



Tim
AML Patient

Corporate Overview

February 26, 2020

Forward-Looking Statements

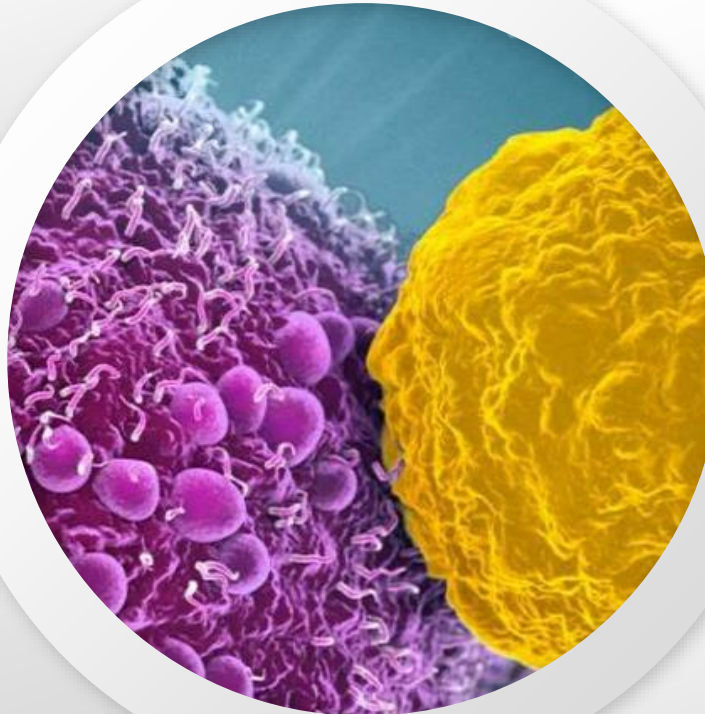
“SAFE HARBOR” STATEMENT UNDER THE PRIVATE SECURITIES LITIGATION REFORM ACT OF 1995

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 2020 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; planned, ongoing and future clinical trials and other product development activities, including clinical trial data read-outs and regulatory events such as the potential U.S. approval of lurbinectedin and JZP-258; ongoing and future product launches, including Sunosi and, if approved, lurbinectedin and JZP-258; 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; 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 may not be submitted, accepted or approved by applicable regulatory authorities in a timely manner or at all; the 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 Annual Report on Form 10-K for the year ended December 31, 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.

Focused Strategies to Meet Long-Term Objectives

DIVERSE PORTFOLIO

Sleep and Neuroscience
Hematology and Oncology



ROBUST AND EXPANDING R&D PORTFOLIO

Early to late-stage studies in core areas focused on differentiated products for unmet needs

DISCIPLINED CAPITAL ALLOCATION

Balanced to support portfolio growth opportunities, corporate development and shareholder returns

EXECUTING GROWTH STRATEGY

Portfolio growth in key therapeutic areas (internal / external opportunities), operational efficiency and globalization

Robust Evolution of Jazz Over Past 5 Years

BUSINESS EXPANSION, INCLUDING NEAR DOUBLING OF REVENUES



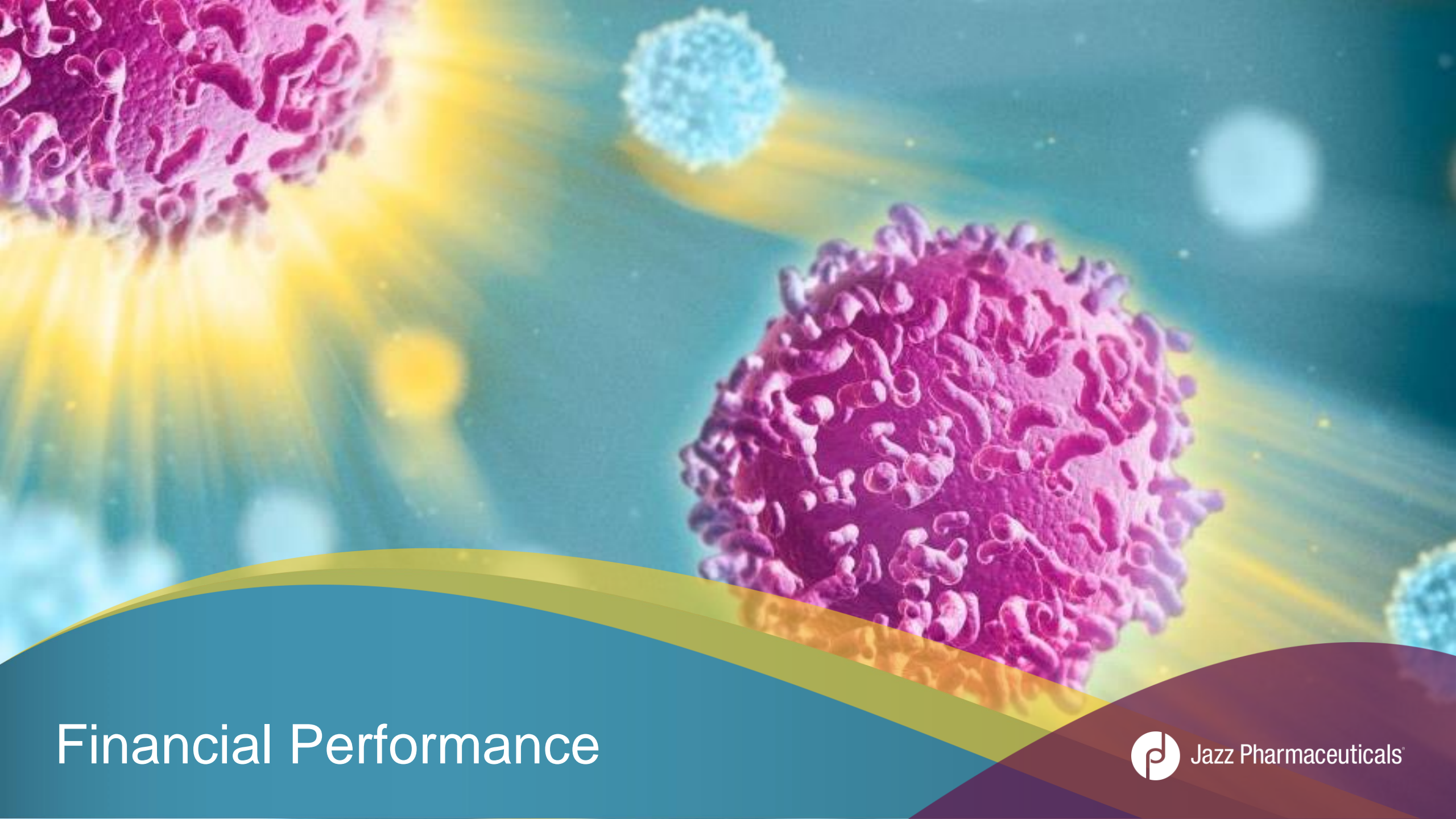
¹ Non-GAAP adjusted R&D spend, unaudited.

