Equity Research

SPROTT STUDENT INVESTMENT FUND

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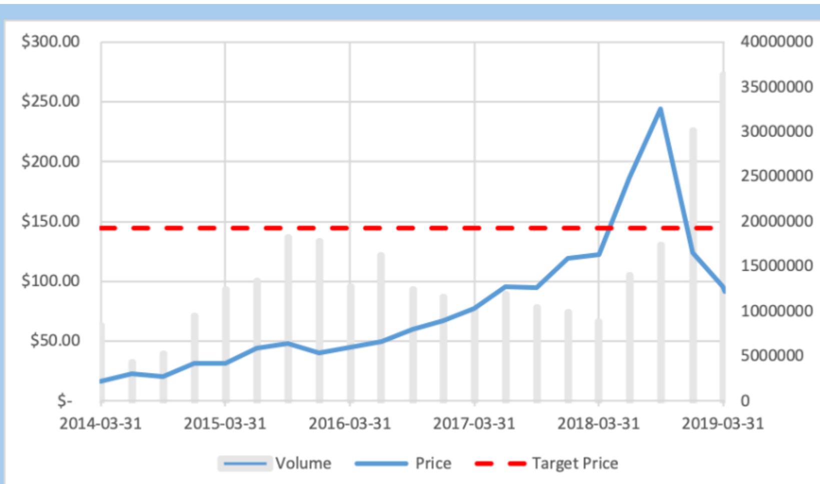
INOGEN INC. – BUY



Source: Bloomberg

NYSE: INGN USD $94.22

Target Price USD $136.62

Inside this Report	
☑ Initial Research	☐ Updated Research
☐ Price Target Change	☐ Rating Change

Research Highlights/Investment Thesis

- *Market Overreaction*
  Inogen's stock has dropped about 66% from its all-time high. It seems the market has overreacted to disappointing Q4 2018 earnings on top of Inogen as selling off with the rest of the market toward the end of 2018.

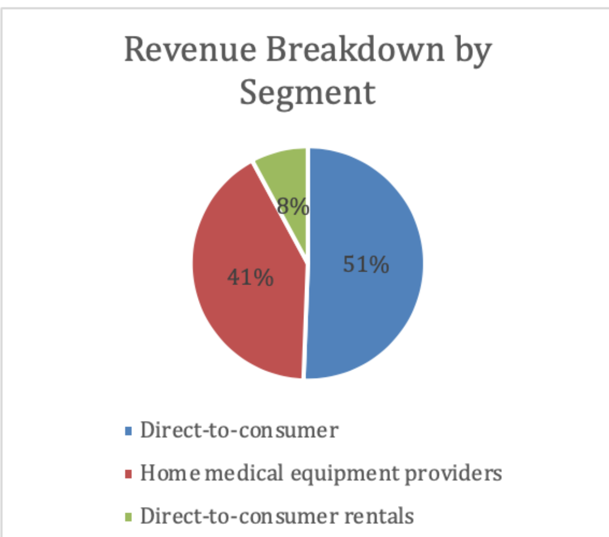
- *Strong Financials*
  Sales grew over 43% in 2018 and are expected to grow over 20% year-over-year in 2019. Conservative projected sales growth from 2020-2022 is 15-20%. Inogen also has no long-term debt on their balance sheets and around $200 million in cash and cash equivalents.

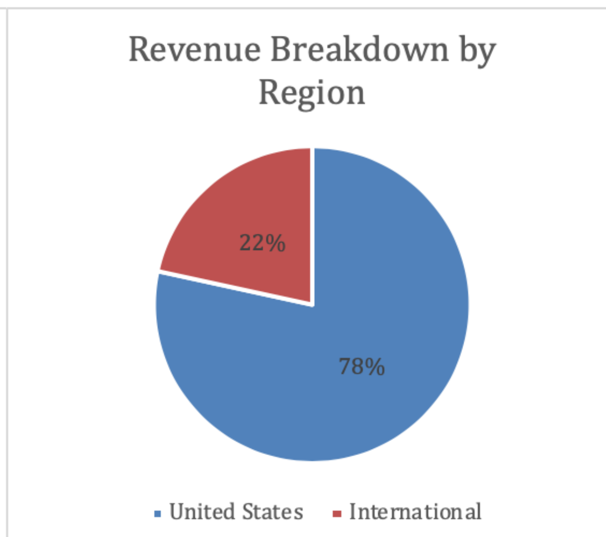
- *Low Market Penetration*
  Current market penetration for portable oxygen concentrators sits at only 10%-15%. If peak penetration of 65% can be reached over the next decade, projected penetration will grow at 5% year-over-year. Being a clear leader in the market, Inogen is in a prime position to benefit from this organic growth.

Key Financial Data	
Market Cap	1.97B
S&P Credit Rating	N/A
Debt to Equity Ratio	0
Price to Earnings	38.85
EV/EBITDA	35.2
Dividend Yield	N/A
Operating Margin	10.6%
Return on Assets	15.9%
Revenue Growth – 1yr	43.6%

Company Outlook/Overview

Inogen is a medical technology company that was incorporated in Delaware on November 27, 2001, by founders Alison Bauerlein, Brenton Taylor, and Byron Myers. They primarily develop, manufacture and market innovative portable oxygen concentrators used to deliver supplemental long-term oxygen therapy to patients suffering from chronic respiratory conditions[1]. Traditionally, these patients must rely on stationary oxygen concentrators in their home and oxygen tanks or cylinders when mobile. These tanks and cylinders contain a finite supply of oxygen and must be delivered on a regular basis. Additionally, the tanks restrict mobility and are often inconvenient for patients. Most of these tanks are also not approved by the FAA for use on a commercial aircraft. Inogen's proprietary Inogen One systems concentrate the air around the patient to offer a source of supplemental oxygen with a portable device. Inogen's portable oxygen concentrators provide a single solution for home, travel and nocturnal therapy. Inogen uniquely provides a direct-to-consumer marketing strategy which allows them to increase patient awareness, capture margins of the home medical equipment provider, and innovate products based on direct customer feedback. Of Inogen's $280 million of revenue derived in the United States, approximately 50.6% represented direct-to-consumer sales, 41.5% represented sales to traditional home medical equipment providers, distributors and resellers, and 7.9% represented direct-to-consumer rentals[2]. About 21% of Inogen's revenue is derived from international markets including Canada, Europe, the Asia-Pacific region, Latin America, the Middle East, and Africa. In the 46 counties outside of the United States that Inogen sells the majority of their products to large distributors including gas and home oxygen therapy countries.





Source: Inogen 2018 10-K

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[1] http://investor.inogen.com/Cache/396885874.pdf (page 2)

[2] http://investor.inogen.com/Cache/396885874.pdf (page 6)

Products

Inogen currently offers two portable oxygen concentrator solutions, the Inogen One G4 and Inogen One G3, weighing 2.8 and 4.8 pounds respectively. The G4 was released in May 2016 and the G3 came out in September 2012. The G4 and G3 both start at $2495 USD and are FAA approved for use on airplanes. On a single battery, the G4 can run for up to 2.6 hours and up to 5 hours on a double battery. Whereas, the G3 can run for up to 4.7 hours on a single battery and up to 10 hours on a double battery. They can both operate on a 24/7 basis for at least 60 months without a stationary concentrator, with minimal servicing of sieve beds, filters, and accessories[3]. Inogen is planning to launch the Inogen One G5 in the first half of 2019[3]. According to CEO Scott Wilkinson, the G5 will produce a higher oxygen capacity output than the G3, will be smaller in size than the G3 and will have a higher oxygen output per pound than the G3. Thus, the G5 will obsolete the G3 immediately.

	Key Product Specifications	
	Inogen One G4	**Inogen One G3**
Capacity (ml/min)	630	1,050
Weight (lbs)	2.8 (single battery) 3.3 (double battery)	4.8 (single battery) 5.8 (double battery)
Battery run-time	Up to 2.6 hours (single battery) Up to 5 hours (double battery)	Up to 4.7 hours (single battery) Up to 10 hours (double battery)
Technology effective for overnight use	Yes	Yes
Sound	40 dBA	39 dBA

Source: Inogen 10-K 2018 page 5

The Inogen G4 features Inogen Connect, a wireless connectivity platform in the form of a front-end mobile app for patients and a back-end data base portal for homecare providers. Inogen Connect was created because of direct customer feedback. The mobile app is available on both Apple and Android and includes features such as oxygen purity status, battery run time, product support functions, notification alerts, and remote software updates. The back-end database features include remote troubleshooting, equipment health checks, and a location tracker. Every Inogen One product is equipped with Intelligent Delivery Technology, a form of pulse-dose technology from which the patient receives a bolus of oxygen upon inhalation[4]. Pulse-Dose technology was designed to extend the number of hours an oxygen tank would last. During sleep, respiratory rates typically decrease and Inogen's proprietary technology increases the bolus size to adjust.

