Jazz Pharmaceuticals®

Corporate Overview

August 7, 2019

Jackie
OSA Patient

Forward-Looking Statements

"Safe Harbor" Statement Under the Private Securities Litigation Reform Act of 1995

This slide deck and the accompanying oral presentation contain forward-looking statements, including, but not limited to, statements related to Jazz Pharmaceuticals' future financial and operating results, including 2019 financial guidance and goals; the company's corporate development efforts; the company's growth strategy and expectations for growth; future product sales and volume; planned sales and marketing and related efforts; future inventory and supply challenges; planned, ongoing and future clinical trials and other product development activities, including clinical trial data read-outs; regulatory events such as the potential approval of the company's MAA for solriamfetol and additional planned regulatory submissions; ongoing and future product launches, including the recent launch of Sunosi in the U.S. and its anticipated potential launch in the EU; the timing of such events and activities; and other statements that are not historical facts. These forward-looking statements are based on the company's current plans, objectives, estimates, expectations and intentions and inherently involve significant risks and uncertainties. Actual results and the timing of events could differ materially from those anticipated in such forward-looking statements as a result of these risks and uncertainties, which include, without limitation, risks and uncertainties associated with: maintaining or increasing sales of and revenue from Xyrem® (sodium oxybate) oral solution; effectively commercializing the company's other products and product candidates; the time-consuming and uncertain regulatory approval process, including the risk that the company's current and planned regulatory submissions, including the solriamfetol MAA and planned JZP-258 NDA, may not be submitted, accepted or approved by applicable regulatory authorities in a timely manner or at all; costly and time-consuming pharmaceutical product development and the uncertainty of clinical success, including risks related to failure or delays in initiating or completing clinical trials; protecting and enhancing the company's intellectual property rights; delays or problems in the supply or manufacture of the company's products and product candidates; the company's ability to maintain rights to its products and product candidates, including Erwinaze; complying with applicable U.S. and non-U.S. regulatory requirements; government investigations and other actions; obtaining and maintaining adequate coverage and reimbursement for the company's products; identifying and acquiring, in-licensing or developing additional products or product candidates, financing these transactions and successfully integrating acquired businesses; the company's ability to realize the anticipated benefits of its collaborations with third parties for the development of product candidates; the ability to achieve expected future financial performance and results and the uncertainty of future tax and other provisions and estimates; and other risks and uncertainties affecting the company, including those described from time to time under the caption "Risk Factors" and elsewhere in Jazz Pharmaceuticals plc's Securities and Exchange Commission filings and reports (Commission File No. 001-33500), including the company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2019 and future filings and reports by the company. Other risks and uncertainties of which the company is not currently aware may also affect the company's forward-looking statements and may cause actual results and the timing of events to differ materially from those anticipated. The forward-looking statements made in this slide deck and the accompanying oral presentation are made only as of the date hereof or as of the dates indicated in the forward-looking statements, even if they are subsequently made available by the company on its website or otherwise. The company undertakes no obligation to update or supplement any forward-looking statements to reflect actual results, new information, future events, changes in its expectations or other circumstances that exist after the date as of which the forward-looking statements were made.

Jazz Pharmaceuticals

A Strong Foundation To Support Global Growth

5

Marketed Products

2 in Sleep and
3 in Hematology/
Oncology

>20

R&D Programs

Multi-stage studies
in Sleep and
Hematology/Oncology

3

Innovative Platform Technologies

CombiPlex (Jazz)
ADC (ImmunoGen)
Exosomes (Codiak)

1,500

Experienced Employees

~500 R&D
~500 outside U.S.

$1.9B

Revenues

2018

Jazz Pharmaceuticals

Transforming Investment Opportunity

STRONG FINANCIAL EXECUTION

- 2018 revenues of $1.9B
- Doubling of revenues over past 5 years
- Non-GAAP adjusted net income CAGR of 17% (2013-2018)[1]
- $3.3B of cash generation (2013-2018)[2]

DIVERSE AND GROWING PIPELINE

- Multiple late- and mid-stage assets
- Growing early-stage opportunities
- Potential to drive significant growth

DISCIPLINED CAPITAL ALLOCATION TO OPTIMIZE SHAREHOLDER RETURNS

- $4.4B deployed in corporate development transactions (2012-2018)
- $1.1B invested in share repurchases (2013-2018)
- $708M in R&D investments[1,3] (2013-2018)

[1] Reconciliations of GAAP to non-GAAP can be found in the Appendix at the end of this presentation.
[2] Net cash provided by operating activities. [3] Non-GAAP adjusted R&D expense for period from January 1, 2013 through December 31, 2018.

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Corporate Development Alliances

Company Acquisitions	Collaborations, Licensing Partnerships or Product Acquisitions	Venture Investments
ORPHAN MEDICAL	PFEnex	MD Anderson Cancer Center
AZUR PHARMA	Redx Pharma	CODIAK
EUSA Pharma (2012)	OHARA	UCB
gentium	XL-protein Superior Biopharmaceuticals	Aerial BioPharma
Alizé Pharma	immunogen	sigma-tau
Celator Pharmaceuticals	CoNCERT Pharmaceuticals Inc.	
	Porton Biopharma Ltd	
	SK biopharmaceuticals	NIPPON SHINYAKU CO., LTD.

Arrivo BioVentures LLC

onera

pappas VENTURES

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R&D Transformation

	PRE-CLINICAL	PHASE 1	PHASE 2	PHASE 3
2013	JZP-386	JZP-416	IV Erwinaze	Leukotac

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R&D Transformation

	PRE-CLINICAL	PHASE 1	PHASE 2	PHASE 3
2013	JZP-386	JZP-416	IV Erwinaze	Leukotac
2019	Oxybate / once nightly	Vyxeos + gemtuzumab[3] / R/R AML	Defitelio / paGvHD	JZP-258 / narcolepsy
	CombiPlex / solid tumors	Vyxeos + venetoclax / Low intensity therapy for first-line, unfit AML (Phase 1b)	Defitelio / TA-TMA[4]	JZP-258 / IH
	CombiPlex / hem/onc	Vyxeos[3] Low intensity dosing for HR-MDS	Defitelio / CAR-T associated neurotoxicity[4]	Defitelio / pVOD
	Recombinant pegaspargase[1] / hem/onc	IMGN632[1,5] / CD123+ hem/onc	Vyxeos + venetoclax[3] / R/R AML	Vyxeos / AML18[6]
	Recombinant crisantaspase-HLE[2] / ALL and other hem/onc		Vyxeos / HR-MDS[6]	Vyxeos / AML19[6]
	Defitelio / exploratory activities		Vyxeos / R/R AML[6] (COG)	Vyxeos[6] / Newly diagnosed adults with standard and HR-AML
	Exosome NRAS[2] / hem/onc		Vyxeos[4,6] / Newly diagnosed older adults with HR-AML	Vyxeos[4,6] / Newly diagnosed pediatric patients
	Exosome STAT3[2] / hem/onc		Vyxeos + venetoclax[4,6] / HR-AML	
	Exosome candidates[2] / hem/onc		JZP-458 (recombinant crisantaspase)[4] / ALL/LBL (pivotal Phase 2/3)	
	Pan-RAF inhibitor program / RAF & RAS mutant tumors			

[1] Opt-in opportunity, [2] Partnered collaboration, [3] Jazz & MD Anderson Cancer Center collaboration study, [4] Planned, [5] Including AML and BPDCN, [6] Cooperative group study

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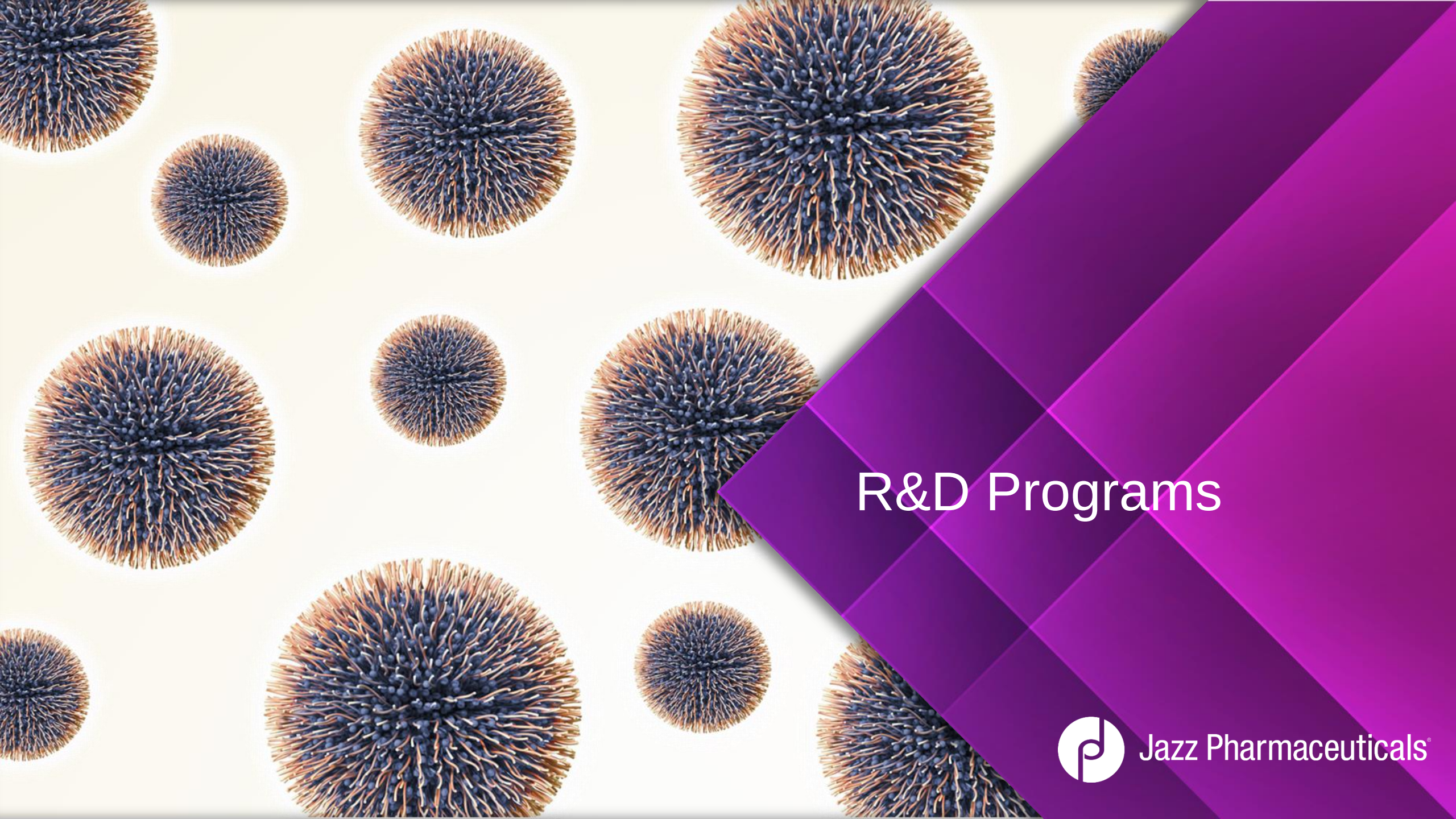

