



INVESTOR PRESENTATION

DO NOT TENDER MERCK'S UNDERVALUED TENDER OFFER FOR ACCELERON

Significant Value Creation Exists on the Horizon for a Standalone Acceleron

NOVEMBER 2021
2021

ACCELERON PHARMA INC. (NASDAQ: XLRN)

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Why We Are Here

As one of Acceleron's most significant shareholders, we are opposed to the sale of Acceleron to Merck at the proposed price of \$180/share and plan not to tender our shares

- **Avoro Capital beneficially owns approximately 7% of Acceleron**, making it one of the Company's most significant shareholders
- **Acceleron has strong momentum; continuing as a standalone entity is a superior path** to a transaction at the proposed price
- **The major value inflection point of phase 3 data is only one year away**, so we believe selling now makes no sense
- **We outline alternatives by which Acceleron could maximize shareholder value as an independent company**, including by monetizing royalties
- **We are ready and willing to assist with change in board composition** to better position Acceleron for a go-forward strategy



We think \$11.5B for XLRN is a steal”¹

RAYMOND JAMES



MRK Got A Good Deal”²

Jefferies

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Executive Summary

Now is the wrong time to cash out of Acceleron

- The Company has strong momentum
- One year away from inflection point with phase 3 trial results
- No need for cash or a transaction at this time
- The Board itself did not proactively choose this timing

Merck's offer does not represent fair value for Acceleron

- We believe the standalone, probability-weighted value is substantially higher than \$180 per share
- Sell-side analysts agree price is a **"steal"**¹ and **"too low"**² and a **"bargain"**³ and a **"surprise"**⁴
- Implied valuation in a deal based on precedent transactions is much higher
- Unlike shareholders, company management received additional financial consideration to make \$180 per share more attractive to them
- Merck can and has paid higher premiums for deals of this size

We believe Acceleron's Board used a flawed process in reaching the deal⁵

- Process was initiated by the buyer, seemingly only to suit its timing and approach
- Board only approached three alternative buyers
- The Company's first draft of a merger agreement committed the Company to a "no shop" provision
- Board seemingly did not appear to seriously pursue other strategic alternatives, such as partnerships or financing arrangements
- Board appeared more dedicated to management, which received significantly enhanced exit packages

We Believe Now is Not the Right Time and \$180 per Share is Not the Right Price to Sell Acceleron

Executive Summary

If a deal is to happen now, it should come at a much higher price

- With a value inflection point potentially less than a year away, and good data to date, a buyer should pay much more for Acceleron
- Board should have compared the deal price to a standalone case with royalty financing or other non- or less-dilutive financing
- We believe a deal should come > \$250 per share, given Acceleron's opportunities

Acceleron can succeed without a deal

- The Company has the cash to continue to execute on its clinical development program
- The executive team is strong and capable and can get to the next milestone without outside help or partnerships
- Downside is limited by Reblozyl's royalty stream
- We believe there will be ample opportunities for lucrative partnerships or a sale in the future

Avoro is prepared to step up if necessary

- If the deal fails, Avoro will provide guidance to the Company
- We are prepared to suggest and nominate new independent directors to the Board
- We are committed to continue owning the stock and would consider helping to finance the Company if financing is necessary

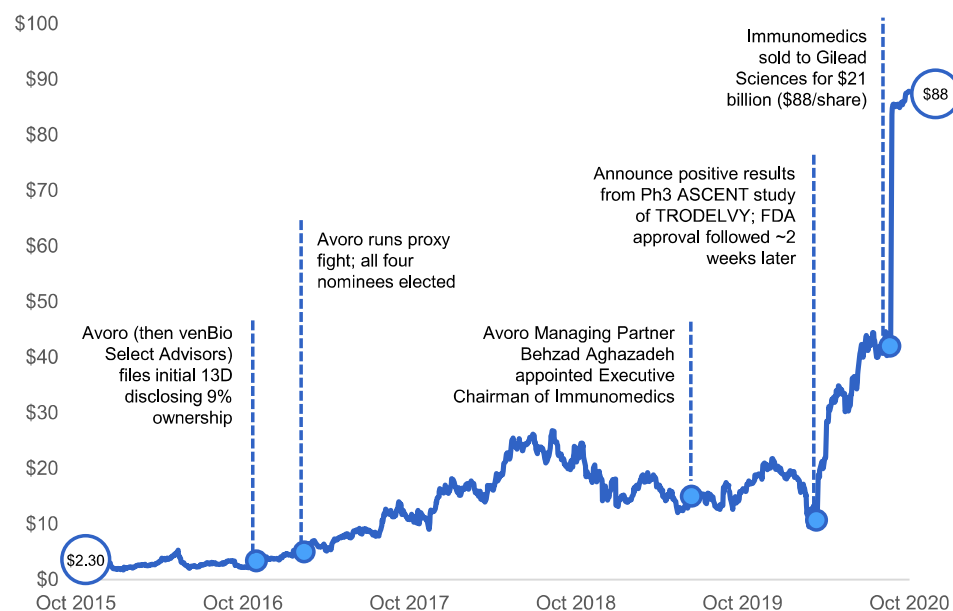
There is a Better Way Forward for Acceleron Shareholders

Overview of Avoro Capital Advisors

Specialist investment firm focused on innovation and scientific advancement in life sciences and biotechnology

- Launched in 2010 for public and private equity investments
- Successful track record of investment across all stages of drug development, supporting significant breakthroughs in areas of high unmet need:
 - Managing Partner, Dr. Behzad Aghazadeh, is supported by a team of seasoned investment professionals with advanced medical and scientific degrees
 - Partner with companies throughout their lifecycle, providing financial support, guidance, access to vast networks and expertise, with the ability to add value through direct operational or board positions when applicable
- Recent activist campaign led to successful development and approval of Trodelvy for patients with triple negative breast cancer, and culminated in the acquisition of **Immunomedics** by Gilead for \$21Bn

Our Experience at Immunomedics¹



Overview of Acceleron (Nasdaq: XLRN)

XLRN is a leader in TGF- β Superfamily Ligand Trap Technology with Two Validated Blockbusters^{1,2} and others in the Pipeline³



- Founded in 2003, Acceleron develops medicines for pulmonary and hematologic diseases that selectively target multiple ligands (proteins) in the TGF-beta superfamily
- In hematology, REBLOZYL® is the first and only erythroid maturation agent approved in the United States, Europe, and Canada for the treatment of anemia in certain blood disorders
- In pulmonary, Acceleron is developing Sotatercept for the treatment of pulmonary arterial hypertension (PAH), having reported positive topline results from the PULSAR Phase 2 trial, and is now conducting multiple Phase 3 trials