Inogen also offers an in-home solution called the Inogen At Home which is a stationary oxygen concentrator designed for a non-ambulatory long-term oxygen therapy patient while also serving as a backup to the Inogen one systems for patients who are renting. It was launched in October 2014 and

3 http://investor.inogen.com/Cache/396885874.pdf (page 6)

4 http://investor.inogen.com/Cache/396885874.pdf (page 6)

starts at $1,495 USD weighing about 18 pounds. The Inogen At Home features low power consumption designed to reduce the patient's electricity bill. For example, a patient living in New York that currently uses a typical 390-watt oxygen concentrator 20 hours a day can save approximately $36.32 a month by switching to Inogen At Home[5].

Market Size & Structure

According to 2017 Medicare data, approximately 3 million patients in the United States used long-term oxygen therapy in 2017. Of the 3 million patients, 1 million of them are Medicare patients using oxygen that cost $2 billion[6]. Management estimates that the United States market is on pace to reach 4 million patients by the end of 2019. Of these patients, it is estimated that 60% are covered by Medicare and 40% are covered by Medicare advantage or other third party insurance[7]. Medicare does not cover the purchase of portable oxygen concentrators but does provide a monthly benefit for renting. Medicare doesn't provide coverage for a portable oxygen concentrator in addition to oxygen tanks which forces the patient to make a decision on which they would prefer. According to Medicare data, current market penetration sits at about 10.8% of the total long-term oxygen therapy market are using portable oxygen concentrators. Currently, around 73% of patients using long-term oxygen therapy rely on ambulatory oxygen and the remaining 27% are considered stationary. According to research done by Technavio, the portable oxygen concentrator market is predicted to post a CAGR of close to 11% by 2023. According to JP Morgan, Inogen has close to 50% US market share making them the clear POC market leader followed by Phillips Respironics with close to a quarter of the market. Between 65% to 70% of Inogen's patients have been diagnosed with Chronic obstructive pulmonary disease, or COPD, which is the leading cause of hypoxemia[8]. Hypoxemia is a condition where the patient has an insufficient amount of oxygen in their blood due to the inability to efficiently convert the oxygen found in the air into the bloodstream, leading to organ damage and poor health. As COPD progresses, it may require oxygen therapy as treatment as currently there is no cure. According to the Centers for Disease Control and Prevention (CDC), approximately 16 million people in the United States have been diagnosed with COPD, with millions more who are unaware they have COPD[9]. COPD is the third leading cause of death in the United States and one of the leading causes of death globally. There are an estimated 210 million individuals worldwide who have COPD, with an estimated 100 million individuals located in China[10]. The number of individuals is

[5] https://www.inogen.com/products/energy-savings-calculator/

[6] http://investor.inogen.com/Cache/396885874.pdf (page 3)

[7] http://investor.inogen.com/Cache/396885874.pdf (page 3)

[8] http://investor.inogen.com/Cache/396885874.pdf (page 3)

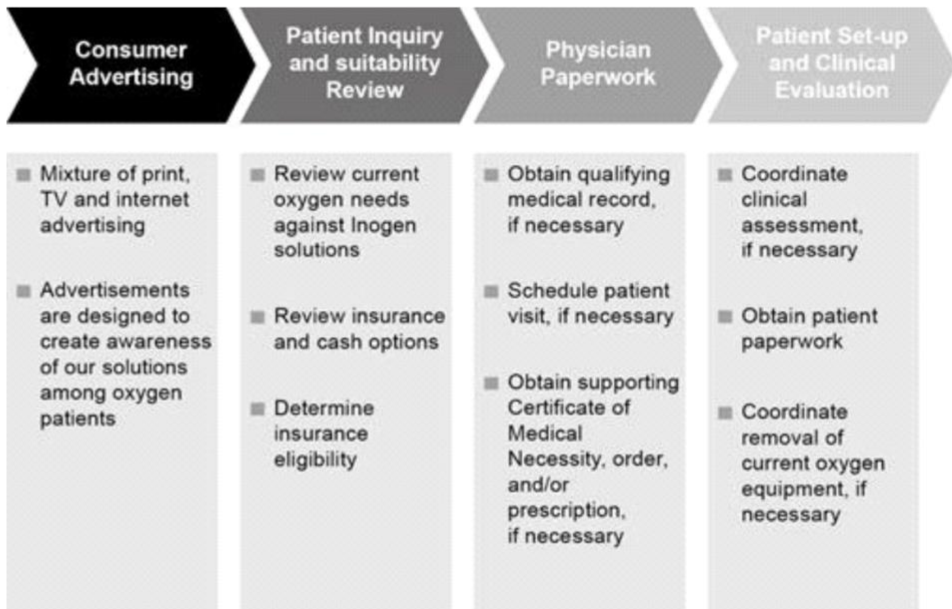
[9] https://www.cdc.gov/copd/index.html

[10] http://investor.inogen.com/Cache/396885874.pdf (page 3)

larger in China mainly due to the increased air pollution. Many patients with COPD need a least 15 hours of oxygen per day and oxygen therapy can vastly improve their quality of life[11]. In addition to COPD, the CDC estimates that there are 18 million American adults who currently have asthma. Although oxygen therapy isn't necessary for mild asthma, it is greatly beneficial for those that suffer from life-threatening asthma and especially for emergency asthma attacks.

Value Chain &/or Unit Economics

Inogen uses direct-to-consumer marketing in order to generate interest among oxygen therapy patients in an Inogen One system or Inogen At Home. Direct-to-consumer sales accounted for 50.6% of Inogen's revenue in the United States in 2018[12]. The following chart describes Inogen's direct-to-consumer sales and rental process from when the adopted it in 2009.



Source: 2017 Inogen Annual Report page 7

Inogen uses many ways to increase awareness about their products such as attendance at oxygen therapy support groups, guest speaking arrangements at trade shows, and product demonstrations, as requested[13]. Inogen first uses advertising in order to promote their Inogen One System products. After a patient inquires about a product, they are presented with solutions to their current situation by Inogen employees. After the right product is selected, insurance eligibility is determined to decide whether renting or purchasing is the right choice for the patient. After this physician and patient paperwork is obtained and the customer receives their product. To supplement their direct-to-consumer marketing strategy, Inogen also offers a physician referral model in which Inogen helps physicians understand their

[11] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2648117/

[12] http://investor.inogen.com/Cache/396885874.pdf (page 6)

[13] http://investor.inogen.com/Cache/396885874.pdf (page 7)

products and the value given to patients. This is an attempt to increase awareness among both physicians and patients. As of December 31, 2018, Inogen employed a marketing team of 8 people, an in-house sales team of 492, a field-based sales team of 20 people, and a business-to-business sales team of 4 people[14]. Inogen has actively been increasing the number of employees on their sales team over the past years in order to reach as many potential patients as possible. Patients that choose to use Medicare or private insurance typically opt to rent from Inogen instead of purchase since they are granted monthly reimbursements. Inogen prefers rental revenue because it is consistent and can be more predictable than regular sales. Inogen also sells their products to traditional homecare providers in the United States, Canada, Europe, the Asia-Pacific region, Latin America, the Middle East and Africa who then sell to long-term oxygen therapy patients. These providers market the benefits of Inogen One systems through advertising or to physicians through sales representatives.