R&D Programs

Jazz Pharmaceuticals®

Defitelio Clinical Development Strategy

Pursue prevention and treatment of serious diseases associated with endothelial cell damage

PREVENTION OF VOD

- Phase 3, randomized, open-label, multi-center study in high-risk patients vs best supportive care
- Enrollment has been strong
- The study includes an interim analysis; expect to have an update on the timing of the interim analysis later this year

PREVENTION OF aGvHD

- Phase 2 proof of concept
- FPI 1Q18
- N = 150

TREATMENT OF TA-TMA

- Phase 2 single arm, open label study in high-risk patients
- Expect to activate study sites late 2019
- N ~40

PREVENTION OF CAR-T ASSOCIATED NEUROTOXICITY

- Expect to activate study sites for Phase 2 in 3Q19
- N ~35

Additionally, more than 20 ISTs ongoing in U.S./EU evaluating Defitelio in multiple conditions

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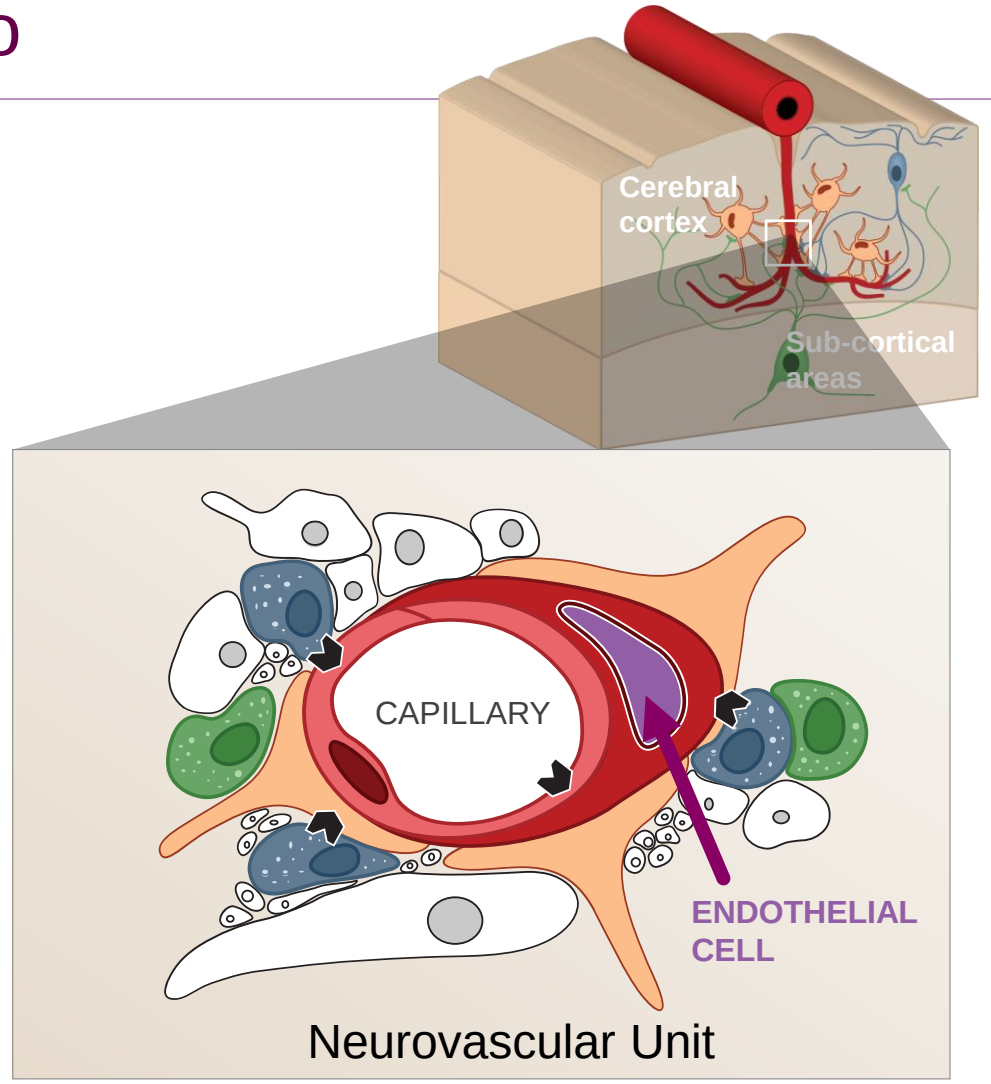
Rationale for Prevention of CAR-T Associated Neurotoxicity with Defitelio

Pathophysiology of CAR-T Associated Neurotoxicity

- Endothelial cell damage leading to BBB disruption seems to play a role in CAR-T associated neurotoxicity, as clinical evidence reports:
  - Diffusion of cytokines into the CSF
  - Trafficking of T-cells into the CNS
  - Serum endothelial biomarker elevations (vWF and ANG2)

Rationale for Prevention with Defitelio

- Endothelial cell damage can start with lymphodepletion prior to CAR-T infusion
- The BBB consists of endothelial cells, pericytes and astrocytes
- Defibrotide may prevent the initiation and/or progression of damage to these “gatekeepers” thereby minimizing the cytokine surge



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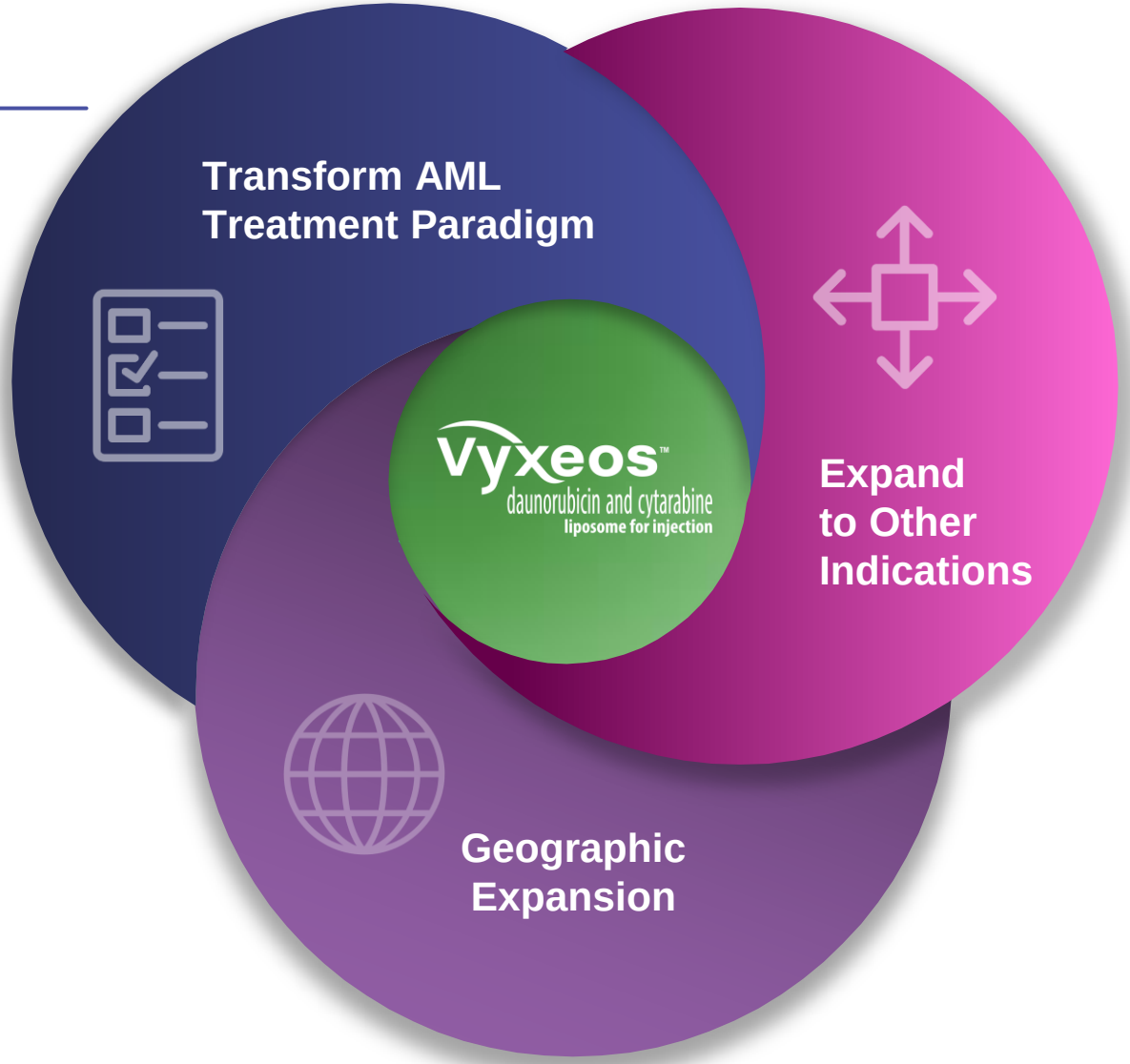
Vyxeos Clinical Development Strategy

