

TRANSENERIX HAS UNSELLABLE, IMPRACTICAL SURGICAL BOTS, MASSIVE SHARE DILUTION PENDING

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RESEARCH SUMMARY

- We have a price target on TransEnterix (TRXC) of \$1.20 by the end of the year. TRXC real goal is to sell stock to uninformed retail investors. The company, insiders, and institutional shareholders are selling their shares, or filing to, on this recent pump.**
- TRXC has three products: their SPIDER surgical system, a failed product which they are discontinuing, and two surgical robots: the ALF-X and the SurgiBot. Evidence shows both are impractical and have little to offer surgeons.**

- The ALF-X has already been a commercial failure. It has been on the market since 2012 with the plan to take market share from Intuitive Surgical (ISRG). The ALF-X didn't sell a single unit in 2013, 2014, or 2015. TRXC acquired the ALF-X for \$25M in cash plus stock in late 2015 for the purpose to parade it in front of uninformed investors.
- The SurgiBot is an impractical surgical robot that TRXC has done enough for it to likely gain FDA 510(k) clearance. It will also likely be a commercial failure like the ALF-X and SPIDER.
- In TRXC sponsored studies of the SurgiBot, surgeons say it "has potential" but isn't quite there yet.
- TRXC management knows its products aren't very good, one indication of this is the lack of patents. TRXC has only one US patent for its SurgiBot.
- Management aren't robotics experts, but their competitors are.
- Johnson & Johnson has its own surgical robot company that will compete with TRXC.
- TRXC's CFO, Joseph Slattery, former company was Trans1 which settled with the US Department Of Justice for \$6M for medicare fraud.

Surgical robot manufacturer TransEnterix (TRXC) stock has gone on quite a run lately. The stock closed at \$1.66 on January 15, 2016, and yesterday closed at \$4.10 for a 150% runup. But it is a run based on thin air and hype. Nothing fundamental has changed since January 15 and today.

This crazy rally/pump has happened for a few reasons. First, Johnson and Johnson's (JNJ) CEO [recently said](#) that they are looking to do acquisitions in the medical device industry. This led people to think TRXC is a buyout candidate. Also there are articles out pumping TRXC claiming that its surgical bots are going to challenge Intuitive Surgical's (ISRG) reign in the robotic surgery space. As explained in this article, both of these claims are nonsense.

TRXC expects its SurgiBot surgical robot will obtain 510(k) clearance by the FDA in late March. The SurgiBot will then be able to be sold in the US. Investors are excited about the 510(k) clearance of SurgiBot. However, we believe the SurgiBot will gain clearance, and then will fall on deaf ears, just like what happened with the sales TRXC's SPIDER system and its ALF-X which were poor.

TransEnterix, Insiders, and Shareholders Are Selling Shares Hand Over Fist, Or Filing To

TRXC executives and insiders are taking advantage of this

nonsensical runup. They are selling shares hand over fist, and/or filing to. None are buying. With its latest ATM financing, TRXC has an enterprise value (EV) of over \$400M. That's a huge EV for a company that has only had failures, and evidence suggests their current products will also fail.

On 2/10/16, [TRXC announced](#) that it had finished selling \$18M worth of stock in its "at the market" (ATM) equity sales facility starting from 9/30/15 at an average price of \$3.23 per share. Immediately after that ATM was finished, [on 2/9/15 TRXC filed another ATM facility](#), this time to sell \$43.6M in equity from now until January, 2017. So they have all year to sell those shares, and you can bet they'll sell a good chunk of that now while the stock has runup 150%. The impact of selling \$43.6M of shares in the open market will surely cause the stock to decline. But more importantly, why does TRXC continue to raise capital, and why do its institutional investors refuse to participate in conventional financing? Investors need to ask these kinds of questions.

On 2/11/16, TRXC [filed for the sale](#) of a whopping 42.7M shares for select institutional investors. These shares represent about 40% of the current shares outstanding. On top of that, TRXC also [filed for the sale](#) of 15.5M shares for Sofar SPA, the pharmaceutical company that developed the ALF-X. Those shares have a lockup expiry in September, 2016.

All of this planned selling from here on through the rest of 2016 will put constant selling pressure on the stock.

TransEnterix' SPIDER Surgical System Failed, The ALF-X Failed And SurgiBot Has No Edge

The SPIDER Surgical System was cleared by the FDA for sale in 2009. [Here](#) is a video from 2011 with TRXC showcasing its SPIDER Surgical System. In theory, these tools should be desirable because they are less invasive, allowing surgeons to make tiny incisions in the patient and enjoy more flexibility during surgery. But in the real world, SPIDER wasn't practical and didn't offer any advantages. SPIDER was phased out by TRXC on December, 31, 2014, after generating a total of \$0 in profits.