Moat

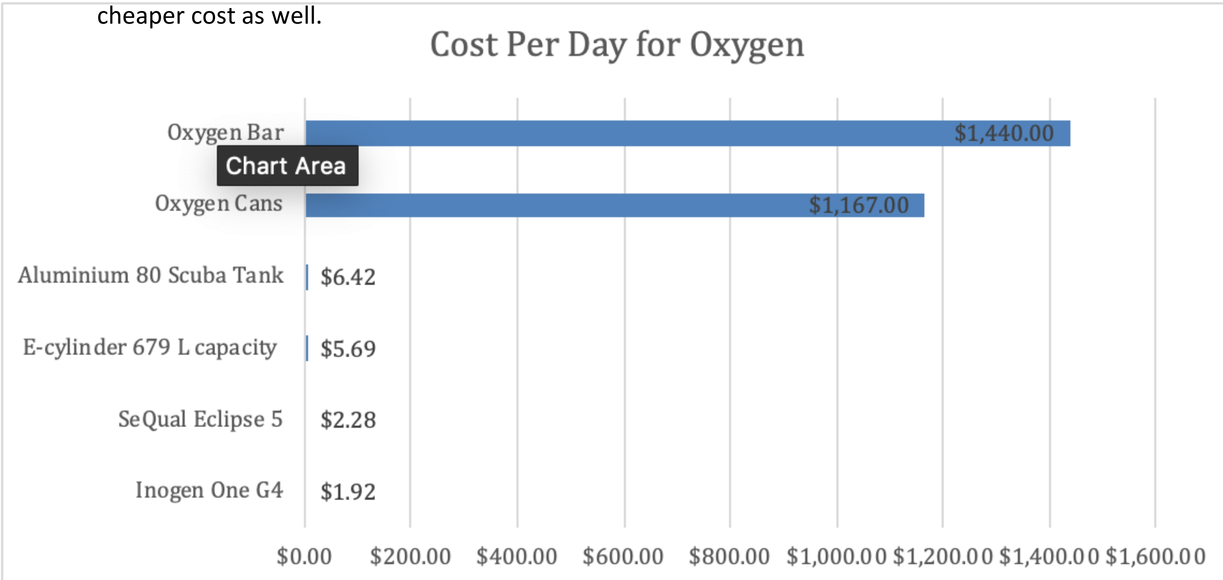
Inogen operates with decent economic moat due to their direct-to-consumer marketing strategy and the economic advantage their Inogen One system provides. Inogen holds a valid Medicare supplier number which gives them the ability to rent to Medicare patients directly, bill Medicare or third parties on the patient's behalf, and service patients in their home. Currently, Inogen is the only player in the long-term oxygen therapy market that operates on a direct-to-consumer model which gives them an advantage over their competitors. In order for a competitor to pursue a direct-to-consumer strategy, they would need to meet national accreditation and state-by-state licensing requirements and secure Medicare billing privileges.

Inogen One systems also provide an economic advantage over their competitors as they cost the least amount per day. Of the six most common methods of oxygen therapy, the most expensive is oxygen bars. Oxygen bars are places where people can breathe up to 30 minutes of oxygen for an increase in their energy levels, cure headaches, or even extend their endurance. On average, oxygen bars cost around $1,400 USD per day. Similar to oxygen bars, oxygen cans provide similar benefit but also have a high cost of around $1,200 USD per day. The next option for patients is to use oxygen canisters such as the E-Cylinder 679 L Capacity. These canisters serve the same purpose to a patient as a portable oxygen concentrator but have a significantly higher cost. The Cylinder 679 L Capacity canister costs the patient about $5.69 per day which is nearly three times the Inogen One G4 cost of $1.92 per day[15]. In addition to the cost, oxygen canisters are bulkier and weigh more while only having a finite supply of oxygen. The most economical options for patients are portable oxygen concentrators. The closest competitor in terms

[14] http://investor.inogen.com/Cache/396885874.pdf (page 6)

[15] https://www.inogen.com/resources/health/cost-days-breath/

of cost per day to Inogen is the SeQual Eclipse 5 which costs about $2.28 per day, still higher than the G4 cost of $1.92 per day. Even though both concentrators start at the exact same price of $2,495, the cost to power the G4 each day is much lower than the Eclipse 5. This gives Inogen a competitive advantage as Medicare prefers to rent out economically cheaper concentrators and regular customers benefit from the cheaper cost as well.



Source: https://www.inogen.com/resources/health/cost-days-breath/

Industry Analysis

Porter's Five Forces

Competitive Rivalry - High

The long-term oxygen therapy market is a highly competitive industry with many players. Inogen has to compete with not only other manufactures of portable oxygen concentrators but all other companies that provide long-term oxygen therapy. Inogen's manufacturing competitors include Respironics (a subsidiary of Koninklijke Philips N.V.), Invacare Corporation, Caire Medical (subsidiary of NGK Spark Plug), DeVilbiss Healthcare (a subsidiary of Drive Medical), O2 Concepts, Precision Medical, Resmed, and Gas Control Equipment (subsidiary of Colfax)[16] and their other competitors include Lincare, Inc. (a subsidiary of the Linde Group), Apria Healthcare, Inc., AdaptHealth (formerly QMES LLC), Aero Care Holdings, Inc, and Rotech Healthcare, Inc. Although Inogen does maintain a large market share they still must innovate and compete in order to maintain their position since many companies wish to enter the rapidly growing industry.

[16] http://investor.inogen.com/Cache/1001250325.PDF?O=PDF&T=&Y=&D=&FID=1001250325&iid=4654100 (Page 13)

Threat of New Entry - High

The barriers to entering the oxygen therapy market are low. Companies wishing to enter the oxygen therapy market can do so by innovating and developing new technologies and products that are superior to those currently offered. New companies may also have new and improved distribution strategies that directly imitate Inogen's direct-to-consumer model.

Threat of Substitution - Medium

Though there are many other portable oxygen therapy concentrators many aren't able to compete with the quality and features of Inogen One Systems. Cheaper options do exist with a lower upfront cost, but those concentrators have fewer features and cost more per day than Inogen One concentrators. Inogen also boasts the ability to directly rent to Medicare patients and bill Medicare on the patient's behalf.

Buyer Power - Low

Inogen has sold or rented over 567,000 portable oxygen concentrators since 2009 meaning they have a modest number of buyers[17]. This limits the customers' ability to drive down prices. With such a high market share Inogen is able to keep buyer power down but can be pressured from increasing competition. Inogen also launches new products approximately every two years which also limits the bargaining power of customers.

Supplier Power - High

Inogen's assembly of the compressor, sieve bed, concentrator and certain manifolds sold in the U.S. manufacturing is now conducted in-house in order to improve quality control and reduce cost. Although, key components including batteries, motors, valves, and some molded plastic components are sourced from single suppliers which presents a large risk to Inogen[18]. If there is any halt or reduction in production from these single suppliers, it would limit Inogen's ability to manufacture products until a replacement supplier is found.

Industry Dynamics

Industry Dynamic #1 - Regulation

All of Inogen's products and accessories are medical devices that are subject to ongoing and thorough regulation by the Food and Drug Administration (FDA) in the United States and other regulatory bodies internationally. In the United States, each medical device that is distributed requires a 501(k) clearance or pre-approval from the FDA. The FDA classifies medical devices into one of three classes: Class I, Class II or Class III based on the risk of the device and control needed. Class I and II are deemed to be lower risk whereas Class III is seen a higher risk due to these devices are designed to support or sustain human life.

[17] http://investor.inogen.com/Cache/1001250325.PDF?O=PDF&T=&Y=&D=&FID=1001250325&iid=4654100 (Page 3)

[18] http://investor.inogen.com/Cache/1001250325.PDF?O=PDF&T=&Y=&D=&FID=1001250325&iid=4654100 (Page 11)

Most oxygen concentrators are considered to be Class II since they don't sustain human life. In terms of the approval process, most Class I devices are exempt from Premarket Notification 510(k); most Class II devices require Premarket Notification 510(k); and most Class III devices require Premarket Approval (PMA)[19]. A Premarket Notification 510(k) is a submission to the FDA to demonstrate a device is as effective and safe as substantially equivalent device that is not subject to PMA. The submitor must compare their device with a legally market one and present evidence to support their claims that their device is safe. Class III devices require PMA which is the most stringent type of medical device application done by the FDA. A PMA is also required if a device can't be cleared through the Premarket Notification 510(k) process. A PMA requires extensive data and sufficient scientific evidence that the device is safe and effective for its intended use. Clinical trials are also usually required to support PMA and sometimes for 510(k) clearance[20]. Inogen obtained 510(k) clearance for the original Inogen One system on May 13, 2004. They market the Inogen One G3 and Inogen One G4 systems pursuant to the original Inogen One 510(k) clearance. They obtained 510(k) clearance for the Inogen At Home system on June 20, 2014[21].

Industry Dynamic #2 – Patents and Trademarks

Patents are essential for companies that operate in the medical device field in order to maintain their competitive advantage of their proprietary technology. As of December 31, 2018, Inogen had eight pending patent applications and thirty-three issued patents relating to the design and construction of their oxygen concentrators and their Intelligent Delivery Technology[22]. Inogen currently has three set of patents and patent applications. The first set relates to the design and construction of their Inogen One products. This set of patents will expire in 2031 which will deter competitors from attempting to copy elements for the near future. The second set of patents relates to operating features and design techniques. These patents are for the efficient operation of the Pressure Swing Adsorption oxygen generating system and the oxygen conserving technology used across the product line. They will be expiring between 2025-2027[23]. The third set of Inogen's patents are related to system component designs that they use in their products. These patents are specific to each product and are used to improve performance on current and future products. Maintaining these patents are essential for Inogen to maintain their competitive advantage as many of their proprietary technologies and designs are protected by patents. Inogen also has the trademark for all their product names as well as own trademark registrations for the mark "Inogen" in Australia, Canada, South Korea, Mexico, Europe (European Union registration), and Japan. They also own pending applications for the mark "Inogen" in Argentina, Brazil, China, and Ecuador, and an International

[19] http://investor.inogen.com/Cache/1001250325.PDF?O=PDF&T=&Y=&D=&FID=1001250325&iid=4654100 (Page 14)
[20] https://www.fda.gov/medicaldevices/deviceregulationandguidance/overview/default.htm
[21] http://investor.inogen.com/Cache/1001250325.PDF?O=PDF&T=&Y=&D=&FID=1001250325&iid=4654100 (Page 14)
[22] http://investor.inogen.com/Cache/1001250325.PDF?O=PDF&T=&Y=&D=&FID=1001250325&iid=4654100 (Page 19)
[23] http://investor.inogen.com/Cache/1001250325.PDF?O=PDF&T=&Y=&D=&FID=1001250325&iid=4654100 (Page 19)

Registration for the mark "Inogen" designating Colombia, Iceland, India, Israel, New Zealand, Norway, Singapore, Switzerland and Turkey[24].

