OVERVIEW / THESIS

Invuity (ticker: IVTY) is a recently IPO'd medical equipment company, trading at nearly half its offering price 18-mos past the IPO. At $6.40, with a $100M market cap, it is trading at ~2.5x 2017 sales guidance of $40M-$42M. This is a "capitulation price" for a company innovating in an overlooked and undervalued area of the surgical equipment market.

Price	6.40
Diluted shares	15.7
Market Cap	100
Net debt	(34)
EV	66
Price / TTM sales	3.4x
Price / '16 sales	3.2x
Price / '17 sales	2.3x

	4Q15	1Q16	2Q16	3Q16	FY15	FY16E	FY17E	FY18E
Total sales	6,247	6,404	8,223	8,478	21,031	32,000	44,800	62,720
Gross profit	4,120	4,298	6,132	6,259	13,298	23,040	33,600	47,040
OpInc	(9,566)	(11,623)	(9,637)	(8,346)	(35,207)	(36,960)	(26,400)	(12,960)
EPS	($0.76)	($0.90)	($0.76)	($0.56)	($4.94)	($2.31)	($1.38)	($0.56)
Cash	46,296	33,864	25,456	47,709	46,296			
Total Assets	66,305	54,328	46,119	68,728	66,305			
Total debt	14,480	14,515	14,551	14,587	14,480			
Stockholder's Equty	42,343	30,683	21,477	43,307	42,343			

We believe IVTY represents a long term GARP opportunity for patient investors to acquire part ownership of a company where there is ample evidence that the operating plan is working and where an opportunity exists for long term growth, if not a takeout, in 3-5 years.

The company's core product is an engineered piece of plastic that delivers cool bright light with a wide field and few shadows directly into the cavity of a surgical space. This piece of plastic – for simplicity sake let's just call it a widget for now – either clips onto a reusable retractor that the company sells or is built into the company's version of ubiquitous operating room tools like "yankauers" and "bovies". Their tools improve visualization - a surgeon's ability to see - in non-laproscopic / non-robotic procedures.

The company charges a premium for their lighted product. Their disposable yankauers and bovies as well as the clip on widgets (called "waveguides") cost $250 to $300 compared to non-lighted versions of the same products, which cost under $50.

Despite the huge premium, they are on track to sell $24M of these disposable plastic products, (and $8M in reusable products that the widgets clip into), all at +70% gross profit margins.

And this is still a tiny company in an underpenetrated market. At 3Q16, the company had just 65 salespeople, many of them with the company for less than a year, selling into just 700 accounts. On a relative basis, compared with last year, they've added 25% more salespeople, 50% more accounts, and have experienced a 63% increase in procedures, to 26,000.

It takes time – and costs money - to introduce a new premium product to the market and for the market to adopt it. It takes time for a salesperson to "mature" and an account to "mature". It takes time for doctors to see the light and press a hospital Value Analysis Committee to buy for them a premium priced piece of equipment.

But we see a lot of promise in the early operating evidence, particularly with the recurring revenue disposable widgets and most particularly at 3Q16, where the ratio of incremental sales to incremental marketing spend reached an inflection point and increased to 48%.

	FY15	1Q16	2Q16	3Q16
incremental sales (y/y)	7,928	1,962	3,476	2,883
incremental marketing (y/y)	17,833	4,387	3,522	1,954
marginal benefit ratio	-56%	-55%	-1%	48%

Management expects to keep sales staff flat into 2017 and focus on going “deeper” into existing accounts, so there should be continued revenue scaling and lower losses next year. As the table above shows, the evidence demonstrates that we are just now seeing the inflection and impact of more salespeople and more accounts on revenues.

However, the market is most skeptical as signs of success are improving. That skepticism, which underlies the low multiple, is driven by the “bad news”, of which there are three primary issues.

First, the company is unprofitable, running at losses of $40M in 2016 on sales of $32M and gross profit margins +70%. We do not foresee an end to these losses in the foreseeable future.

Seconds, the company has $14.5M of outstanding debt at 12.5% interest, held by Healthcare Royalty Partners, a medspace investment firm that also owns 5% of the stock. This is no walk in the park, but startups with losses and debt are not unusual, and the management team - lead by CEO Phil Sawyer and CFO Jim Mackaness - have significant prior experience running growth distribution businesses.

The third piece of skepticism is from recent guidance shortfall – to 35% topline growth in 2017 down from expectations of 50% growth - that led to the stock’s capitulation. The stock was trading towards $13 heading into the quarter and hit $4.50 on the earnings release. That guidance / lowered expectations expanded the specter of doubt driven by the losses and the debt.