Headquarters: Cambridge, MA

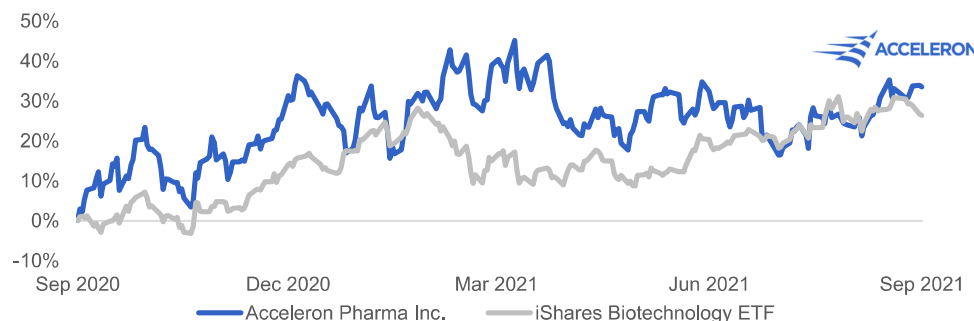
Market Cap (as of 11/5/2021): \$10.6 billion

2020 Revenue: \$92.5 million

LTM Free Cash Flow: (\$190.4 million)

Cash and equivalents: \$857.5 million

One-Year Total Shareholder Return Prior to Deal⁴



¹Luspatercept is a recombinant fusion protein that binds select transforming growth factor β superfamily ligands to decrease SMAD2 and SMAD3 signaling, thereby enabling erythroid maturation by means of late stage erythroblast differentiation (NEJM 2020)

²Sotatercept acts as a ligand trap for members of the TGF- β superfamily, thus restoring balance between the growth-promoting activin growth differentiation factor pathway and the growth-inhibiting BMP pathway (NEJM 2021)

³ACE-1334 is a TGF-beta superfamily-based ligand trap designed to bind and inhibit TGF- β 1 and 3 ligands while sparing TGF- β 2

⁴Source: FactSet. Data from September 14, 2020 to September 14, 2021, the last day prior to which XLRN's trading price began to reflect a potential transaction.

Overview of Acceleron (Nasdaq: XLRN)

Acceleron receives a strong royalty stream on one drug and has a promising Phase 3 compound that has earned Breakthrough Therapy Designation by the FDA

REBLOZYL®

- FDA approved for MDS and β -thalassemia
- Licensed to BMS with low-to-mid-20% royalties to Acceleron
- 2021 YTD generated \$400M in sales; ~80M in royalty revenue provided to Acceleron
- BMS guidance for \$4Bn+ peak sales → implies peak royalty of \$800M+ to Acceleron
- Phase 3 (MEDALIST) data presented in plenary session at ASH annual meeting in 2019
- Phase 3 (MEDALIST) study published in NEJM



The NEW ENGLAND
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SOTATERCEPT

- First disease-modifying therapy for PAH
- Blockbuster potential as a backbone therapy in PAH with \$5Bn+ in peak sales potential
- BTB by the FDA (first PAH therapy to receive this honor)
- PRIME Designation by the EMA
- Phase 2 (PULSAR) trial in PAH published in NEJM
- Plenary abstract at the 2020 ATS annual meeting
- Best abstract award at the AHA annual meeting in 2020



BREAKTHROUGH
DESIGNATION



ATS



The NEW ENGLAND
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EUROPEAN MEDICINES AGENCY
SCIENCE · MEDICINES · HEALTH

PRIME - Designation

¹Luspatercept is a recombinant fusion protein that binds select transforming growth factor β superfamily ligands to decrease SMAD2 and SMAD3 signaling, thereby enabling erythroid maturation by means of late stage erythroblast differentiation (NEJM 2020)

²Sotatercept acts as a ligand trap for members of the TGF- β superfamily, thus restoring balance between the growth-promoting activin growth differentiation factor pathway and the growth-inhibiting BMP pathway (NEJM 2021)

³ACE-1334 is a TGF-beta superfamily-based ligand trap designed to bind and inhibit TGF- β 1 and 3 ligands while sparing TGF- β 2

Overview of the Tender Offer

TRANSACTION OVERVIEW¹

Announcement Date September 30, 2021

Buyer Merck

Tender Deadline November 18, 2021

Offer Premium to Average Prices²

30- Days: 25%

60- Days: 34%

90- Days: 38%

Deal Process

- Accelaron responded to inbound inquiry
- Spoke with just three other potential buyers

Treatment of Executive Equity

- Special new executive comp arrangement put in place in conjunction with deal announcement

Deal Reaction

- ⚠ At least 4 sell-side analysts declared the price low
- ⚠ 4 large shareholders publicly oppose the deal

We Are As Enthusiastic as Merck About Acceleron

Sotatercept Is a Promising Disease-Altering PAH Drug



*...Sotatercept may have the potential to **stop not only progression but to actually reverse** the disease phenotype.”*

*There is “remarkable evidence to-date” that **“Sotatercept could be a first-in-class foundational agent** for pulmonary arterial hypertension and has the potential to be disease modifying based on preclinical data.”*

Dean Y. Li

EVP and President, Merck Research Laboratories¹

Sotatercept Has a Multi-Billion Dollar Peak Sales Opportunity



*Based on our confidence in the **strong science underpinning Sotatercept’s clinical profile**, we believe the Phase 3 trials will confirm the positive clinical effects achieved in Phase 2.*

*If so and assuming regulatory approvals, **we believe Sotatercept has a multi-billion dollar peak sales opportunity** with an opportunity to help drive revenue growth later into this decade and well into the next.”*

Robert M. Davis

CEO and President, Merck¹

Wrong Time to Sell Acceleron

1

Phase 3 data likely to be released within one year¹ on key pipeline asset, Sotatercept

- First of its kind drug with very promising Phase 2 data
- Significant value creation inflection point

2

Acceleron has plenty of cash and manageable burn

- \$653mm cash
- Manageable burn (~\$190mm in last 12 months)

3

Many financing opportunities exist

- Non-dilutive, or minimally dilutive, financing opportunities exist, including royalty financing on strong cash flowing asset REBLOZYL®

