LSI Alumni Innovator Spotlight: SOMAVAC's Elizabeth Hoff

Elizabeth Hoff (Source: LSI Europe '24)

SOMAVAC is tackling one of the most neglected aspects of breast cancer care: post-surgical fluid management. Under the leadership of CEO Elizabeth Hoff, the company is bringing modern, negative pressure technology to a space that's seen little change in more than 50 years. With SOMAVAC's discreet, active-suction system, patients are recovering faster, avoiding complications, and regaining their mobility and their dignity.

From Boardroom *to CEO*

Elizabeth Hoff didn't start **SOMAVAC**, but she quickly became its fiercest advocate. After a surgeon-founder suggested she look into the company's transformative potential, Hoff joined the board to drive commercialization, gather data, and explore strategic partnerships. She was soon compelled to take the reins as Chief Executive Officer. "I became so engaged with the board that I joined as CEO to partner with an excellent Chief Operating Officer, **Phil Ryan**, to take us to the next level," she recalled. "We've built a phenomenal team and are laser-focused on transforming recovery for breast cancer patients."

Hoff brings decades of medtech leadership to the role, including time as VP and GM at **Medtronic**. What drew her in was the massive unmet need in recovery after mastectomy and breast reconstruction. "Diagnostics and treatments have advanced. But the post-surgical experience? Still stuck in the 1970s," she said. "We are the first and only company aggressively focused on this phase of care."

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A Broken Standard of Care

For the 2.6 million people undergoing breast cancer surgeries globally each year, surgical drains are an unavoidable part of recovery. Most patients go home with outdated Jackson-Pratt (JP) bulbs: a passive system that collects fluid into clunky, clear bulbs via external tubing. "They wear their husband's shirts with safety pins," Hoff explained. "They unhook a tube and squirt the fluid out. Patients hate it, describing it as disgusting, painful, and isolating. I'm quite confident that we will look back and think it was archaic how we treated people for so many years."

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Beyond the trauma of self-managing surgical drains, the risks are high. Patients can wear them for up to six weeks, increasing the chance of infection fourfold and frequently requiring reoperations. "One patient I've gotten to know has endured 17 surgical procedures in just three years. She called our office to make sure she got SOMAVAC for her 17th procedure," Hoff shared. "That's how much these outdated drains impact people's lives."

The SOMAVAC *Solution*

SOMAVAC's device replaces the outdated bulb-and-pin system with a sleek, wearable belt that uses active negative pressure to efficiently remove surgical fluid. "This is not passive suction. It's a smart, closed system that works continuously without requiring the patient to handle their own surgical fluids," Hoff explained.

Patients experience faster drain removal, reduced complications, and far greater mobility. "Because SOMAVAC drains surgical fluid far more efficiently, we are able to pull the drains 30% sooner. For many women, that means dropping their kids off at school, running errands, or going out to dinner," she said. "Our device allows them to regain their mobility and return to activity and exercise, which we all know is an important part of the recovery process."

For providers, SOMAVAC delivers predictable outcomes and fewer reoperations. The technology aligns with broader clinical goals of promoting early mobility and reducing post-op infections, making it a compelling value-add for surgeons and hospitals alike. In addition to breast procedures, SOMAVAC is also being used in abdominal wall hernia surgeries, where fluid management and infection prevention are equally critical.

Growth, Validation, and Strategic Pull

Since SOMAVAC's FDA clearance, the company has sold 1,800 units and expanded its footprint far beyond its Memphis pilot market. New pilot programs are underway in Texas, California, and Virginia, and SOMAVAC recently received three VAC Committee approvals.

Hoff emphasized the pace and purpose of this expansion. "We're aggressively collecting clinical and economic data with 60-day endpoints. These are quick turnarounds with meaningful impact: fluid removal rates, drain removal timelines, and patient experience," she said.

