

**Debjit Chattopadhyay, Ph.D.**

debjit.chattopadhyay@guggenheimpartners.com  
212 823 6584

**Robert Finke, Pharm.D.**

robert.finke@guggenheimpartners.com  
212 901 9343

**Ry Forseth, Ph.D.**

ry.forseth@guggenheimpartners.com  
212 518 9226

## RARE

Ultragenyx Pharmaceutical Inc.  
Sector: Biotechnology

## BUY

### Rating Change

Share Price	\$38.47
Price Target	\$50.00
Prior	NA

### Revenue (\$M)

(FY DEC)	1Q	2Q	3Q	4Q	FY
2022	80.0	89.0	84.7E	87.0E	365.1E
EV/Sales					4.2x
2023	—	—	—	—	401.0E
Prior	—	—	—	—	410.7E
EV/Sales					3.8x
2024	—	—	—	—	482.0E
Prior	—	—	—	—	499.3E
EV/Sales					3.2x

### EPS (\$)

(FY DEC)	1Q	2Q	3Q	4Q	FY
2022	(2.19)	(2.26)	(2.78)E	(1.74)E	(8.56)E
Prior	—	—	—	—	(8.16)E
P/E					NM
2023	—	—	—	—	(7.61)E
Prior	—	—	—	—	(6.98)E
P/E					NM
2024	—	—	—	—	(7.01)E
Prior	—	—	—	—	(6.14)E
P/E					NM

### Financial Metrics

Cash (M)	\$1,100
----------	---------

### Market Data

52-Week Range	\$36.86 - \$89.56
Shares Out (M)	70.0
Market Cap (M)	\$2,694
ADV (3 mo; 000)	756
Enterprise Value (M)	\$1,524

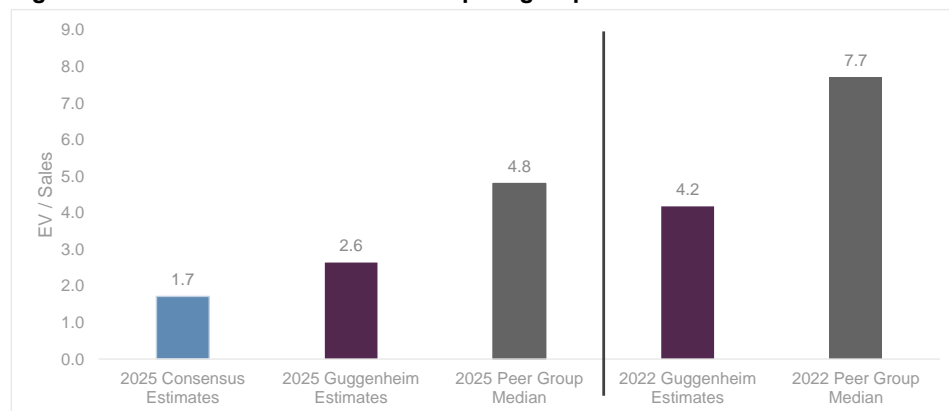
## RARE: Upgrading to BUY as Near-Term Pipeline Risk Appears Adequately Discounted; PT \$50

**Key Message:** Ultragenyx trades at 2.6× our 2025E EV/S vs. a peer group median of 4.8×, a meaningful discount to its midcap commercial biotech peers. While sentiment on GTX-102 is at a nadir, reflected in the 78% draw down in the stock since its peak on 12/24/20 (vs. 22% decline in NBX over the same period), the program may not be a write-off should cumulative drug exposure sustain efficacy. Importantly, for every 10% increase in GTX-102 POS, we gain an incremental \$7 on our DCF analysis. With its commercial franchise and risk-adjusted pipeline providing a floor for the stock close to the current trading level, we are upgrading the shares to a BUY (from NEUTRAL) and introducing a \$50 price target.