Our Execution Has Led to 7 Major Approvals in 5 Consecutive Years

3 POTENTIAL APPROVALS IN 2020–2021



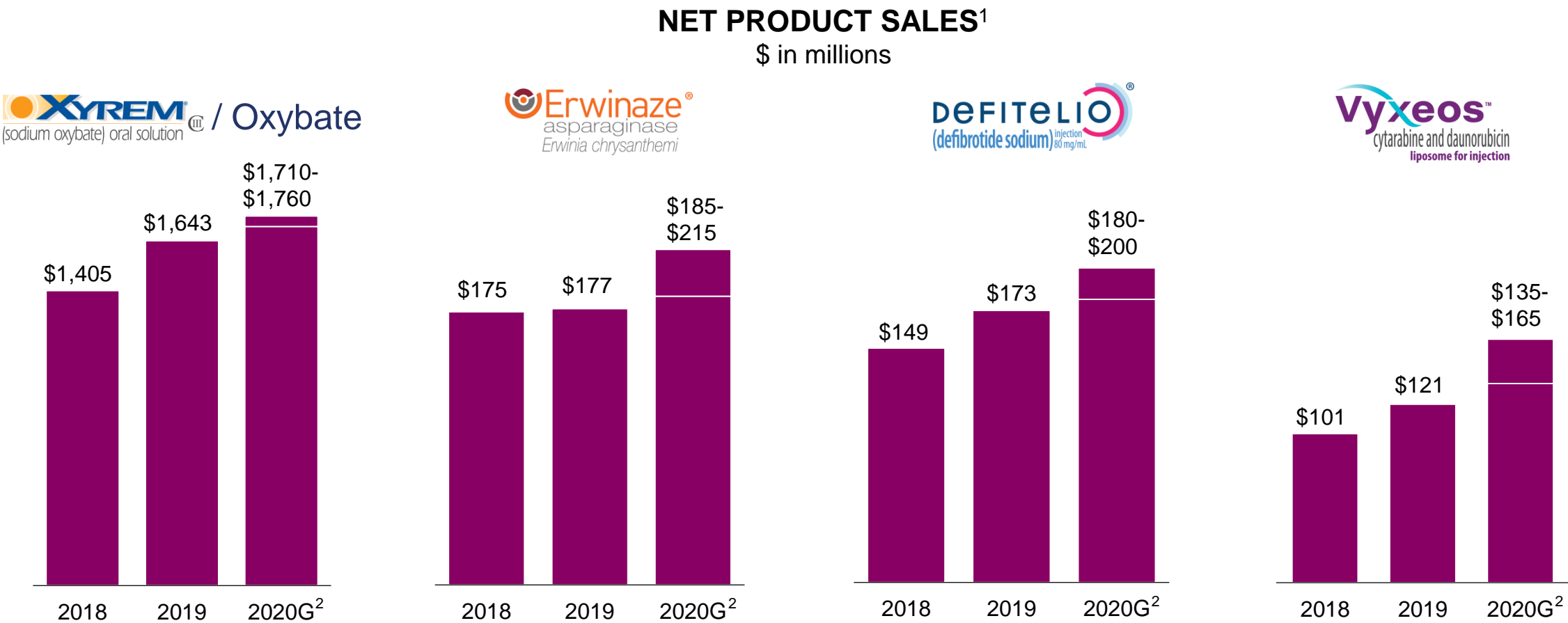
¹ Nippon Shinyaku Co., Ltd. has exclusive rights to develop and commercialize defibrotide in Japan. ² Exclusive U.S. license, PDUFA action date of August 16, 2020



