

# Oramed Pharmaceuticals Biotechnology

**Edward Nash** | Analyst | Canaccord Genuity LLC (US) | enash@cgf.com | 212.389.8128  
**Xinwei An, Ph.D.** | Associate | Canaccord Genuity LLC (US) | xan@cgf.com | 212.849.3926

<b>Rating</b> <b>HOLD</b> <i>unchanged</i>	<b>Price Target</b> <b>US\$2.00</b> ↓ <i>from US\$3.00</i>
<b>ORMP-NASDAQ</b>	<b>Price</b> <b>US\$3.67</b>

**Market Data**

52-Week Range (US\$) :	1.81 - 13.73
Market Cap (US\$M) :	147.0
Shares Out., Basic (M) :	40.0
Enterprise Value (US\$M) :	(6.8)
Cash (US\$M) :	153.7

FYE Dec	2021A	2022A	2023E
Revenue (US\$M)	2.7	2.7	2.7
EPS (US\$)	(0.78)	(0.94)	(0.35)↑
<i>Previous</i>	-	-	(0.59)

Quarterly Revenue	Q1	Q2	Q3	Q4
2021A	0.7	0.7	0.7	0.7
2022A	0.7	0.7	0.7	0.7
2023E	0.7A	0.7	0.7	0.7

Quarterly EPS	Q1	Q2	Q3	Q4
2021A	(0.23)	(0.17)	(0.17)	(0.24)
2022A	(0.27)	(0.27)	(0.18)	(0.22)
2023E	(0.08)A	(0.09)	(0.09)	(0.08)

## Retrospective analysis looking for responding subpopulation; decreasing PT from \$3 to \$2

Oramed reported financial results for 1Q23. We updated our model to reflect the latest financial results and reduced our projected FY2023 G&A expense from \$12M to \$5.5M based on the 1Q23 result. We also anticipate several equity raises between now and 2036. Our 12-month price target decreased from \$3 to \$2 due to the increased share count from the raises. Currently, only cash and cash equivalents of the company are used to generate our price target.

**Oramed Pharmaceuticals 1Q23 snapshot**

	1Q23A	CG 1Q23E	Var (A:E)	% Var	1Q23 Consensus	Var (A:C)	% Var
GAAP EPS (diluted)	-0.08	-0.29	0.21	262.5%	-0.26	0.18	225.0%
Product Sales Revenue (\$MM)	0.0	0.0	0.0		0.0	0.0	
R&D	4.4	7.0	-2.6	-59.1%	7.5	-3.1	-70.5%
G&A	1.3	5.0	-3.7	-295.9%	3.9	-2.6	-208.8%

Balance sheet	1Q23E
Cash (\$MM)	\$153.7
LTD (\$MM)	\$0.0

Expected upcoming clinical/commercial milestones		
ORMD-0901	1H23E	Data read-out on bioavailability study (T2D)

Changes made to financial projections
Updated model to reflect companies latest financial results
Reduced projected G&A expense for FY2023 from \$12M to \$5.5M based on 1Q23 results
Projected several equity raises between 2023 and the out-year of our model 2036

Source: Company reports and Canaccord Genuity estimates

### Oral insulin submitted for marketing in China

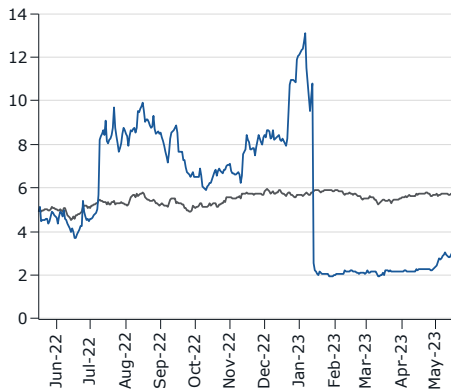
Oramed announced that its Chinese partner, Hefei Tianhui (HTIT) has submitted a Marketing Authorization Application for the oral insulin product in China. The submission is supported by a positive Phase III trial in T2D conducted by HTIT in China. The study showed a statistically significant reduction of HbA1c. Data from the trial have not been released.

