60 SECONDS WITH THE FUND MANAGER



BIOTECH INVESTING: IS THERE A DOCTOR IN THE HOUSE?

RUDI VAN DEN EYNDE, Head of Thematic Global Equity at Candriam, answers investors' questions about a sector where depth of specialist knowledge is a prerequisite to consistent stock selection success.



What are the key drivers to the performance of the biotech sector?

Of all the sectors praised to the heavens at the time of the dot-com bubble, the only firms to have truly lasted the course are biotechnology companies. There are good reasons for this.

Currently, six of the ten best selling drugs worldwide are biotechnology drugs, including the No. 1 seller, antiinflammatory Humira. The sector as a whole is also less vulnerable to generic competition due to its inherent scientific complexity and due to the necessity of holding costly clinical trials. Corporate activity is an omnipresent factor too as cash-rich companies bolt on smaller biotechs to boost overall growth rates.

But what usually escapes most investors who are not experienced biotech specialists is that the major driver to performance in the sector is medical innovation.

What does this mean for investors?

Improved scientific instruments and a better understanding of the underlying causes of diseases are leading to big improvements in drug efficacy and innovation. These are the major drivers of individual share price performance.

For investors, these characteristics result for example in a relatively low correlation between the performance of the biotech sector and the wider equity market. The vagaries of the broader economic cycle are, after all, largely irrelevant in the success or failure of drug development founded on many years of hard work in the laboratory.

And while there is certainly competition in some treatment areas, individual companies very rarely have exposures to precisely the same risk factors. Biotech is therefore very much a stockpickers' universe. But it is also one which requires huge specialist knowledge.

When is the right stage of drug development to invest in biotechs?

In the early stages, investment can certainly yield very high profits. However, these returns inevitably go hand in hand with a great deal of risk. At the other end of drug development, you are likely to miss the vast majority of the profit potential if you wait until all of the clinical development phases have been completed successfully.

However, we believe that there is a "sweet spot" in the risk/reward trade-off that lies between these two extremes. This is after "Phase II" of a drug's development has been successfully concluded.



CANDRIAM HEALTHCARE TEAM

"Interpreting the data requires a deep understanding of the disease settings"

PRE-CLINICAL / TOXICITY

 Needs to be positive for a drug to be authorized for human testing

• At this stage, failure risk is still high (80-90%)

PHASE I

The safety of the product is assessed on healthy volunteers or in uncontrolled patient groups

ailure risk still very high, ven after promising data

PHASE II

• Optimal dosing is determined, providing a first indication of efficacy (20-400 patients)

PHASE III

Well-controlled studies of established dose in thousands of patients.

• The failure risk of an individual drug is greatly reduced after a successful Phase III.

What does successful stock picking in the biotechnology sector involve?

In-depth clinical assessments, much less the valuation models, are the critical factor in determining biotech company investment returns. Drugs are are developed by doctors, approved by doctors at the regulatory bodies and they are prescribed by doctors.

Thinking like a doctor and understanding the needs and processes followed by the medical profession are therefore the key elements to consistent alpha generation. But this is a scientifically complex world which requires experience and a depth of specialist knowledge that cannot be quickly or easily assimilated.

What differentiates Candriam in mastering the inherent scientific complexity of this sector?

Since inception, Candriam's biotech

strategy has been managed by the same fund manager, and has always benefited from this dependable mix of knowledge and experience these past 16 years. Contrary to intuition the outcomes of clinical trials are not always binary, not always black or white. Interpreting the data requires a deep understanding of the disease settings and over the years we have been able to thoroughly develop this, with the healthcare team expanded to 3 people including two dedicated biotechnology analysts with a PhD degree.

Does the strong performance of biotechs over the last few years mean the sector is now overvalued?

Many observers are now questioning whether the sector can maintain the strong performance of the last 5 years, even more so in the light of the political statements by Hillary Clinton and others on drug pricing in the US. We remain however positive on the sector as no politician wants to stop the huge innovation currently going on and hence we firmly believe truly innovative and efficacious medicines will always gather high reimbursement. Innovation never sleeps and especially in immune-oncology the progress has been spectacular recently.

Against this backdrop and in the context of many biotech companies' potential growth, valuations for the sector do not look unreasonable. As always, biotech remains an opportunity-rich universe for skilled stock pickers.

