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Novadaq Technologies Inc. ⁰

Let There Be Light; Initiating at Market Outperform

MARKET OUTPERFORM

NDQ-TSX \$4.72

Price	\$4.72	FY Dec	2010A	2011E	2012E	
Target Price	\$7.00	Revenue (M)	1Q	\$2.71	\$2.90A	\$4.01
52-Wk Range	\$2.86 - \$5.52		2Q	\$2.62	\$3.48A	\$4.61
Shares Out. (M)	33		3Q	\$6.26	\$4.19A	\$5.21
Market Cap. (M)	\$160		4Q	\$2.28	\$4.31	\$5.82
			FY	\$11.80	\$14.88	\$19.65
				2010A	2011E	2012E
		EPS	1Q	(\$0.10)	(\$0.09)A	(\$0.04)
			2Q	(\$0.14)	(\$0.13)A	(\$0.04)
			3Q	(\$0.17)	(\$0.03)A	(\$0.03)
			4Q	(\$0.11)	(\$0.02)	(\$0.01)
			FY	(\$0.21)	(\$0.27)	(\$0.12)
		P/E		NM	NM	NM
		Previous FY		--	NE	NE
		CY EV/S		12.6x	10.0x	7.6x

NC indicates no change to previous estimate. NE indicates no previous estimate.

Source: Company reports and JMP Securities

INVESTMENT HIGHLIGHTS

- We are initiating coverage of Novadaq with a Market Outperform rating and a \$7 price target.** Novadaq manufactures the SPY technology platform, a breakthrough imaging system that allows surgeons to visualize blood flow and perfusion in real-time. The company has established partnerships with LifeCell and Intuitive Surgical, which in our view validates the technology. We are attracted to the broad applicability of this technology across a wide variety of indications and surgeons. The breadth of the technology translates into a ~\$2.3B market opportunity in the U.S. alone. Our diligence indicates that SPY technology can improve surgical outcomes and save money - two key characteristics that we believe could drive adoption in the long-run. Our \$7 price target is predicated on a 7x EV/S multiple on our FY13 revenue estimate of \$36.6M, discounted by 15%. We believe shares of Novadaq should trade at a slight premium to a peer group of high-growth, med-tech comps (6x EV/S) because the company has a similar high-revenue growth profile with applicability across a wider variety of indications than most of its peers, similar to Intuitive's Da Vinci.
- Novadaq's SPY technology can save money and improve outcomes.** Novadaq's SPY imaging technology helps surgeons visualize blood flow and tissue perfusion in real-time. This allows surgeons to make decisions, evaluate the severity of the underlying problems, and assess the quality of their work and modify it as necessary. Clinical data produced to date shows consistent reduction in re-operations and costs associated with the use of SPY technology.
- Partnerships validate the technology.** The business is positioned as a razor-razorblade model. However, the potential uses of the technology are so broad that they are far beyond the reach of a small company like Novadaq. As such, the company has established partnerships with LifeCell and Intuitive Surgical. These partnerships validate the technology while providing revenue. The company retains the rights to market its own SPY-based products in non-overlapping indications.
- Market opportunity is substantial.** Novadaq's SPY technology can be used in cancer treatment, wound care, cardiac surgery, breast reconstruction, and a host of other indications. We estimate that up to 1.5M procedures in the U.S. could benefit from using SPY technology on an annual basis. This translates into a market opportunity of \$2.3B annually in kit sales alone, excluding hardware or international sales.

FOR DISCLOSURE AND FOOTNOTE INFORMATION, REFER TO THE JMP FACTS AND DISCLOSURES SECTION

INVESTMENT SUMMARY

Game Changing Technology

Novadaq Technologies develops and markets imaging technologies that gives surgeons real-time fluorescence visualization capabilities in the operating room. The Company's technology platform is called SPY. It allows surgeons to visualize clinically relevant anatomic and physiologic structures during complex open and minimally-invasive surgical procedures. The applications of the technology are incredibly broad, in our view. SPY allows surgeons treating breast, colon and other cancers and cardiovascular disease, to more effectively visualize blood flow and the margins of diseased or cancerous tissue. In our view, this allows surgeons to: 1) improve outcomes, and 2) reduce cost by lowering re-admission rates.

Validating Partnerships

Unlike other young companies, Novadaq has substantial support from a broad cross-section of the medical community. First, the company has more than 40 peer-reviewed publications demonstrating that SPY imaging leads to fewer post-operative complications and reduced hospital costs. Second, the company has established partnerships with Intuitive Surgical (ISRG, MO, \$467 price target) and LifeCell to distribute and develop products for specific indications. The SPY system is now integrated as an option into the Da Vinci Si systems. The partnership with LifeCell is an exclusive, North American sales and marketing agreement for the plastic and reconstructive, gastrointestinal, and head/neck surgery markets. This agreement was recently expanded to include wound care applications as well. In our view these partnerships validate the strong clinical potential of the platform. The technology is branded as the SPY Imaging System for open surgery, the SPY-Elite for plastic and reconstructive surgery through LifeCell, Firefly for Intuitive Surgical robotic surgeries, and SPY Scope for minimally invasive endoscopic surgery.

Surgeons are Supportive of the Technology

We have spoken with several surgeons who regularly use the SPY system. Our conversations with users have led us to believe that: 1) the learning curve is surprisingly mild, 2) "seeing" perfusion immediately leads to quick decision-making in the operating room, 3) surgeon's experience to date suggests that data from existing publications is compelling, 4) the company's partners are actively pushing the technology, and 5) the technology has the potential for broad utility across multiple indications. There have been over 40 peer reviewed journal articles published to date on intraoperative imaging using Novadaq's SPY technology.

Large Market Opportunities

We believe that there are 1.5M procedures that can be performed using SPY technology, which translates into an annual market opportunity of \$2.3B. We do not include any international or hardware sales in that estimate.

Valuation

We believe shares of Novadaq should trade at least at par with its peer group of high-growth medical technology companies. Our target price of \$7 is predicated on an EV/S multiple of 7x our FY13 revenue estimate of \$36.6M, discounted by 15%. We believe that revenue growth will be more predictable in 2013 after having another full year of continued progress with Intuitive Surgical and LifeCell.

FIGURE 1: Company Comparables

		Price as of 12/19/2011	Market Cap (m)	Sales (m)		Growth	EV/S		
				2011	2012		2011	2012	
Novadaq Technologies Inc.	NDQ-T	\$4.75	\$ 161.5	\$ 14.9	\$ 19.6	32%	10.9x	8.2x	
Uroplasty, Inc.	UPI	\$4.25	\$ 93.8	\$ 19.0	\$ 25.9	36%	4.9x	3.6x	
Cardiovascular Systems, Inc.	CSII	\$9.23	\$ 164.7	\$ 82.7	\$ 96.8	17%	2.0x	1.7x	
Insulet Corporation	PODD	\$17.61	\$ 877.3	\$ 152.3	\$ 221.1	45%	5.8x	4.0x	
Dexcom, Inc.	DXCM	\$8.11	\$ 561.0	\$ 75.1	\$ 101.2	35%	7.5x	5.5x	
Mako Surgical Corp.	MAKO	\$25.43	\$ 1,122.6	\$ 79.5	\$ 131.0	NM	14.1x	8.6x	
Nxstage Medical, Inc.	NXTM	\$17.68	\$ 994.2	\$ 216.4	\$ 245.6	14%	4.6x	4.0x	
Cyberonics, Inc.	CYBX	\$32.89	\$ 895.4	\$ 207.9	\$ 233.8	12%	4.3x	3.8x	
Intuitive Surgical, Inc.	ISRG	\$432.19	\$ 17,173.1	\$1,740.4	\$2,044.8	17%	9.9x	8.4x	
						Mean	33%	6.2x	4.5x

Source: ThomsonOne; JMP Securities, LLC

BUSINESS DESCRIPTION

Novadaq Technologies develops and markets imaging technologies that gives surgeons real-time fluorescence visualization capabilities in the operating room. The Company's technology platform is called SPY. It allows surgeons to visualize clinically relevant anatomic and physiologic structures during complex open and minimally-invasive surgical procedures. The applications of the technology are incredibly broad, in our view. SPY allows surgeons treating breast, colon and other cancers as well as cardiovascular disease, to more effectively visualize blood flow and the margins of diseased or cancerous tissue.

Unlike other young companies, Novadaq has substantial support from a broad cross-section of the medical community. First, the company has more than 40 peer-reviewed publications demonstrating that SPY imaging leads to fewer post-operative complications and reduced hospital costs. Second, the company has established partnerships with Intuitive Surgical and LifeCell to distribute and develop products for specific indications. The SPY system is now integrated as an option into the Da Vinci Si systems. The partnership with LifeCell is an exclusive, North American sales and marketing agreement for the plastic and reconstructive, gastrointestinal, and head/neck surgery markets. The company signed an additional agreement with KCI in December 2011 to develop a SPY system for use in wound care. In our view these partnerships validate the strong clinical potential of the platform. The technology is branded as the SPY Imaging System for open surgery, the SPY-Elite for plastic and reconstructive surgery through LifeCell, FireFly for Intuitive Surgical robotic surgeries, and SPY Scope for minimally-invasive endoscopic surgery.

