"Diagnosing Progyny As A Strong Sell"

/ STRONG SELL OPINION /

Progyny, Inc. | NASDAQ: PGNY

SPRUCE POINT CAPITAL MANAGEMENT

INVESTMENT RESEARCH REPORT

Full Legal Disclaimer

This research presentation expresses our research opinions. You should assume that as of the publication date of any presentation, report or letter, Spruce Point Capital Management LLC ("SPCM") (possibly along with or through our members, partners, affiliates, employees, and/or consultants) along with our subscribers and clients has a short position in all stocks (and are long/short combinations of puts and calls on the stock) covered herein, including without limitation Progyny, Inc. ("PGNY") therefore stand to realize significant gains in the event that the price of either stock declines. Following publication of any presentation, report or letter, we intend to continue transacting in the securities covered therein, and we may be long, short, or neutral at any time hereafter regardless of our initial recommendation. All expressions of opinion are subject to change without notice, and Spruce Point Capital Management does not undertake to update this report or any information contained herein. Spruce Point Capital Management, subscribers and/or consultants shall have no obligation to inform any investor or viewer of this report about their historical, current, and future trading activities.

This research presentation expresses our research opinions, which we have based upon interpretation of certain facts and observations, all of which are based upon publicly available information, and all of which are set out in this research presentation. Any investment involves substantial risks, including complete loss of capital. There can be no assurance that any statement, information, projection, estimate, or assumption made reference to directly or indirectly in this presentation will be realized or accurate. Any forecasts, estimates, and examples are for illustrative purposes only and should not be taken as limitations of the minimum or maximum possible loss, gain, or outcome. Any information contained in this report may include forward looking statements, expectations, pro forma analyses, estimates, and projections. You should assume these types of statements, expectations, pro forma analyses, estimates, and projections may turn out to be incorrect for reasons beyond Spruce Point Capital Management LLC's control. This is not investment or accounting advice nor should it be construed as such. Use of Spruce Point Capital Management LLC's research is at your own risk. You should do your own research and due diligence, with assistance from professional financial, legal and tax experts, before making any investment decision with respect to securities covered herein. All figures assumed to be in US Dollars, unless specified otherwise.

To the best of our ability and belief, as of the date hereof, all information contained herein is accurate and reliable and does not omit to state material facts necessary to make the statements herein not misleading, and all information has been obtained from public sources we believe to be accurate and reliable, and who are not insiders or connected persons of the stock covered herein or who may otherwise owe any fiduciary duty or duty of confidentiality to the issuer, or to any other person or entity that was breached by the transmission of information to Spruce Point Capital Management LLC. However, Spruce Point Capital Management LLC recognizes that there may be non-public information in the possession of PGNY or other insiders of PGNY that has not been publicly disclosed by PGNY. Therefore, such information contained herein is presented "as is," without warranty of any kind – whether express or implied. Spruce Point Capital Management LLC makes no other representations, express or implied, as to the accuracy, timeliness, or completeness of any such information or with regard to the results to be obtained from its use.

This report's estimated fundamental value only represents a best efforts estimate of the potential fundamental valuation of a specific security, and is not expressed as, or implied as, assessments of the quality of a security, a summary of past performance, or an actionable investment strategy for an investor. This is not an offer to sell or a solicitation of an offer to buy any security, nor shall any security be offered or sold to any person, in any jurisdiction in which such offer would be unlawful under the securities laws of such jurisdiction. Spruce Point Capital Management LLC is registered with the SEC as an investment advisor. However, you should not assume that any discussion or information contained in this presentation serves as the receipt of personalized investment advice from Spruce Point Capital Management LLC. Spruce Point Capital Management LLC is not registered as a broker/dealer or accounting firm.

Spruce Point Has A Successful Track Record of Shorting Healthcare-Related "Growth" Companies

Spruce Point has successfully targeted a number of healthcare-related companies benefitting from unreasonably high growth expectations and misunderstood business models.

Company:	FIGS	HESKA	PETIQ
Report	NYSE: FIGS | 9/7/2022	Nasdaq: HSKA | 10/25/2021	Nasdaq: PETQ | 4/30/2019
Ent. Value	$2.0 billion	$2.7 billion	$970 million
Situation Overview	Medical scrubs company with well-worn origin story and assumed to have unassailable market position and growth opportunity.	A pandemic beneficiary, this equipment distributor wove a story of innovation, diversification, and growth to capitalize on the booming animal health theme.	A JOBS Act IPO, PETQ was a veterinary drug distributor poised to grow rapidly given pet trends and the opening of new wellness centers.
Our Analysis	We provided evidence to suggest that FIGS had misrepresented a co-CEO's background as well as its past financial performance, TAM, competitive differentiation, and growth opportunities. We highlighted troubling feedback on FIGS' culture and employee turnover and showed its financials didn't support a premium valuation.	We found evidence to suggest that HSKA misrepresented its organic growth, market share gains, profitability, subscription trends, product development efforts, and M&A deal contributions while proving to be an ESG nightmare. Despite acquiring low-margin businesses at LSD multiples, HSKA traded in-line (9x revs.) with industry leader IDEXX.	We identified questionable business practices, a core business under pressure, suspicious circumstances around a major acquisition, poor and declining earnings quality, a troubling early history of the Company, a CEO with a history tied to fraudulent vendor rebate schemes, and a premium valuation.
Successful Outcome	It its next earnings release, FIGS disclosed decelerating growth (and reduced FY22 revenue guidance), excess inventories, and rapidly increasing CAC. FIGS shares declined -47% to their post earnings low versus a 1% increase in the S&P 500.	Over the next year (from Q3 21 to Q3 22), revenue from the areas most highly touted for growth by HSKA, consumables, Element AIM, and international, grew 1%, seemingly nil, and -6%. In the three months after our report, HSKA shares returned -40% versus a -4% decline in the S&P 500.	PETQ shares suffered double-digit declines after four of the subsequent 10 earnings reports. Consistent with our concerns, wellness center expansion dramatically missed targets (only 126 as of April 2021 versus original management forecast for 261 by the end of 2020). The CFO left.

Past performance is no guarantee of future success. Please read our disclaimer at the front of this presentation. The reports shown above are not intended to be exhaustive. A full list of all research reports produced over the past twelve months can be found on our website

Spruce Point Capital Management

Table of Contents

Executive Summary

Spruce Point Capital Management

Spruce Point Issues A "Strong Sell" Opinion On Progyny (PGNY) With 60% - 80% Downside Risk

Progyny (Nasdaq: PGNY or "the Company") is a $3.1 billion market capitalization fertility benefit manager. The Company offers a structured fertility insurance benefit targeting self-insured employers. The Company does not operate its own fertility clinics or provide any medical services. PGNY went public in 2019 and has grown to over $700m in LTM revenue.

Last December, a bearish research report on PGNY identified a relatively narrow range of accounting issues related to revenue recognition, bad debt expense, and stock-based compensation and contended that the Company has overstated its addressable market. We believe the research was both compelling and consistent with our own findings. However, we believe we have identified a broader range of financial, operating, business model, and management issues that go far beyond those previously discussed and raise serious questions about management's disclosures and marketing claims and the ethics of the PGNY approach to fertility.

The top three PGNY executives, as well as a board member, though not directly implicated, held senior management roles at WebMD and/or its predecessor company Medical Manager, where a massive accounting fraud involving 16 members of senior management was uncovered. We highlight additional accounting concerns related to revenue and expense recognition, as well as significant inconsistencies related to the Company's client and member disclosures. We find that member churn is greater than PGNY implies and that revenue from its two largest clients, Amazon and Alphabet, likely declined last quarter. Moreover, we have identified numerous headwinds to PGNY's growth in 2023 which suggest the Company will likely miss current Street expectations. These include several non-recurring revenue sources from 2022, macroeconomic factors such as layoffs, downward pressure on benefit utilization, and an increasingly competitive environment as the fertility marketplace quickly becomes commoditized. Further, we believe that pharmacy benefit outperformance, which has counteracted medical revenue disappointments, will cease in 2023. We also find that new customers are contributing less revenue per member as customer acquisition costs are skyrocketing.

PGNY pitches a story that fertility benefits are a win-win for employees and employers. However, we find that PGNY's marketing claims, and its outcomes data in particular, are highly problematic, and that PGNY's treatment model is so popular with the fertility industrial complex because it maximizes revenue for all parties involved despite clear conflicts of interest and questionable support from existing scientific research. Beyond PGNY management's past proximity to a massive accounting fraud, we are struck by the team's extremely limited healthcare expertise and the unsavory parallels in healthcare conflicts of interest between WebMD and PGNY. To top it off, we believe Wall Street analysts have wrongly compared PGNY to high-margin, technology-related healthcare companies when the Company is nothing of the sort.
We see 60% to 80% downside risk to PGNY's share price to $7 to $14 per share.

We Identify Several Incremental Issues With PGNY's Reporting And Disclosures And Deteriorating Fundamentals

Our forensic financial analysis has identified numerous reasons for caution and skepticism beyond those previously highlighted.

- Unbilled receivables rocketed to an all-time high in Q3, and we find that PGNY would have missed consensus revenue expectations in Q3 (as well as five other quarters in the previous ten) without their contribution to revenue, yet we cannot reconcile these figures with other reported metrics and management's commentary. We question whether executive compensation incentives may have driven this behavior.
- We note that issues with unbilled receivables have been a central elements of predicting shareholder disappointment at previous recent Spruce Point research targets such as C3.ai (AI) and Leidos (LDOS).
- Members added were flat year-over-year, calling into question PGNY's status as a high growth story, despite the fact that employer decisions regarding the addition of a fertility benefit for 2023 were made in early to mid-2022, which was a dramatically healthier macroeconomic backdrop. Also, the Company is clearly becoming more reliant on smaller employers, which we believe will have negative implications for customer acquisition costs and LTV.
- We have identified numerous concerns with PGNY's client and member reporting, as member growth does not track with client reported employee growth, selling season commentary suggests much greater churn than management has disclosed, and revenue from its largest customers likely declined for the first time (ex-Covid) in Q3.
- Disturbingly, as PGNY's financial results have deteriorated, we highlight a marked and growing disparity between PGNY's reported Adjusted EBITDA and cash flow from operations.

We foresee numerous headwinds to PGNY's revenue growth in 2023 and 2024 and thus believe consensus estimates are too high.

- The 1.2 million members PGNY claims it added for 2023 equals the number added for 2022. We highlight that analysts are projecting ~$239 million of revenue growth in 2023, but we believe that three key dynamics that comprised about 47% of incremental revenue in 2022 will not repeat this year, including early new client launches, large client employee growth, and drug pricing tailwinds.
- PGNY offers a discretionary, premium benefit. Given the challenging outlook for the economy, and the technology sector in particular to which PGNY is over-exposed, we foresee slower new employee recruiting and growth, but also the prospect of widespread layoffs. Based on announced layoffs at known PGNY clients to date (and more are likely), and extrapolated to its remaining client base, we estimate up to $52 million of revenue is at risk.
- Moreover, we see several headwinds to benefit utilization. We believe it is reasonable to expect these dark clouds will directly impact family planning decisions for people not facing immediate time pressure, thus negatively impacting benefit utilization. Additionally, we show that utilization within PGNY's existing client base declines as the benefit matures, which, given declining growth in new lives added, portends an overall decline in utilization.
- Pharmacy benefit revenues have offset disappointing performance of core medical revenues. Our analysis indicates that a large portion of pharmacy revenue growth has come from a more than doubling in pharmacy revenue per ART cycle. While our checks indicate industrywide price increases for the most common IVF medications, we question both the magnitude of this increase for PGNY (as it equates to per-cycle drug costs far in excess of industry averages) and, more importantly, the sustainability of these price increases.

PGNY Has Little Competitive Advantage And New Entrants Have Gained Ground In A Rapidly Commoditizing Industry

- Technology companies were early adopters of fertility benefits, but benefits consultants with whom we spoke generally consider the market for large tech clients nearing saturation. Importantly, our analysis of fertility benefit coverage indicates that newer PGNY clients, more often outside knowledge worker sectors, are offering less generous (averaging a half cycle lower) benefits, meaning that new customers offer lower potential revenue per member.
- At the same time, in contradiction to management's claims of improved marketing and sales efficiency, we find that PGNY's cost of customer acquisition has skyrocketed since 2019, and the Company's increasing reliance on smaller clients will likely exacerbate these pressures.
- We also believe that PGNY will face increasing cost pressures from its clinic network. Constrained clinic capacity in the face of increasing benefit manager competition and member adds means that clinics are likely gaining negotiating leverage, and PGNY clinic contracts are typically for only one-year terms, facilitating frequent repricing of economic splits. Moreover, the fertility landscape has been an area of significant consolidation by firms under private equity ownership, so we expect that larger, more financially sophisticated clinic networks will be able to exert materially greater financial pressure in contract negotiations with PGNY.

We believe that the fertility benefits marketplace is becoming increasingly commoditized and crowded, as credible, well-funded private players have achieved significant scale.

- Despite being the largest pure play, PGNY offers only modest differentiation or sustainable competitive advantage. The PGNY approach to fertility (for better or worse) has essentially become the standard of care among the focused fertility benefit managers. And since PGNY's relationships with its clinics are non-exclusive, PGNY lacks both operational control over costs and quality and any differentiation as it regards its clinic network.
- Several high-profile private companies have exhibited rapid growth and achieved both scale and impressive wins. We find that, if anything, it is these other players that have the most competitive differentiation in terms of business model (Kindbody, with owned clinics), payer relationships (WIN Fertility, with strong payer links), international scope (Carrot, with arguably the leading solution for employees outside the US), and breadth of solution (Maven, taking a more holistic view of women's health), and several of these players have innovated in areas such as payments and personal technology leverage (such as apps and wearables).
- We believe investors have wrongly discounted PGNY's competitors since they are all private companies with minimal visibility. However, Google search trends, employee growth, member adds, and competitor financing trends highlight PGNY's deteriorating competitive position and the significantly greater pressures the Company will face.
- Just as PGNY's differentiation fades, two large competitive threats will likely loom. First, given their existing infrastructure and clinic relationships, we believe the large payers have an easy path to market entry, as developing a specialized fertility benefit is relatively easy. Second, given the aforementioned role of private equity in the clinic sector, we wouldn't be surprised to see a major clinic network offer their own fertility benefit to regional employers emulating the Kindbody model.
- We believe PGNY has glossed over the threats to its client base and has likely understated client churn. We find high profile examples of lost clients such as Activision provide a reality check on the PGNY marketing pitch. We identify specific risks at three major PGNY clients (in particular that Google Ventures is an investor in Kindbody) and note that nearly half of PGNY existing clients will roll-off their initial contracts in the coming two years.

We Believe PGNY's Marketing Claims Are Highly Questionable And Its Treatment Model Is Rife With Conflicts

We find that many of PGNY's most important marketing claims, particularly its highly touted "superior outcomes", are highly suspect.

- PGNY heavily markets its pregnancy outcomes versus both national averages and those of non-members at PGNY in-network clinics. We believe these comparisons are so misguided as to make PGNY's claims invalid. The CDC makes clear that a comparison of outcomes between clinics is flawed. Second, some PGNY outcomes are essentially a direct byproduct of its treatment approach (for example, PGNY provides contracted financial incentives for single embryo transfer, so of course their rate is higher) and comparing the outcomes of PGNY patients with a premium benefit often valued at $50,000 or more to disadvantaged cash-pay patients who may be unable to afford ancillary services is patently unfair. Third, given major PGNY clients are skewed toward large technology companies and knowledge workers that are, on average, younger, wealthier, and less diverse than national averages, their healthcare outcomes are fundamentally not comparable. Finally, we find that PGNY has made a number of highly questionable methodological decisions, including using incomplete and/or massaged data, using advantageous recording periods and other definitions compared to the CDC data, and comparing results from different time periods, among others. Even the actuary PGNY hired to validate its data analysis noted numerous deficiencies and highlighted that they did not actually audit the underlying data.
- While PGNY management has touted superior trends relative to national averages, we find those claims to be disputable. More concerning, we find that PGNY's miscarriage rates have increased sharply since 2019 despite the Company using a questionable measurement methodology.
- PGNY's other major marketing claim is that its network comprises the best fertility clinics in the US. We contend that such a claim is practically meaningless since its clinic relationships are non-exclusive. More importantly, we find numerous examples of PGNY in-network clinics lacking accreditation, failing to report outcomes data to the CDC, receiving FDA warning letters, and being involved in some of the most egregious operational screw-ups the industry has seen.
- PGNY's other major marketing point is that it offers members individualized care and guidance by offering access to a dedicated patient care advocate (PCA) with "deep fertility expertise". We can easily find numerous examples of PCAs with extremely limited fertility, or even general healthcare, experience.
- Finally, we highlight examples of where PGNY exaggerates the scope of its fertility benefit and the potential savings to employers.

Our close examination of the research regarding the three pillars of the PGNY treatment plan reveals questionable scientific support and a business model rife with financial conflicts of interest.

- We believe the strategy of progressing patients directly to IVF, the most aggressive and expensive course of treatment, is highly questionable. In fact, the American Society for Reproductive Medicine (ASRM) concluded "*current evidence does not support IVF as a first-line therapy for unexplained infertility*". Also, PGNY may potentially be ignoring the substantially greater treatment intensity and resultant physical burden and health risks related to IVF.
- Second, numerous studies have called into question the utility of preimplantation genetic testing. Thus, we question whether its aggressive embrace by PGNY is simply a revenue grab that ingratiates the Company with clinics seeking growth. For reference, we estimate that such tests contributed $142 million of revenue in 2021, representing 40% of medical revenue.

Our Concerns Are Amplified By Management's Association With Medical Manager/WebMD

- Third, PGNY's claims that single embryo transfer can limit pre-term births (and thus their massive associated costs) is a major selling point made to employers, so much so that PGNY contractually incentivizes, if not obligates, clinics to pursue single embryo transfers, and PGNY is subject to service level guarantees. However, the science does not support this conclusion, meaning that we believe PGNY's treatment plan has been influenced more by client financial considerations than the underlying science.
- As noted, fertility treatments are often highly variant and tailored based on the specifics of the fertility diagnosis and patient profile, making PGNY's universal treatment mandate highly questionable. Viewing PGNY's control over treatment plans for its members in a legal context, we question whether the Company is actually in violation of corporate practice of medicine regulations.

Our concerns about PGNY's financial performance and business model are only exacerbated by our review of the Company's management team, in particular their track record at WebMD and lack of meaningful fertility, or even healthcare, expertise.

- The top three executives at PGNY, as well as a board member, held senior management roles at WebMD and/or its predecessor company Medical Manager, where a massive fraudulent accounting scheme involving 16 members of senior management was uncovered. While none of the PGNY individuals were implicated or indicted, we are troubled that their functional roles placed them close to the scheme and that they were seemingly the only senior managers not involved.
- We also question their track record at WebMD, an internet advertising company. Under the guise of providing consumers with healthcare information, we perceived that WebMD was a clickbait factory that during their tenures was criticized for sensationalizing medical conditions, touting unproven medicine, and manipulating its user base to the benefit of its big-paying pharma clients. We are troubled that they are once again managing a business that has the veneer of helping patients navigate a complex healthcare landscape while their actual offering is based on questionable science and rife with conflicts of interest.
- And as troubling as the lack of true scientific expertise is at PGNY, we are alarmed by the background of its "Medical Director". Dr. Alan Copperman is part-time and has faced two malpractice cases.

Spruce Point's fair value price target for PGNY's stock is $7 to $14 per share, or 60% to 80% downside risk

- Wall Street analysts are positive on PGNY and have published aggressive growth assumptions for FY23 despite the weakening economy. Revenue estimates have only been reduced by 5% in the past 12 months, while EBITDA expectations are largely unchanged.
- We acknowledge that valuing PGNY is a challenge, as there are no good companies with both comparable business models and similar financial profiles. While we believe referencing technology-related healthcare plays is dubious given their vastly different regulatory issues and superior margin models, we do use them as peer companies given their similar growth profile.
- We point to comparable 2023 adjusted EBITDA multiples, but we make one key adjustment: adding back stock-based compensation expense to get a more accurate picture of relative profitability and true earnings power.
- We also calculate our price target using both consensus and Spruce Point estimates for 2023, which yields a price target range from $7 to $14, representing approximately 60% to 80% downside in PGNY shares.
- Finally, we question why any institutional investors would build positions in front of massive insider selling.

We Have Serious Concerns About PGNY's Management And Governance

The PGNY Origin Story And Management Evolution Raises Questions

The fertility technology that once constituted part of PGNY was divested in early 2018, and the vast majority of senior management came from internet advertising company WebMD.

PGNY was created from the March 2015 merger of Auxogyn, a biotech start-up that attempted to develop a predictive, non-invasive embryo selection technology (called Eeva), and Fertility Authority, an online IVF referral network founded by former CEO Gina Bartasi (now CEO of competitor Kindbody). The Company pivoted to fertility benefit management in 2016 and once billed itself as "*the Uber or fertility*". According to industry rumors, Bartasi was a polarizing figure who was forced out by Auxogen's venture capital backers in 2017. The Eeva technology was sold to an affiliate of Merck Ventures for just $8 million in January 2018. Following Bartasi's departure, PGNY hired a number of executives who previously worked at WebMD, an online healthcare content company that generated revenue from advertising (lead generation).

The WebMD Team Comes to PGNY

Executive	WebMD Role(s)	PGNY Role(s)
David Schlanger	• CEO, Aug 2013 to Sep 2016 • SVP Corp. Dev., Sep 2001 to Apr 2013	• Executive Chair, Jan 2022 to present • CEO, Jan 2017 to Dec 2021
Peter Anevski	• CFO, May 2013 to Sep 2016 • Other "senior finance and operations roles at WebMD and predecessor companies for 14 years"	• CEO, Jan 2022 to present • COO, Jan 2017 to Dec 2021 • President, Jun 2019 to Dec 2021 • CFO, Jan 2017 to Sep 2020
Mark Livingston	• VP of FP&A, Aug 1999 to Sep 2006	• CFO, Sep 2020 to present • EVP Finance, May 2019 to Sep 2020
Risa Fisher	• VP Investor Relations and other roles, Sep 1996 to Apr 2017	• Chief Marketing Officer, Oct 2021 to present • S/EVP Comms., Sep 2017 to Nov 2021
Lisa Greenbaum	• Various roles including VP Sales and ending at SVP, Jun 2004 to May 2019	• EVP, Chief Client Officer, Jun 2019 to Apr 2021
Roger Holstein	• EVP, S&M, President, CEO, 1997-2005	• Director, Nov 2020 to present

Source: NYPost, PGNY IPO prospectus, PGNY proxy, LinkedIn bios for David Schlanger, Peter Anevski, Mark Livingston, Risa Fisher, Lisa Greenbaum, Roger Holstein, WebMD 2014 proxy

SPRUCE POINT CAPITAL MANAGEMENT

How Did Internet Advertising Executives Suddenly Become Fertility Healthcare Experts?

We find it remarkable that an executive team with largely internet advertising experience centered on healthcare information drove the creation and roll-out of a fertility treatment model. We also believe the team's track record at WebMD highlights a history of questionable business practices.

Educational Backgrounds of WebMD Management Transplants

Executive	Undergraduate Education	Graduate Education
David Schlanger	• Georgetown, Economics	• Michigan, JD
Peter Anevski	• Montclair State, Accounting	• None
Mark Livingston	• Tulane, Management & Accounting	• None identified
Risa Fisher	• Lehigh	• NYU, MBA
Lisa Greenbaum	• Duke, BA	• None identified

The Incongruous Backgrounds of the WebMD Team Were Not Lost On A Former PGNY Employee

Former Director of Client Solutions at PGNY, Tegus, 9/28/22	**Client**: *"Can you speak to maybe the formation of Progyny? Like, I guess, what does WebMD have to do with fertility benefits?"* **Former Dir of Client Solutions at PGNY**: *"We probably have to ask the board that oversaw Progyny that particular question because that was a head scratcher for myself and many other people that were there at that time. The two individuals that became at that time following Gina's departure, the CFO or COO and then the CEO, and* ***for all intents and purposes, they were fired from WebMD. We could never understand myself having been in the industry for so long, why these two because they clearly didn't understand the space, we spent more time than I could possibly get back in my life, explaining to these two, the industry, the clinical nature of fertility, much less all the other factors that come into play. But they were the two that were chosen. There could have been two better people than them, I can unequivocally say that."***

Source: LinkedIn bios for David Schlanger, Peter Anevski, Mark Livingston, Risa Fisher, Lisa Greenbaum, Tegus

A Wide-Ranging Accounting Fraud Occurred At Medical Manager Before And After Its Acquisition by WebMD

Medical Manager was a healthcare software company formed in July 1996. The Company went public in 1997 and embarked on an aggressive roll-up strategy, eventually acquiring ~135 companies in the following three years. In July 1999, Medical Manager was acquired for $1.4 billion by Synetic, a supplier of plastic/filtration products whose e-commerce subsidiary CareInsite was later spun-off. The combined company took the Medical Manger name, and most senior management roles went to former Medical Manager executives. WebMD merged with Healtheon in 1999 and subsequently acquired Medical Manager (including its publicly traded internet subsidiary CareInsite) in a $2.1 billion deal that closed in September 2000. In 2005, ten executives from Medical Manager were indicted for conspiracy and money laundering related to a wide range of fraudulent accounting practices related to acquired companies designed to inflate earnings between 1997 and 2003. Six additional executives later pleaded guilty.

Excerpt From DOJ Press Release Announcing Conviction of Two Medical Manager Executives

Kang and Sessions were convicted of conspiring to engage in fraudulent accounting practices intended to artificially inflate the quarterly revenues of Medical Manager in order to meet and exceed the expectations of financial analysts, and thus to fraudulently inflate the market price of Medical Manager stock and, after its acquisition by WebMD, that company's stock. According to evidence presented during the nearly two-month trial, the conspiracy involved a number of fraudulent practices, including inflating the company's revenue by engaging in "round-trip" sales with software dealers that Medical Manager was acquiring. Evidence at trial proved that the defendants participated in a scheme to inflate the purchase price for the companies that Medical Manager was acquiring in order to compensate these companies for the simultaneous purchase of Medical Manager software that Medical Manager compelled them to purchase as part of their acquisition. Evidence presented at trial proved that the defendants also inflated Medical Manager's revenue by causing companies acquired by Medical Manager to reclassify revenue they had already recognized - and thus already included in their earnings - as "deferred revenue," which was not included in earnings. Once the books of the acquired companies were combined with those of Medical Manager, the conspirators recognized the deferred revenue again, thereby fraudulently increasing Medical Manager's revenue and earnings. Kang and Sessions were also found guilty of causing companies Medical Manager was acquiring to fraudulently inflate their accrued liability accounts and reserves for various expenses before the financial statements of the target companies were combined with those of Medical Manager. Once the financial statements were combined, the conspirators caused Medical Manager to reverse those accrued liability accounts and reserves into earnings for Medical Manager.

Source: DOJ press release, Case 9:05-cr-00928-DCN document 10 filed 12/15/05

The Top Three PGNY Executives And Director Holstein All Worked At Medical Manager And/Or WebMD During The Fraudulent Scheme

Sixteen executives were indicted, pleaded guilty, and/or were convicted as part of the Medical Manager fraud. We believe Schlanger, Anevski, and Livingston were practically the only executives involved in M&A and finance activities that were **not** implicated or charged in the scheme.

Medical Manager Executives Allegedly Involved In The Fraudulent Scheme And Current PGNY Executives

John H. Kang President	Michael A. Singer CEO	Lee A. Robbins CFO	
Roger Holstein EVP Marketing & Sales	John P. Sessions VP and COO	Charles L. Hutchinson Controller	David Schlanger SVP Corp Dev
Ted W. Dorman SVP Southeast Region	David A. Ward VP Enterprise Business Group	Mark Livingston Vice President	Robert Davids VP M&A
Henry Holbrook VP Northeast Region	William Kottage Director of Operations	Peter Anevski Vice President?	Patrick Sedlacek M&A
Maxie L. Juzang SVP West Region	Frederick B. Karl General Counsel	Kevin M. Kennedy Various accounting roles	
	Franklyn M. Krieger Associate General Counsel		Glenn S. Moss Independent dealer and paid consultant

Red: Indicted by Grand Jury, Pleaded Guilty, and/or Convicted

Teal: PGNY Executive/Director

Source: DOJ press release, Case 9:05-cr-00928-DCN document 10 filed 12/15/05

Schlanger Was The "Lead Executive" For The Acquisitions Forming Medical Manager And WebMD

PGNY Executive Chairman and former CEO David Schlanger was the primary M&A executive evaluating Medical Manager while at Synetic. Later, he was SVP of Corporate Development at Medical Manager and WebMD, executing numerous transactions during a period when acquired companies were used as an instrument of accounting fraud.