Growth and Risk Analysis

Growth Outlook

Low Market Penetration

Inogen has been growing at an outstanding pace for the past couple of years and should continue to see accelerating growth going into the future. For the year ended 2018, Inogen posted revenue of $358.1 million which was up 44% from 2017[25]. GAAP net income for 2018 was $51.8 million, reflecting a 146.9% increase versus 2017 and a 14.5% return on revenue. Sales revenues amounted to $80.7 million in the quarter under review, up 38.4% on a year-over-year basis. Rental revenues totaled $5.8 million, up 6.7% on a year-over-year basis. They had a record number of units sold at 198,600, an increase of 70,600, or 55.2%, compared with 2017. As for 2019 guidance, the company has stated that revenue will be between $430 to $440 million, representing growth of 20.1% to 22.9% versus 2018 full year results[26]. Full-year adjusted EBITDA is projected between $67 million and $71 million, representing 9.3-15.9% growth year over year. Management has stated that they are targeting the European market for growth. Portable oxygen concentrators should continue to see double-digit growth as they become more standard in the future. Inogen should be at the forefront to take advantage of this lucrative growth since they have such a large market share. Currently, market penetration for portable oxygen concentrators sits between 10%-15%. If market penetration is able to hit 65% (all ambulatory patients) over the next decade, penetration would grow at 5% per year compared to the current 2%-3%. Considering the acceleration of adoption of portable oxygen concentrators, penetration of 5% is entirely plausible. Given Inogen's market share, they are in a position to take advantage of this growth to increase their presence.

Untapped Markets

China and India present very lucrative markets for an opportunity for massive growth. China and India rank first and second in most smokers in the world respectively. According to WHO, China has over 300 million smokers[27] and India has over 100 million[28]. Smoking is the leading cause of COPD and COPD patients are the majority of Inogen's customer base. Both these countries also have poor air quality as well as no reimbursements for portable oxygen concentrators meaning patients must purchase. Currently,

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[24] http://investor.inogen.com/Cache/1001250325.PDF?O=PDF&T=&Y=&D=&FID=1001250325&iid=4654100 (Page 19

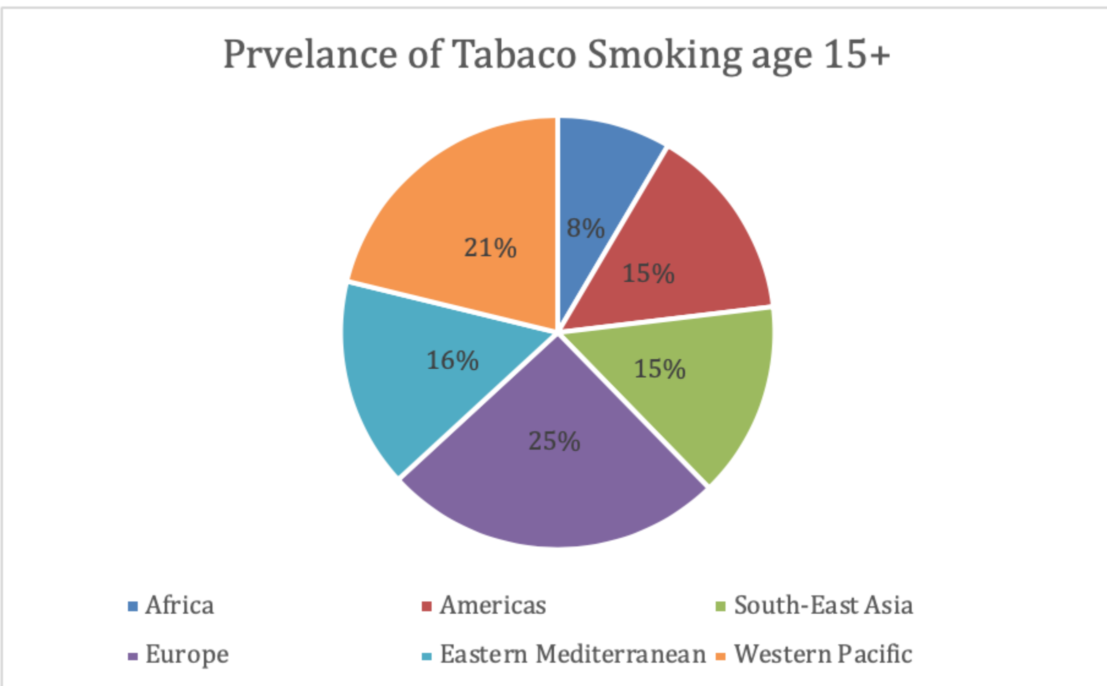
[25] http://investor.inogen.com/Cache/1001250325.PDF?O=PDF&T=&Y=&D=&FID=1001250325&iid=4654100 (Page 60)

[26] Inogen Q4 earnings call

[27] http://www.wpro.who.int/china/mediacentre/factsheets/tobacco/en/

[28] https://www.who.int/tobacco/surveillance/survey/gats/GATS_India_2016-17_FactSheet.pdf

Inogen sells to one homecare provider in India and is working to enter the Chinese market. Entering China may be difficult due to different regulations and standards. Europe also presents a promising market as around 29% of people over the age of 15 in Europe smoke tobacco[29]. Management has already stated that they are targeting Europe for growth in 2019 and beyond. In 2017, the acquired a previous distributor, MedSupport, to improve their European service. Inogen also manufactured the Inogen One G3 concentrator in the fourth quarter of 2017 using a contract manufacturer, Foxconn, located in the Czech Republic to improve their ability to service European customers. These international markets present strong opportunities for growth into the future for Inogen for multiple reasons. Countries like France and the United Kingdom have more favourable reimbursement rates for portable oxygen concentrators than the United States. This should encourage more patients to switch or initially purchase a portable oxygen concentrator rather than an alternative. Other countries have a less developed oxygen therapy infrastructure making it increasingly difficult to receive treatment. Portable oxygen concentrators will be able to reach some patients that have no option for oxygen tank deliveries or other alternatives. Finally, some countries such as Australia don't offer any form of reimbursement for ambulatory oxygen therapy leaving the burden to the patient. Since the patient has to pay out of pocket, they will likely choose an Inogen One system due to the low economic cost as well as the other features and benefits of a portable oxygen concentrator. International markets present strong opportunities for growth for Inogen.



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[29] http://apps.who.int/gho/data/view.sdg.3-a-data-reg?lang=en

Medicare

As a result of competitive bidding, Medicare reimbursement rates may be reduced acting as a potential tailwind for Inogen's growth due to increased sales revenue instead of rental revenue. Medicare has also enhanced their billing requirements and coverage which is causing increased growth for the patients buying portable oxygen concentrators outright with cash. Inogen has the ability to rent to Medicare patients directly, bill Medicare and other third-party payors on their behalf, and service patients in their homes requires that we hold a valid Medicare supplier number, are accredited by an independent agency approved by Medicare, and comply with the differing licensure and process requirements in the 50 states in which they serve patients[30]. This allows Inogen to better service Medicare and third-party insurance payors a greater degree than their competitors. Patients that rely on Medicare or third-party payors are more likely to choose an Inogen product due to the simplicity and less effort required. Overall growth for the industry can be attributed to patients switching from oxygen tanks to portable oxygen concentrators due to the quality of life improvements as well as the economic advantages.

Major Risks

Competition

The biggest threat to Inogen is increasing competition and losing significant market share. If a competitor was able to produce a portable oxygen concentrator that was economically cheaper than Inogen's, it would propose a material risk to the business. One of the main reasons that Inogen is able to have a competitive advantage is their Inogen One concentrators offer an economic advantage over the competition. The majority of Inogen's competition are subsidiaries of larger corporations such as Koninklijke Philips N.V. and Chart Industries. These companies are much larger and therefore have more capital, established relationships, higher research and development budget, and have more diverse product lines. This poses a risk to Inogen, as these companies have the opportunity to react quicker and more effectively in the case of new opportunities and the emergence of new technologies. Competitors can also opt to imitate Inogen's direct-to-consumer marketing strategy as it is more effective while also allowing them to increase their margins. If a company does decide to imitate the strategy it could erode Inogen's dominant market share and reduce their potential revenue.