Before TRXC gave up on its SPIDER system, there was a lot of hype claiming that it was the new generation of minimally invasive surgery procedures.

[Here](#) is a news story of the SPIDER System being used to perform a mini-gastric bypass.

[Here](#) is a video from 11/8/10 showing the SPIDER system being used for weight loss surgery.

[This article](#) from 12/15/11 reports TRXC is raising funds to market the SPIDER Surgical System.

From the article:

The current financing is the second tranche of TransEnterix's \$55 million series B round in 2009 that the company used to prepare for the launch of its surgical system. The SPIDER became commercially available in the United States in early 2010 and later

that year TransEnterix received a CE Mark clearing the way for market entry into Europe. A new version of the surgical system launched last March.

\$55M is a lot of shareholder money wasted on a product that turned out to be impractical and is now discontinued.

Why The SPIDER Surgical System Failed

[Here](#) is a third party medical study done on the SPIDER system. It was a group of 20 participants, 10 inexperienced surgical students, and 10 experienced laparoscopists. Both groups worked on a laparoscopic surgery simulator with standard laparoscopy technique, and with the SPIDER.

The study's conclusion was:

Even though the SPIDER is an innovative and promising device, our study proved that it is more challenging than conventional laparoscopy in a population with different degrees of surgical experience.

TRXC raised \$55M in financing to market the SPIDER, and it was a complete failure. Now, TRXC is raising money to market its SurgiBot. What are the chances that the same result will happen? Evidence suggests it is pretty high.

TransEnterix' Two Surgical Robots

Now that it has discontinued its SPIDER surgical system, TRXC only has two products. Its two surgical robots, the Telelap ALF-X (ALF-

X), and the SurgiBot. The SurgiBot will have an average selling price (ASP) of \$500K while the ALF-X is offered for \$1.77M. The SurgiBot hasn't been cleared to be sold anywhere yet. The ALF-X has had CE Mark (it can be sold in the EU and Middle East) since late 2011.

The ALF-X Surgical Bot Has Already Proven To Be A Commercial Failure

Italian generic pharmaceutical and medical device company, [Sofar SPA](#), created the ALF-X and it received CE Mark in 2011. ALF-X was developed "to compete with Intuitive Surgical's (ISRG) da Vinci", as explained in [this medical journal](#) from 2012. However, **Sofar didn't sell a single ALF-X in 2013, 2014, or 2015.**

Sofar's total loss attributed to the ALF-X was \$3.6M in 2013 and \$3.36M in 2014. ALF-X generated \$0 in revenues in 2013 and 2014. Below are the [ALF-X carve-out financials](#) provided by Sofar SPA for the years ended December 31, 2013 and 2014:



ALF-X losses were \$2.059M related to the ALF-X for just the first six months of 2015. The following are the [ALF-X carve-out financials](#) provided by Solar SPA for the sixth months ended 6/30/15:



Note that sales related to the ALF-X were \$69K for 2015. That wasn't revenues from selling a unit, as ALF-X selling price is over \$1 million. 2015 meager revenues were for a service of some kind.

As [described in third party clinical studies](#), there's no clear edge with using the ALF-X over other forms of minimally invasive surgery. Therefore, there's no incentive for surgeons to buy the expensive robot. From [this clinical study](#) done in September, 2015 on the ALF-X:

“more clinical data are needed to determine whether this approach can offer any other benefits over other minimally invasive surgical techniques.”

After over three years of trying to market this machine, SOFAR gave up on it. It [sold it to TRXC](#) in September, 2015, for \$25M in cash and 15.5 million shares of TRXC stock. Sofar may also qualify for an earn-out of \$31.1M should negotiated milestones be reached.

Why Would TransEnterix Acquire The ALF-X After It Failed To Sell Any Units?

TRXC's acquisition of the ALF-X doesn't make any logical business sense for TRXC. TRXC won't be able to market it any better than Sofar did. Sofar already had hospital contacts from selling its pharmaceuticals. Whereas TRXC has no contacts, no hospital knows who the company is. How could TRXC sell the ALF-X any better than Sofar could? We surmise the real reason for the

acquisition was to make TRXC appear to be a larger, more established surgical robotics company to entice uninformed investors.

Another point that makes the acquisition strange, is both the ALF-X and SurgiBot are designed to be used for laparoscopic surgery. Why would TRXC acquire a competing robot to their SurgiBot?

Furthermore, if the SurgiBot is a great machine, why would TRXC acquire the ALF-X, a machine with old technology that already didn't garner any interest in the marketplace since its launch four years ago. Shouldn't TRXC focus first on selling its SurgiBot and being successful there before making more acquisitions? Now it needs to make serial dilutions of its stock in order to finance that acquisition.

