



Jazz Pharmaceuticals®

# Corporate Overview

November 6, 2019

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**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 positive CHMP opinion and EMA approval of the company's MAA for Sunosi and additional planned regulatory submissions such as the company's NDA for JZP-258 (with the redemption of a priority review voucher); 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 Sunosi 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 September 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.

# A Strong Foundation To Support Global Growth



# 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)<sup>1</sup>
- \$3.3B of cash generation (2013-2018)<sup>2</sup>

## 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<sup>1,3</sup> (2013-2018)

<sup>1</sup> Reconciliations of GAAP to non-GAAP can be found in the Appendix at the end of this presentation.

<sup>2</sup> Net cash provided by operating activities. <sup>3</sup> Non-GAAP adjusted R&D expense for period from January 1, 2013 through December 31, 2018.



# Corporate Development Alliances

Company Acquisitions	Collaborations, Licensing Partnerships or Product Acquisitions	Venture Investments
  <b>EUSA Pharma</b> (2012)    	             	   

# R&D Transformation

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

# 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 <sup>3</sup> / R/R AML	JZP-385 <sup>4</sup> / Essential tremor (Phase 2b)	JZP-258 / narcolepsy
	CombiPlex / solid tumors	Vyxeos + venetoclax / Low intensity therapy for first-line, unfit AML (Phase 1b)	Defitelio / paGvHD	JZP-258 / IH
	CombiPlex / hem/onc	Vyxeos + various targeted agents <sup>4</sup> / first-line, fit AML	Defitelio / prevention of CAR-T associated neurotoxicity	Defitelio / pVOD
	Recombinant pegaspargase <sup>1</sup> / hem/onc	Vyxeos <sup>3</sup> / Low intensity dosing for HR-MDS	Vyxeos + venetoclax <sup>3</sup> / de novo or R/R AML	Vyxeos / AML18 & AML19 <sup>5</sup>
	JZP-341 (Long-acting <i>Erwinia</i> asparaginase) <sup>2</sup> / ALL and other hem/onc	IMGN632 <sup>1</sup> / CD123+ hem/onc	Vyxeos / HR-MDS <sup>5</sup> (EMSCO)	Vyxeos <sup>5</sup> / Newly diagnosed adults with standard and HR-AML (AML5G)
	Defitelio / exploratory activities	IMGN632 +/- venetoclax/azacitidine <sup>1</sup> / CD123+ AML (Phase 1b/2)	Vyxeos / R/R AML <sup>5</sup> (COG)	Vyxeos <sup>4,5</sup> / Newly diagnosed pediatric patients (COG)
	Exosome NRAS <sup>2</sup> / hem/onc		Vyxeos <sup>4,6</sup> / Newly diagnosed older adults with HR-AML	
	Exosome STAT3 <sup>2</sup> / hem/onc		Vyxeos + venetoclax <sup>4,5</sup> / HR-AML	
	Exosome candidates <sup>2</sup> / hem/onc		JZP-458 (recombinant <i>Erwinia</i> asparaginase <sup>4</sup> / ALL/LBL (pivotal Phase 2/3)	
	Pan-RAF inhibitor program / RAF & RAS mutant tumors			

<sup>1</sup> Opt-in opportunity, <sup>2</sup> Partnered collaboration, <sup>3</sup> Jazz & MD Anderson Cancer Center collaboration study, <sup>4</sup> Planned, <sup>5</sup> Cooperative group study





# 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
- Expect to conduct interim analysis of first 280 patients in 1H20
- Expect to reach enrollment of 400 patients in 1H20

## PREVENTION OF aGvHD

- Phase 2 proof of concept
- FPI 1Q18
- N = 150
- Completed enrollment 4Q19

## PREVENTION OF CAR-T ASSOCIATED NEUROTOXICITY

- FPI in Phase 2 study 4Q19
- N ~35

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

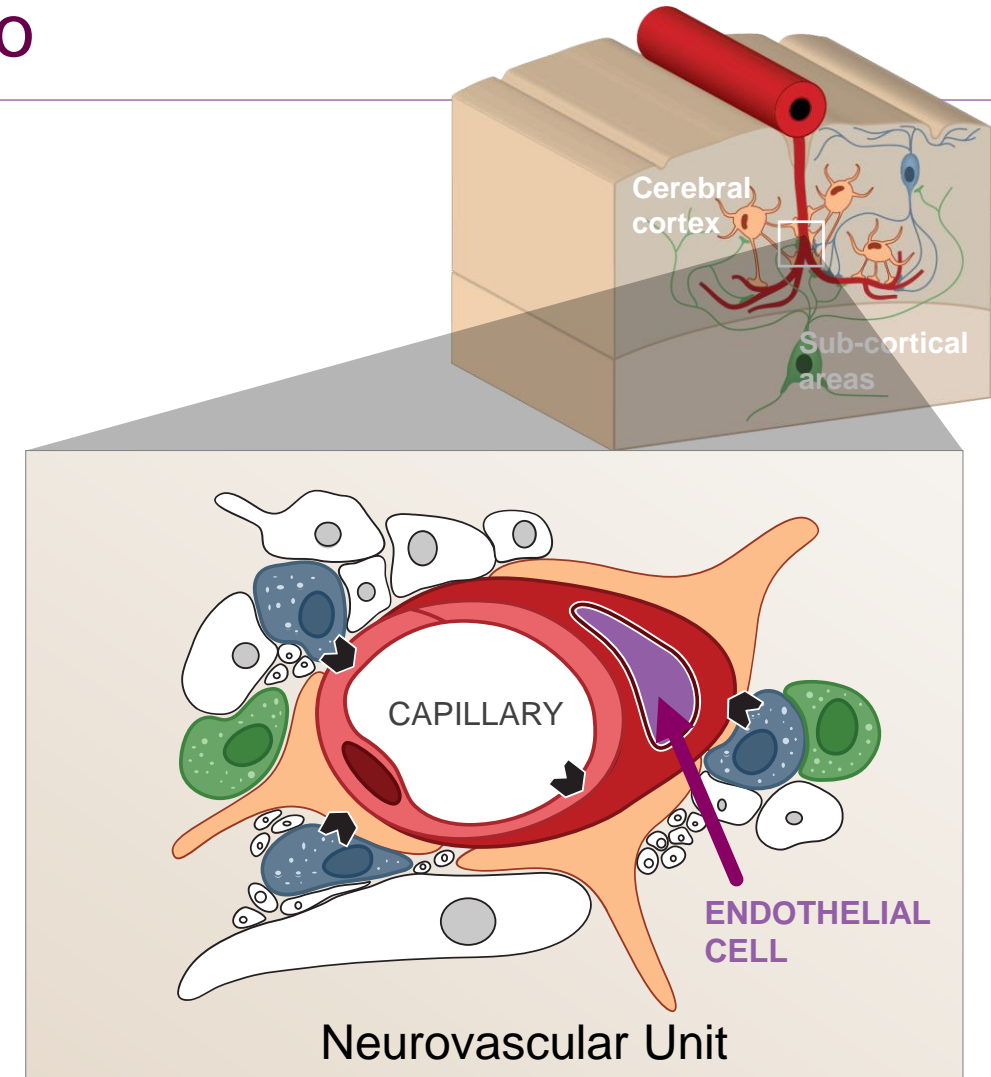
# Rationale for Prevention of CAR-T Associated Neurotoxicity with Defitelio