The SPY Imaging System is approved United States Food and Drug Administration for real-time use during multiple open surgical procedures and the endoscopic implementation of SPY imaging (aka the SPY Scope) is FDA cleared for real-time use during minimally invasive procedures. The endoscopic SPY System combines all of the capabilities of SPY imaging with high definition (HD) visible light visualization offered by conventional endoscopes.

PRODUCTS

The SPY Imaging System

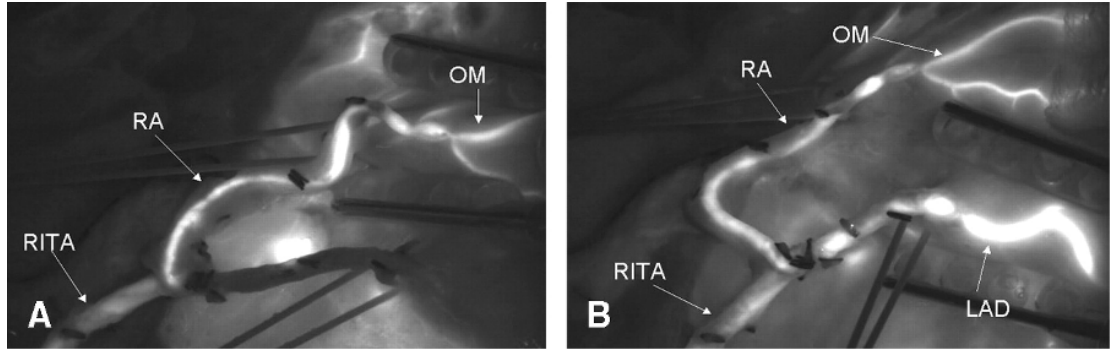
Novadaq's key product is the SPY Imaging System. It consists of the SPY intra-operative system unit and the SPY Accessory Pack. The accessory pack contains the fluorescent agent needed for the imaging procedure. The SPY system uses an 806 nm laser to illuminate a targeted area, which causes the administered agent to fluoresce. The fluorescent compound is called indocyanine green (ICG). It is a non-toxic, non-radioactive, FDA-approved compound that absorbs light in the near infrared (NIR) region of 806 nm, emits light at a longer 830 nm wavelength. ICG binds to plasma proteins in the blood, but shows no affinity for vessel walls or other tissues. Hence, it stays localized within the vascular system and thereby allows accurate visualization of blood flow (or lack thereof) in a specific visual field. The images that are viewed by the surgeon are captured using a video camera that allows 830 nm wavelength light through, while filtering out the 806 nm light. The FDA has cleared SPY for use in coronary artery bypass, cardiovascular, plastic, reconstructive micro, and organ transplant surgeries.

FIGURE 2: SPY Technology



The SPY Elite (LifeCell), FireFly (Intuitive Surgical), PINPOINT (SPY Endoscope), and SPY Wound Care (unnamed). Source: Novadaq Technologies

FIGURE 3: Screenshot of SPY Image During CABG Procedure



(A) SPY (Novadaq Technologies, Inc, Toronto, Canada) image showing the right internal thoracic artery (RITA) graft to the left anterior descending coronary artery (LAD). A composite radial artery (RA) graft was placed from the RITA to the obtuse marginal (OM) coronary artery. Note that no fluorescence was seen in the RITA distal to the radial artery anastomosis, which was therefore reconstructed (see Fig 1B). (B) SPY image taken after revision of radial artery (RITA anastomosis seen in Fig 1A). Note fluorescence seen in the distal portion of the RITA graft and in the LAD. (Reprinted from *Ann Thorac Surg*, 75, Taggart DP, et al, Preliminary experience with a novel intraoperative fluorescence imaging technique to evaluate the patency of bypass grafts in total arterial revascularization, 870–3, Copyright (2003), with permission from The Society of Thoracic Surgeons.) Source: Balacumaraswami, L. et al. *Annals of Thoracic Surgery* 2007;83:2251-2257.

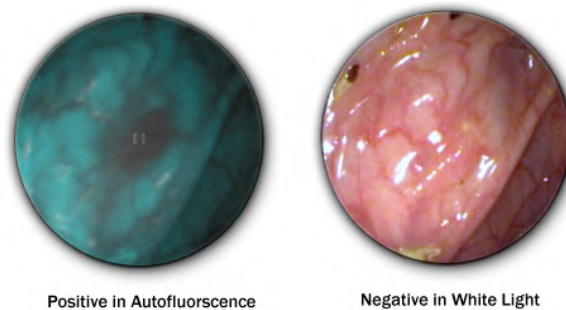
Software for SPY Imaging

Novadaq's software systems provide surgeons with information about blood flow in the vessels and the quality of perfusion in tissue while the patient is still on the operating table. Called SPY-Q and SPY-QC, surgeons can compare pre-, intra-, and post-procedural images to evaluate changes in relative blood flow and perfusion resulting from the surgical procedure. Based on this information, the surgeon can revise the procedure, choose an adjunctive therapy to enhance the outcome of the procedure, or confirm that the procedure was successful and conclude the case. SPY-Q was introduced in 2010 for use in plastic and reconstructive surgical procedures and is used with the LifeCell SPY-Elite System. The SPY-QC software is designed for use in cardiac surgery, in which the technology enables cardiac surgeons to perform intra-operative myocardial perfusion mapping to confirm adequate blood flow through surgically-created anastomoses (sutures). SPY-Q is sold directly by Novadaq to the cardiac markets and is currently undergoing pilot testing at four to five cardiac centers.

Auto-Fluorescence Technology

The broad applicability of Novadaq's technology is further demonstrated in the development of the auto-fluorescence endoscopic technology. It allows surgeons to differentiate between healthy tissue and unhealthy tissue during colonoscopy and bronchoscopy procedures. The auto-fluorescence platform causes epithelial (surface) cells to light up in the presence of blue light. Certain connective tissues and proteins absorb blue light, but emit red and green wavelengths in response. As tissue decays, its ability to emit green light fades proportionally. Thus the technology would allow physicians to catch unhealthy or cancerous tissue earlier because aberrant tissue emits a different color than healthy tissue in the patient. Specifically, it can help physicians identify polypoid- and non-polypoid lesions in the colon, delineating cancerous margins, or confirming the presence or absence of cancerous tissue.

FIGURE 4: Autofluorescence Imaging



Source: Novadaq Technologies

The FDA has approved the product only for use in bronchoscopy procedures for lung cancer detection. In 2007, the American College of Chest Physicians (ACCP) recommended that auto-fluorescence should be used in addition to white light during bronchoscopy procedures. In an international multi-center clinical trial, the product demonstrated a 325% per-lesion improvement in the detection of early lung cancer and a 250% per-patient improvement compared to white light alone.

CO2 HEART LASER SYSTEM for Transmyocardial Revascularization (TMR)

Improving blood flow in patients with coronary artery disease is a critical to a patient's recovery. While most patients benefit from angioplasty, CABG, or the use of drug-eluting stents, there are some who may not benefit due to the state of their disease. Transmyocardial revascularization (TMR) is a surgical procedure that is used to improve the blood flow to areas of the heart that are not amenable to other revascularization methods. During a TMR procedure, a CO2 laser is used to create small channels in the heart muscle in order to improve blood flow. While this procedure is frequently performed in conjunction with coronary bypass surgery, it is also used for standalone interventions on patients with unresolved angina.

FIGURE 5: CO2 Heart Laser System



Source: Novadaq

PINPOINT - Endoscopic SPY Imaging System

The endoscopic SPY system (aka SPY Scope) combines high-definition visible light imaging with Novadaq's SPY into a single system. It replaces the rigid endoscopes used in endoscopic or single-port surgeries. The scope illuminates the area of interest to the surgeon, captures and displays the image. Fluorescence imaging is administered to the patient and the resulting fluorescent image is captured and displayed by the camera. The scope can provide simultaneous viewing of white light and fluorescence imaging. This product is currently being evaluated in four centers of excellence before being more broadly launched in 2H12. The ASP of this device is approximately \$3,500, while the system will likely sell for close to \$100,000.

PARTNERSHIPS

Intuitive Surgical

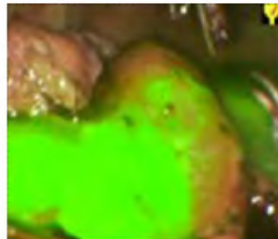
Novadaq announced an agreement with Intuitive Surgical in 2009 to develop and supply Intuitive with a SPY technology that can be integrated into the Da Vinci surgical system. The objective was to develop a system that would allow surgeons to visualize blood flow and perfusion during robotic surgery. For Intuitive, the SPY system enhances the experience for the surgeon and allows him/her to make decisions, modify the procedure, or check outcomes in real-time - something they would not be able to do under normal surgical conditions. For Novadaq, the partnership allows the company to leverage Intuitive's brand to increase awareness of its own technology while generating a stream of disposable product revenue. Dubbed FireFly, the SPY technology has been integrated into Da Vinci systems since approximately 2Q11. Intuitive offers the FireFly as an option to new purchasers and as an upgrade to existing customers. Our recent meetings with Intuitive's management suggests that the company is very bullish on FireFly's potential in urology, gynecology, GI, cardiac, and many other robotic procedures. In terms of revenue, Novadaq receives three forms of payments from Intuitive:

- A royalty from Intuitive whenever a Da Vinci robot is sold with a FireFly on board;
- SPY hardware sold to Intuitive to be integrated into the Da Vinci robot;
- Fluorescence imaging agent that must be bought exclusively from Novadaq.