### Ultragenyx trades at a discount to commercial biotech peers

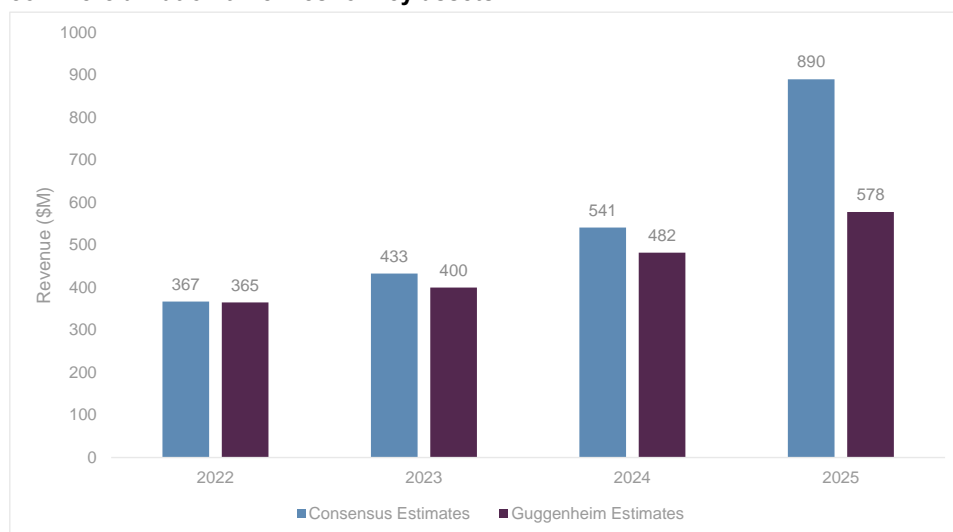
RARE trades at a discount to commercial biotech peers: (1) 4.2× 2022 EV/sales multiple vs. peer group median multiple of 7.7×; and (2) 2.6× 2025 EV/Sales at a discount to the 4.8× peer group median multiple. While a discount is somewhat warranted following the underwhelming July 15, 2022, GTX-102 update, the Angelman program could still have legs. The commercial franchise, while not poised for gangbusters growth coupled with remainder of the pipeline, offers a floor for the stock close to current level. Note, multiples are derived from Guggenheim estimates, which are discounted vs. consensus, Figures 2 and 3, and reflect realistic commercial launch timelines, Figure 5.

**Figure 1 - RARE trades at a discount to peer group medians**



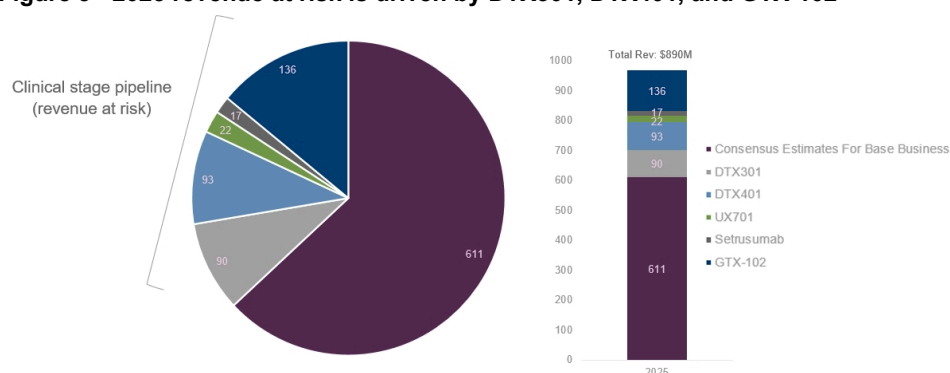
Source: Guggenheim Securities, LLC, FactSet and VisibleAlpha