### Post hoc analysis of failed U.S. Phase III searching for responding subgroups

Oramed also announced that a *post hoc* analysis of the U.S. Phase III trial for ORMD-0801 showed an over 1% placebo-adjusted, statistically significant reduction in HbA1c in subpopulations of T2D patients with pooled specific parameters, such as body mass index (BMI), baseline HbA1c, age, gender, and body weight.

A causal machine learning (ML) analysis was used to identify subgroup responders from the U.S. Phase III trial, and results showed that patient baseline BMI and age could be the two most impactful factors on patients' response to ORMD-0801 treatment. The company stated that patients over 54 years of age with BMI<31 tend to have the most reduction in A1c (p<0.002). Another analysis showed that age and BMI, as well as baseline levels of glucose, A1c, and C-peptide, may impact patients' response to the treatment of ORMD-0801.

In January, the company reported that the first of its two Phase III T2D trials missed its primary endpoint of reducing A1c at Week 26. The trial also missed the key secondary endpoint of change in fasting plasma glucose level. The trial, ORA-D-013-1, is the larger of the two trials for ORMD-0801 in T2D patients with inadequate glycemic control on two or three oral glucose-lowering medicines. Upon the news, management also announced the termination of the second T2D Phase III trial, ORA-D-013-2, for ORMD-0801 in T2D patients with only diet control or on metformin monotherapy.



— ORMP  
— NASDAQ Biotechnology (NBI) (rebased)

Source: FactSet

Priced intraday 16 May 2023

**Oramed Pharmaceuticals (ORMP) income statement**

	2021	FY transition		2022	2023E					2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E	2034E	2035E	2036E
	Aug-21	Nov-21 3 months	Dec-21 4 months	Year	1Q	2QE	3QE	4QE	Year													
ORMD-0801 T2D product sales	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Collaboration revenue	2.7	0.7	0.9	2.7	0.7	0.7	0.7	0.7	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Total Revenue</b>	<b>2.7</b>	<b>0.7</b>	<b>0.9</b>	<b>2.7</b>	<b>0.7</b>	<b>0.7</b>	<b>0.7</b>	<b>0.7</b>	<b>2.7</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
Cost of U.S. product sales (10%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gross profit	2.7	0.7	0.9	2.7	0.7	0.7	0.7	0.7	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R&D	21.0	6.4	9.0	27.6	4.4	3.0	3.0	2.0	12.4	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
G&A	5.9	1.7	3.3	13.8	1.3	1.5	1.5	1.2	5.5	6.0	7.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Sales expense	0.0	0.6	0.9	1.9	0.2	0.0	0.0	0.1	0.3	18.8	31.3	37.5	38.6	39.8	41.0	42.2	43.5	44.8	46.1	47.5	48.9	50.4
Operating expense	26.9	8.7	13.2	43.3	5.9	4.5	4.5	3.4	18.2	30.8	44.3	51.5	52.6	53.8	55.0	56.2	57.5	58.8	60.1	61.5	62.9	64.4
<b>Operating Profit (Loss)</b>	<b>(24.2)</b>	<b>(8.1)</b>	<b>(12.3)</b>	<b>(40.6)</b>	<b>(5.2)</b>	<b>(3.8)</b>	<b>(3.8)</b>	<b>(2.7)</b>	<b>(15.5)</b>	<b>(30.8)</b>	<b>(44.3)</b>	<b>(51.5)</b>	<b>(52.6)</b>	<b>(53.8)</b>	<b>(55.0)</b>	<b>(56.2)</b>	<b>(57.5)</b>	<b>(58.8)</b>	<b>(60.1)</b>	<b>(61.5)</b>	<b>(62.9)</b>	<b>(64.4)</b>
Interest income	1.2	(0.1)	0.2	3.8	1.6	0.2	0.2	(1.2)	0.8	0.8	0.8	0.8	(0.5)	(0.5)	-0.5	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6
Interest expense	(0.0)	(0.2)	(0.1)	(0.8)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Loss (gain) fair value of investments	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net loss attributable to non-controlling interests	(0.8)	0.0	(0.6)	1.2	0.2	0.0	0.0	(0.2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pretax profit (loss)	(22.2)	(7.9)	(11.7)	(36.5)	(3.4)	(3.6)	(3.6)	(4.1)	(14.7)	(30.0)	(43.5)	(50.7)	(53.2)	(54.3)	-55.5	-56.8	-58.0	-59.4	-60.7	-62.1	-63.6	-65.0
Income Tax	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(14.4)	(14.7)	-15.0	-15.3	-15.7	-16.0	-16.4	-16.8	-17.2	-17.6
Tax rate	0.0%	0.0%	0.0%	-0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	27.0%	27.0%	27.0%	27.0%	27.0%	27.0%	27.0%	27.0%	27.0%	27.0%
<b>Net Income (Loss)</b>	<b>(22.2)</b>	<b>(7.9)</b>	<b>(11.7)</b>	<b>(36.6)</b>	<b>(3.4)</b>	<b>(3.6)</b>	<b>(3.6)</b>	<b>(4.1)</b>	<b>(14.7)</b>	<b>(30.0)</b>	<b>(43.5)</b>	<b>(50.7)</b>	<b>(38.8)</b>	<b>(39.7)</b>	<b>(40.5)</b>	<b>(41.4)</b>	<b>(42.4)</b>	<b>(43.3)</b>	<b>(44.3)</b>	<b>(45.3)</b>	<b>(46.4)</b>	<b>(47.5)</b>
EPS - basic	(\$0.78)	(\$0.22)	(\$0.31)	(\$0.94)	(\$0.08)	(\$0.09)	(\$0.09)	(\$0.08)	(\$0.35)	(\$0.49)	(\$0.66)	(\$0.77)	(\$0.56)	(\$0.54)	(\$0.53)	(\$0.53)	(\$0.54)	(\$0.55)	(\$0.55)	(\$0.53)	(\$0.53)	(\$0.54)
EPS - diluted	(\$0.78)	(\$0.22)	(\$0.31)	(\$0.94)	(\$0.08)	(\$0.09)	(\$0.09)	(\$0.08)	(\$0.35)	(\$0.49)	(\$0.66)	(\$0.77)	(\$0.56)	(\$0.54)	(\$0.53)	(\$0.53)	(\$0.54)	(\$0.55)	(\$0.55)	(\$0.53)	(\$0.53)	(\$0.54)
Weighted average basic shares	28.5	36.7	37.1	39.0	40.0	40.0	40.0	48.3	42.0	61.2	66.2	66.2	69.8	73.4	76.2	78.9	78.9	78.9	81.2	85.7	88.0	88.0
Weighted average diluted shares	28.5	36.7	37.1	39.0	40.0	40.0	40.0	48.3	42.0	61.2	66.2	66.2	69.8	73.4	76.2	78.9	78.9	78.9	81.2	85.7	88.0	88.0

