

Table of Contents

Introduction.....	1
The Life Sciences Industry	2
Academia	2
Biotech.....	3
Pharma.....	4
Valuation	5
The Role of Valuation	5
Current Problems in Valuation	6
Basics of Valuation.....	11
Introduction	11
Fundamentals.....	11
Cash Flows	11
Discounting.....	13
Valuation Methods	29
Discounted Cash Flows Valuation	29
Decision Tree.....	32
Real Options	36
Difference Between Real Options and Financial Options	59
Valuation of Financial Options.....	60
Valuation in Life Sciences	67
Fundamentals.....	67
Drug Development	67
Medical Device Development and Approval	70
Cost.....	72
Success Rates.....	74
Time.....	76
Peak Sales.....	77

Discounting.....	96
Volatility.....	100
Project Valuation.....	103
Project Valuation: DCF.....	105
Project Valuation: Decision Tree.....	113
Project Valuation: Real Options.....	121
Simulations of Projects.....	134
Sensitivity Analysis and Sensitivity-Simulations.....	143
License Contract Valuation.....	146
Fundamentals of Licensing.....	146
Valuation of License Contracts: DCF.....	152
Valuation of License Contracts: Real Options.....	160
Advanced Topics in Project and License Contract Valuation.....	169
Early-Stage Licensing with Possible Sublicensing.....	169
Simulation of License Contracts.....	194
Discovery and Preclinical License Deals: What’s Realistic?.....	195
How to Read a Deal.....	197
The Virtual Company Model.....	201
Negotiating License Deals.....	208
Valuing License Contracts with Multiple Indications.....	218
Valuing Projects with Multiple Markets.....	232
Technology Valuation and Feed Rate.....	233
IP Valuation.....	235
Pipeline Valuation.....	243
Portfolio Management.....	245
Introduction.....	245
Qualitative Approaches.....	247
Quantitative Approaches.....	248
Optimal Portfolio Structure.....	250
Company and Stock Valuation.....	255
Introduction to Company Valuation.....	255
Theory.....	258
Interpretation of Valuation Results.....	273
Simulation on Company Level.....	275
Case Company Valuation.....	275
Stock Valuation.....	278
Advanced Company Valuation.....	284
Mergers and Acquisitions.....	290
Other, Less Serious Approaches.....	293

Exercises 305
 Introduction 305
 Exercises 305
 Solutions 311

Case Studies 331
 Introduction 331
 Case Study 1 331
 Case Study 2 338
 Case Study 3 346
 Case Study 4 354

References 363

Index 365



<http://www.springer.com/978-3-642-10819-8>

Valuation in Life Sciences
A Practical Guide
Bogdan, B.; Villiger, R.
2010, XIV, 370 p., Hardcover
ISBN: 978-3-642-10819-8