



August 30, 2022

RBC Capital Markets U.S. Small Cap Growth Idea List September Update

RBC Capital Markets US Research is updating its Small Cap Growth Idea list. This is a quarterly list of our highest conviction Small Cap Growth recommendations. The list is an opportunity to highlight companies that have either an attractive normalized growth story or strong durable growth characteristics. We feature companies with market capitalizations below \$5 billion (as of joining the list), and a minimum average daily trading value of \$10 million.

In software, we reiterate our conviction in **JAMF Holdings, Rapid7, Varonis, Pegasystems** and **Coursera**. For internet exposure, we recommend **CarGurus** and in advertising technology, **Pubmatic** and **Magnite**. In payments, we maintain conviction in **Shift4 Payments** and **Flywire**. In healthcare technology and services, **Avid BioServices** and **Surgery Partners** remain high conviction ideas. We add **Evolent Health** following a recent initiation to the list. Evolent's heavy focus on better managing specialty care differentiates it from the increasingly dense tech-enabled provider space, and we further see significant whitespace opportunity for EVH to both add new logos as well as cross-sell/up-sell which combined, we believe can comfortably drive mid-teens or better revenue growth for the next 3+ years. For medical device exposure, we add **NuVasive** as the company is in its first full year of two major product launches, is attractively positioned to deliver above market top-line growth along with operating margin expansion, and is attractively valued in our view. In biopharma, **Intra-Cellular Therapies, Sarepta Therapeutics** and **Pacira Biosciences** remain on the list. We add **Agios Pharmaceuticals**, a focused orphan disease hematology company at an attractive valuation with the lead commercial asset now launching in an ultra-rare anemia condition with longer-term indication expansion efforts underway in higher value disease areas. For consumer exposure, we add **Sweetgreen**, a compelling long-term restaurant development story, with potential near-term tailwinds to sales in the 2H including: return-to-office/improving mobility; menu innovation; and ongoing digital focus. In energy, we add **Ranger Oil**, one of few mid cap E&Ps that provide a balanced investor proposition that includes adding activity for growth, paying a fixed dividend, stock buybacks, accretive acquisitions, and paying down debt; we expect ~10% sequential production growth in both 3Q22/4Q22 plus 12-15% in 2023. Residential solar leader **Sunnova**, drone manufacturer, **AeroVironment**, and insurance broker, **Goosehead Insurance** all remain on the list. Please see the body of this note for additional details on each name's investment thesis and as always, we encourage you to reach out to the team with any questions.

Additions (5): Agios Pharmaceuticals, Inc., Evolent Health, Inc., NuVasive, Inc., Ranger Oil Corporation, Sweetgreen, Inc.

Deletions (6): Fluence Energy, Inc., Global Blood Therapeutics, Inc., Kinsale Capital Group, Inc., Matador Resources Company, OptimizeRx Corporation, Ping Identity Holding Corp.

Exhibit 1 - RBC Capital Markets Small Cap Growth Idea List

Company	Pricing Symbol	Analyst	Rating	Trading Currency	Closing Price (08/29/2022)	Market Cap (MM)	Price Target	Dividend Yield (%)	Implied All-in Return (%)
Intra-Cellular Therapies, Inc.	ITCI US	Brian Abrahams	Outperform	USD	49.55	5,024	70	0.0	41
Sarepta Therapeutics, Inc.	SRPT US	Brian Abrahams	Outperform	USD	110.28	8,602	182	0.0	65
Sweetgreen, Inc.	SG US	Christopher Carril	Outperform	USD	17.46	1,894	20	0.0	15
Avid Bioservices, Inc.	CDMO US	Sean Dodge	Outperform	USD	17.34	1,221	22	0.0	27
Evolent Health, Inc.	EVH US	Sean Dodge	Outperform	USD	36.43	3,282	44	0.0	21
Goosehead Insurance Inc	GSHD US	Mark Dwelle	Outperform	USD	51.59	1,919	100	0.0	94
CarGurus, Inc.	CARG US	Brad Erickson	Outperform	USD	19.11	2,262	35	0.0	83
Ranger Oil Corporation	ROCC US	Scott Hanold	Outperform	USD	41.69	1,766	52	0.8	26
Jamf Holding Corp.	JAMF US	Matthew Hedberg	Outperform	USD	24.46	3,171	35	0.0	43
Rapid7, Inc.	RPD US	Matthew Hedberg	Outperform	USD	58.72	3,940	85	0.0	45
Varonis Systems, Inc.	VRNS US	Matthew Hedberg	Outperform	USD	27.29	3,234	35	0.0	28
Surgery Partners, Inc.	SGRY US	Ben Hendrix	Outperform	USD	29.13	2,403	62	0.0	113
AeroVironment, Inc.	AVAV US	Ken Herbert	Outperform	USD	92.06	2,267	115	0.0	25
Coursera Inc	COUR US	Rishi Jaluria	Outperform	USD	11.63	1,913	20	0.0	72
Pegasystems Inc.	PEGA US	Rishi Jaluria	Outperform	USD	36.27	3,094	90	0.0	148
Flywire Corporation	FLYW US	Daniel R. Perlin	Outperform	USD	25.11	2,697	34	0.0	35
Shift4 Payments, Inc.	FOUR US	Daniel R. Perlin	Outperform	USD	46.05	3,771	65	0.0	41
Agios Pharmaceuticals, Inc.	AGIO US	Gregory Renza	Outperform	USD	25.83	1,415	44	0.0	70
Pacira Biosciences, Inc.	PCRX US	Gregory Renza	Outperform	USD	54.43	2,526	81	0.0	49
Sunnova Energy International Inc	NOVA US	Elvira Scotto	Outperform	USD	25.10	2,877	41	0.0	63
NuVasive, Inc.	NUVA US	Shagun Singh	Outperform	USD	43.56	2,289	63	0.0	45
Pubmatic, Inc.	PUBM US	Matthew Swanson	Outperform	USD	19.40	1,094	31	0.0	60
Magnite, Inc.	MGNI US	Matthew Swanson	Outperform	USD	7.92	966	19	0.0	140

Source: RBC Capital Markets estimates, Bloomberg

Priced as of market close on August 29, 2022, unless otherwise indicated.
All values in USD unless otherwise noted.

Table of Contents

Investment Summaries – Technology and Payments	4
CarGurus, Inc. (NASDAQ: CARG)	5
Coursera, Inc. (NYSE: COUR)	6
Flywire Corporation (NASDAQ: FLYW)	7
Jamf Holding Corp. (NASDAQ: JAMF)	8
Magnite, Inc. (NASDAQ: MGNI).....	9
Pegasystems Inc (NASDAQ: PEGA)	10
Pubmatic, Inc. (NASDAQ: PUBM)	11
Rapid7 Inc. (NASDAQ: RPD).....	12
Shift4 Payments, Inc. (NYSE: FOUR)	13
Varonis Systems, Inc. (NASDAQ:VRNS)	14
Investment Summaries – Biopharma	15
Agios Pharmaceuticals, Inc. (NGS: AGIO)	16
Intra-Cellular Therapies, Inc. (NASDAQ: ITCI).....	17
Pacira Biosciences, Inc. (NASDAQ: PCRX)	18
Sarepta Therapeutics, Inc. (NASDAQ: SRPT)	19
Investment Summaries – Healthcare Technology and Services	20
Avid Bioservices, Inc. (NASDAQ: CDMO)	21
Evolent Health, Inc. (NYSE: EVH)	22
NuVasive, Inc. (NASDAQ: NUVA)	23
Surgery Partners, Inc. (NASDAQ: SGRY)	24
Investment Summaries – Energy	25
Ranger Oil Corporation (NASDAQ: ROCC)	26
Sunnova Energy International Inc. (NYSE: NOVA)	27
Investment Summaries – Financials	28
Goosehead Insurance Inc. (NASDAQ: GSHD)	29
Investment Summaries – Industrials	30
AeroVironment, Inc. (NASDAQ: AVAV)	31
Investment Summaries – Restaurants	32
Sweetgreen, Inc. (NYSE: SG US).....	33
Contributing Authors	34

Changes to the list
Recurring names

Company	Pricing Symbol	Analyst	Rating	Trading Currency	Closing Price 08/29/2022	Price Target	Added to the List
Intra-Cellular Therapies, Inc.	ITCI US	Brian Abrahams	Outperform	USD	49.55	70.00	04/27/2021
Sarepta Therapeutics, Inc.	SRPT US	Brian Abrahams	Outperform	USD	110.28	182.00	04/27/2021
Avid Bioservices, Inc.	CDMO US	Sean Dodge	Outperform	USD	17.34	22.00	03/01/2022
Goosehead Insurance Inc	GSHD US	Mark Dwelle	Outperform	USD	51.59	100.00	02/03/2021
CarGurus, Inc.	CARG US	Brad Erickson	Outperform	USD	19.11	35.00	06/01/2022
Jamf Holding Corp.	JAMF US	Matthew Hedberg	Outperform	USD	24.46	35.00	10/13/2021
Rapid7, Inc.	RPD US	Matthew Hedberg	Outperform	USD	58.72	85.00	02/03/2021
Varonis Systems, Inc.	VRNS US	Matthew Hedberg	Outperform	USD	27.29	35.00	03/01/2022
Surgery Partners, Inc.	SGRY US	Ben Hendrix	Outperform	USD	29.13	62.00	12/01/2021
AeroVironment, Inc.	AVAV US	Ken Herbert	Outperform	USD	92.06	115.00	06/01/2022
Coursera Inc	COUR US	Rishi Jaluria	Outperform	USD	11.63	20.00	03/01/2022
Pegasystems Inc.	PEGA US	Rishi Jaluria	Outperform	USD	36.27	90.00	06/01/2022
Flywire Corporation	FLYW US	Daniel R. Perlin	Outperform	USD	25.11	34.00	08/27/2021
Shift4 Payments, Inc.	FOUR US	Daniel R. Perlin	Outperform	USD	46.05	65.00	12/01/2021
Pacira Biosciences, Inc.	PCRX US	Gregory Renza	Outperform	USD	54.43	81.00	03/01/2022
Sunnova Energy International Inc	NOVA US	Elvira Scotto	Outperform	USD	25.10	41.00	08/27/2021
Pubmatic, Inc.	PUBM US	Matthew Swanson	Outperform	USD	19.40	31.00	08/27/2021
Magnite, Inc.	MGNI US	Matthew Swanson	Outperform	USD	7.92	19.00	06/01/2022