Greater than Expected Reimbursement Cuts

Changes to Medicare reimbursement also pose a risk to Inogen's rental revenue. Medicare reimbursement is already a complex system and any significant changes could cause increased cost and/or decreased revenue. In 2018, rental revenue represented about 6.2% of total revenue and the potential of higher than expected cuts Medicare reimbursement could cause a significant decrease in this revenue. Competitive bidding under Medicare could also pose a threat to Inogen's financial position due to uncertainty in the

[30] http://investor.inogen.com/Cache/1001250325.PDF?O=PDF&T=&Y=&D=&FID=1001250325&iid=4654100 (Page 6)

future. The next round of competitive bidding is set to take place January 1, 2021, and this bidding is a process for awarding contracts for the furnishing of competitively priced items of durable medical equipment, including oxygen equipment. There have been some changes that will take place in the next round of bidding that includes a plan to implement surety bond requirements, lead item pricing, and setting reimbursement rates at the maximum winning bid rate instead of the median winning bid rate. These changes can cause unforeseen changes to the prices of Inogen's products and Inogen's margins presenting a risk for their future revenue as it isn't clear how the changes will play out.

Accounting Scandal

On March 7, 2018, Bernstein Liebhard LLP along with other law firms announced they were filing a securities class action lawsuit on behalf of investors against Inogen due to the significant drop in share price. The reason behind the lawsuit was (1) Inogen had overstated the true size of the total addressable market ("TAM") for its portable oxygen concentrators and had misstated the basis for its calculation of the TAM; (2) Inogen had falsely attributed its sales growth to the strong sales acumen of its salesforce, when in reality it was due in large part to sales tactics designed to deceive its elderly customer base; (3) the growth in Inogen's domestic business-to-business sales to home medical equipment ("HME") providers was inflated, unsustainable and was eroding direct-to-consumer sales; and (4) very little of Inogen's business was actually coming from the more stable Medicare market[31]. The law firm is claiming that these factors resulted in Inogen's stock price being artificially inflated to around $288 per share. So far, the law firm hasn't presented any proof of their claims and Inogen is yet to comment on the matter. If the claims turn out to be valid it could present a major risk to Inogen as their opportunity for growth may have been vastly overstated. Although, this type of lawsuit is often referred to as a "stock-drop lawsuit" which occurs when shareholders sue a company after a large unexpected decline in the share price in an attempt to recover their losses. These lawsuits are usually not successful as the law firm must prove the company made false statements, the false statements were material, and investors relied on them. It is difficult to prove that every investor that bought shares relied on the reported information. Inogen shouldn't see any issues with this lawsuit unless they indeed did misinform investors which could pose a financial risk to the company.

Management

Insider Ownership

Currently, insiders own about 1% of Inogen's outstanding common shares and the largest holder is Co-founder & Executive VP of Engineering, Brenton Taylor who holds 0.27%. CEO Scott Wilkinson is the third largest insider holder at 0.17% behind Co-founder & Executive VP of Sales and Marketing, Byron Myers

[31] https://www.prnewswire.com/news-releases/investor-alert-bernstein-liebhard-llp-announces-a-securities-class-action-lawsuit-against-inogen-inc--ingn-300808845.html

who holds 0.18%[32]. The reason Scott Wilkinson is the third largest owner currently is because he was only appointed as the CEO on March 1, 2017. Prior to being appointed as CEO, he served as the Chief Operating Officer from January 1, 2016 until March 1, 2017. Since 2018, Brenton Taylor has bought a net 21,869 shares and Scott Wilkinson has purchased 13,827[33]. With top management continuing to purchase shares it demonstrates their confidence in Inogen's future performance.

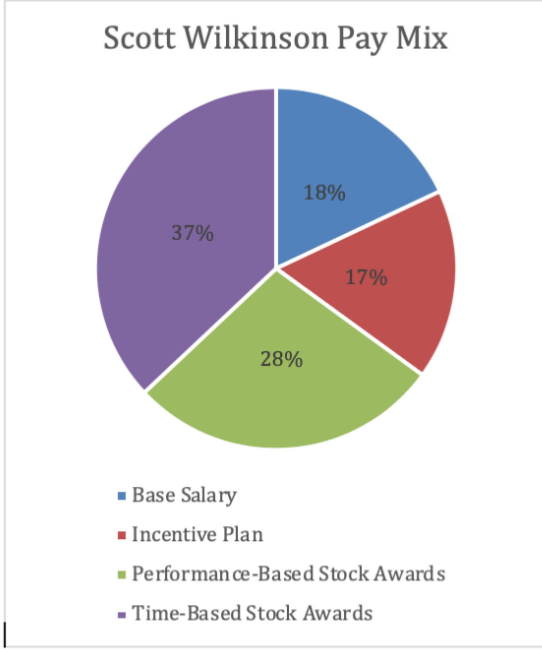
Track Record

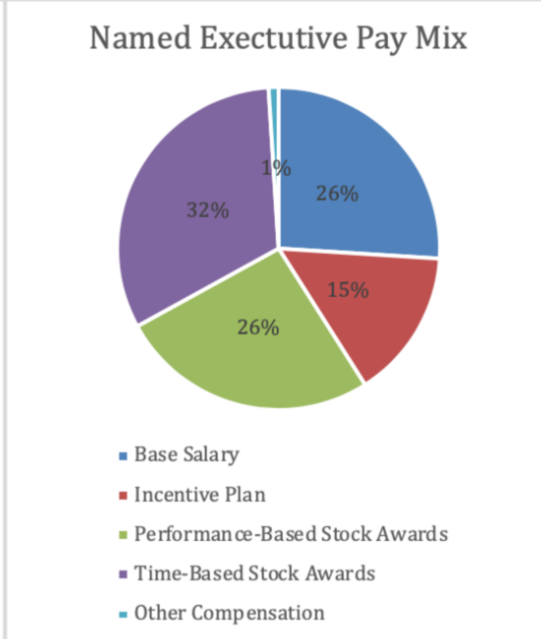
Inogen has acquired just two companies since 2011 for undisclosed amounts. The first was in 2011 where Inogen acquired Nashville based home respiratory services company, Breathe Oxygen Services. The goal of this acquisition was to increase Inogen's product offerings to established patients in the state of Tennessee. The second acquisition was the previously discussed acquisition of MedSupport Systems in 2017. MedSupport was a former European distributor for Inogen and management's reason was to improve customer service and repair services in the European markets. In terms of future acquisitions, management hasn't stated any targets but it seems they will stay conservative unless an opportunity presents itself. In 2018, Inogen had $2.3 million of Goodwill on the balance sheet.

Executive Compensation

Inogen's objective with their compensation program is to build momentum for earnings growth using performance-based criteria. Inogen's executive compensation consists of base salary, annual cash incentive and long-term equity compensation. Base salary is based on factors such as job level, responsibilities, prior experience and future potential. The annual cash incentive is based on a formula that includes targets for revenue and EBITDA. Finally, long-term equity compensation is granting stock awards subject to a mix of time or performance conditions. Scott Wilkinson's total compensation for 2018 was approximately $2.7 million. Of the total, 18% was his base salary, 17% was from the annual cash incentive, 28% performance-based stock awards and 37% time-based stock awards[34]. With roughly 65% of Scott Wilkinson's compensation being long-term stock-based which aligns his goals with the long-term success of Inogen. For other named executives, their average compensations consist of 26% was his base salary, 15% was from the annual cash incentive, 26% performance-based stock awards and 32% time-based stock awards and 1% other compensation[35]. It is clear through Inogen's compensation program that they are promoting growth by increasing adoption of portable oxygen concentrators. Since much of the executive pay is based on performance and long-term success, their views must be to maximise shareholder value over the long-term.

