk factor to discuss any material patent or any patents that as a group are material to your business, whether owned or licensed, and the expiration date of such patents.
12. Please describe any known infringement to date of your intellectual property and any material patent litigation matters to which you are a party.

We may incur product liability losses..., page 23

13. Please describe any known serious adverse effects of your products and describe your product liability insurance, including the coverage level and whether you deem it adequate to meet your current business exposure.

Our reporting and payment obligations under the Medicare and/or Medicaid..., page 24

14. Please describe any current, pending or recently completed governmental investigations related to your reporting and payment obligations and practices under Medicare and/or Medicaid.

Our operations expose us to the risk of material health..., page 26

15. Please disclose any fines, criminal charges or other sanctions you have received as a result of health, safety or environmental violations.
16. Please quantify your potential exposure and costs associated with the investigation, cleanup and potential remedial action for the formerly owned sites for which you have received notifications from the EPA or similar environmental regulatory agencies. Also describe how you have allocated funding for future capital and operating expenditures and whether you believe such funding will be adequate to address the potential payment obligations.

If we are unable to retain our key personnel..., page 27

17. To the extent that you have experienced problems attracting and retaining key members of your scientific, regulatory, technical and commercial personnel in the recent past, please revise your disclosure to describe these problems.

We may have received more favorable..., page 27

18. You describe your agreements with Covidien related to the separation as having resulted from “arm’s-length negotiations.” Given that these transactions are related party transactions, this term does not appear appropriate. Accordingly, please revise to delete the reference.

After the separation, certain of our executive officers..., page 30

19. We note that certain persons you expect will be your executive officers and directors will also be former officers and employees of Covidien. Please revise your disclosure to include the names of these individuals, their current positions with Covidien and their financial interest in Covidien.

Business, page 47

Competitive Strengths, page 48

20. Please balance the discussion of your competitive strengths with disclosure regarding your material weaknesses and challenges in a competitive marketplace.

Unaudited Pro Forma Condensed Combined Financial Statements, pages 41-45

21. Please quantify your proforma adjustments, proforma earnings per share and proforma weighted-average shares outstanding. Please be sure to disclose relevant assumptions in proforma amounts quantified.

Global Medical Imaging, page 52

Nuclear Imaging, page 52

22. Please provide a more fulsome explanation of the substance Mo-99, how it relates to your Tc-99m generator products and your manufacturing process.
23. Given the limited number of Mo-99 suppliers referenced in your Risk Factors section, please explain how you intend to diversify the supply chain for this product.

Intellectual Property, page 55

24. We note that you currently own or license issued patents and pending applications in the United States and other countries. We note your disclosure on page 55 indicating that no single patent is material to your business. Please consider whether you have any owned or licensed patents that, when considered as group, are material to your business. If so, please expand your disclosure to describe such material group or groups of patents, including:
- Specific products, product groups or technologies to which such patents relate;
  - Type of patent protections (e.g., composition of matter, use of process);
  - Patent expiration dates; and
  - Jurisdictions in which the patents were granted.

Management's Discussion and Analysis, page 74  
Gurantees, page 90

25. Please revise your disclosure to describe the nature and extent of the indemnification that you will provide to Covidien in the separation. Please also provide this disclosure in the section starting on page 138 entitled "Our Relationship with Covidien Following the Distribution."

Management, page 98

26. Please fill out the executive officer and board of directors information with your next amendment.

Compensation Discussion and Analysis, page 103

27. Please file as exhibits to your Form 10, any employment agreements with executive officers and describe the material terms of such agreements, including any change in control provisions.

How Executive Pay Decisions are Made, page 105  
Going Forward, page 107

28. Please name the independent compensation consultant utilized by Covidien to benchmark Mallinckrodt peer companies and describe any other services this consultant provides.

Our Relationship with Covidien Following the Distribution, page 138  
Separation and Distribution Agreement, page 138

29. Please expand your disclosure to list the material assets to be transferred and the material liabilities to be assumed by Mallinckrodt.

Employee Matters Agreement, page 140

30. Please expand your disclosure to list the employee benefit obligations of Mallinckrodt relating to current and former employees of Covidien's Pharmaceutical business.

Combined Financial Statements  
The Pharmaceutical business of Covidien plc  
Notes to Combined Financial Statements  
Note 16 – Retirement Plans, page F-27

31. Insurance contracts comprise the single largest investment asset class of your defined benefit plan equivalent to over 24% of the fair value of the plan. Due to the significance of the insurance contracts to the solvency of your pension plan and the judgments inherent in level 3 valuations please disclose the following:

- The name, credit rating and aggregate fair value of insurance contracts for each well-known, highly rated issuer;
- How you determined the insurance contracts value based on a “negotiated value”;
- The models employed and the most relevant unobservable assumptions used in determining the level 3 fair value of the insurance contracts; and
- The nature and credit ratings of the underlying asset-backed and fixed income securities of the insurance contracts.

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:

- 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 Jim Peklenk at (202) 551-3661 or Gus Rodriguez at (202) 551-3752 if you have questions regarding comments on the financial statements and related matters. Please contact Johnny Gharib at (202) 551-3170 or me at (202) 551-3715 with any other questions.

Sincerely,

/s/ Jeffrey P. Riedler

Jeffrey P. Riedler  
Assistant Director

cc: Via E-mail  
Victor Goldfeld, Esq.  
Wachtell, Lipton, Rosen & Katz  
51 West 52nd Street  
New York, NY 10019