Source: Company Reports, Canaccord Genuity estimates. A more detailed financial model, including balance sheet, income statement, and cash flow projections, if available, may be obtained by contacting your Canaccord Genuity Sales Person or the Authoring Analyst, whose contact information appears on the front page of this report.

# Appendix: Important Disclosures

## Analyst Certification

Each authoring analyst of Canaccord Genuity whose name appears on the front page of this research hereby certifies that (i) the recommendations and opinions expressed in this research accurately reflect the authoring analyst's personal, independent and objective views about any and all of the designated investments or relevant issuers discussed herein that are within such authoring analyst's coverage universe and (ii) no part of the authoring analyst's compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed by the authoring analyst in the research, and (iii) to the best of the authoring analyst's knowledge, she/he is not in receipt of material non-public information about the issuer.

Analysts employed outside the US are not registered as research analysts with FINRA. These analysts may not be associated persons of Canaccord Genuity LLC and therefore may not be subject to the FINRA Rule 2241 and NYSE Rule 472 restrictions on communications with a subject company, public appearances and trading securities held by a research analyst account.

## Sector Coverage

Individuals identified as "Sector Coverage" cover a subject company's industry in the identified jurisdiction, but are not authoring analysts of the report.

## Investment Recommendation

Date and time of first dissemination: May 16, 2023, 13:23 ET

Date and time of production: May 16, 2023, 13:23 ET

## Target Price / Valuation Methodology:

Oramed Pharmaceuticals - ORMP

We value shares of Oramed by employing a sum-of-the-parts analysis that includes programs where we believe clinical data is available to fairly determine the overall probability of success, as well as net cash on hand. Currently, only cash and cash equivalents of the company are used to generate our \$2 12-month price target.