Source: RBC Capital Markets estimates, Bloomberg

Additions to the U.S. Small Cap Growth Idea List

Company	Pricing Symbol	Analyst	Rating	Trading Currency	Closing Price 08/29/2022	Price Target	Added to the List
Agios Pharmaceuticals, Inc.	AGIO US	Gregory Renza	Outperform	USD	25.83	44.00	08/30/2022
Sweetgreen, Inc.	SG US	Christopher Carril	Outperform	USD	17.46	20.00	08/30/2022
Evolent Health, Inc.	EVH US	Sean Dodge	Outperform	USD	36.43	44.00	08/30/2022
NuVasive, Inc.	NUVA US	Shagun Singh	Outperform	USD	43.56	63.00	08/30/2022
Ranger Oil Corporation	ROCC US	Scott Hanold	Outperform	USD	41.69	52.00	08/30/2022

Source: RBC Capital Markets estimates, Bloomberg

Deletions from the U.S. Small Cap Growth Idea List

Company	Pricing Symbol	Analyst	Rating	Trading Currency	Closing Price 08/29/2022	Price Target	Added to the list	Removed from the list
Fluence Energy, Inc.	FLNC US	Shelby Tucker	Outperform *	USD	19.18	18.00	03/01/2022	08/30/2022
Global Blood Therapeutics, Inc.	GBT US	Gregory Renza	Sector Perform	USD	67.68	68.50	02/03/2021	08/30/2022
Kinsale Capital Group, Inc.	KNSL US	Mark Dwelle	Outperform	USD	261.83	275.00	04/27/2021	08/30/2022
Matador Resources Company	MTDR US	Scott Hanold	Outperform	USD	62.69	75.00	04/27/2021	08/30/2022
OptimizeRx Corporation	OPRX US	Sean Dodge	Outperform	USD	15.59	22.00	04/27/2021	08/30/2022
Ping Identity Holding Corp.	PING US	Matthew Hedberg	Sector Perform	USD	28.04	28.50	08/27/2021	08/30/2022

Source: RBC Capital Markets estimates, Bloomberg

Investment Summaries – Technology and Payments

CarGurus, Inc. (NASDAQ: CARG)

Brad Erickson (Analyst)
(503) 830-9488
brad.erickson@rbccm.com

Rating: Outperform

Closing Price: \$19.11

Price Target: \$35.00

Implied All-in Return: 83%

Most recent company note: [link](#)

Investment summary

CARG is the largest car shopping site in the U.S. by traffic and leverages a differentiated, freemium-based approach to offer the most inventory of any shopping site. We are bullish on the stock on the back of bringing together CarOffer's two-sided marketplace technology and CarGuru's industry-leading audience to move down the funnel and extract greater economics from retail and wholesale car sales in the U.S.

Valuation

The stock trades at a discount relative to the peer group. That said, early success with the recently acquired CarOffer business coupled with its Max Cash Offer platform shows a promising down-funnel opportunity, which we believe can drive the next leg of growth for CARG, provide synergies to the core lead-gen business, and direct multiple expansion. To that end, we use a 17x EV/'23E EBITDA multiple to derive our \$35 price target, which supports our Outperform rating.

Risks to rating and price target

Pandemic relapses causing disruption to the used car market, such as lack of liquidity in asset-backed markets and/or inventory constraints; new car supply constraints leading to lower used car inventory; lack of traction within the wholesale market; lower industry gross profits/vehicle leading to lower advertising spend/vehicle; rising interest rates, inflation, and/or a macroeconomic downturn.

Coursera, Inc. (NYSE: COUR)

Rishi Jaluria (Analyst)
(415) 633-8798
rishi.jaluria@rbccm.com

Rating: Outperform
Closing Price: \$11.63
Price Target: \$20.00
Implied All-in Return: 72%
Most recent company note: [link](#)

Investment summary

We like shares of Coursera for four primary reasons: We believe the multi-segmented approach (consumer, enterprise, higher ed) creates a powerful flywheel effect and a sustainable economic moat. The consumer business, for example, creates brand awareness that has helped drive enterprise traction, while also serving as a funnel for the degree program (and lowering CAC as a result). **Our due diligence on Coursera has been positive.** We spoke to multiple Coursera customers as well as Coursera's industry and education partners; partners praised Coursera for its reach and openness to innovation vs. competitors and consumers praised Coursera for the breadth and depth of its content vs. competitors. **We believe the pandemic has created lasting tailwinds across all segments for Coursera, especially in higher education.** We believe education has been irreversibly changed and we see room for more degrees (graduate and undergraduate) to be fully online. **Rapid growth with room for margin expansion.** Coursera has grown revenue rapidly, with a 30% CAGR from 2017 through 2021, while growth nearly doubled in 2020 vs. 2019 as a result of the pandemic. Importantly, high growth seems sustainable, with the shift to digital learning still in early innings. We also see room for meaningful margin expansion and Coursera to reach 25%+ FCF margins at scale, driven primarily by revenue mix-shift.

Valuation

Our \$20 price target is based on 4x EV/CY23E revenue, a discount to the group which balances Coursera's competitive positioning and growth profile in a large market opportunity with lack of profitability. Our price target supports our Outperform rating on the stock.

Risks to rating and price target

Investment risks include: 1) competition, including against 2U, Udemy, Udacity, edX, LinkedIn Learnings, and Pluralsight; 2) Coursera is unprofitable and we do not expect sustained profitability in the near term; 3) Coursera is a Public Benefit Corporation (PBC) and registered b-corp, which requires additional investor disclosures and attention from management; 4) pandemic-related tailwinds may not be sustainable and may cause growth to decelerate; and 5) international risk, with international representing more than half of the business and 80% of total learners.

Flywire Corporation (NASDAQ: FLYW)

Daniel Perlin (Analyst)
(410) 625-6130
daniel.perlin@rbccm.com

Rating: Outperform
Closing Price: \$25.11
Price Target: \$34.00
Implied All-in Return: 35%
Most recent company note: [link](#)

Investment summary

We believe Flywire is uniquely positioned to solve various payment friction points embedded in its key verticals, which include education, healthcare, and travel. Growth in the company's end markets, high retention rates, market share gains, new products, and expansion into additional verticals should support 30%+ revenue CAGR over the next three years. While the company is currently investing in the business to support this revenue growth, we believe it will turn adjusted EBITDA positive in FY23 and long-term adjusted EBITDA margins could approach 25%+ with the revenue CAGR remaining ~30%.

We believe FLYW's success will be underpinned by several attributes, which in our opinion include: 1) its focus on large and unique addressable markets; 2) Flywire Advantage, its technology platform, setting itself apart from peers and resulting in high retention rates and new client wins; 3) the competitive moat provided by FLYW's proprietary global payment network (over a decade to build) and vertical-specific software; and 4) the potential optionality the company has as it expands into B2B payments.

Valuation

Our price target of \$34 is based on an EV/revenue multiple of 10x our CY23 revenue estimate of \$345M. This target is in line with the company's peers and reflective of the company's anticipated 30%+ long-term revenue growth CAGR and achieving consistent EBITDA profitability in FY23. The implied upside supports our Outperform rating.

Risks to rating and price target

We believe there are three broad risk categories: 1) macro-economic risks; 2) regulatory and compliance risks; and 3) competitive risks including pricing and technological changes.

In terms of specific risks, we note that since inception, Flywire has incurred net losses from operations, and despite significant revenue growth in recent periods, it is uncertain whether the company will obtain high enough volumes to sustain/increase growth or achieve/maintain profitability in the future. The company's key verticals, furthermore, are highly competitive and regulated while evolving rapidly. Finally, a group of major shareholders controls a significant portion of FLYW's voting and economic rights.

Jamf Holding Corp. (NASDAQ: JAMF)

Matthew Hedberg (Analyst)
(612) 313-1293
matthew.hedberg@rbccm.com

Rating: Outperform
Closing Price: \$24.46
Price Target: \$35.00
Implied All-in Return: 43%
Most recent company note: [link](#)

Investment summary

We see Jamf's primary mission as being to help organizations succeed with Apple. As the standard in Apple enterprise management, we think Jamf is in a strong position to leverage the growing preference for Apple in the enterprise. In addition to a TAM that is likely to expand more quickly than previously expected in a post-COVID world, the company's financial profile is unique given rapid growth and high profitability.

Apple innovation has transformed the technology landscape. What started off as a consumer revolution to Apple devices has steadily made its way to the enterprise. As such, there has been a substantial share shift in operating system usage since 2009, with iOS representing 32% of Internet traffic in the US and macOS 12%, for a total of 43%, which is significantly higher than Windows at 31%. To put that into perspective, in 2009 Windows-based devices drove 88% of Internet traffic vs. iOS at 1% and macOS at 10%.

Expanding the TAM. The company has provided a bottom-up estimate of \$10.3 billion TAM in 2019, growing at a CAGR of 17.8% to \$23.4 billion by 2024.

Potential growth catalysts: (1) A growing acceptance of Mac and iOS in the enterprise (see IBM example in our initiation report on JAMF dated 17 Aug. 2020). (2) Growing preference for BYOD. (3) Consumerization of IT. (4) Shifting demographics in the workforce to Millennials. (5) COVID changes everything as enterprises and employees re-think the value/importance of WFH. (6) The launch of additional Apple products or ability to monetize the Apple Watch. (7) Vertical specific tailwinds in education from e-learning and healthcare from tele-health.

Valuation

Our \$35 price target is based on shares trading at 8x our CY/23 EV/S estimate. This is a slight premium to similar growing SaaS peers, which we believe is warranted due to their above average growth and profitability offset somewhat by their PE overhang and dependency on Apple. We think if ARR growth were to stay at +30%, 500 bps expansion above our CY/22 estimate, one could argue for additional multiple expansion. Our price target supports an Outperform rating.

Risks to rating and price target

(1) The impact on Jamf's operations and financial condition from COVID-19. (2) Changes in Jamf's continued relationship with Apple including the adverse impact of changes in features and functionality by Apple on Jamf's engineering focus or product development efforts. (3) Jamf derives a substantial portion of its revenue from one product; as of CY/19, sales of Jamf Pro accounted for ~78% of total revenue.