David Schlanger's Work History Overlaps Much of The Medical Manager Scheme

According to his LinkedIn profile, Schlanger was SVP Corporate Development at Medical Manager from Jan 1995 to Sep 2001 and maintained that role at WebMD through Dec 2011. He was originally SVP Corporate Development at Synetic, which acquired Medical Manager. An article regarding the deal in the Tampa Bay Times included the following statement by Schlanger:

*"**Medical Manager has done a great job in creating an electronic infrastructure that we can use to deploy our e-commerce network in doctors' offices," said David Schlanger, senior vice president at Synetic. "It's a combination that makes great sense**."*

We note that, given his role as SVP Corporate Development at Synetic, Schlanger may have been responsible for assessing the Medical Manager business over two years into its fraudulent scheme. Holding substantially the same title at Medical Manager and WebMD, Schlanger was involved with additional acquisitions and management of the business for another four years during which the scheme continued to be perpetrated.

David Schlanger
Executive Chairman at Progyny, Inc.

Senior Vice President, Corporate Development
Sep 2001 - Dec 2011 · 10 yrs 4 mos
New York

Was the lead executive responsible for sourcing, assessing, structuring, negotiating and executing the 12 acquisitions that came to form the core of WebMD's business, including the acquisition of Medscape. In addition, some other key accomplishments included:
* Structured, negotiated and managed key strategic partnerships with major media partners (AOL, MSN, Yahoo), customers (Bausch & Lomb, Pfizer), technology and content partners
* Sourced, negotiated and managed a partnership with Boots UK, Ltd (the largest pharmacy and health care retailer in the UK) to launch WebMD's consumer site in the UK. The site grew to be the largest commercial on-line health destination in the UK.
* Developed the business plan and strategy to launch WebMD the Magazine, which has grown to be the #2 health-related print publication in the US with a readership of over 10 mm people per issue.
* Managed a commercial relationship with Sanford Health, one of the largest rural hospitals in the U.S., to develop a new online destination and resource for children and parents to combat childhood obesity.

Senior Vice President- Corporate Development
Medical Manager Corp.
Jan 1995 - Sep 2001 · 6 yrs 9 mos

The Medical Manager fraud scheme ran from 1997 to 2003. Schlanger first evaluated Medical Manager as the primary deal executive in 1999 and later evaluated and executed additional deals as part of Medical Manager and WebMD during an additional four years that the scheme was perpetrated.

Source: David Schlanger LinkedIn profile, Tampa Bay Times, May 1999

Both Livingston And Anevski Served As Vice Presidents In The Finance Function During The Fraudulent Scheme

We find it troubling that PGNY's current CEO and CFO both served as Vice Presidents in the finance function during the Medical Manager fraudulent scheme given the pervasive involvement of as many as 16 members of senior management and the financial nature of the activities. Medical Manager accounted for 35%-40% of WebMD revenue in 2003 when the Company's offices were raided by law enforcement. Anevski and Livingston were not implicated.

Mark Livingston Was A Vice President In The Finance Function During the Medical Manager Scheme

According to his LinkedIn profile, Livingston was VP of FP&A at WebMD from Aug 1999 to Sep 2006. In his detailed description, he states that he was "*Chief financial officer for the Company's $300mm physician practice management software division*", which sounds like the former Medical Manager. Furthermore, Livingston's deposition in the USA vs Robbins case suggests he worked at Medical Manager in a finance role prior to the acquisition by WebMD.

Mark Livingston
Chief Financial Officer at Progyny, Inc.

WebMD

Vice President, Financial Planning & Analysis
WebMD Corporation
Aug 1999 - Sep 2006 · 7 yrs 2 mos
Greater New York City Area

• Key member of Executive deal team for successful $2.1 Billion divestiture of two of the Company's largest divisions. Primary lead for development and presentation of financial and operational models and financial due diligence with multiple potential buyers in an auction process.
• Company-wide leader of Strategic Planning & Financial Analysis function with responsibility to provide insight and counsel to the CFO and CEO regarding business performance, mergers & acquisitions evaluation, investment decisions and strategic planning while supplying the tools and guidance to the operating divisions to succeed.
• Chief financial officer for the Company's $300mm physician practice management software division.

Peter Anevski Was a Vice President in the Finance Function During the Medical Manager Scheme

Peter Anevski's LinkedIn profile does not provide detail regarding his exact roles early in his career at WebMD. However, his bio in WebMD's 2014 proxy notes "*senior finance and operations roles*" at "*predecessor companies for 14 years*".

Pete Anevski
Chief Executive Officer at Progyny, Inc.

WebMD

Executive Vice President and Chief Financial Officer
WebMD
Feb 1999 - Sep 2016 · 17 yrs 8 mos
New York, NY

WebMD is a leading provider of health information services to consumers, physicians and other healthcare professionals through its public and private online portals, mobile platforms and health-focused publications. WebMD is also a provider of wellness services and solutions through its leading cloud-based population health management services that help employers and health plans improve the health of their employee and plan participant populations. The organization has over 1,700 employees and operates across the US and internationally.

Source: LinkedIn profiles for Mark Livingston and Peter Anevski, Case 9:05-cr-00928-SB document 548-5 filed 9/15/08, WebMD 2014 proxy, Tampa Bay Times

PGNY Disclosed A Material Weakness In Its FY18 Financials

PGNY's disclosed a material weakness in its financial statements for the year ended 2018 in its Draft Prospectus. One of the steps that PGNY took to remediate the weakness was hiring a senior financial executive with a focus on SEC reporting and technical accounting. Spruce Point has identified only one senior finance executive that was hired in 2019, Mark Livingston who worked at WebMD from 1999 to 2006.

PGNY Material Weakness Disclosure

In connection with our preparation of our annual financial statements for the year ended December 31, 2018, we and our independent registered public accounting firm identified a material weakness in our internal control over financial reporting. Any failure to maintain effective internal control over financial reporting could harm us.

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements in accordance with GAAP. In connection with our audit of the fiscal year 2018 consolidated financial

statements, we and our independent registered public accounting firm identified one material weakness in our controls related to the lack of review and oversight over financial reporting. We determined that we had insufficient financial statement close processes and procedures relating to the classification and presentation of certain revenue and expenses. Under standards established by the United States Public Company Accounting Oversight Board, a material weakness is a deficiency, or combination of deficiencies, in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of annual or interim financial statements will not be prevented or detected and corrected on a timely basis.

We have taken steps to remediate this weakness, including hiring of a senior financial executive in 2019 with a focus on SEC reporting and technical accounting. We have also implemented preventative and detective procedures and controls including analytical reviews designed to improve our annual and quarterly financial close process. However, we cannot assure you that the measures we have taken will remediate this deficiency or that we will not suffer from other material weaknesses in the future.

Mark Livingston, Current CFO of PGNY, was hired in May 2019 as an EVP of Finance.

Although, we could debate whether Livingston had the requisite background to remediate a material weakness, we do note that Livingston's previous work experience included 7 years at WebMD from 1999 to 2006 which overlapped with Anevski and Schlanger.

Source: PGNY Draft Prospectus, Source: Mark Livingston Bio -- LinkedIn

The Track Record of PGNY Management While At WebMD is Highly Suspect

WebMD generated revenue through advertising (essentially what we view as medical clickbait) and sponsored content for pharma, biotech, medical device, and other healthcare related companies. During the tenures of Schlanger and Anevski, WebMD was clouded by several scandals that called into question the credibility of information posted on the site, business model conflicts of interest, and the ethics of senior management.

Conflicts of Interest and Trust Issues at WebMD

The Pharma-Funded Health Survey Scandal

"Recent troubles at WebMD date back to early 2010 when ***a very public scandal surfaced—one that may have permanently tarnished WebMD's image*** *for a significant number of customers—that* ***ended with a formal investigation by the US Senate*** *in which a letter from Senator Charles Grassley of the US Senate Finance Committee stated that he was "concerned about the independence between WebMD and industry since many people access WebMD seeing it as an independent, objective medical resource."* ***The concern focused on a "rigged" online test for depression*** *that was created so that even if the user answered "no" to all of the 10 questions (which are all framed so that the "yes" answer indicates depressed behavior) the test's response would include the phrase that "You may be at risk for major depression."* ***At issue is the complicated relationship between the user and WebMD's online information and the user's awareness of WebMD's ties to pharmaceutical companies****. For instance, from WebMD's general depression information page,* ***an editorial link to a "Depression Quiz" takes you to a depression screening page, funded by Lilly, which makes the antidepressant Cymbalta****. Worse, a banner ad from the same depression home page takes you directly to a Cymbalta-sponsored page titled Learning to Treat Depression, whose layout and design are hard to distinguish from non-sponsored content."*

- Excerpt from "Has WebMD become Synonymous with Big Pharma?", Business Insider, 10/31/12

Source: Business Insider

WebMD Conflicts, continued

Alarmist and/or Questionable Medical Content

"With the site's (admitted) connections to pharmaceutical and other companies, ***WebMD has become permeated with pseudomedicine and subtle misinformation****."*
"It's not only a waste of time, but it's also a disorder in and of itself — one that ***preys on the fear and vulnerability of its users to sell them half-truths and, eventually, pills****."*

- Excerpts from "A Prescription for Fear", The New York Times Magazine, 2/4/11

"The only high-quality study I could find that related to the question of WebMD's independence was published in JAMA in 2013. The researchers looked at which medical communication companies targeting doctors received the most money from 14 pharmaceutical and device companies. They found ***WebMD, along with its sister site Medscape, were the top recipients of industry dollars****"*
"those links raise thorny ethical questions, said James Yeh, a physician-researcher based at Brigham and Women's Hospital who has studied the influence of industry funding on medical information. ***"This puts [WebMD] in a conflict of interest…They are also trying to sell a drug."***
"The site's popular symptom checker, which allows users to insert basic information about their age, sex, and symptoms, is a ***hypochondriac's worst nightmare****."*
"The pages on weight loss were a mixed bag. Information about weight loss supplements suggested green coffee supplements might help. Last time I checked, the government had cracked down on the maker of these pills for bogus peddling, and there's* ***no good evidence behind them****."*
"While the site's content is produced by a team of doctors and medical writers, the article failed to mention any basic information about the drug's effectiveness or how many people the drug was likely to help (the number needed to treat, in medical parlance). And ***some of the information was worryingly incomplete****. For example, WebMD didn't note the serious side effects associated with the drug Contrave — it can cause severe, potentially fatal skin reactions and liver failure."*

- Excerpts from "The truth about WebMD, a hypochondriac's nightmare and Big Pharma's dream", Vox.com, 4/5/16

Source: The New York Times Magazine, Vox.com

WebMD Conflicts, continued

Conflicts of Interest

"What consumers want is sound, independent information. But they, along with experts and doctors, are ***bombarded with manipulative advertising and industry-funded drug and device studies that can incorporate shady or even illegal tactics to obscure bad science and conflicts of interest****."*

"Other major WebMD advertising sources include ***the nutrition and diet industry****, along with processed-food manufacturers. Numerous WebMD news videos and stories tacitly endorse fast food by posing misleading questions such as "Fast-Food French Fries: Which Are Healthiest?""*

*"****WebMD's extensive data mining provides another problematic revenue stream****. When visitors research embarrassing, or insurance- and job-threatening conditions, that information…is collected, used internally and sold. WebMD's privacy policy warns that the site collects "personal information" when you sign up for its newsletters or use its many services…WebMD also collects "non-personal information" from "external sources, even if you have not registered with or provided any personal information to WebMD." …visitors who describe themselves as over 12 relinquish control over how their information is used."*

- Excerpts from "Doctor Who? The corporations behind WebMD's friendly, free advice", In These Times, 8/28/12

Backlash From Wellness Profile Program to Gather User Information

Penn State Employees Protest Wellness Effort

Petition Calls for Cancellation of Program That Asks Workers to Provide Health Information or Face Penalties of Up to $1,200 a year

Pennsylvania State University employees are protesting a new wellness program that requires them to provide detailed health information or pay penalties that can total $1,200 a year, in an unusually public backlash against an increasingly common employer practice.

L.R.
Aug 19, 2013 at 2:22 pm

From the FAQ file (http://ohr.psu.edu/assets/benefits/documents/TakeCareOfHealthFAQs.pdf)

***

Q: I don't trust WebMD or the other third-party companies that they sell information to. Is it mandatory that I share personal health information with third-party web businesses that I don't trust?
A: Completion of the WebMD Wellness Profile is not mandatory, however, if someone chooses not to complete the profile, the surcharg will be applied beginning in the January payroll.
View more information about WebMD's security and privacy policies at http://ohr.psu.edu/assets/benefits/documents/WebMDPrivacyAndSecurity.pdf.

Q: Can I request that my data from the wellness profile and WebMD be purged if I leave Penn State in the future?
A: No, if you leave the University, WebMD places the member files into a holding area in case the member ever rejoins – they do not delete/purge them. (added 8/9)

Schlanger left WebMD abruptly in 2016 "by mutual agreement"

Source: Wall Street Journal, The Health Care Blog, In These Times, WebMD 8-K Sept 18, 2016

Spruce Point Capital Management

We Are Troubled By Director Holstein's Links To WebMD (Medical Manager) And Other Inconsistencies in His Bio

Holstein excludes specific reference to Medical Manager, seemingly exaggerates his role at Medco (a company we show faced several regulatory actions after his departure), and excludes his tenure as CEO of HeatlhGrades, like WebMD, a lead-gen clickbait company that we believe operated under the guise of helpful healthcare information for consumers.

Review of Holstein's Current PGNY Bio and Comparison to His 2003 WebMD Proxy Bio

Prior Bio Under WebMD

Roger C. Holstein has been Chief Executive Officer of WebMD since May 2003 and a director since December 2002 and has served in senior executive positions at WebMD and its predecessors since 1997. Mr. Holstein was President of WebMD from October 2002 to May 2003. He served as Chief Executive Officer of WebMD Health, our Portal Services segment, from June 2001 to October 2002 and as a member of WebMD's Office of the President from September 2001 until October 2002. From October 2000 until June 2001, Mr. Holstein was Executive Vice President, Marketing and Strategic Planning of WebMD. He served as Executive Vice President — Sales & Marketing and a director of CareInsite from March 1999 until its acquisition by WebMD in September 2000 and was Executive Vice President — Marketing and Sales of Medical Manager and its predecessors from 1997 to July 1999. From 1991 to 1996, Mr. Holstein was Senior Executive Vice President, Marketing and Sales of Merck-Medco and its predecessors and from 1996 to 1998, he was a special consultant to Merck-Medco.

In his current PGNY bio, we believe Holstein both exaggerates his role and leaves out his prior role at Medical Manager during the fraudulent scheme.

Holstein also now seems to attach much greater foundational significance and sexier title to his role at Medco than he did in the years directly following it. In his AHIP bio he goes so far as to say he was "Co-President".

Current PGNY Bio

Roger Holstein has served as a member of our board of directors since November 2020. He has been a Managing Director at Vestar Capital Partners, a private equity firm, since 2006. He currently serves on the boards of Quest Analytics, and Friday Health Plans. From 1997 to 2005, Mr. Holstein served as Chief Executive Officer, President or Director of WebMD Health Corp., or WebMD, and helped establish it as the leading source of healthcare information for consumers and professionals. From 1991 to 1996, Mr. Holstein was a member of the Office of the President at Medco, where he helped create the business of prescription benefit management. Prior to that, Mr. Holstein held executive positions at MCI, Warner Amex Cable and Grey Advertising. He began his career in marketing with the Spirits of St. Louis basketball team in the American Basketball Association. Mr. Holstein holds a B.A. with distinction, from Swarthmore College. We believe that Mr. Holstein is qualified to serve on our board of directors because of his extensive leadership and healthcare experience.

Why does Holstein's bio fail to mention a four-year tenure as CEO of Healthgrades?

Roger Holstein
Managing Director at Vestar Capital Partners

Chief Executive Officer
Healthgrades
Jan 2012 - Jan 2016 · 4 yrs 1 mo
Denver, Colorado

Led the private equity investment in Healthgrades the nations most trusted source of information on physicians and hospitals and served as CEO as we grew the audience to 30mm monthly visitors.

Is it because Holstein presided over the Company's transformation to what we perceived to be clickbait and because its physician and hospital reviews have been criticized for their questionable methodology, false conclusions, inaccurate info, and poor reliability?

Source: WebMD 2003 Proxy, PGNY website, Roger Holstein LinkedIn bio, Wikipedia, Healthgrades website

Spruce Point Capital Management

Is This The Business Model That Holstein "Created"?

Holstein claims that he "*helped create the business of prescription benefit management*". We note that years later, Medco was subsequently the target of several government judgements. In fact, the entire PBM sector has been targeted for government evaluation of rampant unfair business practices. Holstein has never been implicated by any federal agency for his role in the industry he claims to have helped create.

Government Judgments Against Medco Based on Actions During Holstein's Tenure

"We have found that Medco has given favorable treatment to Merck drugs. As a result, in some cases, consumers have been denied access to the drugs of competing manufacturers. In addition, the merger has made it possible for Medco to share with Merck sensitive pricing information it gets from Merck's competitors, which could foster collusion among drug manufacturers."

Merck Settles FTC Charges that Its Acquisition of Medco Could Cause Higher Prices and Reduced Quality for Prescription Drugs

The Federal Trade Commission today announced an agreement with Merck and Co., Inc. ("Merck"), a leading pharmaceutical manufacturer, and its subsidiary, Merck-Medco Managed Care, LLC ("Medco"), resolving antitrust concerns resulting from Merck's acquisition of Medco. The Commission alleged that Merck's acquisition of Medco, a pharmacy benefits manager ("PBM"), may substantially lessen competition in the manufacture and sale of pharmaceuticals, and in the provision of PBM services, leading to higher prices and reduced quality. PBMs serve as middlemen in the provision of prescription drugs to managed care plans. The settlement would require Medco to take steps to diminish the effects of any unwarranted preference that might be given to Merck's drugs over those of Merck's competitors in connection with the pharmacy benefit management services that it provides.

"Medco…submitted false claims to the government, solicited and accepted kickbacks from pharmaceutical manufacturers to favor their drugs, and paid kickbacks to health plans to obtain business"

Department of Justice

FOR IMMEDIATE RELEASE
MONDAY, OCTOBER 23, 2006
WWW.USDOJ.GOV

CIV
(202) 514-2007
TDD (202) 514-1888

Medco to Pay U.S. $155 Million to Settle False Claims Act Cases

WASHINGTON – Medco Health Solutions has agreed to pay the United States $155 million plus interest to settle allegations that the Parsippany, N.J.-based company submitted false claims to the government, solicited and accepted kickbacks from pharmaceutical manufacturers to favor their drugs, and paid kickbacks to health plans to obtain business, the Justice Department announced today. Medco, the nation's second largest pharmacy benefit management company, manages the prescription drug benefits of over 60 million Americans, including millions of Medicare beneficiaries.

The United States intervened in two qui tam or whistleblower cases filed by George Bradford Hunt and Walter W. Gauger in 1999, and by Joseph Piacentile, M.D. in 2000. Both cases were later consolidated. The government's complaint alleged that Medco submitted false claims for mail order prescription drug services it was required by contract to provide to millions of federal employees, retirees and their families under the Federal Employee Health Benefits Program. Additionally, it is alleged that the company cancelled valid prescriptions it could not timely fill in order to avoid paying penalties under its contract; shorted pills from prescriptions it filled; failed to conduct concurrent drug utilization review for all prescriptions in order to identify potential adverse drug interactions; and, when filling prescriptions, used drugs other than those prescribed by the physician to earn undisclosed rebates from drug manufacturers.

The government complaint also alleged that the company violated the Anti-Kickback Act by soliciting and accepting payments from pharmaceutical companies to favor their products on Medco's published list of drugs, and by paying kickbacks to induce health plans to award contracts to provide the mail order pharmacy benefits for plan beneficiaries.

Source: FTC press release, DOJ press release

We Uncovered Several Troubling Revelations About PGNY's Medical Director

SPRUCE POINT CAPITAL MANAGEMENT

In a Company stacked with internet marketing executives, one would assume PGNY would employ a full-time fertility doctor to guide its decisions that impact treatment protocols. However, we found that PGNY's Medical Director, Alan Copperman, is a full-time physician who faced two lawsuits for medical malpractice.

Dr. Copperman Doesn't Prominently Disclose His Affiliation With PGNY in His RMA Biography

Affiliations

- Member, American Medical Association
- Fellow, American College of Obstetricians and Gynecologists
- Fellow, American Society of Reproductive Medicine
- Member, American Association of Gynecological Laparoscopy
- Member, New York Society of Reproductive Medicine
- Board of Directors, RESOLVE

Why doesn't Copperman prominently disclose his relationship with PGNY on the website? You have to click on his curriculum vitae to see his Progyny affiliation. Shouldn't patients be made aware of potential conflicts of interest more prominently?

Dr. Copperman Faced Two Malpractice Lawsuits After Seeking Dismissal Under the Statute of Limitations

State of New York Court of Appeals

Summaries of cases before the Court of Appeals are prepared by the Public Information Office for background purposes only. The summaries are based on briefs filed with the Court. For further information contact Gary Spencer at (518) 455-7711 or gspencer@nycourts.gov.

To be argued Wednesday, November 15, 2017

No. 126 B.F. v Reproductive Medicine Associates of New York, LLP
No. 127 Dennehy v Copperman

These medical malpractice actions were brought separately by couples seeking damages for "wrongful birth." The couples were treated for infertility by Dr. Alan Copperman at Reproductive Medicine Associates of New York (RMA), and underwent in vitro fertilization using donated eggs. Both couples allege that RMA and Copperman negligently failed to test the egg donors for a chromosomal abnormality known as "fragile X," which can produce intellectual disability and other injuries, until after their children were born. When tests were conducted months after the births, the donors were found to be fragile X carriers and a child born to each couple had the full fragile X mutation.

RMA and Copperman moved to dismiss both lawsuits as untimely under CPLR 214-a, which requires that a medical malpractice claim be filed within two and a half years "of the act, omission or failure complained of or last treatment where there is continuous treatment for the same illness, injury or condition which gave rise to the said act, omission or failure." The outcome depends on whether the limitations period began to run when the defendants ended their treatment of the plaintiffs or when the children were born. In Case No. 126, embryos produced by the donated eggs were implanted in January

New York Court of Appeals Ruled Against Copperman

The New York Court of Appeals, New York's highest appellate court, held in its opinion filed on December 14, 2017 that the statute of limitations for wrongful birth claims in New York begins to run on the date of birth, and not on the date of the alleged medical negligence.

Source: Alan Copperman RMA biography, Curriculum Vitae, PGNY website, State of New York Court of Appeals Case Summaries November 14-17, 2017, medicalmalpracticelawyers.com

Our Forensic Financial Analysis Uncovers Additional Areas of Concern

Spruce Point's Analysis Is Incremental To Other Issues Identified at PGNY

Another short report published in December last year highlighted issues with PGNY's accounting and size of its addressable market. Major accounting issues addressed by the report included the manipulation of gross margins by as much as 900 bps, use of aggressive revenue recognition stemming from unbilled and accrued revenues, and the magnitude of PGNY's bad debt expense.

Spruce Point's forensic review has also identified incremental accounting issues, unaccounted for missing member lives, reduced run-rate revenue at Amazon and Google, as well as our take that PGNY is potentially overcharging members for fertility medication. Additionally, PGNY's CEO and Chairman were recently awarded substantial equity grants that vest based on undisclosed revenue targets. Lastly, we see other material factors that should weigh on consensus estimates.

- Unbilled A/R has been used repeatedly since PGNY's IPO to beat consensus revenue expectations.
- We think the material spike in unbilled A/R that was disclosed in PGNY's 3Q22 10Q is largely attributable to aggressive revenue recognition from ~9 new clients. We find it hard to believe that revenue from its nine new clients that increased the member base by 4% in 3Q22 would be responsible for 22% of fertility benefits revenue in 3Q22.
- PGNY's CEO and Chairman were both granted substantial equity grants on January 1, 2022, that vest based on undisclosed revenue targets.
- We are unable to reconcile management's commentary about member additions from PGNY's 2022 selling season and believe that PGNY's selling season may have been overstated. We can't account for ~200,000 member lives in PGNY's lives under coverage. Is it possible that PGNY inflated the amount of member lives that would be added from the 2022 selling season to cover up for an underwhelming selling season?
- Our work also suggests that PGNY could be over-charging its members for fertility medication. We estimate that PGNY may be charging on average as much as $8,000 for fertility medication versus industry levels in the range of $5,000 to $6,000.
- We believe that consensus estimates are not accounting for material headwinds that will likely appear in 2023 from reduced utilization and lower member counts, and the absence of major price increases for its Pharmacy Solution benefit. We illustrate that the aging of the fertility benefit within PGNY's aggregate member base will reduce utilization. More specifically, revenues at PGNY's two largest clients, Google and Amazon, that have offered PGNY's benefit since 2017 and 2019, respectively, likely declined in Q3 which solidifies our belief that an aging fertility benefit will decrease utilization.
- We also see the obvious macroeconomic factors causing some couples to re-evaluate the lifelong expense of having a child. Further employee counts at existing clients have been a significant tailwind that will turn into a headwind with the recent layoffs and hiring freezes thus far announced throughout PGNY's client base.

Without Revenue Recognition Related To Unbilled Accounts Receivables, PGNY Would Have Missed Wall Street Revenue Expectations Every Quarter Thus Far In FY22

Spruce Point Capital Management

We believe a lever that PGNY may be using to accelerate revenue recognition is unbilled accounts receivable and corresponding unbilled revenues. PGNY's use of unbilled accounts receivables (revenues that have been recognized but not yet billed to a customer) are at historic highs. By adjusting revenues for changes in unbilled A/R, PGNY would have missed revenue expectations on six occasions and in all three quarters in 2022. A recent academic study into unbilled receivables concluded, "*Preceding studies have shown that unbilled receivables may lead either to earnings management or accounting fraud and issued warnings for stakeholders to carefully observe unbilled receivables*."(1)

We note that issues with unbilled receivables have been a central elements of predicting shareholder disappointment at previous recent Spruce Point research targets such as C3.ai (AI) and Leidos (LDOS).(2)

PGNY's Unbilled Revenues and Revenue Surprise History Analysis

	Unbilled Accounts Receivable										
(S in Millions)	1Q20	2Q20	3Q20	4Q20	1Q21	2Q21	3Q21	4Q21	1Q22	2Q22	3Q22
Unbilled A/R	$21.1	$8.5	$17.1	$16.4	$23.2	$25.6	$24.8	$23.7	$31.3	$36.2	$65.7
QoQ Change	*12.6*	*(12.6)*	*8.6*	*(0.7)*	*6.8*	*2.4*	*(0.8)*	*(1.1)*	*7.6*	*4.9*	*29.5*

Unbilled A/Rs at all-time highs and the increase in 3Q22 was substantial.

	PGNY Revenue Surprise History										
(S in Millions)	1Q20	2Q20	3Q20	4Q20	1Q21	2Q21	3Q21	4Q21	1Q22	2Q22	3Q22
Reported Revenues	$81.0	$64.6	$98.9	$100.3	$122.1	$128.7	$122.3	$127.6	$172.2	$195.0	$205.4
Estimated Revenues	71.8	48.3	92.6	97.4	121.8	129.3	126.5	134.8	167.7	190.5	194.3
Beat / Miss	*9.2*	*16.3*	*6.4*	*2.9*	*0.4*	*(0.7)*	*(4.2)*	*(7.2)*	*4.6*	*4.5*	*11.1*
	Beat	*Beat*	*Beat*	*Beat*	*Beat*	*Miss*	*Miss*	*Miss*	*Beat*	*Beat*	*Beat*

The three most recent beats (and six times in PGNY's public history) relied on revenue recognized from increased unbilled A/R in order to surpass Wall Street revenue estimates.