In presentations, such as at the [Canaccord Genuity Med Tech and Diagnostics](#) forum on 11/19/15, TRXC's CEO, Todd Pope, raves on about the ALF-X, and doesn't talk much about the SurgiBot. This is odd, not only because the ALF-X is already a proven commercial failure, but also because SurgiBot will be a new product into the market, you'd think he would talk that one up. He must not be very confident about the SurgiBot, and instead is pumping up the ALF-X to investors because it's a more interesting, more expensive machine.

ALF-X Studies, No Independent Data On The SurgiBot

On TransEnterix's [clinical publications section](#) on its website, it lists

several clinical articles on its ALF-X. However, there are zero clinical publications on the SurgiBot.

Studies in regards to the ALF-X include:

[Telelap Alf-X-Assisted Laparoscopy for Ovarian Cyst Enucleation: Report of the First 10 Cases.](#) From 9/2015.

In the above study it says:

“Telelap ALF-X laparoscopic enucleation of benign ovarian cysts with an ovary-sparing technique is feasible, safe, and effective; however, more clinical data are needed to determine whether this approach can offer any other benefits over other minimally invasive surgical techniques.”

That doesn't sound very advantageous if the benefits over other surgical techniques aren't easily apparent.

Another study from 12/2012 called:

[Telelap Alf-X: a novel telesurgical system for the 21st century.](#)

In the above study it says:

“The TELELAP Alf-X system shows excellent stability, easy-to-use interface, and ability to perform essential endoscopic skills. Further experimentation, especially in live tissue, could identify the role of this new technology for the surgical repertoire”

That study was from 2012, and although the conclusion sounds positive, no units were sold in the following three years.

We already know that the ALF-X robot has been a commercial failure. However, not a single third party medical study or article has been completed on SurgiBot. Having no data available on the robot shows that it's not a product with potential. If it was, there would likely be numerous experts from the robotics sector involved in independent definitive clinical studies. With the history of TRXC's failures, the SurgiBot's success looks slim.

TRXC has completed some studies on its own with the SurgiBot. [Here](#) TRXC announced it has completed GLP (Good Laboratory Practice), non-clinical safety tests with the SurgiBot.

[This article](#) describes an analyst event in April, 2015 which was hosted by TRXC and has surgeons present their experiences using the SurgiBot to other surgeons. As this was an event hosted by TRXC, it's biased and they only picked surgeons to present the SurgiBot who will say positive things about it. But even though it's biased, many of the surgeons imply that the SurgiBot has potential, but isn't quite there yet. They mention that the SurgiBot could have potential *in the future*. If they're thinking about how the current model can be improved, that implies it has flaws and it may not be practical in the real world.

Following are some quotes from the article that convey this:

"The SurgiBot has promise to get us to that ideal of single incision surgery"

There's "promise", but it isn't there yet.

“I’m already thinking five, six generations down, but I can see that the platform has a lot of expand-ability”

The surgeon that is looking into the future implies the current SurgiBot version needs improvement.

TransEnterix Only Has One Patent On Its SurgiBot

TRXC has patents on its ALF-X that were from Sofar. But incredibly, TRXC only has one patent in the US on its SurgiBot. From the [2014 10-K](#):

IP related to the SurgiBot System and the SPIDER System: The Company holds four United States patents, two Japanese patents, and two Australian patents, and it has filed more than thirty patent applications in the United States and abroad. In each instance, we own all right, title and interest, and no licenses, security interests or other encumbrances have been granted on such patents and patent applications. Three of our United States patents resulted from filings relating to the SPIDER System. The Japanese and Australian patents, which also resulted from filings relating to the SPIDER System.

The above states that all of TRXC’s patents apply to its SPIDER surgical system, except for one US patent that applies to the SurgiBot. Note the SPIDER system was a failed product for TRXC and they have discontinued selling it.

The fact that TRXC only bothered to get one patent on its SurgiBot shows that it isn’t concerned about the technology getting ripped

off. This suggests the SurgiBot is not a useful machine and isn't at risk of getting copied.

Compare TRXC's one SurgiBot patent, to the patents of Intuitive Surgical (ISRG). From its [2015 10-K](#):

As of December 31, 2015, we held ownership or exclusive field-of-use licenses for more than 2,100 U.S. and foreign patents and more than 1,500 U.S. and foreign patent applications. We intend to continue filing new patent applications in the U.S. and foreign jurisdictions to seek protection for our technology.

Intuitive Surgical has 2100 patents, and 1500 patent applications. The TRXC SurgiBot has one patent. There's no comparison here. With only one patent, how valuable or unique could the SurgiBot technology be?

TransEnterix Management Are Not Robotics Experts But Their Competitors Are

TRXC's CEO Todd Pope was previously employed with Cordis, a division of J&J that offered drug-coated stents. Cordis was a failing entity at J&J and [they let Mr. Pope go](#). We have reviewed Mr. Pope's biography and conducted a search for any references to Mr. Pope being involved in robotics prior to his work at TRXC. It appears clear to us that Mr. Pope had zero experience with surgical robotics prior to joining TRXC.