## 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



# 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



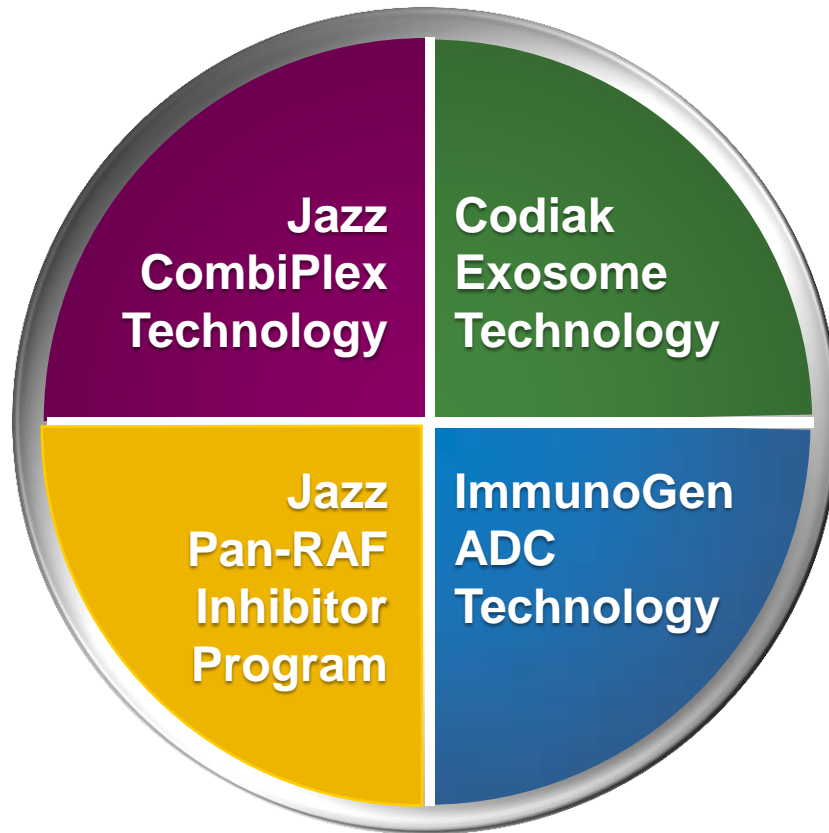
**MDS is also a priority:**

Initiate two studies (fit and unfit)



# 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<sup>1</sup>

<sup>1</sup> JAMA Oncol. 2018;4(2):210-216. doi:10.1001/jamaoncol.2017.4427

# Pan-RAF Inhibitor Program

## Preclinical pan-RAF small molecule inhibitor

- Demonstrated *in vivo* efficacy in a B-RAF V600E mutant colorectal cancer xenograft mouse model as monotherapy
- Promising activity in RAS-mutated cancer cells
- Does not induce paradoxical activation observed with first generation B-RAF inhibitors
- Redx to perform certain pre-clinical activities
- Jazz will be responsible for future development, regulatory, manufacturing and commercialization activities

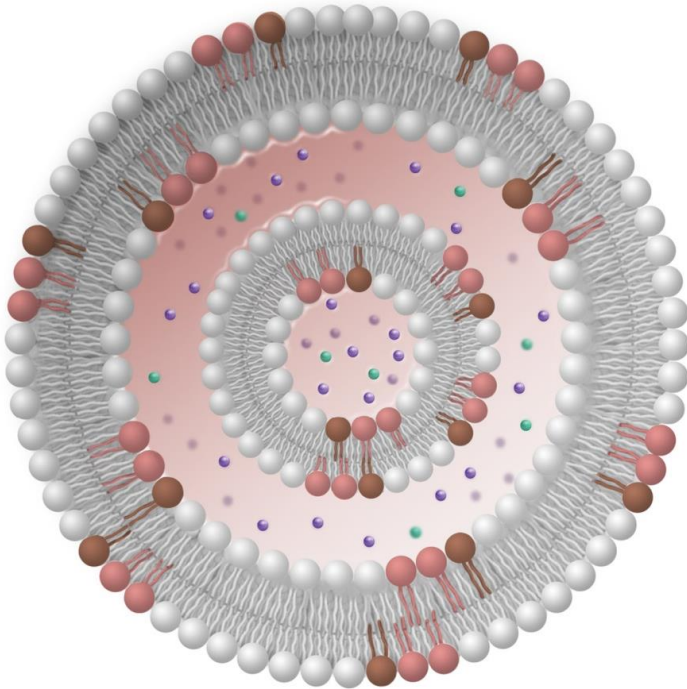
- Jazz acquired preclinical pan-RAF inhibitor program from Redx Pharma in 3Q19
- Novel class of next generation precision oncology drug
- Potential treatment of RAF and RAS mutant tumors