	PGNY Adjusted Beat / Miss										
(S in Millions)	1Q20	2Q20	3Q20	4Q20	1Q21	2Q21	3Q21	4Q21	1Q22	2Q22	3Q22
Adjusted Revenues	$68.4	$77.2	$90.3	$101.0	$115.3	$126.3	$123.1	$128.7	$164.6	$190.1	$175.9
Estimated Revenues	71.8	48.3	92.6	97.4	121.8	129.3	126.5	134.8	167.7	190.5	194.3
Adj Beat / Miss	*(3.4)*	*28.9*	*(2.2)*	*3.6*	*(6.4)*	*(3.1)*	*(3.4)*	*(6.1)*	*(3.0)*	*(0.4)*	*(18.4)*
	Miss	*Beat*	*Miss*	*Beat*	*Miss*	*Miss*	*Miss*	*Miss*	*Miss*	*Miss*	*Miss*

Note: Adjusted Revenues = Reported revenues – change in unbilled A/R

Sources: Bloomberg, PGNY FY19 10-K, 1Q20 10-Q, 2Q20 10-Q, 3Q20 10-Q, FY20 10-K, 1Q21 10-Q, 2Q21 10-Q, 3Q21 10-Q, FY21 10-K, 1Q22 10-Q, 2Q22 10-Q, 3Q22 10-Q

(1) "Unbilled Receivables, Loss Allowances and Earnings Management", Academy of Accounting and Financial Studies Journal, 2019

(2) See Spruce Point reports AI, LDOS

Were PGNY's Aggressive Practices Driven by Management Compensation Considerations?

Schlanger and Anevski were recently issued PSUs on January 1, 2022 that vest upon a "rigorous revenue target" over any four consecutive fiscal quarters up until 2027. We are puzzled why revenue targets would be permitted over four consecutive quarters rather than being based on annual audited financials. Does this allow management to use the revenue recognition levers we have noted in this report? Given the past and present accounting irregularities we have identified in this report, we think the compensation committee needs to reevaluate any management compensation tied to revenues.

Excerpt from PGNY FY21 Proxy Regarding Equity and Option Grant Vesting

Messrs. Schlanger and Anevski did not receive any equity awards during fiscal 2021 and had not received any equity awards since 2019. Rather, in connection with the transition of their roles and in order to continue to retain and incentivize these key executives given that the significant majority of their outstanding equity awards were fully vested, on January 1, 2022 Messrs. Schlanger and Anevski received grants of 333,000 and 1,000,000 options at an exercise price of $50.35, 84,000 and 250,000 restricted stock units, and 83,000 and 250,000 PSUs, respectively. Each such option and restricted stock unit award vests as to 25% on the first anniversary of the vesting commencement date of January 1, 2022 with the remaining 75% of such award vesting in equal quarterly installments on each quarterly anniversary thereafter over the next three years, subject to the executive's continued service through each applicable vesting date. The PSUs vest and are earned, if at all, in two equal tranches in the event that specified sustained revenue targets are achieved (as determined by the compensation committee). The first tranche of PSUs vests if a certain rigorous revenue target amount is sustained over any four consecutive fiscal quarters between the grant date and the fifth anniversary of the grant date and the second tranche of PSUs vests if a certain "stretch" revenue goal target amount is sustained over any four consecutive fiscal quarters between the grant date and the fifth anniversary of the grant date, in each case subject to the executive's continued service through each applicable vesting date. Each tranche of PSUs may be earned at any point prior to the fifth anniversary of the grant date; provided that if either or both tranches have not been earned prior to such date they will be forfeited for no consideration. The design of the PSUs serves to align certain of our key executives' interests with those of long-term stockholders, incentivize the achievement of sustained and strong Company financial performance and create retentive value.

As shown on the previous slide, unbilled revenue recorded in 1Q22, 2Q22, and 3Q22 were $7.6M, $4.9M, and $29.5M, respectively. Has the use of unbilled revenues thus far in FY22 put management on track to trigger further compensation?

Source: PGNY [FY21 Proxy]

We Cannot Reconcile The Large Increase in Q3 Unbilled A/R With Management Disclosures

The short report published in December attributed the recent increase in unbilled A/R to an intentional delay in billing by PGNY. We have a different take where we believe that the recent spike could potentially be attributable to accelerated revenue recognition from new client additions. PGNY noted a negative cash flow impact to new client additions on its 3Q22 conference call, which we believe is directly correlated to the anomalistic increase in non-cash revenues associated with the increased 3Q22 unbilled A/R balance. New launches, of which there were nine in 3Q22, can take a "quarter or so" to integrate thus delaying collections. We find it suspect that adding 200,000 member lives which represented 4% of the average lives in 3Q22 could have contributed 23% of the total fertility revenues. Said differently, how could new member lives have a utilization that was +6x versus the legacy member lives? This does not pass our sanity check and we call on PGNY management for an explanation.

Spruce Point Estimated Fertility Benefit Breakout (New Members vs. Legacy Members)(1)

"Weighted average covered lives increased by more than 200,000 driven by the launch of nine new clients at various points during the quarter."
-- Mark Livingston, CFO, 3Q22 Transcript

	New Member vs. Legacy Member Breakout		
($ in Millions)	New	Legacy	Total
Fertility Revenues	$29.5	$99.8	$129.3
% of Total	*23%*	*77%*	*100%*
Average Lives	200,000	4,282,000	4,482,000
% of Total	*4%*	96%	100%

How did new clients that represented 4% of average member lives during 3Q22 represent 23% of total fertility revenues?

PGNY Fertility Benefits Revenue Detail, Unbilled A/R Balance and Impact to Operating Cash Flow

($ in Millions)	3Q19	4Q19	1Q20	2Q20	3Q20	4Q20	1Q21	2Q21	3Q21	4Q21	1Q22	2Q22	3Q22
Fertility Benefits Revenues	$50.0	$53.5	$59.4	$46.3	$73.1	$74.7	$88.9	$92.3	$85.3	$89.2	$110.9	$126.8	$129.3
Unbilled A/R	9.2	8.5	21.1	8.5	17.1	16.4	23.2	25.6	24.8	23.7	31.3	36.2	65.7
Impact to Operating Cash Flow		*0.7*	*(12.6)*	*12.6*	*(8.6)*	*0.7*	*(6.8)*	*(2.4)*	*0.8*	*1.1*	*(7.6)*	*(4.9)*	*(29.5)*

"Additionally, given the large number of new clients and lives on boarded during the last couple of quarters, cash flow also reflects that short-term negative impact that we typically see with these new launches, as it can take a quarter or so to get the integrations with the newest clients and their carriers running efficiently." -- Mark Livingston, CFO, 3Q22 Transcript

Sources: PGNY FY19 10-K, 1Q20 10-Q, 2Q20 10-Q, 3Q20 10-Q, FY20 10-K, 1Q21 10-Q, 2Q21 10-Q, 3Q21 10-Q, FY21 10-K, 1Q22 10-Q, 2Q22 10-Q, 3Q22 10-Q, 3Q22 Press Release, 3Q22 Transcript

(1) Based on PGNY's disclosures, Spruce Point believes that unbilled A/R solely relate to Fertility Benefit Revenues and does not apply to Pharmacy Solutions Revenues. PGNY'S FY21 10K states "unbilled receivables [represent] claims received and approved but unbilled." Pharmacy Solutions Revenues for fertility drugs are recognized when prescription services are completed by a specialty pharmacy, so unbilled A/R would not apply

Spruce Point Capital Management

Critical Audit Matters Regarding Accrued Receivables In Both FY20 And FY21 Raise Further Suspicion About PGNY's Revenue Recognition

PGNY's own auditor comments on PGNY's revenue recognition regarding fertility treatment revenues. As disclosed in its 10-K, PGNY accrues revenues based on member appointments scheduled. Our work indicates that some fertility treatments may require 10+ appointments over a three-month duration. Is PGNY recognizing revenue prematurely before the performance obligation has been satisfied? We have never seen a situation where scheduling a member appointment would permit revenue to be recognized. Issues surrounding the revenue recognition related to this dynamic has been disclosed as a critical audit matter in both FY20 and FY21. We question why PGNY would just not practice conservatism and recognize revenue when the full service is complete?

Critical Audit Matter in FY2021 10-K

Accrued Receivables and Accrued Claims Payable

As of December 31, 2021, accrued receivables and accrued claims payable were $30.2 million and $20.0 million, respectively. As discussed in Note 2 to the consolidated financial statements, the Company estimates accrued receivables for those fertility benefit services provided but for which a claim has not been received from the provider clinic based on historical claims experience. The estimated cost of the related services and accrued claims payable are determined based upon the amount to be paid to the provider clinic and expected gross margin on each related fertility benefit service estimated to have been provided.

Auditing the Company's estimates of accrued receivables and the related accrued claims payable was complex and required significant judgment as the estimates were sensitive to changes in the significant assumptions, including management's assumptions regarding the lag between authorization date and service date, service changes and cancellations.

Critical Accounting Estimates

Accrued Receivable and Accrued Claims Payable

Fertility benefits solution revenue is recognized based on the negotiated price with our clients and includes the portion to be paid directly by the member. Revenue is recognized when Smart Cycle services are completed for a member. Revenue is also accrued, which we refer to as accrued receivables, for authorized Smart Cycle services rendered based on member appointments scheduled with a fertility specialist in our network but for which no claim has yet been reported.

We estimate accrued receivables based on historical experience for those fertility benefit services provided but for which a claim has not been received from the provider clinic, which includes assumptions regarding the lag between the authorization date and service date as well as estimates for changes and cancellations of services. We include accrued receivables within accounts receivable on our consolidated balance sheet. As of December 31, 2021 and 2020, accrued receivables were $30.2 million and $28.2 million, respectively.

Source: PGNY FY2021 10-K

Spruce Point Capital Management

Growth In Lives Added Has Rolled Over; PGNY Relied More Heavily On Smaller Clients

Management has disclosed that the annual addition of member lives (underlying employees and their partners at PGNY's clients) from new clients was 1.2M in the 2022 selling season *(although, we believe it may have been significantly lower, see slide 33)*. The disclosed increase of 1.2M member lives is generally equal to the 1.2M member lives added in the 2021 selling season. This is a leading indicator that PGNY's growth trajectory is slowing. Equally alarming for PGNY is that each new client on average added 11,429 member lives in the 2022 selling season versus 14,118 in the 2021 selling season, which represents a 19% decline. Spruce Point believes that a PGNY shift to smaller clients: (1) indicates that the market for larger, more attractive clients, is increasingly saturated, and (2) is likely to have a negative impact on operating margins, as customer acquisition costs may vary little by company size.

Number of Member Lives Added in Each Selling Season

	Estimated Member Lives Added With Fertiliy Benefit			
	2019	2020	2021	2022
Added Lives from New Clients	750,000	400,000	1,200,000	1,200,000
# of New Clients	57	45	85	105
Lives / Client	*13,158*	*8,889*	*14,118*	*11,429*

Flat member lives additions

Average size of clients decreased by 19%

3Q21 Management Commentary on 2021 Selling Season

"2021 has been the most successful selling season in our history, producing a record number of new clients and members"
– David Schlanger, 3Q21 Transcript

"This year is, if you will [is] back to normal from an average client size perspective."
– Peter Anevski, 3Q21 Transcript

3Q22 Management Commentary on 2022 Selling Season

[in 2022, we] secured a record 105 new client commitments during the selling season representing an additional 1.2 million covered lives."
– Peter Anevski, 3Q22 Transcript

Management's is characterizing a flat selling season as a "record"

PGNY's flat YoY member life additions are particularly alarming since clients made their 2022 selling season decisions in early to mid-2022 in a materially stronger macroeconomic environment.

Source: PGNY 3Q19 Transcript, PGNY 3Q21 Transcript, PGNY 3Q22 Transcript, 3Q20 Press Release, 3Q21 Press Release, 3Q22 Press Release

Existing Client Employee Growth Has Been A Material Driver of Member Growth; We Believe PGNY Disclosures Don't Add Up

If we subtract new members added from the previous selling season from total members added during a calendar year, we can calculate a proxy for members added from existing client employee growth. However, we find that this figure fell far short of reported employee growth, even when looking solely at four major clients. How can this be?

Analysis of Reported Major Client Employee Growth Versus Implied PGNY Existing Client Growth

(in Thousands)	2017	2018	2019	2020	2021	2022
[A] EoP Members	234	720	1,517	2,335	2,935	4,600
[B] Members Added During Calendar Year		486	797	818	600	1,665
[C] Members Added During Previous Year Selling Season (1)		460	316	750	400	1,200
[D] Implied Member Growth From Existing Clients [equals B - C]		26	481	68	200	465
Year End Employee Counts of Major Early Clients						
Amazon (2)			250	350	500	
Microsoft	131	144	163	181	221	
Alphabet	80	99	119	135	157	
Meta	25	36	45	59	72	
Total (AMZN+MSFT+GOOG+META)	236	278	577	725	949	
[E] YoY Major Client Employee Growth		42	298	148	225	
[E / D] YoY Major Client Employee Growth / Implied Existing Client Member Growth			**62%**	**218%**	**112%**	

*"…many of our clients have continued to expand their workforce as they successfully grow their own businesses. **Our existing clients grew in aggregate by approximately 100,000 lives in 2020** despite the significant disruptions caused by the COVID pandemic. **Because of our utilization-based model, as our employees grow, we grow too**."*
– David Schlanger, 2021 JPMorgan Healthcare Conference Transcript

How did the PGNY existing client member base grow by only 100,000 members when just four clients, AMZN, MSFT, GOOG, and FB/META, grew by nearly 150,000 alone?

Source: PGNY Q3 2022 earnings call, PGNY Q3 2021 earnings call, PGNY Q3 2020 earnings call, PGNY Q3 2019 earnings call, PGNY 10-Ks for 2019, 2020, and 2021, Bloomberg

(1) For 2018 and 2019, represents the change in members from YE of previous year to Q1 end; for 2020, 2021 and 2022, represents management commentary on members added during selling season

(2) Amazon lives covered for FY19, FY20, and FY21 are estimated at 250,000, 350,000, 500,000. PGNY discloses annually the size of its largest customer which we presume has been Amazon since FY19

Furthermore, Management Commentary On Member Lives Does Not Add Up

Management has disclosed that new member additions from the 2022 selling season represent an additional 1.2M covered lives. Management also stated on its Q3 earnings call that it expected to start 2023 with 5.4M covered lives. Based on our calculations, we can deduce that 200,000 member lives have vanished. Did PGNY embellish the member additions in the 2022 selling season? We call on management to provide disclosure that aids investors to fully understand the contributors to annual changes in covered lives including churn and changes in covered lives at legacy clients.

Spruce Point Analysis of PGNY Covered Life Disclosure

2023 Estimated Covered Lives Bridge

[A] 4Q22 Average Lives (dislcosed by PGNY)	4,600,000
[B] 2022 selling season (disclosed by PGNY)	1,200,000
[C] Pull Forward (disclosed by PGNY)	*200,000*
[D] = [B] - [C] Incremental Remaining Additions	*1,000,000*
[A] + [D] Spruce Point Expected Number of Avg Lives	**5,600,000**
[E] 2023 Expected Lives by PGNY (disclosed by PGNY)	5,400,000
[A] +[D] - [E] Difference	(200,000)

"Expected average member count for the fourth quarter to 4.6 million."
-- Mark Livingston, 3Q22 Transcript

"We continued that momentum and secured a record 105 new client commitments during the selling season representing an additional 1.2 million covered lives."

"Weighted average covered lives increased by more than 200,000 [in 3Q22] driven by the launch of nine new clients at various points during the quarter."
-- Mark Livingston, 3Q22 Transcript

"We expect to be managing fertility benefits for 5.4 million people and approximately 370 companies in 2023"
-- Peter Anevski, 3Q22 Transcript

Where did the 200,000 lives go?

Source: PGNY 3Q22 Transcript

We Find Evidence That Suggests PGNY Has Historically Understated Client Churn

In both its SEC filings and on earnings calls, PGNY often states that the Company has retained nearly all of its clients. However, former PGNY employees, and known examples of client losses such as Activision, conflict with this claim. In fact, we find PGNY's past disclosures to the SEC regarding the materiality of client churn nonsensical.

Conflicting Commentary on Customer Churn

"We have retained substantially all of our clients since inception"
- Excerpt From PGNY 2021 10-K

Former Lead Fertility Patient Care Advocate at Progyny, Tegus, 10/13/22	**Tegus Client:** *"And how often did that happen that people switch providers?"* **Former Lead Fertility Patient Care Advocate at Progyny:** *"It would happen, but I can't say how often.* ***Maybe 5% of the time. It was low, but people would switch.****"*

PGNY Response to SEC Comment on PGNY IPO Prospectus

6. *We note your disclosure on page 98 that you have several customers that accounted for at least 10% of total revenue in 2018. Please furnish the information required by Item 101(c)(vii) of Regulation S-K, including the names of such customers.*

The Company respectfully advises the Staff that, pursuant to Item 101(c)(1)(vii) of Regulation S-K, disclosure of the name of any customer that accounts for 10% or more of the registrant's consolidated revenues is necessary only if the loss of such customer would have a material adverse effect on the registrant and its subsidiaries taken as a whole. Based on the Company's significant growth since the launch of its fertility benefits solution in 2016, it does not believe the loss of any such client would have a material adverse effect on the Company. The Company has increased its number of clients from 18 clients in 2017 to over 80 clients as of today. It has also increased its number of members from 234 thousand members in 2017 to over 1.4 million members as of today, representing only 2% of what it believes to be its total addressable market. In addition, the Company's revenue increased 117% and 113% period-over-period for the year ended December 31, 2018 and six months ended June 30, 2019, respectively. Accordingly, the Company believes its net revenue growth could overcome any short-term impact from the loss of any one such client and, therefore, does not believe disclosure of the name of any such client is currently required. The Company will continue to assess the potential impact that the loss of any such client would have on the Company, and should it be determined that the loss would have a material adverse effect on the Company, it undertakes to make the disclosures required by Item 101(c)(1)(vii) of Regulation S-K in its future filings, including identifying the name of any such client.

PGNY's largest customer in 2018 accounted for 24% of revenue, meaning the Company would require over 30% revenue growth just to replace revenue from its hypothetical loss.

Source: PGNY 2021 10-K, PGNY response to SEC comment letter dated 9/11/2019, Tegus

In Fact, Comparing Selling Season Commentary And Subsequent Reported Member Counts Suggests Member Churn

If PGNY has retained all its clients, shouldn't PGNY's Q1 ending member count (once newly added clients have started beginning January 1) equal more than those reported at year end? They don't. Can it be explained by early client starts, as has occurred in 2H 2022? We believe that is unlikely, as: (1) the level of early client starts in 2022 was far greater than previous levels, and (2) adjusting the calculation for the change in members from Q3 end to Q1 end shows a similar, yet smaller, period-over-period decline in two of the past three years.

Comparison of Selling Season Commentary and Subsequent Reported Member Counts

(in Thousands)	2020	2021	2022
Members Added During Previous Year Selling Season (1)	750	400	1,200
Members Added From Q4 End of Previous Year to Q1 End	578	322	1,028
Percent Above/(Below) Selling Season Member Adds	**(23%)**	**(20%)**	**(14%)**
Members Added From Q3 End of Previous Year to Q1 End	716	436	1,071
Percent Above/(Below) Selling Season Member Adds	**(5%)**	**9%**	**(11%)**

Looking at this analysis, we don't know if PGNY overstated the success of its selling seasons or understated the churn it was suffering?

Source: PGNY Q3 2022 earnings call, PGNY Q3 2021 earnings call, PGNY Q3 2020 earnings call, PGNY Q3 2019 earnings call, PGNY 10-Ks for 2019, 2020, and 2021
(1) Represents management commentary on members added during selling season

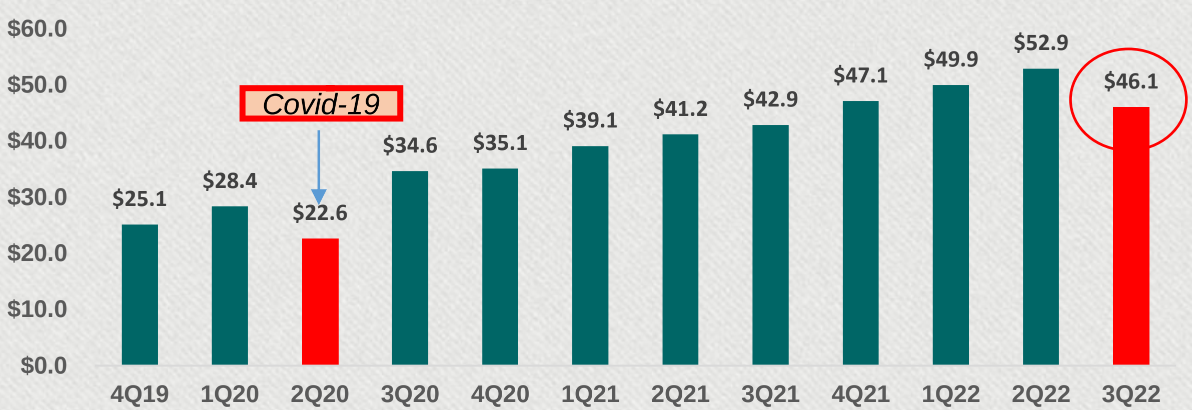
SPRUCE POINT
CAPITAL MANAGEMENT

PGNY's Largest Customers Likely Declined Sequentially For The First Time Ever Outside Covid-Impacted Q2 2020

Our work indicates that revenue contribution from PGNY's two largest clients, Google and Amazon, likely declined in 3Q22. This is the first sequential decline (*absent a COVID-19 decline in 2Q20*) for these two clients since PGNY went public. Google and Amazon have provided the benefit to eligible employees since 2017 and 2019, respectively. As the fertility benefit ages in the larger and more mature cohorts, we believe utilization trends will continue to decline, resulting in revenue headwinds from PGNY's largest and longest tenured clients.

Google and Amazon Estimated Combined Revenues Since 4Q 2019[1]

$ in Millions



Absent the Covid-19 decline in 2Q20, PGNY's revenues from its top 2 customers peaked in 2Q22 and witnessed its first decline in 3Q22.

Google and Amazon – Estimated Member Lives With Fertility Benefit

	Estimated Member Lives With Fertiliy Benefit						
Company	Dec 2017	Dec 2018	Dec 2019	Dec 2020	Dec 2021	Dec 2022	Dec 2023
Google[2]	80,110	98,771	118,899	135,301	186,779	???	???
Amazon [2]			250,000	350,000	500,000	???	???
Total	**80,110**	**98,771**	**368,899**	**485,301**	**686,779**	**???**	**???**

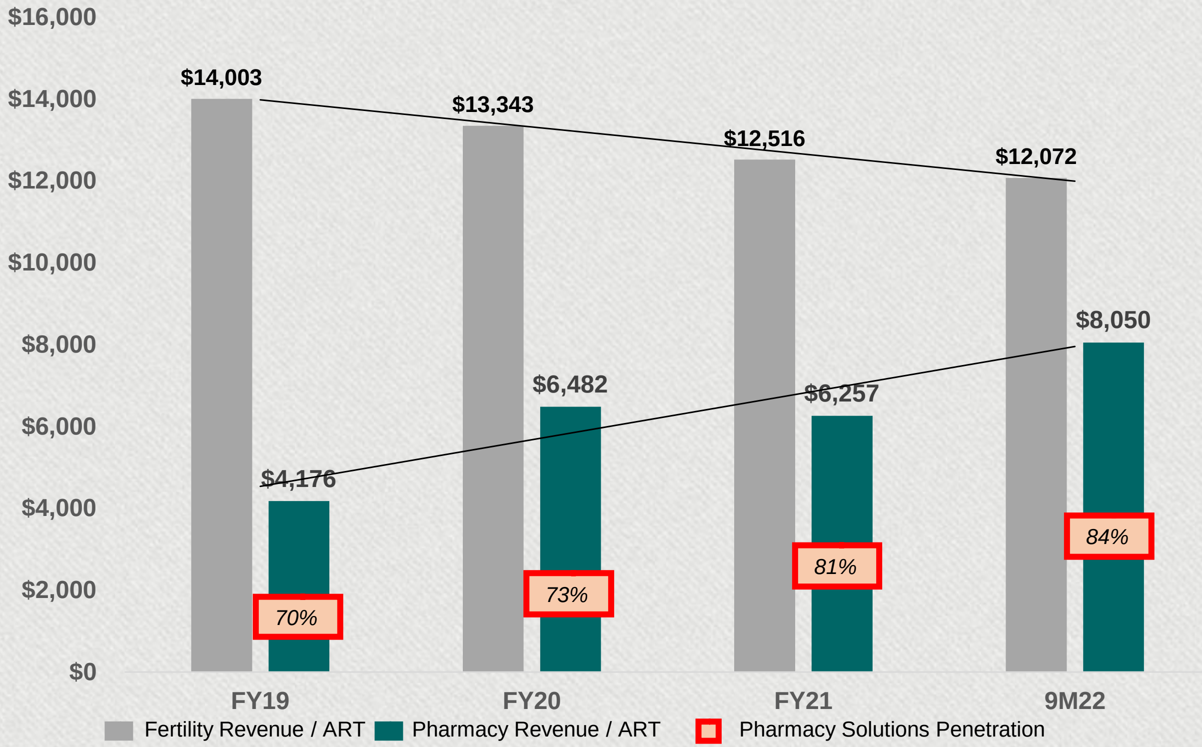
Hiring going to firing???

Sources: PGNY DRS, 3Q19 10-Q , FY19 10-K, 1Q20 10-Q, 2Q20 10-Q, 3Q20 10-Q, FY20 10-K, 1Q21 10-Q, 2Q21 10-Q, 3Q21 10-Q, FY21 10-K, 1Q22 10-Q, 2Q22 10-Q, 3Q22 10-Q
(1) Our estimates are based on disclosed company figures that have been rounded to the nearest percentage.
(2) PGNY's largest three clients in FY19 were Google, Amazon and Microsoft. Google and Amazon have continued to represent at least 10% of PGNY's quarterly revenues since 4Q19. Amazon lives covered for FY19, FY20, and FY21 are estimated at 250,000, 350,000, 500,000. PGNY discloses annually the size of its largest customer which we presume has been Amazon since FY19. Google lives covered in FY17 thru FY21 are based on annual employee headcounts disclosed in its10-Ks.

Is PGNY Overcharging For Fertility Medications? Are They Deemphasizing Less Lucrative IVF Protocols?

We estimate the unit economics for PGNY's core fertility benefit have decreased from $14K per ART cycle to $12K. How did PGNY offset the reduced growth profile of its core business? We believe that PGNY just pushed higher priced and/or more drugs to women undergoing fertility treatments. Fertility industry publications (FertilityIQ, FertilitySpace) indicate that the average costs of fertility medication per cycle of ART ranged from approximately $5K to $6K. This is substantially less than the $8K that we estimate PGNY is charging its customers. We also estimate that PGNY customers are paying almost double for the pharmacy benefit in FY22 versus the 2019 cohort.

Medication Costs per Assisted Reproduction Technology (ART) Cycle(1)



"Specialty pharmacies are notorious for overcharging on patients with insurance, thereby wiping out their lifetime maximum benefit. Patients can typically procure drugs from abroad and have them imported for exactly half of the cost as in the US."
-- FertilityIQ.com

We note that "minimal stimulation", or mini-IVF, is an accepted protocol for women under certain circumstances. SART notes several advantages, including **lower costs, fewer injections**, fewer days of monitoring, and less egg exposure to drugs. Interestingly, PGNY clearly deemphasizes the less lucrative mini-IVF, listing it last on its treatment blog under "alternative IVF protocols" and only noting its disadvantages.

Sources: PGNY 3Q22 Transcript, FY19 10-K, FY20 10-K, FY21 10-K. 3Q22 10-Q, Fertilityspace.io, fertilityiq.com, SART, PGNY website
(1) Medication Costs Per ART = Pharmacy Benefits Service Revenue / (PGNY disclosed ARTs * Total Client Utilization of Pharmacy Benefit)

Spruce Point's Earnings Quality Analysis Shows A Widening Gap Between Adjusted EBITDA And FCF

A widening gap between a company's presentation of Adjusted EBITDA and Spruce Point's Calculation of FCF is often a sign of current and future financial strain. Our calculation of FCF is significantly less than PGNY's Adjusted EBITDA presentation. Further, we calculate that its FCF margin has deteriorated since FY20. Over the last twelve months, we calculate that PGNY has generated ~$22M (FCF yield of ~0.6%). Said differently, investors are currently paying over 160x PGNY's true FCF per share.