Financial Performance

Broad Product Portfolio Contributing to Growing Revenues

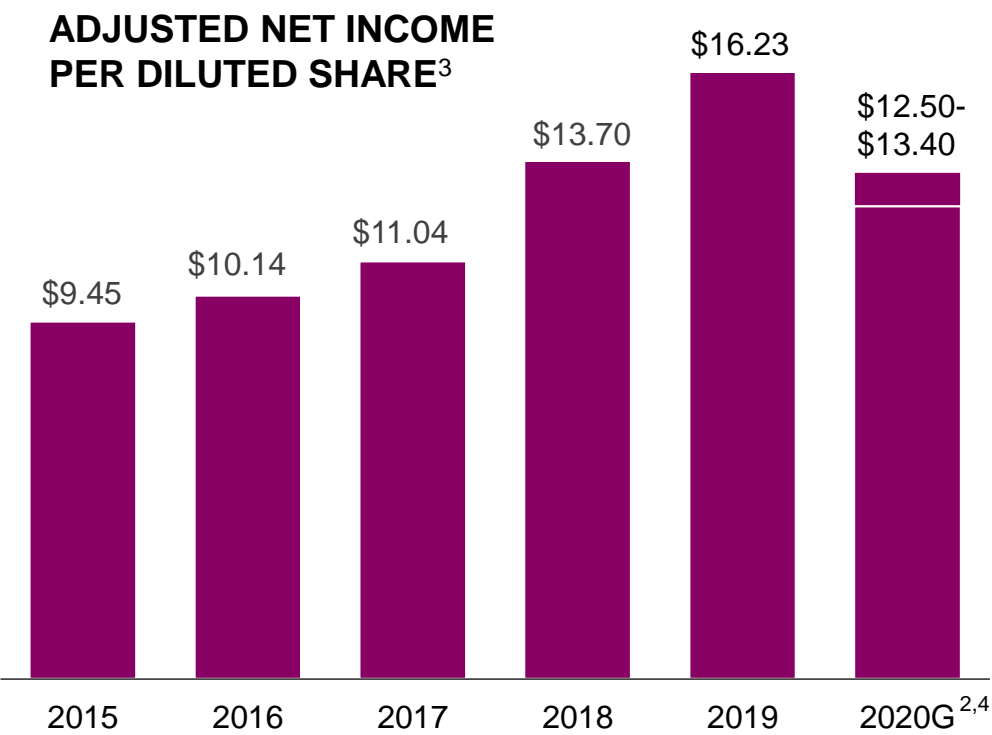
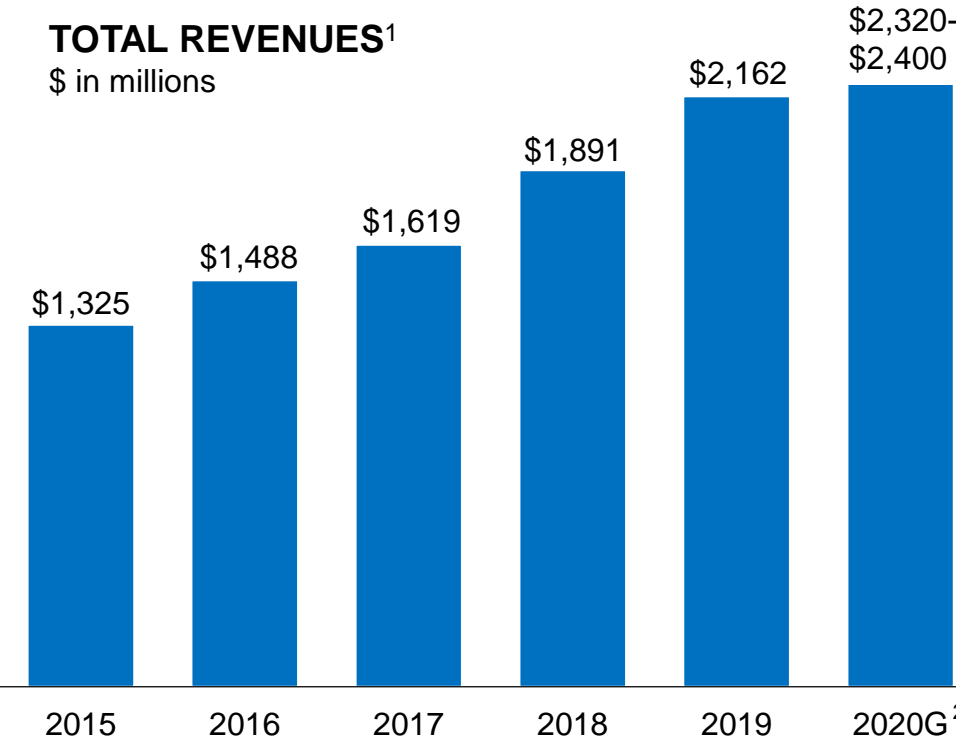
2019 NET PRODUCT SALES INCREASED 14% OVER 2018



Charts not to Scale
¹ 2018 and 2019 audited, ² G=Guidance. Guidance provided by Jazz Pharmaceuticals plc on and as of February 25, 2020. Jazz Pharmaceuticals plc is not confirming or updating that guidance and actual results may differ.

Strong Financial Execution

STRONG TOP- AND BOTTOM-LINE GROWTH



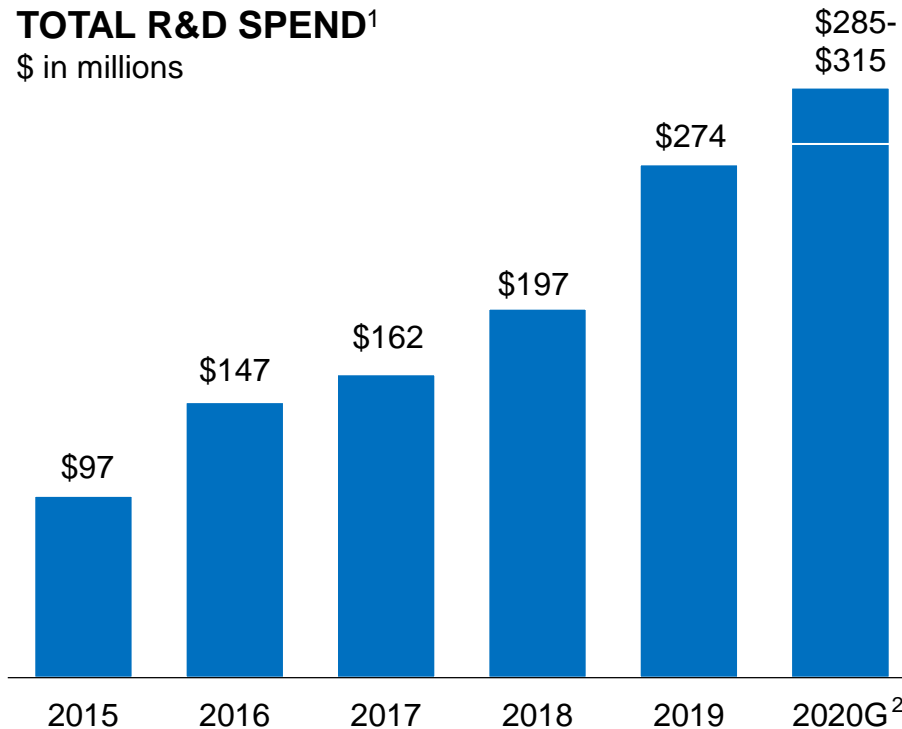
¹ 2015 to 2019 audited. ² G=Guidance. Guidance provided by Jazz Pharmaceuticals plc on and as of February 25, 2020. Jazz Pharmaceuticals plc is not conforming or updating that guidance and actual results may differ.
³ Reconciliations of GAAP net income to non-GAAP adjusted net income can be found in the Appendix at the end of this presentation. ⁴ Beginning with the presentation of the company's financial guidance for 2020, following consultation with the staff of the Division of Corporation Finance of the U.S. Securities and Exchange Commission, the company will no longer exclude upfront and milestone payments from the company's non-GAAP adjusted net income, its line item components and non-GAAP adjusted EPS. The impact of this change to the company's 2020 non-GAAP adjusted net income and non-GAAP adjusted EPS guidance is approximately \$175 million or \$3.13 per diluted share, respectively, related to the post-tax impact of the \$200 million upfront payment made to PharmaMar in January 2020.