However, what drives long term growth of a company – qualitatively - is a problem identified and solved at a price the customer can afford. We see evidence in the operations that the company’s illumination products are indeed solving a problem, and that despite the high premium, they are generating traction on the valuable recurring revenue side of the business.

The product’s payoff to the client is safety and productivity. In certain surgical verticals - breast oncology, orthopedic surgeries, thoracic and spine procedures - the company expects surgeons who adopt the product will be able to do 1-2 more surgeries per day given the improved visualization.

To date, some of the verticals - breast oncology - have seen significant traction and early signs exist that gynecology may be another vertical.

Unfortunately, the more lucrative spine and orthopedic procedures remains under-penetrated. As a case in point of the hurdles the company faces in those markets, we spoke with a young orthopedic surgeon who acknowledged that visualization is indeed a problem for hip arthroplasties, but pushed back with a combination of hubris (“I know how to do it without seeing clearly”) and cost (“I’m not sure how to justify the higher priced product”).

There is a saying that "salesmanship beings when the customer says no". New sales. New accounts. More procedures. We believe the company’s success to date selling what has historically been seen as a low value commodity product for a significant premium demonstrates sound traction for the platform. With additional illumination products expected to be pushed into the distribution channels in 2017, we suggest there is a bigger picture that the market ignores.

The payoff to the investor, with continued execution by the company, growth and the opportunity to buy at a skeptical multiple, is a potential return 5x in 3-5 years, or a range of 20%-50% CAGR depending on share dilution.

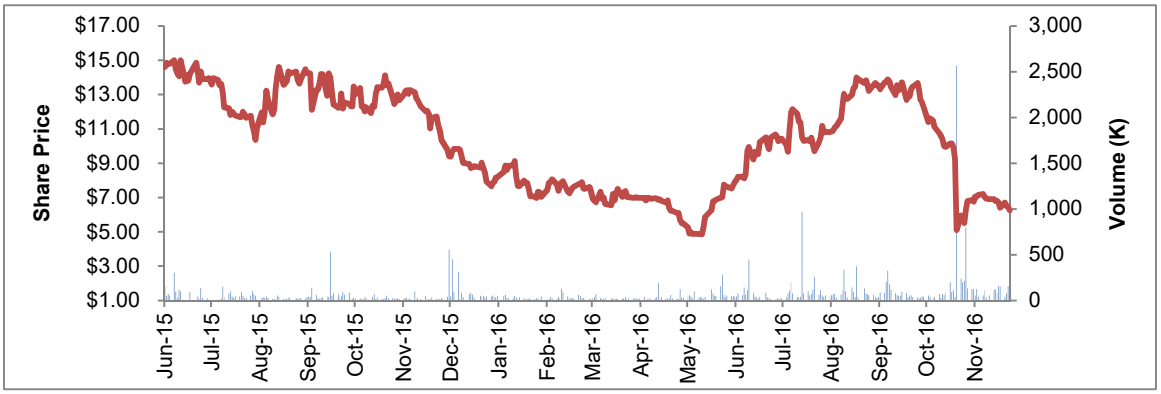
VALUATION AND OPPORTUNITY

A. This is a money losing startup.

Or

B. This is a company innovating in an overlooked vertical of the market, delivering an elegant solution to a widely acknowledged problem faced by surgeons

These attitudes range with the multiples and the skepticism around the company's prospects.



The stock IPO'd in June 2015, priced at $12 / share, below the expected $14-$16 range.

In July 2016, there was a follow on offering of 2.8M shares – 20% dilution - at $10 / share – representing what was then a 4x annualized sales multiple.

After the company reported 3Q16 earnings, the stock traded down towards 2x 2017 sales. The downdraft was due to 35% sales growth guidance in 2017, down from 50% growth in 2016 and below consensus expectations.

The 3Q16 sell-off reflected the market's focus on the weak guidance. Through the lens of a DCF model, such a response makes total sense: If T+1 income is lower, the whole valuation declines.

But from a qualitative perspective, there should be no point in investing in this company at any price – regardless of what the DCF says - nor under any circumstance without the belief that IVTY's usefulness to its customers will grow over time, along with its sales and eventually profits.

We believe the evidence suggests it is adding value in the growth in salespeople; the growth in accounts; the growth in procedures; and the incremental revenue accelerating past incremental marketing costs. At the current price of $6.40 / share, at a time when the market is skeptical, we see promise.

