

## Contents

<b>Acknowledgements</b>	<b>xi</b>
<b>1 Introduction</b>	<b>1</b>
Biotechnology Background	5
<b>2 Traditional Valuation Methods</b>	<b>11</b>
The Value of a Company	11
Accounts – Providing the Data for Valuation Analysis	12
The Income Statement	13
Balance Sheet	17
Cash Flow Statement	20
Income Statement Multiples	22
Balance Sheet Multiples	26
Summary	27
Discounted Cash Flow Analysis	27
Net Present Value	27
Constructing the DCF	28
Projecting the Cash Flow Stream	29
Choosing a Discount Rate	30
Other Thoughts	37
<b>3 The Drug Development Process</b>	<b>39</b>
The Drug Development Process	40
Drug Discovery and Research	44
Pre-Clinical Development	44
Clinical Trials	48
What Investors Should Look For When Analysing Clinical Trials	56
Conclusion	59
The Regulatory Process	59
Regulation in the US	60
Regulation in Europe	63
The Label	64

Timelines for Approval	65
Post Approval	65
Investment Lessons	66
Case Study #1	66
<b>4 Biotechnology Company Valuation</b>	<b>69</b>
Data Collation	71
NPV of the Pipeline	75
Calculations	80
Sensitivity Analyses	86
DCF of Whole Company	92
EBIT DCF of Products	97
Comparables Valuation	99
NPVs are Additive	101
Using all the Tools Available to Reach a Valuation Conclusion	101
Market Models	104
Conclusion	105
Appendix 1	106
Example 1	106
Example 2	108
Example 3	108
Appendix 2	116
Biosimilar Update	116
<b>5 Decision Trees and Real Options</b>	<b>119</b>
Decision Trees	120
Discount Rate	124
Deriving Scenarios	125
Conclusion	125
Decision Tree Example	126
Real Options	126
Valuing Options	129
Estimation of the Input Variables	138
Conclusions	139
<b>6 Biotechnology Investing</b>	<b>141</b>
Types of Healthcare Investment	141
Biotechnology Sector Evolution	143
Biotechnology Investment Cycles	145
Biotechnology Business Models	152
Focus on People	154
Cash	155
Product Pipeline	155
Commercial Risks	156
Newsflow	158
Lessons from Biotech Investing	160

---

<b>7 Early-stage Valuation</b>	<b>161</b>
Private Valuation	162
Discounted Cash Flow Method	166
Comparable Valuation	168
Venture Capital Method	170
Discount Rates	173
Conclusion	173
<b>Glossary</b>	<b>175</b>
<b>References</b>	<b>189</b>
<b>Index</b>	<b>193</b>

<http://www.pbookshop.com>

<http://www.pbookshop.com>