Benchside to Bedside: The Launching of a Novel Bone Healing Agent

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Abstract:

The ability to evolve a nascent idea into a successful entity requires navigation through a number of perils known to debilitate new ventures. Embryonic firms (or ideas) require sufficient development; from establishing an unambiguous approach, to attaining the necessary capital for evolution and growth, to fostering an environment and market for the idea or product. In the venture community, there are a number of advocates who possess the ability to contribute to new ventures (e.g. venture community support functions, venture capitalists, or informal contributors), and these individuals help navigate the startup or idea through inception to effectuation. Academic faculty, though, who often are not engrained into the local venture community, are frequently disadvantaged because their ideas or new firms come as an ancillary to their primary work.

Already potentially impeded by the challenges presented by the legal constraints of providing sufficient equity for ideas to the university, developing a clear, effective path to market can be difficult for academic faculty. In addition to the systemic uncertainty, difficulty, and impediments faced by all entrepreneurs, academic faculty are constrained by limited time, funding, experience, and other resources – all related to their inclusion in the university or system. In order to alleviate these constraints and propel cutting-edge scientific breakthroughs and technological development, Innovation-to-Enterprise Central (ITEC) was initiated to assist academic faculties' developments into the market – where, ultimately, these products will have the greatest utility to society.

Osetofuse is an embryonic firm in the nascent stages of conceptualizing a revolutionary new product, which uses thrombopoietin as a novel bone healing agent. Through the ITEC program, Osteofuse has been able to facilitate the exploration of the potential value (clinically, economically, and societally) of its research and how the initial idea can be developed into a commercialized and monetized product. In the process, it has developed mechanisms to gauge the market's acceptance of the product, the intellectual property and legal issue constraints facing the idea, potential commercialization streams and related valuations for marketization, and a quantitative analysis of projected revenue provisions. ITEC fosters continual compounding of knowledge capacity, as the trajectory of Osteofuse has not only inclined, but redirected because of specific uncovered data and insight from the program. As a result, Osteofuse has undergone dramatic transformation; in terms of both its formal identity and the potential approach to the market.