The Management and Economics of the Pharmaceutical, Biotech and Medical Device Industries

HCMG 863
Spring 2009
JMHH F60
Mon/Wed 3:00-4:20 p.m.

Syllabus Update 1.26.09

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Course Objectives: This course provides an overview of the management, economic and policy issues facing the pharmaceutical-biotechnology industries, with brief coverage of medical devices. We focus on functional areas where these industries differ significantly from other industries. These include: intensive R&D and rapid technological change; a complex global market place in which customers include physicians and third party payers, as well as individual consumers and sometimes pharmacists; complex and evolving M&A strategies, including alliances and joint ventures; and government regulation of every dimension of the business. The perspective is global but with emphasis on the U.S.

Readings: A coursepack of required readings is available from Wharton Reprographics in two parts. The readings listed below are required, except those marked ** which are optional. These optional readings are not in the coursepack.

Grading

- Class participation 15%
- Exam 40%
- Case Studies 20%
- Term Project 25%

Term Projects
Students will work on a term project, in teams of 5. A list of possible topics will be provided or you may choose a topic of particular interest to you, subject to approval. These projects will be presented in class. The final write-up (max. 10 pages plus optional tables) is due Wednesday April 15th.

Cases
Case questions will be posted on the WebCafe. All cases should be prepared for class discussion. Each team is responsible for one write up of each case (shown in italics below). Please email cases write-ups to
Jennifer Laverty at laverty@wharton.upenn.edu, by 5pm the day before the class in which the case is to be discussed. Case write-ups should not exceed 2 pages, excluding any supporting material.

**WebCafe**
All class materials will be posted at the WebCafe, at https://webcafe.wharton.upenn.edu/eRoom/hcmg/863-sp09-1. Registered students will automatically have access. In case of problems, contact the Wharton webCafe Team at webcafe@wharton.upenn.edu.

**Other Resources:** For a basic primer on the pharmaceutical industry, see J. Campbell, Understanding Pharma, Pharmaceutical Institute, available at Lippencott Reference. The Pharmaceutical Research Industry trade association, PhRMA, has useful industry overview materials, at www.phrma.org. For an insider account of the biotech industry, see Robbins Roth, From Alchemy to IPO.

**Topics and Reading Assignments (** denotes optional readings, not in the coursepack)**

**January 14: Introduction**

**January 19: Martin Luther King Day- NO CLASS**

**January 21: Global Pharma-Biotech Industry: Structure, Conduct and Performance**

**January 26: R&D (I): Regulation, Costs and Returns**
**Congressional Budget Office, Research and Development in the Pharmaceutical Industry October 2006. Ch.1-3, Ch.6

**January 28: Marketing in the Old and New Worlds: Zantac and Humira Cases (choose one)**
E1. INSEAD Case: Zantac.
February 2: Torcetrapib: A Case Study of (Failed) New Drug Development - Steve Yoder, MD MBA, Principal, Eastern Assoc., formerly team leader global product development at Pfizer

Readings are on Webcafe, not in the coursepack

Hensley and Winslow, “Blood Work: Pfizer makes $800m. bid to reshape the health-care market.” WSJ 4-8-2004

February 4: Managing a Biotech Company – Jay Moorin, Partner, ProQuest Investments and formerly CEO, Magainin Pharmaceuticals.

F1. Van Brunt, J. “Biotech’s Old Soldiers”, Signals Magazine published 10/05/05

February 9: NO CLASS

February 11: R&D Productivity Management – Dr. Thomas Hofstaetter, Senior VP, Corporate Business Development, Wyeth


February 16: Washington Update: FDA and CMS - Mike McCaughan, Senior Editor, The RPM Report


February 18: R&D(2): Management and Deals – Graham Brazier , VP and Head of Business Development, Bristol-Myers Squibb

February 23: Trends in Deals – Roger Longman, Managing Partner, Windhover Information; Editor, IN VIVO

February 25: Pricing, PBMs and Pharmacoeconomics: Medicines Co. Case

March 2: Price and Reimbursement Regulation: An International Perspective
L1 Pharmaceuticals: Cost Containment, Pricing, Reimbursement, World Bank HNP Brief #7, August 2005
L2 Pearson SD, Rawlins MD. “Quality, Innovation, and Value for Money: NICE and the British National Health Service” JAMA November 23/30, 2005

March 4: International Marketing – Nancy Lilly, Vice President, Global Marketing for New Product Planning and Marketing Analytics, Eli Lilly and Company

March 9 and 11: Spring Break

March 16: The Generic Drug Industry – William Marth, CEO, TEVA USA

**Case: Teva Pharmaceuticals, Ltd. HBS 9-707-441 Not for write-up.
March 18: Sirtris case
J1 Sirtris Pharmaceuticals: Living Healthier, Longer. HBS 9-808-112

March 23: Asia and other Markets and Companies

March 25: Trends in Reimbursement and Comparative Effectiveness - Perry Bridger, Vice President, Avalere Health

March 30: Evolving Sales Force Strategies – Jaideep Bajaj, Managing Director, ZS Associates
S1 Rickwood, “Blow the Launch- Doom the Product.” IN VIVO Oct. 2008

April 1: Specialty Pharma – Ian Sanderson, Managing Director, Cowen and Co.
T Readings to be added.

April 6: Medical Device Start-Ups – David Anderson, President and CEO, Gentis Inc.

April 8: Emerging Markets Producers: Dr. Reddy or Biocon case (choose one)
V1 Dr. Reddy’s Laboratories (A): Ivey Case 908M64
V2. Biocon: From Generics Manufacturing to Biopharmaceutical Innovation: Asia Case Research Center HKU657


April 15: TBD

April 20: Presentations

April 22: Presentations

April 27: Presentations