While Growing Our Commitment to R&D

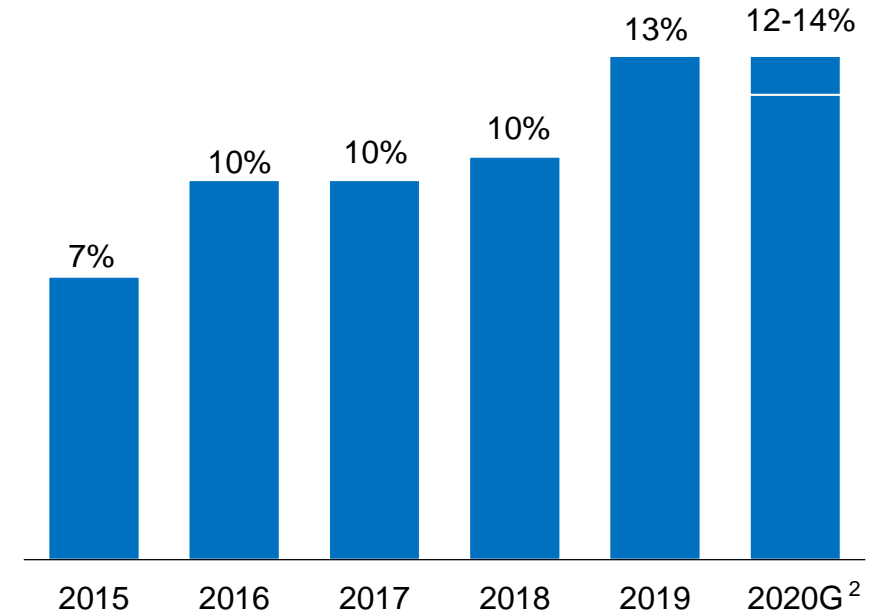
FOCUS ON PORTFOLIO DIVERSIFICATION LEADING TO EXPANDED INVESTMENT

TOTAL R&D SPEND¹

\$ in millions



R&D SPEND AS % OF TOTAL REVENUES¹



¹ Non-GAAP adjusted R&D spend, unaudited. Reconciliations of GAAP to non-GAAP can be found in the Appendix at the end of this presentation.

² G=Guidance. Guidance provided by Jazz Pharmaceuticals plc on and as of February 25, 2020. Jazz Pharmaceuticals plc is not confirming or updating that guidance and actual results may differ.



Sleep and Neuroscience Update



Jazz Pharmaceuticals

Recognized Leader in Sleep Disorders

BROADENED NEUROSCIENCE FOCUS INTO MOVEMENT DISORDERS

SLEEP DISORDERS

EDS in Narcolepsy
Cataplexy in Narcolepsy
EDS in OSA
Idiopathic Hypersomnia
EDS in MDD



MOVEMENT DISORDERS

Essential Tremor

Our Narcolepsy Focus

COMMITTED TO DEVELOPING LIFE-CHANGING THERAPIES FOR PATIENTS

CHRONIC, NEUROLOGIC SLEEP DISORDER

Narcolepsy affects
1 in 2,000



UNDERTREATED AND UNDERDIAGNOSED

In U.S. fewer than 50%,
or 75,000 patients, are
diagnosed/drug-treated

REQUIRES LIFE-LONG TREATMENT

Narcolepsy patients are at increased risk
for stroke, heart attack/failure and death

Expanding Sleep Therapies With Impending New Product Launch

JZP-258: NOVEL NEXT GENERATION OXYBATE FORMULATION

Unmet Need	<ul style="list-style-type: none">• Narcolepsy is a chronic sleep disorder requiring life-long treatment• Narcolepsy patients are at increased risk of CV mortality and morbidity
Opportunity	<ul style="list-style-type: none">• JZP-258 was developed to provide a safer product to patients by reducing sodium by a clinically meaningful 92%<ul style="list-style-type: none">• Sodium intake reduced significantly to a range of 88-131 mg per night, representing 4-6% of the recommended daily allowance of sodium¹• 1,000 to 1,500 mg less sodium per night in a medication that is taken chronically• Growth opportunity in patients who currently are not prescribed Xyrem due to sodium and/or CV considerations
Current Status	<ul style="list-style-type: none">• Phase 3 demonstrated JZP-258 was well-tolerated with an efficacy profile consistent with Xyrem• NDA submitted in January 2020 and PRV redeemed• Expect FDA decision as early as 3Q20• REMS implementation post FDA approval• Expect to launch as early as 4Q20• Ongoing Phase 3 study in idiopathic hypersomnia, expect to complete enrollment 2H20

¹ 2,300 mg sodium recommended upper limit per AHA guidelines.

Expansion and Commercial Execution To Propel Future Revenue Growth



APPROVED IN THE U.S. AND EU FOR THE TREATMENT OF EDS ASSOCIATED WITH OSA OR NARCOLEPSY

Unmet Need	<ul style="list-style-type: none">• U.S.: ~50% of drug-treated OSA patients with EDS fail one or more traditional stimulants/WPAs• Europe: no approved pharmacotherapy agents for EDS in OSA
Opportunity	<ul style="list-style-type: none">• U.S.: ~12 million diagnosed OSA patients, but only 6% currently drug treated<ul style="list-style-type: none">– Up to 50% of patients on CPAP therapy still report EDS¹• Europe: ~4 million diagnosed OSA patients²; ~1 million with EDS• Exploration of additional indications; expect to initiate Phase 3 for EDS in MDD in mid-2020
U.S. Current Status	<ul style="list-style-type: none">• U.S. launch initiated July 2019• Growing commercial coverage: majority of commercial lives covered for 2020; added to<ul style="list-style-type: none">– Express Scripts National Preferred Commercial Formulary/Tier 2 in September 2019– Cigna, CVS Caremark and PRIME Therapeutics National Preferred Commercial Formularies/Tier 2 in January 2020• Steady growth in TRx, more than 13,000 cumulative scripts through December 2019
Europe Current Status	<ul style="list-style-type: none">• Building a Commercial Team in Europe• Expect to initiate rolling launch in Germany mid-2020<ul style="list-style-type: none">– Medical Science Liaisons recruited; training underway– Sales force recruitment in 1H20• France and UK launch to follow after P&R negotiations – expected early 2021

¹ Antic NA, Catcheside P, Buchan C, et al. The Effect of CPAP in Normalizing Daytime Sleepiness, Quality of Life, and Neurocognitive Function in Patients with Moderate to Severe OSA. Sleep. 2011;34(1):111-119.

