Alexandra Carina Gruber

Biotech Funding Trends

Insights from Entrepreneurs and Investors

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The Author

Dr. Alexandra Carina Gruber
Vienna, Austria

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For my parents
who were the most important teachers
during much of my own development

"It is not the strongest of the species that survive,
nor the most intelligent,
but the ones most responsive to change." *(Charles Darwin)*

Contents

Preface

The European biotech industry has long lagged behind its US counterpart. For most of Europe, the same holds true for private equity and venture capital (VC) spending on innovative start-ups. In recent years, however, the European biotech industry has improved its competitive position vis-à-vis the US, and so has the development of the private equity and VC market. Despite this positive trend, only a small fraction of available capital is invested in biotech start-ups – probably because there is hardly an area more complex, more globally oriented, more time-consuming, and more risky than biotech. As a result, many biotech start-ups are still struggling for survival, particularly in cultures that are less entrepreneurially and private-equity driven.

Has venture capital indeed developed into the dominant financing form for biotech, as it had for other start-up industries, such as information technology? How do above trends affect the interaction between European entrepreneurs, venture capitalists, and other investors? Is the value of venture capital perceived differently between entrepreneurs and investors? Are there any other important financial tools for biotech start-ups? What are the most important advantages and shortcomings of the different financing forms available? What makes the ideal entrepreneur or investor? Why do so many biotech start-ups fail? Can improved communication between entrepreneurs and their investors as well as among investors themselves help foster mutual understanding and lead to more successful long-term partnerships?

Answers to these and other questions about the interpersonal and financial aspects of starting a biotech company were obtained by conducting qualitative interviews with three groups of interview partners, i.e., entrepreneurs, venture capitalists, and other investors. The results of this prospective research study are reported in this book. Entrepreneurs and venture capitalists both inhabit two complex and differing ecosystems with many important, but often opaque, rules and interactions. In view of their different backgrounds, entrepreneurs and investors need to first find a way to understand – and begin to use – the language spoken by their respective counterparts. Interests between different groups of investors, too, can differ substantially. It is therefore nothing short of a challenge to reconcile the often diverging interests of all key players involved in starting a biotech company.

By describing the characteristics, beliefs, and expectations of each of these groups, this book intends to support both entrepreneurs and investors in getting along more successfully with each other. At the end of the day, finding the most suitable partner and building a relationship based on mutual understanding greatly increases the chances of a biotech start-up to succeed in a fiercely fought-over market.

N.B.: For easier reading, only male titles were used.

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Second, I would like to thank all of my interview partners, without whom this book would not have been possible. It was exciting and challenging to interview so many highly experienced entrepreneurs, venture capitalists, and other experts and investors, and discuss their insights into the European biotech market and the financing models available to develop a company. Every single interview contributed distinctively to the overall conclusions of this work, which would have been unthinkable without their generous and valuable support. Special thanks go to the contributors of the extended biotech case studies presented in this book, namely to Thomas Fischer and Susanne Bach of AUSTRIANOVA Biomanufacturing AG, Michael Tscheppe, Reinhard Zickler, and Isolde Bergmann of AVIR Green Hills Biotechnology AG, Wolfgang Schönfeld of EUCODIS GmbH, Werner Lanthaler of Intercell AG, and Bernhard Küenburg of onepharm GmbH.

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Therefore, dear reader, please consider this piece of work a heartfelt thank you to my instructor, to my many interview partners, and to my family and friends. Thank you all – and please enjoy reading!

Vienna, July 2008 *Alexandra Carina Gruber*

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Executive Summary

The European biotech industry has long lagged behind its US counterpart. For most of Europe, the same was true for private equity and venture capital spending on innovative start-ups. In recent years, however, the European biotech industry has improved its competitive position vis-à-vis the US, and so has the development of the private equity and venture capital market. Despite this positive trend, only a small fraction of available capital is invested in biotech – probably because there is hardly an area more complex, more globally oriented, more time-consuming, and more risky. As a result, many biotech start-ups today are still struggling for survival, particularly in cultures that are less entrepreneurially and private-equity driven, such as Austria and Germany, where there is still an evident gap between seed and early-stage financing. Considering the long lead times involved in biotechnological research and development, the unwillingness of venture capitalists to fund early development may largely be due to start-ups being unable to propose viable exits. At the same time, it has become tougher for companies to raise venture capital, as consolidation has thinned the ranks of venture capital firms.

This book focuses on two counteracting trends: One is the private equity and venture capital spending boom and the increasing number of biotech start-ups with strong product pipelines. At the same time, compared to other industries, the amount of venture capital spent on biotech start-ups is still limited.

In general, each development phase of a young company is financed by specific types of investors. In the preseed and seed phases, financing in many cases starts with the 'three Fs' – family, friends, and fools. After that, it is usually the government that steps in with grants and loans, followed by business angels and early-stage venture capitalists. In later development stages and as capital requirements increase, strategic alliances with corporate companies are key to success, as are deals with late-stage venture capitalists or banks. The last link in the financing chain of a biotech start-up is its exit, usually in form of an initial public offering (IPO), trade sale, or management buy-out.

Based on the general financing matrix for start-up companies and given the complexity of biotech development, the primary question of this survey was whether a biotech start-up went through the same development phases and was financed by