Revenue breakout	**1Q15**	**2Q15**	**3Q15**	**4Q15**	**FY15**	**1Q16**	**2Q16**	**3Q16**
Single use devices	2,990	3,463	4,074	4,742	15,269	4,789	6,012	6,421
Reusable retractors	887	720	875	851	3,333	1,151	1,452	1,398
Sales to 3rd party manu	300	429	306	387	1,422	217	491	369
Accessories	265	135	340	267	1,007	247	268	290
Total revenue	**4,442**	**4,747**	**5,595**	**6,247**	**21,031**	**6,404**	**8,223**	**8,478**
Gross profit	2,720	2,898	3,560	4,120	13,298	4,298	6,132	6,259
OpInc	(8,113)	(8,866)	(8,662)	(9,566)	(35,207)	(11,623)	(9,637)	(8,346)
NetInc	(9,032)	(9,346)	(9,138)	(10,054)	(37,570)	(12,110)	(10,129)	(8,821)
Diluted shares	1	3	13	13	8	13	13	16
EPS	($12.84)	($3.20)	($0.69)	($0.76)	($4.94)	($0.90)	($0.76)	($0.56)
Analysis								
single use / reusable	3.37x	4.81x	4.66x	5.57x	4.58x	4.16x	4.14x	4.59x
single use / total sales	67%	73%	73%	76%	73%	75%	73%	76%
% GP	61%	61%	64%	66%	63%	67%	75%	74%
% chg y/y single use						60%	74%	58%
% chg y/y reusable						30%	102%	60%
incremental sales (y/y)					7,928	1,962	3,476	2,883
incremental marketing (y/y)					17,833	4,387	3,522	1,954
marginal benefit ratio					-56%	-55%	-1%	48%
Direct sales force	43	44	52	59	50	67	69	65
Rev($K) / Salesperson	103	108	108	106	425	96	119	130
Procedures / Salesperson	419	386	308	339		306	297	400
Accounts / Salesperson	11	10	9	9	10	9	9	11
Procedures performed (cum)	92,000	109,000	125,000	145,000	145,000	*165,500*	186,000	212,000
procedures in period	18,000	17,000	16,000	20,000	71,000	20,500	20,500	26,000
single use device / procedure	$166	$204	$255	$237		$234	$293	$247
total revenue / procedure	$247	$279	$350	$312		$312	$401	$326
Accounts / Customers ordering	480	450	465	530	481	605	610	700
Procedures / account	38	38	34	38	148	34	34	37
Revs / account ($K)	$9.3	$10.5	$12.0	$11.8	$43.7	$10.6	$13.5	$12.1
Single use revs / account	$6.2	$7.7	$8.8	$8.9	$31.7	$7.9	$9.9	$9.2
Reusable retractors / account	$1.8	$1.6	$1.9	$1.6	$6.9	$1.9	$2.4	$2.0

In our view, the most important consideration for the patient investor is the evident traction in the disposable business, which shows proof of the model. There is significant scale here via recurring revenues on high value, high margin engineered optics plastic

The installed base of single use devices currently generates annualized $24M in revenue. The value of that business alone – as a premium recurring revenue model – broken out from the rest of the company, sells for 4x sales, with a continued runway ahead for growth. It seems very inexpensive to us.

Concurrently, there is a reusable product – retractors – that is typically part of *the initial sale* to customers. We consider part of the guidance "shortfall" driven by the abundance of reusable big metal *initial sales* in 2016. While this leads to difficult comps on growth, it also expands the installed base for more reusable products in 2017. That is a key.

Beyond the balance between single-use and reusable products, beyond the growth in salespeople, accounts and procedures, there are also future product introductions pending. The ability to "go deeper" in the 700 accounts with existing and new products is a key to next year's growth.

In 2017, the company will release a lighted version of Medtronic's PEAK Plasma Blade (they will call it the PhotonBlade). (It is noteworthy that IVTY's head of R&D, Paul Davison, was the head of R&D at PEAK Surgical, before it was acquired by Medtronic in 2011). This will be another lever for growth.

Obviously, the company isn't "there yet"; if we were to use the analogy of a rocket, and considering continued losses, it isn't yet out of the atmosphere. But the stock is priced as if it may never.

MANAGEMENT

The CEO is Phil Sawyer, known as a serial builder and seller of businesses. He previously co-founded Fusion Medical Technologies, a surgical sealant company that was acquired by Baxter International in 2002 for $157M and now represents more than $500M in annual sales for the company.

After selling Fusion, he joined Helix Ventures, which according to the website has sold or taken public 10 companies, and still maintains a portfolio of six private ones.