FIND OUT MORE ABOUT OUR FUNDS AND THEIR RISK PROFILES:

www.candriam.com

60 SECONDS WITH THE FUND MANAGER



General Disclaimer

This document is for informational purposes only, is confidential and may not be reproduced or distributed in any form or for any reason. This document is intended as general background on the capabilities of Candriam Investors Group and, as applicable, presents information on investment strategies that are not currently provided to U.S. persons. Information included in this document that is attributable to any fund or group of funds sponsored or advised by Candriam Investors Group is shown solely for the purpose of highlighting experience and capabilities relevant to the management of an investment strategy within the relevant asset class, sector, or geography. The contents of this document have not been reviewed or endorsed by any regulatory authority, including the Securities and Exchange Commission (the "SEC") and the Commodity Futures Trading Commission (the "CFTC").

Please exercise caution in relation to this document. This document is not intended to identify all the risks associated with an investment in any of the investment strategies presented. Additional information about investment risks is available in the Form ADV Part 2A brochure of the relevant Candriam Investors Group manager. No investment should be made based on this document. Candriam Investors Group does not provide accounting, legal or tax advice. The information contained herein is true as of the date above and is subject to change. Candriam Investors Group shall not be under any obligation to update this information.

Past performance does not guarantee future results and current performance may be lower or higher than past performance data presented. Accordingly, future returns are not guaranteed, and there can be no assurance that a prospective investment in a given strategy will achieve comparable investment results or its investment objective. You may lose money on your investment in any of the investment strategies shown.

Important information

This document has been prepared by Candriam Investor Group for persons who are legally eligible under the U.S. federal securities laws to make the types of investments described herein. Generally, they would include persons who are "accredited investors" within the meaning of Rule 501 under the Securities Act or 1933 and "qualified purchasers" within the meaning of Section 2(a)(51) of the Investment Company Act of 1940.

This document is solely for informational purposes and may not be relied upon in evaluating the merits of investing in any particular investment strategy. All information in this document is subject to and qualified in its entirety by reference to the more detailed information appearing in our Form ADV Part 2A brochure (the "Brochure") and the agreement, investment guidelines and other documents associated with establishing an investment account as our client (the "Confidential Documents").

This document is not intended to provide an investment recommendation and should not be relied upon for accounting, legal or tax advice. The recipient should consult with its accounting, legal or tax advisor about the issues discussed herein. The recipient should review carefully the Brochure and the Confidential Documents before entering into any advisory relationship with Candriam Investors Group and considering any investment recommendation we may make upon becoming our client. These materials do not constitute an offer to sell or a solicitation of an offer to buy any securities.

Candriam believes that the information provided herein is reliable, but does not guarantee its accuracy or completeness. Certain information contained herein has been obtained from published and non-published sources and has not been independently verified by Candriam. Except where otherwise indicated herein, the information presented is based on matters as they exist as of the date of preparation, and will not be updated or otherwise revised to reflect information that subsequently becomes available, or circumstances existing or changes occurring after the date hereof.

Certain information contained herein constitutes forward-looking statements, which can be identified by the use of terms such as "may", "will", "should", "expect", "anticipate", "project", "estimate", "intend", "continue", or "believe" (or the negatives thereof) or other variations thereof. Due to various uncertainties and actual events, including those discussed herein and in the Brochure and the Confidential Documents, actual investment results may differ materially from those reflected or contemplated in such forward-looking statements. As a result, investors should not rely on such forward-looking statements in making their investment decisions. Candriam has no duty to update or amend such forward-looking statements.

Any investment strategies discussed in this document have not been recommended or approved by any U.S. Federal or state securities commission or regulatory authority (including the SEC and the CFTC). Furthermore, the foregoing authorities have not passed upon the accuracy or determined the adequacy of this summary. Any representation to the contrary is a criminal offense. An investment in a fund or an account managed or advised by Candriam is not a deposit and is not insured by the Federal Deposit Insurance Corporation, the Federal Reserve Board, or any other U.S. federal or state governmental agency.

Please exercise caution in relation to this document. This document is for informational purposes only, is confidential, and may not be reproduced or distributed in any form or for any reason. Additional information is available upon request. Information in this document is subject to change without notice.

Candriam cannot be held liable for any direct or indirect losses as a result of the use of this document. The intellectual property rights of Candriam must be respected at all times and the contents of this document may not be reproduced without Candriam's prior written approval.