According to management, the first two add up to approximately \$15,000 per robot sold. Management has not disclosed the price of ICG kits sold to Intuitive, but we estimate that it is around \$150-165 per kit. For now, we assume that most of the revenue coming from Intuitive is the royalty and hardware sale. We would expect that at the end of twelve months, the revenues from the install base will become more substantial.

FIGURE 6: Images from FireFly (SPY Imaging Integrated into Da Vinci Robot)

Partial nephrectomy - tumor margin



Lymph node



Source: Novadaq

LifeCell (part of KCI)

Novadaq signed an agreement with LifeCell in 2010 that gives LifeCell exclusive rights to sell SPY Imaging in North America for use in open plastic, reconstructive, gastrointestinal, and head and neck surgery in North America. Under the terms of the agreement, LifeCell provides all the market development and commercialization activities (clinical support, physician education, sales, distribution), while Novadaq is responsible for R&D. The agreement also gives LifeCell rights of first refusal to European rights for these same indications. The companies have a revenue sharing agreement where both companies split the revenues for the imaging systems and the disposables. LifeCell recognizes total SPY revenues, while Novadaq recognizes its share of the partnership-based revenues. Under the terms of the LifeCell agreement, Novadaq recognizes revenue mainly in the form of ICG kit sales. The SPY Elite is leased to the hospital and the cost is folded into the sale price of the kit, which is \$1,100-1,200.

In December 2011, the company announced that it had expanded its relationship with KCI / LifeCell to develop a SPY system for wound care applications. The SPY System allows surgeons to assess tissue perfusion, which is critical to tissue regeneration and essential to the treatment of wounds. Under the terms of the agreement, KCI will pay Novadaq exclusivity payments of \$3.0 million upfront and additional milestone payments. We estimate another \$4M in milestone payments over the next 24 months. The agreement covers two systems: one that is similar to SPY Elite but designed for vascular surgeons and another more portable system. KCI and Novadaq will share ongoing sales revenues from SPY systems and related disposables. The new agreement will range from six to seven years and cover North America, Europe, and Japan.

MARKET OPPORTUNITIES

We find it best to think of the market opportunity for Novadaq in terms of the company's distribution channels: LifeCell, Intuitive Surgical, and its own MIS channel. Novadaq's technology is applicable to both open and minimally-invasive surgery, and has been applied in plastic reconstructive, cardiac, GI, robotic surgery, and endoscopy. The broad applicability of the technology is a double-edged sword in that it would take substantial resources to develop each of these markets. However, by partnering with companies that specialize in one or several of these areas, the company can broaden awareness and adoption of its technology while generating revenue and retaining several high-value indications for itself.

The partnerships account for 82% of the potential annual market opportunity in terms of procedure volume. However, because the partnerships generate less revenue per procedure compared to sales of minimally invasive products (PINPOINT), this only translates into 60% of the \$2.3B market opportunity. Novadaq still retains \$1B of market opportunity for itself.

FIGURE 7: Summary of Market Opportunities for Novadaq's SPY Technology (procedures)

<u>Partner</u>	<u>Indication</u>	<u>Procedures</u>	<u>ASP</u>	<u>Market Opportunity (MM)</u>
LifeCell - Surgery	Head and Neck	52,000		\$60
	Breast Reconstruction	91,000		\$105
	Hernia Repair	100,000	\$1,150	\$115
	Colorectal	211,000		\$243
	Other	337,000		\$388
LifeCell - Wound Care	Food Ulcers	312,000		\$359
	Diabetic Amputation	90,000	\$1,150	\$104
Intuitive Surgical	Hysterectomy	40,000		\$7
	Prostatectomy	40,500	\$165	\$7
	Colorectal	28,000		\$5
	Partial Nephrectomy	23,000		\$4
MIS	Colorectal	42,000		\$147
	Gynecology	40,000		\$140
	Urology	63,500	\$3,500	\$222
	Pulmonary	75,000		\$263
	Bariatric	39,000		\$137
			Total	\$2,302

Source: JMP Securities, LLC

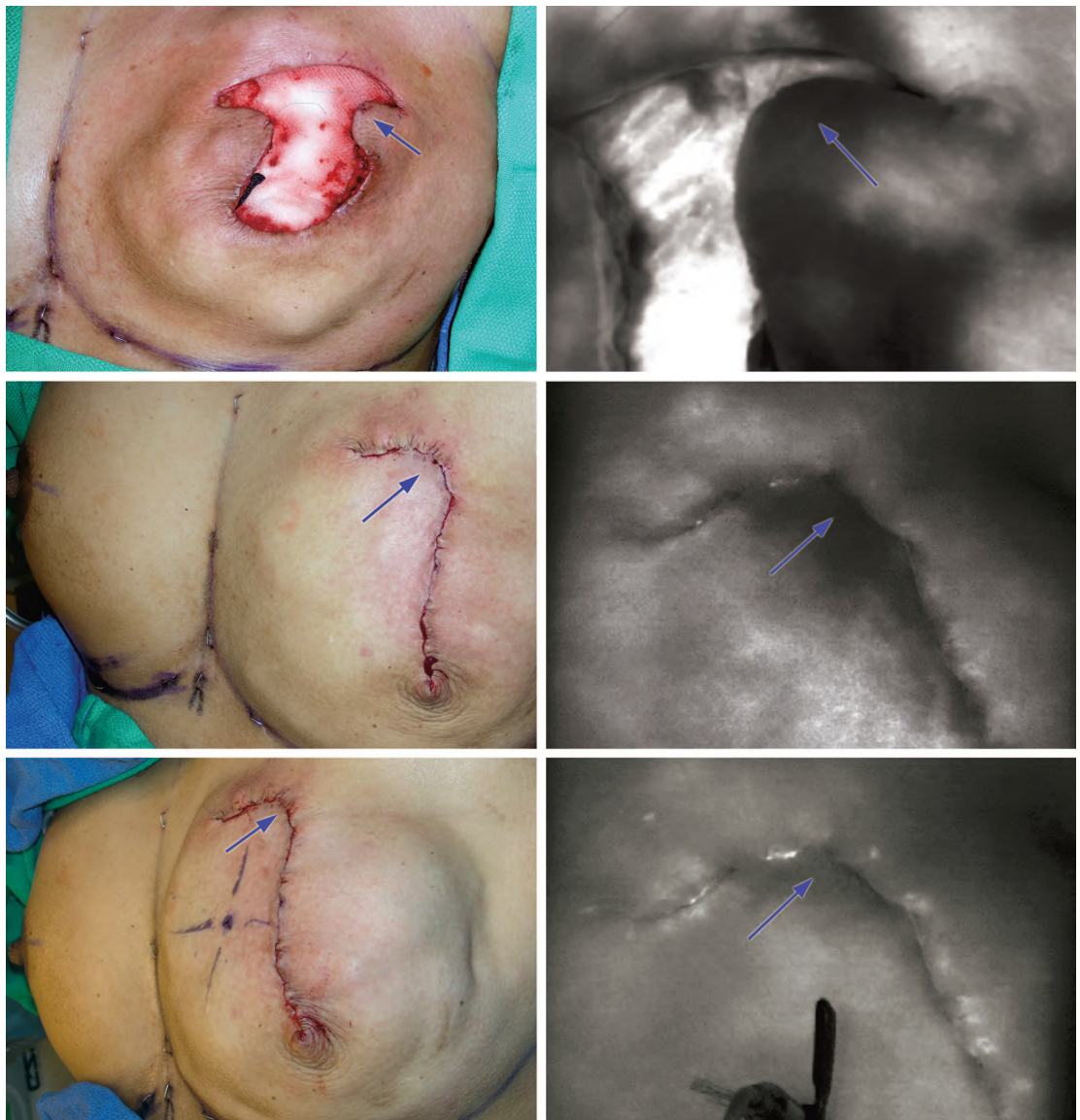
LifeCell - General Surgery

The agreement with LifeCell covers a variety of surgical applications: microsurgery, tumor resection, body contouring, birth defect repair, head and neck surgery, colorectal cancer, breast reconstruction, and hernia repair. In total, these add up to approximately 820,000 annual procedures. The impact may be most tangible in terms of re-hospitalizations. According to management, 65% of hospital spending can be attributed to a patient's time spent in the operating room, the ICU, or a hospital bed. Improving operative outcomes can positively reduce costs associated with each of these hospital areas.

The most well-developed protocols of using SPY are in breast reconstruction. Recall that the primary clinical advantage of using the SPY technology is that it potentially saves money by preventing complications caused by poor blood flow to tissue or lack of perfusion. Both these issues lead to tissue death and the subsequent failure of the surgical procedure, which in turn can lead to re-hospitalization, worsening of the underlying condition, or even death. Several studies have started to show the benefit of using SPY technology in breast reconstruction.