The CFO is James Mackaness who joined the company after the IPO, in August 2015. He was previously, for eight years, the CFO of IRIDEX Corp, a distributor in the opthamology vertical. He had prior experience in a variety of technology companies.

The co-founder of the company is an optical engineering named Alex Vayser, who had previously co-founded two other visualization companies, and who believed he had found a better way to light surgeries.

When we think about the business and the prior experiences of the CEO in particular, we think about the options available to him to capitalize on the technology developed by Vayser.

There were two – broadly speaking - possible routes to take:

1. A low capital cost / royalty model. Go to the existing makers of retractors and disposable pieces of OR equipment and say "build in our technology and you can sell your stuff for a little more money and share with us some of the incremental profits."

2. A high capital cost / own and build model. You build out a salesforce, a manufacturing facility, etc. and create a whole ecosystem to sell your product.

Since this is an area of the industry with very little innovation, Scenario 1 is not very appealing, akin, perhaps to suggesting, in1989, that with an espresso machine, a diner can charge $6 for coffee instead of $1.50. ("Yeah right!")

Scenario 2, is akin to what the company is doing. But when we consider it, what would be the point of engaging the high capital cost of setting up a manufacturing plant and building out a salesforce of 65 people, etc. just to sell a piece of bent metal with an attachable widget and three disposable products?

This is where the investor must consider the optionality embedded in the company's strategy. Because in order to achieve the same level of sales at larger organizations, say $1M / salesperson, the company needs to have products to fill the pipeline for its 65 salespeople.

When we invert this idea of the business and approach it from “why are they doing it this way” instead of “why aren’t they growing 50%” it starts to scratch away at the common view that they’re just going to sell a new technology and then eventually sell the company itself.

We believe there is more value in a vertical distribution model and given the backgrounds of the executives, it seems there would be no reason to build out this company as broadly as it has unless it considered owning every handheld instrument the doctor touched within certain procedures. If they can do it with the lowly yankauer, currently found in every operating room in the world, its possible they can do it with many more products as well. We think is can be the long term promise of the company.

RISKS / WHERE THIS FAILS

Perception drives reality. As previously mentioned, this is a medical equipment company, not a medical device company. We believe the market perceives the different growth curves commensurate with the different type of company, as a failure. It’s possible the low multiple reflects this perception. We see plenty evidence of progress at a price that discounts failure. However, the market may never give the company a “typical” multiple because it is not a typical company.

The technology might be better but … Invuity’s is a “better” solution compared to overhead lights, the doctor’s headlamp and fiber optics. It is brighter but not blindly so, lights a wider area without shadows, and it does not create heat that, which, with alternatives, can burn human tissue or the abundant paper draping now commonly used in hospital ORs.

The positive feedback and apparent adoption notwithstanding, solving a problem “better” than others is not a certainty for success. The world is awash in solutions that are sub-optimal, occasionally even when better solutions exist, simply b/c of marketing, timing, high switching costs, etc.

There is a potentially thin wallet to contend with. The company's success will ultimately be predicated on its ability to encourage hospitals to spend more money on retractors and hand held devices when the current equipment might be viewed is "just fine".

It's an uphill climb for two reasons:

Last I checked hospitals are not huge income generators with wide margins. If there's anything I know in life it’s that selling to a fat wallet is better than selling to a thin one, and hospital wallets can be quite slim. And if ACA is at risk, and hospitals tend to more uninsured patients, their wallets may take a beating.

Hospitals are known to crack open their wallets when safety is an issue, but even as the company promotes various "white papers" supporting the view that their devices improve outcomes, the company’s own filings state clearly: "The FDA has not required, and we have not developed, clinical data supporting the safety and efficacy of our devices. Therefore, we currently lack clinical data supporting the benefits and cost effectiveness of our devices compared to other illumination solutions."

The sales function is driven by the efficiency of the ultimate customer, but that drives another risk …

There is an inherent agency problem in that they are essentially outsourcing their sales to the surgeons. The sales model is driven by selling to surgeons, who then request the product from hospitals, who then will likely track the effectiveness of and efficiency of the surgeons with and without the product.

If hospitals don't perceive an overall payback on the increased spend for what was hitherto seen as a commodity product, this will die on the vine. As a result, in essence, the company is outsourcing the agency of their sales to a surgeon who will be required to work a little harder (one more procedure / day) to justify continuing that spend.