**Figure 2 - Our 2025 estimates are lower than consensus and reflect likely commercialization timelines for key assets**



Source: Guggenheim Securities, LLC, FactSet and VisibleAlpha

**Figure 3 - 2025 revenue at risk is driven by DTX301, DTX401, and GTX-102**

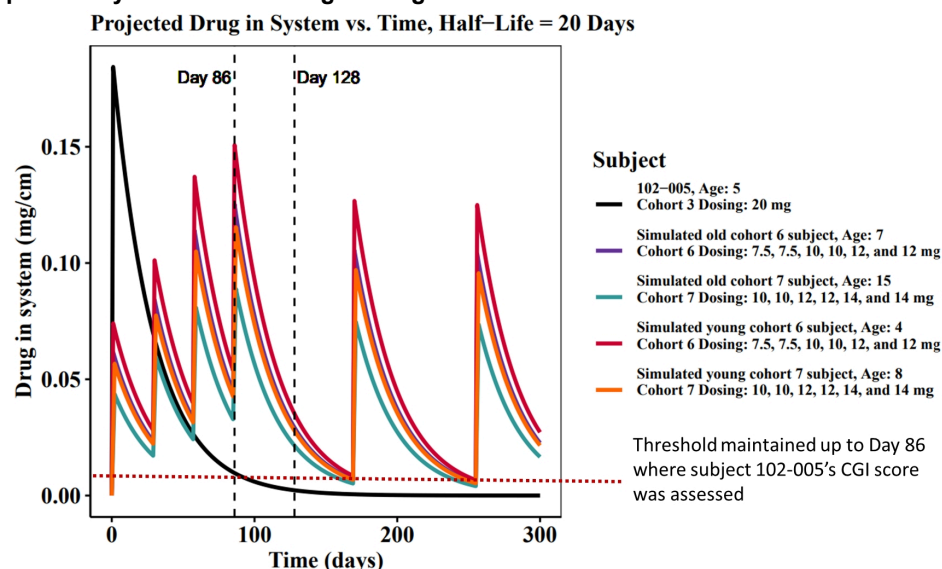


Source: Guggenheim Securities, LLC, FactSet and VisibleAlpha

### Revisiting drug exposure projections—GTX-102 outlook has room for upside if the long-term exposure thesis plays out

Currently, our model leverages a 15% POS for the GTX-102. Our prior PK/PD modeling work ([LINK](#)) serves as a basis for this position. However, we recognize that our PK/PD efforts are inadequate for projecting the potential long-term therapeutic benefit that may be derived from sustained GTX-102 exposure beyond Day 128. Our GTX-102 exposures models do, however, suggest that the Cohort 6 (7.5, 7.5, 10, 10, 12 and 12 mg) and Cohort 7 (10, 10, 12, 12, 14, and 14 mg) dosing could sustain drug exposures at a level that previously resulted in strong 2-point improvement in non-subjective CGI domains (sleep, fine- and gross-motor function) for subject 102-005 (Figure 4). Taken together, this information suggests the Angelman POS will be accretive if the long-term drug exposure benefit comes to fruition.

**Figure 4 - Our PK/PD modeling does not capture the benefit of long-term drug exposure and the Cohort 6 and 7 doses can sustain drug levels that have previously resulted in strong CGI signals**



Source: Simulation conducted by Guggenheim Securities, LLC.

### Valuation

We value Ultragenyx based on a blended average of risk-adjusted 2025E EV/S and risk-adjusted 10-year DCF analysis. We associate a 100% POS for approved products Crysvita, Mepsevii, and Dojolvi. We model 2022 revenues of \$365M, and 2023 revenues of ~\$400M (prior \$411M). Our 2022 EPS estimates decrease to \$(8.56) per share from \$(8.16) post GeneTx acquisition announcement. We assume an 12.0% discount rate (prior 8%), based on 5-year beta 1.50, risk-premium 5.3% (prior 4.63%), risk-free rate aligned with 10-year U.S. treasury bond rates, a terminal growth rate of 1.0%, and share count estimated from YE24. Beyond the approved medicines, we assign a: (1) 50% POS for DTX301 (prior 70%); (2) 70% POS for DTX401; (3) 60% POS for Setrusumab in pediatric OI; (4) 15% POS (prior 10%) for GTX102; (5) 10% POS for UX701; (6) 10% POS for UX053. Our valuation does not include the out-licensed gene therapy DTX201. We upgrade to BUY and introduce a \$50 price target.

**Figure 5 - Probability of success, mid-decade pipeline expectations, and adjusted 2030 sales**

Program	Probability of Success	Guggenheim vs Consensus 2025 Sales (\$MM)	Guggenheim Probability Adjusted 2030 Sales (\$MM)
GTX-102	15%	0 vs 136	247
Setrusumab	60%	0 vs 17	216
DTX-301	50%	0 vs 90	165
DTX-401	70%	15 vs 93	380
UX701	10%	0 vs 22	124
UX053	10%	0 vs 0	82

Source: Guggenheim Securities, LLC and VisibleAlpha

### Investment Risks

RARE is susceptible to the same risks that apply to the entire biotech industry, including development, regulatory, commercial, manufacturing, financing, and IP. Risks more specific to RARE include:

Clinical risk. Downside risks: Several key pipeline products are still in clinical development and may have delays with clinical trial initiation or enrollment, unexpected safety issues, or efficacy that is lower than expectations.

Regulatory risk. Downside risks: If clinical trials are ultimately successful, it is possible that RARE's medicines will not be approved by global regulatory agencies. Given the novelty of gene therapy, regulatory agencies may require additional or longer-term data, which could delay a potential approval.

IP risk. Downside risks: RARE depends on licenses from third parties for its intellectual property. RARE's partners may not be able to defend its patents and could result in increased generic competition. The gene therapy landscape is rapidly evolving, and there is no guarantee that RARE will have access to any new developments or technologies that emerge in the space.