² France, Germany, Italy, Spain, UK

Expanding Our Neuroscience Focus Into Movement Disorders

JZP-385: POTENTIAL TO IMPROVE DEBILITATING SYMPTOMS OF ESSENTIAL TREMOR

Unmet Need	<ul style="list-style-type: none">• Limited treatment options• Tolerability issues and lack of efficacy with currently available pharmacotherapy• ET ranges from mild to fully debilitating, with significant effects on quality of life and daily activities, such as eating, drinking, dressing and writing
Opportunity	<ul style="list-style-type: none">• ET is the most common movement disorder• Incidence of ET increases and progressively worsens with age• In the U.S. and Europe¹:<ul style="list-style-type: none">– ~11 million prevalence, 2 million diagnosed, 500K drug-treated• First-in-class, best-in-class potential• May have applicability in other neurological conditions
Current Status	<ul style="list-style-type: none">• Phase 2 proof-of-concept study results presented at AAN May 2019• Jazz acquired worldwide rights August 2019• Developing modified release formulation (with once daily administration) to enhance clinical profile• Plan to initiate Phase 2b study in 4Q20

¹ France, Germany, Italy, Spain, UK



Hematology and Oncology Update



Jazz Pharmaceuticals

Strategic Evolution in Oncology to Improve Outcomes in Cancer

FOCUSED EXPANSION INTO SOLID TUMORS WITH INNOVATIVE APPROACHES

HEMATOLOGICAL MALIGNANCIES

AML

ALL

Complications of
HSCT



HEMATOLOGY/ ONCOLOGY

SOLID TUMORS

Lurbinectedin¹

Pan-RAF inhibitor

Exosome targets^{2,3}

CombiPlex

¹ Exclusive U.S. license. ² Partnered collaboration. ³ Solid tumors and hematological malignancies.

Lurbinectedin: Providing Relapsed SCLC Patients with an Improved Therapeutic Option

POTENTIAL FOR U.S. ACCELERATED APPROVAL AND LAUNCH IN 2020

Unmet Need

- Limited treatment options for relapsed SCLC
- Poor prognosis and low survival rates
- High need for tolerable, effective 2L+ therapies

Opportunity

- Complements Jazz's H/O commercial assets and investigational efforts in solid tumors
- ~30K cases of SCLC in 2019 in the U.S.
- Expect use of lurbinectedin in patients post platinum doublet + PD-1/L1 inhibitor (1L standard therapy)

Current Status

- Phase 2 monotherapy study demonstrated strong ORR and favorable safety, tolerability and administration profile relative to historical standard of care
- Received Orphan Drug Designation for relapsed SCLC in August 2018
- Jazz acquired U.S. rights to lurbinectedin from PharmaMar in December 2019
- PDUFA action date of August 16, 2020
- Phase 3 ATLANTIS study topline data expected 2H20

Developing New Asparaginase Therapies for ALL

JZP-458 BLA SUBMISSION AS EARLY AS 4Q20

Unmet Need

- L-asparaginase is an important component of ALL therapy
- Patients who do not complete all of their prescribed asparaginase doses have significantly inferior EFS¹
- Alternative asparaginase therapies are needed to ensure that patients who develop hypersensitivity to *E. coli*-derived asparaginase are able to receive all prescribed asparaginase doses to complete their full treatment course

Opportunity

- ALL is most common form of cancer in children
- ~15,000 ALL patients in U.S., Europe², Japan, Canada
 - In U.S., ~50% are pediatric patients and ~20% are adolescent and young adult
- Hypersensitivity reactions are reported in up to 30% of patients³

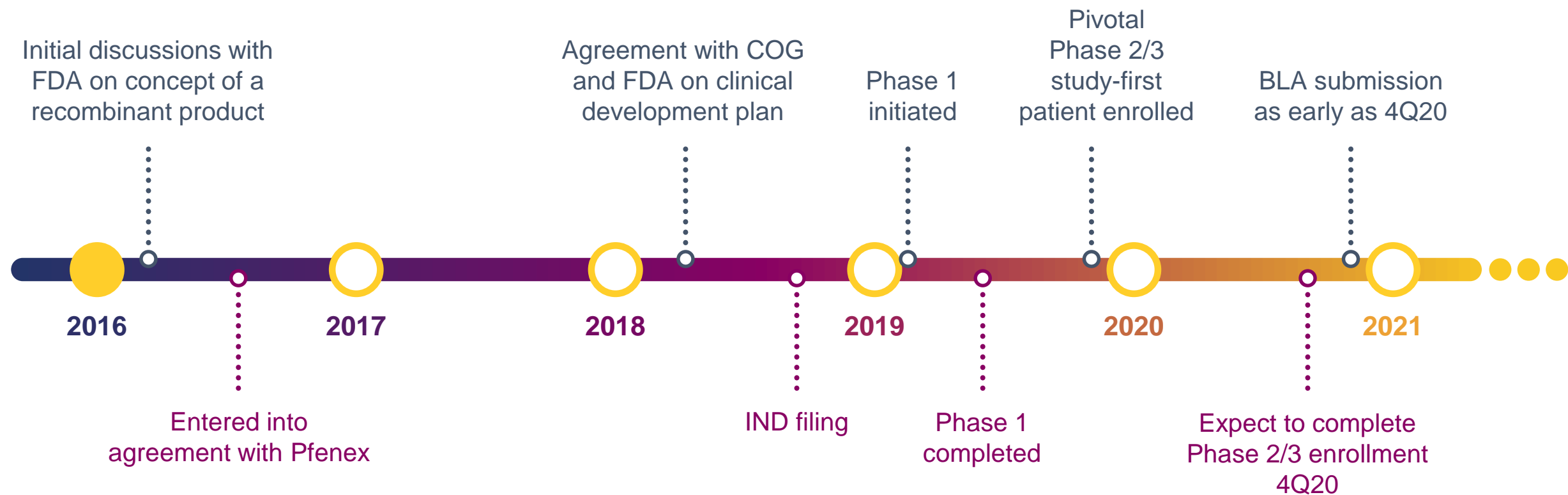
Current Status

- Pivotal Phase 2/3 study in collaboration with COG enrolled first patient in December 2019
- Expect to enroll up to ~100 patients for IM administration with IV cohort to follow
 - IA at ~50 patients
- Fast Track designation received October 2019

¹ DOI: 10.1200/JCO.2019.37.15_suppl.10005 *Journal of Clinical Oncology* 37, no. 15_suppl (May 20, 2019) 10005-10005. ² France, Germany, Italy, Spain, UK. ³ Vrooman LM, et al. *Pediatr Blood Cancer*. 2010;54(2):199-205.