# CombiPlex Strategy

## Transform Patient Outcomes with the Innovative CombiPlex Delivery Technology

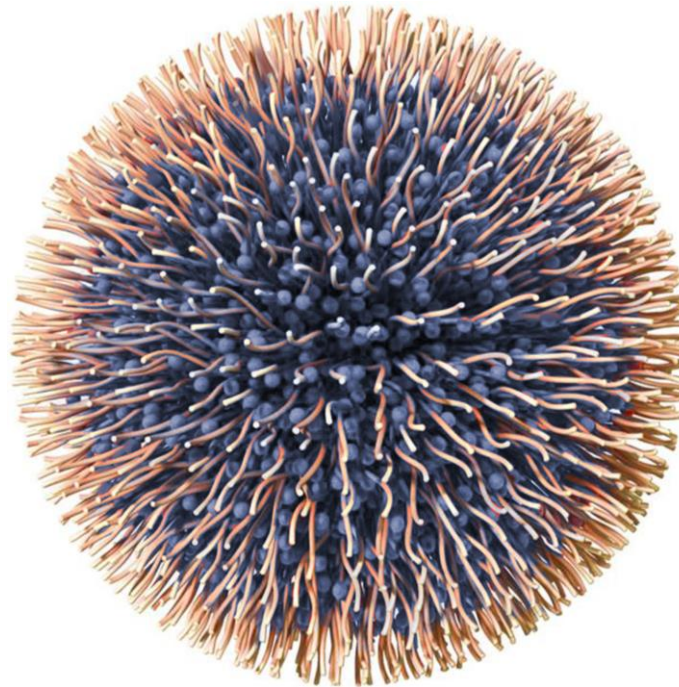
### LIPOSOME DELIVERY PLATFORM

Delivery of water soluble drugs



### NANOPARTICLE DELIVERY PLATFORM

Delivery of hydrophobic drugs  
in polymer core



### Solid Tumors Candidate

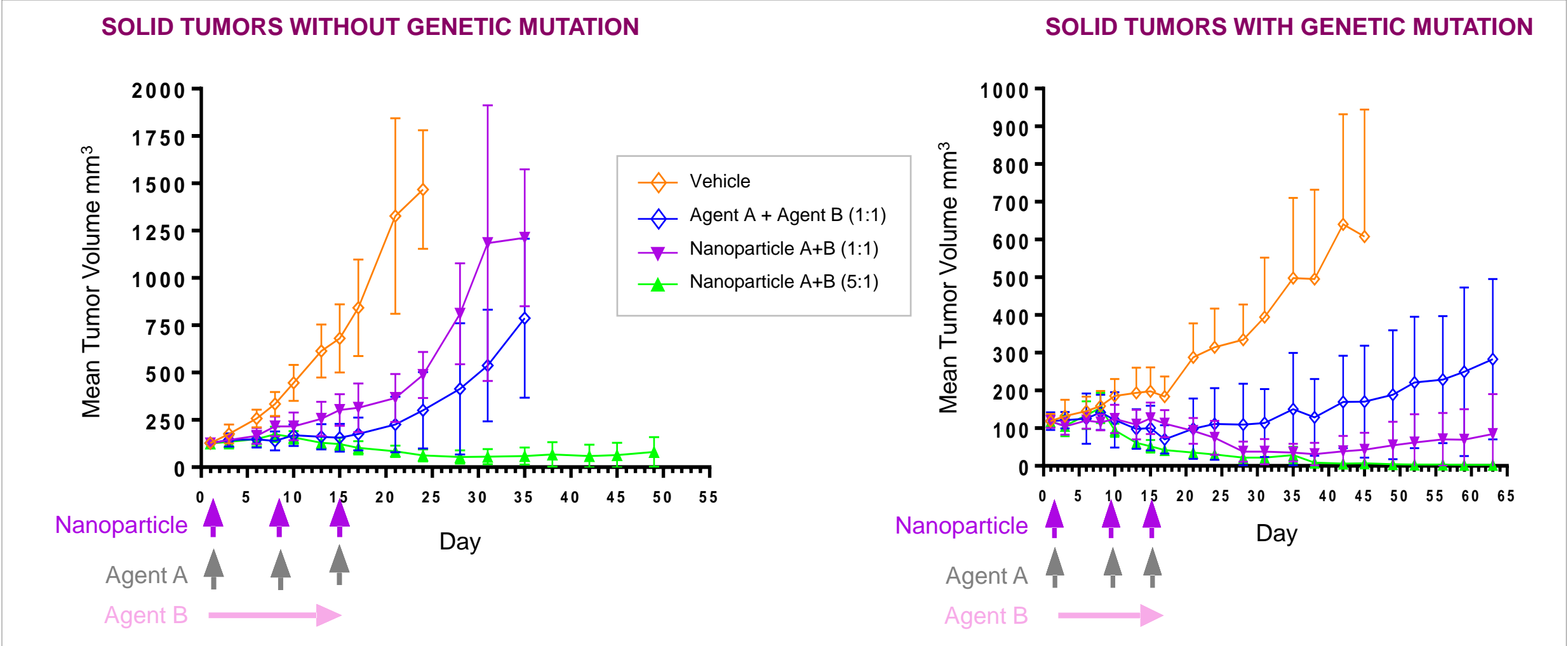
- Novel combination
- IND-enabling activities ongoing

### Hematology/Oncology Opportunities

- Exploratory pre-IND enabling activities ongoing



# CombiPlex Nanoparticles Generate Robust Anti-Tumor Activity in Murine Xenografts



# ImmunoGen Collaboration



## IMGN632

- Anti-CD123 ADC
- Employs a novel IGN cancer-killing agent (DGN549)
- FDA granted orphan drug designation for IMGN632 for the treatment of AML in October 2018

## CLINICAL DEVELOPMENT STATUS

- Monotherapy Phase 1 (FPI 1Q18)
  - Phase 1 ongoing in patients with CD123+ R/R AML, BPDCN and ALL
  - Updated data with additional patients enrolled in AML and BPDCN expansion cohorts to be presented at ASH 2019
- Monotherapy or combination (Phase 1b/2 to be initiated 4Q19)
  - Monotherapy in MRD+ AML
  - Combinations with venetoclax/azacitidine in unfit AML