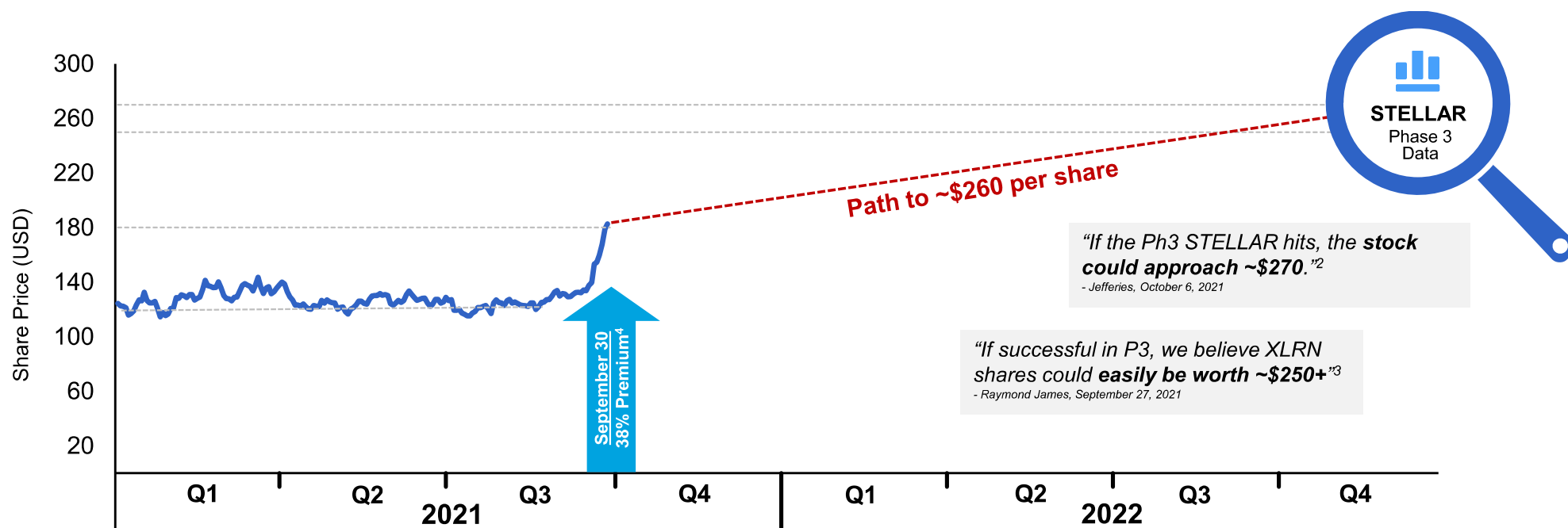
4

Board did not initiate this timing

- Merck chose to approach the Company, which was otherwise content to remain independent

Wrong Time to Sell Acceleron

With such potential, it is premature to sell. Phase 3 (STELLAR) trial data is one year away¹



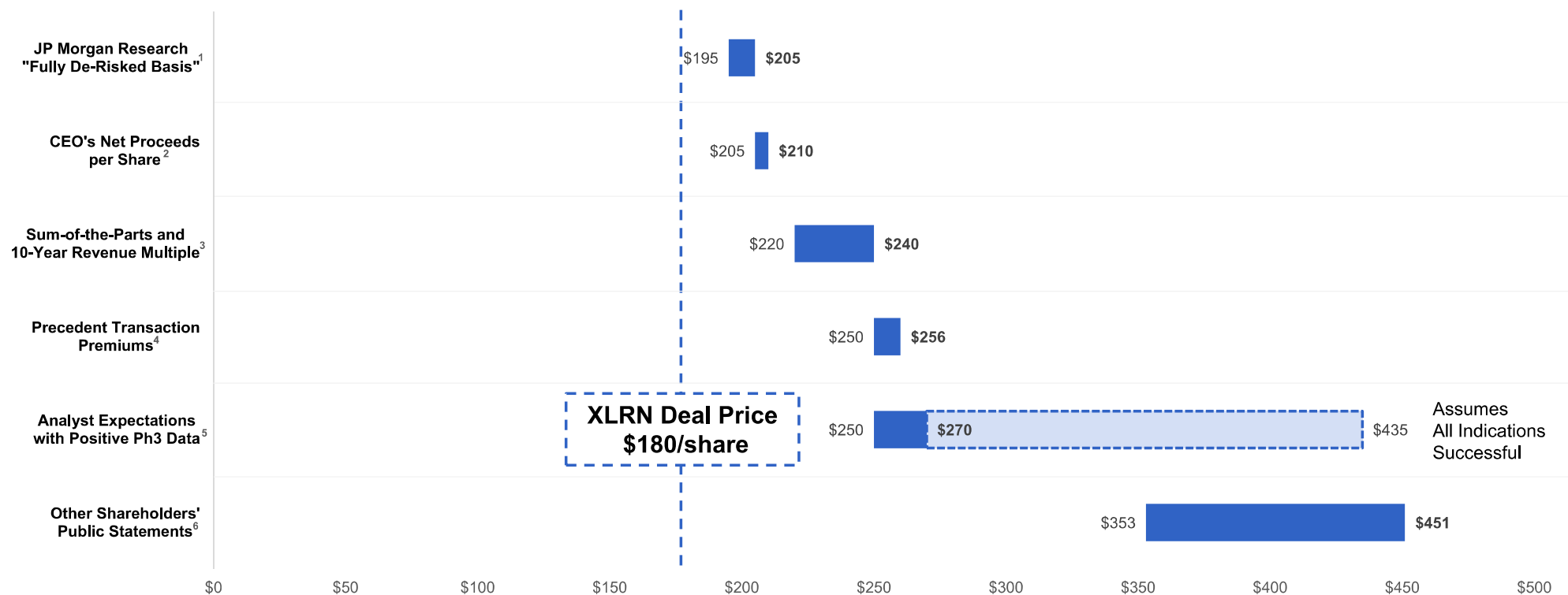
¹ Source: <https://clinicaltrials.gov/ct2/show/NCT04576988?cond=sotatercept&draw=2&rank=4>

² Raymond James (Danielle Brill), 9/27/21; ³ Jefferies (Akash Tewari), 10/6/21

⁴ Premium calculated relative to the stock's average closing price over the prior three months.

Wrong Price to Sell Acceleron

INDICATIVE VALUATION



¹ Source: JP Morgan research note dated September 24, 2021.

² Source: Public filings and proprietary analysis.

³ Sum-of-the-parts information provided on slide 18.

⁴ Precedent transactions and premiums provided on slide 19.

⁵ Source: Jefferies research note dated October 6, 2021.

⁶ Source: Darwin Global Management Limited Letter to Acceleron Shareholders dated October 20, 2021.

Accelaron's Bank – JP Morgan – Is Bullish on Accelaron

On September 24, while rumors swirled about a potential deal, JP Morgan analyzed the value of Accelaron



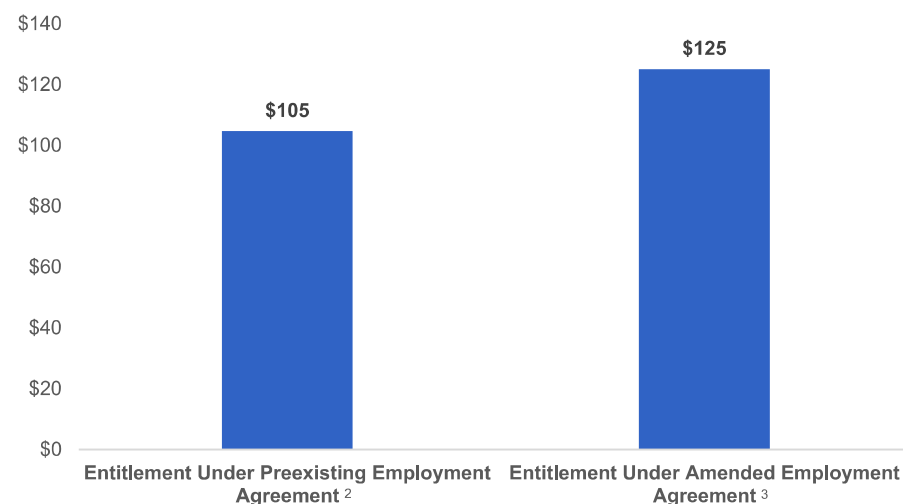
“[A]s a reference point, on a fully de-risked basis, the combined value of [REBLOZYL® and Sotatercept] amounts to \$195-205/sh in our model.”¹

JP Morgan concluded Accelaron was worth \$195 to \$205 on a de-risked model as a standalone company (i.e., not factoring in a control premium)¹

Economic Outcome for Executives Is Equivalent to a Deal at \$205-210

- **The Acceleron Board amended the employment agreements for Acceleron's key executives** to add tax gross-ups, accelerated vesting of PSUs (at maximum performance payouts) and increased cash compensation
- These amendments had the effect of substantially increasing the total proceeds to be received by the executives, when compared to the in-place executive agreements and compensation programs
- As a result, **the economic outcome of Acceleron's executives** in the Merck transaction at \$180 per share is equivalent to what the executives would have earned under their original employment agreements at a deal price of **\$205-210 per share**

Value Entitlement for XLRN CEO in a Deal (\$m)¹



Company management received additional financial consideration to make \$180 per share more attractive to them; other XLRN owners should demand the same per share economics

¹ Source: Acceleron's 2021 Proxy Statement and 14D-9 filed on October 12, 2021.

