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The governance of innovation: Vertical integration and collaborative arrangements in the biotechnology industry

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Abstract

This paper analyzes and compares the various governance structures through which new biotechnologies have been developed and commercialized over the past decade and a half. These governance structures include (1) forward vertical integration by new biotechnology firms (NBFs) from R&D into manufacturing and marketing; (2) backward integration by established firms from downstream industries into biotechnology R&D; and (3) various forms of collaboration between NBFs and established firms involving R&D, technology transfer, production, and distribution. The institutional, technological, and organizational forces affecting the incidence of these governance structures over time are discussed and examined with data from several sources.



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