[32] Bloomberg
[33] Bloomberg
[34]http://investor.inogen.com/Cache/397250724.PDF?O=PDF&T=&Y=&D=&FID=397250724&iid=4654100(page 29)
[35]http://investor.inogen.com/Cache/397250724.PDF?O=PDF&T=&Y=&D=&FID=397250724&iid=4654100(page 29)





Source: Inogen 2019 Proxy Statement Page 29

Financial Statement Analysis

Financial Condition	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
Profitabilty							
EBITA Margin	2.32	7.79	10.89	10.75	12.32	12.05	11.62
Operating Margin	1.71	5.92	9.34	9.47	11.27	11.06	10.58
Profit Margin	1.16	33.71	6.07	7.29	10.12	8.42	14.48
Return on Assets	1.57	39.14	6.14	7.69	10.93	8.59	15.93
Return on Common Equity	—	—	—	9.19	12.98	10.27	19.29
Return on Invested Capital	2.74	47.00	7.40	9.00	12.73	9.91	20.25
Liquidity							
Current Ratio	1.93	1.74	4.94	5.22	7.07	6.74	6.75
Cash Ratio	1.10	0.72	3.03	3.77	4.99	5.13	5.16
Activity							
Accounts Receivable Turnover	8.52	8.74	7.61	8.11	8.00	8.01	10.46
Inventory Turnover	8.60	8.78	9.61	10.18	9.18	7.73	7.82
Accounts Payable Turnover	3.84	—	—	—	16.87	17.37	16.14
Cash Conversion Cycle	-9.82	—	—	—	63.92	71.79	58.96
Asset Turnover	1.35	1.16	1.01	1.06	1.08	1.02	1.10
Net Fixed Asset Turnover	2.93	3.02	3.65	5.08	7.26	11.01	16.87
Financial Leverage							
Long-term Debt to Total Assets	10.63	6.54	0.22	0.00	0.00	0.00	0.00
Long-term Debt to Total Equity	17.70	9.58	0.27	0.00	0.00	0.00	0.00
Total Debt to Total Equity	31.27	18.92	0.52	0.24	0.00	0.00	0.00
Financial Leverage	—	—	4.01	1.20	1.19	1.20	1.21
Interest Coverage	2.44	—	25.70	—	—	—	—
Capital Expenditure Ratio	1.98	4.44	10.12	3.07	3.93	8.75	4.75
Shareholder Ratios							
Earnings per Share	-59.91	0.76	0.33	0.60	1.02	1.02	2.44
Dividend Payout Ratio	—	0.00	0.00	0.00	0.00	0.00	0.00
Source: Bloomberg							

Profitability

In terms of accounting profitability, Inogen has seen their EBITA and operating margins increase from 2012 until 2016 and then taking a slight hit in 2017 but still remaining healthy. In recent years their EBITA margin has stayed constant 12% while profit margin remained around 11%. This is slightly lower than industry peers average of 20.4% and 13.8%[36]. Despite this, Inogen has an outstanding net income growth of 81% in 2018 from the prior year. Profit margins have also been increasing steadily with the exception of 2017 and were 14.5% for 2018. Their profit margin is slightly higher than the industry average of 12.22%. When looking at economic profitability Inogen is clearly ahead of their peers across all measures. Return on assets of 15.93% is more than triple the peer average of 5.6%. Return on invested capital for Inogen is 20.25% well above the 8.5%. Finally,their return on equity for 2018 was 19.3% above the average of 14.1%.

Growth

Inogen has seen excellent growth over the past years for revenue. In 2018, Inogen's sales revenue grew 43.6% over the previous year which blows away the average 13.8% for the industry. Since 2013, Inogen's revenue has grown at an average rate of almost 40% year-over-year with the lowest being 23% in 2017. EBITA growth is also great for Inogen at 23.4% in 2018 almost triple the average of 23.4%. Inogen's sales revenue should continue to grow into the near future as management has guided for 23-25% revenue growth in 2019 followed by 15-20% growth from 2020-2022. These estimates are very conservative as they are assuming just a 2-3% growth in market penetration and that the United States and China trade war continues without a resolution. Inogen should continue to see double-digit growth as portable oxygen concentrator adoption continues.

Solvency

Inogen has a very strong balance sheet with no short-term or long-term debt against the company since 2015. This shows that Inogen is able to generate cash themselves for expenditures. Having no debt is also very beneficial during times of economic slowdown as highly leveraged companies must pay back fixed interest. Inogen doesn't have to worry about this if a recession occurs since having no debt makes them inherently less risky than a highly leveraged company. The average debt to equity ratios for the industry is 9.9% and the total debt to EBITDA ratio is 1.63 compared to Inogen's 0%.

Liquidity

With such low short-term debt obligations, Inogen is well positioned to pay off most current liabilities. Their cash and current ratios have both steadily risen since 2014 and currently sit at 5.16 and 6.75 respectively[37]. This shows creditors that Inogen has the ability to pay back debt in the case they take on debt. In the future, if Inogen has a target for acquisition having high cash and current ratios will help them obtain financing.

Activity

Since 2012, accounts receivable turnover for Inogen has stayed at about 8 until slightly increasing in 2018 to 10.5. Their accounts payable turnover ratio has been an average of 16 in the past three years. Their inventory turnover

[36] Bloomberg
[37] Bloomberg

for 2018 was 7.82 and has slightly decreased over the years which could be a sign that Inogen is holding excess inventory.

Valuation

Discounted Cash Flow

The valuation was compared by a base, bull and bear case, mainly using year-over-year sales and rental revenue growth. Inogen's guidance was used as the main factor when decided the growth rate for the future years. These estimates are conservative considering they were assuming a lower portable oxygen concentrator adoption rate of 2-3% and no resolution to U.S. and China trade negotiations.

Inogen's margins were kept at or near historical levels in the base case and capital expenditures and non-cash working capital were estimated as a percentage of total revenue. The model used a 13.75x EV/EBITDA exit multiple and a 9.9% WACC, in line with historical averages for Inogen. A 3% terminal growth rate was used since Inogen will likely be growing at an accelerated rate with increased adoption. These bear model returned a share price of $39.98 or a 57.8% downside while the base case returned a share price of $111.70 or a potential upside of 18%. The bull case returned a share price of $254.43 or a potential upside of 168.7%. After weighing the base, bull and bear case 60%,25% and 15% respectively, a share price of $136.62 was determined representing a potential upside of 51.47%.

Inogen Cash Flow Valuation - In Millions $USD (except per share amounts)												
	2012	2013	2014	2015	2016	2017	2018E	2019E	2020E	2021E	2022E	CV
EBITDA	5.838	13.008	22.591	29.063	36.422	39.892	154.163	207.491	270.217	344.728	433.618	640.679
EBIT (1-Tax Rate)	0.836	26.051	7.285	11.909	20.658	18.936	89.537	120.509	156.940	200.215	251.842	372.101
Add Depreciation	4.984	8.544	12.08	14.012	13.558	12.302	41.609	56.002	72.932	93.043	117.034	172.921
Less Capex	3.067	1.756	12.489	8.016	10.227	15.719	11.553	5.542	0.768	0.980	1.233	1.822
Less Change in Non-Cash Working Cap	11.7	0.087	8.809	-1.255	15.882	-3.815	- 14.448	2.764	3.251	3.862	4.607	10.731
Free Cash Flow to Firm	-8.947	32.752	-1.933	19.16	8.107	19.33	134.04	168.21	225.85	288.42	363.04	532.47
Free Cash Flow Yield	-18.42%	43.41%	-1.72%	12.05%	4.00%	7.75%	36.43%	33.97%	35.02%	35.06%	35.08%	34.82%
Discount Periods	-	-	-	-	-	-	0.50	1.50	2.50	3.50	4.50	4.50
FCFF Discounted	0	0	0	0	0	0	128	146	178	207	237	5,393

Source: Bloomberg

Model Assumptions		
Company WACC		9.90%
Terminal Growth Rate		3.00%
Exit Multiple		13.75x
Terminal Value (GGM)		588.53
PV of Terminal Value (GGM)		384.84
Weight		50%
Terminal Value (EM)		1256.352159
PV of Terminal Value (EM)		821.53
Weight		50%
Weighted Terminal Value		603.18
Sum of Discounted CF		78.89
Firm Value		682.07
+ Cash		223.9
- LT Debt		0
Equity Value		905.97
Diluted Shares Outstanding		22.659052
Intrinsic Value per Share	$	39.98
Current Share Price	$	94.68
Under/(Overvalued)		-57.8%

Model Assumptions		
Company WACC		9.90%
Terminal Growth Rate		3.00%
Exit Multiple		13.75x
Terminal Value (GGM)		2,107.85
PV of Terminal Value (GGM)		1,378.32
Weight		50%
Terminal Value (EM)		3772.175618
PV of Terminal Value (EM)		2,466.62
Weight		50%
Weighted Terminal Value		1,922.47
Sum of Discounted CF		384.66
Firm Value		2,307.13
+ Cash		223.9
- LT Debt		0
Equity Value		2,531.03
Diluted Shares Outstanding		22.659052
Intrinsic Value per Share	$	111.70
Current Share Price	$	94.68
Under/(Overvalued)		18.0%

Model Assumptions		
Company WACC		9.90%
Terminal Growth Rate		3.00%
Exit Multiple		13.75x
Terminal Value (GGM)		5,392.77
PV of Terminal Value (GGM)		3,526.33
Weight		50%
Terminal Value (EM)		8812.095503
PV of Terminal Value (EM)		5,762.22
Weight		50%
Weighted Terminal Value		4,644.27
Sum of Discounted CF		896.89
Firm Value		5,541.16
+ Cash		223.9
- LT Debt		0
Equity Value		5,765.06
Diluted Shares Outstanding		22.659052
Intrinsic Value per Share	$	254.43
Current Share Price	$	94.68
Under/(Overvalued)		168.7%

Case	Share Price	Weight
Base	$ 111.70	60%
Bear	$ 254.43	25%
Bull	$ 39.98	15%
Implied Share price		$ 136.62
Current Share price		$ 90.20
Undervalued		51.47%

Investment Recommendation

Buy, Price Target $136.62

Investment Positives

Low market penetration of around 10-15% for portable oxygen concentrators presents a great opportunity for Inogen to maintain their strong market share. With the Inogen One G5 set to launch in 2019, they should be in a prime position to grow. Inogen posted 43% year-over-year sales revenue growth in 2018 and projected 20% revenue growth over the next three years which should see an increase in shareholder value.