² "Entitlement Under Preexisting Employment Agreement" is equal to the sum of: 1) cash severance payment (as described on page 38 of the proxy statement); 2) the value of unvested options (as described on page 4 of the 14D-9), assuming a price of \$180/share; 3) the value of RSUs (as described on page 5 of the 14D-9); 4) the value of PSUs awarded at target (as described on page 30 of the proxy statement); 5) the combined value of "Perquisites/Benefits" and "Other Items" (as described on page 33 of the 14D-9); and 6) the value of vested options (as described on page 4 of the 14D-9), assuming a price of \$180/share.

³ "Entitlement Under Amended Employment Agreement" is equal to the sum of: 1) cash severance payment (as described on page 33 of the 14D-9); 2) the value of unvested options (as described on page 4 of the 14D-9), assuming a price of \$180/share; 3) the value of RSUs (as described on page 5 of the 14D-9); 4) the value of PSUs (as described on page 5 of the 14D-9); 5) the value of the tax reimbursement (as described on page 33 of the 14D-9); 6) the combined value of "Perquisites/Benefits" and "Other Items" (as described on page 33 of the 14D-9); and 7) the value of vested options (as described on page 4 of the 14D-9), assuming a price of \$180/share.

Comparable Deals Suggest a Higher Price is Appropriate

- ✓ **Sotatercept is a first-in-class drug** with disease modification potential that received BTB from the FDA
- ✓ **Highly differentiated asset** with robust Phase 2 data published in NEJM
- ✓ **Significant royalty revenue from REBLOZYL®** with limited associated costs
- ✓ **Proper set of comparable transactions** are those involving targets with BTBs

Deals Involving Targets with FDA Breakthrough Designation¹

Ann. Date	Target	Deal Premium ²	Deal Multiple vs. 10 Year Sales ³	Breakthrough Therapy Designation	First-in-Class	Major Publication ⁴
Oct-20	MyoKardia, Inc.	109%	3.3x	✓	✓	✓
Sep-20	Immunomedics, Inc.	118%	2.6x	✓	✓	✓
Mar-20	Forty Seven Inc	145%	2.0x	✓	✓	✓
Jun-19	Array BioPharma Inc	96%	5.5x	✓	X	✓
Feb-19	Spark Therapeutics, Inc.	164%	3.0x	✓	✓	✓
Jan-19	Loxo Oncology, Inc.	57%	3.8x	✓	✓	✓
Dec-18	TESARO, Inc.	104%	1.1x	✓	X	✓
Apr-18	AveXis, Inc.	82%	6.5x	✓	✓	✓
Jan-18	Bioverativ, Inc.	92%	3.4x	✓	X	X
Jan-18	Juno Therapeutics, Inc.	67%	1.6x	✓	X	X
Aug-17	Kite Pharma, Inc.	72%	2.0x	✓	✓	✓
Jan-17	ARIAD Pharmaceuticals, Inc.	56%	2.5x	✓	X	✓
Average		97%	3.1x			
Sep-21	Acceleron Pharma Inc.	38%	2.2x	✓	✓	✓

¹Identified using criteria of US based-public, BioPharma M&A deals between 3-30Bn since 1/1/17 involving assets with BTB [Source: Bloomberg].

²Premium to 90-day average closing price.

³Multiples calculated based on base-case sales projections from respective Schedule 14D9 filings; Utilized 10 years forward to approximate peak sales.

⁴Major publication defined as New England Journal of Medicine, The Lancet or the Journal of the American Medical Association, prior to, or within 6 months of announcement of the acquisition.

Sum-of-Parts and 10-Year Revenue Multiple Suggest \$220-240

**Based on Acceleron's internal assumptions and relevant recent transactions, fair value is ~ \$229 per share
(not including the value in Acceleron's promising pipeline)**

NPV of REBLOZYL® Royalty

Discount Rate ¹	9.5%
NPV of REBLOZYL® Royalty (at 9.5%)	5,068



NPV of SOTATERCEPT

Discount Rate ¹	9.5%
Sotatercept Year 10 Sales ²	3,644
Average 10 Year Sales Multiple ³	3.1x
Sotatercept Value	11,294
NPV of Sotatercept Royalty (at 9.5%)	(2,598)
Sotatercept Net Value	8,696



Sum of the Parts

	NPV (M)	NPV/ Share
REBLOZYL® Royalty Value	5,068	\$ 80
Sotatercept Value	8,696	\$ 138
Net Cash ⁴	688	\$ 11
Share Price		\$ 229

¹A 9.5% interest rate used to calculate the NPV of the two royalty streams based on management's base-case forecast in Acceleron's Recommendation Statement on Schedule 14D-9

²10 years was utilized to approximate projected peak sales

³The 3.1x multiple was determined as the average deal multiple versus 10 year sales for M&A transactions involving assets with FDA's Breakthrough Therapy Designation [refer to Slide 17 for further details]

⁴XLRN has 63 million diluted shares outstanding; both cash and diluted shares outstanding identified from Acceleron's Recommendation Statement on Schedule 14D-9

Precedent Transactions 90-Day Premiums Imply \$250-256

The proposed premium of ~ 38%¹ represents the lowest premium among 24 pharma deals between \$2bn and \$20bn since 2017

Deal Sets ²	N	Average Premium
Targets with BTDs (1/2017 to Present)	13	97%
Recent Pharma Deals (Since 2020)	19	92%
Similar Size Pharma Deals (\$2bn to \$20bn)	24	96%

Implied Value Based on Premium	
90-Day Average Trading Price	\$130
Average Deal Premium	92-97%
Implied XLRN Deal Price	\$250-256

Transaction Committee Should Know Premium Is Too Low

- XLRN formed a Board committee to evaluate Merck's offer, comprised of Habib Dable, Christopher Hite, Terrence Kearney and Francois Nader
- These directors have served on boards of **eight other public companies that have been acquired**
- XLRN's 90-day premium of 38% would represent the **lowest premium of any public company transaction** in these directors' careers

Ann. Date	Acquiror	Target	Acceleron Director	Transaction Value (\$M)	90-Day Premium
Dec-2020	Eli Lilly & Co.	Prevail Therapeutics	Nader	826	71%
Dec-2020	AstraZeneca	Alexion Pharmaceuticals	Nader	38,979	68%
Feb-2019	Ipsen	Clementia Pharmaceuticals	Nader	1,011	220%
Apr-2018	Novartis	AveXis	Kearney	7,439	132%
Oct-2017	Novartis	Advanced Accelerator Applications ¹	Nader	3,900	99%
Aug-2015	Shire	Baxalta	Nader	31,518	- ²
Jan-2015	Shire	NPS Pharmaceuticals	Nader	4,931	53%
Jul-2009	Hisamitsu	Noven Pharmaceuticals	Nader	323	100%
			Average:	11,116	106%
Sep-2021	Merck	Acceleron		10,404	38%

Source: FactSet and company filings.