PGNY's Adjusted EBITDA vs Spruce Point

$ in Millions	FY19	FY20	FY21	LTM
Revenues	$229.7	$344.9	$500.6	$700.1
Net Income to EBITDA Bridge				
Net income	**($8.6)**	**$46.5**	**$65.8**	**$42.0**
Depreciation and amortization	2.1	1.9	1.3	1.5
Stock-based compensation (SBC)	5.1	12.8	33.7	86.5
Other income	0.0	(0.2)	0.4	0.3
Interest expense, net	0.1	(0.1)	(0.5)	(0.3)
Convertible Stock Valutation Adj.	18.2	0.0	0.0	0.0
Provision (benefit) for income taxes	0.0	(37.8)	(33.3)	(22.1)
Vendor Arbitration Legal Fees	1.3	9.3	0.0	0.0
IPO costs	0.2	0.0	0.0	0.0
PGNY's Adjusted EBITDA	**$18.3**	**$32.4**	**$67.3**	**$107.8**
% of Revenues	8.0%	9.4%	13.5%	15.4%

$ in Millions	FY19	FY20	FY21	LTM
Cash Flow From Operations	**($1.5)**	**$36.2**	**$26.0**	**$37.7**
Less: Capex	(3.0)	(1.0)	(2.1)	(3.1)
Less: SBC Taxes Paid	0.0	(8.9)	(18.0)	(12.8)
Adjusted Spruce Point FCF	**($4.5)**	**$26.2**	**$5.9**	**$21.7**
% of Revenues	-2.0%	7.6%	1.2%	3.1%

Widening gap between reported EBITDA and FCF.

PGNY's Margin Expansion Is Illusory, Largely The Result of Aggressive Use of Stock Compensation

Optically, PGNY would like investors to believe that it is achieving significant operating leverage. In reality, the largest contributor to its operating leverage story has been its aggressive use of stock-based compensation (SBC). Netting out the benefit of SBC uncovers that PGNY's EBITDA margins are in decline.

PGNY's Adjusted EBITDA

$ in Millions	FY19	FY20	FY21	LTM
Revenues	$229.7	$344.9	$500.6	$700.1
EBITDA Margin Calculation				
Net income	($8.6)	$46.5	$65.8	$42.0
Depreciation and amortization	2.1	1.9	1.3	1.5
Stock-based compensation (SBC)	5.1	12.8	33.7	86.5
% of Revenues	*2.2%*	*3.7%*	*6.7%*	*12.3%*
Other Add-Backs	19.7	(28.8)	(33.4)	(22.2)
PGNY's Adjusted EBITDA	**$18.3**	**$32.4**	**$67.3**	**$107.8**
% of Revenues	*8.0%*	*9.4%*	*13.5%*	*15.4%*

$ in Millions	FY19	FY20	FY21	LTM
Spruce Point Adjusted EBITDA (1)	**$13.3**	**$19.6**	**$33.6**	**$21.3**
% of Revenues	5.8%	5.7%	6.7%	3.0%

Stock Based Compensation has accelerated from 2% of FY19 revenues to >12% over the most recent twelve months.

Spruce Point always contends that SBC has real economic costs in the form of shareholder dilution. Our Adjusted EBITDA performance metric treats all compensation equally and includes the costs of SBC.

GAAP Operating Cost Breakout

$ in Millions	FY19	FY20	FY21	LTM
GAAP Operating Costs	**$35.8**	**$61.7**	**$79.8**	**$128.1**
SBC included in GAAP Operating Costs	*$4.5*	*$9.8*	*$24.7*	*$63.2*
Stock Comp % of total GAAP Opex	***13%***	***16%***	***31%***	***49%***

Stock based compensation is now ~50% of all operating expenses up from 13%, 16%, and 31% of operating costs for FY19, FY20 and FY21, respectively.

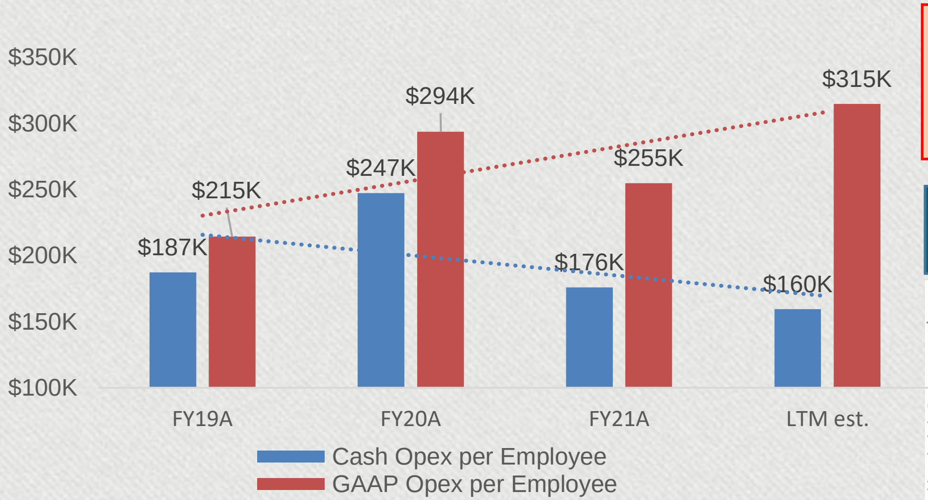
Sources: PGNY DRS, 3Q19 10-Q , FY19 10-K, 1Q20 10-Q, 2Q20 10-Q, 3Q20 10-Q, FY20 10-K, 1Q21 10-Q, 2Q21 10-Q, 3Q21 10-Q, FY21 10-K, 1Q22 10-Q, 2Q22 10-Q, 3Q22 10-Q

(1) Spruce Point's Adjusted EBITDA calculation removes the benefit of Stock Based Compensation to its calculation

Stock Compensation Is Replacing Cash Compensation

Management's narrative on profitability conveniently excludes the ballooning cost of SBC to public shareholders in the form of dilution. As recently as February 2022, Peter Anevski, commented that PGNY was not replacing any cash compensation with stock compensation. We note that a large stock grant to non-executive employees was made on October 18, 2022. Spruce Point estimates that "cash" operating costs per employee has decreased from $247K in FY20 to ~$160K in the LTM period ending September 30, 2022.

Operating Cost Per Employee (1)



CEO Quote from February 2022

"We're not replacing any level of cash comp with stock comp"
– Peter Anevski on 4Q21 Conference Call on February 28, 2022

Material Non-Executive Grant Occurred on October 28, 2022

November 2022 Retention Grants

On October 18, 2022, the Company's Board of Directors granted 3,706,800 non-qualified stock options and 207,400 restricted stock unit awards under the Company's 2019 Equity Incentive Plan to certain key executives and employees of the Company. In each case, the awards vest 25% on the first anniversary of the vesting commencement date with the remaining 75% of such award vesting in equal quarterly installments thereafter over the next three years.

This is the first material grant to non-executive employees that has been disclosed in its filings.

Sources: PGNY 4Q21 Transcript, FY19 10-K, FY20 10-K, FY21 10-K,

(1) PGNY disclosed year ending employees for FY19, FY20 and FY21. Employees for the LTM metric are estimated by Spruce Point based on 30% employee growth in FY22
Cash OPEX excludes stock compensation from operating costs

We See Downside To FY 2023 Consensus Expectations

We See Numerous Headwinds To PGNY's 2023 Financial Outlook

Wall Street analysts are projecting 2023 revenue growth of $283 million and improving margins. We believe these expectations are overly optimistic based on the breadth of revenue and profit headwinds we see in 2023.

Headwinds to PGNY 2023 Results

Issue	Description	Potential Financial Impact
Non-Recurring Tailwinds From 2022	We believe PGNY benefitted from three material quantifiable tailwinds in 2022 that we do not believe will repeat in (or will detract from) 2023: • Early client starts in 2H 2022 ($30M) • Amazon and Alphabet member growth ($26M) • Pharmacy price increases ($63M)	Accounted for $119 million, or ~47% of 2022 dollar growth
Member Losses	PGNY's technology heavy client base is experiencing layoffs. We extrapolate known layoffs to all clients and examine clients that may drop PGNY after being acquired by much larger companies that are not current PGNY clients. We believe additional rounds of layoffs are likely in 2023, existing client hiring will be more tepid, and that competitive losses will occur, all of which are difficult to quantify at this time.	Up to $52 million
Lower Benefit Utilization	We show that PGNY utilization is in decline, as rates drop at existing clients after members exhaust pent-up demand. Lower new employee growth and potential member IVF deferrals due to a weak economy are likely to further suppress utilization in 2023.	TBD?
Pharmacy Outperformance Likely Done	Adoption of PGNY's pharmacy benefit among existing clients has been a major growth driver, but we see this dynamic ending.	TBD?
Worsening Customer LTV / CAC	We believe PGNY's newer clients are offering less generous fertility benefits, meaning that new clients offer lower potential revenue per member. Moreover, we show that PGNY customer acquisition costs have increased dramatically over the past three years, and the increasing reliance on smaller clients will exacerbate CAC issues.	TBD?

Source: Spruce Point Research

We Believe Three Major Benefits To 2022 Revenues Are Unlikely To Recur In 2023

As noted, PGNY's 2022 selling season will result in the addition of 1.2M lives to start 2023, the same number of lives added to begin 2022. We calculated PGNY's anticipated 2022 dollar revenue growth based on its January 9th guidance, $286M, and then exclude the impacts of four quantifiable dynamics we do not believe will repeat in 2023. These include the impacts of early client starts in 2H 2022, revenue growth from Amazon and Google, pharmacy pricing Increases, and the Menapor shortage. We believe this provides a framework to assess the achievability of current consensus 2023 revenue estimates. Excluding the estimated $110M net tailwind to revenues that will not repeat in FY23, sell-side estimates look wildly optimistic.

$ in Millions

FY22E Dollar Revenue Growth	
[A] FY22E PGNY Revenue Guidance[1]	$787
[B] FY21A Revenue	501
[C] = [A] - [B] FY22E Dollar Revenue Growth	**$286**
Spruce Point FY22 Core Revenue Growth Calculation	
Estimated Non Recurring FY22 Revenue Tailwinds	
[D] Early Starts from 2022 Selling Season[2]	$30
[E] Estimated FY22 Revenue Growth from Amazon + Google[3]	26
[F] Pharmacy Price Increase[4]	63
[G] = [D] + [E] + [F] Total Non Recurring FY22 Revenue Tailwinds	**$118**
Estimated Non Recurring FY22 Revenue Headwinds	
Addback of Revenue Decline Experienced in FY22 from Menapor Shortage[5]	8
[H] Total Non Recurring FY22 Revenue Headwinds	**$8**
[I] = [G] - [H] Total Non Recurring Adjustments to FY22 Revenues	**$110**
[J] = [C] - [I] Spruce Point "Core" Growth from 1.2M Member Additions[6]	**$175**
FY23E Revenue Growth Attribution	
[K] FY23E Revenues	$1,023
[A] FY22E PGNY Revenue[1]	787
[L] = [K] - [A] FY23E Revenue Growth	**$236**
[J] Spruce Point "Core" Growth from 1.2M Member Additions[7]	**$175**
[M] = [L] - [J] Incremental FY23 Revenue Growth in Sell-Side Expectations Beyond "Core" Growth	**$61**

$118M of tailwinds in FY22 that will not likely repeat in FY23

Sources: Bloomberg, Spruce Point Research, PGNY Press Release (January 9, 2023), PGNY Press Release (November 28, 2022), PGNY 3Q22 Press Release, PGNY 3Q21 Press Release, 1Q22 10-Q, 2Q22 10-Q, 3Q22 10-Q, FY21 10-K

Footnotes: (1) PGNY updated FY22 guidance on November 28, 2022 and January 9, 2023; (2) See Spruce Point Analysis on Slide 29 that establishes our viewpoint on the revenues attributable to early starts from the 2022 selling season; (3) Spruce Point Estimate. Growth from Amazon and Google was $25.8M for 9M2022 vs. 9M2021; (4) Spruce Point Estimate. We assume 42,000 ART Cycles * 83% Rx Penetration * $1793 Increase in Medication Per ART (see slide 37); (5) Spruce Point Estimate. On 3Q22 conference call on November 3, 2022, PGNY management estimated that the shortage of Menapor would result in a revenue headwind of $7.5M to $12.5M. When PGNY updated guidance on November 28, 2022, they attributed the increase to their guidance based on the resumption of deliveries of Menapor; (6) 1.2M Member additions from the FY22 selling season was disclosed in PGNY's 3Q21 press release; (7) 1.2M Member additions from the FY23 selling season was disclosed in PGNY's 3Q22 press release

Spruce Point Capital Management

We Foresee Layoffs At Existing Clients Likely To Pressure Member Growth

We analyzed layoff announcements at 41 of PGNY's 282 clients (generally their largest) and extrapolated member reductions to the remaining client base, applying a 2.8% average headcount reduction. We also assess the impact if Cerner and VMWare drop PGNY after their sales close, as their acquirers are not PGNY clients.

Layoffs at Known PGNY Clients

PGNY Client	2021 Year End Employees	Announced Layoffs	Notes	Sources
Amazon.com (1)	500,000	18,000		Link
Alphabet	156,500	12,000		Link
Meta Platforms	71,970	11,025		Link
Microsoft Corporation	221,000	10,000		Link
Salesforce	73,541	8,000		Link
IBM	53,628	3,900	US only	Link
PayPal Holdings	30,900	3,000	Includes August cut	Link
AT&T	203,000	2,500	Average 10K/yr	Link
3M Company	95,000	2,500	Estimate	Link
Phillips 66	14,000	1,100		Link
The Cooper Companies	14,000	800		Link
Lyft	4,453	700		Link
C.H. Robinson Worldwide	16,877	650	More layoffs likely	Link
V.F. Corporation	20,300	600		Link
Dropbox	2,667	315		Link
Illumina	9,800	300	5% of US	Link
Teleflex	14,000	200	Estimate	Link
Total		**75,590**		
PGNY Clients Being Acquired:				
Vmware	37,500	37,500	Acquired by AVGO	
Cerner	25,150	25,150	Acquired by ORCL	
Total		**62,650**		

Illustrative Potential Revenue Impact of Layoffs

Client Population	Estimated Members Lost (2)	Female Member Utilization (3)	Potential Lost Revenue ($M) (4)
41 Identified Clients (5)	113,385	1.07%	$26
Extrapolated to Other 239 Clients (6)	22,400	1.07%	$5
Total	**135,785**		**$31**
Potential Losses From Known Acquisitions (7)	**93,975**	**1.07%**	**$21**
Grand Total			**$52**

(2) Employees converted to members at a 1:1.5 ratio, a Spruce Point estimate
(3) Spruce Point estimate; equal to 2021 actual figure
(4) Assumes 0.85 Smart Cycles at $25K each based on 2019-21 average ART cycles per female utilized life
(5) Layoffs equal 2.8% of 2.7M employees from these clients, which represent 4M members
(6) Layoffs equal 2.8% of remaining 0.8M members from other 239 clients
(7) Represents employee count of Cerner and VMWare multiplied by 1.5

We note that there will be other important headwinds to member growth in 2023, including: (1) additional layoffs in 2023, (2) reduced hiring at existing clients, and (3) potential client losses to competitors.

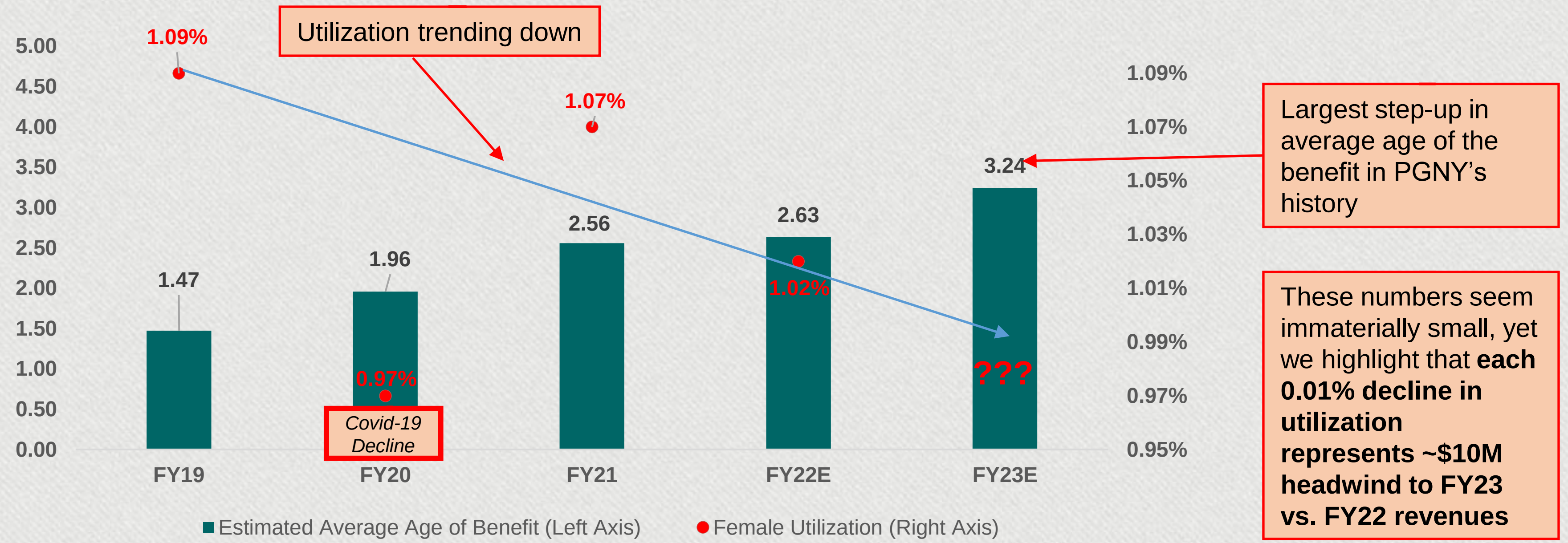
Source: Spruce Point Research

(1) We adjust Amazon YE 2021 employees to equal the number of members using the PGNY benefit based on our previously discussed estimates. We assume that all announced layoffs at Amazon will come from the PGNY member population, as the details disclosed to date suggest the layoffs came largely from corporate staff.

Utilization Is Decreasing As The Fertility Benefit Matures Within PGNY's Member Base

We estimate that the average duration of the fertility benefit across PGNY's aggregate membership base will have increased to 3.24 years entering FY23 versus 1.47 years in FY19. We note that membership utilization has decreased by ~6.5% in FY22 (from 1.09% in FY19 to an estimated 1.02% in FY22). Historical trends indicate that utilization will decrease again next year as the average age of the benefit will see its largest step increase since PGNY went public.

PGNY's Maturing Fertility Benefit and Female Utilization Trends



Logically, lower hiring rates among existing clients will also reduce utilization as relevant current employees exhaust their fertility benefits. In addition, we believe it is important to note that IVF, pregnancy, and having a child are very expensive, even with generous healthcare insurance. Therefore, while difficult to quantify, we expect a weaker macroeconomic picture will be an incremental headwind to utilization.

Sources: PGNY FY19 10-K, FY20 10-K, FY21 10-K, 3Q22 10-Q, Spruce Point Estimates

Compared With Analyst Expectations Directly After PGNY's 2019 IPO, Disappointing Medical Revenues Have Been Offset By Recent Pharmacy Outperformance

PGNY has failed to meet fertility benefit revenue expectations set when it went public. However, the rapid adoption of the pharmacy benefit by existing customers has offset those misses. Importantly, we believe there is little juice to squeeze from pharmacy adoption going forward.

Medical and Pharmacy Revenue Performance Versus Expectations at IPO, as Represented by Goldman Sachs Research Initiation Dated November 19, 2019

($ in millions)	2019	2020	2021	2022
Medical Revenue				
2019 Goldman Sachs Model	$187	$307	$446	$610
Actual / Estimated (1)	$190	$254	$356	$500
PGNY Performance vs Expectation	**2%**	**(17%)**	**(20%)**	**(18%)**
Pharmacy Revenue				
2019 Goldman Sachs Model	$40	$85	$149	$220
Actual / Estimated (1)	$40	$91	$145	$282
PGNY Performance vs Expectation	**(0%)**	**8%**	**(2%)**	**28%**
(1) 2022E segment revenue from Jefferies Research				

Source: Spruce Point Research, Goldman Sachs Research

As PGNY Has Expanded Its Client Base, It Has Added Non-Tech Clients That Are Generally Less Generous With Fertility Benefits

During our diligence, we were able to quantify the PGNY benefit at some of its larger clients. We note that many of the early technology and biotech clients that comprised a large portion of PGNY's client adds offered three or more Smart Cycles to their employees. However, as PGNY has added more clients outside these knowledge worker sectors, the average fertility benefit offered has been much less generous. In addition, our research further suggests that fertility benefits are reaching full penetration among large technology companies, meaning that companies from these less generous sectors will account for a disproportionate share of future PGNY client adds, creating an additional headwind to PGNY revenue growth.

Technology and Biotech Clients

Maximum Fertility Benefit Cycles	
ALPHABET	3
AMAZON	2
BLOCK	2
ILLUMINA	3
JAZZ PHARMA	2
LYFT	4
META	4
MICROSOFT	3
PAYPAL	2
SALESFORCE	3
Average	**2.80**

Mature Industry Clients

Maximum Fertility Benefit Cycles	
3M	3
TD Bank	3
BP	3
WILLIS TOWERS	3
HCA HEALTHCARE	2
ABBOTT	2
CHARTER COMMUNICATIONS	2
VF CORP	2
CH ROBINSON	2
LINCOLN NATIONAL	2
EXELIXIS	2
Average	**2.36**

Benefits Lead at Technology Company, Tegus, 11/17/22

"So within our competitive set, which is like characterized as north of 50,000 employees and within the software and high-technology industry, something like Amazon, Google, Microsoft, Apple, Oracle, Salesforce, Twitter, these kind of players, the penetration of a carve-out fertility benefit is probably close to like 75%"

More mature industries on average are offering about a half cycle less of benefit to their employees than PGNY's core technology customer base. Lower coverage reduces potential revenue per member at new clients and thus erodes new customer profitability. We have also heard anecdotally that, in response to deteriorating business conditions, some existing PGNY clients may consider reducing their fertility benefit, either by reducing the smart cycles covered or reducing eligibility parameters.

Sources: Spruce Point Research, Tegus

Spruce Point Capital Management

Contrary to Management's Statements, We Estimate CAC Has Increased And Will Likely Further Deteriorate

In contrast to PGNY management's comments, we calculate increasing new member acquisition costs, whether based on total lives added during a fiscal year or only during a selling season. We expect CAC to further increase as PGNY increasingly relies on smaller clients to grow members.

PGNY Management Commentary on CAC

CFO Mark Livingston on Q4 2021 Earnings Call	***"we have been able to improve our sales and marketing efficiency each year"***

Analysis of PGNY Customer (New Member) Acquisition Cost Trends

	2017	2018	2019	2020	2021	2022	2019-2022 Change
Members Added During Calendar Year (000)	--	486	797	818	564	1,701	
FY GAAP Sales and Marketing Expense ($M) (1)	--	$7	$12	$15	$20	$47	
Average Cost per Member Added During Year	**--**	**$14.98**	**$14.94**	**$18.34**	**$35.78**	**$27.42**	**84%**
Members Added During Selling Season (000) (2)	460	316	750	400	1,200	1,200	
Q1-Q3 GAAP Sales and Marketing Expense ($M) (3)	$3	$5	$9	$10	$12	$33	
Average Cost per Member Added During Selling Season	**$6.52**	**$16.27**	**$11.53**	**$25.58**	**$10.40**	**$27.23**	**136%**

(1) 2022 GAAP S&M expense a Spruce Point estimate based on a Q4 25% QoQ increase over Q3 (compared to 58% average increase in 2020 and 2021)

(2) For 2018 and 2019, represents change in members from YE of previous year to Q1 end; for 2020, 2021 and 2022, represents management commentary on members added during selling season

(3) 2017 S&M an estimate based on reported $4.3M S&M expense for FY2017

Source: PGNY Q3 2022 earnings call, PGNY Q4 2021 earnings call, PGNY Q3 2021 earnings call, PGNY Q3 2020 earnings call, PGNY Q3 2019 earnings call, PGNY 10-Ks for 2019, 2020, and 2021

Spruce Point Capital Management

We Believe PGNY's Economics Will Be Further Pressured by Fertility Clinic Consolidation

The fertility clinic landscape has changed markedly since PGNY launched its fertility benefit business in 2016. Numerous private equity firms have acquired clinic networks and pursued roll-up strategies, resulting in significantly greater sector concentration. We believe the greater scale and financial sophistication (through PE ownership) of clinic chains bodes poorly for PGNY. These trends are likely to tilt bargaining leverage toward the clinics, particularly since: (1) clinic capacity remains constrained relative to demand, and PGNY must maintain sufficient capacity to service clients and (2) PGNY must renegotiate clinic agreements every year, while client agreements are typically for three years. Thus, economic splits to PGNY, and thus its core unit economics, are likely to deteriorate.

Private Equity Firms Own Approximately 50% of Clinics in the PGNY Network

Spruce Point Clinic Analysis

- To simplify the analysis, we compiled a list of PGNY in-network clinics located within 250 miles of the top 20 metropolitan areas in the US, which yielded 413 fertility clinics.
- Using a number of sources, **we determined that 207 of those clinics, or approximately 50%, were ultimately owned by private equity firms**, and another 22 (or 5%) were owned by a public company.
- This is a major increase relative to GenderSci Lab's estimate that 29% of 2018 ART cycles occurred at private equity owned practices.
- Major clinic chains represented include: USFertility (Amulet), Prelude (Lee Equity), IVIRMA (KKR), First Fertility (Sverica), and CCRM (TA / Atlas)

Private Equity News

Ready for consolidation: Buyouts eye fragmented fertility clinics

FORTUNE

Fertility Inc.: Inside the big business of babymaking

One in eight couples struggles to conceive. No wonder investors are injecting cash into the industry.

Institutional Investor

This Venture Capital Fund Wants to Get You Pregnant

TAKE ON WALL ST

Wall Street greed's latest target: fertility clinics

Source: Spruce Point Research, Private Equity News, Institutional Investor, Fortune, Take on Wall Street

We See A Likelihood of Expectations Being Revised Lower For FY23 Guidance

Our diligence suggests that a reset of revenue growth and EBITDA expectations will likely occur when PGNY issues FY23 guidance in late February 2023 on its next earnings call. Revenue tailwinds observed in FY22 will likely cease in FY23. Further, layoffs within the technology sector (PGNY's largest sector exposure), likely client losses from M&A, declining revenues from Google and Amazon, reduced utilization within its member base, as well as broader recessionary implications, will all weigh on PGNY's revenue growth. We see growth slowing to as low as 12% in FY23 vs. the ~30% revenue growth rate that is currently embedded in sell-side expectations.

Spruce Point Estimates For PGNY 2023E Results

		Spruce Point Estimates		
$ in Millions	**Consensus**	**Low**	**Base**	**High**
FY22E Revenues Guidance		$786.5	$786.5	$786.5
Core Revenue Growth from 1.2M Member additions[1]		$175.2	$175.2	$175.2
Layoffs and Client losses from M&A[2]		($40.0)	($52.0)	($64.0)
Utilization		($40.0)	($20.0)	$0.0
Underlying Female Utilization Assumption		*0.98%*	*1.00%*	*1.02%*
FY23E Revenues	**$1,022.8**	**$881.7**	**$889.7**	**$897.7**
Growth	30%	12%	13%	14%
Adj. EBITDA	$169.6	$146.2	$147.5	$148.9
% of Revenues	16.6%	16.6%	16.6%	16.6%
Stock Based Comp[3]	$100.5	$100.5	$100.5	$100.5
% of Revenues	9.8%	12.8%	12.8%	12.8%
Spruce Point Adj. EBITDA	**$69.1**	**$45.7**	**$47.0**	**$48.4**
% of Revs	6.8%	5.2%	5.3%	5.4%

Core revenue growth of $175M from 1.2M member additions

Assumptions based on announced layoffs and likely client attrition from M&A

Our range of estimates assumes that female utilization could decrease to 0.98% vs. the 1.02% female utilization we estimate for FY22. Each 0.01% of utilization decline equates to approximately $10M of revenues.