Magnite, Inc. (NASDAQ: MGNI)

Matthew Swanson (Analyst)

(612) 313-1237

matthew.swanson@rbccm.com

Rating: Outperform

Closing Price: \$7.92

Price Target: \$19.00

Implied All-in Return: 140%

Most recent company note: [link](#)

Investment summary

Magnite is one of the largest independent sell-side advertising platforms (SSP) offering buyers and sellers of digital advertising a single partner for transacting globally across a variety of channels, formats, and auction types. Recently, the company has invested toward a full CTV technology stack including the acquisition of SpotX. In 2020, Magnite generated \$221.6M in revenue (+42% Y/Y) while also delivering 19% adjusted-EBITDA margins. Looking forward, we believe the company's success will revolve around being able to successfully integrate CTV investments and expand market share within the fast-growing segment.

Potential positive catalysts: 1) Magnite is a leader in CTV for open-internet SSP players and has the opportunity to capture additional share in this rapidly growing TAM; 2) the company's expanded product portfolio around CTV could create additional cross-sell opportunities as well as accelerated spend from its publishers assisting in linear TV re-targeting; 3) Alternative Cookie Solutions (TTD's Unified ID 2.0, RAMP's ATS) create a superior targeting and measurement environment on the Open Internet relative to third-party cookies; 4) regulatory action is taken against Google that limits its ability to aggressively compete in the SSP space, leaving more room for Magnite to gain market share.

Valuation

We calculate our price target of \$19 by applying a 5.5x multiple to our CY/23E revenue estimate or 16.3x EV/EBITDA. Our target multiple is a slight premium to lowered ad-tech peers, in our view warranted due to the potential for upside to estimates driven by strong CTV traction balanced by increased risk from the nascent stage of that same market. Our price target supports our Outperform rating.

Risks to rating and price target

(1) Magnite has seen both headwinds and tailwinds resulting from the COVID-19 environment, which could impact the advertising industry and the company's performance. (2) Magnite is a transactional model; revenue is based on the number of transactions and could lead to more revenue variability based on company-specific and macro challenges. (3) Magnite is tied to the advertising vertical; any macroeconomic event that impacts the supply or demand of digital advertising could cause an adverse impact on their end markets disproportionately to other software markets. (4) Magnite has created an advantage in CTV/OTT. Failure to manage and defend these emerging growth opportunities could lead to market share losses.

Pegasystems Inc (NASDAQ: PEGA)

Rishi Jaluria (Analyst)
(415) 633-8798
rishi.jaluria@rbccm.com

Rating: Outperform
Closing Price: \$36.27
Price Target: \$90.00
Implied All-in Return: 148%
Most recent company note: [link](#)

Investment summary

We like shares of Pega for four primary reasons: (1) Pega's cloud transition creates a more attractive financial model. Historically, Pega's model has been rather “lumpy” and difficult to predict, owing to high ASPs and long-term nature of deals. Since Pega began its cloud transition in 2018, the model has become increasingly predictable, with subscription revenue representing 80%+ of total (up from 56% pre-transition) and cloud representing one-third of total ACV (up from 15% pre-transition). Over the next few years, we expect cloud to account for a majority of business, driving revenue acceleration. We also see room for margin expansion and expect Pega to reach 20%+ FCF margins, on improving cloud gross margins sales efficiency. **(2) High levels of financial transparency.** While many cloud transitions can be rather opaque, we give Pega credit for providing high transparency into underlying metrics to better allow investors to gauge underlying growth, such as ACV by source and detailed RPO breakdown by source and duration (Pega provides the most detailed RPO breakdown of any company we've seen in software). With the high level of visibility into future business, we have confidence in the strength of Pega's business post-transition. **(3) Beneficiary of digital transformation tailwinds.** As digital transformation has become a top priority for enterprises, accelerated by COVID-19, Pega has increasingly benefited from those tailwinds, especially given the complexity of IT environments at large enterprises. Importantly, Pega has broadened its platform from the core BPM and case management into a broader DPA platform that encompasses BPM, RPA, and low code. **(4) Growing presence in CRM.** While Pega has been in CRM for a decade, its presence/competitiveness has grown meaningfully recently, based on our due diligence. We have seen numerous occasions where Pega has won head-to-head versus Salesforce (CRM). Pega's CRM solutions (targeted at large deployments in the contact center), tend to win deals based on a few meaningful vectors, including flexible deployment (cloud, on-premises, or hybrid), single-tenant architecture, and connection with the back office. With improved sales coverage and execution, we would expect win rates to continue improving.

Valuation

Our base case price target of \$90 assumes a 5.5x multiple on our CY23 EV/revenue estimate, in line with the peer group and reflecting our confidence in the transition and growth/margin prospects of the company. Our price target supports our Outperform rating.

Risks to rating and price target

Investment risks include: (1) concentrated ownership, with CEO and founder Alan Treffer owning 49% of shares outstanding; (2) the cloud transition may not be successful; (3) competition, including versus Salesforce, Appian, and UiPath; (4) high professional services mix (~20% of revenue); and 5) international risk, with non-US revenue representing ~40% of total revenue.

PubMatic, Inc. (NASDAQ: PUBM)

Matthew Swanson (Analyst)

(612) 313-1237

matthew.swanson@rbccm.com

Rating: Outperform

Closing Price: \$19.40

Price Target: \$31.00

Implied All-in Return: 60%

Most recent company note: [link](#)

Investment summary

PubMatic is one of the largest independent sell-side advertising platforms (SSP) offering buyers and sellers of digital advertising a single partner for transacting globally across a variety of channels, formats, and auction types. In 2021, PubMatic generated \$227M in Revenue (+53% Y/Y), driven primarily by growth in the company's faster-growing CTV/OTT, Mobile and Video segments. PubMatic processed 92.2T Ad Impressions in 2021 (+97%) driven by supply path optimization. PubMatic has a multi-year track record of generating positive EBITDA and delivered 42% EBITDA margins in 2021.

Potential positive catalysts: (1) PubMatic is able to gain additional market share from market leaders by targeting emerging spend categories with less entrenched positions from Facebook and Google; (2) PubMatic is able to consolidate market share from smaller SSPs as SPOs continue to gain traction leading to DSPs consolidating the number of SSPs they work with; (3) PubMatic's CTV product (OpenWrap OTT) gains faster-than-expected adoption, generating share gains and significant revenue growth in this fast-growing segment of the market; (4) Alternative Cookie Solutions (TTD's Unified ID 2.0, RAMP's ATS) create a superior targeting and measurement environment on the Open Internet relative to third-party cookies; (5) Regulatory action is taken against Google that limits its ability to aggressively compete in the SSP space, leaving more room for PubMatic to gain market share.

Valuation

We calculate our base-case price target of \$31 by applying a 12.4x multiple on CY/23E adj-EBITDA. Our target multiple is a slight discount to ad-tech peers, in our view warranted due to the potential for upside to estimates, better profitability and overall model durability. Our price target supports our Outperform rating.

Risks to rating and price target

(1) PubMatic has seen both headwinds and tailwinds resulting from the COVID-19 environment, which could impact the advertising industry and the company's performance. (2) PubMatic is a transactional model; revenue is based on the number of transactions and could lead to more revenue variability based on company specific and macro challenges. (3) PubMatic is tied to the advertising vertical; any macroeconomic event that impacts the supply or demand of digital advertising could cause an adverse impact on their end markets disproportionately to other software markets. (4) PubMatic has created an advantage in CTV/OTT as well as mobile and video channels. Failure to manage and defend these emerging growth opportunities could lead to market share losses.

Rapid7 Inc. (NASDAQ: RPD)

Matthew Hedberg (Analyst)
(612) 313-1293
matthew.hedberg@rbccm.com

Rating: Outperform
Closing Price: \$58.72
Price Target: \$85.00
Implied All-in Return: 45%
Most recent company note: [link](#)

Investment summary

Rapid7 is a cyber-security vendor with a unique data- and analytics-driven approach to DevSecOps. Its value proposition is to utilize massive amounts of data collected from the network and endpoints to drive automation and productivity to help customers proactively prevent security breaches. ARR growth is the key metric, and management expects it to remain at or above 20% through 2022.

We are confident about the opportunity in the core-VM market, which is currently over half of the business, with above market growth rates, consistent competitive win rates and minimal pricing pressure while longer-term success in IDR, AppSec and Connect should drive a unique position in the DevSecOps market.

The company has multiple product drivers over multiple years that should help sustain durable growth and measured operating margin expansion. Currently, base growth is via VM with IDR providing higher levels of growth that longer term should be buoyed by AppSec and Connect. The company is looking for ARR to grow at 20%+ through 2022 with 200-300 bps of annual margin expansion expected with ARR growth in the low- to mid-20% range, 100-200 bps of annual margin expansion with ARR growth in the mid- to high-20% range, and 30%.

Potential catalysts: (1) Acceleration of new customer additions; (2) increasing dollar renewal rates; (3) increased focus on leveraging data analytics with a growing security-risk landscape (i.e., differentiating Rapid7 from other VM vendors); (4) additional channel investments and international expansion; and (5) potential from IDR, AppSec and Connect.

Where we could be wrong: (1) Increased competition in a highly fragmented market; (2) security stocks could go out of favor; (3) the company is running near break-even; (4) a decline in renewal rates could adversely affect growth; and (5) COVID-19 could impact company operations or customer demand.

Valuation

Our price target of \$85 is based on 7.5x CY/23E EV/S. The multiple is a slight premium to security peers, which we believe is reasonable with an above-average growth rate. Our price target supports an Outperform rating.

Risks to rating and price target

Risks to our price target and rating could include changes in the macro environment including COVID-19 that could continue on longer than expected, moderating IT spending, limited operating history, or should acceptance of the company's products change.

Shift4 Payments, Inc. (NYSE: FOUR)

Daniel Perlin (Analyst)
(410) 625-6130
daniel.perlin@rbccm.com

Rating: Outperform
Closing Price: \$46.05
Price Target: \$65.00
Implied All-in Return: 41%
Most recent company note: [link](#)

Investment summary

We believe Shift4 offers investors several attractive and unique attributes within the payments industry.

(1) The company is tapped into the large and secularly growing payments market in the US, which when combined with its ISV and hospitality focus, provide a backdrop of growth that we forecast to be in the high-single to low-double-digit organic range. (2) The company has an embedded internal mix shift opportunity to convert its existing gateway-only clients to End-to-End (E2E) processing clients, which drives a 4x-6x uplift to gross profit. (3) Shift4 utilizes a partner-centric distribution model whereby roughly 100% of its sales are generated through its +7K software partner network, which is unique in the industry. The benefits to this distribution model are designed to leverage the domain expertise & local relationships that its software partners have already established, while reducing its own customer acquisition costs as the sales & support functions are largely borne by its channel partners. (4) The company has a demonstrated track record of providing client-focused innovation in the hospitality industry, which was illustrated recently during the COVID-19 pandemic, as Shift4 quickly pivoted with its clients to provide solutions that enabled SMBs to quickly adapt to an omni-channel and cashless environment.