## Risks to achieving Target Price / Valuation:

Oramed Pharmaceuticals - ORMP

**Clinical risk:** Although ORMD-0801 has demonstrated clinical proof-of-concept in patients with T2D, the molecule is now being dosed in larger Phase III trials, and as more patients are exposed to drug over time there is the chance that issues could appear relating to efficacy, safety or both. While there is a significant amount of literature speaking to insulin use in treating T2D, ORMD-0801 is a unique orally delivered version of insulin and only through additional clinical trials can the molecule be further de-risked.

**Regulatory risk:** Given that there are currently no oral-insulin options approved for the treatment of T2D, the FDA is in new territory regarding the review of this type of molecule administration. The FDA continues to be unpredictable even with the review pathways, designations and outside panel reviews that can be employed during the review process.

**Commercial risk:** Given that there are currently no oral insulin therapeutics approved for the treatment of T1D and T2D, grasping the true commercial opportunity post-launch is difficult. The outcome of the two-Phase III trials and final labeling will be key to understanding the true market potential for ORMD-0801.

**Competitive risk:** The competitive landscape for T2D drug development is crowded. The opportunity to tap into a mature multi-billion-dollar market opportunity will result in the space remaining competitive. In addition to the overall T2D clinical landscape being competitive, specific to Oramed there are multiple players attempting to develop an oral delivery option for insulin.

**Management risk:** For a clinical stage biotech, stability in the C-suite roles is key as it is with any company. Turnover, especially in regulatory agency-facing roles such as CEO and CSO, could negatively impact share performance.

## Distribution of Ratings:

### Global Stock Ratings (as of 05/16/23)

Rating	Coverage Universe		IB Clients
	#	%	%
Buy	602	64.66%	22.26%
Hold	140	15.04%	10.71%
Sell	16	1.72%	0.00%
Speculative Buy	159	17.08%	46.54%
	931*	100.0%	

\*Total includes stocks that are Under Review

## Canaccord Genuity Ratings System

**BUY:** The stock is expected to generate risk-adjusted returns of over 10% during the next 12 months.

**HOLD:** The stock is expected to generate risk-adjusted returns of 0-10% during the next 12 months.

**SELL:** The stock is expected to generate negative risk-adjusted returns during the next 12 months.

**NOT RATED:** Canaccord Genuity does not provide research coverage of the relevant issuer.

“Risk-adjusted return” refers to the expected return in relation to the amount of risk associated with the designated investment or the relevant issuer.

**Risk Qualifier**

**SPECULATIVE:** Stocks bear significantly higher risk that typically cannot be valued by normal fundamental criteria. Investments in the stock may result in material loss.

**12-Month Recommendation History** (as of date same as the **Global Stock Ratings** table)

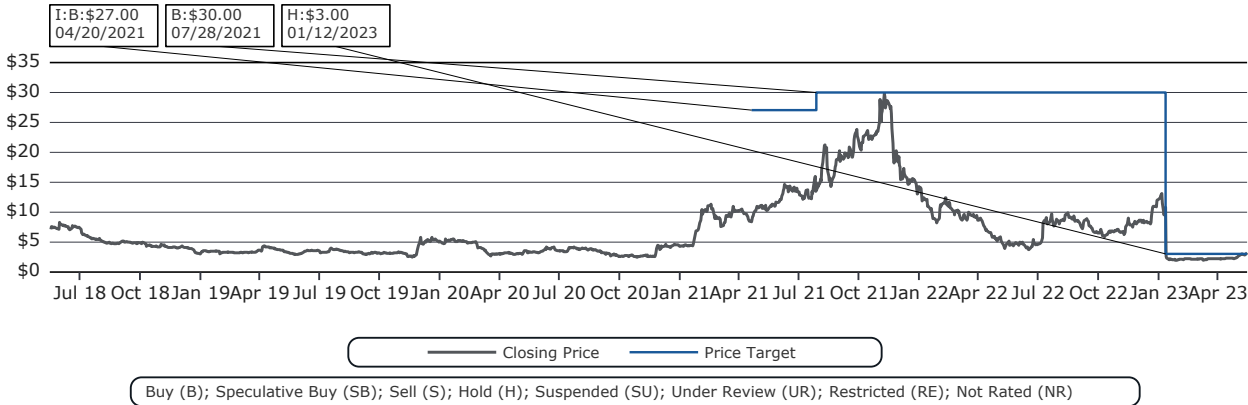
A list of all the recommendations on any issuer under coverage that was disseminated during the preceding 12-month period may be obtained at the following website (provided as a hyperlink if this report is being read electronically) <http://disclosures-mar.canaccordgenuity.com/EN/Pages/default.aspx>