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

# 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 signaling





- 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



# Growing R&D Pipeline

PRE-CLINICAL	PHASE 1	PHASE 2	PHASE 3	REGULATORY
Oxybate Once Nightly Formulation	Vyxeos + gemtuzumab <sup>3</sup> R/R AML or HMA Failure MDS	JZP-385 <sup>4</sup> Essential tremor (Phase 2b)	JZP-258 Cataplexy & EDS in narcolepsy	Sunosi EU EDS in OSA and Narcolepsy
CombiPlex Solid tumors candidate	Vyxeos + venetoclax Low Intensity Therapy for first-line, unfit AML (Phase 1b)	Defitelio Prevention of aGvHD	JZP-258 Idiopathic hypersomnia	
CombiPlex Hem/Onc exploratory activities	Vyxeos + various targeted agents <sup>4</sup> First-line, fit AML (Phase 1b)	Defitelio Prevention of CAR-T associated neurotoxicity	Defitelio Prevention of VOD	
Recombinant Pegaspargase <sup>1</sup> Hematological malignancies	Vyxeos <sup>3</sup> Low Intensity Dosing for higher risk MDS	Vyxeos + venetoclax <sup>3</sup> <i>de novo</i> or R/R AML	Vyxeos <sup>5</sup> AML or HR-MDS (AML19 & AML18)	
JZP-341 (Long-acting <i>Erwinia</i> asparaginase) <sup>2</sup> ALL/other hematological malignancies	IMGN632 <sup>1</sup> CD123+ Hematological malignancies	Vyxeos <sup>5</sup> HR-MDS (EMSCO)	Vyxeos <sup>5</sup> Newly diagnosed adults with standard- and HR-AML (AML19)	
Defitelio Exploratory activities	IMGN632 +/- venetoclax/azacitidine <sup>1</sup> CD123+ AML (Phase 1b/2)	Vyxeos <sup>5</sup> R/R AML (COG)	Vyxeos <sup>4,5</sup> Newly diagnosed pediatric patients (COG)	
Exosome NRAS candidate <sup>2</sup> Hematological malignancies		Vyxeos <sup>4,5</sup> Newly diagnosed older adults with HR-AML		
Exosome STAT3 candidate <sup>2</sup> Hematological malignancies		Vyxeos + venetoclax <sup>4,5</sup> HR-AML		
Exosome-based candidates <sup>2</sup> Solid tumors/Hematological malignancies		JZP-458 (recombinant <i>Erwinia</i> asparaginase) <sup>4</sup> ALL/LBL (pivotal Phase 2/3)		
Pan-RAF Inhibitor Program RAF & RAS mutant tumors				

 SLEEP/NEUROSCIENCE  
 HEMATOLOGY/ONCOLOGY

<sup>1</sup> Opt-in opportunity, <sup>2</sup> Partnered collaboration, <sup>3</sup> Jazz & MD Anderson Cancer Center collaboration study, <sup>4</sup> Planned, <sup>5</sup> 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 presented at the World Sleep Congress in September 2019
- Plan to redeem our PRV and submit NDA in January 2020

### JZP-258 Idiopathic Hypersomnia

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

### Sunosi EDS for Narcolepsy/OSA

- MAA submission November 2018
- Expect positive CHMP opinion 4Q19
- Expect EMA decision early 2020

### Sunosi EDS for MDD

- Unmet medical need
- Program in discussion with regulatory agencies

### JZP-385 Essential Tremor

- Phase 2 proof-of-concept study completed by Cavion
- Commercial formulation optimization work began 3Q19 to enhance target profile
- Plan to initiate Phase 2b study in 2020