Strong R&D Execution

JZP-458: RAPID PROGRESSION FROM CONCEPT TO CLINIC IN COLLABORATION WITH FDA AND COG



AS PART OF OUR GLOBALIZATION EFFORTS, EXPECT TO MEET WITH EX-U.S. REGULATORY AUTHORITIES IN 2020

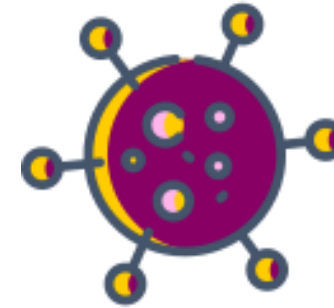
2020 Milestones/Goals

OPTIMIZING AND ADVANCING THE DEVELOPMENT PIPELINE



Sleep/Neuroscience

- JZP-258 for IH
 - Complete Phase 3 enrollment 2H20
- Sunosi for EDS in MDD
 - Initiate Phase 3 mid-2020
- JZP-385 for ET
 - Initiate Phase 2b 4Q20



Hematology/Oncology

- JZP-458 for ALL pivotal Phase 2/3
 - Conduct IA at ~50 patients
- Defitelio for pVOD Phase 3
 - Conduct IA of first 280 patients; reach enrollment of 400 patients in 1H20
- Defitelio for prevention of acute GvHD
 - Phase 2 top-line data 2H20

2020 Milestones/Goals

EXPANSION AND DIVERSIFICATION



3 Possible Product Approvals

- ✓ Sunosi – EDS in OSA & Narcolepsy (EU)
- JZP-258 – EDS & Cataplexy for Narcolepsy (U.S.)
- Lurbinectedin – Relapsed SCLC (U.S.)¹



Regulatory Priorities

- ✓ JZP-258 – NDA submission 1Q20
- JZP-458 – BLA submission as early as 4Q20



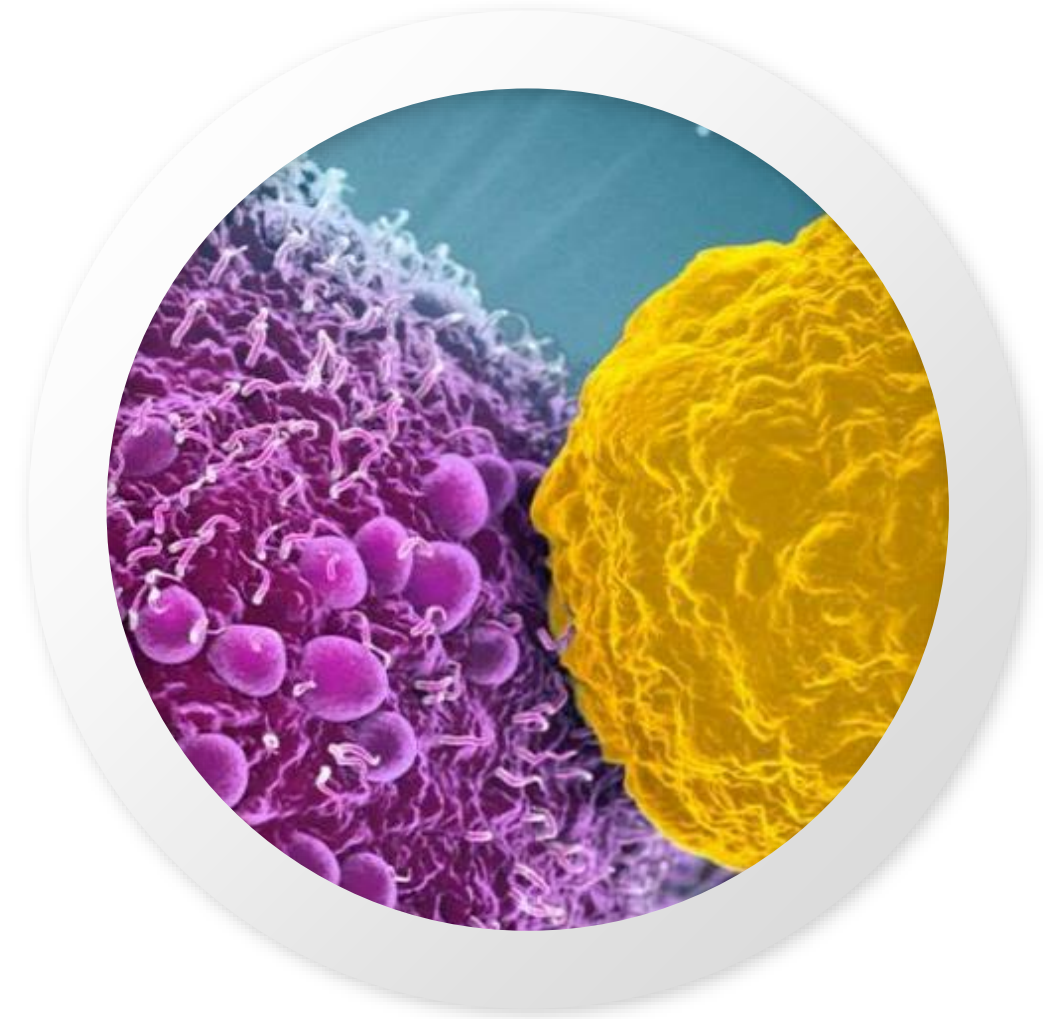
Corporate Development Activities

- Expand portfolio through multiple acquisitions or partnerships

¹ Exclusive U.S. license

JAZZ's Demonstrated Value Proposition

- 1 Diverse portfolio of commercialized products
- 2 Multiple growth drivers
 - 3 potential product approvals in 2020-2021
- 3 Disciplined capital allocation
 - Focused investments in the business
 - Investing to diversify portfolio
- 4 Robust and expanding R&D portfolio
 - Enhanced R&D capabilities
 - Expanding our portfolio through internal and corporate development efforts
 - 4 corporate development transactions in 2019
- 5 Strong operational efficiency and globalization