1. Novartis acquired a 98.7% majority stake in Advanced Accelerator Applications.

2. Baxalta common stock did not begin trading under BXL on the New York Stock Exchange until July 1, 2015, so did not have 90-day trading history.

Analysts Agree the Price Is Low



While the circulating deal price of \$11B / \$180/sh represents an ~20% premium to our Dec 2022 price target ... **we view the number to be somewhat conservative** given the attractiveness of sotatercept to a number of existing PAH/CV franchises among large biopharma.”¹

J.P.Morgan



...we share the view of many investors in XLRN that **this deal-price is too low** (<40% premium over 200-day moving average)”²

RAYMOND JAMES



We believe that **the stock could see much higher values as a stand-alone company** either based on 35x P/E multiple on EPS or a more traditional 4-6x multiple on peak sales which would provide an even higher valuation.”³

COWEN



With that backdrop, and sotatercept’s significant commercial potential, **we would be somewhat surprised to see Acceleron proceed here without a greater premium...**⁴

 BARCLAYS

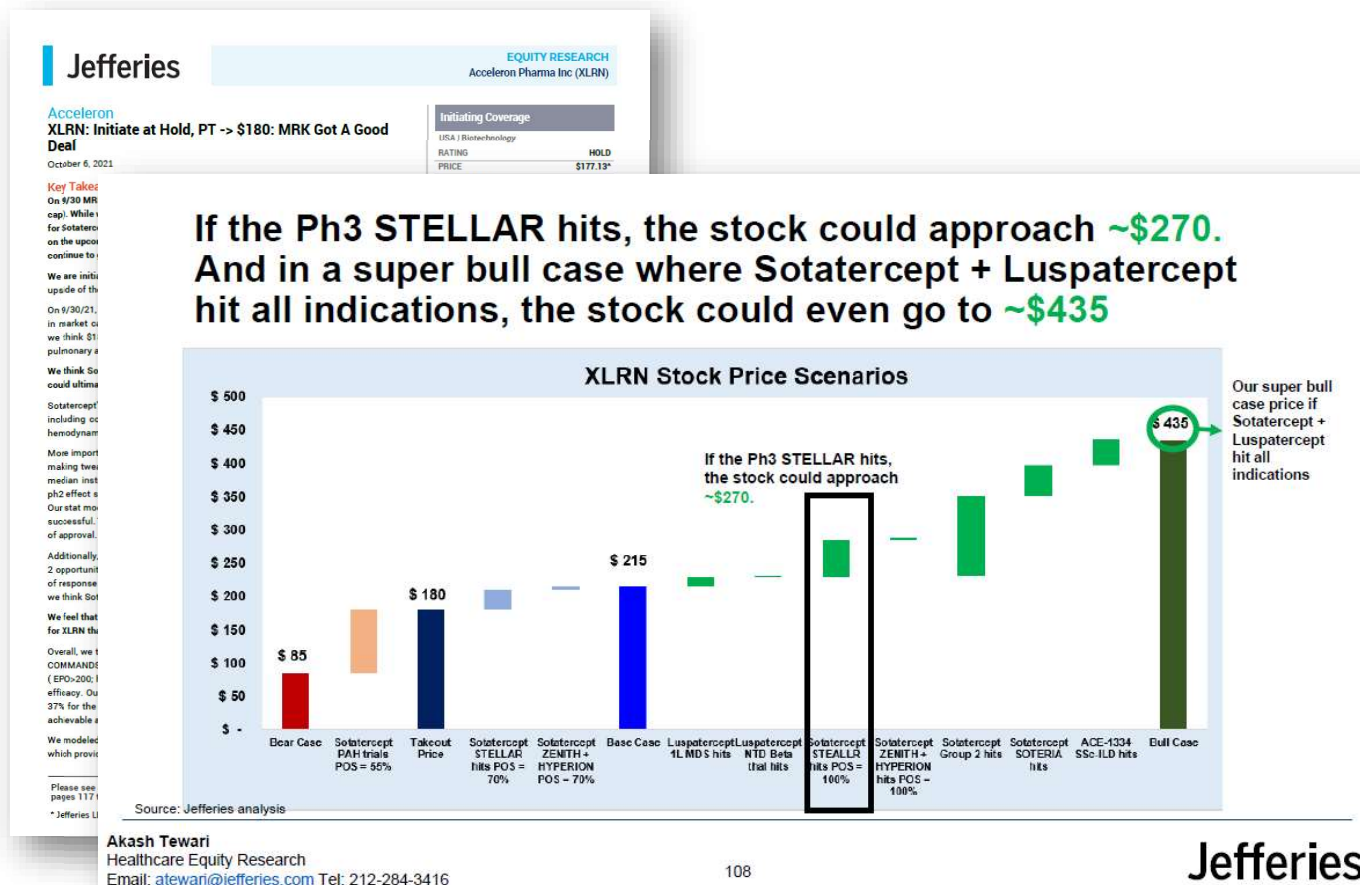


The deal price of **\$180/share is a bargain...**⁵

Jefferies

Jefferies Sees Much Higher Standalone Value

- Acceleron, as a standalone business, is worth \$215 per share in a “base case” scenario, according to a Jefferies equity research report published on October 6, 2021¹
- If the Phase 3 STELLAR hits, Jefferies estimates Acceleron’s stock could approach ~\$270 per share
- In Jefferies’ bull case scenario, if SOTATERCEPT + Luspatercept hit all indications, Acceleron stock could go to ~\$435 per share



Merck Could Pay Significantly More for Acceleron

Transaction Will Be Accretive Without Sotatercept

“ [W]ith regards to the royalty stream, we are confident in REBLOZYL's commercial potential and ability to expand into new indications. ... The royalty cash flows are financially attractive and provide the opportunity for this acquisition to be accretive in the near-term.”

“The deal will be minimally dilutive to non-GAAP earnings in 2022 will turn accretive in 2023 and become increasingly more accretive in the years to follow.”

Caroline Litchfield
CFO and EVP, Merck¹

Merck Has Plenty of Dry Powder To Pay More

“ [W]e have a strong balance sheet and the ability to finance this transaction which we will do so with a mixture of cash and debt.

...And that will not impact our current investment credit rating. [W]e have ample firepower to do the kinds of deals that will be additive and meaningful and innovation-driven for our company. And as [our CEO] noted, we are comfortable taking a one notch downgrade to support such transactions.”