**Required Company-Specific Disclosures (as of date of this publication)**

Canaccord Genuity or one or more of its affiliated companies is a market maker or liquidity provider in the securities of Oramed Pharmaceuticals or in any related derivatives.

Canaccord Genuity or one or more of its affiliated companies intend to seek or expect to receive compensation for Investment Banking services from Oramed Pharmaceuticals in the next three months.

**Oramed Pharmaceuticals Rating History as of 05/15/2023**



**Required Company-Specific Disclosures (as of date of this publication)**

**Past performance**

In line with Article 44(4)(b), MiFID II Delegated Regulation, we disclose price performance for the preceding five years or the whole period for which the financial instrument has been offered or investment service provided where less than five years. Please note price history refers to actual past performance, and that past performance is not a reliable indicator of future price and/or performance.

**Online Disclosures**

Up-to-date disclosures may be obtained at the following website (provided as a hyperlink if this report is being read electronically) <http://disclosures.canaccordgenuity.com/EN/Pages/default.aspx>; or by sending a request to Canaccord Genuity Corp. Research, Attn: Disclosures, P.O. Box 10337 Pacific Centre, 2200-609 Granville Street, Vancouver, BC, Canada V7Y 1H2; or by sending a request by email to [disclosures@cgf.com](mailto:disclosures@cgf.com). The reader may also obtain a copy of Canaccord Genuity’s policies and procedures regarding the dissemination of research by following the steps outlined above.

**General Disclaimers**

See “Required Company-Specific Disclosures” above for any of the following disclosures required as to companies referred to in this report: manager or co-manager roles; 1% or other ownership; compensation for certain services; types of client relationships; research analyst conflicts; managed/co-managed public offerings in prior periods; directorships; market making in equity securities and related derivatives. For reports identified above as compendium reports, the foregoing required company-specific disclosures can be found in a hyperlink located in the section labeled, “Compendium Reports.” “Canaccord Genuity” is the business name used by certain wholly owned subsidiaries of Canaccord Genuity Group Inc., including Canaccord Genuity LLC, Canaccord Genuity Limited,

Canaccord Genuity Corp., and Canaccord Genuity (Australia) Limited, an affiliated company that is 80%-owned by Canaccord Genuity Group Inc.

The authoring analysts who are responsible for the preparation of this research are employed by Canaccord Genuity Corp. a Canadian broker-dealer with principal offices located in Vancouver, Calgary, Toronto, Montreal, or Canaccord Genuity LLC, a US broker-dealer with principal offices located in New York, Boston, San Francisco and Houston, or Canaccord Genuity Limited., a UK broker-dealer with principal offices located in London (UK) and Dublin (Ireland), or Canaccord Genuity (Australia) Limited, an Australian broker-dealer with principal offices located in Sydney and Melbourne.

The authoring analysts who are responsible for the preparation of this research have received (or will receive) compensation based upon (among other factors) the Investment Banking revenues and general profits of Canaccord Genuity. However, such authoring analysts have not received, and will not receive, compensation that is directly based upon or linked to one or more specific Investment Banking activities, or to recommendations contained in the research.

Some regulators require that a firm must establish, implement and make available a policy for managing conflicts of interest arising as a result of publication or distribution of research. This research has been prepared in accordance with Canaccord Genuity's policy on managing conflicts of interest, and information barriers or firewalls have been used where appropriate. Canaccord Genuity's policy is available upon request.