Become the chemo backbone for AML

Target new patient segments across AML landscape: Prolong survival and increase potential of curative intent

Pursue broad combinations approach: Synchronizing Jazz studies, collaborations and ISTs to generate clinical data

Extend clinical benefits: Lower intensity and higher intensity dose/schedule, MRD, genetics/mutations



MDS is also a priority:

Initiate two studies (fit and unfit)

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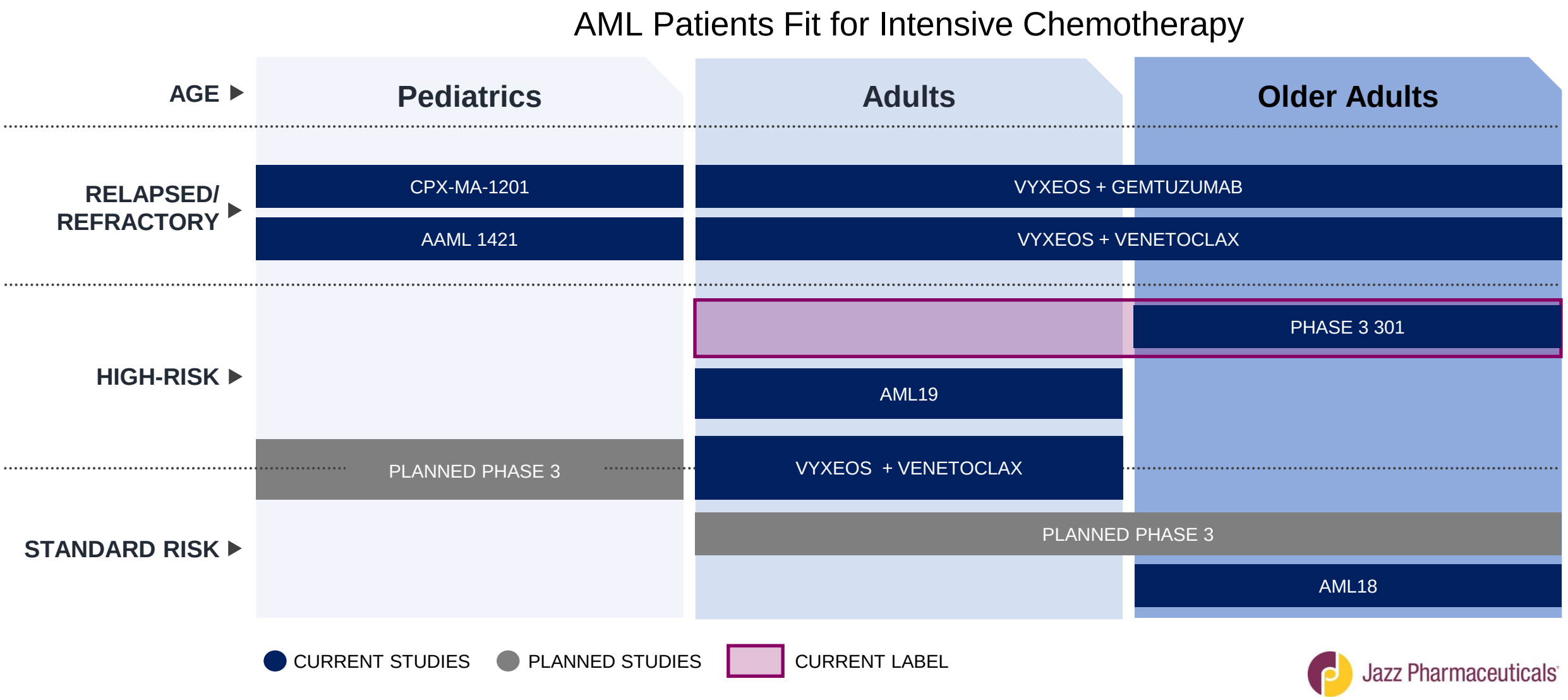
Vyxeos Clinical Development Program in Fit AML

Current and Planned Studies



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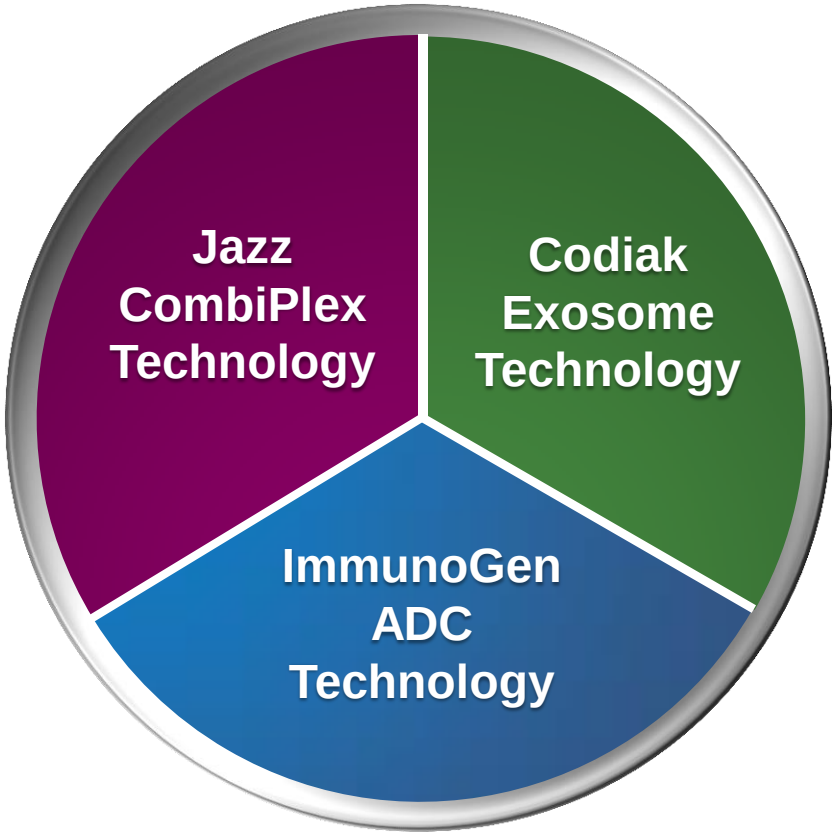
Jazz Precision Oncology Strategy

Leverage Multiple Technologies to Potentially Improve Therapeutic Index of Cancer Agents



Precision oncology therapeutics may result in better outcomes for targeted subgroups of patients than non-targeted approaches[1]

[1] JAMA Oncol. 2018;4(2):210-216. doi:10.1001/jamaoncol.2017.4427

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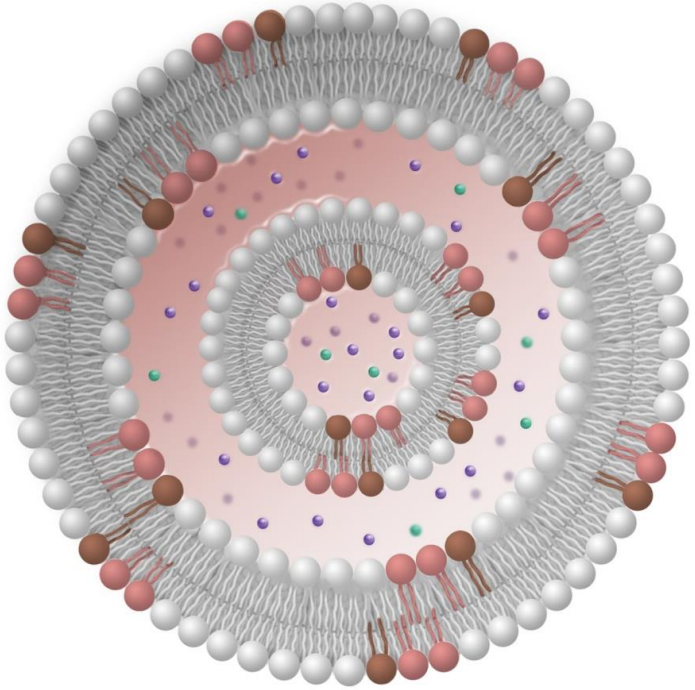
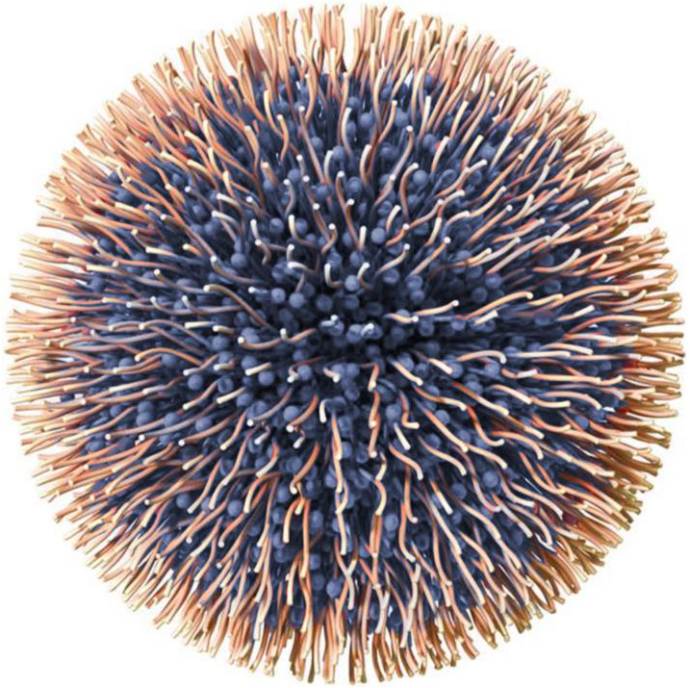
CombiPlex Strategy

