

The Impact of Pipeline Events on Stock Price Adjustment and Volatility in the Pharmaceutical Industry

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Executive Summary

This paper analyzes the effect of pipeline related events in the pharmaceutical and biotechnological sector on investment decisions and stock price adjustments of health care companies.

Pipeline related news play a crucial role in the pharmaceutical and biotechnological field. The drug development phase takes on average 12 years to go from the preclinical testing phase to the market launch¹ and is marked by several stages which are critical in continuing or abandoning the drug development process. Low success probabilities of reaching the market may be compensated by high potential drugs, which make interesting cases for investors. However, due to long developing process and the difficulties in estimating future outcome, investors deal with high uncertainty. Milestones are usually commented by the companies in the press and these announcements represent crucial information regarding the future of the drug.

This paper investigates the reaction of investors to newsflow related to the clinical trial results, by assessing changes in volatility, stock price movements and trading volumes. For relevant members of the STOXX 600 Healthcare index, the exact dates of announcements related to the development of the new drug are identified in order to study market reaction.

Event study methodology is used to analyze the price adjustment to R&D progress announcements. The results show that investors already start trading between three to two weeks before an event occurs, which is reflected in a higher volatility and higher trading volumes. Furthermore, the data reveal that companies tend to release more positive than negative news, which results in an overall increase in stock prices around the event date.

¹ Bogdan (2008), P. 18