

Pioneering High-Margin, Disposable Instruments to Improve Minimally Invasive Laparoscopic Procedures

*Proprietary **MicroAnchoring™** Technology provides optimal tissue access and visualization that allows surgeons to reduce the number of ports, incisions, interruptions and personnel during laparoscopic procedures.*

Company Profile

In the United States (U.S.) and Europe, more than three million laparoscopic procedures are performed each year. As the importance of aesthetics increases, surgeons are faced with the challenge of performing the requisite tasks of laparoscopic surgery through smaller incisions and fewer ports. Visualization of the target tissue is of paramount importance but is often compromised by organs and soft tissue overlaying the desired anatomical target.

Founded in 2006, Virtual Ports, an emerging life science medical device company, is dedicated to bringing a higher level of performance to laparoscopic surgery through the use of proprietary MicroAnchoring™ Technology to provide secure laparoscopic organ retraction using exceptionally small-profile devices. Virtual Ports designs and manufactures the only products

capable of using existing ports to retract organs entirely from within the body cavity. These devices allow the surgeon to perform critical procedural functions without cluttering the laparoscopic workspace.

Virtual Ports solutions optimize tissue access and visualization by allowing surgeons to atraumatically retract the organ obstructing the surgical field of view by lifting it and internally anchoring it to the endocavity wall. The Virtual Ports tool is then removed from the surgical port, freeing up the port for other uses. In contrast to conventional laparoscopic surgery, which requires the use of dedicated ports, incisions and auxiliary personnel solely for organ retraction, the Virtual Ports approach results in complete organ retraction without the need of a dedicated port or assistant.

The Virtual Ports concept was born of collaboration with leading surgeons in the fields of endoscopy and urology in Israel and the U.S., with the goal of eliminating the dedicated port for

organ retraction, thereby improving patient outcomes and lowering direct labor and surgical materials costs. Clinical applications include cholecystectomy, general, bariatric, oncologic, gynecologic and urologic surgeries, colon resection, robotic-assisted and single port surgery.

The EndoGrab™ Port-Free Retractor and EndoLift™ Port-Free Retractor were registered with the U.S. Food and Drug Administration (FDA) in April 2007, and received CE Mark in August 2007, and received CE Mark in August 2009. The EndoClear™ Endocavity Cleaning Station, designed to allow surgeons to clean the lens of the laparoscope without removing it from the body, received FDA clearance in April 2008. Since their introductions, Virtual Ports products have been used in more than 8,000 procedures worldwide.



Key Facts

- 2011. Virtual Ports signs five-year distribution agreement with Senko Medical, procedure volume reaches 8,000; sales revenue \$600,000
- 2009. Virtual Ports raises \$2.6MM; EndoGrab Retractor receives CE Mark; U.S. introduction of EndoGrab and EndoClear Cleaning Station
- 2008. EndoClear receives FDA clearance
- 2007. U.S. operations established in Richmond, VA; EndoGrab and EndoLift registered with the FDA
- 2006. Company founded in Western Galilee, Israel

Market

- Minimally Invasive Surgery (MIS)
- Proprietary High-margin Consumable Platform

Company Stage

- Revenue Expansion Stage
- FDA Clearance & Registration, CE Mark and Japanese Approval

Management

- Eric Meier, Chairman
- Dan Shwarzman, CEO
- Brian O'Neil, VP, U.S. Sales
- Gilad Heftmann, COO

Intellectual Property

- 7 patents issued or pending

Key Customers

- Stanford Medical Center
- The Cleveland Clinic
- Tampa General Hospital
- Sentara Medical System

Clinical Advisors

- S. Horgan, U.C. San Diego
- Y. Mintz, Hadassah
- D. Portenier, Duke Medical Ctr.
- H. Rivas, Stanford Medical Ctr.
- T. Rogula, The Cleveland Clinic
- S. Ross, Tampa General Hosp.
- L. Swanstrom, Oregon Clinic

Strategic Partner

- Senko Medical (Japan)

Investors

- Virginia Life Science (VLSI)
- The Trendlines Group
- KIG Investments

Investment To Date

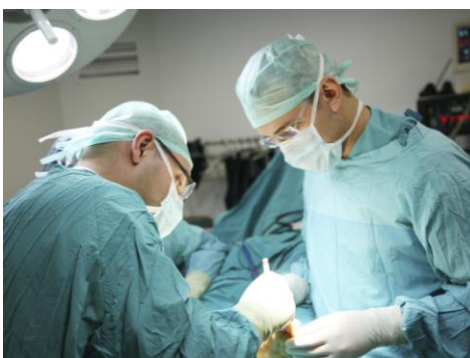
- \$4.5 MM

Financing Sought

- \$1.0 MM - \$1.5 MM

Use Of Proceeds

- Sales & Marketing in the U.S., Europe and Japan
- Product Line expansion



Contact Information

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Product Portfolio

The Virtual Ports products are introduced into the body using a proprietary Applier hand instrument which is removed after the consumable is securely fastened to the intra-abdominal wall.

EndoGrab™ Port-Free Retractor completely retracts the organ in two directions, without the need of a dedicated port.

EndoClear™ Endocavity Cleaning Station enables cleaning of the camera lens without removing the laparoscope from the cavity.

EndoLift™ Port-Free Retractor optimizes access to larger soft tissue structures, such as the liver and uterus.

Target Markets

The Virtual Ports family of products are designed to improve the efficiency of laparoscopic surgeries and represent a \$500 MM U.S. market opportunity. Laparoscopic procedures are widely adopted, but key unmet needs remain in order to reduce the cost and streamline the workflow of the procedure.

1. *Cholecystectomy*: Gallbladder removal is the most common laparoscopic procedure with over 1.0M annual U.S. procedures. A MIS approach has become the standard of care, but the unmet needs which Virtual Ports technology addresses include simplifying the operative workspace, improving access and visualization of target tissue, and reducing the number of surgical ports required. Fewer ports reduces materials cost, operative time and the risk of infection and significantly improves the aesthetic outcome. EndoGrab and EndoClear are critical enabling technologies for this procedure.

2. *Bariatric*: Weight reduction procedures have increased dramatically over the last decade with approximately 175,000 U.S. procedures performed annually. The key to simplifying and streamlining these procedures lies in maintaining accessibility to the stomach. The EndoLift device safely and completely retracts the liver to provide unparalleled access to the stomach without use of a dedicated port.

3. *Colon Resection*: Approximately 280,000 procedures are performed annually in the U.S. The EndoGrab and EndoClear improves accessibility to the desired tissue while reducing the number of surgical ports, materials cost and risk of infection.

4. *Robotic Surgery*: Robotic-assisted procedures place new constraints on surgical techniques, due in part to the significant cost of the capital equipment which increases the cost of operating room time. The EndoClear provides optimal visual clarity without removing the laparoscope from the body thereby preserving the surgeon's focus and reducing operative time.

5. *Single Incision Laparoscopic Surgery*: SILS is an enhancement to laparoscopic surgery in that the procedure is performed through just one port. The EndoGrab and EndoLift retractors uniquely complement SILS by retracting the organ from inside the body instead of requiring a dedicated port for organ retraction.