Caroline Litchfield
CFO and EVP, Merck¹

Merck Has Paid Substantially Higher Premiums for Other Assets

- 38%¹ premium for Acceleron is the **lowest premium Merck has paid** for another public company acquisition of similar size²
- Acceleron is well below the average premium of approximately 184% for previous Merck acquisitions

Ann. Date	Target	Transaction Value (\$M)	90-Day Premium
Feb-2021	Pandion	1,551	431%
Dec-2019	ArQule	2,310	94%
Dec-2014	Cubist Pharmaceuticals	7,950	67%
Jun-2014	Idenix Pharmaceuticals	3,490	240%
Mar-2009	Schering-Plough	45,704	85%
		Average:	184%
Sep-2021	Acceleron	10,404	38%

We Believe the M&A Process Managed By the Board Was Flawed

The \$180 per share bid should not have been accepted by the Board

Opening offer should not have even been entertained

- “July 20 Proposal” at \$160 per share represented a 29% premium¹
- In our opinion, such an offer should not have been taken forward

Nonsensical logic of “no other bidders”

- Lack of interest from Parties A-C for a mid-stage asset doesn’t justify a sale at an undervalued price, particularly when phase 3 data is within reach
- Board offered, seemingly unprompted, a “no shop” provision in the first draft of the M&A agreement

Board seemingly only focused on a sale

- The Board failed to consider other strategic alternatives to create shareholder value, such as royalty monetization

Feeble attempt to secure an appropriate price

- One phone call was made on 9/28/21 to increase the price due to poor market reaction, but Merck declined and original \$180 per share was simply accepted
- Meanwhile, shares closed above deal price at ~\$183 per share due to speculation that Acceleron would not accept an offer at the rumored low price of \$180 per share

The Board Relied on Flawed Fairness Opinions

The precedent transactions used by Centerview do not properly represent the unique attributes of Acceleron

Centerview used nine transactions going back seven years with limited relevance among the >50 transactions¹ during this same time period and neglected to reference more recent and representative transactions

- **Undifferentiated assets** or assets with limited clinical validation
- Transactions include **two deals from 2015** that offer limited valuation relevance
- None of comparator set include **substantial royalty streams**

Inappropriate Comparators Used in Centerview's Fairness Opinion

Ann. Date	Target	Acquiror	Transaction Value (\$M) / 5-Year Forward Revenue	Breakthrough Therapy Designation	First-in-Class	Major Publication ²
Aug-20	Momenta Pharmaceuticals, Inc.	Johnson & Johnson	10.8x	X	X	X
Jul-20	Principia Biopharma Inc.	Sanofi SA	8.2x	X	X	X
Feb-20	Forty Seven, Inc.	Gilead Sciences, Inc.	11.4x	✓	✓	✓
Dec-19	Audentes Therapeutics, Inc.	Astellas Pharma Inc.	5.0x	X	✓	X
Feb-19	Spark Therapeutics, Inc.	Roche Holding Ltd.	7.2x	✓	✓	✓
Jan-19	Loxo Oncology, Inc.	Eli Lilly and Company	6.9x	✓	✓	✓
Jan-18	Juno Therapeutics, Inc.	Celgene Corporation	6.0x	✓	X	X
Oct-15	Dyax Corp.	Shire plc	9.4x	✓	✓	X
Jun-15	Receptos, Inc.	Celgene Corporation	9.5x	X	X	X

The Board Reversed Course on its Prohibition Against Tax-Gross Ups

Acceleron's Board failed to adhere to one of its own governance "best practices" by awarding tax gross-ups to key executives, and failed to disclose the amended employment agreements for more than a month

- In the proxy statement for its 2021 Annual Meeting, Acceleron proudly declared that **"none of our executive officers is entitled to a Section 280G gross-up,"** which the Company noted was **"consistent with good corporate governance"**
- Just three months later – *on the day the parties executed the merger agreement* – Acceleron entered into amended employment agreements with its key executives that **provided for tax gross-ups**
- Acceleron **did not disclose these employment agreements** until its 10-Q was filed on November 4 – **more than a month after the agreements were signed and after some shareholders had already tendered**

XLRN Touted Its Commitment to No Gross-Ups as Recently as April

Best Practices We Employ

Long-Term Focus. A majority of our executive officers' compensation is tied to long-term performance through the use of long-term incentives.

No Excessive Perquisites. Other than participation in benefit plans offered to all of our employees, we generally do not provide other benefits or perquisites to our executive officers.

No Hedging, Pledging, Short-Sales or Publicly-Traded Options. We do not allow any of our employees, including our executive officers, or our directors to enter into any hedging-type transactions with respect to our stock, to pledge our stock, to engage in short-sales of our stock, or transactions with publicly-traded options with respect to our stock.

Equity Ownership Guidelines. We have equity ownership guidelines that apply to (i) our executive officers, requiring them to hold equity interests with a value that equals or exceeds a pre-determined multiple of their annual base salary, and (ii) our non-employee directors, requiring them to hold equity interests with a value that equals or exceeds a pre-determined multiple of their annual base retainer.

Performance-Based Equity Compensation. Beginning in 2020, we restructured our annual long-term incentives for our executive officers such that the value of the equity awards at grant now includes approximately 25% in PSUs (determined based on grant date fair value, assuming target

No Section 280G Gross-Ups. None of our executive officers is entitled to a Section 280G gross-up.