- A study was released at the 2009 American Society of Plastic Surgery Annual Meeting that showed that the SPY system, when used during breast reconstructive surgeries, reduced complication rates from a national average of 15% to virtually zero. There are cost savings associated with such a drastic reduction, but the key benefit is that follow-up therapy (radiation and chemotherapy) is not delayed.
- A similar study was published in 2010 by Komorowska et al. in the Journal of Plastic and Reconstructive Surgery. In 24 consecutive breast reconstruction procedures performed with SPY imaging, there was a 4 percent complication rate. Intraoperatively, the use of indocyanine green imaging allowed all poorly perfused skin to be removed completely in each case, minimizing the incidence of mastectomy flap necrosis, partial necrosis of autologous tissue, and impaired healing. This complication rate was significantly less than the 15.1 percent complication rate observed in 206 reconstructions in the previous consecutive 148 patients ($p < 0.01$) with similar demographics and risk factors. The authors concluded that an increased accuracy in predicting tissue necrosis (mastectomy flap, autologous tissue) as guided by indocyanine green imaging. Further prospective studies are warranted to quantify whether this technology can reduce health care costs by preventing complications in immediate breast reconstruction.

FIGURE 8: Use of SPY Imaging in Mastectomy



Intraoperative images (left) compared with indocyanine green imaging (right). Areas of poor perfusion are indicated with blue arrows. The left breast after mastectomy had non-perfused lateral skin that was excised. After removal of the ischemic lateral incision border, the tissue expander was filled with 250 ml, causing obvious ischemia along the medial incision line by indocyanine green imaging (center). After the removal of 50 ml from the tissue expander, the skin perfusion returned to normal and the flap subsequently survived postoperatively (below). Source: Komorowska-Timek E; Gurtner GC., Plastic and Reconstructive Surgery 2010; 125(4):1065-1073

- In 2011, there have been several positive articles about the capability of SPY in reconstructive surgeries. In 1Q11, SPY was the topic of two presentations at the American Society of Reconstructive Micro-Surgery and also of an article in the Canadian Journal of Plastic Surgery written by surgeons at the Cleveland Clinic in 1Q11.
- In 2Q11, the journal Clinics in Plastic Surgery published an overview of fluorescence angiography by Duke surgeon, Dr. Michael R. Zenn. Management was encouraged because this type of article is important to gaining society recommendations for SPY. In June 2011, an article was published in the Journal of Reconstructive Microsurgery reviewing 17 cases of breast and other reconstructive procedures in 386 patients in which SPY imaging was used extensively. The study authors concluded that ICG angiographic perfusion assessment improves clinical outcomes and the adoption of the technology will continue to grow as its uses extend to any specialty concerned with poor blood supply.

LifeCell - Wound Care

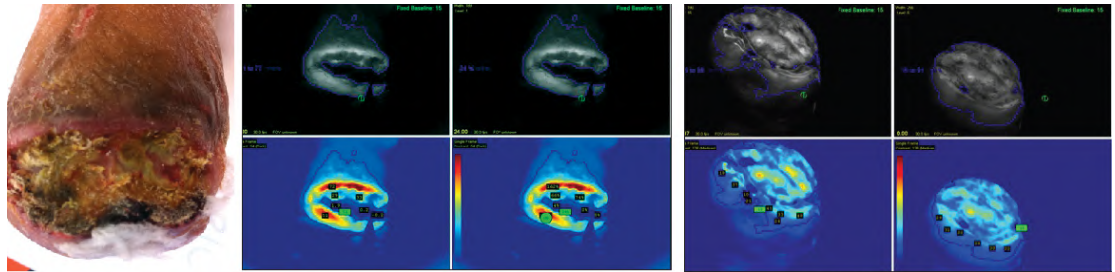
Often overlooked as a rather staid indication, the market for treating diabetic foot ulcers, pressure sores, and poor circulation represents an annual opportunity of 420,000 procedures. There are five million people annually in the U.S. who are treated for these types of wounds at a cost ranging from \$15,000 to \$60,000. The number of people needing this treatment is likely to go up as well, given the demographic trends in obesity and aging.

There are four key uses of SPY technology in the wound care market:

- **Perfusion assessment** - Perfusion often refers to the amount of moving, oxygenated, blood in any part of the body. SPY is used to assess the wound to guide treatment such as wound debridement or negative pressure therapy. Debridement requires removing dead, damaged, or infected tissue - a highly subjective task for any surgeon. SPY can provide a quantitative measure of whether tissue is healthy or unhealthy.
- **Vascularity assessment** - In untreatable cases of diabetic foot ulcers surgeons choose to amputate the leg to prevent more systemic damage. However, the decision of where to cut (above the knee, or below it) is again a surgical judgment. The SPY can be used to assess how far up the leg the vascular system has been damaged.
- **Tissue flap perfusion assessment** - Tissue flaps are used in a variety of surgeries. In wound care, tissue flaps are used to repair areas of debridement. Poor vascularization into the flap will lead to its death, which would put the patient back in the hospital.
- **Evaluation of pressure ulcers** - Pressure ulcers form when pressure against the skin reduces blood flow to a given area. Often referred to as bedsores, pressure ulcers can often result from staying in one position too long. Excision of dead tissue is the most aggressive treatment available for the most advanced stages of the disease. The SPY system can be used to determine how extensive the ulcer is.

SPY is an attractive tool because it can be used either in a hospital setting or in a specialized clinic. Moreover, it can be used throughout the treatment process to guide decision-making. Lepow and Armstrong recently published an article in the August edition of Podiatry Management detailing their experience with SPY in treating a 60-year old male with Type II diabetes. The patient came under the physician's care because of gangrene and non-healing surgical wound site following the amputation of his left foot. The physicians used SPY technology to isolate parts of the limb that were poorly perfused and treated accordingly using standard debridement techniques. However, the physicians used SPY images to guide them in determining the amount of tissue removal and the wound closure technique needed to heal the wound. The Figure below shows pre-treatment images from the SPY system; the dark appearance of the central wound site (middle 4 pictures) is indicative of poor perfusion and correlates with the clinical picture shown on the left. The block of four pictures on the right shows SPY imaging post-debridement. The central portion of the wound site now appears illuminated, indicating an improvement in perfusion. Two months after the surgery to treat the limb, the patient showed 100% healing of the problem area.

FIGURE 9: SPY Imaging in Wound Healing



Source: Lepow, BD., et al. *Podiatry Management*. August 2011.

Novadaq has been working with four wound care programs to validate the potential for this opportunity. These sites are The Southern Arizona Limb Salvage Alliance at the University of Arizona Medical Center in Tucson, Arizona; the Amputation Prevention Center at Valley Presbyterian Hospital in Los Angeles, California; the Center for Wound Healing at Georgetown University Hospital in Washington D.C.; and the University of North Carolina Limb Salvage Wound Healing Center in Chapel Hill, North Carolina. In March 2011, the sites presented positive initial findings at DFCon 2011, but formal studies are needed to validate this market opportunity – limb salvage and predictive wound healing studies are already in progress.

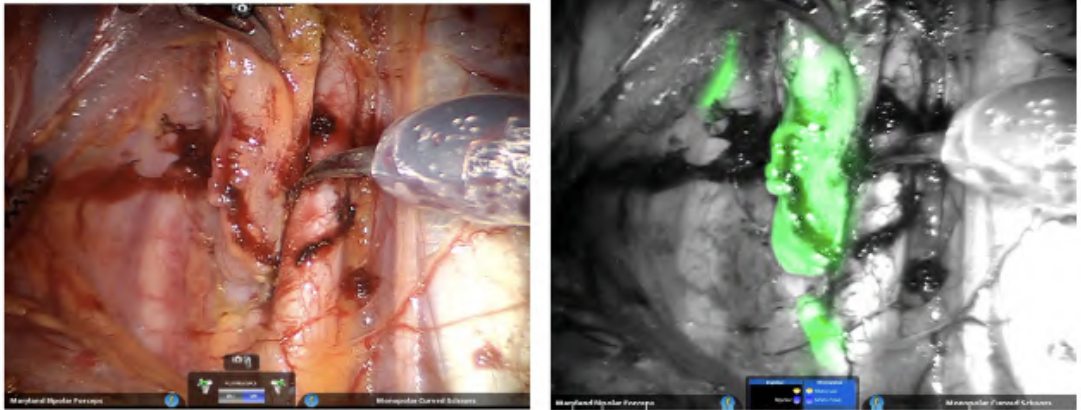
Intuitive Surgical

Intuitive's Da Vinci robot is most commonly used in radical prostatectomy, hysterectomy, partial nephrectomy, and colorectal cancer. These add up to over 200,000 procedures, but our diligence with existing users suggests that only the most serious of cases will necessitate using the SPY technology; this likely reduces the market opportunity to 120,000 of these cases. Nevertheless, we believe the broad applicability of the technology across a wide variety of indications remains evident.

The technology is currently being used during robotic partial nephrectomy, a procedure that removes part of a kidney to treat small tumors. Usually performed using traditional laparoscopic methods, it is often difficult for surgeons to visualize the blood vessels and the edges of the tumor. Management believes there are four main benefits to SPY-enabled robotic partial nephrectomies. SPY imaging allows the surgeon to see main blood vessels in the tumor. It allows selective isolation of these blood vessels through clamping; tumor-specific clamping avoids organ-wide trauma. It also allows the surgeon to see the margins of the tumor. Lastly, it allows the surgeon to map sentinel nodes (offshoots off the main tumor that have spread to nearby lymph nodes). Sentinel node mapping is often associated with long-term complications like nerve injury and the formation of cysts in the lymph nodes. SPY can be used to overcome these side-effects of the node-mapping process.