International markets are an additional place where Inogen can benefit, especially in Europe. Since international market such as China and India contain a majority of the world's smokers, oxygen therapy and particularly portable oxygen therapy should benefit over the long term as these populations age and develop diseases such as COPD. Both these markets are largely untapped currently and should be prime markets for Inogen to focus on going forward.

Inogen also has great financials and is reasonably valued compared to historical times. Since 2015 Inogen has had no debt on their balance sheet which is very attractive given that economic indicators point to a potential recession in the next couple years. Companies with lots of debt tend to struggle and sometimes even go bankrupt in times of economic downturn due to not being able to pay off obligations. Inogen doesn't have to be concerned with this in the event of an economic slowdown. Inogen is also down more than 66% from its all-time high where it was trading at a hefty valuation. Now, with the share price and valuation being at a much more reasonable level it presents a more attractive opportunity to invest.

Investment Negatives

With the portable oxygen concentrator market growing at such a fast pace it is likely the number competitors will increase, and current competitors will continue to try and take away market share from Inogen. Most of Inogen's competitors are subsidiaries of much larger corporations which puts Inogen to a disadvantage. These companies have access to much more capital, higher research and development budgets, more relationships and can benefit from economies of scale. A competitor may be able to produce a portable oxygen concentrator with better technology which could reduce Inogen's sales and margins.

Potential changes to FDA approval for medical devices could have an impact on the release of Inogen's future products. This can present a risk since Inogen relies on innovating new products to grow sales and improve patient well-being. Unforeseen Medicare changes could also pose a risk to Inogen's rental revenue as competitive bidding could affect the prices of their products. The changes to this program still haven't been concluded thus the uncertainty presents a potential issue for Inogen. Medicare also has the ability to cut reimbursement rates as they see fit and large than expected cuts would have a material impact on the business.

Catalyst for Recommendation Change

A looming lawsuit against Inogen may present a material risk to the company if the claims are true. If many of Inogen's statements turn out to be false, their growth and total addressable market were vastly overstated. The stock price will likely take a large hit and the company should be re-evaluated with the proper numbers.

Overall, we feel that the positives of investing right now outweigh the negatives of investing and that is why our final recommendation is a Buy.

Disclaimer

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Appendix A

Pro-forma Financial Statements

Figure A1: Balance Sheet

Inogen Inc (INGN US) - Standardized In Millions of USD except Per Share	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
Total Assets						
+ Cash, Cash Equivalents & STI	15.1	13.5	56.8	82.9	113.9	173.9
+ Cash & Cash Equivalents	15.1	13.5	56.8	66.1	92.9	143.0
+ ST Investments	0.0	0.0	0.0	16.8	21.0	31.0
+ Accounts & Notes Receiv	7.0	10.2	19.3	19.9	30.8	31.4
+ Accounts Receivable, Net	7.0	10.2	19.3	19.9	30.8	31.4
+ Notes Receivable, Net	0.0	0.0	0.0	0.0	0.0	0.0
+ Inventories	4.1	4.2	7.6	8.6	14.3	18.8
+ Raw Materials	3.7	—	—	7.1	12.4	16.3
+ Work In Process	0.0	—	—	0.0	0.0	0.0
+ Finished Goods	0.4	0.6	1.0	1.7	2.2	2.9
+ Other Inventory	-0.1	3.7	6.6	-0.1	-0.2	-0.4
+ Other ST Assets	0.5	4.8	8.7	3.4	2.5	4.3
+ Derivative & Hedging Assets	0.0	0.0	0.0	0.0	0.0	0.0
+ Deferred Tax Assets	—	3.9	5.0	0.0	0.0	—
+ Taxes Receivable	—	0.1	2.1	2.2	0.4	1.3
+ Misc ST Assets	0.5	0.8	1.6	1.3	2.1	2.9
Total Current Assets	**26.7**	**32.8**	**92.5**	**114.8**	**161.5**	**228.5**
+ Property, Plant & Equip, Net	20.3	29.7	31.9	30.7	25.2	20.1
Product/Brand Segments	**20.3**	**29.7**	**31.9**	**30.7**	**25.2**	**20.1**
Oxygen Concentrators	20.3	29.7	31.9	30.7	25.2	20.1
+ Property, Plant & Equip	30.9	45.7	57.8	66.3	67.2	64.6
- Accumulated Depreciation	10.6	16.0	25.8	35.6	42.0	44.5
+ LT Investments & Receivables	0.0	0.0	0.0	0.0	0.0	0.0
+ Other LT Assets	0.6	19.8	15.6	15.8	27.3	26.5
+ Total Intangible Assets	0.6	0.2	0.3	0.2	0.2	7.1
+ Goodwill	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*2.4*
Product/Brand Segments	**—**	**—**	**—**	**—**	**0.0**	**2.4**
Oxygen Concentrators	—	—	—	—	0.0	2.4
+ Other Intangible Assets	*0.6*	*0.2*	*0.3*	*0.2*	*0.2*	*4.7*
+ Deferred Tax Assets	—	17.9	15.2	15.5	26.7	18.6
+ Derivative & Hedging Assets	0.0	0.0	0.0	0.0	0.0	0.0
+ Misc LT Assets	0.1	1.8	0.1	0.1	0.4	0.8
Total Noncurrent Assets	**20.9**	**49.6**	**47.5**	**46.5**	**52.5**	**46.6**
Total Assets	**47.6**	**82.4**	**140.1**	**161.3**	**214.0**	**275.1**
Liabilities & Shareholders' Equity						
+ Payables & Accruals	8.4	11.7	15.3	18.1	18.9	27.8
+ Accounts Payable	8.3	—	—	7.4	5.7	9.5
+ Accrued Taxes	0.0	—	—	0.0	0.0	0.3
+ Interest & Dividends Payable	0.0	—	—	—	—	—
+ Other Payables & Accruals	0.0	11.7	15.3	10.7	13.2	18.0
+ ST Debt	3.9	5.3	0.3	0.3	0.0	0.0
+ ST Borrowings	0.0	0.0	0.0	0.0	0.0	0.0
+ ST Capital Leases	0.0	0.0	0.0	0.0	0.0	0.0
+ Current Portion of LT Debt	3.9	5.3	0.3	0.3	0.0	0.0
+ Other ST Liabilities	1.6	1.9	3.1	3.5	3.9	6.0
+ Deferred Revenue	1.1	1.5	2.3	2.3	2.2	3.5
+ Derivatives & Hedging	0.0	0.0	0.0	0.0	0.0	0.0
+ Deferred Tax Liabilities	0.0	—	—	—	—	—
+ Misc ST Liabilities	0.4	0.4	0.8	1.2	1.7	2.5
Total Current Liabilities	**13.8**	**18.8**	**18.7**	**22.0**	**22.8**	**33.9**
+ LT Debt	5.1	5.4	0.3	0.0	0.0	0.0
+ LT Borrowings	5.1	5.4	0.3	0.0	0.0	0.0
+ LT Capital Leases	0.0	0.0	0.0	0.0	0.0	0.0
+ Other LT Liabilities	0.2	1.9	2.9	5.3	9.1	14.1
+ Accrued Liabilities	0.0	0.0	0.0	0.0	0.0	0.0
+ Pension Liabilities	0.0	0.0	0.0	0.0	0.0	0.0
+ Pensions	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
+ Other Post-Ret Benefits	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
+ Deferred Revenue	0.0	0.8	2.2	4.2	7.0	9.4
+ Deferred Tax Liabilities	—	—	—	—	—	0.3
+ Derivatives & Hedging	0.0	0.0	0.0	0.0	0.0	0.0
+ Misc LT Liabilities	0.2	1.1	0.7	1.1	2.1	4.4
Total Noncurrent Liabilities	**5.2**	**7.3**	**3.2**	**5.3**	**9.1**	**14.1**
Total Liabilities	**19.0**	**26.1**	**21.9**	**27.3**	**32.0**	**48.0**
Product/Brand Segments	**19.0**	**26.1**	**21.9**	**27.3**	**32.0**	**48.0**
Oxygen Concentrators	19.0	26.1	21.9	27.3	32.0	48.0
+ Preferred Equity and Hybrid Capital	109.6	118.9	0.0	0.0	0.0	0.0
+ Share Capital & APIC	0.0	0.0	174.8	179.2	194.5	218.1
+ Common Stock	0.0	0.0	0.0	0.0	0.0	0.0
+ Additional Paid in Capital	—	0.0	174.8	179.1	194.5	218.1
- Treasury Stock	0.0	0.0	0.0	0.0	0.0	0.0
+ Retained Earnings	-81.0	-62.6	-56.7	-45.1	-12.4	8.6
+ Other Equity	0.00	0.00	0.00	-0.04	-0.04	0.27
Equity Before Minority Interest	**28.6**	**56.3**	**118.2**	**134.0**	**182.1**	**227.0**
+ Minority/Non Controlling Interest	0.0	0.0	0.0	0.0	0.0	0.0
Total Equity	**28.6**	**56.3**	**118.2**	**134.0**	**182.1**	**227.0**
Total Liabilities & Equity	**47.6**	**82.4**	**140.1**	**161.3**	**214.0**	**275.1**