Sources: Bloomberg and Spruce Point Estimates, November 2022 Press Release

(1) Core revenue growth calculation is shown on Slide 43
(2) Estimated impact from layoffs and client losses is shown on Slide 44
(3) Stock based compensation for FY22 was disclosed in PGNY's 8K filed on November 28. We assume that consensus estimates include equivalent amounts of SBC for FY23 and FY22

We Believe PGNY's Differentiation Fades As Its Competitive Landscape Becomes Increasingly Crowded

We Believe PGNY Has Under-Represented The Competitive Environment

Spruce Point Capital Management

PGNY has often stated that there is "nobody" that is competitive with them. We find these claims to be highly questionable, as numerous credible competitors have emerged. Benefits consultants and industry participants characterize the landscape as commoditized, and, just months after claiming "nobody" was competitive, PGNY lost Walmart, the largest US employer, to one of the emerging providers it discounts.

Who Do You Believe?

PGNY View of Competitive Landscape	
CEO Peter Anevski at 2022 JPMorgan Healthcare Conference, 1/11/22	*"**There really is nobody**. And when I say nobody, nobody, not a carrier, not a VC-backed start-up, nobody that takes every component of what it means to manage a fertility benefit and addresses it. And so at the end of the day, a lot of people have marketing materials and have a lot of claims, but there is a reality."*

"Reality"?	
Industry Consultant, Spruce Point Interview, 11/17/22	*"**It's becoming much more of a commoditized service…**there's only so many fertility clinics, and so they are not exclusive to any one company."*

A little over eight months later PGNY fails to win one of the best clients in the country?

Walmart Names Kindbody as Provider for Associate Fertility and Family-Building Benefits Nationwide

Walmart associates will have access to more than 30 state-of-the-art clinics across the U.S., including a new clinic in Northwest Arkansas

Sept. 27, 2022 | 4 Min. Read | Working at Walmart

Source: Bloomberg, Spruce Point Research, Walmart press release

We View PGNY's Approach To Fertility Treatment And Benefits As Not Differentiated And Easy To Replicate

We view PGNY as purely an administrative middleman, with no direct control over fertility clinic operations. Despite not being an actual healthcare provider, the Company has pushed a specific fertility treatment protocol, elements of which have been widely embraced by the industry since they maximize clinic and benefit manager revenue. As we discuss later, we believe this has occurred despite obvious conflicts of interest and questionable science.

Core Elements of the PGNY Fertility Benefit Structure and Treatment Protocol

Element	Description	Spruce Point Observation
Smart Cycle Benefit Structure	Benefits delivered in treatment bundles (cycles) with values assigned to each; most employers offer 2-3 smart cycles	A structured fertility benefit is easy to replicate; our research indicates some clients simply prefer a maximum dollar benefit as opposed to the "Smart Cycle" approach, as it has been criticized as lacking transparency and cost controls
Direct to IVF	Allowing patients to proceed directly to IVF as opposed to first requiring multiple IUI cycles which might exhaust a portion of a members' benefit	The industry has largely embraced this practice as a revenue maximizer, and even some large payers have incorporated greater flexibility to not disincentivize IUIs
Preimplantation Genetic Testing	Providing genetic testing on the theory that it will improve live birth rates	The industry has largely embraced this practice as a revenue maximizer despite questionable scientific support for its impact on outcomes
Single Embryo Transfer	Encouraging (or providing financial incentives or even forcing) clinics to implant a single as opposed to multiple embryos in order to reduce the potential for multiple births	The industry has largely embraced this practice given its attractiveness to clients in reducing healthcare expense volatility; we believe most multiple embryo transfers are done by self-pay clients (not using a fertility benefit)

Despite their widespread embrace, we show later that the scientific support for these is questionable.

Since other benefit managers have largely adopted the PGNY treatment protocol, we expect that fertility outcomes, a major (although questionable) marketing point for PGNY, will cease to be a point of competitive differentiation.

Source: Spruce Point Research

Our Research Suggests That Fertility Benefits Have Become Largely Commoditized As The Landscape Grows More Crowded

We believe investors would be wrong to assume that PGNY is handily dominating the market. To the contrary, we believe the core elements of the PGNY solution are commoditized, and PGNY's differentiation is minimal. In fact, several high-growth private companies have out-innovated or out-maneuvered PGNY in other areas.

Fertility Benefits Competitive Landscape

Solution Element	PGNY	WINFertility	Kindbody	Carrot	Maven
"Superior" Outcomes	✓	✓	✓	✓	✓
Genetic Testing	✓	✓	✓	Considered "non-essential"	✓
Patient Advocates	✓	✓ >5 yrs experience	✓	✓	✓
Large/Quality Clinic Network	✓	✓	✓	✓	✓
Pharmacy Benefit	✓	✓	✓	✓	✓
Leverage Technology	? Less advanced	✓ Many partnerships	✓	✓	✓ Leader?
Credible Clients	Multiple	ACN, BA, ECL, DIS, JPM, PwC, SHW	ATVI, MDT, TSLA, WMT	BOX, LCID, NFLX, OKTA, SNAP, ZM	AT&T, BSX, L'Oreal, MSFT
Differentiation	• Scale? • Benefit structure?	• Payer relationships	• Clinic ownership • Transparent / standard pricing	• International scope • Payment solution	• Navigation • Service breadth • Payment solution

We believe the emerging providers are the ones currently innovating.

Source: Spruce Point Research

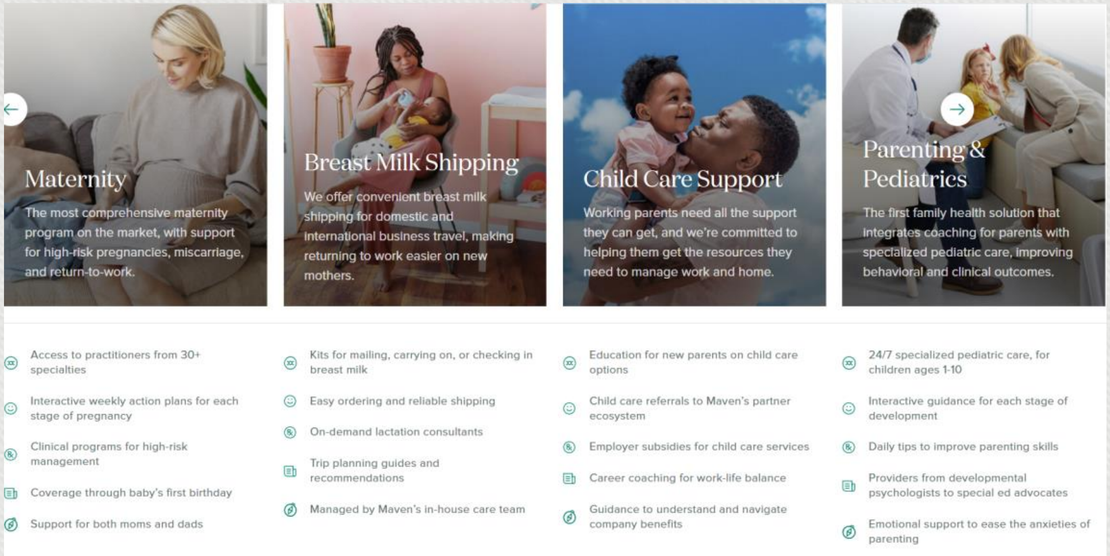
Unlike PGNY, Competitors Have Expanded Their Benefit Coverage Beyond Fertility

PGNY is a fertility pure-play in a market where we find fertility benefits becoming largely commoditized, and fast-growing competitors are driving differentiation and competitive advantage through significantly broader treatment coverage capturing the broader lifecycle of fertility, pregnancy, parenting, and ancillary services such as mental health.

Kindbody and Maven Have Expanded Their Treatment Coverage Beyond Fertility

Not only has Kindbody expanded its service breadth, but it has brought key capabilities in-house through acquisitions: Alternative Reproductive Resources (gestational surrogacy) and Phosphorus Labs (genetic testing).

Maven is widely considered to offer the greatest benefit coverage, including numerous relevant services that benefit members beyond fertility.



Benefits Consultant, Willis Towers Watson, Spruce Point Interview, 11/21/22	*"Progyny's biggest con is that it only focuses on infertility. It is unclear how it will fare with companies that want an integrated family benefit."*
Benefits Lead at Technology Company, Tegus, 11/17/22	*"…Progyny has really honed in on IVF…whereas the other guys are more diversified and it's more of a family planning kind of service and not just like a fertility benefit."*

Source: Spruce Point Research, Kindbody website, Maven website, Tegus

We Find That PGNY Competitors Have Done More To Integrate Technology Into Their Offering

Spruce Point Capital Management

PGNY is generally considered a technology laggard compared to its fertility benefit manager peers, which either have strong digital DNA given their recent founding or have sought to partner with leading technology platforms.

Fertility Benefit Manager Embrace of Technology

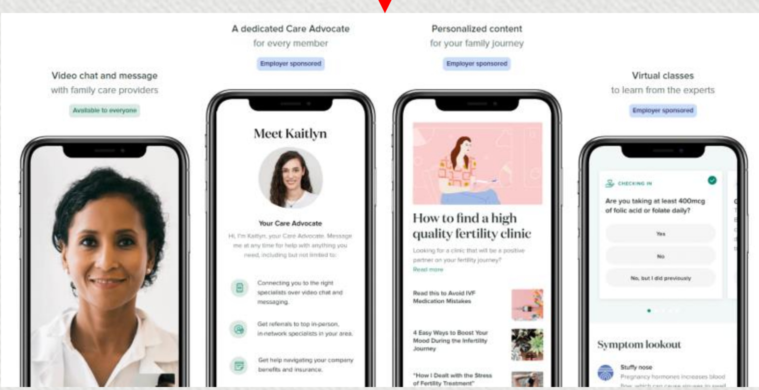
Why did one of the leading fertility apps decide to partner with WIN rather than PGNY? WIN has also partnered with Dadi and Ava and leverages wearables.

WINFertility Adds Cleo's Family Support Programs to WIN Family Services, a Comprehensive and Personalized Inclusive Family-Planning Support Program for Employers

WINFertility's partnership with Cleo enhances WIN Family Services for families from preconception through parenting with comprehensive and personalized family support

GREENWICH, Conn. (PRWEB) March 29, 2022 -- WINFertility (WIN), the leading global fertility benefits management company with the largest portfolio of employer clients, adds Cleo's comprehensive global family support solution, to WINFertility's WIN Family Services, a comprehensive and inclusive family-building advocacy and support program for employers. The partnership will allow WIN members to access Cleo's personalized family support platform, including Cleo Guides, who deliver one-to-one coaching to help individuals and families at all stages from family planning through parenting teens. Cleo clients will also have the opportunity to access WIN services, including support for fertility management, adoption ... egg freezing.

Maven is lauded for its navigation engine and technology leverage.



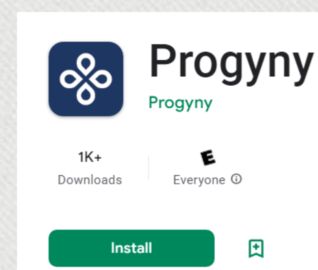
Carrot has invested in its telehealth offerings as a core element of its benefit.

Telehealth with doctors, nurses, and more to navigate fertility & pregnancy healthcare

Carrot Core offers many of the same features today's Carrot members use the most: fertility and family forming education, unlimited virtual chats with physicians and other specialists, an expert-authored library of resources, and exclusive discounts. It also includes access to one of our newest offerings: Carrot Pregnancy, which includes unlimited virtual access to OB/GYNs and pregnancy specialists, prenatal yoga and meditation classes, guidance from doulas and midwives on birth plans, and more.

Carrot Core also includes an expansive telehealth program with unlimited virtual visits with reproductive endocrinologists, urologists, and adoption experts; on-demand chats with mental health and emotional support experts including family therapists and grief counselors; and virtual chats with OB/GYNs, doulas, midwives, nutritionists, and lactation specialists to answer pregnancy questions.

In contrast, the PGNY app only has "1K+" downloads on the Google Play Store



Despite their smaller size, Maven, Carrot, and Kindbody have over 2x, 3x, and 4x the followers of PGNY on LinkedIn

Source: Cleo, Carrot, Maven, LinkedIn, Google Play Store

The Loss of Activision To Kindbody Presents A Compelling Case Study For The PGNY Pitch Vs. Reality

Activision Blizzard was one of PGNY's earliest client wins, signing a contract in 2016. After five years, Activision switched to competitor Kindbody in January 2022. We believe the wide range of issues Activision encountered with PGNY highlights the risks to PGNY as more clients roll off their initial contracts.

Interview With Vice President Global Benefits at Activision Blizzard on March 23, 2022 From Tegus	
Poor Data and Reporting	*"The **reporting wasn't excellent**. We did learn of cases where multiple embryos were implanted, that didn't make me very happy. I don't know that it resulted in neonatal ICU cost, but it was not exactly what I had been sold…I felt that **Progyny's ability to report interesting, useful data was pretty lacking**."*
Higher Cost	*"I think in general, so we use a broker consultant called Mercer, and they were giving us information that **we were not alone in our inability to understand the lack of cost control with Progyny.**"*
Inferior / Narrow Offering	*"And after about three years, we began to see some cracks and begun to begin looking at alternatives to Progyny…So we did an RFP last year and Kindbody guaranteed some things that were very attractive. For example, **across the board saving service-for-service of 20%**, which was quite substantial, given the fact that we invest $1 million or so in fertility treatments in a year. They also had some other attributes that they gave them an advantage, which included **a really strong behavioral health and behavioral support model**. So they had that in-house and Progyny did not. And then third, they were also **the only firm that was able to demonstrate, not only their own DEI kind of fiber, if you will, but their ability to support a workforce that was very diverse** in what its needs were with regard to building families…They had coverage just as good as Progyny. And they also have the advantage, I think, of **having a lot of their own signature clinics, which, in my mind, gives them more control over the quality and the pricing that they're going to be passing on to us**."*
Low Switching Cost	*"If I would put it on a scale of 1 to 10 with one being very easy, **I would put it out a three probably**…But I'll say that there's been very, very low employee disruption, no employee noise over the switch. **So to me, it was quite worth it**."*
Aggressive Practices With Clinics	*"Now I wasn't aware that they lost clinics. **I knew that they were playing kind of dirty with regard to their clinics when Kindbody was also negotiating contracts with them** where they threaten to end contracts with their clinicians who were also going to sign a contract with Kindbody."*

Source: Tegus

We Believe Competitors Have Gained Significant Traction And Are Positioned For Further Gains

We believe investors should not discount PGNY's private company competitors, as they have material scale, comparable (if not superior) business momentum, and financial backing from leading investors (including a leading PGNY client in the case of Kindbody and Google).

Competitor's Have Substantial Scale and Momentum…

Reported and Estimated Covered Lives by Provider (MM)						Market Share	
	2019	2020	2021	2022	2023 (1)	2020	2022
PGNY	1.5	2.3	2.9	4.6	5.4	30%	30%
WINFertility	na	4.6	na	7.0	na	60%	46%
Kindbody	na	0.2	0.5	2.1	3.0	2%	14%
Carrot	0.3	0.6	1.0	1.6	na	8%	10%

(1) At beginning of year accounting for new client starts

Observations
- WINFertility remains the largest with over 7m lives
- Kindbody grew to over 2 million lives from its founding in 2018 to 2022, outpacing PGNY's time required to meet that threshold. Kindbody will add about as many lives from 2020 to YE 2022 and from 2022 to 2023 start as PGNY despite operating a more capital-intensive model

Other Data Points
- Kindbody will have $320 million in estimated sales in 2023
- WIN claims 800+ clients compared to PGNY's 282
- Carrot grew clients from ~100 at YE 2019 to ~420 at YE 2021, representing about double PGNY's growth rate
- Carrot grew revenue by about 400% in 2021
- Maven claims to be growing lives by 4-5x per year

…And Credible and Substantial Financial Backing

WINFertility
- Acquired by NexPhase Capital (Moelis) in 2010

Kindbody
- Has raised over $180 million, last at a $1.2 billion valuation as of early 2022
- Investors include Claritas Health Ventures, Google Ventures, Perceptive Advisors, and RRE Ventures among others

Carrot
- Has raised $115 million
- Most recent financing a $75 million series C in mid-2021
- Investors include Backstage Capital, CRV, F-Prime, OrbiMed, Tiger Global, Uncork Capital, and USVP

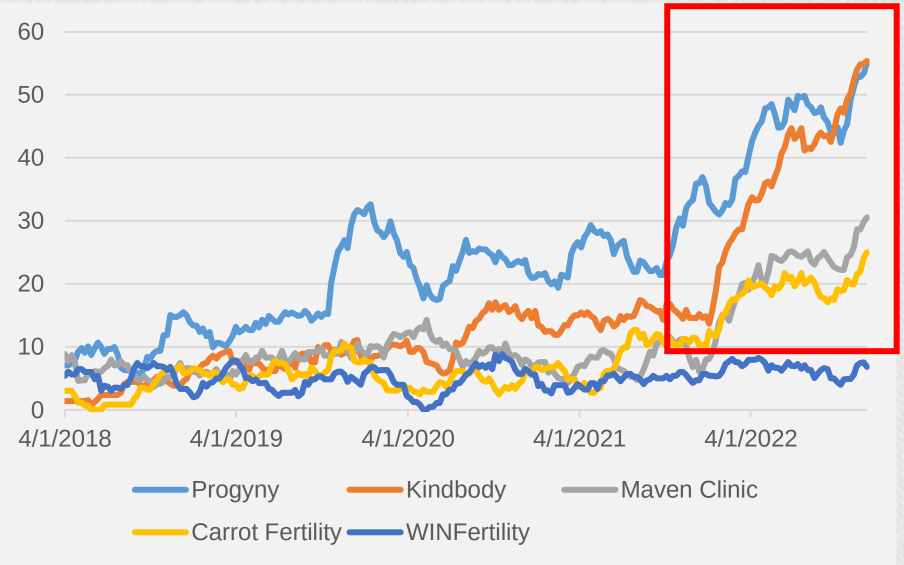
Maven
- Has raised $300 million
- Most recent financing a $90 million series E in November 2022 at a $1.35 billion valuation
- Investors include CVS Health Ventures, Dragoneer, General Catalyst, Icon Ventures, Lux Capital, Oak, and Sequoia, as well as Oprah Winfrey and several notable actresses

Source: Spruce Point Research, Barclays Research, PGNY Q3 2022 earnings call, WINFertility website, fiercehealthcare, fiercehealthcare, Tegus interview with Kindbody SVP of Pharmacy, Carrot blog, Fiercehealthcare, Maven 2022 press release and 2021 press release, LinkedIn

Google Trends Data Highlights The Exploding Interest In Other Competitors Relative To PGNY

PGNY's fertility benefit manager competitors have seen dramatic increases in Google Trends search interest since early 2022, with Kindbody surging to levels comparable with PGNY. We suspect one reason for WINFertility's modest search interest is the Company's strategy of selling through the major payers.

Trailing 13-Week Average Google Trends Search Interest



YoY Change in Average Quarterly Google Trends Search Interest

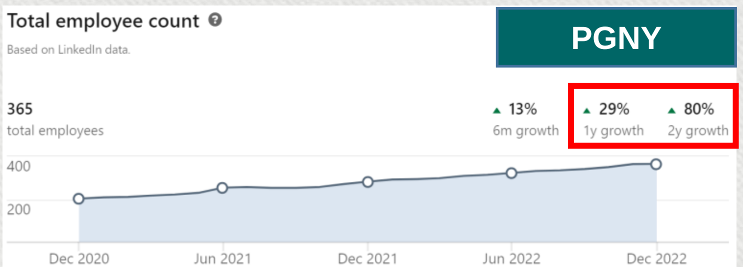
	Progyny	Kindbody	Maven Clinic	Carrot Fertility	WINFertility
Q1 2021	6%	36%	-44%	4%	83%
Q2 2021	29%	137%	-34%	109%	40%
Q3 2021	-13%	-10%	11%	153%	-23%
Q4 2021	69%	-5%	14%	46%	1%
Q1 2022	51%	118%	179%	468%	94%
Q2 2022	80%	186%	295%	110%	56%
Q3 2022	110%	228%	103%	79%	-12%
Q4 2022	70%	279%	361%	162%	44%

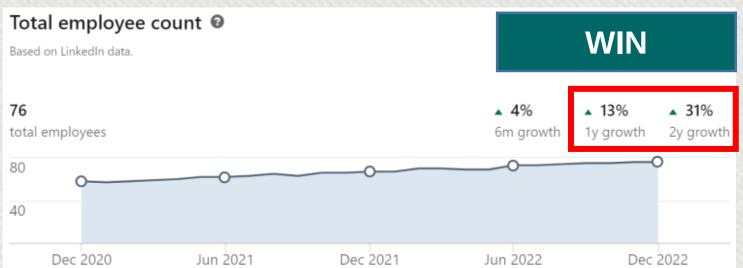
Source: Google Trends as of 12/14/22

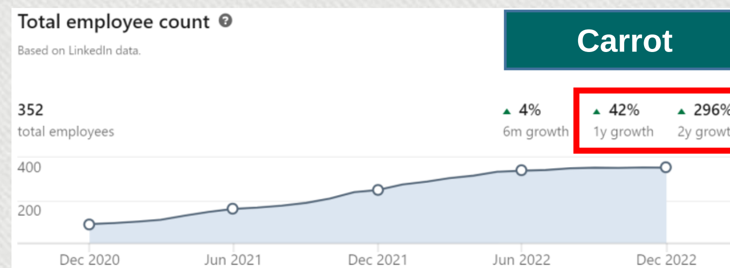
Comparing Competitor Employee Growth Further Highlights Other Players' Strong Momentum

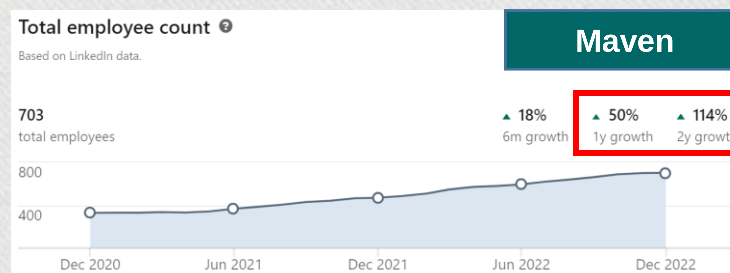
PGNY's competitors are well-funded and growing rapidly, with nearly all posting significantly higher employee headcount growth. Whatever "scale" or "first-mover" advantages PGNY may have enjoyed are rapidly deteriorating.

Comparison of LinkedIn Employee Growth Insights by Competitor









Source: LinkedIn company Insights for PGNY, WIN Fertility, Kindbody, Carrot, and Maven

WINFertility Has Scale, While Kindbody Is Pursuing Aggressive Growth

In the market for 25 years, WINFertility leads PGNY in clients and lives and has exceptionally strong payer relationships, which differentiates it from other competitors. With its unique vertically integrated model, Kindbody has put the industry on notice with exceptionally strong client and member growth and its recent Walmart win.

WINFertility: Leader in Covered Lives is Dominant with Payers

- Founded in 1997, WINFertility is the largest fertility company in the US covering 7+ million lives
- Claims improved clinical outcomes drive a 400-800% increase in ROI for clients
- Reported 98.9% patient and 100% provider satisfaction scores in 2020
- Works closely with insurance companies to offer a standalone fertility benefit

Director of Health and Benefits at Willis Towers Watson, Tegus, 4/15/22	*"If somebody is currently working with one of the Blues as their health plan payer, they generally have a working understanding of WIN, right, because WIN has really grown up servicing a lot of the Blue Cross Blue Shield plans right across the country. So they know who they are."*

Kindbody: Aggressive Grower Pursuing Vertical Integration

- Founded in 2018 by former PGNY founder and CEO Gina Bartasi, Kindbody operates ~30 fully-owned clinics and ~350 partnered locations
- Kindbody offers a breadth of services at attractive clinics with transparent flat-rate pricing
- Claims superior fertility outcomes to PGNY and 20-35% saving versus peers
- Recently acquired Vios to expand clinic footprint
- Won Walmart as a client in 2022 and lured Activision away from PGNY; others include Medtronic and Tesla

Director of Health and Benefits at Willis Towers Watson, Tegus, 4/15/22	*"Kindbody has the reputation of being…an up and comer or a fast charger...They're gaining more ground…I think they just got some additional funding. They seem to be making a marketing push, right?*
Former Director at PGNY, Tegus, 4/4/22	*"…if you've got a large employer who's got a geographic density of employees… Kindbody can say, "Hey, we're going to come in and we're going to stand up a fertility clinic right in your area." So that kind of gives people good access to it and then Kindbody gets to control all the costs and all the profit there."*

Source: Spruce Point Research, Barclays Research, WINFertility website, Kindbody website, fiercehealthcare, fiercehealthcare Tegus

Spruce Point Capital Management

Carrot Is The International Leader, While Maven Leverages Technology To Deliver the Broadest Coverage

Carrot is the clear leader in offering fertility benefits internationally, creating an avenue to penetrate existing PGNY clients and compete for their US business. Maven became the first women's health unicorn by leveraging technology and telehealth to revolutionize care delivery and has demonstrated strong Fortune 500 penetration.

Carrot: The International Leader Offering a Highly Flexible Benefit For Employees Abroad

- Founded in 2016, Carrot has differentiated itself by offering a simple, highly flexible, and customizable benefit structure and building the leading international presence
- Carrot is unique in offering debit cards loaded by employers to simplify payments
- Carrot Rx pricing is ~67% less than national averages
- Carrot services over 450 clients in over 120 countries and provides access to over 8,000 clinics, agencies, pharmacies, and legal service partners around the world

Vice President of Sales, Carrot Fertility, Tegus, 3/28/22	*"So yes, like just period full stop, we saw a number of takeaways this year. What's much more common, however, is that we would hear from a company and they would say, look, we've got Progyny in the U.S. We've got two more years on our contracts. We're pretty happy with them, but they can't support us globally. So we'll give you the global business. And then when the time is right, we'll have a competitive bid for the U.S. business.. that happens all the time."*

Maven: Offering a Technology-Enabled Broad Women's Health Platform

- Founded in 2014, Maven is a global virtual care provider that focuses on a broad range of women's health issues
- Facilitates access to over 30 types of medical specialists and dedicated patient advocates through its app/web-based solution and in-person referral network
- Has supported >15 million women to date in 175 countries
- Gained 1.2 million lives across 150 clients for menopause and ongoing care program within first 6 weeks of launch
- Says 60% of multinational clients use Maven for employees outside US

Benefits Consultant, Willis Towers Watson, Spruce Point Interview, 11/21/22	*"Maven is an example of that broader family building offering as opposed to just infertility…they are one of the best in terms of navigation and advocacy…they were started by a woman who really understood the issues…I think they do a wonderful job."*
Consultant, Spruce Point Interview, 11/17/22	*"That will be the wave of the future if you can tie into the OB-GYN and get the referrals from their practice, which is really what Maven's trying to do."*

Source: Spruce Point Research, Barclays Research, Carrot blog, Fiercehealthcare, Maven 2022 press release and 2021 press release Tegus

We Believe The Large Payers Represent A Major Competitive Threat

The large payers still account for the vast majority of ART cycles performed in the US, and their existing client relationships (as plan administrators to self-insured companies), clinic relationships, and infrastructure make them formidable competitors. We believe that structuring a more competitive fertility benefit presents a low barrier to entry. We believe the conventional wisdom that the payers are slow and inflexible is short-sighted.