Recently, Rossi et al. detailed the use of FireFly in robotically-assisted, lymph node detection. Twenty subjects with cervical or endometrial cancer were prospectively enrolled for sentinel lymph node mapping. All 20 patients were injected with ICG and had their nodes mapped twice in one day. While this was primarily an observational study, the results showed that fluorescence imaging is safe, reliable, and time-efficient.

FIGURE 10: Sentinel node mapping using FireFly on the Da Vinci system

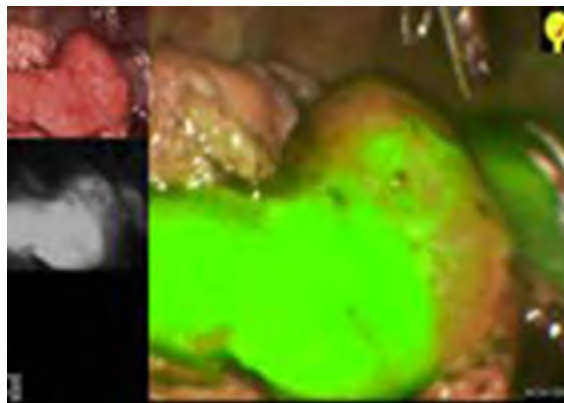


Appearance of resected right pelvic sentinel node under (left) conventional white light source and (right) fluorescence imaging using the FireFly unit on the Da Vinci. Source: Gynecologic Oncology, 2011 (epub ahead of print publication)/

Minimally-Invasive Surgery

Novadaq has formed three significant partnerships to establish the validity of the technology. However, it will likely choose to market the PINPOINT® SPY Scope on its own. The Scope is a modified high-definition endoscope combined with the SPY fluorescence detection technology. The surgeon uses the device view fluorescence images, which can be overlaid onto regular images in real-time. The device is approved, but the company is unlikely to broadly launch the product until 2H12 after data from post-marketing studies in minimally-invasive GI, ob/gyn, thoracic, and urological surgeries are made available. Management believes that the Scope could address a combined 200,000 procedures annually in the U.S.

FIGURE 11: Screenshot of PINPOINT® SPY Scope

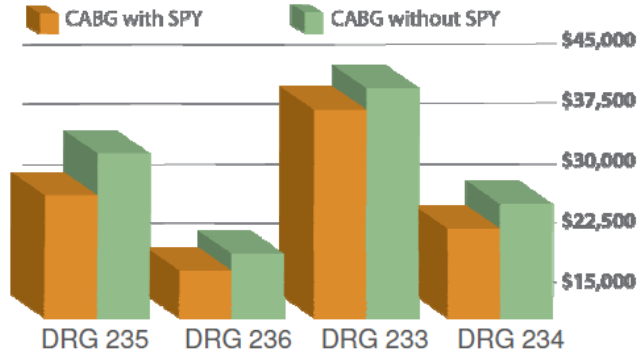


This screen shot from the SPY scopes show the white image, the SPY image, and the combined image. Source: Novadaq

Coronary Artery Bypass Grafting

One of the most compelling uses of SPY technology is in the cardiac surgery setting. Surgeons use the SPY technology to intraoperatively visualize blood flow in the arteries during the procedure and to check the patency of their grafts. Some of the most compelling data for SPY comes from the bypass graft indication. The Centers for Medicare and Medicaid compared data from coronary bypass with and without using SPY technology from 376 patients in 2009. The table below summarizes the data, which shows that using SPY reduces cost in this indication.

FIGURE 12: CMS Data Comparing Costs of Using SPY in CABG Surgery

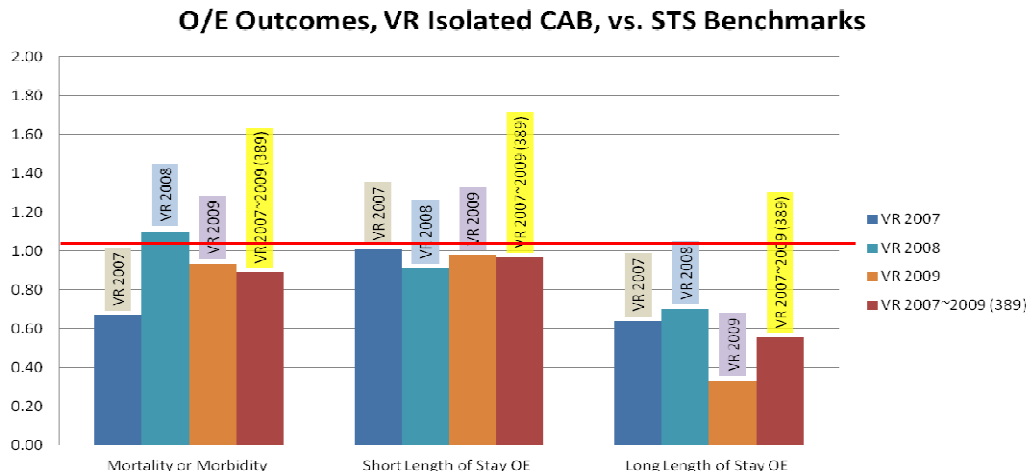


Source: Company reports

Similarly, in 2010, Ferguson et al reported on a registry study of 350 patients who had undergone CABG surgery during which SPY technology was used for visualization and compared it to data from the Society for Thoracic Surgeon's national database. Known as the SPY VICTORIA™ Cardiac Surgery Registry, the database was set-up to study the results of SPY imaging in the clinical setting. The original data in 2010 showed that patients in the registry had a 50% lower rate of reoperation and a shorter hospital stay relative to historical data. In 1Q11, the American Hospital Society published new VICTORIA data, now with over 600 patients, which showed a statistically significant reduction in reoperation rates, complication rates, and length of hospital stay.

Shown below is data from an analysis of the first 450 patients in this registry. Overall outcomes for CABG surgeries are shown to be similar or better than STS benchmarks over three years. The red line indicates the STS Observed / Expected (O/E) benchmark of 1.0. For short LOS, a more optimal O/E > 1, while for morbidity /mortality and long length of stay (LOS) an O/E < 1.0 is better.

FIGURE 13: Comparison of Patients



Source: Company reports.

MANAGEMENT BIOGRAPHIES

Arun Menawat, PhD, MBA - President and Chief Executive Officer

Dr. Menawat has been the President and Chief Executive Officer of Novadaq since 2003. His prior experience includes positions of increasing executive responsibilities including President and Chief Operating Officer of Cedara Software Corporation, now part of Merge Healthcare; Vice President, Operations at Tenneco Inc., a diversified business conglomerate, now separated into multiple companies; and product development management positions at Hercules Incorporated, a specialty chemicals company. Dr. Menawat holds a Ph.D. in Chemical (Bio) Engineering from the University of Maryland and an Executive MBA from the J.L. Kellogg School of Management, Northwestern University.

Stephen Purcell - Chief Financial Officer

Mr. Purcell has been Chief Financial Officer since January 12, 2009 after joining Novadaq as Director of Finance in March 2008. Prior to joining the Company, Mr. Purcell served approximately five years as Corporate Controller of Sealy Canada Ltd. In addition, Mr. Purcell has held a number of senior financial management roles, including Chief Financial Officer of Canron Corp. Mr. Purcell has a business degree from Saint Francis Xavier University.

Rick Mangat, PhD - Sr. Vice President and General Manager

Dr. Mangat co-founded Novadaq in April of 2000 and is a co-inventor of the SPY System. The research element of his PhD thesis (Pharmacology and Therapeutics) performed at the National Research Council of Canada (Institute for Biodiagnostics) formed the foundation for SPY Imaging and related IP. Dr. Mangat has led the research, development and commercialization teams at Novadaq from bench-top through clinical use of the SPY System and is now responsible for the general management of Novadaq's commercial business unit including Sales and Marketing. Dr. Mangat received his Bachelor of Science from the University of Toronto and a PhD from the University of Manitoba.

Roger Deck - Vice President Operations

Mr. Deck has over 20 years of operational and financial experience. Prior to being Vice President of Operations, he was the Chief Financial Officer of Novadaq from 2004 to June 2008. Mr. Deck served as Vice President, Financial Advisory Services at PricewaterhouseCoopers LLP from 2001 to 2003. From 2000 to 2001, Mr. Deck worked with J.R./Janus Merchant Brokers Ltd., an independent mid-market M&A advisory firm. Prior to that role, Mr. Deck served as Vice President, Merchant Banking at Brascan Corporation, starting in this position in 1996. Mr. Deck is a chartered accountant and holds a Bachelor's degree in Economics from the University of Western Ontario.