Competitor risk. Downside risks: It is possible that the risk/benefit of RARE's therapies may not be competitive. There are gene therapy/gene editing companies developing potential competitive medicines that could turn out to have better safety or efficacy than RARE or move faster to the market than RARE.

GUGGENHEIM

D. Chattopadhyay

## Ultranex (RARE) Income Statement

	FY end Dec. 31	2019A	2020A	2021A	1Q22	2Q22A	3Q22E	4Q22E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
<b>Income statement</b>																	
(\$ in thousands, except per share data)																	
Product revenues	\$ 20,221	\$ 38,720	\$ 77,017	\$ 26,684	\$ 30,832	\$ 30,700	\$ 33,000	\$ 121,216	\$ 179,825	\$ 255,295	\$ 312,392	\$ 451,063	\$ 696,335	\$ 1,076,334	\$ 1,393,085	\$ 1,488,835	
Crysvita in LatAm	4,286	10,350	21,422	9,394	12,402	11,000	11,000	43,796	52,696	72,898	83,267	83,826	84,413	85,004	85,599	86,198	
Mepsevii	12,634	15,342	16,035	4,861	4,933	4,700	5,000	19,494	27,000	29,250	31,500	33,750	34,200	36,338	38,475	40,613	
Dojolvi (UX007)	3,301	13,028	39,560	12,429	13,497	15,000	17,000	57,926	91,000	131,825	151,712	160,412	192,304	193,650	163,805	72,657	
Evkeeza (Ex-US)	0	0	0	0	0	0	0	0	9,129	21,323	30,491	45,783	61,105	76,457	76,534	76,610	
GTX-102 in Angelman	0	0	0	0	0	0	0	0	0	0	0	49,695	102,372	184,526	239,428	246,611	
Setrusumab in OI	0	0	0	0	0	0	0	0	0	0	0	16,641	52,200	109,599	169,490	216,340	
DTX-301 in OTC	0	0	0	0	0	0	0	0	0	0	0	0	0	73,574	122,916	164,706	
DTX-401 in GSD	0	0	0	0	0	0	0	0	0	0	15,422	60,956	120,098	220,091	331,995	379,519	
UX701 in Wilson's	0	0	0	0	0	0	0	0	0	0	0	0	16,712	69,892	113,760	123,964	
UX053 in GSD III	0	0	0	0	0	0	0	0	0	0	0	0	7,250	27,203	51,083	81,617	
Collaboration and License Revenue	83,493	219,315	270,517	53,251	58,511	54,000	54,000	219,762	184,931	171,756	186,936	204,533	205,930	211,036	203,753	262,552	
Crysvita collaboration revenue in profit-share territory	74,869	128,597	171,198	45,164	51,609	51,000	51,000	198,773	167,931	171,756	184,936	199,533	200,930	202,336	203,753	205,179	
Crysvita royalty revenue in European territory	8,120	1,498	14,323	4,838	5,423	3,000	3,000	16,261	17,000	0	0	0	0	0	0	57,373	
Daiichi Sankyo Tech Trnsfr (\$183M)	0	89,220	84,996	3,249	1,479	0	0	4,728	0	0	0	0	0	0	0	0	
Bayer DTX201 AAV.FVIII Milestones (\$232M)	504	0	0	0	0	0	0	0	0	0	2,000	5,000	5,000	8,700	0	0	
Bayer DTX201 AAV.FVIII Royalties	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Non-cash Collaboration Royalty Revenue	0	12,995	3,872	0	0	0	0	24,087	35,953	55,189	78,780	79,332	79,887	80,446	81,010	24,203	
<b>Total Revenues</b>	<b>103,714</b>	<b>271,030</b>	<b>351,406</b>	<b>79,935</b>	<b>89,343</b>	<b>84,700</b>	<b>87,000</b>	<b>365,065</b>	<b>400,710</b>	<b>482,240</b>	<b>578,109</b>	<b>734,928</b>	<b>982,152</b>	<b>1,367,817</b>	<b>1,677,847</b>	<b>1,775,590</b>	
Factset consensus revenues as of 10/11/22	103,714	271,030	351,406	99,395	86,975	81,647	83,389	367,000	433,489	541,814	839,900	1,057,345	1,100,696	1,952,073	1,765,770	1,827,123	
COGS as % of Product Revenue	45%	16%	15%	23%	14%	14%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	
Cost of goods sold	9,008	6,129	16,008	6,100	8,270	4,000	4,100	18,182	26,974	38,294	46,859	67,660	104,450	161,450	208,963	223,325	
<b>Gross profit</b>	<b>94,706</b>	<b>264,901</b>	<b>335,398</b>	<b>73,835</b>	<b>81,073</b>	<b>80,700</b>	<b>82,900</b>	<b>346,883</b>	<b>373,736</b>	<b>443,945</b>	<b>531,250</b>	<b>667,269</b>	<b>877,702</b>	<b>1,206,367</b>	<b>1,468,884</b>	<b>1,552,265</b>	