Steve
VOD Patient

Appendix

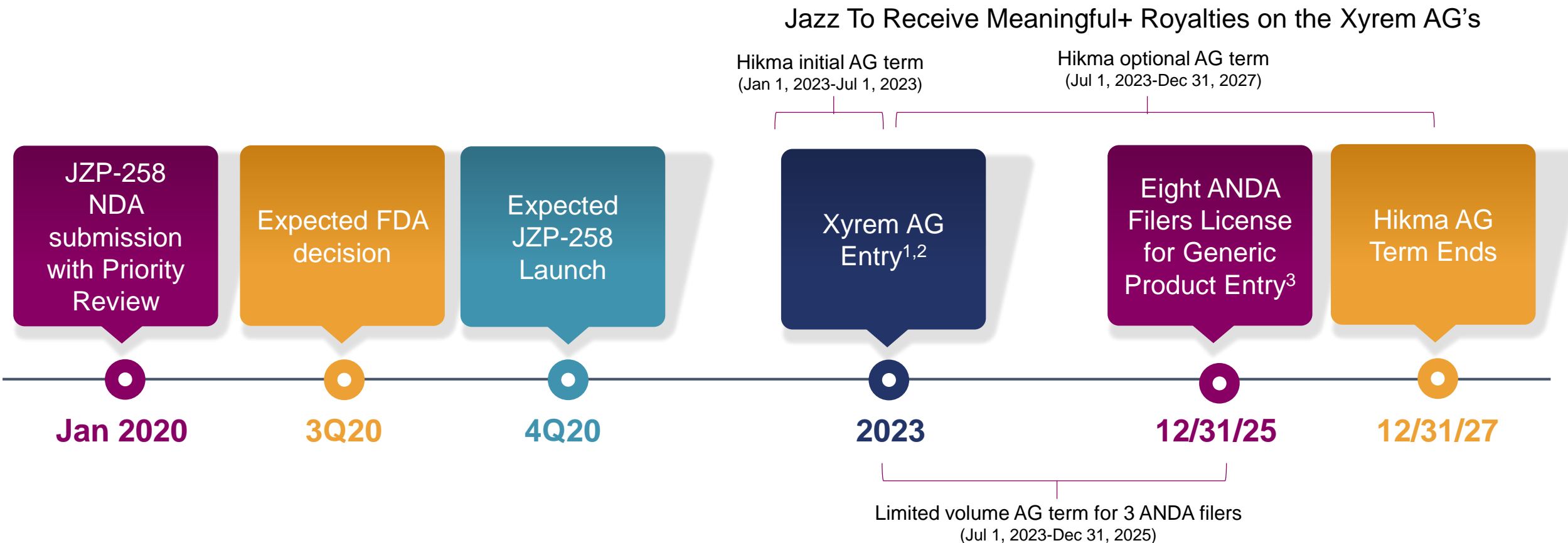
Robust Early- to Late-Stage Pipeline

PRE-CLINICAL	PHASE 1	PHASE 2	PHASE 3	REGULATORY
JZP-324 Oxybate once-nightly formulation	Vyxeos + gemtuzumab³ R/R AML or HMA Failure MDS	JZP-385⁴ Essential tremor (Phase 2b)	JZP-258 Idiopathic hypersomnia	JZP-258 Cataplexy & EDS in narcolepsy
CombiPlex Solid tumors candidate	Vyxeos + venetoclax Low Intensity Therapy for first-line, unfit AML (Phase 1b)	Defitelio Prevention of aGvHD	Sunosi EDS in MDD ⁴	Lurbinectedin⁶ Relapsed SCLC
CombiPlex Hem/Onc exploratory activities	Vyxeos + other approved therapies First-line, fit AML (Phase 1b)	Defitelio Prevention of CAR-T associated neurotoxicity	Defitelio Prevention of VOD	
JZP-341 (Long-acting <i>Erwinia</i> asparaginase) ² ALL/other hematological malignancies	Vyxeos³ Low Intensity Dosing for higher risk MDS	Vyxeos + venetoclax³ <i>de novo</i> or R/R AML	Vyxeos⁵ AML or HR-MDS (AML19 & AML18)	
Recombinant pegaspargase¹ Hematological malignancies	IMGN632¹ R/R CD123+ Hematological malignancies	Vyxeos⁵ HR-MDS (EMSCO)	Vyxeos⁵ Newly diagnosed adults with standard- and HR-AML (AMLSG)	
Defitelio Exploratory activities	IMGN632 +/- venetoclax/azacitidine¹ CD123+ AML (Phase 1b/2)	Vyxeos^{4,5} Newly diagnosed older adults with HR-AML	Vyxeos^{4,5} Newly diagnosed pediatric patients with AML (COG)	
Exosome NRAS candidate² Hematological malignancies		Vyxeos + venetoclax^{4,5} HR-AML	Lurbinectedin⁶ Relapsed SCLC (ATLANTIS)	
Exosome STAT3 candidate² Hematological malignancies			JZP-458 (recombinant <i>Erwinia</i> asparaginase) ALL/LBL (pivotal Phase 2/3)	
Exosome-based candidates² Solid tumors/Hematological malignancies				
Pan-RAF Inhibitor Program RAF & RAS mutant tumors				

 SLEEP & NEUROSCIENCE
 HEMATOLOGY & ONCOLOGY

Oxybate Landscape

OXYBATE NET SALES AND AG ROYALTIES EXPECTED TO CONTRIBUTE MEANINGFULLY TO TOTAL REVENUES



¹ Hikma AG entry on January 1, 2023 with initial 6-month AG term and optional AG terms from July 1, 2023 to December 31, 2027; Amneal, Lupin and Par AG entry with low single-digit volume restrictions on July 1, 2023; Launch dates provided in settlement agreements with ANDA filers could be accelerated under certain circumstances. ² Hikma has a license to launch its generic product as of July 1, 2023, but it will no longer have the right to sell an AG product through the Xyrem REMS if it elects to do so. ³ Subject to obtaining or maintaining ANDA approval.

