

EXECUTIVE SUMMARY

QUICK PITCH

Hubly Surgical is a medical device company forming the future of safe neurotechnology. We are first advancing intracranial access, streamlining previously proven safety features with our unique IP protected deep tech to make accessing the brain the safe, standard procedure it needs to be. Hubly Ventri Drill is an innovative, safer, and cost-effective alternative for the 100,000+ life-saving ventriculostomies performed annually in the U.S.

THE PROBLEM WITH INTRACRANIAL ACCESS

Patients with hydrocephalus, traumatic brain injury, intracranial hemorrhage, cancers of the nervous system, brain tumors, epilepsy, and subdural hematomas often undergo surgical treatments which rely on intracranial access. Such procedures are performed both inside (80,000 procedures U.S. annual) and outside (20,000 U.S. annual) of the operating room, making it one of the most common neurosurgeries. Yet, the current bedside procedure relies on an inaccurate, hand-crank drill deficient of any safety features. This shortcoming is manifest by the 40% misplacement rate of catheters during intracranial access procedures and the 3-attempt average for functional catheter placement. 50% of bedside and 10% of operating room intracranial access procedures yield patients' suffering from infection, hemorrhage, stroke, neurological injury, and death. Hubly Surgical is solving the problem of high failure intracranial access inside and outside of the operating room.

VENTRI DRILL

The patent-pending Hubly Ventri Drill is new and innovative because it includes safety, guidance, and ease of use features for use both inside and outside of the operating room. Our device includes (1) entirely mechanical, pressure-based plunge prevention; (2) battery power – rather than wired, electric power as is used in the operating room; (3) hardware catheter guidance utilizing the Ghajar guide technique, which has been proven to facilitate accurate freehand placement; and (4) hardware drilling path guidance. Ventri Drill could save 5,000 lives each year through catheter guidance alone and also eliminate plunging into brain tissue, which in total, cost the U.S. healthcare system \$1 billion annually. While Ventri Drill is optimized for intracranial access, the underlying plunge prevention technology can be adopted for alternative indications such as spinal taps and epidurals, which have lower failure rates but enormous markets.

CONTACT INFORMATION

- ✓ Hubly Surgical, Inc.
149 New Montgomery St.
San Francisco, CA 94601
- ✓ +1 (703) 798 6332
- ✓ www.hublysurgical.com
- ✓ info@hublysurgical.com

USE OF FUNDS

- TARGET MILESTONES**
- ✓ Published Cadaveric Study
- ✓ FDA Pre-Submission
- PREVIOUS MILESTONES**
- ✓ VP of Technology Hire
- ✓ Proof of Concept Finalized

FINANCIAL INFORMATION

- ✓ Stage: Pre-Seed
- ✓ Prior Capital: SAFE \$200K, Grant \$60K
- ✓ Upcoming: \$2M Seed





HIGH-MARGIN BUSINESS AND MARKET

Today's bedside, hand-cranked drill kits sell for \$1200/single-use disposable kit. Ventri Drill will be sold at \$2,000/single-use disposable kit with a 75% margin. With our safety features reducing patient complications, limiting O.R. time, and reducing readmits, we conservatively estimate our device could save hospitals \$10,000 per procedure. Based on our current hospital pipeline, which includes Stanford, Northwestern, and UT Health System, we expect to sell 10,000 units in the first year of launch in 2022. That's \$20M revenue or \$15M profit. Selling 65,000 units, 25% of the U.S. and E.U. markets, we will make \$135M revenue or \$100M net profit.

COMPETITIVE LANDSCAPE; ACQUISITIVE SPACE

Today the Integra Lifesciences Kit has 100% of the market, which includes a free-hand, hand-cranked drill, without any features for guidance or stability. The second bedside competitor, Phasor Drill, is a battery-powered drill with FDA clearance but has yet to penetrate the market. It also includes no features for safety or guidance. The lack of plunge protection means that battery power makes it more difficult for the surgeon to prevent drilling past the skull and into the brain. There are three main competitors in the operating room intracranial access market: the Medtronic Midas Rex MR7 Pneumatic Surgical Drill, Micromar EasyDrill Autostop Cranial Perforator, and the Stryker pi-drive CORE drill. Such products include features such as electric power and plunge protection but lack control and guidance, yielding egregiously high failure rates for the operating room. Potential acquirers with whom we have already had conversations include Medtronic, Johnson & Johnson, and Koh Young.

BUSINESS MODEL

Prior to achieving Class II 510(k) FDA clearance, Hubly Surgical will build an in house sales force of three to five highly talented, experienced neurosurgical device sales personnel. Like the Integra Lifesciences Kit, Hubly Surgical will sell our drilling system in a kit with 30 other components directly to hospitals. Our primary markets are those which rely heavily on junior trainees and non neurosurgeons, and which face financial crises: teaching hospitals, trauma clinics, and the department of defense. Our sales organization will focus first on generating revenue in three major U.S. teaching hospitals with which we have connections – Northwestern, Stanford, and University of Texas Health System. Already, the two Vice Chairs of Neurosurgery at Northwestern Hospital are excited and ready to use our product once we launch in Q1 2022. Upon increasing revenues in these key centers, we will decide to either seek an acquisition or raise a Series B and scale.

MANAGEMENT TEAM

CEO

CASEY GRAGE co-founded Hubly, after years of work in neuroengineering and roles held at JP Morgan and NASA.

VP of TECHNOLOGY

TYLER PANIAN has >10 years of medtech product development experience and >20 patents.

VP of OPERATIONS

DR. NIKHIL MURTHY joined after his Northwestern MD/MBA and years of neurosurgery experience.

VP of CLINICAL DEVELOPMENT

DR. AMIT AYER is Chief Neurosurgery Resident and Northwestern MD/MBA recipient. He previously founded neurosurgical company Rhaeos.

ADVISORS (& INVESTORS)

COOPER PERKINS, LLC

Highly regarded, leading medical device design and manufacture firm.

ALCHEMIST ACCELERATOR, LLC

Harvard Business Review ranked #5 accelerator in the United States.