**John**  
AML patient

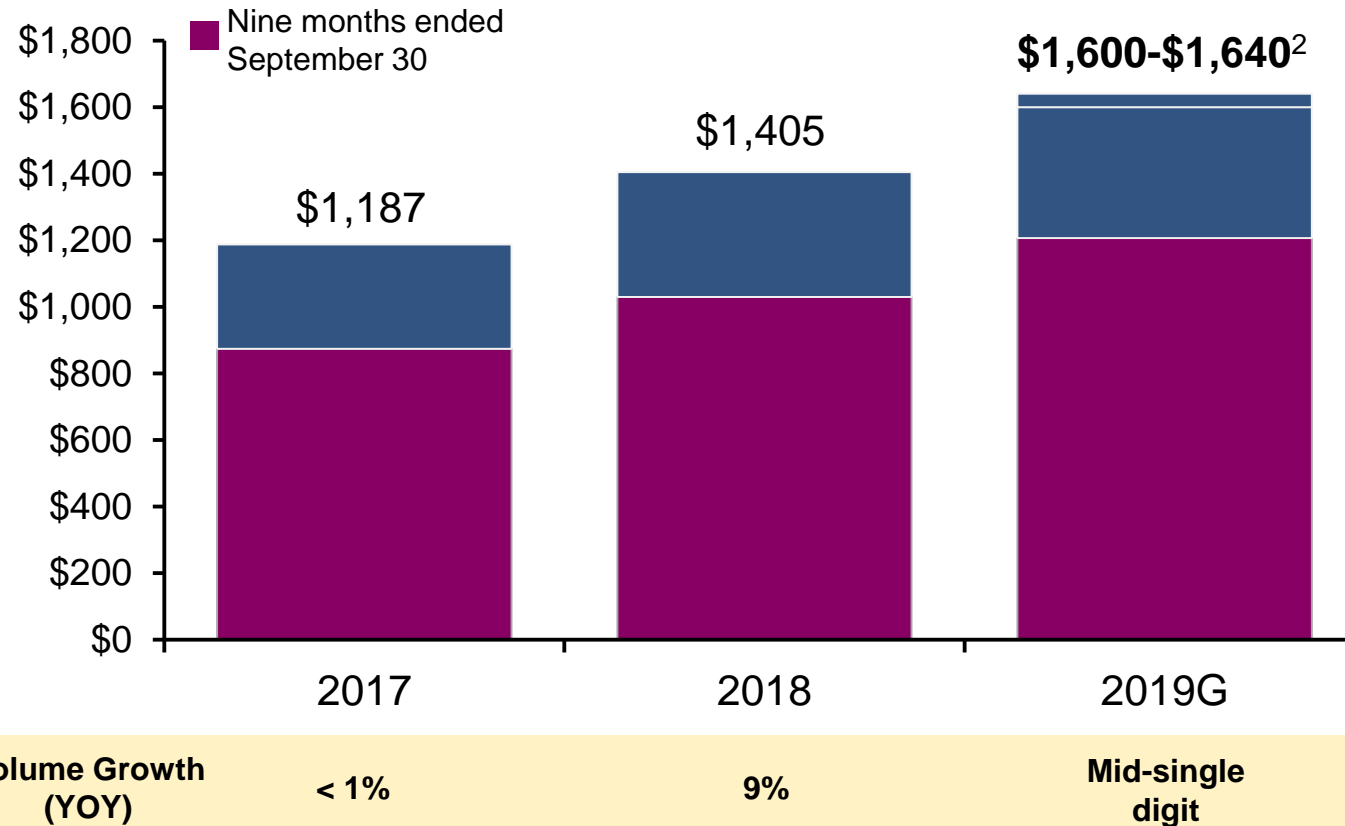
# Commercial Portfolio



Jazz Pharmaceuticals®



## NET PRODUCT SALES<sup>1</sup> \$ in millions

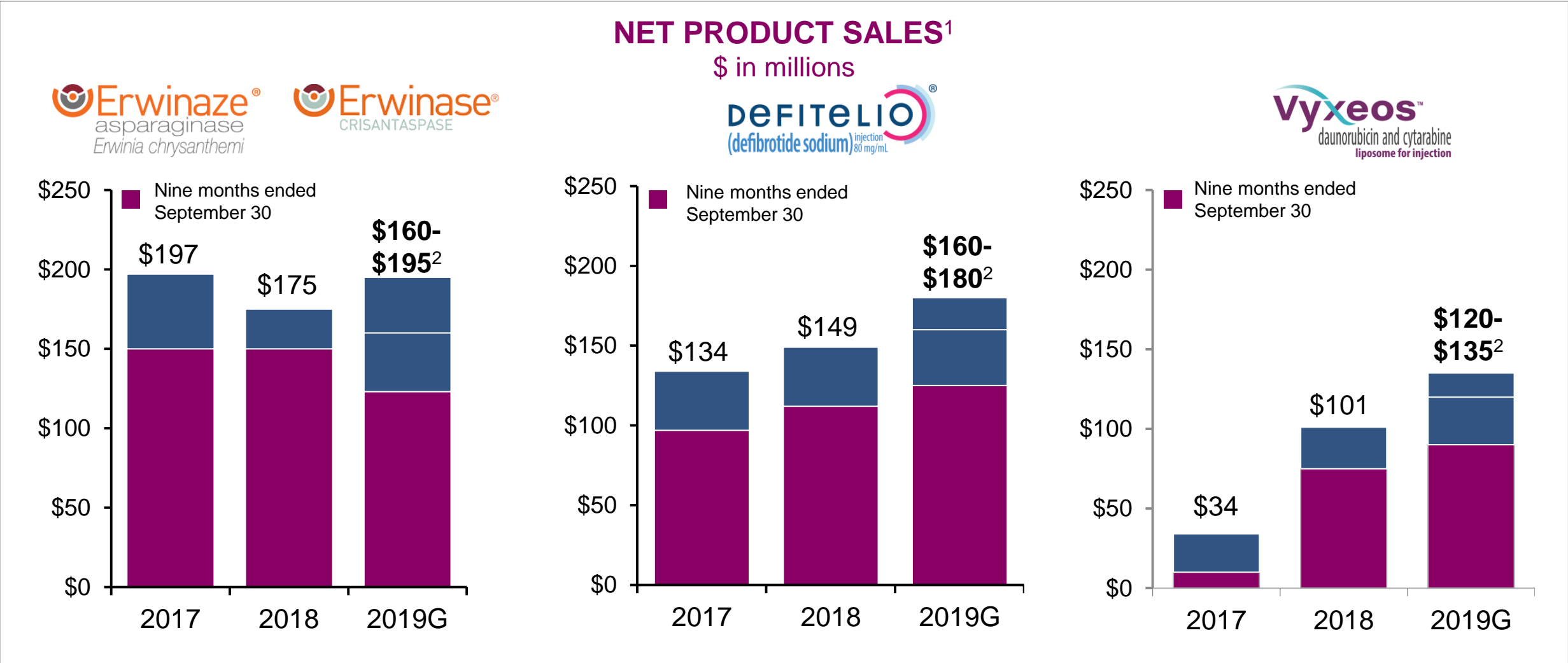


- FDA-approved for the treatment of cataplexy and EDS in narcolepsy patients  $\geq 7$  years of age
- Disease awareness efforts to improve narcolepsy awareness and diagnosis rates
- Launched pediatric indication 1Q19

<sup>1</sup> 2017 and 2018 audited; Nine months ended September 30, 2017, 2018 and 2019, unaudited. <sup>2</sup> G=Guidance. Guidance provided by Jazz Pharmaceuticals plc on and as of November 5, 2019. Jazz Pharmaceuticals plc is not confirming or updating that guidance and actual results may differ.