Lori Swalm - Vice President Product Development

Ms. Swalm has over 20 years of experience in a variety of clinical regulatory, research and development roles in medical devices, healthcare informatics, and clinical research. Prior to assuming the role of Vice President of Product Development in December of 2009, Ms. Swalm held significant strategic roles at Novadaq including; Director of Reimbursement, Director of Market Development and Divisional Vice President. Beginning her healthcare career in 1991 as Associate Executive Director of the CSANT practice, a large multi-specialty physician practice in North Texas, Ms. Swalm then became the founding CEO of the CRSTI Institute, a cardiovascular CRO from 1997 until March of 2000 when she joined health informatics developer ARMUS Corporation, Burlingame, CA as Vice President of Business Development. In 2003, Ms. Swalm joined Chase Medical Inc. of Richardson, Texas, as Director of Market Development, until joining Novadaq in 2005. Ms. Swalm holds a Bachelor of Arts in Political Science and Master of Arts in Public Law from the University of Nevada, Las Vegas.

David C. Martin, PhD, MBA - Vice President Business Development and Investor Relations

Dr. Martin has over 15 years of experience combined in the fields of clinical diagnostics and laboratory instrumentation sales and marketing as well as investment banking and equity analysis. Prior to joining Novadaq in 2011 in the role of Vice President Business Development and Investor Relations, Dr. Martin was a ranked biotechnology and healthcare analyst serving for 10 years at two independent Canadian investment banks. In the early 1990's, he worked in sales and marketing at Boehringer Mannheim (subsequently acquired by Roche) and InterScience Inc. Dr. Martin holds a Ph.D. (Biochemistry, University of Western Ontario - 1998) and an MBA (Richard Ivey School of Business - 2000).

FINANCIAL OVERVIEW

Novadaq recognizes revenue in several different ways, each dependent largely on the type of distribution channel.

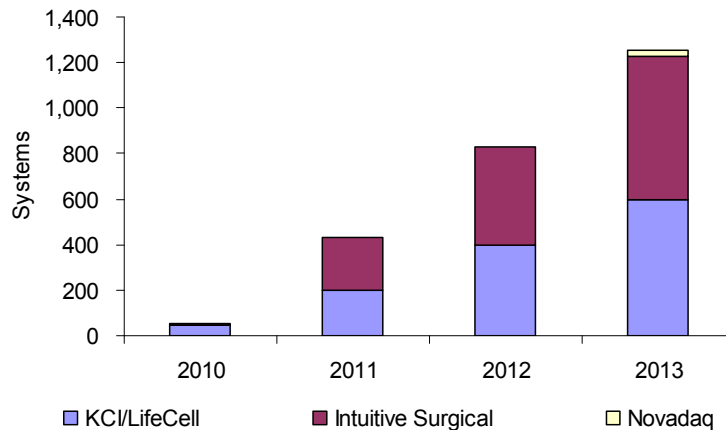
LifeCell - Novadaq primarily books revenue through sales of the ICG kits. Under the agreement with LifeCell, Novadaq leases the SPY Elite to hospitals, the cost of which is amortized through sales of the ICG kits. Each kit is sold for \$1,100-1,200. We assume that all revenue associated with LifeCell comes from kit sales. Management announced its expanded relationship with KCI earlier this month for wound care indications. The company will recognize a \$3M licensing agreement by the end of the year and we expect the ICG kits to price at an equivalent level, though recurring revenues are unlikely to be recognized until 2013 at the earliest. We are modeling an additional \$4M in milestones to be spread out over the next two years.

Intuitive Surgical - Novadaq books revenue in three ways. First, Intuitive pays a royalty to Novadaq for every Da Vinci sold with a FireFly on board. Second, Intuitive buys the SPY hardware that goes into the robot. These two elements roughly translate into \$15,000 in revenue for every Da Vinci robot sold. Lastly, Intuitive buys the ICG kits from Novadaq at a price of \$165 (our estimate, not Novadaq's public disclosure) per kit. For now, revenue associated with the relationship with Intuitive Surgical comes primarily from royalties associated with system sales.

Minimally Invasive Surgery (PINPOINT) - We assume that the company will sell each system at approximately \$100,000 and that each Scope will be sold for approximately \$3,500. We expect systems to start selling in 2H12, though we do not expect a meaningful contribution until 2013.

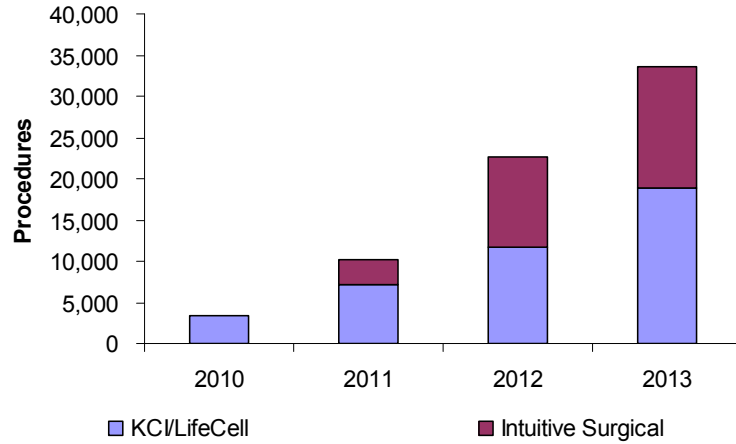
We are currently modeling \$15M for 2011 and \$19.6M for 2012. We believe 2013 will be a critical year of growth, with both the PINPOINT and the wound-care revenue streams coming on-line that year, and with the older KCI and Intuitive Surgical partnerships having a substantial install base by that point. We believe revenues will grow from \$19.6M in 2012 to \$36.6M in 2013, with the primary driver being the KCI relationship.

FIGURE 14: Projected SPY Install Base 2010 - 2013 E



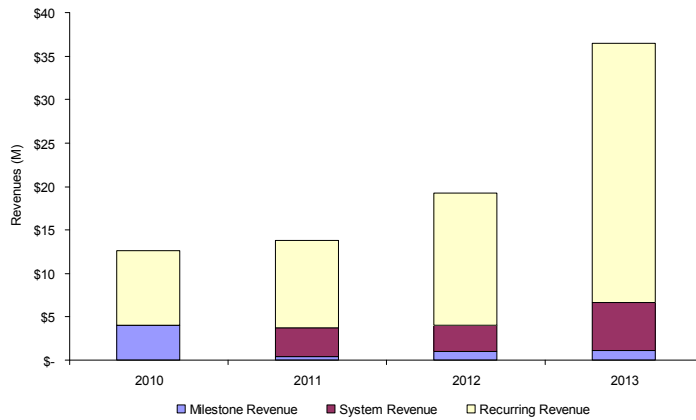
Source: JMP Securities, LLC

FIGURE 15: Projected SPY Procedure Volumes 2010 - 2013 E



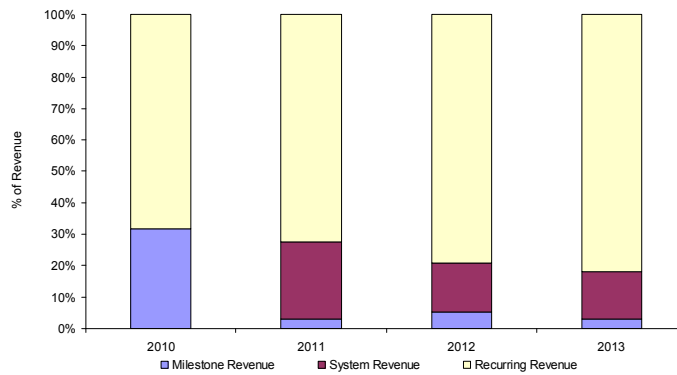
Source: JMP Securities, LLC

FIGURE 16: Projected Revenue, 2010 - 2013 E



Source: Company reports, JMP Securities, LLC

FIGURE 17: Revenue Contribution, 2010 - 2013 E



Source: JMP Securities, LLC

Gross margins are currently hovering in the range of 50-60%. We expect Novadaq's gross margins to improve by 2013 and end the year at 65% or better. In the long-run, gross margins of 70% may be achievable, but the timing of such a goal remains very dependent on a number of factors, including how fast recurring revenues can contribute to the top line.

Operating expenses have been fairly predictable up to this point, but we expect these to grow in 2012 and beyond. The key driver for the increased costs is an expansion of the domestic sales force, ahead of the broader commercialization of the SPY Scope. The company currently has five salespeople, but in the long run management sees this expanding to 50-75 people.

The company currently has \$10M in cash and equivalents in the bank. We expect the company to file for a public listing on a U.S. exchange in mid-2012. We also expect the company to raise capital to fund the commercialization of its SPY Scope.

INVESTMENT RISKS

Regulatory risk - We believe that this is a fairly low-risk aspect of the story. Most of Novadaq's products have been approved for sale by the FDA, but with the announcement of an expanded relationship with KCI to develop a wound healing application, the story now has an added element of regulatory risk. We would note however, that we have not included any sales of wound-care related products in our modeling.

Adoption risk - SPY is a relatively new technology and its ultimate utility in the operating room remains an evolving part of the story. While the company's partnerships validate the technology's potential, the utilization on a longer-term basis depends on whether clinical data and physician experience demonstrate a clinical benefit.

Commercial risk - Novadaq's near-term revenue stream is dependent on the amount of resources that Intuitive Surgical and KCI are willing to commit to the product. In the long-run, Novadaq remains focused on selling its own products in the minimally-invasive setting. While there is substantial value in this effort, the company is small and has little experience commercializing a product.