Research and development	357,355	412,084	497,153	143,155	154,529	133,000	140,000	570,684	599,218	617,195	635,711	654,782	674,425	694,658	715,498	736,963	
General and administrative	161,524	182,933	219,982	67,312	68,137	68,818	69,507	273,774	287,463	296,086	304,969	314,118	323,542	333,248	343,245	353,543	
<b>Total operating expenses</b>	<b>518,879</b>	<b>595,017</b>	<b>717,135</b>	<b>210,467</b>	<b>222,666</b>	<b>201,818</b>	<b>209,507</b>	<b>844,458</b>	<b>886,681</b>	<b>913,281</b>	<b>940,680</b>	<b>968,900</b>	<b>997,967</b>	<b>1,027,906</b>	<b>1,058,743</b>	<b>1,090,506</b>	
<b>Operating gains (losses)</b>	<b>(424,173)</b>	<b>(330,116)</b>	<b>(381,737)</b>	<b>(136,632)</b>	<b>(141,593)</b>	<b>(121,118)</b>	<b>(126,607)</b>	<b>(497,575)</b>	<b>(512,945)</b>	<b>(469,336)</b>	<b>(409,429)</b>	<b>(301,631)</b>	<b>(120,265)</b>	<b>178,460</b>	<b>410,141</b>	<b>461,760</b>	
Interest Income	13,238	7,038	639	0	0	0	0	0	0	0	0	0	0	0	0	0	
Change in fair value of equity securities	13,413	170,403	(42,063)	(9,329)	(10,184)	0	0	(19,513)	(19,513)	(19,513)	(19,513)	(19,513)	(19,513)	(19,513)	(19,513)	(19,513)	
Non-cash interest expense on liability related to sale of equity	(1,135)	(33,291)	(29,422)	(6,584)	(6,052)	(4,000)	(4,000)	(20,636)	(28,812)	(28,812)	(28,812)	(28,812)	(28,812)	(28,812)	(28,812)	(1,401)	
Other income (expense)	(787)	607	(398)	783	(31)	(75,000)	(7)	(74,255)	(390)	(390)	(390)	(390)	(390)	(390)	(390)	(390)	
Total other income (expense)	24,729	144,757	(71,244)	(15,130)	(16,267)	(79,000)	(4,007)	(114,404)	(48,715)	(48,715)	(48,715)	(48,715)	(48,715)	(48,715)	(48,715)	(21,304)	
<b>Gain (loss) before income taxes</b>	<b>(399,444)</b>	<b>(185,359)</b>	<b>(452,981)</b>	<b>(151,762)</b>	<b>(157,860)</b>	<b>(200,118)</b>	<b>(130,614)</b>	<b>(611,979)</b>	<b>(561,660)</b>	<b>(518,051)</b>	<b>(458,144)</b>	<b>(350,346)</b>	<b>(168,980)</b>	<b>129,745</b>	<b>361,426</b>	<b>440,456</b>	
Provision for income taxes	(3,283)	(1,207)	(1,044)	(558)	(302)	(200)	(200)	(1,260)	0	0	0	0	0	0	0	0	
<b>Net Income (loss)</b>	<b>(402,727)</b>	<b>(186,566)</b>	<b>(454,025)</b>	<b>(152,320)</b>	<b>(158,162)</b>	<b>(200,318)</b>	<b>(130,814)</b>	<b>(613,239)</b>	<b>(561,660)</b>	<b>(518,051)</b>	<b>(458,144)</b>	<b>(350,346)</b>	<b>(168,980)</b>	<b>129,745</b>	<b>361,426</b>	<b>440,456</b>	
Factset consensus Net Income as of 10/12/2022	(402,727)	(186,566)	(454,025)	(136,141)	(122,428)	(72,998)	(122,458)	(606,997)	(515,308)	(422,206)	(146,200)	105,089	234,877	363,299	588,144	652,596	
<b>Earnings (loss) per share- basic</b>	<b>(7.12)</b>	<b>(3.07)</b>	<b>(6.70)</b>	<b>(2.19)</b>	<b>(2.26)</b>	<b>(2.78)</b>	<b>(1.74)</b>	<b>(8.56)</b>	<b>(7.61)</b>	<b>(7.01)</b>	<b>(5.60)</b>	<b>(4.27)</b>	<b>(2.06)</b>	<b>1.58</b>	<b>4.38</b>	<b>5.33</b>	
Factset consensus EPS as of 10/12/2022	(7.12)	(3.07)	(6.70)	(2.03)	(1.81)	(1.08)	(1.79)	(8.50)	(7.08)	(5.86)	(1.97)	1.34	3	3	3	3	
Shares outstanding - basic	56,577	60,846	67,789	69,517	69,925	72,000	75,000	71,611	73,759	73,906	81,856	82,020	82,184	82,349	82,513	82,678	
<b>Earnings (loss) per share- diluted</b>	<b>(5.62)</b>	<b>(2.46)</b>	<b>(6.70)</b>	<b>(2.19)</b>	<b>(2.26)</b>	<b>(2.78)</b>	<b>(1.74)</b>	<b>(8.56)</b>	<b>(7.61)</b>	<b>(7.01)</b>	<b>(5.60)</b>	<b>(4.27)</b>	<b>(2.06)</b>	<b>1.58</b>	<b>4.38</b>	<b>5.33</b>	