TRXC's CTO Anthony Fernando was previously employed with a variety of medical device manufacturers. It appears he worked for

Stryker, Becton Dickinson, PerkinElmer, Varian. We conducted a search for [patents held](#) by Mr. Fernando. It appears to us that Mr. Fernando also did not have significant expertise in robotics prior to joining TRXC.

TRXC's VP of Research & Development, Nicole Bell, [has a history](#) of marketing and project management. She has very little, if any, engineering experience, let alone robotics experience.

Check out the following companies and the links to their management teams. The difference in robotics experience between them and TRXC management is vast. TRXC management just dabbles in robotics. Whereas their competitors have devoted their entire career to it.

1. [Titan Medical management team](#)
2. Verb Surgical: robotics experts [Andrea Bajo](#), [Dave Scott](#)
3. Medtronic robotics experts: [Dwight Meglan](#)[Miki Rosenberg](#)
4. Auris Surgical Robotics experts: [David Mintz](#)[Enrique Romo](#)
5. [Intuitive Surgical management team](#)

Johnson & Johnson Has Its Own Surgical Bot Company

J&J has no interest in TRXC's surgical robots. Instead, J&J has its own surgical robotics venture company jointly created with Google. In March 2015, the two technology behemoths [announced](#) the partnership. They've already designed a prototype.

From [this article](#):

“J&J’s Ethicon division, world leader in equipment for general surgery, designed a basic prototype of the robot last year and expects it to be a “disruptive” alternative to existing products, Gary Pruden, global chairman of J&J’s medical devices group, said in an interview.”

J&J had already created this surgical robot prototype in 2014, and has been working on it since then. Then, on December 10, 2015, [J&J announced](#) the formation of Verb Surgical, in collaboration with Verily Life Sciences, LLC (formerly Google Life Sciences).

“We believe Verb Surgical has the potential to change the future of surgery, not just robotic surgery,” said Gary Pruden, Worldwide Chairman, Johnson & Johnson Medical Devices. “The team has already made meaningful progress on the robotics platform, which is being developed for application across a host of surgical specialties.”

J&J is working on something great that can possibly rival Intuitive Surgical’s bots. Why would it turn around and acquire TRXC which has rinky dink, dated surgical bots that have failed in the commercial marketplace? J&J’s surgical bots will crush those of TRXC. There’s no comparison between the two companies and the resources each has to carry out their objectives.



Which company has more of a chance of creating a commercially successful surgical robot? There’s no comparison here. J&J has

better talent and more capital.

TransEnterix Has A Reverse Merger History With An OTC Stock

In 2013, TRXC [merged](#) with SafeStitch (OTCBB:SFES). Todd Pope was the existing CEO of TRXC, and became the CEO of the combined company. The combined company renamed itself TransEnterix, and initially traded on the OTCBB exchange under the symbol, SFES. Eventually TRXC [moved](#) to the NYSE under the symbol TRXC.

TransEnterix CFO, Joseph Slattery, Previous Company Was Charged With Medical Fraud By The DOJ

TRXC CFO, Joseph Slattery was the CFO of Trans1 from 2010-2013, and was with the company since 2007. On Slattery's watch as CFO, Trans1 [was](#) charged by the US Department Of Justice (DOJ) on federal health care fraud charges and false claims. Trans1 settled with the DOJ for \$6 million. When the DOJ gets involved in a company allegedly committing fraud, it means the situation is serious, and likely criminal.

Trans1 became Baxano Surgical from 2010-2013, as shown on Slattery's [LinkedIn profile](#). Trans1 and Baxano was another medical device company merger. Similar to TRXC, it sold minimally invasive surgical products. Baxano [filed](#) for Chapter 11 bankruptcy in 2014. Right after he left Baxano in 2013, Slattery started working for TRXC as CFO.

The Numbers Don't Lie

TRXC can have as many conferences as it wants, there can be buyout rumors every week, newsletters telling investors to buy, and a new Motley Fool article published every day on how great it is. But at the end of the day, numbers are the only thing that will either keep the stock up or cause it to crash down to earth.

As TRXC starts to report bad sales numbers of the ALF-X and SurgiBot, the stock will continue to fall. TRXC management knows this, and that's why they are aggressively selling stock right now. Management knows that the good times will soon end. We have a \$1.20 short term price target on TRXC. This price, 25% lower than where it was trading on January 15, 2016, is where the stock will go when sales don't materialize this year. We don't envision TRXC will survive when SurgiBot doesn't sell. That should be the end of the road.

Disclaimer: White Diamond Research has clients that are short TRXC.



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