Transform Patient Outcomes with the Innovative CombiPlex Delivery Technology

LIPOSOME DELIVERY PLATFORM
Delivery of water soluble drugs



NANOPARTICLE DELIVERY PLATFORM
Delivery of hydrophobic drugs in polymer core



Solid Tumors Candidate

- Novel combination
- IND-enabling activities ongoing

Hematology/Oncology Opportunities

- Exploratory pre-IND enabling activities ongoing

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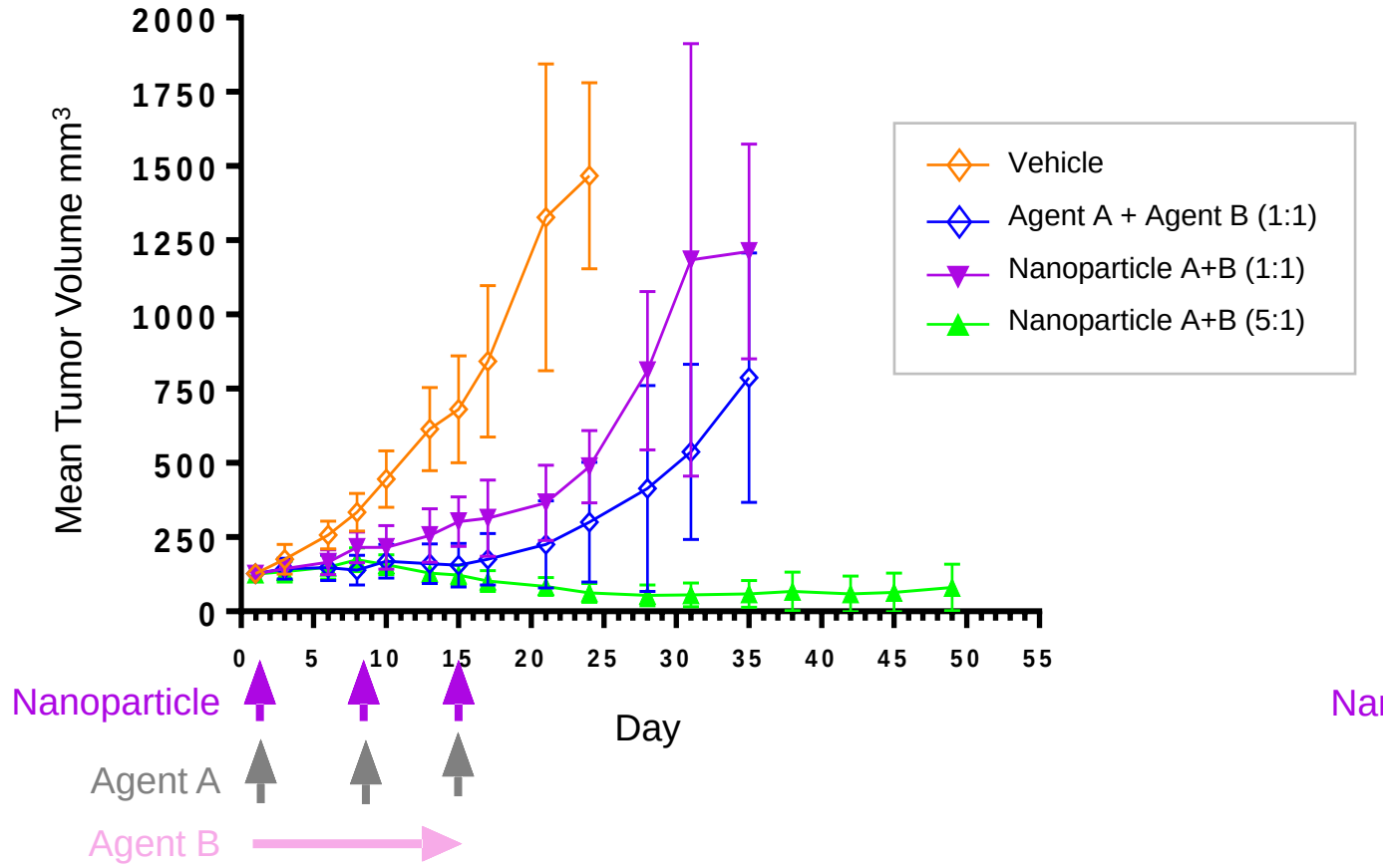
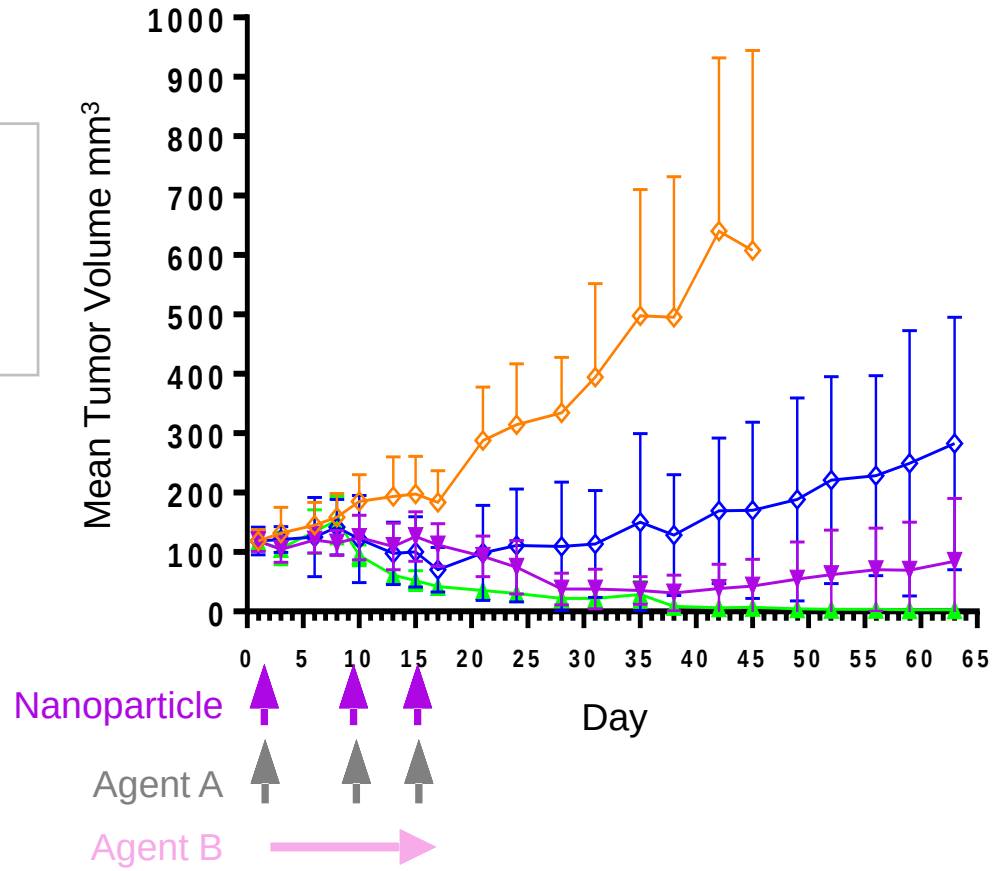
CombiPlex Nanoparticles Generate Robust Anti-Tumor Activity in Murine Xenografts

SOLID TUMORS WITHOUT GENETIC MUTATION



SOLID TUMORS WITH GENETIC MUTATION



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ImmunoGen Collaboration

IMGN632

- Anti-CD123 ADC
- Employs a novel IGN cancer-killing agent (DGN549)
- Potential indications: hematological malignancies, including AML and BPDCN
- Received orphan drug designation by FDA for the treatment of AML in October 2018
- Phase 1 data presented at ASH 2018

- Collaboration and option agreement
- Worldwide rights to develop and commercialize ADC programs
  - IMGN632
  - Undisclosed program
- May exercise opt-in prior to a pivotal study or prior to a BLA
- ImmunoGen responsible for development up to Jazz opt-in

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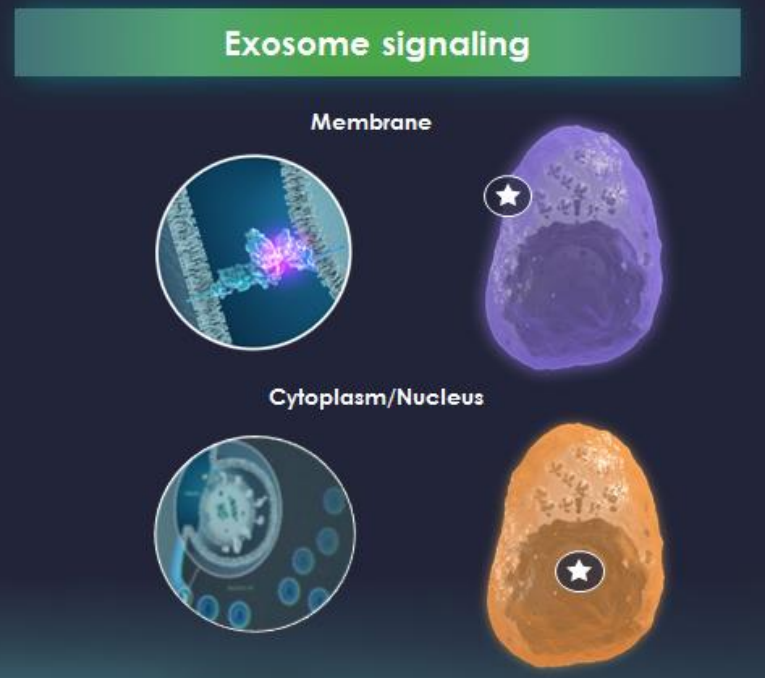
Codiak Collaboration

Research collaboration and license agreement to develop exosome-based oncology or hematology/oncology therapeutics