Losses continue, debts mount and dilution eats away at returns. Because IVTY is a cash-flow-negative, emerging growth company, it is likely to further dilute shares. Assuming 35% topline CAGR over the next four years – from $32M sales in 2016 to $106M in 2020 - and assuming this results in a company with a $500M market cap (5x sales, the middle of the valuation range for medspace companies), then without dilution, we have a roughly 5x return. However, if they dilute by 20% every year, it would cut the returns in half and make this investment less attractive.

CONCLUSION

At ~2x 2017 sales, IVTY represents a long term GARP opportunity for patient investors to acquire part ownership of a company that is innovating in an overlooked and undervalued vertical of the market.

The stock market appears skeptical about the prospects due to losses, debt and a recent guidance shortfall. However, as the value of the illumination product becomes evident to the wider market, there will be opportunities not only to accelerate recurring revenues but to add more product into the channels. This is the bigger picture that the market is ignoring, beyond 2017.

We believe the company's success to date selling what has historically been seen as a low value commodity product for a significant premium demonstrates sound traction for the platform.

And while the stock market perceives this to be a build and sell strategy, we see optionality down the road for the company to own a vertical manufacturing / distribution business that supplies handheld tools and equipment for a multitude of surgeries and procedures.

Nobody knows the future, but with continued execution and growth and a reasonable multiple, we believe this investment can return up to 5x in 3-5 years, or a range of 20%-50% CAGR depending on dilution."

- END –

	1Q15	2Q15	3Q15	4Q15	FY15	1Q16	2Q16	3Q16
Revenues	4,442	4,747	5,595	6,247	21,031	6,404	8,223	8,478
COGS	1,722	1,849	2,035	2,127	7,733	2,106	2,091	2,219
GP	2,720	2,898	3,560	4,120	13,298	4,298	6,132	6,259
R&D	1,900	1,857	2,042	2,070	7,869	2,601	2,340	2,471
SG&A	8,933	9,907	10,180	11,616	40,636	13,320	13,429	12,134
OpInc	(8,113)	(8,866)	(8,662)	(9,566)	(35,207)	(11,623)	(9,637)	(8,346)
Int inc / (exp)	(368)	(504)	(504)	(505)	(1,881)	(505)	(505)	(505)
Other inc / (exp)	(551)	24	28	17	(482)	18	13	30
Net income	(9,032)	(9,346)	(9,138)	(10,054)	(37,570)	(12,110)	(10,129)	(8,821)
EPS	($12.84)	($3.20)	($0.69)	($0.76)	($4.94)	($0.90)	($0.76)	($0.56)
Diluted shares	1	3	13	13	8	13	13	16
Analysis								
% GP	61%	61%	64%	66%	63%	67%	75%	74%

					FY15	1Q16	2Q16	3Q16
Cash				46,296	46,296	33,864	25,456	47,709
AR				3,619	3,619	4,062	4,514	5,149
Inventory				5,182	5,182	5,575	5,450	5,120
Other				923	923	782	572	952
Total current assets				56,020	56,020	44,283	35,992	58,930
Restricted cash				1,090	1,090	1,090	1,090	1,090
PP&E				9,195	9,195	8,955	8,752	8,538
Other					0		285	170
Total Assets				**66,305**	66,305	**54,328**	**46,119**	**68,728**
AP				2,458	2,458	1,765	2,369	2,800
Accruals				4,214	4,214	4,574	4,951	5,283
S/T Debt					0	375	750	1,125
Total current liabilities				6,672	6,672	6,714	8,070	9,208
Deferred rent				2,810	2,810	2,791	2,771	2,751
L/T Debt				14,480	14,480	14,140	13,801	13,462
Total Liabilities				**23,962**	23,962	**23,645**	**24,642**	**25,421**
Common stock				13	13	13	13	14
Add'l PIC				147,937	147,937	148,387	149,309	179,960
Retained earnings				(105,607)	(105,607)	(117,717)	(127,845)	(136,667)
Stockholders Equity				**42,343**	42,343	**30,683**	**21,477**	**43,307**
Analysis								
Total debt				14,480	14,480	14,515	14,551	14,587
Net debt / (cash)				(32,906)	(32,906)	(20,439)	(11,995)	(34,212)
Total debt / Total cap				25%	25%	32%	40%	25%
Period cash flows								
Net Income	(9,032)	(9,346)	(9,138)			(12,110)	(10,129)	(8,821)
D&A	398	421	439			484	488	509
Stock based comp	173	388	358			432	715	569
OCF	(6,941)	(8,214)	(8,736)			(12,160)	(8,135)	(7,716)
CAPEX	(1,467)	(1,228)	(486)			(290)	(206)	(388)
FCF	(8,408)	(9,442)	(9,222)			(12,450)	(8,341)	(8,104)