Jazz Pharmaceuticals®

SECOND QUARTER 2021 FINANCIAL RESULTS

AUGUST 3, 2021

Sara
Xywav Narcolepsy Trial Participant

Life-Changing Medicines. Redefining Possibilities.

Caution Concerning Forward-Looking Statements

This presentation contains forward-looking statements, including, but not limited to, statements related to: expected upcoming value drivers for and 2021 goals of Jazz Pharmaceuticals (the Company), including with respect to revenue diversification; the near-term blockbuster potential of Epidiolex®; the Company's pipeline and targeted investments providing for sustainable growth; the commercial and growth potential of the Company's products and product candidates; the potential launch of Xywav™ in idiopathic hypersomnia (IH) and the timing thereof; the Company's plans to submit additional data for Rylaze™; expected initiations of Epidiolex, nabiximols, JZP385, JZP150 and Zepzelca™ clinical trials and the timing thereof; the anticipated development of Vyxeos® in additional populations and indications; 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 the Company's oxybate products and other key marketed products; effectively launching and commercializing the Company's other products and product candidates; obtaining and maintaining adequate coverage and reimbursement for the Company's products; the time-consuming and uncertain regulatory approval process, including the risk that the Company's current and/or planned regulatory submissions may not be submitted, accepted or approved by applicable regulatory authorities in a timely manner or at all, including the risk that the Company's supplemental new drug application seeking approval for Xywav in IH may not be approved by U.S. Food and Drug Administration 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 successfully initiating or completing clinical trials and assessing patients such as those being experienced, and expected to continue to be experienced, by the Company as a result of the effects of the COVID-19 pandemic; the Company's failure to realize the expected benefits of its acquisition of GW Pharmaceuticals plc, including the risk that the legacy GW Pharmaceuticals business will not be integrated successfully or that such integration may be more difficult, time-consuming or costly than expected; the ultimate duration and severity of the COVID-19 pandemic and resulting global economic, financial, and healthcare system disruptions and the current and potential future negative impacts to the Company's business operations and financial results; regulatory initiatives and changes in tax laws; market volatility; 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; complying with applicable U.S. and non-U.S. regulatory requirements; government investigations, legal proceedings and other actions; identifying and acquiring, in-licensing or developing additional products or product candidates, financing these transactions and successfully integrating acquired product candidates, products and businesses; the Company's ability to realize the anticipated benefits of its collaborations and license agreements with third parties; the sufficiency of the Company's cash flows and capital resources to fund its debt service obligations; the Company's ability to achieve expected future financial performance and results and the uncertainty of future tax, accounting and other provisions and estimates; the possibility that, if the Company does not achieve the perceived benefits of the acquisition of GW Pharmaceuticals as rapidly or to the extent anticipated by financial analysts or investors, the market price of the Company's ordinary shares could decline; 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' and GW Pharmaceuticals' Securities and Exchange Commission filings and reports, including the Company's Annual Report on Form 10-K for the year ended December 31, 2020, GW Pharmaceuticals' Annual Report on Form 10-K for the year ended December 31, 2020, and future filings and reports by the Company, including the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2021. 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 communication 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.

Life-Changing Medicines. Redefining Possibilities.

Non-GAAP Financial Measures

To supplement Jazz Pharmaceuticals' financial results and guidance presented in accordance with U.S. generally accepted accounting principles (GAAP), the Company uses certain non-GAAP (also referred to as adjusted or non-GAAP adjusted) financial measures in this presentation. In particular, the Company presents non-GAAP adjusted net income (and the related per share measure). Non-GAAP adjusted net income (and the related per share measure) exclude from GAAP reported net income (and the related per share measure) certain items, as detailed in the reconciliation table included in the Appendix to this presentation, and adjust for the income tax effect of non-GAAP adjustments and impact of the change in the statutory tax rate in the U.K.

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 and impact of the change in the statutory tax rate in the UK 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 in 2020, the Company no longer excludes upfront and milestone payments from the Company's non-GAAP adjusted net income, its line item components and non-GAAP adjusted EPS. 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 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.

Additional Cautionary Language

Certain information in this presentation is based upon management forecasts and reflects prevailing conditions and management's views as of this date, all of which are subject to change. In preparing this presentation, we have relied upon and assumed, without independent verification, the accuracy and completeness of all information available from public sources or which was provided to us by third parties or which was otherwise reviewed by us. The information contained herein is subject to change, completion or amendment and we are not under any obligation to keep you advised of such changes.