- 30-200 nm vesicles released and taken up by all cells
- Crucial mechanism for intercellular communication
- Convey and protect complex macromolecules which can alter the function of recipient cells
- Intrinsically non-immunogenic
- Natural or engineered tropism to specific cells and tissues



- Exosome platform can be targeted broadly throughout the body
- Platform to control the signals on the surface of, or within, the exosome with the goal of delivering precise signals to promote a therapeutic effect
- Jazz has rights to five targets
  - NRAS
  - STAT3
  - 2 Undisclosed
  - One to be selected at later date
- Codiak to fund early-stage research activities for all five targets
- Jazz to fund IND-enabling and Phase 1/2 studies for three targets
- Codiak to fund IND-enabling and Phase 1/2 studies for two targets

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Growing R&D Pipeline

PRE-CLINICAL	PHASE 1	PHASE 2	PHASE 3	REGULATORY
Oxybate Once-Nightly Formulation	Vyxeos + gemtuzumab[3] R/R AML or HMA Failure MDS	Defitelio Prevention of aGvHD	JZP-258 Cataplexy & EDS in narcolepsy	Solriamfetol EU EDS in OSA and Narcolepsy
CombiPlex Solid tumors candidate	Vyxeos + venetoclax Low Intensity Therapy for first-line, unfit AML (Phase 1b)	Defitelio[4] Treatment of TA-TMA	JZP-258 Idiopathic hypersomnia	
CombiPlex Hem/Onc exploratory activities	Vyxeos[3] Low Intensity Dosing for higher risk MDS	Defitelio[4] Prevention of CAR-T associated neurotoxicity	Defitelio Prevention of VOD	
Recombinant Pegaspargase[1] Hematological malignancies	IMGN632[1] CD123+ Hematological malignancies[5]	Vyxeos + venetoclax[3] *de novo* or R/R AML	Vyxeos[6] AML or HR-MDS (AML19)	
Recombinant Crisantaspase-HLE[2] ALL/other hematological malignancies		Vyxeos[6] HR-MDS	Vyxeos[6] AML or HR-MDS (AML18)	
Defitelio Exploratory activities		Vyxeos[6] R/R AML (COG)	Vyxeos[6] Newly diagnosed adults with standard- and HR-AML	
Exosome NRAS candidate[2] Hematological malignancies		Vyxeos[4,6] Newly diagnosed older adults with HR-AML	Vyxeos[4,6] Newly diagnosed pediatric patients with AML (COG)	
Exosome STAT3 candidate[2] Hematological malignancies		Vyxeos + venetoclax[4,6] HR-AML		
Exosome-based candidates[2] Solid tumors/Hematological malignancies		JZP-458 (recombinant crisantaspase)[4] ALL/LBL (Pivotal Phase 2/3)		
Pan-RAF Inhibitor Program RAF & RAS mutant tumors				

SLEEP/NEUROSCIENCE

HEMATOLOGY/ONCOLOGY

[1] Opt-in opportunity, [2] Partnered collaboration, [3] Jazz & MD Anderson Cancer Center collaboration study, [4] Planned , [5] Including AML and BPDCN, [6] Cooperative group study

Sleep/Neuroscience R&D Clinical Development and Regulatory Strategy

Continued investment to deliver therapeutic options for unmet medical needs

JZP-258 EDS & Cataplexy for Narcolepsy

- Positive top-line data announced in March 2019
- Phase 3 data accepted for oral presentation at the World Sleep Congress in September 2019
- NDA submission goal as early as end of 2019

JZP-258 Idiopathic Hypersomnia

- Initiated Phase 3 study in idiopathic hypersomnia in 4Q18
- Received Orphan Drug Designation from FDA July 2019

SOLRIAMFETOL EDS for Narcolepsy/OSA

- MAA submission November 2018
- FDA approval March 20, 2019
- U.S. launch July 2019

SOLRIAMFETOL EDS for MDD

- Unmet need
- Program in discussion with regulatory agencies

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Sunosi™(solriamfetol)
U.S. Launch July 2019

Key Considerations

- OSA large market opportunity, but need to build market as <10% are drug treated with wake-promoting agents
- 7% of all physicians who diagnose and manage OSA patients cover 60% of the OSA population and over 40% of drug treated OSA patients
- The prevalence of EDS is high in OSA, even in CPAP-compliant patients, ranging from 12%-65%[1]
- Generic wake-promoting agents available
- Consolidation in the payer industry has concentrated the majority of commercial lives with a few payers/PBMs
- Open formularies have declined significantly; ~10-15% of commercial lives in open formularies during initial launch phase[2]
- Retail pharmacy - non specialty (electronic adjudication)
- Co-pay coupon program/patient assistance program

LAUNCH ——— **+ 2 YEARS**

[1] Gasa et al, *J Sleep Res.* (2013) 22, 389–397; Koutsourelakis et al, *Eur Respir J* 2009; 34: 687–693; Pepin et al, *Eur Respir J* 2009; 33: 1062–1067; Weaver et al, *SLEEP*, Vol. 30, No. 6, 2007, [2] McKinsey September 2017

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Commercial Portfolio

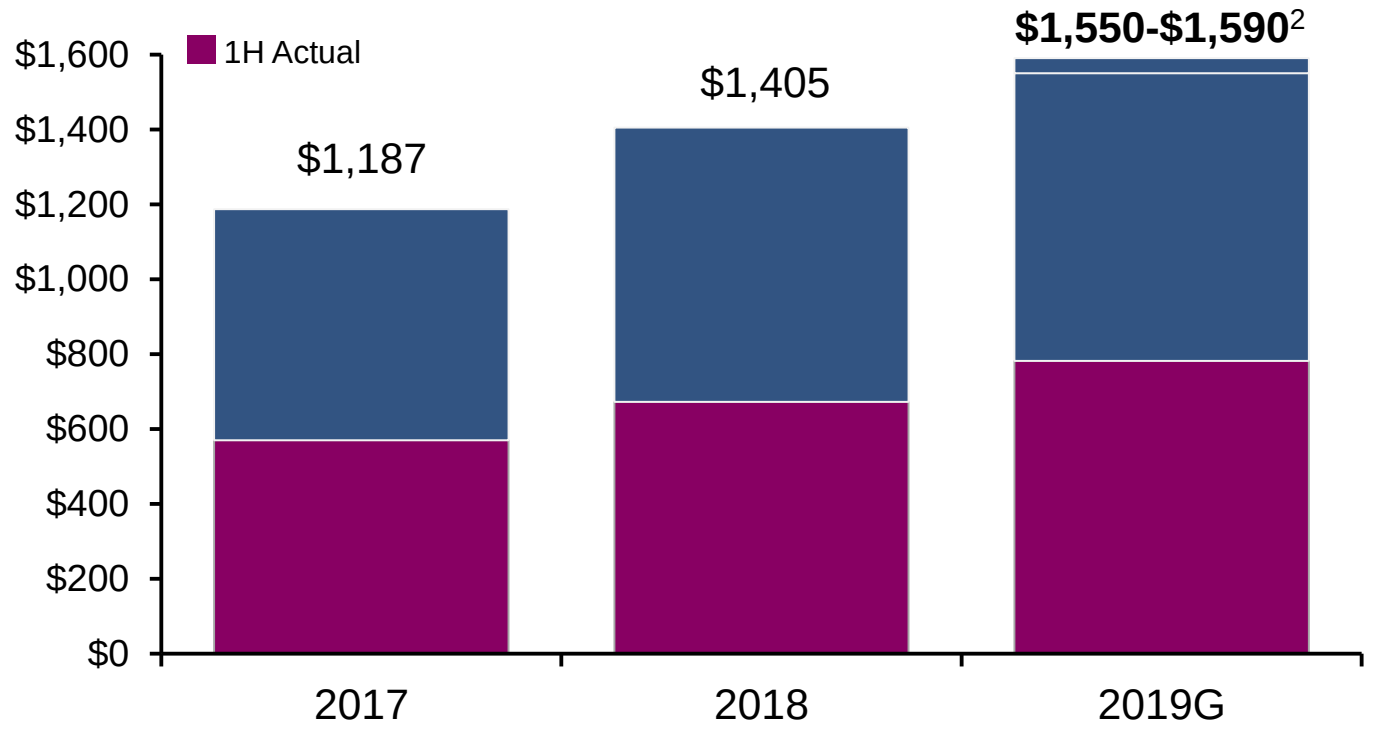
Jazz Pharmaceuticals

John
AML patient

XYREM® (sodium oxybate) oral solution

NET PRODUCT SALES[1]

$ in millions



Volume Growth (YOY)	**< 1%**	**9%**	**Mid-single digit**

- FDA-approved for the treatment of cataplexy and EDS in narcolepsy patients ≥ 7 years of age
- Disease awareness efforts to improve narcolepsy awareness and diagnosis rates
- Launched pediatric indication 1Q19

[1] 2017 and 2018 audited; 1H17, 1H18 and 1H19 unaudited. [2] G=Guidance. Guidance provided by Jazz Pharmaceuticals plc on and as of August 6, 2019. Jazz Pharmaceuticals plc is not confirming or updating that guidance and actual results may differ.