Valuation

Our price target of \$65 is 17x CY23 RBCe EV/EBITDA and in line with the peer group average, which we think is appropriate given FOUR's faster growth rate as it converts merchants to its end-to-end processing platform. Our price target supports our Outperform rating.

Risks to rating and price target

We believe there are three broad risk categories: (1) the highly focused nature of FOUR's business model on the hospitality industry creates concentration risk were the economic environment to suffer another shock from COVID-19; (2) the company's exposure to SMBs can create variability in its financial results, given the possible churn related to COVID-19; and (3) the company carries a fair amount of leverage, as defined by net-debt-to-TTM EBITDA, which can reduce financial flexibility.

Varonis Systems, Inc. (NASDAQ:VRNS)

Matthew Hedberg (Analyst)
(612) 313-1293
matthew.hedberg@rbccm.com

Rating: Outperform
Closing Price: \$27.29
Price Target: \$35.00
Implied All-in Return: 28%
Most recent company note: [link](#)

Investment summary

Founded in 2004, Varonis provides a software platform that assists customers in automating unstructured data protection and management, particularly for human-generated data. The core technology behind the products is its proprietary Metadata Framework, which collects and aggregates metadata (or data about data) from human-generated content including emails, documents, spreadsheets, etc. The company's family of five products leverages Metadata Framework for applications focused on security, compliance, access, storage, collaboration, etc.

We believe the company is in the early stages of penetrating a \$47 billion market that includes fragmented competition. Through a land, expand, and retain strategy, we believe Varonis has the opportunity to generate strong financial growth for several years while continuing to innovate new technologies that leverage its Metadata Framework. In addition, we believe the company is an attractive acquisition target for larger vendors seeking exposure to innovative big data solutions.

Key points: (1) Large market opportunity. (2) Post COVID beneficiary due to the increased risk of data governance in a work from anywhere environment. (3) Growth strategy = land + expand + retain. (4) Expanded salesforce. (5) Rapid innovation. (6) High barriers to entry. (7) International growth opportunity. (8) Long-term margin expansion

Valuation

Our \$35 price target assumes that shares trade at 6.0x CY/23E EV/S, or roughly in-line with peer multiples. Our price target and multiple reflect peer multiple compression and are warranted in our view by the increased pace of the transition, a near-term headwind to revenue though we expect long-term value of additional subscription revenue, offset by the potential for near-term model volatility. We believe our rating and price target are justified by the large and expanding end market, growing customer base, execution improvement, and success of the land-and-expand model. Our price target and implied return support our Outperform rating.

Risks to rating and price target

(1) The economic environment remains volatile specifically for COVID-19 impact. (2) The potential for increased competition. (3) ARR growth as the transition normalizes.

Investment Summaries – Biopharma

Agios Pharmaceuticals, Inc. (NASDAQ: AGIO)

Gregory Renza (Analyst)
(212) 858-7065
gregory.renza@rbc.com

Rating: Outperform
Closing Price: \$25.83
Price Target: \$44.00
Implied All-in Return: 70%
Most recent company note: [link](#)

Investment summary

AGIO's wholly owned pyruvate kinase deficiency (PKD) franchise is one of its most valuable assets but a controversial potential blockbuster. We see AGIO's wholly owned pyruvate kinase deficiency (PKD) franchise as one of its most valuable assets but a controversial potential blockbuster. We believe Pyrukynd's broad label enables relatively easy prescribing (diagnosis & prescribing based on a blood test; no companion diagnostic required) and potentially adding tailwinds to the early launch, though we note the label's clause advocating discontinuation of treatment in patients not deriving a response at ~24wks potentially adding headwinds after several launch quarters. We see the approval of Pyrukynd in PKD read-through to potential of the agent in other hemolytic anemias such as sickle cell disease and thalassemia. We see the potential for peak global sales of ~\$1.6B in 2031 collectively in PKD, SCD, and thalassemia.

Servier oncology sales are a net positive for AGIO as it streamlines into a more focused rare disease company. AGIO announced a \$2B oncology deal (\$1.8B upfront cash + \$200M vorasidenib milestone payment) with French-based pharma co. Servier in an effort to focus on genetically defined diseases led by mitapivat development in pyruvate kinase disease (PKD) while maintaining partial upside, in the form of royalty payments, from US commercialization of Tibsovo (5%) and vorasidenib (15%).

Key upcoming potential catalysts: (1) Potential EMA approval in adult patients with PK deficiency (YE2022); (2) Complete enrollment in the ph.II portion of the RISE UP study in adult SCD patients (YE2022); (3) Present full ph.I SAD/MAD data of AG-946 in HV at a medical conference (2022E); (4) Initiate ph.IIa trial in adults with L-IR MDS (YE2022).

Valuation

Our base case is driven by a 90% probability of success for mitapivat in PKD with ~\$400M out-year global revenue potential, with a 35% probability of success in SCD with ~\$900M out-year global sales potential, and 40% probability of success in thalassemia with over \$300M out-year global sales potential. Our \$44 price target is based on a blend of DCF (using a 10% discount rate and a 0.5% terminal growth rate) and probability-adjusted multiples (25x on 2031E adjusted EPS with a 10% discount) analyses. Our valuation supports an Outperform rating.

Risks to rating and price target

Risks to our price target and rating include: 1) lack of treatment benefit of mitapivat in other hemolytic anemias such as sickle cell disease and thalassemia; and 2) delayed regulatory/launch timelines vs. our estimates.

Intra-Cellular Therapies, Inc. (NASDAQ: ITCI)

Brian Abrahams (Analyst)
(212) 858-7066
brian.abrahams@rbc.com

Rating: Outperform

Closing Price: \$49.55

Price Target: \$70.00

Implied All-in Return: 41%

Most recent company note: [link](#)

Investment summary

Based on unique pharmacology enabling broad activity across a spectrum of brain receptors, a clean safety profile, and positive physician feedback that supports use in schizophrenia, we believe Caplyta could be a highly differentiated schizophrenia and bipolar treatment. Following approval in both indications with what we view as a clean and potentially differentiated label—particularly regarding the safety profile—we model >\$450M in out-year WW revenues for Caplyta in schizophrenia and >\$700M in bipolar. With lumateperone's commercial potential we believe shares are undervalued and have upside potential into launch in bipolar, and we see further optionality in both mixed features and major depression, along with pipeline opportunities such as further '214 PD readouts.

Key positives: (1) Recent approval in schizophrenia, following mixed ph.III efficacy data. (2) Lumateperone may be uniquely useful against the negative and cognitive schizophrenia symptoms, due to distinct pharmacological properties that enable activity across a number of brain receptors. (3) Positive recent BPD data in adjunctive setting. (4) Schizophrenia approval may reduce risk to path forward in BPD, given ability to file sNDA. (5) Blockbuster potential of a drug with broad applicability across psychiatric conditions.

Potential catalysts: (1) Launch dynamics of Caplyta in bipolar (2022+). (3) Study 403 readout for mixed features (late-'22/early-'23). (4) Adjunctive MDD study readouts (2H23).

Valuation

Our \$70 price target blends DCF (using a 10% discount rate and 2.5% terminal growth rate) and probability-adjusted multiples (25x on 2025E adjusted EPS with a 10% discount) analyses. Our price target supports our Outperform rating.

Risks to rating and price target

(1) If Caplyta fails to differentiate itself in an increasingly crowded generics space, opportunity in schizophrenia and bipolar may be more limited. (2) ITCI needs to continue to maintain a strong commercial infrastructure to successfully launch, which carries inherent risk for a smaller company. (3) ITI-214 is relatively early-stage with limited data—clinical failure of this compound would reduce revenue potential post-lumateperone patent expiry. (4) Potential COVID-19 impacts on clinical trial conduct and Caplyta launch.

Pacira Biosciences, Inc. (NASDAQ: PCRX)

Gregory Renza (Analyst)

(212) 858-7065

gregory.renza@rbccm.com

Rating: Outperform

Closing Price: \$54.43

Price Target: \$81.00

Implied All-in Return: 49%

Most recent company note: [link](#)

Investment summary

We think PCRX is well positioned to drive continued growth from its flagship product, EXPAREL, with several expansion opportunities that can maintain momentum. We also expect the company to benefit from several thematic tailwinds including ongoing volume shift to the outpatient/ASC setting. More near-term, we will continue to monitor the broader recovery from COVID-19, where we assume continued normalization throughout 2022.

(1) Near-term focus will remain on the impact of COVID-19, though rebound under way. EXPAREL utilization has outperformed the elective surgery market throughout the pandemic, which we expect to continue. We also expect to see benefit from the return of “warehoused” patients. **(2) We expect growing EXPAREL revenues to drive meaningful margin expansion over time.** We expect gross margins to grow from ~80% to mid-80% with additional benefit from R&D and SG&A expenses that we expect to grow at a slower rate than sales. **(3) FLXN acquisition complements PCRX's existing non-opioid portfolio and enriches the pipeline for long-term value generation and growth.** FLXN's commercial product ZILRETTA in osteoarthritis (OA) knee pain and label expansion potential in shoulder OA, as well as pipeline assets FX201 and FX301 in OA and acute pain, are complementary to PCRX's long-term approach and pain management toolbox, in our view.

Potential catalysts: (1) Pre-announcement of July 2022 sales (mid-August 2022); (2) meeting with FDA to discuss regulatory strategy for iovera in spasticity (2022); (3) Joint topline data for new lower extremity nerve block in bunionectomy and TKA (3Q/4Q 2022); (4) ph.III initiation of Zilretta in OA shoulder pain (4Q 2022).

Valuation

Our base case assumes an 80% probability of success for Exparel with ~\$1.6B out-year sales potential, a 50% probability of success for iovera with more than \$90M out-year sales potential, a 70% probability of success for Zilretta with ~\$300M out-year sales potential, and an 80% probability of success for other products with more than \$4M out-year sales potential collectively. Our \$81 price target is based on a blend of DCF (using a 12% discount rate and a 0.5% terminal growth rate) and probability-adjusted multiple (20x on 2024E adjusted EPS with a 12% discount) analyses. Our valuation assumptions are comparable to other biotech companies developing therapeutics at a similar stage. Our price target supports an Outperform rating.