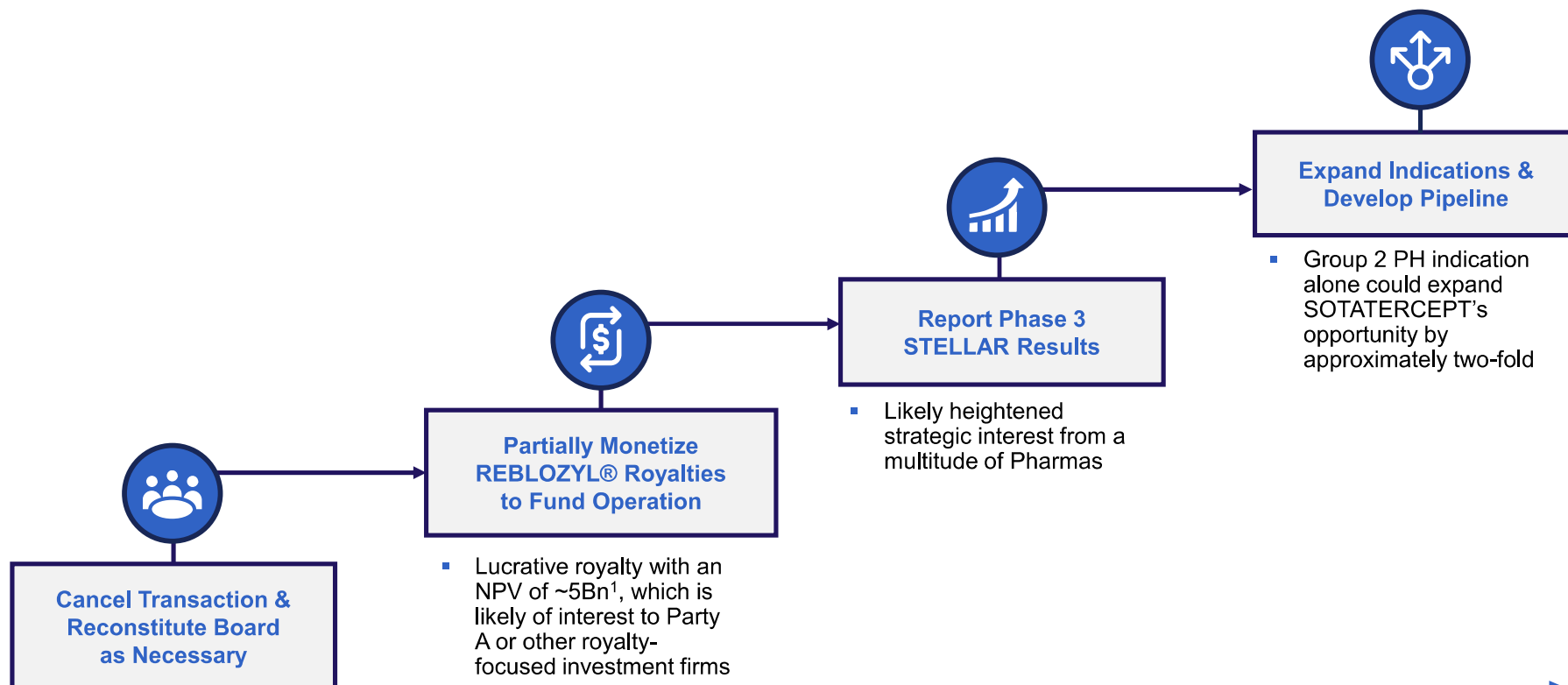
Double-trigger vesting acceleration, no single trigger cash payments. All unvested time-based equity held by our executive officers is subject to double-trigger vesting acceleration upon a change of control. We do not provide any single trigger cash payments.

Director Independence. The Compensation Committee is made up entirely of independent directors.

Independent Compensation Consultant. The Compensation Committee retains an independent compensation consultant to advise on our executive compensation program and practices.

Risk Assessment. The Compensation Committee conducts an annual risk assessment of our executive compensation program to affirm that the designs of our compensation programs do not encourage excessive risk taking.

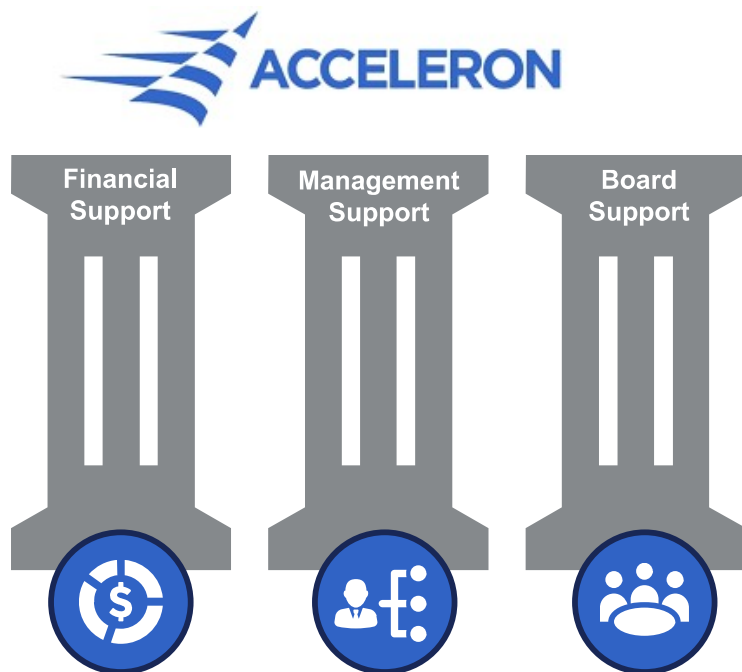
Better Alternatives Exist for Shareholders



Potential for Significant Value Creation as Standalone Company with Strategic Optionality Post-Phase 3 Readout

Avoro is Prepared to Provide Alternatives, Including Nominating New Directors

Avoro is ready and willing to support a go-forward strategy



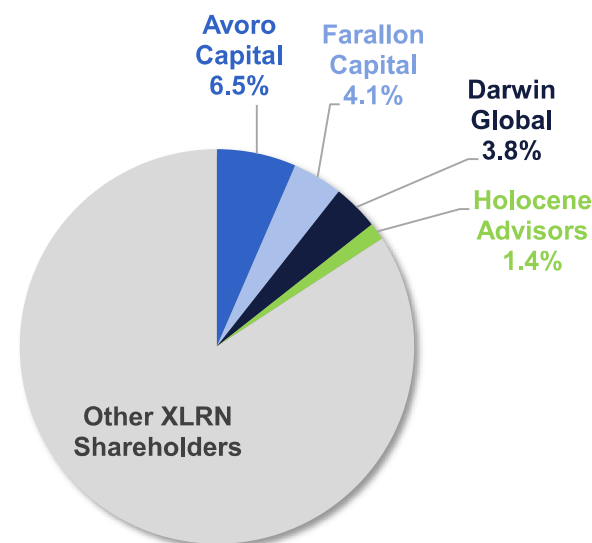
- **Avoro has a strong track record of activism** that led to Immunomedics' first FDA approval, to provide an important treatment option to patients with triple negative breast cancer and culminated in a \$21B acquisition by Gilead – a benefit to shareholders and stakeholders alike
- **Avoro stands ready to take the steps necessary** to help modify the Board's composition by adding independent directors with relevant experience and expertise to improve shareholder value

Other Long-Term Shareholders Are Also Opposed to the Deal

Multiple investors with significant sector expertise and who rarely if ever take public stances like this have publicly indicated that they will not tender

- Since our initial letter on September 30th, 2021, **three** other significant Accelaron shareholders have publicly stated their opposition to the Merger at the current price and **will not tender their shares**¹⁻³
- Our conversations suggest there are numerous other shareholders who are displeased with the proposed acquisition price

XLRN Beneficial Ownership⁴



¹ <https://www.bloomberg.com/news/articles/2021-11-02/farallon-capital-opposes-terms-of-merck-s-accelaron-takeover>

² <https://www.businesswire.com/news/home/20211013006045/en/Holocene-Advisors-Believes-Merck%E2%80%99s-Proposed-Offer-of-180-Per-Share-for-Accelaron-Significantly-Undervalues-Company%C2%A0>

³ <https://www.businesswire.com/news/home/20211020005321/en/Darwin-Global-Urges-Accelaron-Shareholders-Not-to-Tender-Their-Shares-to-Merck>

⁴ Source: FactSet and public filings.