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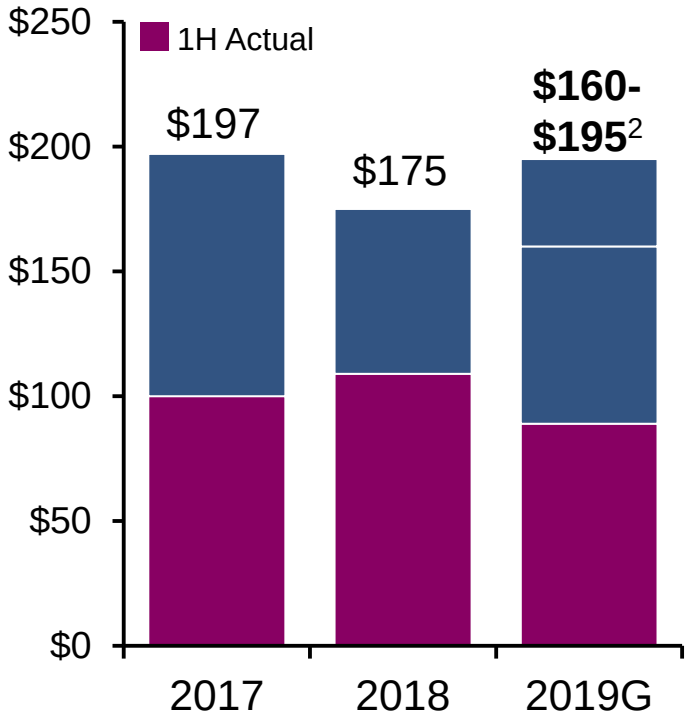
Hematology/Oncology Revenues

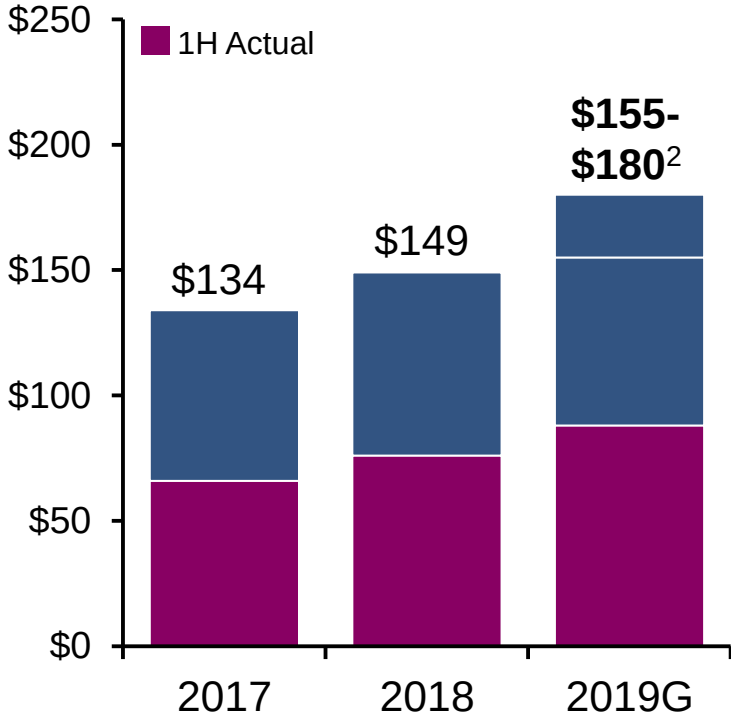
NET PRODUCT SALES[1]

$ in millions

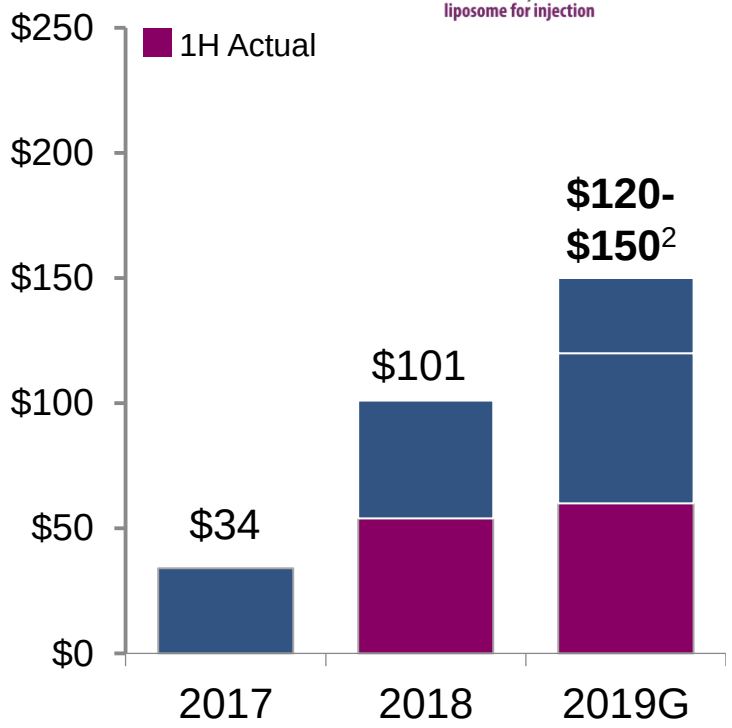
Erwinaze® asparaginase Erwinia chrysanthemi / Erwinase® CRISANTASPASE



DEFITELIO® (defibrotide sodium) injection 80 mg/mL



Vyxeos™ daunorubicin and cytarabine liposome for injection



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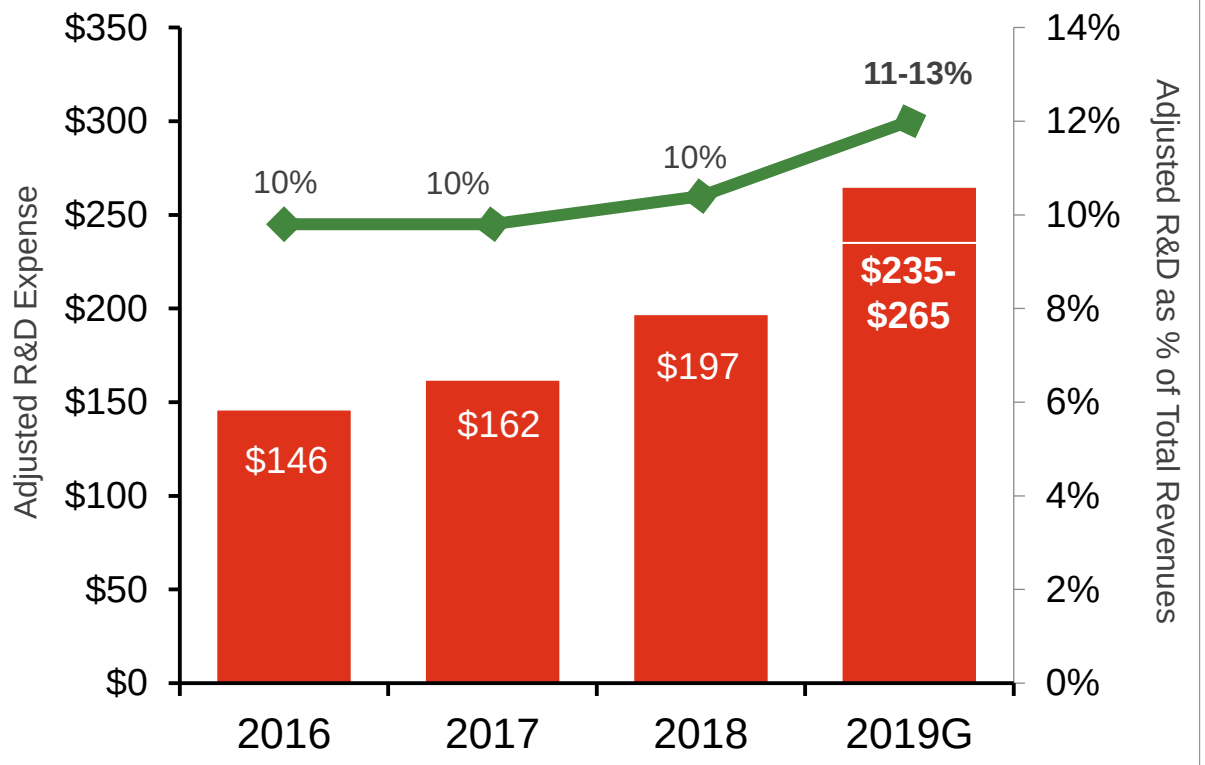
Disciplined Resource Allocation to Fuel R&D Pipeline and Support Multiple Product Launches

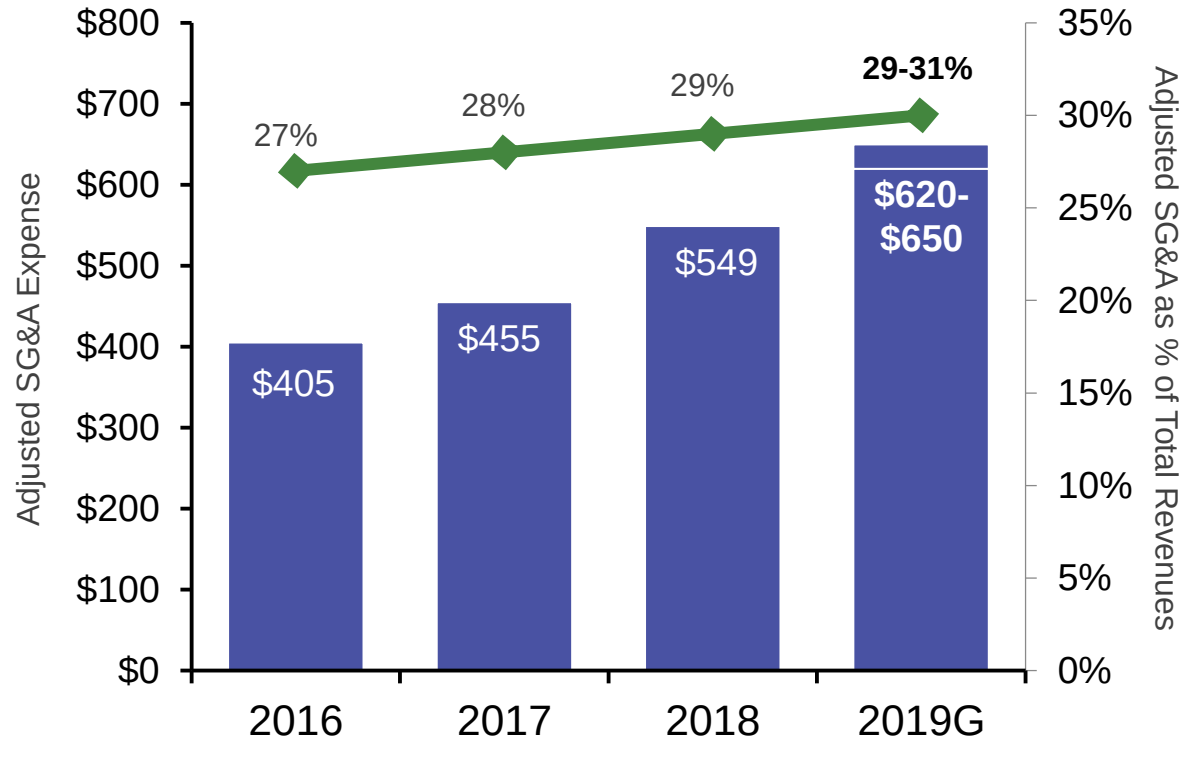
TOTAL NON-GAAP ADJUSTED R&D EXPENSE[1,2] AND ADJUSTED R&D EXPENSE AS % OF TOTAL REVENUES

$ in millions (unaudited)



TOTAL NON-GAAP ADJUSTED SG&A EXPENSE[1,2] AND ADJUSTED SG&A EXPENSE AS % OF TOTAL REVENUES

$ in millions (unaudited)



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[2] Reconciliations of GAAP to non-GAAP can be found in the Appendix at the end of this presentation.