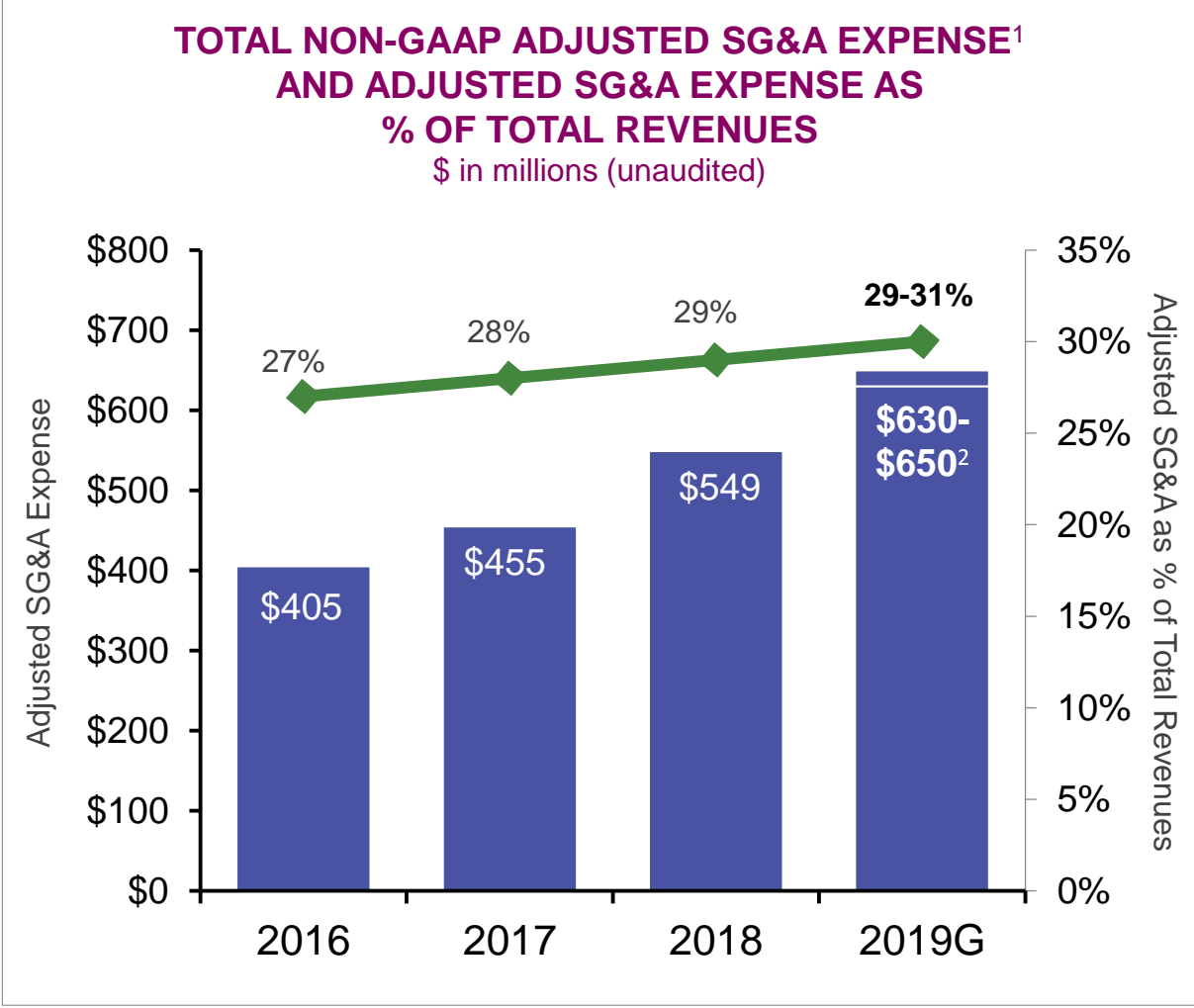
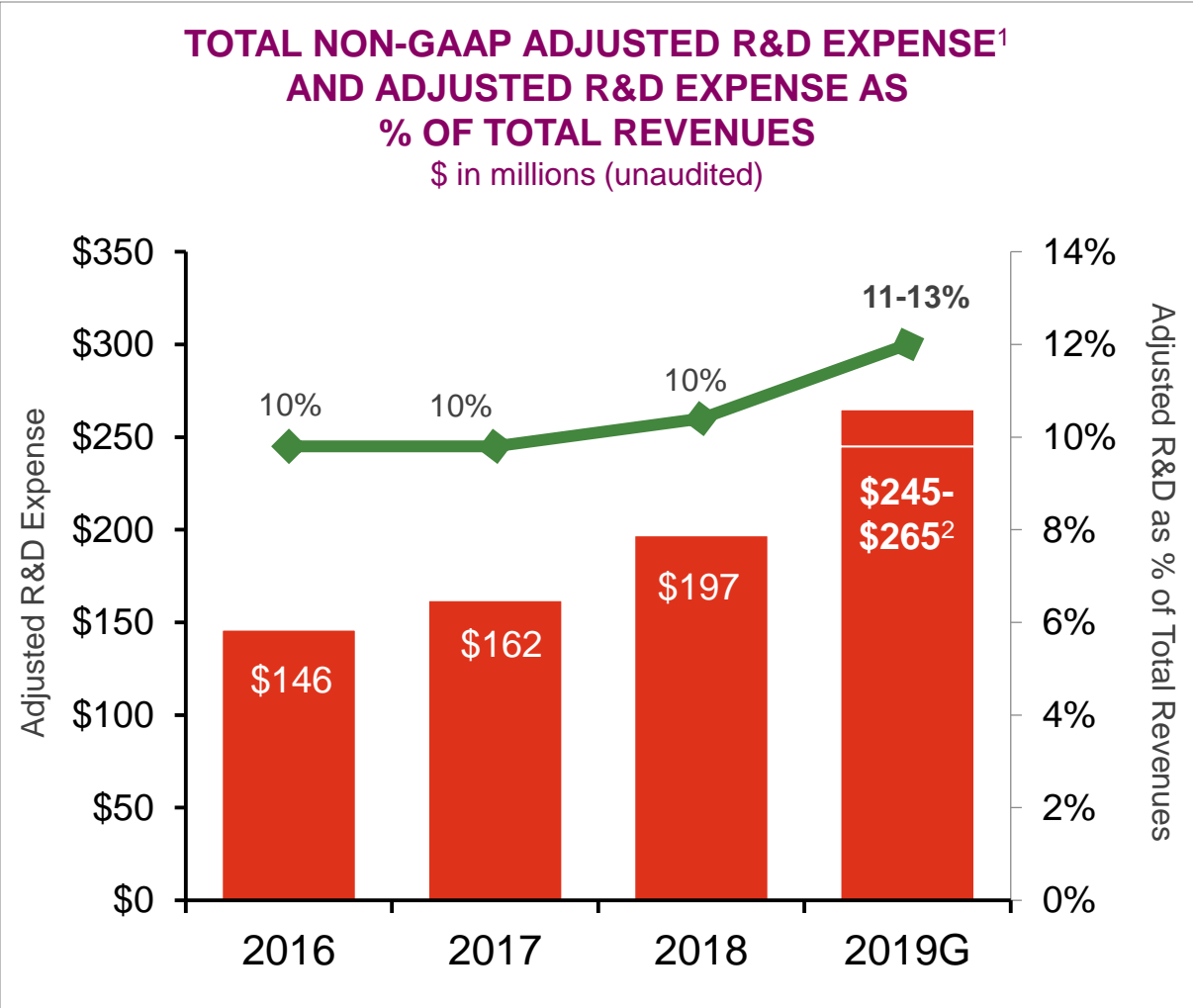