Source: Guggenheim Securities LLC estimates, Company Reports, and FactSet.

**ANALYST CERTIFICATION**

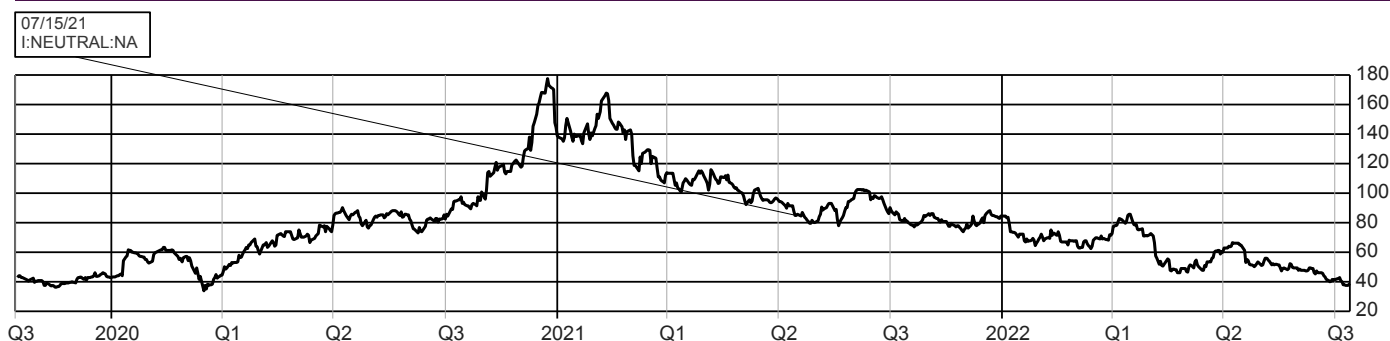
By issuing this research report, each Guggenheim Securities, LLC ("Guggenheim Securities") research analyst whose name appears in this report hereby certifies that (i) all of the views expressed in this report accurately reflect the research analyst's personal views about any and all of the subject securities or issuers discussed herein and (ii) no part of the research analyst's compensation was, is, or will be directly or indirectly related to the specific recommendations or views expressed by the research analyst.

**IMPORTANT DISCLOSURES**

The research analyst(s) whose name(s) appear(s) in this report have received compensation based upon various factors, including quality of research, investor client feedback, and Guggenheim Securities, LLC's overall revenue, which includes investment banking revenue.

Guggenheim Securities, LLC or its affiliates expect(s) to receive or intend(s) to seek compensation for investment banking services from Ultragenyx Pharmaceutical Inc. in the next 3 months.

Please refer to this website for company-specific disclosures referenced in this report: <https://guggenheimsecurities.bluematrix.com/sellside/Disclosures.action>. Disclosure information is also available from Compliance, 330 Madison Avenue, New York, NY 10017.

**Rating and Price Target History for: Ultragenyx Pharmaceutical Inc. (RARE) as of 10-12-2022**

Created by: BlueMatrix

**RATINGS EXPLANATION AND GUIDELINES**

**BUY (B)** - Describes stocks that we expect to provide a total return (price appreciation plus yield) of 10% or more within a 12-month period.