Participants Throughout the Fertility Landscape See the Large Payers as a Real Competitive Threat to PGNY

Endocrinologist at Leading Fertility Clinic, Spruce Point Interview	**Spruce Point**: *"Would it be hard for a large insurance company to structure a benefit like PGNY?"* **Endocrinologist**: *"I don't see why they couldn't. I mean,* ***there's nothing proprietary about what PGNY is really doing****."*
Former Director at PGNY, Tegus, 3/28/22	*"Aetna is doing that in certain markets already where they're going completely away from the lifetime maximum model, right, and going into the cycle-based benefit plan design model that Progyny introduced."*
Former Director of National Accounts, PGNY, Tegus, 7/8/20	*"****I think the biggest potential competitor for Progyny is one of the carriers just figuring out how to do this on their own and coming out with a solution that is "Progyny-like****." And consultants and employers being ignorant to it because it's not an area they touch very often and just saying, "Well, we'll just put this in. It's already integrated with the carrier…****They could add a benefit through their carrier with WINFertility at a cost projection that's probably 20% to 30% cheaper than Progyny in terms of hard cost****. They're not thinking about long-term cost impact.* ***They're looking to check a box****. They're looking to say we offered infertility benefits and check a box. And that's the biggest competitor to Progyny probably, is just somebody wanted to check a box."*
Former Director at PGNY, Tegus, 4/4/22	*"****Aetna and the other health insurers have also a pretty easy path to compete back against Progyny*** *because they already have the provider networks and the relationship management contracting teams in place to go after the same providers…They have begun to rewrite the way that they do their plan designs for fertility and infertility coverage to make it based on cycle-based benefits like the Progyny style benefit that they had brought to the market a few years ago."*
Senior Director, Worldwide Benefits, Cerner, Tegus, 4/4/20	*"I think someone else could create a similar plan design…And so, then it will become more of like a cost play, you know where providers are like, I think all the -- lots of providers are equally good. And so, I want to negotiate the best rate. And I think that we'll get there."*

Source: Spruce Point Research, Tegus

We Also Believe A Large Clinic Network May Eventually Challenge PGNY

As discussed, private equity players have aggressively consolidated the fertility clinic landscape. We believe a logical outcome is that a major clinic network will develop its own fertility benefit. Much like Kindbody, such a strategy would benefit from clinic ownership and the resultant quality and cost control levers.

Industry Participants See Logic in a Clinic Network Developing Their Own Fertility Benefit	
Endocrinologist at Leading Fertility Clinic, Spruce Point Interview, 11/29/22	**Spruce Point**: *"Do you foresee a major clinic network creating their own benefit to compete with PGNY?"* **Endocrinologist**: *"I think a lot of clinics are beginning to explore that idea because that's essentially what Kindbody has started to do. They can go out and sell themselves directly to employers instead of going through the benefits manager, negotiating a deal with them rather than having the middle man. I think we may see more of that. I think it's definitely being tested right now."*
Former Medical Director, Sincera Reproductive Medicine, Tegus, 2/24/22	**Interviewer**: *"Do you think there's any possibility that they say, we have a large enough network that we will go directly to an employer and offer something like Progyny?* **Medical Director**: *"I think they could. I think they could maybe in a specific geographic area. Especially, if Shady Grove wanted to do that in, and they have, actually. Because I try to think of who was it. University of Pennsylvania Penn Fertility, right, has done that in Lancaster."*
Former Regional COO at Inception Fertility, Tegus, 2/25/22	*"I think there is going to be further consolidation. I mean, there are two brand-new national networks that sprung up last year, that tells you that there's more players entering the fray here. There's a ton of consolidation happening. It's really difficult to organically grow in this industry because the doctors are so few and far between, it's really difficult to recruit."*

PGNY's Clinic Network is Not a Differentiator and May be Fragile if Clinic Roll-Ups Poach PGNY Clinics	
Sr. Director at Willis Towers Watson, Tegus, 3/3/21	*"Yes, they have their own provider network. But that's reproducible."*

Source: Spruce Point Research, Tegus

PGNY Faces Real Threats To Incumbent Clients Over The Coming Few Years

Each of PGNY's major customers has a potential pathway for defection and about one-half of PGNY's clients face a renewal decision in the coming two years. While only modest switching has occurred in the industry to date, we believe that switching costs are modest, and the macroeconomic environment will be likely be quite different.

PGNY's "Big Three" at Risk?

Google

- **Investor in Kindbody**

Microsoft

- **Adopted Maven in 2021**
- **Acquiring Activision, which switched from PGNY to Kindbody**
- **Invested in NOW-fertility.com, an online platform for fertility treatment**

amazon

- **Announced acquisition of One Medical in July 2022**

Significant Portion of PGNY Customer Base Will be Re-Evaluating Their Fertility Benefits in 2023 and 2024

	Selling Season					
	2017	2018	2019	2020	2021	2022
Client Adds (1) (2)	10	15	45	48	44	76
Percent of Total					18%	32%

(1) Clients added in Q4 of previous year plus Q1 of the selling season year

(2) Assumes 5 clients were added in 2016 per PGNY disclosure and 3 of 18 clients at year end 2017 were early adds for 2018

PGNY discloses that its client contracts typically have three year terms and annual outs. Therefore, based on the number of clients added from each of the last two selling seasons (which we define as aggregate client adds over sequential Q4-Q1 periods), nearly one-half of PGNY's clients will face a renewal decision over the next two selling seasons. We believe it is important that PGNY is considered a relatively high-cost provider and that those future decisions are likely to be made in a materially worse macroeconomic environment than during the initial contracting decision.

Source: PGNY 10-Ks for 2019, 2020, and 2021, Maven press release, Technology Magazine

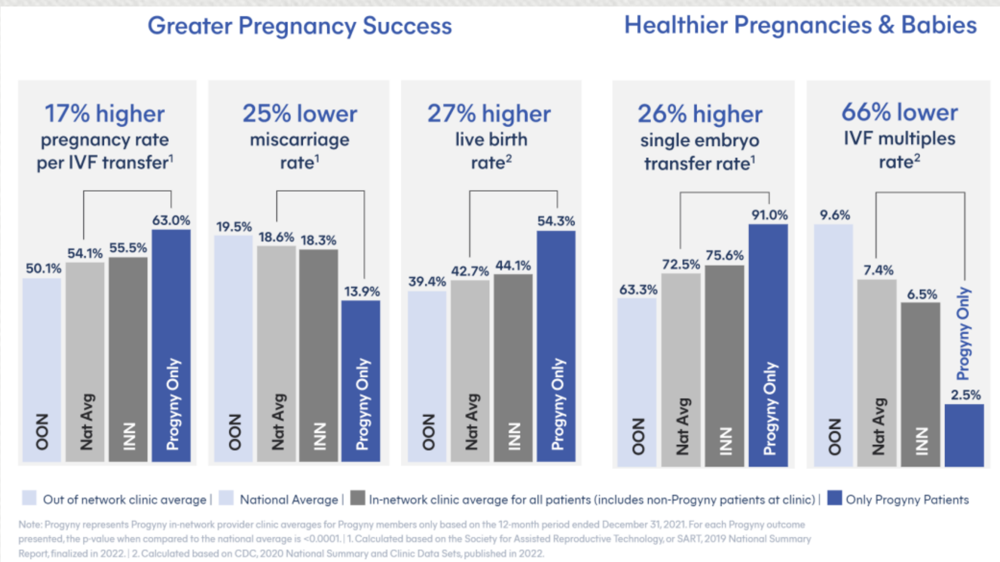
Our Analysis Suggests That PGNY's Key Marketing Claims, Particularly Its Outcomes Data, Are Disputable

PGNY's Claims of "Superior" Outcomes Have Long Been A Cornerstone of Its Pitch To Clients And Investors

The Fertility Clinic Success Rate and Certification Act of 1992 mandated national public reporting of clinical outcomes to the CDC. In addition, the Society for Assisted Reproductive Technologies (SART), an industry group, maintains a voluntary reporting system that shares data with the CDC. PGNY has long compared its clinical outcomes with this national data and recently commissioned a third-party actuarial firm, Milliman, to assess the Company's reporting methodologies.

In its 2019 IPO prospectus, PGNY references its treatment outcomes (most often referred to as "superior" or "optimal") a whopping 57 times, and the Company frequently references its superior outcomes data relative to non-members, both in-network and outside the PGNY network of clinics. We believe these claims are disputable.

PGNY's Most Recent Outcomes Data



PGNY Focus on Outcomes

CEO Peter Anevski on PGNY Q3 2022 Earnings Call 11/3/22

*"…we've seen our market share continue to grow… given our track record of success in helping companies more efficiently manage their healthcare spend while simultaneously enhancing the patient experience **through our superior clinical outcomes**."*

Source: PGNY IPO Prospectus, PGNY website (here and here), PGNY Q3 2022 earnings call

We Believe PGNY's Claims of "Superior" Outcomes Are Highly Questionable, As The Data Sets Are Fundamentally Not Comparable

We believe PGNY's outcomes data should not be relied upon, as it suffers from three fundamental issues of comparability: (1) different clinics, (2) different fertility treatments (driven by different fertility diagnoses and patient motivations), and (3) vastly different patient demographics. These issues, as well as other methodological issues, were largely ignored by the Milliman study assessing PGNY's outcomes data.

#1 Different Clinics

We believe PGNY ignores the advice of the CDC and SART by comparing fertility outcomes between individual clinics. Different clinics are defined by different fertility treatments and patient demographics (as we discuss below). Moreover, a focus on the performance of PGNY in-network clinics ignores the facts that: (1) PGNY selects clinics for their network based on their outcomes data, and (2) those clinics are NOT exclusive to PGNY.

Excerpts From the CDC's 2019 Assisted Reproductive Technology, Fertility Clinic and National Summary Report

8. Can I use clinic success rates to measure the quality of ART services?

Although the quality of ART services can affect the reported outcomes, patient characteristics such as age, race or ethnicity, infertility diagnosis, or existing medical conditions can also contribute to differences in ART success rates. For example, a clinic may accept patients that would be denied care from another clinic, which may result in lower success rates even if the quality of care in the two clinics was identical.

The clinic-specific success rates provide information on ART use and the associated outcomes from each reporting clinic. However, differences in the success rates between clinics may not reflect differences in the quality of ART services.

Interpretation of Fertility Clinic Success Rates

Many people considering ART will want to use the information presented online in ART Fertility Clinic Success Rates to find the "best" clinic. However, comparisons between clinics must be made with caution. Many factors contribute to the success of an ART procedure. Some factors are related to the training and experience of the fertility clinic and laboratory professionals and the quality of services they provide. Other factors are related to the patients themselves, such as their age, the quality of their eggs and sperm, the cause of their infertility, and genetic factors. Some clinics may be more willing than others to accept patients with low chances of success or may specialize in ART treatments that attract particular types of patients.

Some clinics see more than the average number of patients with difficult infertility problems

Some clinics offer ART to most potential patients, even those who have a low probability of success. Others discourage such patients or encourage them to use donor eggs, a practice that results in higher success rates among older patients. Clinics that accept a higher percentage of patients who previously have had multiple unsuccessful ART cycles will generally have lower success rates. In contrast, clinics that offer ART procedures to patients who might have become pregnant with less technologically advanced treatment will generally have higher success rates. CDC does not collect information on clinic-specific patient selection practices.

State Mandates

Given PGNY's client base, its members are skewed toward states like CA, CO, IL, MA, NJ, NY, OH, and TX. All these states have state-mandated fertility insurance coverage. **The CDC has found that fewer embryos are transferred, more IVF births occur, and fewer multiples are observed in states with fertility coverage mandates**, thus biasing PGNY outcomes data.

Source: CDC 2019 Assisted Reproductive Technology, Fertility Clinic and National Summary Report, CDC website

Spruce Point Capital Management

Fertility Treatment Processes Are Influenced By Numerous Factors And Directly Impact Outcomes

#2 Different Fertility Treatments

Individual fertility treatments and outcomes are strongly dependent upon the fertility diagnosis. Moreover, the PGNY fertility benefit prioritizes IVF and effectively mandates single embryo transfer. Finally, comparing outcomes for patients using the PGNY benefit (often valued at $50K or more, and inclusive of preimplantation genetic testing) to patients using a more limited benefit or self-funding their treatment entirely is not an apples-to-apples comparison.

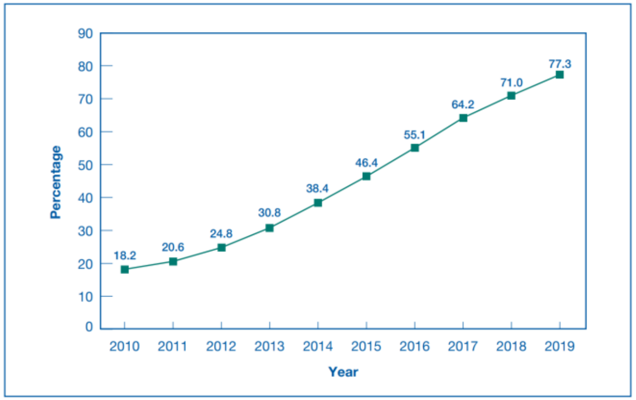
Even Milliman acknowledges that fertility diagnoses impact outcomes:
"Other factors that may contribute to differences in fertility outcomes include infertility diagnosis, which may include diminished ovarian reserve, endometriosis, male factor, uterine factor, tubal factor, ovulatory dysfunction, or unexplained infertility"

One of the fundamental tenets (and in fact, a marketed advantage) of the PGNY fertility benefit is that it allows patients to bypass alternative processes such as intrauterine insemination (IUI) and proceed directly to IVF. IUI is less expensive and has a lower success rate than IVF (10-25% depending on age), but it is viewed as an appropriate first treatment for less severe fertility diagnoses. Therefore, **PGNY's outcomes data includes "easy cases" that could have gotten pregnant through IUI, and non-PGNY patient data is skewed toward more difficult IVF cases, thus lowering expected outcomes.**

PGNY pushes single embryo transfer. Therefore, PGNY's higher single embryo transfer rate and resultant lower multiples birth rate is a business decision more than a health outcome. Regardless, SART and the CDC both recommend single embryo transfer, and CDC data (right) clearly indicates this is becoming the standard of care, which **will reduce the difference between PGNY and non-PGNY outcomes in the future**.

IVF is very expensive. However, **non-PGNY member data includes self-pay patients** that, due to the financial burden, pursue alternative treatment protocols and/or go without valuable ancillary services and treatments that can improve outcomes. We believe comparing these two data sets is incorrect.

Percentage of Embryo Transfers in Which a Single Embryo Was Transferred—United States, 2010–2019



Source: Milliman Report, CDC 2019 Assisted Reproductive Technology, Fertility Clinic and National Summary Report

Spruce Point Capital Management

PGNY Patients Have Superior Access To Quality Healthcare And Are Younger, Wealthier, and White/Asian; As A Result, They Have Better Outcomes

#3 Different Patient Demographics

PGNY's client base is skewed toward large technology companies and other knowledge workers. Most of these companies are located in major metropolitan areas where quality healthcare is more accessible, and the employee demographics at these companies do not mirror the general workforce. Moreover, employees at these companies, as well as the employees within PGNY clients most likely to pursue a premium benefit, are certain to have dramatically higher incomes than that of the general population. Income inequality is a major driver of healthcare outcomes.

PGNY Client	White	Asian	Black	Latinx Ethnicity	Median Compensation
Google (US)	48.3%	43.2%	5.3%	6.9%	$295,884
Microsoft (US)	47.2%	34.2%	6.9%	7.5%	$190,302
Amazon (US "Corporate")	44.6%	34.4%	8.5%	8.7%	NA
Meta Platforms (US)	37.6%	46.5%	4.9%	6.7%	$292,785
Average	**44.4%**	**39.6%**	**6.4%**	**7.5%**	**$259,657**
US General Workforce	**77.0%**	**6.0%**	**13.0%**	**18.0%**	**$52,000**

We believe Google, Microsoft, Amazon, and Meta Platforms have all been 10% customers of PGNY since 2018, and in 2021 PGNY's top two customers accounted for 34% of revenue in 2021, suggesting these clients contribute disproportionately to total lives. However, we find that the demographic mix and income levels of these employees are not representative of the general US workforce. It should surprise no one that multiple studies have found that **healthcare outcomes, including those related to fertility, in the US are impacted by race and income**. A 2019 study titled *"Trends in Health Equity in the United States by Race/Ethnicity, Sex, and Income, 1993-2017"* found that **income was the biggest predictor of differences in health outcomes** and that health inequality has actually worsened over the past 25 years. In addition, as noted in the AMA Journal of Ethics, a systematic review of 24 studies showed that **minority patients experienced worse fertility treatment outcomes compared to white patients**. The same article notes that tubal factor infertility affects 25-35% of IVF patients and directly impacts the success of IVF. While IVF pregnancy rates are doubled for patients who first treat hydrosalpinges prior to IVF, a survey of physicians practicing in states without a fertility insurance mandate showed that they were less likely to perform these procedures, thus resulting in **substandard care (and thus worse outcomes) for uninsured patients**.

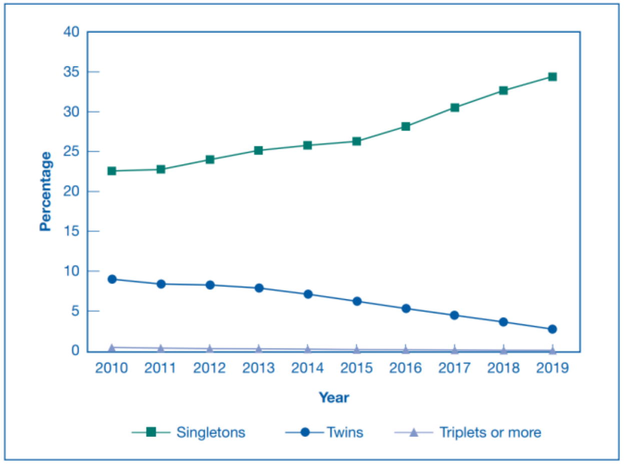
Source: Alphabet diversity report and proxy, Microsoft diversity report and proxy, Amazon diversity report, Meta Platforms diversity report and proxy, BLS 2020 US Workforce Composition, BLS Q3 2022 Weekly Earnings Report, Trends in Health Equity in the United States by Race/Ethnicity, Sex, and Income, 1993-2017, Infertility, Inequality, and How Lack of Insurance Coverage Compromises Reproductive Autonomy

PGNY Also Makes A Number of Questionable Methodological Decisions

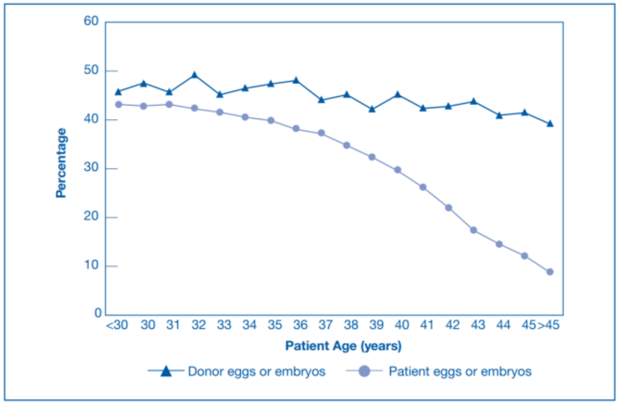
Beyond the high-level biases that we believe limit comparability, PGNY's outcomes reporting methodology contains a number of questionable decisions that serve to improve the Company's reported results. Furthermore, we note that misaligned incentives and a lack of third-party auditing call the PGNY data into question.

- **Incomplete data set.** PGNY discloses a 95% reporting rate and excludes data from out-of-network clinics. What results have been excluded?
- **Comparison of different reporting periods.** PGNY compares its current data (2021) to old data from SART and the CDC, which report on 2 and 3 year lags respectively. We believe such a comparison is biased, since many fertility outcome metrics are rapidly improving for the general population (right top).
- **Different reporting period and live birth definitions.** PGNY stops measuring outcomes as of March after the reporting year and imputes live birth rate by subtracting miscarriages, while SART/CDC extend the measurement period to October, thus capturing more adverse outcomes, and measures actual live births. We believe PGNY's method is deficient.
- **Advantageous treatment of patients using donor eggs.** PGNY includes its own patients using donor eggs while excluding them from the SART data. Since the use of donor eggs improves IVF outcomes, especially for older patients, (right bottom) this benefits PGNY and penalizes non-PGNY results.
- **Exclusion of available pregnancy health metrics.** Although claiming to be "data-driven", PGNY does not publish metrics related to pregnancy length, which is a key metric indicative of pregnancy health.
- **Lack of proper data methodology disclosures.** PGNY fails to disclose how it treats IVF cycles performed by clinics no longer part of the PGNY network, creating opportunities for selective data exclusion.
- **Misaligned incentives.** Clinics self report outcomes data, and they are motivated to report favorable outcomes in order to remain in-network.
- **Lack of third-party auditing.** Milliman did not audit PGNY's raw data.

Percentage of Embryo Transfers That Resulted in the Live-Birth Delivery of Singletons, Twins, or Triplets or More—United States, 2010–2019



Percentage of Embryo Transfers That Resulted in Live-Birth Delivery, by Patient Age and Egg or Embryo Source—United States, 2019



Source: Milliman Report, CDC 2019 Assisted Reproductive Technology, Fertility Clinic and National Summary Report

We Believe PGNY's Management Mischaracterizes The Superiority of Its Outcomes

As discussed, PGNY frequently compares its results to national data from earlier periods. We show that Schlanger made factually incorrect statements regarding outcomes data on PGNY's Q2 2021 earnings call. Trends in key metrics were much better for national averages than PGNY over the period of available comparable data.

Questionable PGNY Management Comments Regarding National Outcomes Trends

"First, our outcomes continued to significantly outperform the national averages as they have done each year over the past five years. ***And second, our outcomes have continued to improve each year while the national averages have stayed largely the same over those five years****."*

- Then-CEO David Schlanger on PGNY Q2 2021 Earnings Call

PGNY has never disclosed data prior to 2018, so how can it make a five-year comparison ending with 2020?

"…the national averages haven't been improving…" - CEO Peter Anevski at 2023 JPMorgan Conference, 1/10/23

	National Averages For All Provider Clinics				Progyny In-Network Provider Clinic Averages For Progyny Members Only				
	Annual Data From SART and CDC			Percentage Point Improvement, 2018-2019/20	Annual Data From PGNY			Percentage Point Improvement, 2018-2019	Percentage Point Improvement, 2018-2020
Metric	2018	2019	2020		2018	2019	2020		
Single Embryo Transfer Rate	64.0%	72.5%	-	8.5%	89.0%	88.4%	90.1%	-0.6%	1.1%
Pregnancy Rate Per IVF Transfer	53.0%	54.1%	-	1.1%	60.7%	59.9%	61.4%	-0.8%	0.7%
Miscarriage Rate	18.6%	18.6%	-	0.0%	10.2%	13.3%	13.8%	-3.1%	-3.6%
Live Birth Rate	42.1%	42.2%	42.7%	0.6%	54.5%	51.9%	52.9%	-	-1.6%
IVF Multiples Rate	12.2%	9.9%	7.4%	4.8%	3.6%	2.4%	2.8%	-	0.8%

We compare 2018 to 2019/2020 available data. In contrast to Schlanger's and Anevski's statements, national averages improved (often dramatically) in 4 of 5 metrics, while PGNY performance deteriorated in 4 of 5 metrics. Even giving them the benefit of looking at 2020 data where available, PGNY's scale of improvement lagged national averages.

Source: PGNY Q2 2021 earnings call transcript, PGNY 10-Ks for 2019, 2020, and 2021, PGNY website

Spruce Point Capital Management

Even Former Employees And Benefits Consultants Are Skeptical of PGNY's Outcomes Claims

PGNY often makes the claim that it is a "data-driven" company that delivers superior outcomes, However, we find that even former employees harbor serious doubts about PGNY's outcomes data and reporting capabilities.

Industry Participants, Including Former PGNY Employees, Question Their Outcomes Data	
Endocrinologist at Leading Fertility Clinic, Spruce Point Interview	*"**I would take it all with a huge grain of salt**...the reason their data looks better is because they're paying for it...So all of those metrics are all gonna look better, but not because of anything special about Progeny, It's somewhat of an artifact of their model."*
Senior Executive, Clinic Network, Spruce Point Interview	**Spruce Point:** *"Is it fair to compare outcomes data across clinics?"* **Senior Executive**: *"**No, it's not**."*
Sr. Director at Willis Towers Watson, Tegus, 3/3/21	*"One, the data is not unique. The major data is collected by the CDC. And Progyny submits its data to the CDC. Actually, the providers submit their data in the CDC, Progyny aggregates it in terms of their network. And it's a core set of data. Again, **it's not rocket science**."*
Former Medical Director, Sincera Reproductive Medicine, Tegus, 2/24/22	*"the Smart Cycle structure, it really incentivizes patients to go more quickly to IVF…if you go right to IVF. then on the average, **you're going to be doing IVF on 'easier' patients**…So now if you're doing IVF on people who are relatively early on in the treatment process, you're going to have less hardcore infertile patients, maybe patients that are like easier to get pregnant, so your pregnancy rates are going to be better."*
VP Global Benefits at Activision Blizzard, Tegus, 3/23/22	*"**The reporting wasn't excellent**. We did learn of cases where multiple embryos were implanted, that didn't make me very happy. I don't know that it resulted in neonatal ICU cost, but it was not exactly what I had been sold…I will say as the plan sponsor and the employer, **I felt that Progyny's ability to report interesting, useful data was pretty lacking**."*
Endocrinologist at Leading Fertility Clinic, Spruce Point Interview	*"the complaint I'm hearing from my folks is one is they're asking for a lot of data, but also it's very tedious to give it to them because **they don't have a great system for giving them that data or uploading that data**. That's been one of the complaint that I've heard from some of my staff."*

Source: Spruce Point Research, Tegus

PGNY Has Experienced A Sharp Increase In Miscarriages At The Same Time That Its Miscarriage Measurement Has Been Called Into Question By Its Own Actuary

Viewing PGNY's outcomes data on an historical basis, we are highly troubled by the sharp increase in miscarriages, a result PGNY has not addressed publicly. Moreover, PGNY's actuary, Milliman, highlighted issues with the Company's potential under-reporting of miscarriages..

PGNY Historical Reported Outcomes Data

	Progyny In-Network Provider Clinic Averages For Progyny Members Only			
Metric	**2018**	**2019**	**2020**	**2021**
Single Embryo Transfer Rate	89.0%	88.4%	90.1%	91.0%
Pregnancy Rate Per IVF Transfer	60.7%	59.9%	61.4%	63.0%
Miscarriage Rate	10.2%	13.3%	13.8%	13.9%
Live Birth Rate	54.5%	51.9%	52.9%	54.3%
IVF Multiples Rate	3.6%	2.4%	2.8%	2.5%

Excerpt From Milliman Report On Issues With PGNY's Live Birth And Miscarriage Calculations

Progyny's current IVF live birth rate is calculated by subtracting the IVF miscarriage rate from the IVF pregnancy rate, while the national benchmarks are based on actual reported live birth rates. In addition to clinical documentation of a miscarriage, if a member received a subsequent ART treatment, Progyny assumes the member's prior IVF cycle did not result in a live birth. Progyny's live birth rate calculation may be impacted by miscarriage data and may be overstated if miscarriages are under-reported. This is particularly important for IVF cycles that occurred in the fourth quarter of 2021, as Progyny data would only capture miscarriages through March 28, 2022. However, the chance of having a miscarriage after 13 weeks is 1.3% and unlikely to impact the miscarriage rate significantly.[4]

PGNY's data collection practices are inconsistent with its definition of a miscarriage right on the Company's website?

A miscarriage, or "spontaneous abortion," refers to the loss of a pregnancy before 20 weeks and occurs in 15 to 20 percent of all pregnancies. Most miscarriages occur during the first trimester but can also occur later on in the pregnancy.

Source: PGNY 10-Ks for 2019, 2020, and 2021, PGNY website, Milliman Report, PGNY website

SPRUCE POINT
CAPITAL MANAGEMENT

We Question Whether Any Clinic Data Can Be Trusted at All

A recent study of IVF clinic success rate reporting found that clinics only adhered to Society for Assisted Reproductive Technology advertising guidelines between 10.5% and 68.4% of the time, and another study found that clinics were often slow to address violations and/or repeat offenders of other guidelines.

Excerpt From "Society for Assisted Reproductive Technology advertising guidelines: How are member clinics doing?" Sauerbrun-Cutler, et al, 10/14/2020

All 361 IVF clinics listed on the SART website were evaluated between February 2019 and August 2019. Table 2 displays the percentage of websites that adhered to the core SART guidelines for advertising. **Overall, adherence to each specific SART guideline for reporting IVF clinic success rate ranged from 10.5% to 68.4%**. Supplemental success rate reporting, which is not encouraged by SART, was found on 114 of the 361 (31.6%) websites. Of these 114 IVF clinics that advertised supplemental success rates, only 10.5% were compliant with the SART guideline requiring clinics to report live birth per transfer, retrieval, and cycle. Of these IVF clinics (68.4%) that reported supplemental success rates had a link to their CSR, 53.5% presented current (2016 or beyond) SART data, and 67.5% included the required disclaimer statement. **In contrast, most IVF clinics (94%) refrained from advertising superiority compared with other clinics** or published denigrating statements about competitors.