Risks to rating and price target

Key potential downside risks to our price target and rating arise from: (1) Pricing risk, which is a key concern that may impede adoption and greater utilization of the product. (2) Regulatory/bundling risk from CMS bundled payments in orthopedic procedures. (3) Competitive risk. (4) Data risk from Ph IV read-outs, or pipeline products in development. (5) Deeper recessionary risk from COVID-19 impacting elective surgery volumes.

Sarepta Therapeutics, Inc. (NASDAQ: SRPT)

Brian Abrahams (Analyst)
(212) 858-7066
brian.abrahams@rbccm.com

Rating: Outperform
Closing Price: \$100.28
Price Target: \$182.00
Implied All-in Return: 65%
Most recent company note: [link](#)

Investment summary

We believe the key value driver for shares going forward will be progress toward the multibillion-dollar opportunity we see for Sarepta's two most advanced muscular dystrophy gene therapy programs. Based on the robust expression, biomarker and safety data for both programs to date—along with highly encouraging functional gains—we believe SRPT could have the best-in-class therapy for both Duchenne and limb girdle muscular dystrophy. Underpinning the significant promise of its gene therapy pipeline are approved drugs (Exondys 51, Vyondys 53, and Amondys 45) addressing a subgroup of DMD patients, and a strong balance sheet bolstered by what we view as a highly validating ex-U.S. microdystrophin DMD gene therapy commercialization deal with Roche. Given Exondys's strong launch, Amondys and Vyondys's approval and launch, positive initial PPMO data, and our increasing optimism around microdystrophin and limb girdle muscular dystrophy gene therapy programs, we believe shares are currently undervalued.

Key positives: (1) potentially transformative clinical-stage gene therapy programs represent a substantial opportunity; (2) strong U.S. launch of exon skippers, with quick uptake and high visibility for growth; (3) next-generation PPMO-based exon skippers in development.

Key potential catalysts: (1) Update on regulatory filing by accelerated approval for SRP-9001 (early-'22) (2) Two-year functional data from crossover subjects in Study 102 (1Q23); (3) Results of Study 301 (mid-'23); and (4) initiate pivotal study with LGMD2E gene therapy SRP-9003 in late-'22/early'23.

Valuation

Our \$182 price target blends DCF (using a 10.5% discount rate and a 3.0% terminal growth rate) and probability-adjusted multiples (30x on 2025E adjusted EPS discounted at 10.5%) analyses. Our price target supports an Outperform rating.

Risks to rating and price target

Risks: (1) clinical, manufacturing, or regulatory setbacks in DMD or LGMD gene therapy programs; (2) slower-than-anticipated growth or other commercial setbacks for Exondys 51, Vyondys 53, and Amondys 45; (3) failure to successfully develop and gain regulatory approval for follow-on exon-skipping drugs, including PPMOs; and (4) poor performance in confirmatory study leading to market removal or increased patient discontinuations.

Investment Summaries – Healthcare Technology and Services

Avid Bioservices, Inc. (NASDAQ: CDMO)

Sean Dodge (Analyst)

(615) 372-1322

sean.dodge@rbccm.com

Rating: Outperform

Closing Price: \$17.34

Price Target: \$22.00

Implied All-in Return: 27%

Most recent company note: [link](#)

Investment summary

Avid Bioservices (CDMO) is a pure-play contract development and manufacturing organization specializing in the production of drug substances used in biologics-based therapeutics. While Avid has been manufacturing biologics since 1993, the story has gotten a lot more exciting recently for several reasons. (1) Timing - since the restructuring to a pure-play CDMO in 2018, the company has focused on shifting to a service-driven culture, building a sales force to pursue business more proactively, and assembling a more manufacturing-focused management team. (2) Industry - Avid specializes in biologics - the fastest growing segment of drugs in development, which, along with accelerated demand for COVID-related treatments, has created what we view as a sustainable supply-demand imbalance for at least the next few years. (3) Runway - the company has lots of expansion potential within existing facilities, meaning there is considerable room for growth that should come on at high incremental margins which we believe can support both revenue growth >25% for the next three years and significant EBITDA margin expansion.

Potential catalysts

Signing New Commercial Customers. As a standalone CDMO, Avid's goal is to partner with pharmaceutical companies early in the development process and support them through the clinical stages in hopes of winning business if/when approval for commercial production is reached. Signing any new commercial-scale contracts with new or existing customers will likely have a material impact on the business.

Completion of Capacity Expansions. Avid has two phases of capacity expansion underway; when complete, these will more than double Avid's existing revenue-generating capacity. The second phase is set to come online early CY23 and support an additional \$100M of manufacturing revenue at scale.

Commercialization of Former R&D Assets. As part of its restructuring in 2018, Avid sold the majority of its R&D assets including two key antibody programs. While these do not appear to be materializing in the near-term, Avid is entitled to a potential \$116M of earn-outs based on certain development and commercialization milestones.

Valuation

Given the nature of CDMO's business—optimizing the utilization of its manufacturing capacity—we believe the best way to value the company is using a discounted cash flow analysis. Our \$22 price target supports our Outperform rating and is based on the following assumptions: (1) revenue growing at a 20%+ CAGR for at least the next 5 years supported by the investments CDMO is making in capacity expansions (including its recent entry into cell & gene therapy), then slows to the MSDs-HSDs thereafter; (2) EBITDA margins reach 33% at maturity; (3) a terminal trailing EBITDA multiple below where its peers currently trade given the relative risk; and (4) a WACC of 8.4%.

Risks to rating and price target

Risks to our rating and price target include significant customer concentration, a dynamic regulatory landscape, hazardous material handling, geographic isolation, and competition from other CDMOs and/or pharmaceutical companies insourcing production.

Evolut Health, Inc. (NYSE: EVH)

Sean Dodge (Analyst)
(615) 372-1322
sean.dodge@rbccm.com

Rating: Outperform
Closing Price: \$36.43
Price Target: \$44.00
Implied All-in Return: 21%
Most recent company note: [link](#)

Investment summary

Evolut Health (EVH) supplies tech and tech-enabled services to both payers and providers that help transition their business models to ones in which they are assuming a more integrated clinical and financial responsibility for their members/patients. Put more simply, its solutions help ease participation and optimize performance in value-based care programs. Why we like EVH and believe it deserves a premium relative valuation comes down to: (1) its significant and growing TAM and alignment with longer-term structural macro trends—aging and sicker US population and accelerating transition to VBC; (2) its heavy focus on specialty care spending, which helps differentiate it in an increasingly dense tech-enabled provider market; (3) its increasing breadth, which we believe helps increase its appeal to those payers and risk-bearing providers looking for platform (as opposed to point) solutions; (4) its significant cross- and up-selling opportunity, which we believe will be relatively easier to convert than solely pursuing new logos; and (5) the heightened conviction all of these combined give us into the company being able to execute on its longer-term mid-teens revenue growth and mid-teens EBITDA margin targets.

Potential catalysts

Cross-Selling Specialty Care Solutions. Any sort of progress update on the integration of or metrics quantifying the cross-selling of newly-acquired palliative and MSK solutions into the existing client base and vice versa.

Shifting More Tech & Services Specialty Care to Risk Models. This has a dramatic impact on revenue growth and provides a much greater opportunity to generate EBITDA dollars.

Progress in Full Capitation Primary Care Contracts. This could come in the form of demonstrated savings across the commercial lives EVH is managing in NC and/or contracting with additional partners for total cost of care management.

ACO Performance Results from CMS. CMS should publish ACO results from the 2021 performance year in August. Improvement relative to 2020 and versus competitors would be an incremental positive, as would any detail indicating that EVH's specialty care solutions played a part in the savings/improvement.

Valuation

Our \$44 price target is based on EVH trading 2.4x our '23 revenue estimate, which represents a slight discount to its historical average, but a slight premium to the 2.0x average of its tech-enabled provider peers. Also, our expectation EVH will sustain a 15%+ organic revenue CAGR over the next 3+ years and is on a path to mid-teens EBITDA margins within that timeframe we believe makes it a "Rule of 30" stock, which even at 2.4x '23E revenue would value it significantly below other Rule of 30 stocks. Our price target supports our Outperform rating.

Risks to rating and price target

Risks to our rating and price target include high customer concentration, inability to generate meaningful savings in risk-based contracts, failure to cross-sell new solutions, increasing competition, and data privacy risk.

NuVasive, Inc. (NASDAQ: NUVA)

Shagun Singh (Analyst)
(646) 618-6886
shagun.singh@rbccm.com

Rating: Outperform

Closing Price: \$43.56

Price Target: \$63.00

Implied All-in Return: 45%

Most recent company note: [link](#)

Investment summary

NUVA operates in one of the largest MedDevice markets. NUVA is the #3 player with ~13% share (after MDT, JNJ) in the ~\$10B global spine market delivering low- to mid-single digit growth. The market is elective and sensitive to COVID-19 surges and staffing shortages. That said, it is a profitable procedure and procedures tend to return quickly due to their high pain burden. Longer-term, we expect the spine market to grow in the low- to mid-single digits and expect NUVA to deliver 2-3x market growth.

NUVA has several tailwinds in 2022. NUVA has several tailwinds in 2022. *First*, it has a material backlog that we estimate was +10% of '21 sales and expect the procedures to be performed to the extent capacity frees. *Second*, it is in the first full year of two major product launches- Simplify cTDR and Pulse. *Third*, NUVA will overlap its NSO (NuVasive Specialized Orthopedics) ship and hold from 2021 (\$10-\$15MM headwind in Q3'21). *Fourth*, NUVA continues to drive international growth in the mid-to-high teens y/y. On Pulse robotics, NUVA is targeting first-in-human (FIH) in 1H'23 (prior 2H'22) that will be important in driving greater share of the customer's wallet, we believe.

NUVA continues to globalize its business. One of NUVA's biggest drivers of growth is globalizing the business, which will allow it to diversify and access sizeable key markets. As per NUVA, it owns ~4.5% share in the ~\$5B OUS spine market that is growing 5%-10% y/y. NUVA's under-penetration in the International market leaves significant runway for the company and is a main source of growth for the top-line.

Upcoming Catalysts: The ongoing Simplify/Pulse roll-out, Investor Day (10/6), and Pulse FIH 1H'23.

