THE RELATIVE IMPORTANCE OF INFORMATION DISCLOSURES IN THE BIOTECHNOLOGY INDUSTRY

Prior research in the strategy literature speculates that investors and potential investors in biotech industry firms may prefer non-financial information disclosures for assessment of firms’ future prospects. Overall our results provide direct evidence that non-financial disclosures such as the commencement of Phase I and II testing, and FDA approval, are, on average, highly statistically significant. This may reflect the fact that in the biotech industry it takes an average of 12 years for products to go from R&D to production of products for the general population, making non-financial indicators of future profitability very important. In addition, many business innovation events such as R&D alliances and manufacturing alliances are also informative. In general, we find that many individual non-financial information disclosures are more significant in terms of information content than earnings announcements. For biotech firms, non-financial information signals future earnings trends and firm value, which helps explain why investors in this industry rely heavily on non-financial information disclosures (particularly since approximately ¾ of biotech firms report negative earnings each quarter). In addition to providing evidence that non-financial disclosures in the biotech (healthcare) sector have significant information content, we document evidence of: (i) higher information content for late-stage vs. early-stage events (particularly for negative late-stage events such as poor Phase III clinical trial results and FDA non-approval of drugs, as compared to negative results from Phase II testing); (ii) negative non-financial scientific innovation events being more informative than similar positive non-financial information; and (iii) higher information content for many non-financial scientific (e.g., clinical trial) events, versus financial (earnings announcement) information. In the biotech industry non-financial information is very important in terms of information content.

In terms of the policy implications of our study, it appears that biotech healthcare firms are acting strategically in their non-financial information disclosures. In particular, they are much less likely than expected to disclose “bad news” events than “good news” events. When “bad news” events are disclosed they are highly significant in terms of the negative impact on stock prices, which may help explain firms’ reluctance to make such disclosures. To the extent that securities regulators can further encourage biotech firms to make both positive and negative non-financial information disclosures, investors are likely to benefit. The main limitations of the paper relate to the generalizability of the findings of a single industry sample to other industries. Future research could assess the importance of non-financial information in other industries, such as industries that have a high R&D component and/or industries in an early-stage of development in terms of product life-cycle.

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2 We thank Wilfrid Laurier University and Concordia University for financial support that facilitated completion of this project. We also thank Joan Conrod, Yue Li, Michel Magnan, Robert Mathieu and seminar participants at the University of Laval for comments on an earlier version of this paper.