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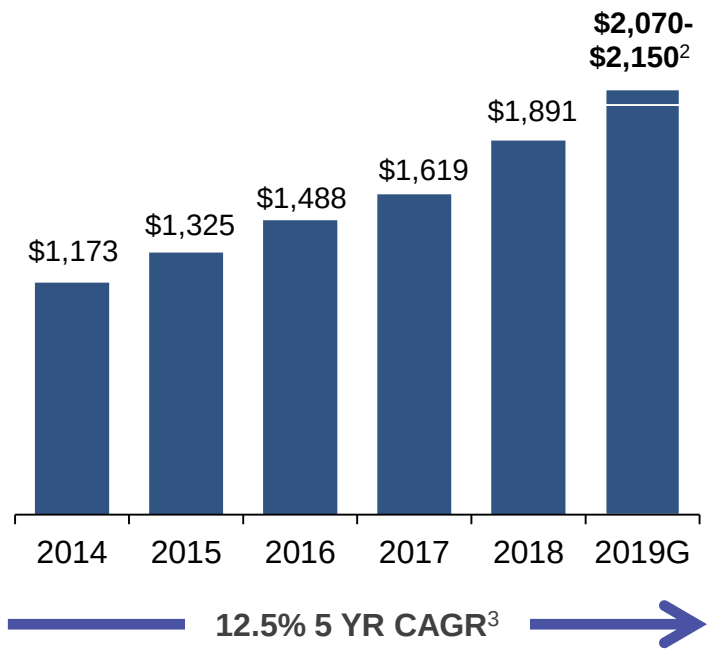
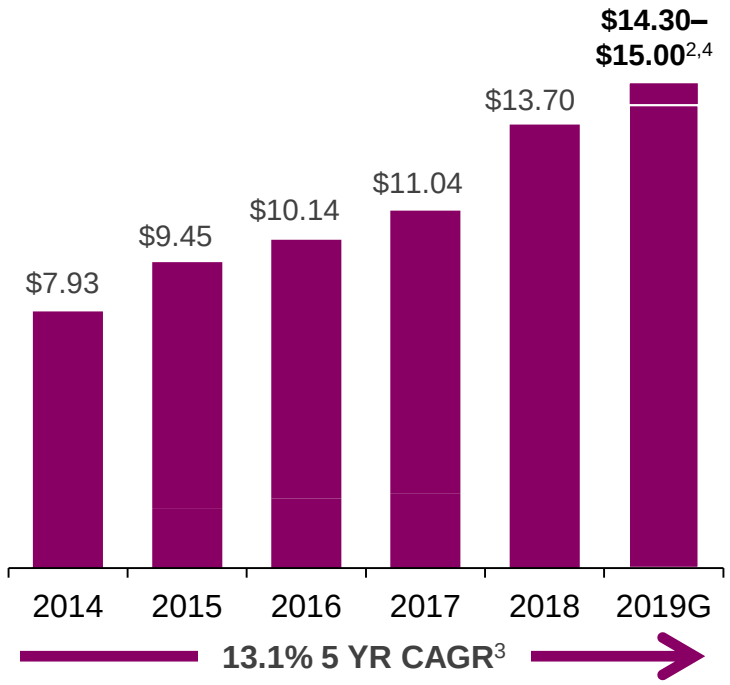
Strong Financial Execution

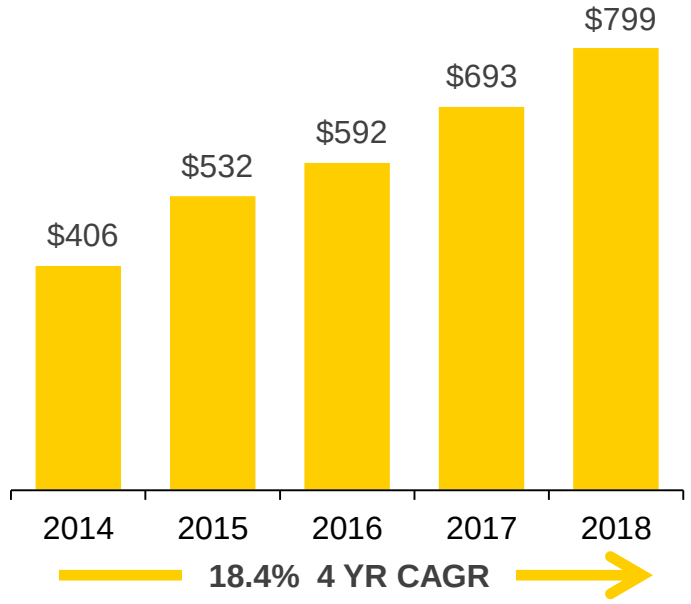
TOTAL REVENUES
$ in millions
(audited)



NON-GAAP ADJUSTED NET INCOME PER DILUTED SHARE[1]
(unaudited)



NET CASH PROVIDED BY OPERATING ACTIVITIES
$ in millions
(audited)



[1] 2014 to 2018 audited. [2] G=Guidance. Guidance provided by Jazz Pharmaceuticals plc on and as of August 6, 2019. [3] CAGR calculations based on mid-point of guidance.
[4] Reconciliations of GAAP net income to non-GAAP adjusted net income can be found in the Appendix at the end of this presentation.

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2019 Goals

Xyrem
- ✓ Launch pediatric narcolepsy indication
- Deliver mid-single digit volume growth for 2019

JZP-258
- ✓ Deliver top-line Phase 3 narcolepsy data spring 2019

Sunosi (solriamfetol)
- ✓ Gain U.S. approval by PDUFA goal date of March 20, 2019
- ✓ Obtain DEA scheduling decision in 2Q19
- ✓ Launch in U.S. for EDS in narcolepsy and OSA
- ✓ Deliver top-line data for EDS for PD in early 2019
- Gain EU approval for EDS in narcolepsy and OSA in 4Q19

CombiPlex
- Continue IND-enabling activities for one solid tumor combination and progress exploratory activities for other candidates

Defitelio
- Conduct interim analysis for prevention of VOD Phase 3 study
- Complete enrollment in prevention of aGvHD Phase 2 study
- Initiate Phase 2 study in TA-TMA
- Initiate exploratory Phase 2 study in CAR-T associated neurotoxicity

Vyxeos
- Obtain data read-outs
  - ✓ COG R/R pediatric AML study data
  - Interim combination data from MD Anderson collaboration
- Commence Jazz-sponsored combination studies
  - AML combination study with multiple targeted agents
  - ✓ Lower intensity dosing study for unfit AML
- Initiate studies in MDS (fit and unfit)
- Continue collaborations with key cooperative groups for Phase 3 studies

Corporate Development
- Expand our commercial and/or development portfolio through multiple acquisitions or partnerships
  - ✓ Exosome product candidates (Codiak collaboration)
  - ✓ Pan-RAF program acquisition (from RedX)

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Appendix

Eve
VOD patient

Jazz Pharmaceuticals

Non-GAAP Financial Measures

To supplement Jazz Pharmaceuticals' financial results and guidance presented in accordance with U.S. GAAP, the company uses certain non-GAAP (also referred to as adjusted or non-GAAP adjusted) financial measures in this presentation and the accompanying tables. In particular, the company presents non-GAAP adjusted net income (and the related per share measure) and its line item components, as well as certain non-GAAP adjusted financial measures derived therefrom. Non-GAAP adjusted net income (and the related per share measure) and its line item components exclude from reported GAAP net income (and the related per share measure) and its line item components certain items, as detailed in the reconciliation tables that follow, and in the case of non-GAAP adjusted net income (and the related per share measure), adjust for the income tax effect of non-GAAP adjustments, the U.S. Tax Cuts and Jobs Act impact and the income tax benefit related to an intra-entity intellectual property asset transfer. In this regard, the components of non-GAAP adjusted net income are income statement line items prepared on the same basis as, and therefore components of, the overall non-GAAP adjusted net income measure.

The company believes that each of these non-GAAP financial measures provides useful supplementary information to, and facilitates additional analysis by, investors and analysts. In particular, the company believes that each of these non-GAAP financial measures, when considered together with the company's financial information prepared in accordance with GAAP, can enhance investors' and analysts' ability to meaningfully compare the company's results from period to period and to its forward-looking guidance, and to identify operating trends in the company's business. In addition, these non-GAAP financial measures are regularly used by investors and analysts to model and track the company's financial performance. Jazz Pharmaceuticals' management also regularly uses these non-GAAP financial measures internally to understand, manage and evaluate the company's business and to make operating decisions, and compensation of executives is based in part on certain of these non-GAAP financial measures. Because these non-GAAP financial measures are important internal measurements for Jazz Pharmaceuticals' management, the company also believes that these non-GAAP financial measures are useful to investors and analysts since these measures allow for greater transparency with respect to key financial metrics the company uses in assessing its own operating performance and making operating decisions.