The information contained in this research has been compiled by Canaccord Genuity from sources believed to be reliable, but (with the exception of the information about Canaccord Genuity) no representation or warranty, express or implied, is made by Canaccord Genuity, its affiliated companies or any other person as to its fairness, accuracy, completeness or correctness. Canaccord Genuity has not independently verified the facts, assumptions, and estimates contained herein. All estimates, opinions and other information contained in this research constitute Canaccord Genuity's judgement as of the date of this research, are subject to change without notice and are provided in good faith but without legal responsibility or liability.

From time to time, Canaccord Genuity salespeople, traders, and other professionals provide oral or written market commentary or trading strategies to our clients and our principal trading desk that reflect opinions that are contrary to the opinions expressed in this research. Canaccord Genuity's affiliates, principal trading desk, and investing businesses also from time to time make investment decisions that are inconsistent with the recommendations or views expressed in this research.

This research is provided for information purposes only and does not constitute an offer or solicitation to buy or sell any designated investments discussed herein in any jurisdiction where such offer or solicitation would be prohibited. As a result, the designated investments discussed in this research may not be eligible for sale in some jurisdictions. This research is not, and under no circumstances should be construed as, a solicitation to act as a 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. This material is prepared for general circulation to clients and does not have regard to the investment objectives, financial situation or particular needs of any particular person. Investors should obtain advice based on their own individual circumstances before making an investment decision. To the fullest extent permitted by law, none of Canaccord Genuity, its affiliated companies or any other person accepts any liability whatsoever for any direct or consequential loss arising from or relating to any use of the information contained in this research.

### **Research Distribution Policy**

Canaccord Genuity research is posted on the Canaccord Genuity Research Portal and will be available simultaneously for access by all of Canaccord Genuity's customers who are entitled to receive the firm's research. In addition research may be distributed by the firm's sales and trading personnel via email, instant message or other electronic means. Customers entitled to receive research may also receive it via third party vendors. Until such time as research is made available to Canaccord Genuity's customers as described above, Authoring Analysts will not discuss the contents of their research with Sales and Trading or Investment Banking employees without prior compliance consent.

For further information about the proprietary model(s) associated with the covered issuer(s) in this research report, clients should contact their local sales representative.

### **Short-Term Trade Ideas**

Research Analysts may, from time to time, discuss "short-term trade ideas" in research reports. A short-term trade idea offers a near-term view on how a security may trade, based on market and trading events or catalysts, and the resulting trading opportunity that may be available. Any such trading strategies are distinct from and do not affect the analysts' fundamental equity rating for such stocks. A short-term trade idea may differ from the price targets and recommendations in our published research reports that reflect the research analyst's views of the longer-term (i.e. one-year or greater) prospects of the subject company, as a result of the differing time horizons, methodologies and/or other factors. It is possible, for example, that a subject company's common equity that is considered a long-term 'Hold' or 'Sell' might present a short-term buying opportunity as a result of temporary selling pressure in the market or for other reasons described in the research report; conversely, a subject company's stock rated a long-term 'Buy' or 'Speculative Buy' could be considered susceptible to a downward price correction, or other factors may exist that lead the research analyst to suggest a sale over the short-term. Short-term trade ideas are not ratings, nor are they part of any ratings system, and the firm does not intend, and does not undertake any obligation, to maintain or update short-term trade ideas. Short-term trade ideas are not suitable for all investors and are not tailored to individual investor circumstances and objectives, and investors should make their own independent decisions regarding any securities or strategies discussed herein. Please contact your salesperson for more information regarding Canaccord Genuity's research.

### **For Canadian Residents:**

This research has been approved by Canaccord Genuity Corp., which accepts sole responsibility for this research and its dissemination in Canada. Canaccord Genuity Corp. is registered and regulated by the Investment Industry Regulatory Organization of Canada (IIROC) and is a Member of the Canadian Investor Protection Fund. Canadian clients wishing to effect transactions in any designated investment discussed should do so through a qualified salesperson of Canaccord Genuity Corp. in their particular province or territory.