**NEUTRAL (N)** - Describes stocks that we expect to provide a total return (price appreciation plus yield) of between plus 10% and minus 10% within a 12-month period.

**SELL (S)** - Describes stocks that we expect to provide a total negative return (price appreciation plus yield) of 10% or more within a 12-month period.

**NR** - The investment rating and price target have been temporarily suspended. Such suspensions are in compliance with applicable regulations and/or Guggenheim Securities, LLC policies.

**CS** - Coverage Suspended. Guggenheim Securities, LLC has suspended coverage of this company.

**NC** - Not covered. Guggenheim Securities, LLC does not cover this company.

**Monitor** - Describes stocks whose company fundamentals and financials are being monitored, and for which no financial projections or opinions on the investment merits of the company are provided.

**Under Review (UR)** - Following the release of significant news from this company, the rating has been temporarily placed under review until sufficient information has been obtained and assessed by the analyst.

Guggenheim Securities, LLC methodology for assigning ratings may include the following: market capitalization, maturity, growth/value, volatility and expected total return over the next 12 months. The price targets are based on several methodologies, which may include, but are not restricted to, analyses of market risk, growth rate, revenue stream, discounted cash flow (DCF), EBITDA, EPS, cash flow (CF), free cash flow (FCF), EV/EBITDA, P/E, PE/growth, P/CF, P/FCF, premium (discount)/average group EV/EBITDA, premium (discount)/average group P/E, sum of the parts, net asset value, dividend returns, and return on equity (ROE) over the next 12 months.

Price targets are assigned for Buy- and Sell-rated stocks. Price targets for Neutral-rated stocks are provided at the discretion of the analyst.

**Equity Valuation and Risks:** For valuation methodology and risks associated with covered companies or price targets for covered companies, please see the most recent company-specific research report at <https://guggenheimlibrary.bluematrix.com/client/library.jsp>, contact the primary analyst or your Guggenheim Securities, LLC representative, or email [GSRResearchDisclosures@guggenheimpartners.com](mailto:GSRResearchDisclosures@guggenheimpartners.com).

#### RATINGS DISTRIBUTIONS FOR GUGGENHEIM SECURITIES:

Rating Category	Count	Percent	IB Serv./ Past 12Mos.	
			Count	Percent
BUY	226	65.89%	41	18.14%
NEUTRAL	112	32.65%	5	4.46%
SELL	5	1.46%	0	0.00%

#### OTHER DISCLOSURES

This research is for our clients and prospective clients only. Other than disclosures relating to Guggenheim Securities and its affiliates, this research is based on current public information that we consider reliable, but we do not represent it is accurate or complete, and it should not be relied on as such. We seek to update our research as appropriate, but various regulations may prevent us from doing so. Other than certain industry reports published on a periodic basis, the large majority of reports are published at irregular intervals as appropriate in the research analyst's judgement. Guggenheim Securities conducts a full-service, integrated investment banking and brokerage business, and one or more of its affiliates conducts an investment management business. Guggenheim Securities is a member of SIPC (<http://www.sipc.org>). Our salespeople, traders, and other professionals may provide oral or written market commentary or trading strategies to our clients and our employees trading for our own account that reflect opinions that are contrary to the opinions expressed in this research. Guggenheim Securities or certain of its affiliates conducts an investment management business, trades for its own account, and conducts an investment business, and may make investment decisions that are inconsistent with the recommendations or views expressed in this research.

We and our affiliates, officers, directors, and employees, excluding equity and credit analysts, will from time to time have long or short positions in, act as principal in, and buy or sell, the securities or derivatives, if any, referred to in this research. We and our affiliates also may sell to or buy from customers on a principal basis the securities described herein. We and our affiliates also do business with, or that relates to, companies covered in Guggenheim Securities' research, and may have a position in the debt of the company or companies discussed herein.

This research is not an offer to sell or the solicitation of an offer to buy any security. It does not constitute a personal recommendation or take into account the particular investment objectives, financial situations, or needs of individual clients. Clients should consider whether any advice or recommendation in this research is suitable for their particular circumstances and, if appropriate, seek professional advice, including tax advice. The price and value of investments referred to in this research and the income from them may fluctuate. Past performance is not a guide to future performance, future returns are not guaranteed, and a loss of original capital may occur. Fluctuations in exchange rates could have adverse effects on the value or price of, or income derived from, certain investments.