Valuation

Our \$63 price target is an equal blend of: 1) discounted cash flow analysis, 2) EV-to-Sales, 3) EV-to-EBITDA, and 4) PE. Our DCF yields a value of \$65 per share and reflects our forecast through 2031E with a ~2% terminal value growth rate and a WACC of 7.3%. Our EV-to-Sales analysis uses a 2.8x multiple on 2023E sales which yields a value of \$64. Our EV-to-EBITDA analysis uses a 11.3x multiple on 2023E EBITDA, which yields a value of \$62. Finally, we apply a PE multiple of 24.3x on 2023E EPS, which yields a value of \$62. Our blended price target of \$63 supports our Outperform rating.

Risks to rating and price target

Risks to rating and PT include, but are not limited to, competitive dynamics such as new competition from large scale MedTech companies such as MDT, SYK, or ZBH who can disrupt and take share; a resurgence or new variants from COVID-19 that may result in lower elective procedures; staffing shortages that result in longer lead times for elective procedures; pricing pressure from competitors, hospital customers, and insurance providers; geopolitical and economic stability, foreign exchange, interest rate risk, healthcare financing and payment system; failure to integrate acquired businesses, unsuccessful future strategic acquisitions to support growth, failure to develop new products or enhance existing products, inability to retain key personnel, and disruption to NUVA's supply chain and manufacturing operations.

Surgery Partners, Inc. (NASDAQ: SGRY)

Ben Hendrix (Analyst)

(615) 372-1323

ben.hendrix@rbccm.com

Rating: Outperform

Closing Price: \$29.13

Price Target: \$62.00

Implied All-in Return: 113%

Most recent company note: [link](#)

Investment summary

SGRY is one of the largest ASC platforms in the country, representing an attractive value proposition for the U.S. healthcare system, as the low-cost care delivery alternative that will likely become increasingly important for patients and payors.

Management has been implementing specific strategies to accelerate SS growth, with a focus on supporting and expanding services in surgical facilities in its existing markets.

These initiatives appear to be gaining traction, yielding improved SS volume growth, strong pricing improvements, and margin expansion.

The benefits from these efforts, along with focused recruitment in targeted high-acuity specialties such as musculoskeletal and cardiology procedures, helped to deliver solid growth through the pandemic. Management is confident in achieving sustainable, double-digit EBITDA growth annually over the long term.

Additionally, forthcoming Medicare rule changes would allow SGRY to perform additional high-acuity procedures in its ASCs, significantly expanding the addressable market, and through continued investments in OR capacity and physician recruitment, we believe the company is well positioned to capitalize on these opportunities, supporting the long-term earnings growth trajectory.

Valuation

Our \$62 price target is based on an enterprise multiple of ~19x FY23E adjusted EBITDA-MI. Our target multiple is consistent with historical ranges, and given that SGRY is a pure-play ASC operator, our multiple reflects a significant premium versus its closest public peer. Our price target supports our Outperform rating.

Risks to rating and price target

(1) Dependence on managed care and Medicare payment rates, including Medicare lab fees. (2) Integration risk. (3) Physician recruitment and retention. (4) Labor cost inflation. (5) Revenue concentration. (6) Balance sheet leverage. (7) Tax receivable agreement.

Investment Summaries – Energy

Ranger Oil Corporation (NASDAQ: ROCC)

Scott Hanold (Analyst)
(512) 708-6354
scott.hanold@rbccm.com

Rating: Outperform

Closing Price: \$41.69

Price Target: \$52.00

Implied All-in Return: 26%

Most recent company note: [link](#)

Investment summary

We believe ROCC shares should outperform the peer group over the next 12 months. The company has a combination of a high-quality asset base, experienced management team, and a good balance sheet; however, there remains a value disconnect to peers since its emergence from restructuring in late 2016. The company has positioned itself as a pure-play Eagleford operator and retains high leverage to oil price strength. We think the path forward for ROCC requires continuing to build size and scale of its operations, such as through the recent LONE merger. (1) ROCC has among peer-best leverage that is trending toward sub-0.5x by YE2022E. This is well ahead of the peer average. (2) The company operates essentially all of its investment capital and production (~100%). (3) A healthy balance sheet, strong leverage to oil prices, and a prudent hedging program make ROCC an attractive potential take-out target for larger consolidators in the current M&A wave, in our view. (4) We think the 2022 program should generate FCF of more than \$300 million under our \$107/bbl WTI outlook. We expect ROCC to stay at similar activity levels for the foreseeable future, which should translate to peer-leading FCF yields, providing optionality for further debt reduction, available FCF to use for bolt-ons or larger acquisitions, or potentially growing shareholder returns. (5) Following its Juniper transaction that closed early 2021, Juniper Capital Advisors own effectively ~52% of the company. The transaction provided financial stability when outlooks were less bullish in late 2020; however, it now represents an ownership overhang for new investors, in our opinion.

Valuation

Our \$52/share price target is derived from a combination of evaluating forward EBITDA multiples, FCF outlooks, and our Net Asset Value (NAV). Our price target reflects: (1) A 7% premium to our \$49/share Net Asset Value (NAV). This is in line with peers given current near-term robust commodity prices. Our NAV is a risked assessment of 3P reserves using the long-term RBC commodity outlook of \$65/bbl (WTI), \$70/bbl (Brent) and \$3.75/Mcf (HH). (2) We model ROCC averaging FCF yields of 22% through 2023, above the peer average. (3) 1.5x our 2022 EBITDA estimate, below the 2.0x SMid cap peer average. Our price target and ROCC's peer-leading FCF outlook support our Outperform rating.

Risks to rating and price target

Weaker-than-expected commodity prices could cause the stock to perform below our expectations. ROCC has one of the highest oil cuts among peers, making its earnings/cash flows more volatile to price swings in the commodity. (2) The stock could underperform our expectations if the company is unable to gain additional scale through organic or inorganic efforts. We expect that inventory depth could be an issue over the coming years if no bolt-ons or larger acquisitions take place. (3) If commodity prices are lower than expected or performance is below expectations, ROCC's size may limit its ability to reaffirm/utilize bank debt or access capital markets for additional financing needs.

Sunnova Energy International Inc. (NYSE: NOVA)

Elvira Scotto (Analyst)
(212) 905-5957
elvira.scotto@rbccm.com

Rating: Outperform
Closing Price: \$25.10
Price Target: \$41.00
Implied All-in Return: 63%
Most recent company note: [link](#)

Investment summary

NOVA is a leading provider of residential rooftop solar services in the United States. We estimate NOVA has ~4-5% market share of the US residential rooftop solar market, but a higher share of the market's growth. NOVA operates under the dealer model, whereby its dealers originate leads and complete the installation of solar systems. NOVA offers customers leases, PPAs and loans, which NOVA retains on its balance sheet. Rooftop solar penetration in the United States is ~4% according to Wood Mackenzie, providing a significant growth opportunity. The recent extension of the investment tax credit for rooftop solar panels should help drive growth over the next several years.

Valuation

We derive our price target of \$41 for NOVA using a sum-of-the-parts analysis. We view NOVA's value having two components: (1) current net earning assets (which represents the value to equity holders already in NOVA's balance sheet); (2) equity value of future customers, which reflects what we believe is the value to equity holders from NOVA's future growth. We derive equity value of future customers using a discounted cash flow analysis, based on a 6% discount rate, 5% cost of debt, and 10% cost of equity. We forecast growth decelerates from 43% (in 2022) to 5% through 2035, and use a ~4% terminal growth rate. Our price target supports our Outperform rating.

Risks to rating and price target

(1) While the federal government has extended the commercial investment tax credit, potential changes in state regulations could impact the growth of rooftop solar. Specifically, changes to net metering policies could affect the value proposition of rooftop solar relative to traditional utilities given the potential lengthening of a homeowner's payback period as net metering allows homeowners with rooftop solar to sell back power into the grid (thus lowering the homeowner's electricity bill). (2) Rising interest rates increase the cost of debt and consequently the cost of capital, which in turn could drive returns lower. That said, historically utilities have passed on the cost of rising rates to consumers. If that holds true, then NOVA should be able to increase its rates while still maintaining a competitive rate vs utilities. (3) NOVA is dependent on debt and tax equity to finance its growth. If the cost of financing increases or financing is not available at optimal terms, then NOVA's returns could deteriorate. Specifically, NOVA has used low-cost tax equity structures to finance its business and inability to use these structures in the future could slow growth. (4) NOVA's growth potential could stall or returns could decline if its product suppliers were to encounter supply chain issues that either slowed production (shortage of solar modules or batteries) or increased costs. In addition, tariffs on solar modules and inverters have led to lower cost declines than in the past.

Investment Summaries – Financials

Goosehead Insurance Inc. (NASDAQ: GSHD)

Mark Dwelle (Analyst)
(804) 782-4008
mark.dwelle@rbccm.com

Rating: Outperform
Closing Price: \$51.59
Price Target: \$100.00
Implied All-in Return: 94%
Most recent company note: [link](#)

Investment summary

Goosehead is an innovative player in the personal lines brokerage industry. Its fully integrated sales and service platform is a sizeable competitive advantage relative to other independent agents and captive agents and gives the company a cost and efficiency edge that is likely to prove sustainable for some time. Equally, its innovative Corporate/Franchise model enables the company to significantly leverage its technology edge and is a coiled economic spring for revenue and earnings growth. We see a long runway of growth ahead and expect that under normalized conditions the company can sustain revenue growth of +30% for the next three to five years with corresponding earnings growth from leverage and platform expansion. Our Outperform rating reflects its attractive high-cash-flow business model and the long-term growth characteristics of the business model.

Investment points

Technology edge: The company's IT platform has three main advantages that competitors cannot easily match, in our view: an integrated sales and service platform, proprietary data, and advanced analytics to drive superior lead generation.

Franchise model: The company's franchise model allows growth with minimal investment. The company earns 20% of commissions on new and 50% on recurring business for providing technology and service support to its agents.

High cash flow and recurring revenue visibility: About 85–90% of customers renew and a service culture drives high retention. Homeowners insurance is a required purchase and premiums are usually escrowed, which improves retention even during difficult economic conditions.

Direct-to-consumer: While direct-to-consumer sales comprise only about 18% of personal lines sales, they are a growing proportion and represent a long-term headwind for all types of agents. The company's technology approach is designed to address this potential long-term challenge.

Valuation

Our price target of \$100 equates to roughly 91x our 2023 operating EPS estimate and is reached via our DCF model. The key assumptions of our DCF include an 10.0% discount rate and a terminal P/E multiple of 21x. In the term of the DCF, we see a continued runway for growth as Goosehead expands operations and its market penetration. We see margins expanding as the company gains operating leverage. Our price target and implied return support our Outperform rating.