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 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 SG&A expenses and non-GAAP R&D 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 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. For example, commencing with the presentation of the company's financial guidance for 2020, the company will no longer exclude upfront and milestone payments from the company's non-GAAP adjusted net income, its line item components and non-GAAP adjusted EPS. Accordingly, while certain of such payments are excluded from its non-GAAP financial measures for the year ended December 31, 2019, as detailed in the reconciliation tables that follow, such presentation is made solely for comparability and transition purposes and will not be continued going forward. 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 press release 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)	2015	2016	2017	2018	2019	2020 Guidance ²
GAAP net income ¹	\$ 329.5	\$ 396.8	\$ 487.8	\$ 447.1	\$ 523.4	\$330 - \$400 ³
Intangible asset amortization	98.2	102.0	152.1	201.5	354.8	250 - 270 ³
Share-based compensation expense	91.6	98.8	106.9	102.4	110.6	120 - 135
Loss contingency	--	--	--	57.0	--	--
Impairment charges and disposal costs	31.5	--	--	44.0	--	--
Upfront and milestone payments	25.0	23.8	101.5	11.0	104.3	--
Transaction and integration related costs	18.2	13.6	--	--	--	--
Expenses related to certain legal proceedings and restructuring	1.6	6.1	6.0	--	--	--
Non-cash interest expense	22.7	22.1	30.0	44.0	46.4	45 - 55
Loss on extinguishment and modification of debt	16.8	0.6	--	--	--	--
Income tax effect of above adjustments	(39.6)	(36.7)	(58.8)	(60.9)	(92.9)	(65) - (90)
Income tax benefit related to intra-entity intellectual property asset transfer	--	--	--	--	(112.3)	--
U.S. Tax Act impact	--	--	(148.8)	(7.5)	--	--
Non-GAAP adjusted net income	\$ 595.5	\$ 627.2	\$ 676.7	\$ 838.6	\$ 934.2	\$700 - \$750
GAAP net income per diluted share ¹	\$ 5.23	\$ 6.41	\$ 7.96	\$ 7.30	\$ 9.09	\$5.90 - \$7.15
Non-GAAP adjusted net income per diluted share	\$ 9.45	\$ 10.14	\$ 11.04	\$ 13.70	\$ 16.23	\$12.50 - \$13.40
Weighted-average ordinary shares used in diluted per share calculation	63.0	61.9	61.3	61.2	57.6	56

Note: Amounts may not total due to rounding.

¹ 2015 to 2019 audited. ² Guidance provided by Jazz Pharmaceuticals plc on and as of February 25, 2020. Jazz Pharmaceuticals plc is not confirming or updating that guidance and actual results may differ.

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

In millions (unaudited)	2015	2016	2017	2018	2019	2020G ²
GAAP R&D expense ¹	\$135.3	\$162.3	\$198.4	\$226.6	\$299.7	\$312-\$348
Share-based compensation expense	(13.4)	(15.3)	(17.9)	(19.0)	(25.2)	(27-33)
Transaction and integration related costs	--	(0.5)	--	--	--	--
Upfront and milestone payments	(25.0)	--	(18.5)	(11.0)	--	--
Restructuring charges	(0.2)	--	--	--	--	--
Non-GAAP adjusted R&D expense	\$96.7	\$146.5	\$162.1	\$196.6	\$274.5	\$285-\$315

Note: Amounts may not total due to rounding.

¹ 2015 to 2019 audited.

² G=Guidance; Guidance provided by Jazz Pharmaceuticals plc on and as of February 25, 2020. Jazz Pharmaceuticals plc is not confirming or updating that guidance and actual results may differ.

Glossary of Terms

2L = Second-Line
AAN = American Academy of Neurology
AG = Authorized Generic
aGvHD = Acute Graft vs Host Disease
AHA = American Heart Association
ALL = Acute Lymphoblastic Leukemia
AML = Acute Myeloid Leukemia
AMLSG = AML Study Group
Amneal = Amneal Pharmaceuticals LLC
ANDA = Abbreviated New Drug Application
ATLANTIS = Phase 3 Clinical Study of lurbinectedin in SCLC
BLA = Biologics License Application
CAR-T = Chimeric Antigen Receptor T-cell Therapy
COG = Children's Oncology Group
CNS = Central Nervous System
CPAP = Continuous Positive Airway Pressure
CV = Cardiovascular
EDS = Excessive Daytime Sleepiness
EFS = Event Free Survival
EMA = European Medicines Agency
EMSCO = European Myelodysplastic Syndromes Cooperative Group
EPS = Earnings Per Share
ET = Essential Tremor
FDA = U.S. Food and Drug Administration
GAAP = Generally Accepted Accounting Principles
GvHD = Graft vs Host Disease
Hem/Onc = Hematology/Oncology
Hikma = Hikma Pharmaceuticals PLC
HMA = Hypomethylating Agent
H/O = Hematology and Oncology
HR-AML = High-Risk AML
HR-MDS = High-Risk MDS

HSCT = Hematopoietic Stem Cell Transplant
HSR = Hart Scott Rodino Act
IA = Interim Analysis
IH = Idiopathic Hypersomnia
IM = Intramuscular
IMGN = ImmunoGen
IND = Investigational New Drug Application
IV = Intravenous
LBL = Lymphoblastic Lymphoma
Lupin = Lupin, Inc.
MAA = Marketing Authorization Application
MDD = Major Depressive Disorder
MDS = Myelodysplastic Syndrome
NDA = New Drug Application
ORR = Overall Response Rate
OSA = Obstructive Sleep Apnea
Par = Par Pharmaceuticals, Inc.
PDUFA = Prescription Drug User Fee Act
Pfenex = Pfenex, Inc.
PharmaMar = Pharma Mar, S.A.
PRV = Priority Review Voucher
P&R = Pricing and Reimbursement
pVOD = Prevention of VOD
R&D = Research & Development
REMS = Risk Evaluation Mitigation Strategies
R/R = Relapsed/Refractory
SCLC = Small Cell Lung Cancer
SG&A = Selling, General & Administrative Expense
TRx = Total Prescriptions
VOD = Hepatic Veno-occlusive Disease
WPA = Wake Promoting Agent

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 or 1-866-XYREM88® (1-866-997- 3688).

Xyrem (sodium oxybate) prescribing information

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