Fundraising risk - The Company ended last quarter with \$10M in cash and equivalents. It will require at least \$30-40M for the company to achieve profitability. We expect the company to raise additional capital within the next twelve months and we have modeled an additional 5M shares of dilution in 2012 to account for this.

COMPANY DESCRIPTION

Novadaq Technologies Inc. develops and commercializes medical imaging and therapeutic devices for use in the operating room. Its proprietary imaging platform is used to visualize blood vessels, nerves, and the lymphatic system during surgical procedures. The company offers SPY imaging systems, which allow surgeons to capture, review, print, and archive image sequences of blood flow in vessels and micro-vessels, tissues, and organ perfusion in real-time during the course of performing various surgical procedures. The company also offers a SPY-Q analysis toolkit, a post-processing software used in combination with the SPY imaging to compare fluorescence in image sequences captured pre-, intra-, and post-procedures. It also provides an Endoscopic SPY imaging system that combines high-definition visible imaging with the fluorescence imaging capabilities of the SPY into a single system and the PINPOINT GI system for autofluorescence colonoscopy to detect and localize flat and polypoid cancerous tissue in the colon. In addition, the company offers the CO2 HEART LASER system for transmyocardial revascularization, an angina-relief therapy for diffusely-diseased coronary vessels with poor targets for bypass grafting. Its products are used in plastic reconstructive, general, cardiac, head and neck reconstruction, and gastrointestinal surgical procedures in the United States, Japan, as well as other countries. Novadaq Technologies Inc. was founded in 2000 and is headquartered in Mississauga, Canada.

FIGURE 18: Revenue Model

	2010 A					2011E					2012E					2013E				
	March '10	June '10	Sept '10	Dec '10	FY	March '11	June '11	Sept '11	Dec '11	FY	March '12	June '12	Sept '12	Dec '12	FY	March '13	June '13	Sept '13	Dec '13	FY
	Q1	Q2	Q3	Q4		Q1	Q2	Q3 A	Q4		Q1	Q2	Q3	Q4		Q1	Q2	Q3	Q4	
LifeCell																				
New Installs				45	45	15	40	50	50	200	50	50	50	50	400	50	50	50	50	600
Cumulative Installs						60	100	150	200		250	300	350	400		450	500	550	600	
ICG Kits	800	800	850	1000	3450	900	1750	2000	2500	7150	2250	2700	3150	3600	11700	4050	4500	4950	5400	18900
Utilization				22		15	17.5	13.3	12.5		9	9	9	9		9	9	9	9	
ASP	\$1,150	\$1,150	\$1,150	\$1,150		\$1,150	\$1,150	\$1,150	\$1,150		\$1,150	\$1,150	\$1,150	\$1,150		\$1,150	\$1,150	\$1,150	\$1,150	
LifeCell Revenue (M)						\$1.0	\$2.0	\$2.3	\$2.9	8.2	\$2.6	\$3.1	\$3.6	\$4.1	13.5	\$4.7	\$5.2	\$5.7	\$6.2	21.7
Intuitive Surgical																				
Units shipped				5		15	60	100	50		50	50	50	50		50	50	50	50	
Cumulative Installs					5	20	80	180	230	230	280	330	380	430	430	480	530	580	630	630
ICG Kits							500	1,000	1,500	3000	2,000	2,500	3,000	3,400	10900	3,300	3,500	3,800	4,000	14600
Royalty / Hardware ASP	\$15,000	\$15,000	\$15,000	\$15,000		\$15,000	\$15,000	\$15,000	\$15,000		\$15,000	\$15,000	\$15,000	\$15,000		\$15,000	\$15,000	\$15,000	\$15,000	
ICG ASP	\$165	\$165	\$165	\$165		\$165	\$165	\$165	\$165		\$165	\$165	\$165	\$165		\$165	\$165	\$165	\$165	
Royalty / Hardware Revenue (M)						\$ 0.2	\$ 0.9	\$ 1.5	\$ 0.8	\$ 3	\$ 0.8	\$ 0.8	\$ 0.8	\$ 0.8	\$ 3	\$ 0.8	\$ 0.8	\$ 0.8	\$ 0.8	\$ 3
ICG Revenue (M)						\$ -	\$ 0.1	\$ 0.2	\$ 0.2	\$ 0.5	\$ 0.3	\$ 0.4	\$ 0.5	\$ 0.6	\$ 1.8	\$ 0.5	\$ 0.6	\$ 0.6	\$ 0.7	\$ 2.4
Total ISRG Revenue (M)						\$ 0.2	\$ 1.0	\$ 1.7	\$ 1.0	3.9	\$ 1.1	\$ 1.2	\$ 1.2	\$ 1.3	4.8	\$ 1.3	\$ 1.3	\$ 1.4	\$ 1.4	5.4
Wound Care																				
New Installs													10	10		20	20	20	20	
Cumulative Installs													10	20	20	40	60	80	100	100
ICG Kits													10	20	30	80	180	320	500	1080
Utilization													1	1		2	3	4	5	
ASP															\$1,150	\$1,150	\$1,150	\$1,150		
Total Wound Care Revenue																\$ 0.2	\$ 0.6	\$ 1.5	\$ 2.9	5.2
Minimally Invasive SPY Scope																				
Scopes																\$ 20.0	\$ 30.0	\$ 40.0	\$ 90	
Systems																\$ 5.0	\$ 6.0	\$ 6.0	\$ 8.0	\$ 25.0
Scope ASP	\$3,500	\$3,500	\$3,500	\$3,500		\$3,500	\$3,500	\$3,500	\$3,500		\$3,500	\$3,500	\$3,500	\$3,500		\$3,500	\$3,500	\$3,500	\$3,500	
System ASP	\$100,000	\$100,000	\$100,000	\$100,000		\$100,000	\$100,000	\$100,000	\$100,000		\$100,000	\$100,000	\$100,000	\$100,000		\$100,000	\$100,000	\$100,000	\$100,000	
Scope (M)																\$0	\$70,000	\$105,000	\$140,000	\$ 0.3
Systems (M)																\$500,000	\$600,000	\$600,000	\$800,000	\$ 2.5
TOTAL PRODUCT REVENUE	\$ 2.1	\$ 2.3	\$ 2.2	\$ 2.0	\$ 8.6	\$ 1.3	\$ 3.0	\$ 4.0	\$ 3.9	\$ 12.1	\$ 3.7	\$ 4.3	\$ 4.9	\$ 5.5	\$ 18.3	\$ 6.6	\$ 7.8	\$ 9.2	\$ 11.4	\$ 35.1