These non-GAAP financial measures are not meant to be considered in isolation or as a substitute for comparable GAAP measures; should be read in conjunction with the company's consolidated financial statements prepared in accordance with GAAP; have no standardized meaning prescribed by GAAP; and are not prepared under any comprehensive set of accounting rules or principles. In addition, from time to time in the future there may be other items that the company may exclude for purposes of its non-GAAP financial measures; and the company has ceased, and may in the future cease, to exclude items that it has historically excluded for purposes of its non-GAAP financial measures. Likewise, the company may determine to modify the nature of its adjustments to arrive at its non-GAAP financial measures. Because of the non-standardized definitions of non-GAAP financial measures, the non-GAAP financial measures as used by Jazz Pharmaceuticals in this presentation and the accompanying tables have limits in their usefulness to investors and may be calculated differently from, and therefore may not be directly comparable to, similarly titled measures used by other companies.

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Reconciliation of GAAP to Non-GAAP Adjusted Net Income

In millions, except per share amounts (unaudited)	2013	2014	2015	2016	2017	2018	2019 Financial Guidance[3]
GAAP net income[1]	$ 216.3	$ 58.4	$ 329.5	$ 396.8	$ 487.8	$ 447.1	$540 - $620
Intangible asset amortization	79.0	126.6	98.2	102.0	152.1	201.5	240 - 260
Share-based compensation expense	44.6	69.6	91.6	98.8	106.9	102.4	110 - 125
Loss contingency	--	--	--	--	--	57.0	--
Impairment charges and disposal costs	--	39.4	31.5	--	--	44.0	--
Upfront and milestone payments	5.0	202.6	25.0	23.8	101.5	11.0	56 - 67
Transaction and integration related costs	6.2	28.8	18.2	13.6	--	--	--
Acquisition accounting inventory fair value step-up adjustments	3.8	10.5	--	--	--	--	--
Changes in fair value of contingent consideration	15.2	--	--	--	--	--	--
Expenses related to certain legal proceedings and restructuring	1.5	1.9	1.6	6.1	6.0	--	--
Non-cash interest expense	4.6	13.7	22.7	22.1	30.0	44.0	40 - 50
Loss on extinguishment and modification of debt	3.7	--	16.8	0.6	--	--	--
Income tax effect of above adjustments	5.3	(53.8)	(39.6)	(36.7)	(58.8)	(60.9)	(75) - (95)
U.S. Tax Cuts and Jobs Act impact	--	--	--	--	(148.8)	(7.5)	--
Income tax benefit related to intra-entity intellectual property asset transfer	--	--	--	--	--	--	(112)
Amount attributable to noncontrolling interests	--	(1.5)	--	--	--	--	--
Non-GAAP adjusted net income	$ 385.2	$ 496.3	$ 595.5	$ 627.2	$ 676.7	$ 838.6	$835 - $875
GAAP net income per diluted share[1]	$ 3.51	$ 0.93	$ 5.23	$ 6.41	$ 7.96	$ 7.30	$9.40 - $10.75
Non-GAAP adjusted net income per diluted share[2]	$ 6.26	$ 7.93	$ 9.45	$ 10.14	$ 11.04	$ 13.70	$14.30 - $15.00
Weighted-average ordinary shares used in diluted per share calculation	61.6	62.6	63.0	61.9	61.3	61.2	58

Note: Amounts may not total due to rounding.
[1] 2013 to 2018 audited. [2] In 2Q16, Jazz modified the calculation of its non-GAAP income tax provision and effected this modification in the non-GAAP results from 2014 onwards. [3] Guidance provided by Jazz Pharmaceuticals plc on and as of August 6, 2019. Jazz Pharmaceuticals plc is not confirming or updating that guidance and actual results may differ.

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Reconciliation of GAAP R&D to Non-GAAP Adjusted R&D Expense

In millions (unaudited)	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019G[2]**
GAAP R&D expense[1]	$41.6	$85.2	$135.3	$162.3	$198.4	$226.6	$257-$303
Share-based compensation expense	(6.7)	(12.2)	(13.4)	(15.3)	(17.9)	(19.0)	(22-27)
Transaction and integration related costs	(0.6)	(1.2)	--	(0.5)	--	--	--
Upfront and milestone payments	--	--	(25.0)	--	(18.5)	(11.0)	(0-11)
Restructuring charges	--	--	(0.2)	--	--	--	--
Non-GAAP adjusted R&D expense	$34.3	$71.8	$96.7	$146.5	$162.1	$196.6	$235-$265

Note: Amounts may not total due to rounding.
[1] 2013 to 2018 audited.
[2] G= Guidance; Guidance provided by Jazz Pharmaceuticals plc on and as of August 6, 2019. Jazz Pharmaceuticals plc is not confirming or updating that guidance and actual results may differ.

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Reconciliation of GAAP SG&A to Non-GAAP Adjusted SG&A Expense

In millions (unaudited)	**2015**	**2016**	**2017**	**2018**	**2019G[2]**
GAAP SG&A expense[1]	$449.1	$502.9	$544.2	$683.5	$702-$740
Share-based compensation expense	(74.7)	(79.0)	(83.2)	(76.8)	(82-90)
Loss contingency	--	--	--	(57.0)	--
Expenses related to certain legal proceedings and restructuring	(0.9)	(6.0)	(6.0)	--	--
Transaction and integration related costs	(18.2)	(13.1)	--	--	--
Disposal costs	--	--	--	(1.1)	--
Non-GAAP adjusted SG&A expense	$355.4	$404.8	$454.9	$548.7	$620-$650

Note: Amounts may not total due to rounding.
[1] 2015 to 2018 audited.
[2] G= Guidance; Guidance provided by Jazz Pharmaceuticals plc on and as of August 6, 2019. Jazz Pharmaceuticals plc is not confirming or updating that guidance and actual results may differ.

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Glossary of Abbreviations

AAML = COG AML Study Identifier
ADC = Antibody Drug Conjugate
aGvHD = Acute Graft vs Host Disease
ALL = Acute Lymphoblastic Leukemia
AML = Acute Myeloid Leukemia
ANG2 = Angiopoietin-2
ASH = American Society of Hematology
BBB = Blood Brain Barrier
BLA = Biologics License Application
BPDCN = Blastic Plasmacytoid Dendritic Cell Neoplasm
CAGR = Compound Annual Growth Rate
CAR-T = Chimeric Antigen Receptor T-cell Therapy
CD = Cluster of Differentiation
CNS = Central Nervous System
COG = Children's Oncology Group
CPAP = Continuous Positive Airway Pressure
CPX-MA-1201 = University of Cincinnati Vyxeos Study Identifier
CSF = Cerebrospinal Fluid
DEA = U.S. Drug Enforcement Administration
EDS = Excessive Daytime Sleepiness
EU = European Union
FDA = U.S. Food and Drug Administration
FPI = First Patient In
GAAP = Generally Accepted Accounting Principles
GHB = Gamma Hydroxybutyrate
HLE = Half-Life Extension
HMA = Hypomethylating Agent
HR-AML = High-Risk AML
HR-MDS = High-Risk MDS
IGN = New class of cancer-killing agents (DNA-alkylating indolino-benzodiazepines) developed by ImmunoGen
IH = Idiopathic Hypersomnia
IMGN = ImmunoGen
IND = Investigational New Drug Application
IST = Investigator Sponsored Trial
IV = Intravenous
LBL = Lymphoblastic Lymphoma
LR-MDS = Low-Risk MDS
MAA = Marketing Authorization Application
MDD = Major Depressive Disorder
MDS = Myelodysplastic Syndrome
MRD = Minimal Residual Disease
NDA = New Drug Application
OSA = Obstructive Sleep Apnea
paGvHD = Prevention of acute Graft vs Host Disease
PBM = Pharmacy Benefit Manager
PD = Parkinson's Disease
PDUFA = Prescription Drug User Fee Act
pVOD = Prevention of VOD
R&D = Research & Development
REMS = Risk Evaluation Mitigation Strategies
R/R = Relapsed/Refractory
SG&A = Selling, General & Administrative
TA-TMA = Transplant Associated Thrombotic Microangiopathy
VOD = Hepatic Veno-occlusive Disease
vWF = Von Willebrand Factor
YOY = Year Over Year
YR = Year

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Xyrem® (sodium oxybate) Boxed Warning

WARNING: CENTRAL NERVOUS SYSTEM DEPRESSION and ABUSE AND MISUSE.

Central Nervous System Depression

Xyrem (sodium oxybate) is a CNS depressant. In clinical trials at recommended doses, obtundation and clinically significant respiratory depression occurred in adult patients treated with Xyrem. Many patients who received Xyrem during clinical trials in narcolepsy were receiving central nervous system stimulants.

Abuse and Misuse

Xyrem® (sodium oxybate) is the sodium salt of gamma-hydroxybutyrate (GHB). Abuse or misuse of illicit GHB, either alone or in combination with other CNS depressants, is associated with CNS adverse reactions, including seizure, respiratory depression, decreases in the level of consciousness, coma, and death.

Because of the risks of CNS depression and abuse and misuse, Xyrem is available only through a restricted program under a Risk Evaluation and Mitigation Strategy (REMS) called the Xyrem REMS Program. Further information is available at www.XYREMREMS.com or 1-866-XYREM88® (1-866-997- 3688).

Xyrem (sodium oxybate) prescribing information

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Vyxeos® (daunorubicin and cytarabine) liposome for injection Boxed Warning

WARNING: DO NOT INTERCHANGE WITH OTHER DAUNORUBICIN- AND/OR CYTARABINE-CONTAINING PRODUCTS

VYXEOS has different dosage recommendations than daunorubicin hydrochloride injection, cytarabine injection, daunorubicin citrate liposome injection, and cytarabine liposome injection. Verify drug name and dose prior to preparation and administration to avoid dosing errors *(5.1)*.

Vyxeos prescribing information

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