Good thing PGNY doesn't actually operate clinics or they'd be violating SART guidelines…

Excerpt From "Society for Assisted Reproductive Technology advertising guidelines: How likely are member clinics to maintain compliance after resolving their violations?" Sauerbrun-Cutler, et al, 6/26/2021

One hundred sixty-one of 383 SART member clinics were evaluated in 2019 by the SART AC members. **In 2019, 44 (27%) of the 161 clinics reviewed had at least one website violation that was not resolved within the two-week grace period** (Table 2). All these clinics eventually resolved their initial violations within a six-month period from the initial citation. One clinic did not renew its SART membership in 2020 and therefore only 43 clinics were reevaluated in 2020 by the AC. **On rereview, 10 (23%) of the 43 clinics were noted to have violations in either the same or different categories as in the previous review.** Eight (80%) of these 10 clinics that were out of compliance had a violation in the same category found in their previous review (Table 2). However, no violations were exactly the same as those during the first time period, even if they were in the same category. Six (60%) of the 10 clinics with a repeat violation had a violation in at least one new category .

Source: Fertility and Sterility, Fertility and Sterility

Spruce Point Capital Management

Are PGNY Clinics Really The Best? We Found Examples of PGNY Clinics Not Adhering To Best Practices

PGNY often boasts that its network has the best clinics. However, we found that two clinics in the PGNY network have received FDA warning letters, four clinics that failed to report their outcomes data to the CDC for 2019, and nine clinics that were listed as unaccredited in the CDC's 2019 report despite having been in operation for years.

PGNY Clinics With Questionable Accreditation or Practices

PGNY Clinics That Have Received FDA Warning Letters

Name	Location
Louisville Reproductive Center (1)	Louisville KY
Strong Fertility Center	Rochester NY

(1) Now operating as Fertility and Endocrine Associates with same doctor at same address

PGNY Clinics or Current Physicians at Non-Reporting Clinics in CDC 2019 Report

Name	Location
Advanced Fertility Care	Glendale AZ
Braverman Reproductive Immunology, PC (1)	New York, NY
Fertility Centers of Orange County	Irvine CA
Westchester Reproductive Medicine (2)	Mount Kisco NY

(1) Dr. Melvin Thornton also practices at PGNY clinic Global Fertility and Genetics in New York

(2) Dr. Rachel Bennett now at PGNY clinic called Northwell Fertility at same address

PGNY Clinics Listed as Unaccredited in CDC 2019 Report

Name	Location
Brown Fertility	Jacksonville FL
Central Coast IVF Laboratory	San Luis Obispo CA
Innovative Fertility Center	Manhattan Beach CA
IVFMD/South Florida Institute for Reproductive Medicine Laboratory	Naples FL
IVFMD/South Florida Institute for Reproductive Medicine Laboratory	Jupiter FL
Shady Grove Fertility-Richmond	Richmond VA
Southwest Center for Reproductive Health, PA	El Paso TX
The Fertility Center of Oregon	Eugene OR
Virginia IVF and Andrology Center Laboratory	Richmond VA

Source: CDC 2019 Assisted Reproductive Technology, Fertility Clinic and National Summary Report, PGNY website, FDA Warning Letter for Louisville Reproductive Center, FDA Warning Letter for Strong Fertility Center

Spruce Point Capital Management

A Quick Search of Notable IVF Clinic Screwups and Resultant Lawsuits Finds Four Clinics That Remain In The PGNY Network

A quick search of high-profile press stories regarding recent egregious operational failures at IVF clinics, including one that a USA Today article called "*one of the biggest fertility center debacles in U.S. history*", surfaces four cases involving centers that remain in the PGNY network today. And these are just issues at clinics that remain in-network.

Prominent Stories Regarding Operational Issues at IVF Clinics That Remain in the PGNY Network

The Washington Post

Jury awards $15 million in landmark case over embryos, eggs destroyed in fertility clinic tank failure

By Derek Hawkins
June 11, 2021 at 7:25 p.m. EDT

"A tank storing frozen human embryos and eggs at Pacific Fertility Center in San Francisco had failed…On Thursday, after more than three years of litigation in federal court, a jury in California awarded five of the patients who lost embryos and eggs a combined $15 million in damages."

Pacific Fertility Center (San Francisco CA) — Clinic Score 5.0
55 FRANCISCO ST, STE 500
SAN FRANCISCO, CA 94133
(415) 834-3095 · Open until 5:00 pm
Services: Surgery, Monitoring
Clinic · 2.0 mi · In Network

The Washington Post

A couple started IVF. The clinic destroyed their embryos, lawsuit says.

By Andrea Salcedo
April 21, 2022 at 6:37 a.m. EDT

"Less than a week after breaking the news that the embryos had not been stored properly, the doctor… explained that the clinic's in-house laboratory professionals had failed to place oil on a petri dish containing the embryos, the lawsuit states."

CNY Fertility Colorado (Colorado Springs CO) — Clinic Score 4.0
265 S PARKSIDE DR, STE 200
COLORADO SPRINGS, CO 80910
(844) 315-2229 · Open until 3:00 pm
Clinic · 2.0 mi · In Network

Cincinnati fertility clinic sued by Ohio couple for swapping out husband's sperm

Anne Saker
Cincinnati Enquirer
Published 11:00 a.m. ET Aug. 7, 2019 | Updated 12:30 p.m. ET Aug. 9, 2019

"A central Ohio couple sued a Cincinnati clinic and the Christ Hospital Wednesday for swapping out the husband's sperm when the couple underwent fertility treatment in 1994, a fact the family discovered only this year through a DNA test kit."

Institute for Reproductive Health (Cincinnati OH) — Clinic Score 4.5
3805 EDWARDS RD, STE 450
CINCINNATI, OH 45209
(513) 924-5550 · Open until 5:00 pm
Services: Surgery, Monitoring
Clinic · 5.0 mi · In Network

Human error may be at fault in University Hospitals' fertility clinic failure, 4,000 eggs, embryos ruined

Published: Mar. 27, 2018, 1:10 p.m.

"As many as 4,000 eggs and embryos were ruined as a result of a temperature fluctuation in a storage tank in the fertility center March 3-4, UH told The Plain Dealer.

University Hospitals Fertility Center (Cleveland OH) — Clinic Score 4.0
11100 EUCLID AVE
CLEVELAND, OH 44106
(440) 623-7006
Clinic · 4.5 mi · In Network

Source: USA Today, Washington Post, Washington Post, Cincinnati Enquirer, Cleveland Plain Dealer, PGNY website

SPRUCE POINT CAPITAL MANAGEMENT

PGNY Clinic Issues (Continued)

We don't understand how a clinic that was subject to a state investigation that found "*unconscionable commercial practices*" can remain in-network.

Other Notable Issues at PGNY Clinics

New Jersey Infertility Clinic Settles Data Breach Investigation with State and Pays $495,000 Penalty

Posted By HIPAA Journal on Oct 14, 2021

*"The state investigation into the data breach revealed business associate agreements were not in place prior to sharing ePHI with three business associates: Infoaxis, BMedTech, and Igenomix, in violation of the HIPAA Rules. Diamond was also alleged to have violated the New Jersey Consumer Fraud Act (CFA), HIPAA Security Rule, and HIPAA Privacy Rule by removing administrative and technological safeguards protecting PHI and ePHI, which allowed unauthorized individuals to gain access to its systems and ePHI for around five and a half months. **The CFA violations included misrepresentation of HIPAA practices in its privacy and security policy, a failure to secure its network leading to a data breach, and unconscionable commercial practices**. The settlement agreement lists failures to comply with twenty-nine provisions of the HIPAA Privacy and Security Rules."*

Diamond Institute for Infertility and Menopause (Millburn NJ)

Clinic Score 4.0

Clinic

89 MILLBURN AVE
MILLBURN, NJ 07041
(973) 761-5600 Open until 5:30 pm

1.1 mi In Network

At the recent 2023 JPMorgan Healthcare Conference, CEO Anevski was asked about whether poor performing clinics have been expelled from the network, but he failed to answer the question.

Source: HIPAA Journal, PGNY website

We Believe PGNY Embellishes The Promised Expertise of Its Patient Care Advocates (PCAs)

We are able to view only about half of ~60 LinkedIn profiles for current PGNY PCAs. However, even a small sample uncovered numerous instances of PCAs with modest levels of "fertility expertise" prior to joining PGNY. We believe PGNY is falling well short of its SEC-filed disclosure and far short of WIN's 5-year experience threshold.

Selected LinkedIn Profiles of Current PGNY Patient Care Advocates

PGNY 2021 10-K Disclosure:
*"Our PCAs have **deep fertility expertise** and **provide extensive clinical education**, guidance and emotional support to our members."*

Jade Brown
Patient Care Advocate at Progyny Fertility Benefits

Patient Care Advocate
Progyny, Inc. · Full-time
Dec 2021 - Present · 1 yr
New York City Metropolitan Area
Skills: Administration · Benefits Administration · Fertility · Customer Service

IVF Coordinator
Reproductive Medicine Associates of New York · Full-time
May 2021 - Nov 2021 · 7 mos
New York, New York, United States

Clinical Shadowee
Clubmed SHU · Internship
Sep 2020 - May 2021 · 9 mos

<1.5 yrs. experience

Cynthia Santana (She/Her)
Reproductive Health Advocate

Patient Care Advocate
Progyny, Inc. · Full-time
Jul 2022 - Present · 5 mos

Rejuvenating Fertility Center
Full-time · 1 yr

Coordinator
Oct 2021 - Feb 2022 · 5 mos
Counseled 100+ patients on their treatment plans while coordinating for the Founder/Me… acting as the core liaison between the provider and patients.

Medical Assistant
Mar 2021 - Oct 2021 · 8 mos

Medical Administrative Assistant
NEXT|HEALTH · Full-time
Oct 2020 - Mar 2021 · 6 mos
Administer heavy calendar management while recording and updating patient informatio… system.

<1.5 yrs. experience

Store Associate
adidas
Oct 2019 - May 2020 · 8 mos

Latisha G. (She/Her)
Patient Care Advocate at Progyny, Inc.

Patient Care Advocate
Progyny, Inc. · Full-time
Sep 2022 - Present · 3 mos
New York, New York, United States
• Support members through their fertility journey by building rapport and bein… email and phone.

Patient Care Associate
The Mount Sinai Hospital · Part-time
Mar 2022 - Sep 2022 · 7 mos
·Assist patients with daily living, such as mobilization, bathing, feeding, and toi…
·Perform clinical procedures such as maintenance of skin integrity, post-morte…

Personal Shopper
Shipt · Self-employed
Oct 2018 - Nov 2021 · 3 yrs 2 mos
United States

Crew Member
Trader Joe's · Full-time
Aug 2019 - Aug 2021 · 2 yrs 1 mo

<1 yr. experience

Michelle Sands
Hi 👋, I'm Michelle.

Patient Care Advocate
Progyny, Inc.
Jul 2021 - Present ·
New York, New Yor…

zero experience

Financial Advisor
The University of Kansas Health System
Jun 2013 - Jul 2021 · 8 yrs 2 mos

Robin Lempel, LMSW
Patient Care Advocate at Progyny, Inc.

Patient Care Advocate
Progyny, Inc.
Aug 2020 - Present · 2 yrs 4 mos
Supervise high-level escalation cases, de-escalate members, and find workable solutions for the Member Complaints Team ...see more

MSW intern
North Central Bronx Hospital
Sep 2019 - Apr 2020 · 8 mos
Provided weekly brief supportive therapy incorporating evidence-informed approaches to clients referred by women's health providers for depression, anxiety, domestic violence, teenage pregnancy, life st ...see more

MSW Intern
StreetWise Partners
Sep 2018 - May 2019 · 9 mos
Counseled mentees in weekly sessions and check-in phone calls on career development, including resumes, cover letters, interviews, and networking, and provided the mentees with support and confidence ...see more

<1 yr. experience

We question whether this represents a violation of PGNY's client contracts.

Source: PGNY 2021 10-K, LinkedIn profiles for Jade Brown, Latisha G., Robin Lempel, Cynthia Santana, Michelle Sands

PGNY's Claims of Complete Coverage Are Not Wholly Accurate

PGNY claims that its Smart Cycle benefit structure ensures that patients can complete treatment cycles. We believe that is a mischaracterization, as Smart Cycles simply represent a "service maximum" as opposed to the traditional "dollar maximum". It is easy to see that the average employer benefit will be insufficient to cover all patients' needs.

PGNY's Coverage Claim

The Smart Cycle

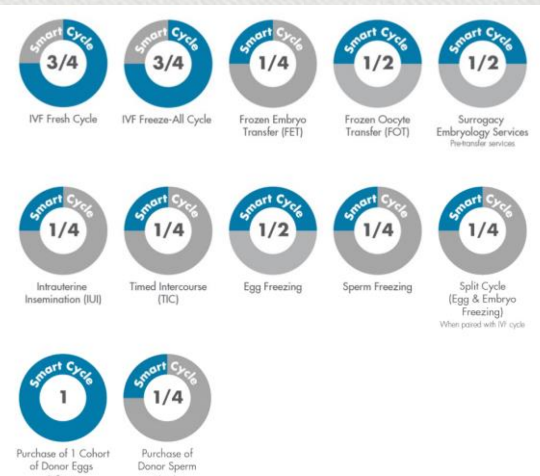
Progyny's proprietary Smart Cycle allows members to customize their treatment without having to worry about running out of coverage mid-treatment.

PGNY Value Proposition in 2021 10-K:

Comprehensive Coverage. We provide all individuals with access to comprehensive coverage. **Our Smart Cycle design ensures that members always have coverage for a full treatment cycle** as their access to treatment is not limited by a dollar maximum that could be exhausted mid-treatment.

The Reality: PGNY's Fertility Benefit Still Has Coverage Maximums That May Not Cover Full Treatment

Smart Cycle Bundles and Values



It is generally acknowledged that, for the 70-80% of women who will successfully get pregnant through IVF, it will require an average of just over 2 IVF cycles to achieve that result. In general, each PGNY Smart Cycle is intended to cover one whole IVF treatment cycle. In addition, reviewing PGNY client coverage amounts, most employers cover 2 to 3 PGNY Smart Cycles. Therefore, given the Smart Cycle allocations for ancillary services and alternative protocols, it is clearly possible that a patient might not be able to complete the average required 2 IVF cycles. In addition, reviewing disclosures from former PGNY patient advocates, one of their primary roles is to explain how to maximize the PGNY benefit given their individual treatment requirements, which can include encouraging patients to pay for certain expenses out-of-pocket in order to preserve Smart Cycle credit. The notion that patients cannot exhaust their coverage mid-treatment is simply not accurate.

Source: PGNY website, PGNY 2021 10-K, VMWare Member Guide 2021

We Believe PGNY Overstates The Cost To Employers of Pre-Term And/Or Multiple Births

Fundamental to the PGNY sales pitch to employers is the prospect of trading cost volatility resulting from pre-term pregnancies (most often the result of multiple births) for certainty, albeit at a higher standalone benefit cost. We find that PGNY exaggerates the cost of multiple births to US employers resulting from IVF.

We Believe PGNY Exaggerates The Costs To Employers of Pre-Term Births From IVF

The conventional approach to fertility benefits is broken

There are structural flaws in the conventional approach:

- Restrictive coverage and plan design
- Mandated step therapy
- Limited access to latest diagnostics and procedures
- Limited access to top fertility specialists
- Limited or no patient support
- Lack of pharmacy integration

These flaws have consequences to both patients and employers:

- Poor pregnancy rates
- High incidence of miscarriages and **MULTIPLE BIRTHS**
- Inefficient, ineffective use of healthcare dollars
- P&L volatility as a result of high-cost claims
- Negative employee experience
- Poor presenteeism and retention rates

The costs to employers from pre-term births
(in addition to ineffective treatment costs)

~$40 billion annually[1]

In the Company's August 2021 Investor Presentation, PGNY implies that pre-term births resulting from fertility treatments cost US employers about $40 billion. However, this figure represents the costs resulting from ALL pre-term births in the US. Based on CDC data, the 209,687 IVF cycles (excluding banking cycles) reported in 2019 yielded 83,946 infants from 77,998 deliveries. **Examining CDC total birth and IVF data, we find that IVF treatments accounted for just 2% of total births and 10% of births in excess of deliveries (a proxy for infants delivered above singleton to allow for comparison of the disparate data sets).**

	Births From CDC Data	Implied Deliveries	Births in Excess of Deliveries
Singleton	3,623,963	3,623,963	
Twin	120,291	60,146	
Triplet	3,136	1,045	
Quadruplet	114	29	
Quintuplet+	36	7	
Total	**3,747,540**	**3,685,190**	**62,350**
IVF Cycle	**83,946**	**77,998**	**5,948**
Percent of Total	*2%*	*2%*	*10%*

Source: CDC 2019 Assisted Reproductive Technology, Fertility Clinic and National Summary Report, CDC National Vital Statistics Reports, Volume 70 Number 2, Births: Final Data For 2019

We Believe The PGNY Treatment Model Is Not Clearly Supported By Existing Science, Is Rife With Conflicts, And Flirts With Regulatory Violations

Understanding The PGNY Treatment Model

Infertility is a complex, emotionally-charged topic. We want to acknowledge that dealing with an infertility diagnosis can be a massive psychological and financial burden, and the US healthcare system has a history of failing to alleviate either of these pressures. Infertility impacts one in eight women in the US, and we are incredibly sympathetic to the challenges faced. We also want to acknowledge that the scope of the fertility discussion has broadened to include the desire of same-sex couples to have children.

Fertility Diagnosis. It is important to recognize that there are numerous potential conditions, impacting the woman, man, or both, that can form the basis of a fertility diagnosis, and sometimes the exact causes can be difficult to ascertain. As a result of these variant factors, fertility treatment plans are largely bespoke and at the discretion of the treating physician. Since the advent of in-vitro fertilization (IVF) in 1978, doctors have had a range of fertility treatments at their disposal that vary in terms of probability of success (largely dependent on the fertility diagnosis and age of the patient), physical burden on the woman, and cost. These generally range from behavioral actions (timed intercourse, etc.), medications, and surgery to open blocked fallopian tubes or treat endometriosis to intrauterine insemination (IUI, or the placement of sperm directly into the uterus), to assisted reproductive technology (ART), the most common form of which is IVF, which involves ovulation stimulation, retrieving eggs, fertilizing them with sperm, and placing the resulting embryo in the uterus. IUI is generally considered to have a 20% success rate per attempt, while IVF is about 50% successful for women under 35, meaning that about two cycles on average are required for a successful pregnancy. And of course, there are some patients that are either too old or have too severe a fertility issue for any procedure to yield a successful outcome. Freezing and storing of eggs for later use has also become an alternative for women hoping to get pregnant in the future.

Fertility Treatments and Constraints. The conventional treatment plan has long been to progress through each treatment option, ramping both medical impact and cost along the way, the logic being that some fertility diagnoses can be addressed with lower intensity and lower cost alternatives. However, two factors create substantial tension around this progression: age and limited fertility benefits. A woman's age is one of the most important drivers of fertility treatment outcomes, creating real time constraints. That said, we believe age is often used as a marketing tool to over-dramatize the fertility treatment imperative, as CDC data indicates 60% of ART cycles performed in 2019 were on women below age 37. Moreover, insurance companies have historically offered limited or no coverage of fertility treatments and have been criticized for taking a reactive, cost minimizing approach that makes the process more burdensome, as couples advance in age and may exhaust their limited benefits before reaching the more intensive treatment actions such as IVF.

Spruce Point Capital Management

Understanding the PGNY Treatment Model (Continued)

For reference, all-in costs for IUI can be as little as a few thousand dollars, while IVF can reach up to $25,000 per cycle. Of note, 19 states have adopted fertility coverage mandates, although provisions vary, and self-insured employers are exempt from such laws. And importantly, the fertility clinics that guide patients through this medical minefield are largely unregulated and thus influenced by financial considerations. Faced with the dual pressures of time and cost, and because embryo health impacts IVF success rates, there has arguably been an incentive for patients to seek the transfer of multiple embryos in a single IVF cycle in order to increase the odds of success. However, doing so can result in multiple-birth pregnancies that are more risky for the patient, jeopardize the health of the infant, and create an incremental cost burden to employers and payers, as the medical cost of triplets can easily exceed $500,000. While many physicians recommend against this course of action, clinics are unregulated and treatment protocols non-standardized.

The PGNY Solution. While traditional fertility treatment plans are characterized by some as reactive and focused on cost minimization, the PGNY protocol can be viewed as more proactive and intensive. In essence, PGNY offers the fully-loaded BMW to every patient, cementing its status as a premium benefit. The PGNY treatment plan and benefit structure has three foundational elements: skipping lower cost and less invasive treatments and proceeding directly to IVF, using preimplantation genetic testing (PGT) to evaluate the health of embryos prior to insertion into the uterus, and limiting transfers to a single embryo to avoid multiple births. While the conceptual logic behind the PGNY approach may seem sound, if not rational, the practical reality is more complex. And as we will discuss, the scientific support for each of these three elements is debatable.

Everyone Wins, Right? On the surface, the PGNY approach offers benefits to all parties involved. Patients, some of whom may be desperate, are attracted to a more aggressive plan that seemingly leverages technology to improve outcomes, and of course, receiving a >$50,000 benefit is terrific. Self-insured employers get credit for offering a premium benefit that will only be utilized by about 1% of employees, which can be a competitive advantage in recruiting (thus the early adoption by technology and other knowledge-worker companies). Additionally, reducing multiple births can reduce the amount and volatility of medical expenses. Finally, it should come as no surprise that the fertility industrial complex loves the PGNY approach: PGNY is a lead-generation engine sending more patients to clinics, IVF generates up to 10x more revenue than IUI per cycle, PGT can add thousands of dollars in incremental revenue per patient, and claims of superior outcomes can drive clinic traffic in a landscape where there are a large number of cash-pay patients. For these reasons, we believe investors who have spoken to industry participants understandably may have formed an overly positive, uncritical view of the PGNY solution and the Company's growth prospects.

We Believe PGNY Trades Traditional Reactive Cost Minimization For Proactive Revenue Maximization

We have no doubt that insurance companies – often believed to look at cost minimization approaches to fertility benefits – can be frustrating for patients. However, we believe exuberance about PGNY's offering overlooks a treatment plan and benefit structure that both seeks to maximize revenues and ignores existing science.

PGNY's Treatment Plan Arguably Takes Advantage of Vulnerable Patients Wanting To Address An Infertility Diagnosis

Treatment Protocol	PGNY Rationale	Benefits to PGNY and Clinics
Straight to IVF	Patients avoid using benefit on lower probability procedures such as IUI	Bill more IVFs at 10x the cost when IUI could address a material portion of patients
Preimplant Genetic Testing	Increase probability of live birth through single embryo transfer	Create new revenue stream for each new IVF patient for PGNY and clinics
Single Embryo Transfer	Reduce potential health complications and added costs of twins/triplets	Increase number of cycles per patient, thus increasing revenue for PGNY and clinics
	Implicit in the PGNY treatment protocol is that, when costs are not a constraint, a more intensive, expensive, and proactive treatment plan results in improved outcomes	We believe PGNY uses its dubious outcomes data to craft a marketing message around its treatment plan that, while compelling, conflicts with the existing science and presents financial conflicts of interest

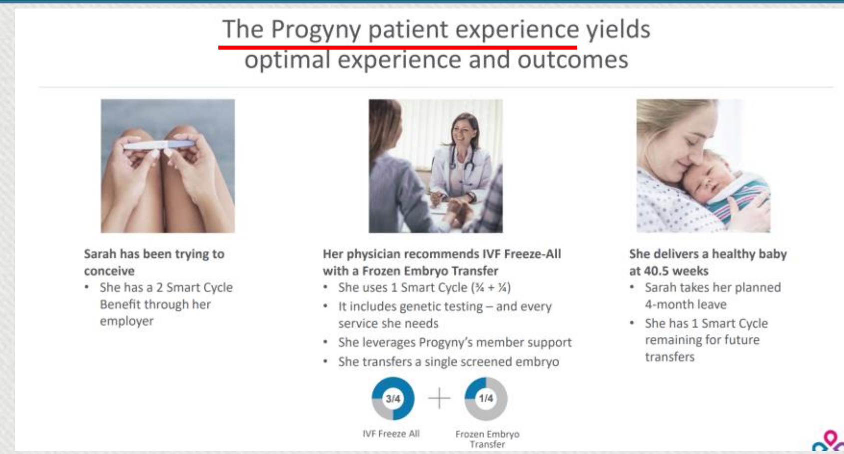
Source: Spruce Point Research

We Believe PGNY Wrongly Simplifies Fertility Treatment And Ignores Conflicts of Interest

SPRUCE POINT CAPITAL MANAGEMENT

In the Company's August 2021 investor presentation, PGNY uses the fictional treatment scenarios of "Sarah" to highlight the scary downsides of conventional treatment paths and the superior outcomes achieved through its more intensive treatment protocol. However, we believe PGNY's pitch contains numerous misrepresentations.

PGNY Contrasts the Treatment Protocol and Improved Outcomes of "Sarah" With and Without the PGNY Benefit



Is This Irresponsible PGNY Positioning?: Miscarriage, Debt, and Unhealthy Babies

- Fails to address and link treatment to Sarah's specific fertility diagnosis
- Positions IUI as a waste of time and resources for all women; based on typical IUI pricing of $1-3K, pursuing three IUI cycles is unlikely to exhaust "most" of her benefit
- Fails to acknowledge that the value of genetic testing has been called into question
- Ignores that fertility clinics strongly recommend against multiple embryo transfer

Is This Irresponsible PGNY Positioning?: IVF Outperformance Every Time

- Suggests that more intensive, technologized treatment protocols yield better outcomes regardless of fertility diagnosis
- Ignores that it takes women who will eventually get pregnant through IVF an average of two cycles
- Presents time to pregnancy and outcome per cycle as metrics for success even though solving for those parameters will predetermine that a more intensive treatment protocol is better

Source: PGNY August 2021 investor presentation, Disrupting the biological clock: Fertility benefits, egg freezing and proactive fertility management, Lucy van de Wiel, Reproductive Biomedicine & Society Online, Volume 14, March 2022, Pages 239-250

SPRUCE POINT CAPITAL MANAGEMENT

We Believe The Science And Math Behind PGNY's "Direct To IVF" Approach Is On Weak Grounds

PGNY's presentation of its treatment protocol suggests it is the right course for all patients, ignoring that highly variant fertility issues and diagnoses require a highly individualized approach to reproductive health. The science clearly suggests that there are logical (and for the patient, financial) arguments for using IUI before IVF.