In December 2024, SOMAVAC closed an oversubscribed convertible note, and as of Q3 2025, the company has issued its fifth patent in the negative

Source: SOMAVAC

pressure therapy space. The team has grown to include 12 sales reps and three new clinical advisors in plastic surgery. A Series A raise is now underway, with targeted completion in November 2025 and plans for a Series B in Q4 of 2026.

A Rapidly Growing *Market Opportunity*

The problem SOMAVAC solves isn't niche; it's massive.

According to LSI's Global Surgical Procedure Volumes database, over 2.6 million breast cancer surgeries were performed worldwide in 2024, with procedures expected to increase to 3.2 million by 2029. According to LSI's Compass database, the global market for fluid management devices reached $788 million in 2024 and is expected to reach $1.1 billion by 2029. LSI estimates that this market is increasing at a rate far in excess of the surgical procedures, including breast surgery, that utilize these devices.

"The breast cancer community is incredibly vocal and connected. Once we unleash the patient word-of-mouth, this will move fast," Hoff said. "They already talk in support groups, on Facebook, and through organizations like **Susan G. Komen**. Once you've had SOMAVAC, you don't want to go back."

Restoring Dignity in Recovery

For Hoff, SOMAVAC is about more than reducing infection rates or improving workflow efficiency; it's about restoring dignity. "It's horrific what women go through after these procedures," she said. "We are fixing the most ignored known problem in mastectomy and breast reconstruction."

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At LSI USA '25, Hoff revealed she had been wearing the SOMAVAC device the entire time she was on stage. "No one noticed. That's the point," she said. "This is about getting women back to living their lives, with comfort, discretion, and grace." LSI

From Unbearable *to Wearable*

"[SOMAVAC] was great. I loved that it had a fanny pack that was self-contained. I really, really loved that. The sooner you can make [SOMAVAC] the standard of care, the better. I can't complain about anything; I'm just grateful I was the one! I loved not having to worry about those grenades...I call the bulbs grenades. It was easy. It was just easy! Everyone I've spoken to has said, 'They. Want. That.'" — Shelley M. (bilateral mastectomy)

"I was one of the first patients to use the SOMAVAC drain after my surgery, and the experience was outstanding. It was discreet, easy to manage, and far more comfortable than the gross bulbs. The reduced hassle and quiet operation made my recovery smoother and less stressful. I'm grateful this innovation was available when I needed it." — Gwen C. (hernia surgery)

"I was diagnosed with cancer 22 years ago. Back then, I had the bulb-type drainage system. It was very cumbersome, and I had them for 2.5 weeks. This time around, I had the SOMAVAC. It was so much easier compared to what I had been through in the past. I did everything myself! I didn't have to worry about pinning up the bulbs, and definitely got my drains out quicker. I was pleasantly surprised by how much easier it was. Very, very positive experience." — Cindy L. (bilateral mastectomy)

"I was prepared to have to deal with the bulb drains, so I was pleasantly surprised with getting the SOMAVAC. It made things so much better. The fact that I didn't have to clean out all the nasty stuff, and I could change the bag by myself, was so nice. My mom came into town because she had the bulbs and knew they were a struggle. When she saw I was able to use the SOMAVAC by myself, she said, "You don't need my help???" and I said, "Nope! I just wait for the light!". I also think I pulled them faster. I had them out at nine days when they thought it'd be two weeks with bulbs. I even got all the stupid shirts with pockets, and I didn't have to wear any of them! Thank God, because it was all ugly anyway. It made my recovery so fast, I didn't want to go back to work! I wanted some more time! We were out eating pizza as a family after two days! I would probably ask for SOMAVAC again. I love that thing!! I didn't know until I used it!!!" — Kelly M. (bilateral mastectomy)

This is Jaime B., the patient who had 17 procedures in three years. She demanded SOMAVAC after her surgeon said her next procedure would use the bulbs. She says the quality of life and benefits of SOMAVAC aren't even debatable in comparison to ancient bulbs.

(Source: SOMAVAC)