Building and Growing a BME Startup Company

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https://asu.zoom.us/j/98112983378

Abstract

Sonoran Biosciences is a preclinical-stage pharmaceutical company developing hospital-based products for treatment of surgical site infections (SSIs) and postoperative pain. The company’s lead product SBG003 is an injectable sustained-release gel containing tobramycin and vancomycin designed for direct application in surgical sites for prevention of SSI. Sonoran’s products are based on the temperature-responsive polymer PNDJ [poly(N-isopropylacrylamide-co-dimethyl butyrolactone acrylamide-co-Jeffamine M-1000 acrylamide)]. SBG003 has the potential to become a first-in-class product for prevention of SSI, including after abdominal, colorectal, cardiac, and orthopedic surgery. IND-enabling toxicology studies on SBG003 are currently in progress.

SSIs impose a significant burden on patients and healthcare providers, leading to increased length of stay, costs, morbidity, and death. No product has been approved to date for local antimicrobial delivery to prevent SSI. Recent third-party analyst reports indicate that an effective product in this market will have peak worldwide revenue potential exceeding $1 billion.

Sonoran was formed out of a research collaboration between the Vernon Lab at Arizona State University and the Orthopaedic Residency program at Banner Health (now Banner University Medical Center). Sonoran received early funding and support from the ASU Foundation, ASU Venture Catalyst, and the Edson Student Entrepreneurship Initiative. The company has raised $3.8 million in NIH grant funding to date.

This seminar will describe the process of starting a spin-out company, formulating a commercial strategy, intellectual property protection, assembling a team, conducting development-focused research as a startup, grant writing, fundraising and partnering, and interacting with the FDA.

Bio-Sketch

Dr. Overstreet earned a bachelor’s degree in Biomedical Engineering from Case Western Reserve University (2008) and a Ph.D. in Biomedical Engineering from Arizona State University (2012). His research work has focused on engineering new functionality into temperature-responsive polymers and improving the understanding, treatment, and prevention of surgical site infection, primarily in orthopaedic surgery. He has led the conduct of four NIH-funded SBIR/STTR research projects and mentored over 30 people, primarily ASU undergraduate students, master’s students, and orthopaedic surgery residents.