There Is A Case For IUI

- The PGNY approach to fertility suggests that more intensive treatments yield better outcomes
- However, **the question of whether IUI or IVF is a preferred primary treatment is widely debated**
- Fertility treatments should be driven by the precise diagnosis rather than a corporate policy based on financial incentives
- For example, IVF, and specifically intracytoplasmic sperm injection (ICSI), may be appropriate when the issues are low sperm count or motility, problems with the fallopian tubes, advanced age (Moolenaar et al., 2015, Romundstad et al., 2015, Tsafrir et al., 2009)
- However, **for other cases, IUI is much less costly and invasive, has fewer health risks for women, requires milder hormonal stimulation, and does not create supernumerary frozen embryos**
- In fact, the 2020 ASRM guidelines note that IVF is 'substantially more invasive and more costly' than other treatments and state that **'current evidence does not support IVF as a first-line therapy for unexplained infertility'; usually 'the best initial therapy is a course (typically 3 or 4 cycles) of ovarian stimulation […] and intrauterine insemination (OS-IUI)' (ASRM, 2020a)**"
- Moreover, PGNY and others often frame IUI as presenting a potentially decisive timing delay, yet we note that three cycles of IUI would take just three months, which is immaterial for most patients

IUI vs IVF: Highly Generalized Costs vs Probability

	IUI	IVF
Success Rates		
Average	10%	35%
Range	0-20%	7-47%
Cost per Cycle		
Average	$2K	$20K
Range	$1K - $4K	$15K - $30K

- IUI is generally about one-tenth the cost and one-third as effective as IVF
- Success rates for both procedures are most heavily impacted by patient age, fertility diagnosis, ovarian reserve, stimulation protocol, presence of male factors, use of donor eggs, and other health conditions
- IUI costs and outcomes will be higher/better when accompanied by stimulation medicines
- Costs of both procedures are impacted by the clinic and location
- Subsequent rounds of IVF may not require egg retrieval and/or may be discounted by a clinic

Source: Disrupting the biological clock: Fertility benefits, egg freezing and proactive fertility management, Lucy van de Wiel, Reproductive Biomedicine & Society Online, Volume 14, March 2022, Pages 239-250

The Value of A Core Element of The PGNY Treatment Protocol (And Source of Revenue), Preimplant Genetic Testing, Has Been Called Into Question

Preimplantation genetic testing (PGT) is effectively a standard feature of the PGNY treatment protocol and typically costs around $5,000. While the logic of PGNY's marketing pitch surrounding PGT seems reasonable (leverage advanced, and more expensive, technology to implant better embryos for better fertility outcomes), the reality is far more murky. The efficacy of PGT has been called into question, and the inherent financial conflicts of interest for benefit providers and clinics has not been lost on the scientific community. For this reason, industry bodies still officially characterize some genetic tests as "*experimental*", and many other providers view PGT as only appropriate in limited circumstances.

To better understand the materiality of this issue, PGNY completed 28,413 ART cycles in 2021. Assuming they all involved PGT at $5,000 per cycle, that represents $142 million of revenue, or about 40% of PGNY's medical revenue that year. Therefore, it is obvious why PGNY would want to encourage PGT as a standard practice.

The Science Behind PGTI Is Less Clear, Calling PGNY's Claims And Standard Treatment Protocol Into Question

- PGT-A analyzes cells from embryos to test whether they have the correct number of chromosomes (i.e. are euploid) and thus are likely to be viable if implanted
- PGNY markets PGT-A as a technology that prevents miscarriage and thus enables single embryo transfer
- **However, PGT-A is highly contentious because the evidence for its efficacy is limited while its costs are high (an additional $3000–12,000 per cycle), and thereby present a significant means of increasing clinic revenue (Theobald et al., 2020, FertilityIQ, 2020a)**
- In the UK, the fertility regulator [Human Fertilisation and Embryology Authority (HFEA)] gives PGT-A a red (negative) rating, stating ***'there is no evidence that this add-on is effective and safe' and that there is a 'risk of misdiagnosing a healthy embryo' as abnormal. HFEA also claims that PGT-A 'can sometimes cause damage to the embryo and prevent it from developing once it has been transferred into the womb' (HFEA., 2018, HFEA, 2020).***
- ASRM states that ***'there is insufficient evidence to recommend the routine use of blastocyst biopsy with aneuploidy testing in all infertile patients' and that 'large, prospective, well-controlled studies are needed to determine not only the effectiveness, but also the safety and potential risks of these technologies' (Penzias et al., 2018).”***

Source: Disrupting the biological clock: Fertility benefits, egg freezing and proactive fertility management, Lucy van de Wiel, Reproductive Biomedicine & Society Online, Volume 14, March 2022, Pages 239-250

Spruce Point Capital Management

We Believe PGNY Embellishes The Value of PGT (Continued)

We believe PGNY's intimation that "Sarah" suffered a miscarriage due to the lack of PGT is marketing fluff. We believe PGNY is capitalizing on patients' (often reasonable) assumption that the increasing use of new technologies must improve health outcomes. Once again, the actual science does not fully support their claim.

PGNY's Suggestion That PGT Can Reduce Miscarriages and/or Implant Cycles is Dubious

- Recall in PGNY's investor presentation excerpted on page 86, Sarah's story suggests she suffers a miscarriage without genetic screening and a full-term pregnancy (after fewer cycles) after PGT-A
- **However, the effect of PGT on miscarriage rates is contentious**; some recent studies, including multi-center randomized controlled trials, show a reduced risk of miscarriage (Verpoest et al., 2018, Scriven, 2020), while others found that it did not affect miscarriage rates (Munné et al., 2019, Murphy et al., 2019, Sato et al., 2019), or that miscarriages were rare even following the implantation of embryos classified as 'abnormal' (Patrizio et al., 2019)
- **Similarly, the reduction of implantation cycles has also been questioned**; a recent systematic review of 26 studies on PGT-A confirms that the add-on should, in theory, be able to enhance clinical outcomes on a per-transfer basis, but finds that the 'current available literature is sparse or of insufficient quality' and concludes that **the routine use of PGT-A '*with the aim of improving clinical outcomes is not supported by substantial evidence*'** (Toft et al., 2020)
- **In fact, ASRM notes that PGT-A may actually decrease the birth rate per cycle as a result of the embryo's culturing conditions and cell biopsy, which could adversely affect the embryo, or due to the risk of unnecessarily discarding embryos that are classified as 'abnormal'** (Penzias et al., 2018).
- For example, Patrizio et al. (2019) found that the transfers of such 'abnormal embryos' nevertheless resulted in 'robust pregnancy and live birth chances with low miscarriage rates' and raised concerns about PGT-A leading to the disposal of 'many normal embryos with excellent pregnancy potential' (also see Mochizuki and Gleicher, 2020). **Far from a straightforward improvement of the IVF cycle that enables single embryo transfer, PGT-A is thus a contested technology.**

Source: Disrupting the biological clock: Fertility benefits, egg freezing and proactive fertility management, Lucy van de Wiel, Reproductive Biomedicine & Society Online, Volume 14, March 2022, Pages 239-250

The Financial Conflicts of Interest Surrounding PGT Are Obvious

Perhaps our least surprising finding in the scientific literature is that PGT has been used to generate increased cycle and clinic revenue in countries with private health systems. PGT use has skyrocketed in the US versus other countries and has seen increased use among younger women despite its lower efficacy in this group.

The Prevalence of PGT In Private Health Systems Highlights The Financial Conflicts of Interest

- Despite the aforementioned concerns regarding PGT-A, its use has grown rapidly in the US
- The use of PGT-A increased from 13% to 27% in the US from 2014–2016 (Theobald et al., 2020), and we have seen estimates that nearly half of current ART cycles include genetic testing; this compares to <2% in the UK
- **These national disparities in UK and US uptake of PGT-A suggest the influence of differing health systems and funding structures of IVF**
- PGT-A was primarily used for women aged 40–42 years in the UK, which makes sense since egg quality deteriorates with age
- **However, in the US, most women using PGT-A were aged <35 years, despite the finding by Murphy et al. (2019) of its lower efficacy in this group (also see Theobald et al., 2020);** in a recent global study, 14% of clinics responded that they used PGT-A for all their cycles (Patrizio et al., 2019)
- **Several authors have raised concerns about potential conflicts of interest that arise when PGT-A becomes an important source of revenue for clinics (Mochizuki and Gleicher, 2020, Theobald et al., 2020)**
- **As van de Weil (2022) notes "In the context of fertility insurance, [the inclusion of an IVF-first approach and PGT-A] in the benefit thus paves the way for greater revenue per cycle for the treating clinics and a more technologically intensified cycle for the patient.** …Indeed, the proposed benefit provides an alternative to a system in which cost and 'dollar caps' can perversely influence people's choices not to choose optimum treatments. **However, the counterpoint of a benefit that is denominated in 'cycles of care' rather than a fixed amount of money and is focused on reducing the time to pregnancy also has particular effects. As can be seen in Sarah's story, this per-cycle approach favours an intensified and technologized treatment pathway, which comes with a risk of overtreating and overmedicalizing reproduction. Rather than trying options that may have a lower per-cycle success rate but could present good cumulative chances and are less taxing on the body, the exemplary cycle includes IVF as a primary treatment and several add-on technologies, both of which could potentially pose additional risks according to ASRM."**

Source: Disrupting the biological clock: Fertility benefits, egg freezing and proactive fertility management, Lucy van de Wiel, Reproductive Biomedicine & Society Online, Volume 14, March 2022, Pages 239-250

Another Recent Study Again Called Into Question The Value of PGT

Recent research published in the New England Journal of Medicine determined that some PGTs do not improve fertility outcomes.

November 2021 NEJM Study Casts Doubts On Efficacy of Preimplant Genetic Testing

The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

Live Birth with or without Preimplantation Genetic Testing for Aneuploidy

J. Yan, Y. Qin, H. Zhao, Y. Sun, F. Gong, R. Li, X. Sun, X. Ling, H. Li, C. Hao, J. Tan, J. Yang, Y. Zhu, F. Liu, D. Chen, D. Wei, J. Lu, T. Ni, W. Zhou, K. Wu, Y. Gao, Y. Shi, Y. Lu, T. Zhang, W. Wu, X. Ma, H. Ma, J. Fu, J. Zhang, Q. Meng, H. Zhang, R.S. Legro, and Z.-J. Chen

ABSTRACT

BACKGROUND
Embryo selection with preimplantation genetic testing for aneuploidy (PGT-A) may improve pregnancy outcomes after initial embryo transfer. However, it remains uncertain whether PGT-A improves the cumulative live-birth rate as compared with conventional in vitro fertilization (IVF).

CONCLUSIONS
Among women with three or more good-quality blastocysts, conventional IVF resulted in a cumulative live-birth rate that was noninferior to the rate with PGT-A. (Funded by the National Natural Science Foundation of China and others; ClinicalTrials.gov number, NCT03118141.)

Excerpts from STAT article on the NEJM study

"The study focuses on preimplantation genetic testing for aneuploidy, or PGT-A, which screens embryos for chromosomal abnormalities that could keep them from implanting. The diagnostic tool has been controversial for decades, since no rigorous studies have conclusively proven the test improves the odds of having a baby. Studies as far back as 2007 showed an earlier, more invasive version of the test, called PGS, harmed patients' chances of having a child. Nonetheless, PGT-A has been sold to prospective parents across the world, bolstering the multibillion-dollar industry of reproductive medicine."

"Clinicians and researchers told STAT say they believe most providers have good intentions, but they are still offering patients an unproven, expensive, and possibly risky procedure."

"Many of the add-ons rest on flimsy science and big marketing budgets, targeting patients desperate for anything that will improve the odds of having a child."

Source: New England Journal of Medicine, STAT

Spruce Point Capital Management

Research Suggests That Single Embryo Transfer May Not Reduce The Incidence of Pre-Term Births; Should It Really Be Subject To A Service Level Guarantee?

Despite the seemingly sound logic of single embryo transfer, research suggests that PGNY's claims that this practice will ensure the reduced incidence (and, most importantly, resultant costs) of pre-term births are questionable, or at least provide an incomplete picture of the aggregate outcomes.

PGNY's Treatment Protocol Should Not Be Expected To Reduce Pre-Term Births

- PGNY focuses its pitch to clients on how its treatment protocol can reduce the incidence of expensive pre-term births, primarily through the practice of single embryo transfer
- However, research suggests that PGNY's intensified approach to fertility does not necessarily reduce all prematurity
- Admittedly, a move from multiple to single embryo transfer will limit the number of multiples and their associated risk of preterm births
- However, **even among elective single embryo transfer (eSET) cycles, IVF pregnancies have a greater risk of preterm birth compared with matched singleton births conceived without reproductive technologies. A recent meta-analysis concludes that *'moving towards eSET as the primary transfer paradigm during IVF will likely not succeed in reducing the elevated risk of preterm delivery seen in IVF singletons'*** (Fechner et al., 2015, Goisis et al., 2019)
- As van de Weil (2022) notes, "*while single – as opposed to multiple – embryo transfer does indeed reduce multiple pregnancies, these findings suggest that, in order to decrease preterm births, it is advisable to limit rather than broaden the indication for IVF, as the proactive fertility management model proposes*."

PGNY discloses that its client contracts contain service level guarantees regarding its outcomes. PGNY's clients, the employers, certainly consider the cost impact of the fertility treatments. Therefore, we believe PGNY's treatment plan is designed with the best interests of its employer clients in mind, and may not give complete consideration to scientific considerations we've highlighted above to its treatment strategy.

PGNY Service Level Guarantee Disclosure in Its 2021 10-K:

"*Progyny's contracts also include potential* ***service level agreement refunds related to outcome-based service metrics****.*"

Source: Disrupting the biological clock: Fertility benefits, egg freezing and proactive fertility management, Lucy van de Wiel, Reproductive Biomedicine & Society Online, Volume 14, March 2022, Pages 239-250, PGNY 2021 10-K

We Believe PGNY May Be Violating Corporate Practice of Medicine Regulations By Mandating Treatments

We believe PGNY may be violating corporate practice of medicine laws by providing contractual financial incentives for clinics to pursue certain treatment protocols. In fact, PGNY has additional incentives, as the Company discloses that its client contracts contain *"service level agreement refunds related outcome-based service metrics."*

PGNY qualifies in its website terms of service that it is not a health care provider…

Not a Substitute for Professional Health Care or Advice

We make the Services available for the purpose of providing information to consumers about our products and services, providing access to health-related resources, and providing our members access to their health plan information. In some instances, videos are presented by health care professionals. Progyny is not a health care provider. The health information contained as part of the Service is general in nature and is not a substitute for professional health care. It is not meant to replace the advice of health care professionals. If you have specific health care needs, or for complete health information, please see a doctor or other health care provider.

…And acknowledges the risks of being in violation of corporate practice of medicine laws

"There is a risk that regulatory authorities in some jurisdictions may find that our contractual relationships with our fertility specialists violate laws prohibiting the corporate practice of medicine and/or fee-splitting. These laws generally prohibit non-physician entities from practicing medicine, exercising control over physicians or engaging in certain practices such as fee-splitting with physicians.

Yet PGNY discloses in its 10-K that it "defines the scope" of fertility treatments administered by clinics

"Progyny controls the specified service (the fertility benefits solution) before it is transferred to the client… ***Progyny defines the scope of the potential services to be performed by the provider clinics*** *and monitors the performance of the provider clinics."*

Our research uncovered that PGNY provides contractual financial incentives to clinics to pursue specific treatment protocols. Since physicians generally believe fertility treatments should be individualized to a specific patient's fertility diagnosis, we view monetary incentives that predetermine a specific treatment plan to be highly questionable.

Fertility clinic executive in PGNY network Spruce Point Interview	*"the way Progyny does it, it's in the contract. And so basically you get a bonus, not a huge amount, but you get a bonus. So it's added to your reimbursement…"*
Former Director of National Accounts, PGNY, Tegus, 7/8/20	*"they pay a little additional funds if you do single embryo transfer"*

Source: Spruce Point Research, PGNY website, PGNY 2021 10-K,

Spruce Point Capital Management

PGNY Has A History of Questionable Practices Regarding Its Clinic Relationships

We find that PGNY has been pushing the envelope on its corporate practices since its repositioning as a fertility benefit manager. An investigation by the NYPost in 2016 identified numerous questionable practices, ranging from the unethical to the possibly illegal, as the Company sought to build its clinic network.

Excerpts From 2016 NYPost Investigation Into PGNY	
Illegal patient referral fees	*"Doctors balked at the company's request for discounts of up to 30 percent to join the network— as well as patient referral fees of up to $1,000. Some doctors claimed the referral fees ran afoul of state regulations."* *"Even worse, doctors griped, Fertility Authority was demanding referral fees as high as $1,000 for each patient it sent — provoking some to cite New York's Public Health Law that forbids "directly or indirectly offering, giving, soliciting, or receiving or agreeing to receive, any fee or other consideration to or from a third party for the referral of a patient.""*
Collecting clinic data under false pretenses	*"But some doctors say Fertility Authority lied to their staffers as they attempted to gather such info on their pricing. "Those folks called our office and tried to get our fee schedule," said Dr. George Hill of Nashville IVF in Tennessee. Hill said Fertility Authority reps had told his staffers that a business partner of his in Texas had "said it was OK" to give out the pricing schedule. But that business partner, Dr. Kaylen Silverberg of the Texas Fertility Center in Austin, told The Post he never gave any such approval."*
Demands for discounts from clinics	*"Meanwhile, still bigger problems have dogged Fertility Authority, the IVF clinic network, whose demands for discounts turned off many prominent doctors. As a result, its network was left with just a smattering of little-known clinics as of late last year. "They discovered pretty quickly that the best doctors already had full waiting rooms," according to one source."*
Forcing doctors to pay to join the network	*"A few months later, in April 2012, however, a Fertility Authority rep emailed Silverberg to tell him a "re-design" of the site would only list doctors who paid to be in the network— whether they had agreed to do a video interview or not, said the doctor, who felt double-crossed by the move."*

Source: NYPost article

Spruce Point Capital Management

We Believe The PGNY Clinic Network Is Unstable And Under Pressure

The fertility clinic landscape is changing rapidly, as private equity owners roll-up a supply constrained sector.
We believe PGNY needs the clinics more than they need PGNY and that short, 1-year clinic contracts only increase clinic network negotiating leverage, which we believe may pressure PGNY margins going forward.

Clinic Supply / Capacity

- The fertility clinic landscape is generally considered to be supply constrained, with insufficient new endocrinologists graduating from schools
- We believe constrained supply is one explanation for clinics with issues remaining in-network
- The best clinics are the ones who need PGNY the least
- Private-equity owned networks and Kindbody are rolling up clinics, which may lead to defections from PGNY

Clinic Demand

- PGNY was widely acknowledged to be a richer payer when the Company launched its fertility benefit; with new entrants undercutting PGNY on price, PGNY may become a less attractive source of business
- The large number of high-growth competitors presents other options for clinics seeking growth

Clinic / PGNY Economic Splits

- Private-equity owned clinic networks have clearly gained negotiating leverage versus PGNY
- PGNY still accounts for a small fraction of most clinics' business, making them less strategic
- PGNY must legally sustain a clinic network able to service its new clients, placing the onus on PGNY to ensure capacity

Clinic Contract Issues

- The PGNY network is inherently unstable, as client contracts are typically three years, yet clinic contracts are only one year
- PGNY clinic relationships are not exclusive, so PGNY has no ability to secure capacity or differentiate its offering

Source: Spruce Point Research

We See 60% - 80% Downside Risk To PGNY's Share Price

Spruce Point Capital Management

Insiders Have Reduced Their Stake From 52% Prior To The IPO To Just 14%

Insiders have continued to reduce their stake in PGNY since its IPO in 2019. Insiders have reduced their stake from 52% prior to the IPO to 14% as of the 2021 proxy filed in April 2022. If insiders are selling at such a rapid clip, why are investors buying?

Major Stakeholders Have All Sold A Majority of Their Stock

	Pre-IPO	Post-IPO	2019 Proxy	2020 Proxy	2021 Proxy
TPG	20,661,413	20,661,413	20,661,413	15,290,469	10,565,351
Kleiner Perkins	19,460,800	19,460,800	19,460,800	9,460,800	6,473,515
David Schlanger, Executive Chairman	4,375,514	3,715,507	4,655,165	4,757,758	3,488,992
Peter Anevski, CEO	2,500,293	1,840,286	2,407,771	2,456,259	1,992,592
Norm Payson, Director	3,663,310	3,289,316	3,192,274	1,312,564	759,984
Total Executive and Director Ownership %	**52%**	**46%**	**33%**	**19%**	**14%**

Sources: PGNY IPO Prospectus, 2019 Proxy, 2020 Proxy, 2021 Proxy

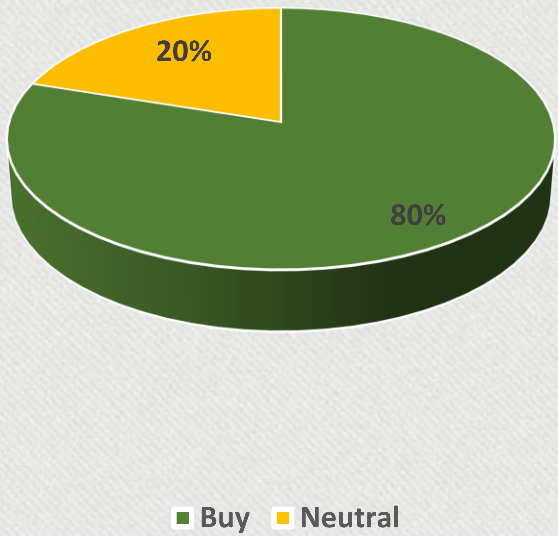
Spruce Point Capital Management

Few Skeptics And Aggressive Upside Estimates

Spruce Point believes current sell-side analyst price targets are wildly optimistic, with all but one analyst recommending buying the stock. The consensus estimate projects 41% upside to PGNY's share price. However, there are reasons to be skeptical of the sell-side's bullish stance based on slowing or even negative growth from its largest two customers (~25% of FY22E revenue). Further the sell-side does not appreciate the questionable revenue recognition, risk to utilization trends in its maturing member base, obfuscation of profitability metrics and accelerating dilution stemming from aggressive stock compensation.

Analyst	Recommendation	Price Target
JP Morgan	Overweight	$62
Berenberg Just Dropped Coverage	Buy	$55
Jefferies	Buy	$48 (down from $50 Feb 1st)
Truist	Buy	$46
KeyBanc	Overweight	$45
SVB Securities	Market perform	$34
Average Price Target **% Upside (Downside)**		**$47.00** **+41%**

Recommendation Mix



Source: Bloomberg. Note: Goldman Sachs was a IPO bookrunner and dropped coverage
Based on closing price of $33.43 per share

Comparable Company Analysis

In our peer group below, we show Adjusted EBITDA metrics for FY 2023 and adjust for stock compensation so investors can evaluate multiples based on a fully loaded cost of compensation. We do not believe that PGNY deserves a multiple premium and rather deserves a discount given based on our findings detailed in this report.

PGNY Comparable Company Analysis

US$ in mm, except per share figures

Name	Ticker	Stock Price 2/6/2023	Adj EV	Rev Growth 2023E	GM% 2023E	EBITDA Margin 2023E [A]	Stock Comp / Revs LTM [B]	[C]=[A]-[B] Adj.EBITDA Margin 2023E	Enterprise Value / Gross Profit 2022E	Enterprise Value / Gross Profit 2023E	Enterprise Value / EBITDA 2022E	Enterprise Value / EBITDA 2023E	Enterprise Value / SP Adj. EBITDA 2022E	Enterprise Value / SP Adj. EBITDA 2023E
Selected Company Comparables														
HEALTHEQUITY INC	HQY	$60.75	$5,930	12.2%	59.0%	33.3%	7.4%	25.9%	12.4x	10.6x	22.7x	18.7x	29.8x	24.0x
TELADOC HEALTH INC	TDOC	$30.31	$5,597	13.1%	68.9%	10.8%	9.8%	0.9%	3.4x	3.0x	23.0x	19.2x	NR	NR
EVOLENT HEALTH INC - A	EVH	$31.01	$3,459	31.0%	25.6%	8.6%	2.0%	6.6%	10.4x	7.7x	34.3x	22.8x	46.6x	29.7x
APOLLO MEDICAL HOLDINGS INC	AMEH	$34.92	$1,987	12.0%	14.7%	11.4%	1.2%	10.2%	11.0x	11.0x	14.0x	14.2x	15.5x	15.9x
TRUPANION INC	TRUP	$59.88	$2,319	21.9%	13.7%	0.7%	3.7%	-3.1%	19.3x	15.5x	NR	NR	NR	NR
			Max	31.0%	68.9%	33.3%	9.8%	25.9%	19.3x	15.5x	34.3x	22.8x	46.6x	29.7x
			Average	18.0%	36.4%	13.0%	4.8%	8.1%	11.3x	9.5x	23.5x	18.7x	30.6x	23.2x
			Min	12.0%	13.7%	0.7%	1.2%	-3.1%	3.4x	3.0x	14.0x	14.2x	15.5x	15.9x
Traditional and Mature Insurance Company Comparables														
HUMANA INC	HUM	$486.22	$53,289	11.3%	19.3%	5.5%	0.2%	5.3%	3.0x	2.7x	35.8x	9.3x	42.1x	9.7x
CIGNA CORP	CI	$288.44	$110,414	4.9%	11.2%	6.2%	0.0%	6.2%	2.0x	5.2x	12.1x	9.3x	12.1x	9.3x
UNITEDHEALTH GROUP INC	UNH	$475.24	$473,752	10.5%	24.8%	10.0%	0.3%	9.7%	1.6x	5.3x	14.9x	13.3x	15.3x	13.7x
ELEVANCE HEALTH INC	ELV	$478.67	$104,142	6.2%	23.9%	6.8%	0.2%	6.7%	0.7x	2.6x	10.3x	9.2x	10.5x	9.4x
CENTENE CORP	CNC	$71.01	$44,596	-1.9%	17.5%	4.0%	0.2%	3.8%	1.7x	1.8x	8.1x	7.9x	8.5x	8.3x
MOLINA HEALTHCARE INC	MOH	$299.05	$11,976	4.3%	15.3%	5.3%	0.3%	5.0%	2.5x	2.4x	7.5x	6.9x	8.0x	7.3x
CRAWFORD & COMPANY -CL A	CRD/A	$6.39	$643	5.2%	26.5%	8.5%	0.5%	7.9%	2.1x	1.9x	7.2x	6.0x	7.7x	6.4x
			Max	11.3%	26.5%	10.0%	0.5%	9.7%	3.0x	5.3x	35.8x	13.3x	42.1x	13.7x
			Average	5.8%	19.8%	6.6%	0.2%	6.4%	2.0x	3.1x	13.7x	8.8x	14.9x	9.2x
			Min	-1.9%	11.2%	4.0%	0.0%	3.8%	0.7x	1.8x	7.2x	6.0x	7.7x	6.4x
PROGYNY INC	PGNY	$33.43	$2,972	30.2%	23.1%	16.4%	12.3%	4.1%	16.7x	12.6x	23.8x	17.7x	106.8x	71.5x
Spruce Point Adjusted				13.1%								20.1x		63.2x

Sources: Bloomberg Estimates and Spruce Point Research

Spruce Point Capital Management

We See 60% - 80% Downside Risk To PGNY's Share Price As Expectations Are Simply Too High

Financial consensus expectations appear too high for PGNY's 2023 outlook. We observe that revenue estimates have only been reduced by 5.0% in the past 12 months, while EBITDA expectations have largely remained unchanged. Spruce Point's fair value price target for PGNY's stock is approximately $7 to $14 per share.

Spruce Point Price Target

$ in mm, except per share figures	Consensus EBITDA		Spruce Point Base Case EBITDA	
	Low	High	Low	High
Multiple	**14x**	**28x**	**14x**	**28x**
Adj 2023E EBITDA(1)	$69	$69	$45	$45
Total Enterprise Value	**$967**	**$1,935**	**$630**	**$1,260**
Less: PV of Leases	($8)	($8)	($8)	($8)
Plus: Cash	$141	$141	$141	$141
Market Value of Equity	**$1,100**	**$2,068**	**$763**	**$1,396**
FD Shares Outstanding	103.4	103.4	103.4	103.4
Implied Stock Price	**$10.65**	**$20.00**	**$7.38**	**$13.48**
Current Price	$33.43	$33.43	$33.43	$33.43
Downside From Current	**-68%**	**-40%**	**-78%**	**-60%**

2023E Consensus Revenue

Time Frame	Estimate	%Chg from Dt
11) Current Estimate	1.023B	0.00%
12) 1 Day Ago	1.023B	0.00%
13) 1 Week Ago	1.037B	-1.37%
14) 1 Month Ago	1.037B	-1.37%
15) 3 Months Ago	1.047B	-2.27%
16) 6 Months Ago	1.033B	-0.94%
17) 12 Months Ago	1.077B	-5.00%

2023E Consensus EBITDA

Time Frame	Estimate	%Chg from Dt
11) Current Estimate	167.667M	0.00%
12) 1 Day Ago	167.667M	0.00%
13) 1 Week Ago	169.571M	-1.12%
14) 1 Month Ago	169.429M	-1.04%
15) 3 Months Ago	168.000M	-0.20%
16) 6 Months Ago	165.333M	1.41%
17) 12 Months Ago	167.333M	0.20%

Sources: Bloomberg, PGNY 3Q22 10-Q

(1) Spruce Point and Consensus FY23 EBITDA calculation includes an estimate for the cost of stock-based compensation in the amount of $100.5M