# Hematology/Oncology Revenues



<sup>1</sup> 2017 and 2018 audited; Nine months ended September 30, 2017, 2018 and 2019, unaudited. <sup>2</sup> G=Guidance. Guidance provided by Jazz Pharmaceuticals plc on and as of November 5, 2019. Jazz Pharmaceuticals plc is not confirming or updating that guidance and actual results may differ.

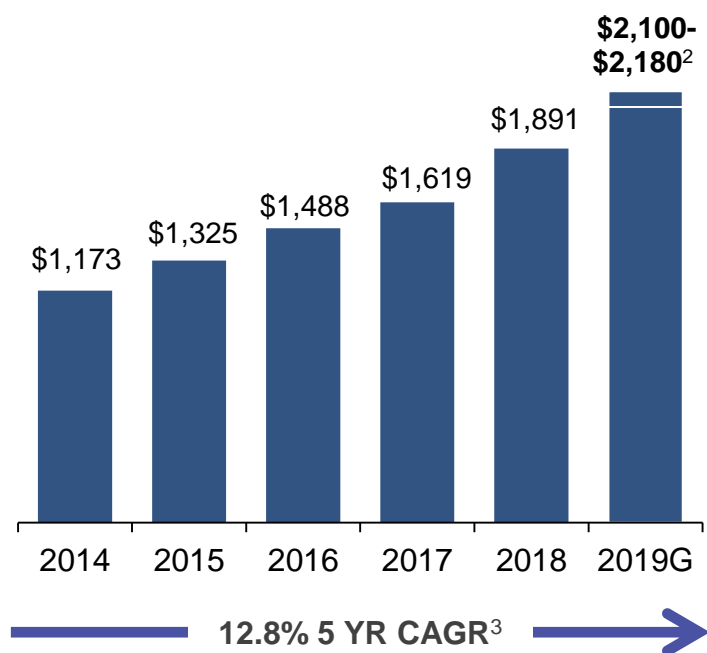
# Disciplined Resource Allocation to Fuel R&D Pipeline and Support Multiple Product Launches



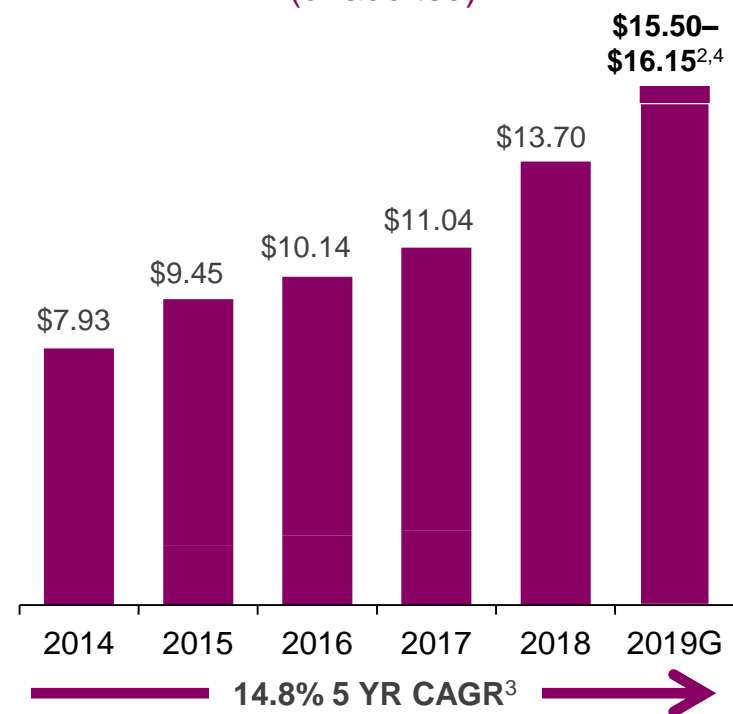
<sup>1</sup> Reconciliations of GAAP to non-GAAP can be found in the Appendix at the end of this presentation.  
<sup>2</sup> G= Guidance; Guidance provided by Jazz Pharmaceuticals plc on and as of November 5, 2019. Jazz Pharmaceuticals plc is not confirming or updating that guidance and actual results may differ.

# Strong Financial Execution

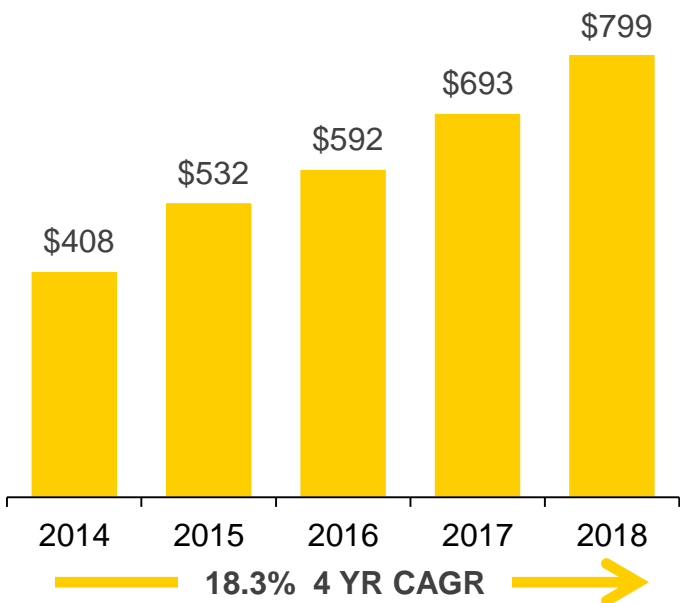
**TOTAL REVENUES<sup>1</sup>**  
\$ in millions  
(audited)