This communication does not constitute an offer of Shares to the public in the United Kingdom. No prospectus has been or will be approved in the United Kingdom in respect of the Securities. Consequently, this communication is directed only at (i) persons who are outside the United Kingdom or (ii) persons who have professional experience in matters relating to investments falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (the "Order"), (iii) high net worth entities falling within Article 49(2) of the Order (iv) and other persons to whom it may lawfully be communicated (all such persons together being referred to as "relevant persons"). Any investment activity to which this communication relates will only be available to, and will only be engaged with, relevant persons. Any person who is not a relevant person should not act or rely on this document or any of its contents.

Copyright © 2022 by Guggenheim Securities, LLC, ("Guggenheim") a FINRA registered broker-dealer. All rights reserved. The content of this report is based upon information obtained from sources that Guggenheim generally considers reliable, but Guggenheim makes no representations or warranties with respect to its accuracy, completeness, timeliness, suitability or otherwise, and assumes no responsibility to update it for subsequent events or knowledge. Guggenheim is not responsible for your use of this information.



## Guggenheim Securities Equity Research & Equities Teams

### Consumer Equity Research

#### Automotive

**Ali Faghri** 310.319.2562  
Ali.Faghri@guggenheimpartners.com

#### Food Retailers; Consumables Retail/Distribution

**John Heinbockel** 212.381.4135  
John.Heinbockel@guggenheimpartners.com

#### Hardlines Retail

**Steven Forbes, CFA, CPA** 212.381.4188  
Steven.Forbes@guggenheimpartners.com

#### Restaurants

**Gregory Francfort, CFA** 212.518.9182  
Gregory.Francfort@guggenheimpartners.com

#### Retailing/Department Stores & Specialty Softlines

**Robert Drbul** 212.823.6558  
Robert.Drbul@guggenheimpartners.com

### Consumer Equities Team

#### Consumer Sector Specialist

**Carey Kaufman** 504.299.3424  
Carey.Kaufman@guggenheimpartners.com

### Power and Energy Transition Equity Research

#### Energy Technology & Industrial Technology

**Joseph Osha, CFA** 415.852.6468  
Joseph.Osha@guggenheimpartners.com

#### Power & Utilities

**Shahriar Pourreza, CFA** 212.518.5862  
Shahriar.Pourreza@guggenheimpartners.com

### Technology & Media Equity Research

#### Entertainment & Digital Media

**Michael Morris, CFA** 804.253.8025  
Michael.Morris@guggenheimpartners.com

#### Media & Live Entertainment

**Curry Baker** 804.253.8029  
Curry.Baker@guggenheimpartners.com

#### Software

**John DiFucci** 212.518.9670  
John.DiFucci@guggenheimpartners.com

**Howard Ma** 512.354.3458  
Howard.Ma@guggenheimpartners.com

**Raymond McDonough, CFA** 212.518.9704  
Raymond.McDonough@guggenheimpartners.com

### Healthcare Equity Research

#### Biotechnology

**Debjit Chattopadhyay, Ph.D.** 212.823.6584  
Debjit.Chattopadhyay@guggenheimpartners.com

**Michael Schmidt, Ph.D.** 617.859.4636  
Michael.Schmidt@guggenheimpartners.com

**Yatin Suneja** 212.518.9565  
Yatin.Suneja@guggenheimpartners.com

**Charles Zhu, Ph.D.** 212.518.9501  
Charles.Zhu@guggenheimpartners.com

#### Global Biopharmaceuticals

**Seamus Fernandez** 617.859.4637  
Seamus.Fernandez@guggenheimpartners.com

#### Healthcare IT & Services

**Sandy Draper, CFA** 404.926.1021  
Sandy.Draper@guggenheimpartners.com

**Jack Wallace** 212.518.9620  
Jack.Wallace@guggenheimpartners.com

### Healthcare Equities Team

#### Healthcare Sector Specialist

**Whitney Wolfe** 212.518.9630  
Whitney.Wolfe@guggenheimpartners.com

#### Healthcare Sector Specialist

**Michael Guba** 212.292.5586  
Michael.Guba@guggenheimpartners.com

#### Senior Consultant, Guggenheim Securities CEO, Health Capital Group, LLC

**Neal Masia**  
GSPolicyPulse@guggenheimpartners.com

### Sales and Trading Offices

New York 212.292.4700  
San Francisco 415.852.6451  
Boston 617.859.4626  
Los Angeles 310.260.6832  
Richmond 804.253.8052