**For United States Persons:**

Canaccord Genuity LLC, a US registered broker-dealer, accepts responsibility for this research and its dissemination in the United States. This research is intended for distribution in the United States only to certain US institutional investors. US clients wishing to effect transactions in any designated investment discussed should do so through a qualified salesperson of Canaccord Genuity LLC. Analysts employed outside the US, as specifically indicated elsewhere in this report, are not registered as research analysts with FINRA. These analysts may not be associated persons of Canaccord Genuity LLC and therefore may not be subject to the FINRA Rule 2241 and NYSE Rule 472 restrictions on communications with a subject company, public appearances and trading securities held by a research analyst account.

**For United Kingdom and European Residents:**

This research is distributed in the United Kingdom and elsewhere Europe, as third party research by Canaccord Genuity Limited, which is authorized and regulated by the Financial Conduct Authority. This research is for distribution only to persons who are Eligible Counterparties or Professional Clients only and is exempt from the general restrictions in section 21 of the Financial Services and Markets Act 2000 on the communication of invitations or inducements to engage in investment activity on the grounds that it is being distributed in the United Kingdom only to persons of a kind described in Article 19(5) (Investment Professionals) and 49(2) (High Net Worth companies, unincorporated associations etc) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (as amended). It is not intended to be distributed or passed on, directly or indirectly, to any other class of persons. This material is not for distribution in the United Kingdom or elsewhere in Europe to retail clients, as defined under the rules of the Financial Conduct Authority.

**For Jersey, Guernsey and Isle of Man Residents:**

This research is sent to you by Canaccord Genuity Wealth (International) Limited (CGWI) for information purposes and is not to be construed as a solicitation or an offer to purchase or sell investments or related financial instruments. This research has been produced by an affiliate of CGWI for circulation to its institutional clients and also CGWI. Its contents have been approved by CGWI and we are providing it to you on the basis that we believe it to be of interest to you. This statement should be read in conjunction with your client agreement, CGWI's current terms of business and the other disclosures and disclaimers contained within this research. If you are in any doubt, you should consult your financial adviser.

CGWI is licensed and regulated by the Guernsey Financial Services Commission, the Jersey Financial Services Commission and the Isle of Man Financial Supervision Commission. CGWI is registered in Guernsey and is a wholly owned subsidiary of Canaccord Genuity Group Inc.

**For Australian Residents:**

This research is distributed in Australia by Canaccord Genuity (Australia) Limited ABN 19 075 071 466 holder of AFS Licence No 234666. To the extent that this research contains any advice, this is limited to general advice only. Recipients should take into account their own personal circumstances before making an investment decision. Clients wishing to effect any transactions in any financial products discussed in the research should do so through a qualified representative of Canaccord Genuity (Australia) Limited or its Wealth Management affiliated company, Canaccord Genuity Financial Limited ABN 69 008 896 311 holder of AFS Licence No 239052.

**For Hong Kong Residents:**

This research is distributed in Hong Kong by Canaccord Genuity (Hong Kong) Limited which is licensed by the Securities and Futures Commission. This research is only intended for persons who fall within the definition of professional investor as defined in the Securities and Futures Ordinance. It is not intended to be distributed or passed on, directly or indirectly, to any other class of persons. Recipients of this report can contact Canaccord Genuity (Hong Kong) Limited. (Contact Tel: +852 3919 2561) in respect of any matters arising from, or in connection with, this research.

**Additional information is available on request.**

Copyright © Canaccord Genuity Corp. 2023 – Member IIROC/Canadian Investor Protection Fund

Copyright © Canaccord Genuity Limited. 2023 – Member LSE, authorized and regulated by the Financial Conduct Authority.

Copyright © Canaccord Genuity LLC 2023 – Member FINRA/SIPC

Copyright © Canaccord Genuity (Australia) Limited. 2023 – Participant of ASX Group, Cboe Australia and of the NSX. Authorized and regulated by ASIC.

All rights reserved. All material presented in this document, unless specifically indicated otherwise, is under copyright to Canaccord Genuity Corp., Canaccord Genuity Limited, Canaccord Genuity LLC or Canaccord Genuity Group Inc. None of the material, nor its content, nor any copy of it, may be altered in any way, or transmitted to or distributed to any other party, without the prior express written permission of the entities listed above.

**None of the material, nor its content, nor any copy of it, may be altered in any way, reproduced, or distributed to any other party including by way of any form of social media, without the prior express written permission of the entities listed above.**