

*Strategies for creating a leaner,  
more effective company*

# **Strategic Management of Resources and Portfolios: *Structuring Risk to Maximize Opportunity in Pharmaceutical R&D***

**Hermann A.M. Mucke, PhD**

As a company develops its business, resources will always be limited and risk will always be involved. This is especially true for companies operating in the high-risk life science industry. To stay on top of the changing pharmaceutical R&D environment, certain measures must be implemented. This report analyzes:

- Types of risk that must be faced;
- Ways that various risks can be assessed and managed;
- How corporate resources can be allocated to meet the goals and create maximum value according to the corporate strategy.

*Continued on next page*

## Overview

Management of risks, resources, and portfolios are key challenges for any life science company that seeks to survive the difficult times through which the industry is now passing. There is ample evidence that the entire sector is in the process of restructuring, initially taking a defensive stance to defend earning streams but actually building momentum toward renewed initiatives on a broad front. The restructured industry that will come roaring back within the next few years will consist of leaner and more effective companies. Certainly, all of these survivors will have learned how to manage their risks and resources strategically.

For a life science company, risk comes in many forms, with compound attrition being the most obvious. **Strategic Management of Resources and Portfolios: Structuring Risk to Maximize Opportunity in Pharmaceutical R&D** examines the types of risks that must be faced (e.g., candidate failure, regulatory risk, legal risk, risk management for launched drugs, commercial and competitor risk, intellectual property risk, operational risk) and shows that these risks can be mitigated and managed if addressed proactively.

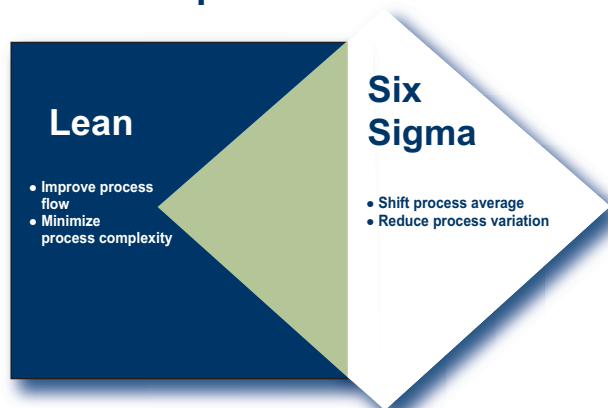
Intimately associated with the risk issue is the valuation of projects and portfolios. We outline the major approaches by which objective and quantitative valuation of drug development can be attempted.

Many resource-intensive corporate operations show extensive potential for streamlining. We present process optimization and quality control approaches that can result in remarkable savings. These include the "Lean" and "Six Sigma" concept, and the proactive management of laboratory equipment (including service contracts) and inventories.

On a strategic level, resource allocation management can largely be equated with portfolio management. We evaluate models and approaches for optimal portfolio planning and management, demonstrating that implementation of sound, data-driven, transparent decision processes is paramount. Also described are advanced software suites that are available to help manage the huge corporate data streams on the operational plane (i.e., enterprise resource management) and on the level of business intelligence, where internal data warehouses are analyzed to provide key figures and profiles that aid in decision-making.

Case studies illustrate how companies of various sizes and types (including Pfizer, Wyeth Pharmaceuticals, Bayer Schering Pharma, and Genzyme) have addressed their portfolio management issues. **Strategic Management of Resources and Portfolios: Structuring Risk to Maximize Opportunity in Pharmaceutical R&D** concludes by distilling our evaluation of this mission-critical function into actionable recommendations for sound project evaluation and portfolio management.

### Lean versus Six Sigma Approaches to Process Optimization



Source: Insight Pharma Reports

**About the Author:** Hermann A.M. Mucke, PhD, spent 17 years in academia and industry before he founded H.M. Pharma Consultancy ([www.hmpharmacon.com](http://www.hmpharmacon.com)) in 2000 to become an independent pharmaceutical consultant, analyst, and science author. His last industry position was Vice President R&D in a European pharmaceutical company, which he helped to take public on the Frankfurt Stock Exchange in 1999. Since then, Dr. Mucke, who holds a PhD in biochemistry from the University of Vienna (Austria), became a consultant and advisory board member for several European and American pharmaceutical companies and a regular reviewer of drugs and patents for Thomson Current Drugs and Ashley Publications. Dr. Mucke is based in Vienna.

## Tables and Figures

### Tables

Typical Business Strategies for Life Science Companies  
Basic Differences Between Financial Options and Real Options  
Variants of Real Options Analysis Approaches  
Cost Estimates for a Basic Preclinical Safety Pharmacology Program  
Recent Licensing and Collaboration Deals for Compounds in Phase II

Leading Insurance Companies in Clinical Trials Coverage  
A Selection of ERP Software Packages with Tailored Life Science Industry Solutions

### Figures

Schematic Representation of Strategy, Portfolios, and Projects in Relation to Corporate Objectives  
Deployment and Adoption Stages of Process Improvement

Lean versus Six Sigma Approaches to Process Optimization  
Patent Applicant's Decision Points in the Patenting Process  
Complexity of Implementation and Relative Cost of Discovery-Stage Predictive Safety Testing Approaches  
European Postmarketing Surveillance Implemented for Tracleer, a Drug for Pulmonary Hypertension

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## Tables and Figures cont.