Risks to rating and price target

The insurance brokerage industry presents a range of unique business risks, many of which could impact our investment rating, the most foreseeable of which include the following: key man risk, information security risk, and regulatory risk in the various states in which the company operates. The company is also exposed to certain economic and recession risks, particularly related to the US housing market and any changes in competition or pricing of industry commissions. A more comprehensive list of potential risk exposures is included in the company's 10-K and other recent filings.

Investment Summaries – Industrials

AeroVironment, Inc. (NASDAQ: AVAV)

Ken Herbert (Analyst)

(415) 633-8583

ken.herbert@rbccm.com

Rating: Outperform

Closing Price: \$92.06

Price Target: \$115.00

Implied All-in Return: 25%

Most recent company note: [link](#)

Investment summary

AeroVironment (AVAV) provides exposure to the U.S. unmanned systems defense market. We believe this is a growing market both in the U.S and internationally as unmanned systems become increasingly important to all aspects of military affairs. AVAV is a leader in the small and medium unmanned aerial systems (UAS) markets and has recently entered the unmanned ground systems market.

The company has benefited from the most recent increase in U.S. defense spending. There has been a surge in upgrade and re-capitalization efforts for unmanned aircraft. The company currently sells its small UAS systems to more than 50 international governments.

As requirements have evolved, AVAV has established a leadership position in the tactical missile system (TMS) market. These loitering munitions offer advantages over traditional missiles in terms of strike precision and timing (including the ability to call off a strike). Recent acquisitions have pushed the company into the medium UAS market (MUAS) as well as the ground unmanned systems market. We believe investors appreciate the more aggressive use of the balance sheet, but the ultimate impacts of the acquisitions on top-line growth, margins, and returns are not yet proven.

We believe investors are focused on the outlook for sales growth after the reset lower with the fiscal 2Q22 results. The company continued to face supply chain headwinds in 3Q22 and 4Q22, but the outlook for defense spending appears to be inflecting positively as a result of Russia's invasion of Ukraine. Moreover, sentiment on defense stocks has improved, and AVAV appears well positioned to benefit from increased sales of its Switchblade loitering munition as well as its Jump-20 system. We believe we are in the early innings of what should be a strong positive inflection for the Switchblade product line.

Valuation

Our \$115 price target is based on the blend of a 29x EBITDA multiple and a 38x EPS multiple, applied to our FY24 estimates. Our price target calculation is weighted towards our EBITDA estimates. Our price target supports an Outperform rating, and we believe multiples at the lower end of the range are appropriate considering the limited visibility on near-term growth, due largely to continued supply chain delays, but partially offset by the upside potential from its TMS and MUAS offerings.

Risks to rating and price target

(1) Top-line level of defense spending and funding for specific company programs. (2) Timing of the FY22 defense budget completion and impact of the Continuing Resolution. (3) Future defense spending priorities, specifically balance of funding for legacy programs and modernization efforts. (4) Timing and opportunity for foreign military sales and the international adoption of the company's TMS product line. (5) Successful integration of recent acquisitions. (6) Ongoing military evaluations of unmanned technologies and continued adoption of autonomous systems in the defense market. (7) Management of COVID-related risks to end-market demand and the potential for further supply chain and logistics disruptions. (8) Ability to hire and train the necessary human capital to achieve growth objectives. (9) Potential supply chain disruptions and extended lead-times, which could impact company, customer, or supplier delivery schedules. (10) Raw material costs and availability. (11) M&A pipeline and the company's ability to successfully execute and integrate subsequent acquisitions. (12) The company's ability to access capital and financial liquidity to support its growth objectives. (13) Pace of new company product and service introductions. (14) Interest rates and the ability to access capital to support acquisitions and other growth initiatives. (15) Success of the HAPS system development and the successful launch of services.

Investment Summaries – Restaurants

Sweetgreen, Inc. (NYSE: SG US)

Christopher Carril (Analyst)
(617) 725-2109
christopher.carril@rbccm.com

Rating: Outperform
Closing Price: \$17.46
Price Target: \$20.00
Implied All-in Return: 15%
Most recent company note: [link](#)

Investment summary

A compelling long-term unit growth story... With only 166 restaurants as of 2Q22, we see substantial development upside for SG, which we model delivering best-in-class unit growth over the near-to-medium term (+25% CAGR through 2025E). Currently, SG total sales represent <1% of the resilient, \$62B fast casual segment—which we see continuing to take share within the broader domestic restaurant industry—in our view representing substantial long-term upside as consumers increasingly demand healthier and more sustainable options.

...with AUV recovery as the primary near-term driver of stock performance: At ~\$2.9M, SG's current average unit volume remains below pre-COVID levels (i.e., 4Q19's \$3.0M), though we see recovery driven by continued improvement in mobility/return to office, digital ordering, and menu innovation (e.g., seasonal items, plus potential expansion with new or existing categories). On digital (62% of 2Q22 sales) specifically, given that SG customers who order on 2+ digital channels order >2.5x more frequently than non-digital customers, we see a potentially significant tailwind from ongoing conversion of non-digital customers to digital platforms. As such, we see near-term stock upside given our expectation for strong same-store sales growth (2022E +15.6%) as AUV continues to recover.

Margin expansion and path to profitability will remain a key investor focus: With AUV recovery, we also see opportunity for restaurant-level margin improvement, from <12% in 2021 to ~15% in 2022E. While recovery back to pre-COVID peak restaurant margin levels (19%) will likely take time—particularly in today's challenging labor environment—we see potential for long-term margin upside driven by scale advantages and technology investments, particularly around automation following SG's acquisition of Spyce Food Co. in September 2021. Beyond restaurant level margins, we also see opportunity for improving profitability with growing sales leverage following significant SG&A investment prior to 2020.

Valuation

Our DCF-based price target for SG is \$20, which assumes long-term same store sales growth of +5%, EBIT margin of ~10% by 2031E, a WACC of 9.4%, and a terminal growth rate of +2.5%. As we expect Sweetgreen to reach profitability (on an operating profit basis) post-2024, we believe a discounted cash flow analysis is the most appropriate measure of valuation at this time. We believe our longer-term DCF assumptions (i.e., 2026E and beyond) for operating margins and unit growth are reasonable given our analysis versus high-growth peers. Our price target supports our Outperform rating.

Risks to rating and price target

Our investment view is driven by a number of factors, and any material deviation from the following may add or diminish support for the stock price: (1) As with most restaurant company stocks, worse-than-expected same-store sales can negatively impact valuation. Risk factors for same-store sales include macro/consumer headwinds (including the impact of COVID-19), increased competition, and declining consumer demand for the brand. (2) Unit growth, a key long-term top-line driver for the company, could be impacted by increasing competition for real estate, changes in development costs, or from shifts in overall demand for the brand. (3) Company-operated restaurant margins can be negatively impacted by rising labor and commodity costs, as well as other restaurant-related expenses (rent, insurance, etc.).

Contributing Authors

RBC Capital Markets, LLC

Brian Abrahams (Analyst)	(212) 858-7066	brian.abrahams@rbccm.com
Christopher Carril (Analyst)	(617) 725-2109	christopher.carril@rbccm.com
Sean Dodge (Analyst)	(615) 372-1322	sean.dodge@rbccm.com
Mark A. Dwelle (Analyst)	(804) 782-4008	mark.dwelle@rbccm.com
Brad Erickson (Analyst)	(503) 830-9488	brad.erickson@rbccm.com
Scott Hanold (Analyst)	(512) 708-6354	scott.hanold@rbccm.com
Matthew Hedberg (Analyst)	(612) 313-1293	matthew.hedberg@rbccm.com
Ben Hendrix (Analyst)	(615) 372-1323	ben.hendrix@rbccm.com
Ken Herbert (Analyst)	(415) 633-8583	ken.herbert@rbccm.com
Rishi Jaluria (Analyst)	(415) 633-8798	rishi.jaluria@rbccm.com
Daniel R. Perlin (Analyst)	(410) 625-6130	daniel.perlin@rbccm.com
Gregory Renza (Analyst)	(212) 858-7065	gregory.renza@rbccm.com
Elvira Scotto (Analyst)	(212) 905-5957	elvira.scotto@rbccm.com
Shagun Singh (Analyst)	(646) 618-6886	shagun.singh@rbccm.com
Matthew Swanson (Analyst)	(612) 313-1237	matthew.swanson@rbccm.com
Shelby Tucker (Analyst)	(212) 428-6462	shelby.tucker@rbccm.com

Required disclosures

Conflicts disclosures

This product constitutes a compendium report (covers six or more subject companies). As such, RBC Capital Markets chooses to provide specific disclosures for the subject companies by reference. To access conflict of interest and other disclosures for the subject companies, clients should refer to <https://www.rbccm.com/GLDisclosure/PublicWeb/DisclosureLookup.aspx?entityId=1>. These disclosures are also available by sending a written request to RBC Capital Markets Research Publishing, P.O. Box 50, 200 Bay Street, Royal Bank Plaza, 29th Floor, South Tower, Toronto, Ontario M5J 2W7 or an email to rbcinsight@rbccm.com.

The analyst(s) responsible for preparing this research report received compensation that is based upon various factors, including total revenues of the member companies of RBC Capital Markets and its affiliates, a portion of which are or have been generated by investment banking activities of the member companies of RBC Capital Markets and its affiliates.

With regard to the MAR investment recommendation requirements in relation to relevant securities, a member company of Royal Bank of Canada, together with its affiliates, may have a net long or short financial interest in excess of 0.5% of the total issued share capital of the entities mentioned in the investment recommendation. Information relating to this is available upon request from your RBC investment advisor or institutional salesperson.

Explanation of RBC Capital Markets Equity rating system

An analyst's "sector" is the universe of companies for which the analyst provides research coverage. Accordingly, the rating assigned to a particular stock represents solely the analyst's view of how that stock will perform over the next 12 months relative to the analyst's sector average.

Ratings

Outperform (O): Expected to materially outperform sector average over 12 months.

Sector Perform (SP): Returns expected to be in line with sector average over 12 months.

Underperform (U): Returns expected to be materially below sector average over 12 months.

Restricted (R): RBC policy precludes certain types of communications, including an investment recommendation, when RBC is acting as an advisor in certain merger or other strategic transactions and in certain other circumstances.

Not Rated (NR): The rating, price targets and estimates have been removed due to applicable legal, regulatory or policy constraints which may include when RBC Capital Markets is acting in an advisory capacity involving the company.