Source: Company reports, JMP Securities, LLC

FIGURE 19: Income Statement

	2010 A					2011E					2012E					2013E				
	Q1	Q2	Q3	Q4	FY	Q1	Q2	Q3 A	Q4	FY	Q1	Q2	Q3	Q4	FY	Q1	Q2	Q3	Q4	FY
Product Sales	\$2.1	\$2.3	\$2.2	\$2.0	\$8.6	\$1.9	\$3.0	\$3.7	\$3.9	\$12.6	\$3.7	\$4.3	\$4.9	\$5.5	\$18.3	\$6.6	\$7.8	\$9.2	\$11.4	\$35.1
Royalty Revenue					\$0.0		\$0.1	\$0.1	\$0.1	\$0.4	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Milestone revenue	\$0.3		\$3.7		\$4.0					\$0.0					\$0.0					\$0.0
Deferred partnership fee revenue							\$0.2	\$0.2	\$0.2	\$0.6	\$0.2	\$0.2	\$0.2	\$0.3	\$1.0	\$0.3	\$0.3	\$0.3	\$0.3	\$1.1
Service revenue	0.4	0.3	0.4	0.3	1.3	1.0	0.1	0.1	0.1	\$1.3	0.1	0.1	0.1	0.1	0.4	0.1	0.1	0.1	0.1	0.4
Total Revenue	2.7	2.6	6.3	2.3	11.8	2.9	3.5	4.2	4.3	14.9	4.0	4.6	5.2	5.8	19.6	7.0	8.2	9.6	11.8	36.6
Cost of Goods	1.4	1.3	1.4	1.3	2.1	1.8	1.4	1.8	1.4	6.3	1.8	1.7	1.8	2.0	7.3	3.2	3.0	3.4	4.0	13.6
Gross Profit	1.3	1.3	4.9	1.0	8.6	1.1	2.1	2.4	2.9	8.6	2.2	2.9	3.4	3.8	12.3	3.9	5.1	6.3	7.8	23.1
Operating Expenses																				
Selling and distribution	1.8	2.0	1.9	1.3	2.8	1.3	1.4	1.4	1.4	5.5	1.5	1.5	1.5	1.5	6.0	1.8	2.0	2.0	2.5	8.3
R&D	0.9	1.2	1.3	1.4	1.8	1.0	1.3	1.1	1.1	4.5	1.2	1.2	1.2	1.2	4.8	1.3	1.3	1.3	1.4	5.3
G&A	0.8	1.0	1.2	0.9	7.6	1.1	1.1	1.1	1.1	4.4	1.2	1.2	1.3	1.3	5.0	1.5	1.5	1.6	1.6	6.2
Write down of intangibles			4.8																	
write down of equipment																				
D&A				0.3																
Total Operating Expenses	3.5	4.1	9.2	4.0	13.0	3.4	3.8	3.6	3.6	14.4	3.9	3.9	4.0	4.0	15.8	4.6	4.8	4.9	5.5	19.8
Operating Income	(2.2)	(2.8)	(4.3)	(2.9)	(3.2)	(2.3)	(1.7)	(1.2)	(0.7)	(5.8)	(1.3)	(1.0)	(0.6)	(0.2)	(3.1)	(0.7)	0.3	1.4	2.3	3.3
Finance costs	(0.2)	(0.2)	(0.2)	(0.2)		(0.2)	(0.2)	(0.2)	0.0	(0.5)					0.0					0.0
Finance income	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0					0.0					0.0
Warranty revaluation	0.0	(0.4)	(0.1)	0.0		0.0	(2.6)	0.3												
Write-down on inventory	(0.1)	(0.4)																		
Gain(loss) on investment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(0.6)	(0.2)	(0.8)	0.0	0.0	0.0	0.0	0.0
Loss for the period	(2.7)	(3.8)	(4.5)	(3.1)	(3.2)	(2.4)	(4.4)	(1.0)	(0.6)	(8.5)	(1.3)	(1.3)	(1.2)	(0.4)	(4.1)	(0.7)	0.3	1.4	2.3	3.3
GAAP	\$ (0.1)	\$ (0.1)	\$ (0.2)	\$ (0.1)	\$ (0.2)	\$ (0.1)	\$ (0.1)	\$ (0.0)	\$ (0.0)	\$ (0.3)	\$ (0.0)	\$ (0.0)	\$ (0.0)	\$ (0.0)	\$ (0.1)	\$ (0.0)	\$ 0.0	\$ 0.0	\$ 0.1	\$ 0.08
Common Shares outstanding	26.0	28.0	26.0	28.0	14.9	28.0	33.0	33.0	33.0	31.8	33.0	33.0	38.0	38.0	35.5	39.0	39.0	39.0	39.0	39.0
Margins	2010 A					2011A					2012E					2013E				
Gross Margin	49.6%	50.7%	78.2%	45.1%	72.8%	38.8%	60.7%	57.2%	68.0%	57.6%	55.1%	63.1%	65.4%	65.6%	62.8%	55.0%	63.0%	65.0%	66.0%	63.0%
Selling & Distribution	88.6%	85.6%	85.1%	66.7%	32.6%	65.9%	45.9%	37.4%	36.2%	43.5%	40.9%	35.1%	30.8%	27.5%	32.9%	27.1%	25.7%	21.6%	21.9%	23.6%
R&D	42.6%	51.2%	58.3%	70.6%	20.8%	54.2%	41.7%	29.4%	28.4%	35.9%	32.7%	28.1%	24.7%	22.0%	26.3%	19.6%	16.7%	14.1%	12.2%	15.1%
G&A	38.7%	42.6%	52.8%	43.6%	88.2%	56.5%	36.5%	28.7%	28.4%	34.8%	32.7%	28.1%	26.7%	23.8%	27.4%	22.6%	19.2%	17.3%	14.0%	17.7%
Operating Expenses	170.0%	179.4%	414.1%	197.4%	151.3%	176.5%	124.1%	95.5%	93.0%	114.1%	106.3%	91.4%	82.2%	73.4%	86.6%	69.3%	61.6%	53.0%	48.1%	56.4%
Operating Income	-104.6%	-121.9%	-193.3%	-146.3%	-37.2%	-118.3%	-54.7%	-31.6%	-17.2%	-46.1%	-35.4%	-23.2%	-12.2%	-3.3%	-16.8%	-11.2%	4.4%	14.6%	20.2%	9.3%
Net Income, net of taxes	-100.6%	-144.5%	-72.4%	-136.5%	-27.1%	-82.8%	-127.5%	-24.5%	-15.0%	-57.2%	-32.4%	-28.2%	-22.7%	-6.1%	-21.1%	-10.7%	4.2%	14.0%	19.5%	8.9%
Growth Rates	2010 A					2011A					2012E					2013E				
Device Revenue	-100.0%	-100.0%	-100.0%	-100.0%	-100.0%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	-99.5%	-99.5%	-99.3%	-99.2%	0.0%	0.0%	0.0%	0.0%	0.0%
Other revenue	-84.3%	-81.9%	-74.7%	-79.5%	-80.8%	45.0%	40.0%	35.0%	25.0%	-1.4%	40.0%	35.0%	30.0%	15.0%	-68.5%	40.0%	35.0%	30.0%	15.0%	0.0%
Total Revenue	-39.7%	-32.9%	84.1%	-15.7%	-20.0%	29.6%	6.0%	31.1%	10.4%	200.7%	1.5%	24.3%	0.4%	44.9%	15.6%	75.2%	77.7%	87.0%	101.2%	85.8%

Source: JMP Securities, LLC and Company reports

FIGURE 20: Balance Sheet (in millions)

	9/30/2011	12/31/2010
ASSETS		
Current Assets		
Cash and equivalents	\$10.3	\$5.6
Accounts Payable	1.9	1.4
Prepaid expenses	1.0	1.2
Inventories	1.7	0.8
Total Current Assets	<u>15.0</u>	<u>9.0</u>
Non-current assets		
Property, Plant, Equipment	4.5	1.2
Prepaid expenses		0.1
Deferred development costs	0.3	0.4
Other intangibles	2.2	1.6
Total Assets	\$21.9	\$12.3
LIABILITIES AND SHAREHOLDERS EQUITY		
Current liabilities		
Accounts payable	\$3.8	\$2.9
Provisions	0.1	0.0
Income taxes payable	0.0	0.0
Deferred revenue	0.2	0.5
Deferred partnership fee	0.8	0.8
Repayable government assistance	0.2	0.5
Total current liabilities	<u>5.2</u>	<u>4.8</u>
Non-current liabilities		
Provisions and deferred tax liability	0.3	
Convertible debt	4.1	3.9
Deferred revenue	0.0	0.2
Deferred partnership fee	2.3	2.9
Repayable government assistance	0.3	
Shareholder warrants	7.2	1.3
Total liabilities	<u>19.5</u>	<u>12.1</u>
Total shareholder's equity	<u>\$2.4</u>	<u>-\$0.8</u>
Total liabilities and shareholder's equity	\$21.9	\$12.3

Source: JMP Securities & Company reports

JMP FACTS AND DISCLOSURES

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Company	Disclosures
Intuitive Surgical, Inc.	(1)
Novadaq Technologies Inc.	

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JMP Securities Research Ratings and Investment Banking Services: (as of October 3, 2011)

JMP Rating	Regulatory Equivalent	# Co's Under Coverage	% of Total	Regulatory Rating	# Co's Under Coverage	% of Total	# Co's Receiving IB Services in Past 12 Months	% of Co's With This Rating
Market Outperform	Buy	207	66%	Buy	207	66%	58	28%
Market Perform	Hold	105	33%	Hold	105	33%	7	7%
Market Underperform	Sell	3	1%	Sell	3	1%	0	0%
TOTAL:		315	100%		315	100%	65	21%

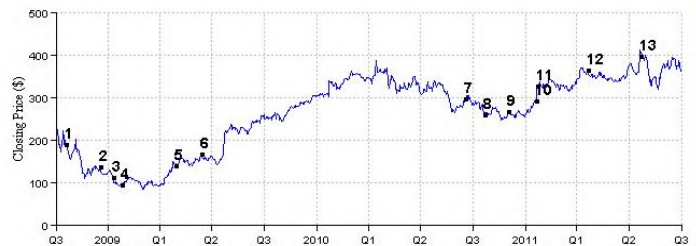
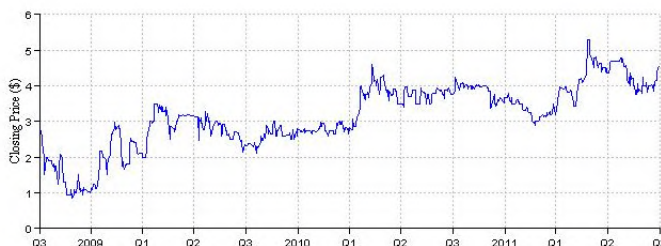
Stock Price Chart of Rating and Target Price Changes:

Note: First annotation denotes initiation of coverage or 3 years, whichever is shorter. If no target price is listed, then the target price is N/A. In accordance with NASD Rule 2711, the chart(s) below reflect(s) price range and any changes to the rating or price target as of the end of the most recent calendar quarter. The action reflected in this note is not annotated in the stock price chart. Source: Jovus and JMP Securities.

NDQ

ISRG

1) 10/17/08 Market Outperform \$324	2) 12/16/08 Market Outperform \$214	3) 01/08/09 Market Outperform \$132	4) 01/23/09 Market Outperform \$130	5) 04/28/09 Market Perform	6) 06/12/09 No Rating
7) 09/17/10 Market Outperform \$362	8) 10/20/10 Market Outperform \$300	9) 12/01/10 Market Outperform \$280	10) 01/19/11 Market Outperform \$308	11) 01/21/11 Market Outperform \$327	
12) 04/20/11 Market Outperform \$430	13) 07/20/11 Market Outperform \$480				



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