Source: Bloomberg

Figure A2: Income Statement

Inogen Inc (INGN US) - As Reported												
In Millions of USD except Per Share												
Income Statement												
	2012A	2013A	2014A	2015A	2016A	2017A	2018E	2019E	2020E	2021E	2022E	CV
Revenues												
Sales revenue	28.077	44.905	73.096	113.625	168.17	225.492	341.59359	466.23467	613.043211	787.6877	996.331368	1486.65791
		59.9%	62.8%	55.4%	48.0%	34.1%	51.5%	36.5%	31.5%	28.5%	26.5%	49.2%
Other revenue	0.532	0	0	0	0	0	0	0	0	0	0	0
		-100.0%	0.0%	0.0%	0.0%	0.0%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Sales of used rental equipment	0.095	0	0	0	0	0	0	0	0	0	0	0
		-100.0%	0.0%	0.0%	0.0%	0.0%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Rental revenue	19.872	30.538	39.441	45.38	34.659	23.946	26.3406	28.97466	31.872126	35.0593386	38.5652725	42.4217997
		53.7%	29.2%	15.1%	-23.6%	-30.9%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%
Total revenue	48.58	75.44	112.54	159.01	202.83	249.44	367.93	495.21	644.92	822.75	1,034.90	1,529.08
Cost of sales revenue	17.359	24.306	38.693	61.553	85.154	110.163	122.38732	164.72332	214.520584	273.673404	344.241514	508.623465
As % of Revenue	*35.74%*	*32.22%*	*34.38%*	*38.71%*	*41.98%*	*44.16%*	33.26%	33.26%	33.26%	33.26%	33.26%	33.26%
Gross Profit	31	51	74	97	118	139	246	330.48601	430.394753	549.073635	690.655126	1020.45625
	64.26%	67.78%	65.62%	61.29%	58.02%	55.84%	67%	67%	67%	67%	67%	67%
Operating Expenses	30	47	63	82	95	112	133	179	233	297	374	553
Research and development	2.262	2.398	2.977	4.18	5.113	5.313	7.5932017	10.219828	13.3093697	16.979352	21.3575662	31.5562153
As % of Revenue	*4.66%*	*3.18%*	*2.65%*	*2.63%*	*2.52%*	*2.13%*	2.06%	2.06%	2.06%	2.06%	2.06%	2.06%
Sales and marketing	12.569	18.375	24.087	31.369	37.54	50.758	69.385936	93.387796	121.619722	155.155662	195.163357	288.357617
As % of Revenue	*25.87%*	*24.36%*	*21.40%*	*19.73%*	*18.51%*	*20.35%*	18.86%	18.86%	18.86%	18.86%	18.86%	18.86%
General and administrative	8.289	13.754	17.942	25.658	31.793	37.576	56.013462	75.38954	98.18044	125.253133	157.550304	232.783608
As % of Revenue	*17.06%*	*18.23%*	*15.94%*	*16.14%*	*15.67%*	*15.06%*	15.22%	15.22%	15.22%	15.22%	15.22%	15.22%
Non-Recurring Expense	7	12	18	21	20	18	0	0	0	0	0	0
$10,339, respectively	7.243	12.146	18.327	21.194	20.365	0	0	0	0	0	0	0
$11,965, respectively	0	0	0	0	0	18.038	0	0	0	0	0	0
Operating Profit	1	4	11	15	23	28	113	151	197	252	317	468
Net Interest Expense	-0.405	-0.55	-0.407	0.08	0.19	0.765	- 2.63	- 3.54	- 4.61	- 5.88	- 7.40	- 10.93
Interest Expense	-0.493	-0.562	-0.449	-0.022	-0.006	0						
Interest Income	0.088	0.012	0.042	0.102	0.196	0.765						
As % of Revenue	*-0.83%*	*-0.73%*	*-0.36%*	*0.05%*	*0.09%*	*0.31%*	-0.71%	-0.71%	-0.71%	-0.71%	-0.71%	-0.71%
Other Non-Operating Expense	0.01	0.196	0.036	0.404	-0.329	1.301	- 0.317	- 0.426	- 0.555	- 0.708	- 0.891	- 1.317
Income	0.01	0.196	0.036	0	0	1.301						
Expense	0	0	0	0.404	-0.329	0						
As % of Revenue	*0.02%*	*0.26%*	*0.03%*	*0.25%*	*-0.16%*	*0.52%*	-0.09%	-0.09%	-0.09%	-0.09%	-0.09%	-0.09%
Pretax Income	0	4	10	16	23	30	110	148	192	245	308	456
As % of Revenue	*0.94%*	*5.45%*	*9.01%*	*9.77%*	*11.20%*	*11.89%*	0.30	0.30	0.30	0.30	0.30	0.30
Income Tax Provision	0.018	-21.587	3.226	3.142	2.206	8.654	23.02	30.98	40.35	51.47	64.74	95.66
As % of Pretax Income	*3.92%*	*-525.23%*	*31.81%*	*20.23%*	*9.71%*	*29.18%*	21.00%	21.00%	21.00%	21.00%	21.00%	21.00%
Net Income	0.44	25.70	6.91	12.39	20.52	21.00	86.59	116.54	151.77	193.63	243.55	359.85
Accounts receivable, net	7.031	10.231	19.349	19.872	30.828	31.444	45.897	61.773	80.447	102.630	129.094	190.739
As % of Revenue	*14.47%*	*13.56%*	*17.19%*	*12.50%*	*15.20%*	*12.61%*	12.47%	12.47%	12.47%	12.47%	12.47%	12.47%
Inventories, net	4.059	4.248	7.616	8.648	14.343	18.842	20.906	28.138	36.644	46.748	58.803	86.882
As % of Revenue	*8.36%*	*5.63%*	*6.77%*	*5.44%*	*7.07%*	*7.55%*	5.68%	5.68%	5.68%	5.68%	5.68%	5.68%
Accounts Payable	8.36	11.662	15.339	18.149	18.918	27.848	58.813	79.158	103.088	131.513	165.425	244.418
As % of Revenue	*17.21%*	*15.46%*	*13.63%*	*11.41%*	*9.33%*	*11.16%*	15.98%	15.98%	15.98%	15.98%	15.98%	15.98%
Change in Non-Cash Working Capital		0.087	8.809	-1.255	15.882	-3.815	-14.448491	2.7637168	3.25079185	3.86152751	4.60672374	10.7309411
Capex	-3.067	-1.756	-12.489	-8.016	-10.227	-15.719	- 11.553	- 5.542	- 0.768	- 0.980	- 1.233	- 1.822
As % of Revenue	*-6.31%*	*-2.33%*	*-11.10%*	*-5.04%*	*-5.04%*	*-6.30%*	-3.14%	-1.12%	-0.12%	-0.12%	-0.12%	-0.12%
Depreciation & Amortization	4.984	8.544	12.08	14.012	13.558	12.302	41.609	56.002	72.932	93.043	117.034	172.921
As % of Revenue	*10.26%*	*11.33%*	*10.73%*	*8.81%*	*6.68%*	*4.93%*	11.31%	11.31%	11.31%	11.31%	11.31%	11.31%