Chemical Differences Between Sildenafil and Vardenafil  
Strategic versus Operational Issues in Portfolio Management  
Portfolio Plan, Strategic Plan, and Business Plan

Simplified Decision Tree for a Drug Development Project  
Efficient Frontiers Resulting from Portfolio Optimization, as Optimized from Raw Productivity Rankings  
Portfolio Bubble Plot Screen from the Enrich Portfolio System

Operational Planning at Pfizer  
Wyeth's New "Learn and Confirm" Clinical Development Strategy, Compared to the Classical Concept

## Table of Contents

### Chapter 1: Accepting Structured Risk to Realize Opportunity: The Essence of Entrepreneurship

- 1.1. Nature and Dictates of the Risk/Resource Relation
- 1.2. Business Complexity: "Home-Grown" Risk or Business Perspective
- 1.3. Projects, Portfolios, and Strategy  
Development Strategies of Life Science Companies  
Portfolios: High-Level Implementation of Strategy  
Projects: Tactical Materialization of Strategy Within the Portfolio

### Chapter 2: Drug R&D as an Environment Tasked to Delivery Efficacy

- 2.1. From Return on Resources to Return on Investment
- 2.2. Proactive R&D Inventory Management and Optimization
- 2.3. Outsourcing Equipment Asset Management
- 2.4. User-Based Management of Consumables and "Soft" Assets
- 2.5. Process Engineering and the Six Sigma Concept  
Six Sigma in Pharmaceutical Marketing and Sales  
Six Sigma and Clinical Development
- 2.6. Reporting and Reviewing in R&D

### Chapter 3: Understanding and Assessing Drug Development Risk/Benefit Balance

- 3.1. Real Options Analysis: Financial Metrics for R&D Valuation  
Valuation in Development Projects  
Real Options Analysis as a Solution to the Valuation Dilemma  
Implementing Real Options Analysis
- 3.2. Valuation of Intellectual Property  
Patents  
Patent Valuation
- 3.3. Predictive Safety from Discovery to the Phase I Clinical Stage

- 3.4. Phase II Study Designs and Relevance of Data
- 3.5. Phase III Programs and Prediction of "Field Performance"

### Chapter 4: Risk and Resource Requirement Throughout the Drug Life Cycle

- 4.1. Scientific and Clinical Development Risk  
Risk and Resources from Discovery to IND  
Phase I Risks and the Consequences of the TGN-1412 Affair  
Phase II  
Phase III
- 4.2. Regulatory Risk
- 4.3. Legal Risk  
Legal Challenges During Development  
Lawsuits Concerning Approved Drugs
- 4.4. Risk Management for Launched Drugs  
Formal Postmarketing Surveillance Systems  
Handling Unexpected Adverse Events
- 4.5. Commercial and Competitor Risk  
Market Risk from New Scientific Data  
Market Risk from a Changing Competitive Situation
- 4.6. Intellectual Property Risk  
Evolving Patent Regulations  
Patent Reform Act of 2007  
Circumvention of Patents and Challenge by Claiming Different Use  
Circumvention Risk Case Study #1: Amlodipine  
Circumvention Risk Case Study #2: Viagra and Levitra  
Circumvention Risk Case Study #3: Gabapentin
- 4.7. Operational Risk: Failure of Execution

### Chapter 5: Portfolio Management: Acting on Portfolio Risk/Return-on-Investment Balance

- 5.1. Prioritization as the Key Issue
- 5.2. The Human Factor in Portfolio Management
- 5.3. Portfolios and the Planning Process: Building the Models

Benchmarking in a Dynamic R&D Environment  
Managing Portfolio Resource Bottlenecks  
Classical Decision Analysis  
Monte Carlo Simulation of Outcomes  
Robustness Against Multiple Outcome Scenarios  
Adaptive Clinical Trials: An Emerging Challenge to Resource Management

- 5.4. Enhancing the Portfolio Through M&A and Inlicensing
- 5.5. Decision Support Software from Contact Management to Business Intelligence  
CRM, PLM, SCM: Operating with Basic Resources  
Enterprise Resource Planning Software: The Great Operative Integrator  
Portfolio Management Software for the Life Sciences  
DecisionIris (Visual i/o)  
Enrich Portfolio System  
PDWare Portfolio  
Data Warehouses and Business Intelligence Software for Strategy Support  
Explicit Risk Analysis Software Tools  
Product Life Cycle Management
- 5.6. Managing Data Security in the Digital Business

### Chapter 6: Case Studies in Portfolio Research Allocation

- 6.1. Pfizer
- 6.2. Wyeth Pharmaceuticals
- 6.3. Bayer Schering Pharma
- 6.4. Genzyme Corporation
- 6.5. Three Examples from the Strategic Decisions Group

### Chapter 7: Synopsis and Recommendations

- 7.1. Evaluation of a Project
- 7.2. Portfolio Management

### References

### Company Index with Web Addresses

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