As of March 31, 2020, RBC Capital Markets discontinued its Top Pick rating. Top Pick rated securities represented an analyst's best idea in the sector; expected to provide significant absolute returns over 12 months with a favorable risk-reward ratio. Top Pick rated securities have been reassigned to our Outperform rated securities category, which are securities expected to materially outperform sector average over 12 months.

Risk Rating: The **Speculative** risk rating reflects a security's lower level of financial or operating predictability, illiquid share trading volumes, high balance sheet leverage, or limited operating history that result in a higher expectation of financial and/or stock price volatility.

Distribution of ratings

For the purpose of ratings distributions, regulatory rules require member firms to assign ratings to one of three rating categories - Buy, Hold/Neutral, or Sell - regardless of a firm's own rating categories. Although RBC Capital Markets' ratings of Outperform (O), Sector Perform (SP), and Underperform (U) most closely correspond to Buy, Hold/Neutral and Sell, respectively, the meanings are not the same because our ratings are determined on a relative basis.

Distribution of ratings				
RBC Capital Markets, Equity Research				
As of 30-Jun-2022				
Rating	Count	Percent	Investment Banking	
			Serv./Past 12 Mos.	
			Count	Percent
BUY [Outperform]	851	58.41	290	34.08
HOLD [Sector Perform]	560	38.44	169	30.18
SELL [Underperform]	46	3.16	6	13.04

Conflicts policy

RBC Capital Markets Policy for Managing Conflicts of Interest in Relation to Investment Research is available from us on request. To access our current policy, clients should refer to <https://www.rbccm.com/global/file-414164.pdf> or send a request to RBC Capital Markets Research Publishing, P.O. Box 50, 200 Bay Street, Royal Bank Plaza, 29th Floor, South Tower, Toronto, Ontario M5J 2W7. We reserve the right to amend or supplement this policy at any time.

Dissemination of research

RBC Capital Markets endeavors to make all reasonable efforts to provide research content simultaneously to all eligible clients, having regard to local time zones in overseas jurisdictions. RBC Capital Markets provides eligible clients with access to Research Reports on the Firm's proprietary INSIGHT website, via email and via third-party vendors. Please contact your investment advisor or institutional salesperson for more information regarding RBC Capital Markets' research.

For a list of all recommendations on the company that were disseminated during the prior 12-month period, please click on the following link: <https://rbnew.bluematrix.com/sellside/MAR.action>

The 12 month history of SPARCs can be viewed at <https://www.rbcinsightresearch.com/>.

Analyst certification

All of the views expressed in this report accurately reflect the personal views of the responsible analyst(s) about any and all of the subject securities or issuers. No part of the compensation of the responsible analyst(s) named herein is, or will be, directly or indirectly, related to the specific recommendations or views expressed by the responsible analyst(s) in this report.

Third-party disclaimers

The Global Industry Classification Standard ("GICS") was developed by and is the exclusive property and a service mark of MSCI Inc. ("MSCI") and Standard & Poor's Financial Services LLC ("S&P") and is licensed for use by RBC. Neither MSCI, S&P, nor any other party involved in making or compiling the GICS or any GICS classifications makes any express or implied warranties or representations with respect to such standard or classification (or the results to be obtained by the use thereof), and all such parties hereby expressly disclaim all warranties of originality, accuracy, completeness, merchantability and fitness for a particular purpose with respect to any of such standard or classification. Without limiting any of the foregoing, in no event shall MSCI, S&P, any of their affiliates or any third party involved in making or compiling the GICS or any GICS classifications have any liability for any direct, indirect, special, punitive, consequential or any other damages (including lost profits) even if notified of the possibility of such damages.

RBC Capital Markets disclaims all warranties of originality, accuracy, completeness, merchantability or fitness for a particular purpose with respect to any statements made to the media or via social media that are in turn quoted in this report, or otherwise reproduced graphically for informational purposes.

Disclaimer

RBC Capital Markets is the business name used by certain branches and subsidiaries of the Royal Bank of Canada, including RBC Dominion Securities Inc., RBC Capital Markets, LLC, RBC Europe Limited, RBC Capital Markets (Europe) GmbH, Royal Bank of Canada, Hong Kong Branch, Royal Bank of Canada, Singapore Branch and Royal Bank of Canada, Sydney Branch. The information contained in this report has been compiled by RBC Capital Markets from sources believed to be reliable, but no representation or warranty, express or implied, is made by Royal Bank of Canada, RBC Capital Markets, its affiliates or any other person as to its accuracy, completeness or correctness. All opinions and estimates contained in this report constitute RBC Capital Markets' judgement as of the date of this report, are subject to change without notice and are provided in good faith but without legal responsibility. Nothing in this report constitutes legal, accounting or tax advice or individually tailored investment advice. This material is prepared for general circulation to clients and has been prepared without regard to the individual financial circumstances and objectives of persons who receive it. The investments or services contained in this report may not be suitable for you and it is recommended that you consult an independent investment advisor if you are in doubt about the suitability of such investments or services. This report is not an offer to sell or a solicitation of an offer to buy any securities. Past performance is not a guide to future performance, future returns are not guaranteed, and a loss of original capital may occur. RBC Capital Markets research analyst compensation is based in part on the overall profitability of RBC Capital Markets, which includes profits attributable to investment banking revenues. Every province in Canada, state in the U.S., and most countries throughout the world have their own laws regulating the types of securities and other investment products which may be offered to their residents, as well as the process for doing so. As a result, the securities discussed in this report may not be eligible for sale in some jurisdictions. RBC Capital Markets may be restricted from publishing research reports, from time to time, due to regulatory restrictions and/or internal compliance policies. If this is the case, the latest published research reports available to clients may not reflect recent material changes in the applicable industry and/or applicable subject companies. RBC Capital Markets research reports are current only as of the date set forth on the research reports. This report is not, and under no circumstances should be construed as, a solicitation to act as securities broker or dealer in any jurisdiction by any person or company that is not legally permitted to carry on the business of a securities broker or dealer in that jurisdiction. To the full extent permitted by law neither RBC Capital Markets nor any of its affiliates, nor any other person, accepts any liability whatsoever for any direct, indirect or consequential loss arising from, or in connection with, any use of this report or the information contained herein. No matter contained in this document may be reproduced or copied by any means without the prior written consent of RBC Capital Markets in each instance.

Additional information is available on request.

To U.S. Residents: This publication has been approved by RBC Capital Markets, LLC (member FINRA, NYSE, SIPC), which is a U.S. registered broker-dealer and which accepts responsibility for this report and its dissemination in the United States. Any U.S. recipient of this report that is not a registered broker-dealer or a bank acting in a broker or dealer capacity and that wishes further information regarding, or to effect any transaction in, any of the securities discussed in this report, should contact and place orders with RBC Capital Markets, LLC.

To Canadian Residents: This publication has been approved by RBC Dominion Securities Inc. (member IIROC). Any Canadian recipient of this report that is not a Designated Institution in Ontario, an Accredited Investor in British Columbia or Alberta or a Sophisticated Purchaser in Quebec (or similar permitted purchaser in any other province) and that wishes further information regarding, or to effect any transaction in, any of the securities discussed in this report should contact and place orders with RBC Dominion Securities Inc., which, without in any way limiting the foregoing, accepts responsibility for this report and its dissemination in Canada.

To U.K. Residents: This publication has been approved by RBC Europe Limited ('RBCEL') which is authorized by the Prudential Regulation Authority and regulated by the Financial Conduct Authority ('FCA') and the Prudential Regulation Authority, in connection with its distribution in the United Kingdom. This material is not for general distribution in the United Kingdom to retail clients, as defined under the rules of the FCA. RBCEL accepts responsibility for this report and its dissemination in the United Kingdom.

To EEA Residents: This material is distributed in the EU by either RBCEL on an authorised cross-border basis, or by RBC Capital Markets (Europe) GmbH (RBC EG) which is authorised and regulated in Germany by the Bundesanstalt für Finanzdienstleistungsaufsicht (German Federal Financial Supervisory Authority) (BaFin).

To Persons Receiving This Advice in Australia: This material has been distributed in Australia by Royal Bank of Canada, Sydney Branch (ABN 86 076 940 880, AFSL No. 246521). This material has been prepared for general circulation and does not take into account the objectives, financial situation or needs of any recipient. Accordingly, any recipient should, before acting on this material, consider the appropriateness of this material having regard to their objectives, financial situation and needs. If this material relates to the acquisition or possible acquisition of a particular financial product, a recipient in Australia should obtain any relevant disclosure document prepared in respect of that product and consider that document before making any decision about whether to acquire the product. This research report is not for retail investors as defined in section 761G of the Corporations Act.

To Hong Kong Residents: This publication is distributed in Hong Kong by Royal Bank of Canada, Hong Kong Branch, which is regulated by the Hong Kong Monetary Authority and the Securities and Futures Commission (SFC) in Hong Kong, RBC Investment Services (Asia) Limited and RBC Global Asset Management (Asia) Limited, both entities are regulated by the SFC. This material is not for general distribution in Hong Kong to persons who are not professional investors (as defined in the Securities and Futures Ordinance of Hong Kong (Cap. 571) and any rules made thereunder).

To Singapore Residents: This publication is distributed in Singapore by the Royal Bank of Canada, Singapore Branch, a registered entity licensed by the Monetary Authority of Singapore. This material has been prepared for general circulation and does not take into account the objectives, financial situation, or needs of any recipient. You are advised to seek independent advice from a financial adviser before purchasing any product. If you do not obtain independent advice, you should consider whether the product is suitable for you. Past performance is not indicative of future performance. If you have any questions related to this publication, please contact the Royal Bank of Canada, Singapore Branch. Royal Bank of Canada, Singapore Branch accepts responsibility for this report and its dissemination in Singapore.

To Japanese Residents: Unless otherwise exempted by Japanese law, this publication is distributed in Japan by or through RBC Capital Markets (Japan) Ltd. which is a Financial Instruments Firm registered with the Kanto Local Financial Bureau (Registered number 203) and a member of the Japan Securities Dealers Association ("JSDA") and the Financial Futures Association of Japan ("FFAJ").

® Registered trademark of Royal Bank of Canada. RBC Capital Markets is a trademark of Royal Bank of Canada. Used under license.

Copyright © RBC Capital Markets, LLC 2022 - Member SIPC

Copyright © RBC Dominion Securities Inc. 2022 - Member Canadian Investor Protection Fund

Copyright © RBC Europe Limited 2022

Copyright © Royal Bank of Canada 2022

All rights reserved