Several Shareholders Have Publicly Disclosed Their Opposition



Bloomberg 11/2/2021

“While we hold Merck in high regard, its offer of \$180 per share does not recognize the value of the company’s uniquely strategic position. We believe Acceleron has a clear path to substantial value creation as a standalone company, and less strategic assets have recently been sold for far higher valuations.”¹



10/13/2021 Press Release

“...a transaction now, at this price, is not compelling. While Merck ultimately could be an attractive partner for Acceleron, we believe its \$180 per share offer significantly undervalues the Company based on a discounted cash flow analysis and recent comparable transactions, and does not compensate XLRN shareholders adequately, given Acceleron’s strong pipeline and attractive long-term business prospects.”²

Darwin Global Management

10/20/2021 Press Release

“[J]ust as Merck is “very confident [that sotatercept] is a multibillion-dollar peak sales potential drug,”⁵ we are very confident that Merck is underpaying to acquire it. ...We understand the Merck management team’s interest in acquiring Acceleron for considerably less than it is worth and in the process creating tens of billions of dollars of value for their own shareholders in what would potentially be one of the most value-accretive acquisitions by a pharmaceutical company in history. That said, we believe that the proposed offer price represents an extraordinarily poor deal for Acceleron shareholders and should be rejected.”³

¹ <https://www.bloomberg.com/news/articles/2021-11-02/farallon-capital-opposes-terms-of-merck-s-acceleron-takeover>

² <https://www.businesswire.com/news/home/20211013006045/en/Holocene-Advisors-Believes-Merck%E2%80%99s-Proposed-Offer-of-180-Per-Share-for-Acceleron-Significantly-Undervalues-Company%C2%A0>

³ <https://www.businesswire.com/news/home/20211020005321/en/Darwin-Global-Urges-Acceleron-Shareholders-Not-to-Tender-Their-Shares-to-Merck>

Conclusion

Now is the wrong time to cash out of Acceleron

- Significant value will be created in one year or less after the STELLAR phase 3 trial data is available

Merck's offer does not represent fair value for Acceleron

- Implied valuation based on precedent transactions is much higher than \$180 per share; sell-side analysts and several other investors agree that the price is too low

Acceleron's Board used a flawed process in reaching the deal

- The Board only approached three other potential buyers and seemingly did not consider any other strategic alternatives; the Board appeared more dedicated to serving management than shareholder interests

Avoro Ready to Support an Independent Acceleron

- Avoro stands ready to take the steps necessary to help modify the Board's composition by adding independent directors with relevant experience and expertise to improve shareholder value

Contact Information



Dan Zacchei / Joe Germani

Sloane & Company

dzacchei@sloanepr.com / jgermani@sloanepr.com

Appendix – Precedent Deals with FDA Breakthrough Designation

Deals Involving Targets with FDA Breakthrough Designation (1/2017 to Present) ¹			
Ann. Date	Target	Deal Size	Deal Premium
Oct-20	MyoKardia, Inc.	\$11.9B	109%
Sep-20	Immunomedics, Inc.	\$20.3B	118%
Mar-20	Forty Seven Inc	\$4.6B	145%
Jun-19	Array BioPharma Inc	\$10.6B	96%
Feb-19	Spark Therapeutics, Inc.	\$4.3B	164%
Jan-19	Loxo Oncology, Inc.	\$7.6B	57%
Dec-18	TESARO, Inc.	\$4.3B	104%
Apr-18	AveXis, Inc.	\$8.2B	82%
Jan-18	Bioverativ, Inc.	\$11.4B	92%
Jan-18	Juno Therapeutics, Inc.	\$9.0B	67%
Aug-17	Kite Pharma, Inc.	\$10.9B	72%
Jan-17	ARIAD Pharmaceuticals, Inc.	\$4.8B	56%
	Average	\$9.0B	97%
Sep-21	Accelaron Pharma Inc.	\$11.0B	38%

Appendix – Recent Pharma Transactions

Recent Pharma Deals (Since 2020) ¹			
Ann. Date	Target	Deal Size	Deal Premium
Sep-21	Kadmon Holdings Inc	\$1.6B	115%
Aug-21	Trillium Therapeutics Inc	\$1.9B	84%
Aug-21	Translate Bio Inc	\$2.7B	63%
Jun-21	Constellation Pharmaceuticals Inc	\$1.7B	47%
Mar-21	Five Prime Therapeutics Inc	\$1.7B	106%
Feb-21	Pandion Therapeutics Inc	\$1.8B	232%
Feb-21	GW Pharmaceuticals Ltd	\$6.8B	72%
Feb-21	Viela Bio Inc	\$3.0B	44%
Dec-20	Alexion Pharmaceuticals Inc/MA	\$38.6B	46%
Oct-20	MyoKardia Inc	\$11.9B	109%
Oct-20	Eidos Therapeutics Inc	\$1.0B	63%
Sep-20	Immunomedics Inc	\$20.3B	118%
Aug-20	Aimmune Therapeutics Inc	\$1.9B	120%
Aug-20	Momenta Pharmaceuticals Inc	\$6.2B	60%
Aug-20	Principia Biopharma Inc	\$3.3B	42%
May-20	Portola Pharmaceuticals Inc	\$1.4B	99%
Mar-20	Forty Seven Inc	\$4.6B	145%
Jan-20	Dermira Inc	\$1.0B	93%
		Average	92%
Sep-21	Acceleron Pharma Inc.	\$11.0B	38%

Appendix – Transactions of Similar Size

Similar Size Pharma Deals (\$2bn to \$20bn) ¹			
Ann. Date	Target	Deal Size	Deal Premium
Aug-21	Translate Bio Inc	\$2.7B	63%
Feb-21	GW Pharmaceuticals Ltd	\$6.8B	72%
Feb-21	Vielia Bio Inc	\$3.0B	44%
Oct-20	MyoKardia Inc	\$11.9B	109%
Aug-20	Momenta Pharmaceuticals Inc	\$6.2B	60%
Aug-20	Principia Biopharma Inc	\$3.3B	42%
Mar-20	Forty Seven Inc	\$4.6B	145%
Dec-19	ArQule Inc	\$2.5B	134%
Dec-19	Synthorx Inc	\$2.2B	325%
Dec-19	Audentes Therapeutics Inc	\$2.9B	110%
Nov-19	Medicines Co/The	\$6.8B	63%
Oct-19	Ra Pharmaceuticals Inc	\$2.3B	68%
Jun-19	Array BioPharma Inc	\$10.6B	96%
Feb-19	Spark Therapeutics Inc	\$4.3B	164%
Jan-19	Loxo Oncology Inc	\$7.6B	57%
Dec-18	TESARO Inc	\$4.3B	104%
Oct-18	Endocyte Inc	\$2.0B	40%
Apr-18	AveXis Inc	\$8.2B	82%
Jan-18	Ablynx NV	\$4.2B	95%
Jan-18	Bioverativ Inc	\$11.4B	92%
Jan-18	Juno Therapeutics Inc	\$9.0B	67%
Aug-17	Kite Pharma Inc	\$10.9B	72%
Jan-17	ARIAD Pharmaceuticals Inc	\$4.8B	100%
		Average	96%
Sep-21	Acceleron Pharma Inc.	\$11.0B	38%

Appendix – Acronyms/Abbreviations

- XLRN: Acceleron Pharma, Inc
- BTM: Breakthrough Therapy Designation
- PAH: Pulmonary Arterial Hypertension
- ATS: American Thoracic Society
- ASH: American Society of Hematology
- AHA: American Heart Association
- EMA: European Medicines Agency
- FDA: Food and Drug Administration