**NON-GAAP ADJUSTED NET INCOME  
PER DILUTED SHARE**  
(unaudited)



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



<sup>1</sup> 2014 to 2018 audited. <sup>2</sup> G=Guidance. Guidance provided by Jazz Pharmaceuticals plc on and as of November 5, 2019. Jazz Pharmaceuticals plc is not confirming or updating that guidance and actual results may differ. <sup>3</sup> CAGR calculations based on mid-point of guidance. <sup>4</sup> Reconciliations of GAAP net income to non-GAAP adjusted net income can be found in the Appendix at the end of this presentation.

# 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

- ✓ 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 (positive CHMP opinion expected 4Q19, EMA decision early 2020)

## Defitelio

- Conduct interim analysis for prevention of VOD Phase 3 study (now expected 1H20)
- ✓ Complete enrollment in prevention of aGvHD Phase 2 study
- Initiate Phase 2 study in TA-TMA (activities discontinued)
- ✓ 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

## CombiPlex

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

## Corporate Development

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





# Appendix

**Eve**  
VOD patient



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# Non-GAAP Financial Measures

To supplement Jazz Pharmaceuticals' financial results and guidance presented in accordance with 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, including non-GAAP adjusted gross margin percentage, non-GAAP adjusted operating income margin percentage and non-GAAP adjusted effective tax rate. 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 and, as applicable, the income tax benefit related to an intra-entity intellectual property asset transfer and the impact of the U.S. Tax Cuts and Job Act (U.S. Tax Act). In this regard, the components of non-GAAP adjusted net income, including non-GAAP cost of product sales, non-GAAP selling, general and administrative expenses and non-GAAP research and development expenses, 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 condensed 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.

# 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 <sup>3</sup>
GAAP net income <sup>1</sup>	\$ 216.3	\$ 58.4	\$ 329.5	\$ 396.8	\$ 487.8	\$ 447.1	\$460 - \$520 <sup>4</sup>
Intangible asset amortization	79.0	126.6	98.2	102.0	152.1	201.5	350 - 370 <sup>4</sup>
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	104
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)	(80) - (100)
U.S. Tax 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	\$900 - \$930
GAAP net income per diluted share <sup>1</sup>	\$ 3.51	\$ 0.93	\$ 5.23	\$ 6.41	\$ 7.96	\$ 7.30	\$8.00 - \$9.00 <sup>4</sup>
Non-GAAP adjusted net income per diluted share <sup>2</sup>	\$ 6.26	\$ 7.93	\$ 9.45	\$ 10.14	\$ 11.04	\$ 13.70	\$15.50 - \$16.15
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.

<sup>1</sup> 2013 to 2018 audited. <sup>2</sup> 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. <sup>3</sup> Guidance provided by Jazz Pharmaceuticals plc on and as of November 5, 2019. Jazz Pharmaceuticals plc is not confirming or updating that guidance and actual results may differ. <sup>4</sup> Includes expected intangible asset amortization of \$111 million in the fourth quarter of 2019 as a result of the Company's notification to the FDA of its intention to redeem its priority review voucher for the planned NDA submission for JZP-258.

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

In millions (unaudited)	2013	2014	2015	2016	2017	2018	2019G <sup>2</sup>
GAAP R&D expense <sup>1</sup>	\$41.6	\$85.2	\$135.3	\$162.3	\$198.4	\$226.6	\$267-\$292
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)	--
Restructuring charges	--	--	(0.2)	--	--	--	--
Non-GAAP adjusted R&D expense	\$34.3	\$71.8	\$96.7	\$146.5	\$162.1	\$196.6	\$245-\$265

Note: Amounts may not total due to rounding.

<sup>1</sup> 2013 to 2018 audited.

<sup>2</sup> G= Guidance; Guidance provided by Jazz Pharmaceuticals plc on and as of November 5, 2019. Jazz Pharmaceuticals plc is not confirming or updating that guidance and actual results may differ.



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

In millions (unaudited)	2015	2016	2017	2018	2019G <sup>2</sup>
GAAP SG&A expense <sup>1</sup>	\$449.1	\$502.9	\$544.2	\$683.5	\$712-\$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	\$630-\$650

Note: Amounts may not total due to rounding.

<sup>1</sup> 2015 to 2018 audited.

<sup>2</sup> G= Guidance; Guidance provided by Jazz Pharmaceuticals plc on and as of November 5, 2019. Jazz Pharmaceuticals plc is not confirming or updating that guidance and actual results may differ.

# Glossary of Abbreviations

ADC = Antibody Drug Conjugate  
aGvHD = Acute Graft vs Host Disease  
ALL = Acute Lymphoblastic Leukemia  
AML = Acute Myeloid Leukemia  
AMLSG = AML Study Group  
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  
CHMP = Committee for Medicinal Products for Human Use  
CNS = Central Nervous System  
COG = Children's Oncology Group  
CSF = Cerebrospinal Fluid  
DEA = U.S. Drug Enforcement Administration  
EDS = Excessive Daytime Sleepiness  
EMA = European Medicines Agency  
EMSCO = European Myelodysplastic Syndromes Cooperative Group  
EU = European Union  
FDA = U.S. Food and Drug Administration  
FPI = First Patient In  
GAAP = Generally Accepted Accounting Principles  
GHB = Gamma Hydroxybutyrate  
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  
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  
PD = Parkinson's Disease  
PDUFA = Prescription Drug User Fee Act  
PRV = Priority Review Voucher  
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

# 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.XYREMS.com](http://www.XYREMS.com) or 1-866-XYREM88® (1-866-997- 3688).

# 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).