INTRODUCTION AND OVERVIEW

BRUCE COZADD
CHAIRMAN AND CHIEF EXECUTIVE OFFICER

Jazz Pharmaceuticals®

Focused Execution Drives Long-Term Value

	Significant Execution	Upcoming Value Drivers
	• Affirmed 2021 revenue guidance of $3.02 - $3.18 billion • 41% of net sales in 2Q21 from new products • Executed 4 of 5 key product launches in 2020-2021	• Revenue diversification target of >65% of 2022 net sales from new products • Additional corporate development initiatives
+ GW pharmaceuticals	• Closed GW transaction on May 5, 2021; accelerates revenue growth and diversification • Integration progressing well • Positive performance of Epidiolex®, near-term blockbuster potential	• Planned Phase 3 pivotal trial for Epidiolex in Epilepsy with Myoclonic-Atonic Seizures (EMAS) in 1H22 • Expect to initiate third Phase 3 nabiximols trial in MS spasticity in 2021 • GW cannabinoid platform expands Jazz R&D portfolio and capabilities
xywav™	**EDS and Cataplexy in Narcolepsy**[1] • ~5,100 active patients on Xywav™ exiting 2Q21 • Lower sodium resonating with HCPs and patients; reinforced by FDA summary of clinical superiority to Xyrem® • FDA granted ODE	**Idiopathic Hypersomnia**[2] • PDUFA target action date set for August 12, 2021 • Preparing for 4Q21 commercial launch • Ongoing unbranded disease education initiatives
ZEPZELCA™	• Establishing Zepzelca™ as standard of care in 2L SCLC • Continued demand and market share growth in 2L SCLC	• Driving continued share growth in 2L setting • Robust development program
RYLAZE™	• FDA approval under RTOR on June 30, 2021[3] • Commercial launch on July 15, 2021	• Addressing significant need for high quality therapeutic option with reliable supply for ALL/LBL patients • Evaluating additional dosing options and IV route of administration

1. Full prescribing information at www.xywav.com, including BOXED Warning and Medication Guide; 2. Pending FDA approval; 3. Full prescribing information at www.rylaze.com

COMMERCIAL PERFORMANCE

DAN SWISHER
PRESIDENT

Jazz Pharmaceuticals®

Neuroscience: Strong Performance and Addition of Epidiolex

OXYBATE
XYREM® +xywav™

- Net product sales of $458.3M, an increase of 3% compared to 2Q20
- Average active patients
  - ~15,900 in 2Q21
  - ~5% increase compared to 2Q20

xywav™

- Net product sales of $124.2M in 2Q21
- ~5,100 active patients exiting 2Q21
- Preparing for 4Q21 launch in IH[1]

Epidiolex®

- Net product sales of $109.5M from close of GW transaction (May 5) through quarter end
- 32% increase in net product sales in 2Q21 ($155.9M) compared to 2Q20 on unaudited pro forma basis
- European launch progressing; favorable access and pricing to date

sunosi®

- Net product sales of $12.1M, an increase of 41% compared to 2Q20
- European rolling launch progressing; secured reimbursement in Germany

1. Pending FDA approval

Delivering Meaningful Growth: Oncology Portfolio

ZEPZELCA™

- Net product sales of $55.9M in 2Q21
- Growth in second line share and overall demand continues to increase
- Sequential demand growth over the first two quarters of 2021 was 8% and 9% respectively - offset mainly by reduced inventory holding by distributors

ASPARAGINASE

RYLAZE™

- Approved on June 30; commercial launch on July 15, 2021

Erwinaze[1]

- Net product sales of $28.3M in 2Q21
- Company distributed remaining inventory in 2Q21 and discontinued selling

Vyxeos™

- Net product sales of $31.5M in 2Q21, an increase of 18% compared 2Q20
- Continued geographic expansion underway; approval in Canada in July

DEFITELIO®

- Net product sales of $48.1M in 2Q21, an increase of 13% compared to 2Q20
- Continued geographic expansion underway

1. The Company's agreement with Porton Biopharma Limited terminated on December 31, 2020. The Company had the right to sell certain Erwinaze inventory post-termination. Sales of this inventory were complete in June 2021; the Company has ceased recording net sales of Erwinaze.

RESEARCH & DEVELOPMENT

ROBERT IANNONE, M.D., M.S.C.E.
EXECUTIVE VICE PRESIDENT, RESEARCH & DEVELOPMENT AND CHIEF MEDICAL OFFICER

Jazz Pharmaceuticals®

Xywav in Narcolepsy: Clinical Superiority and ODE from FDA

- FDA granted ODE for Xywav in narcolepsy
  - Seven-year market exclusivity expires July 21, 2027
  - Based on July 21, 2020 FDA approval date

- FDA published its summary of clinical superiority findings for Xywav for the treatment of cataplexy or excessive daytime sleepiness in patients 7 years of age and older with narcolepsy by means of greater safety compared to Xyrem

xywav™

"Xywav is clinically superior to Xyrem by means of greater safety because Xywav provides a greatly reduced chronic sodium burden compared to Xyrem."1

"..the differences in the sodium content of the two products at the recommended doses will be clinically meaningful in reducing cardiovascular morbidity in a substantial proportion of patients for whom the drug is indicated."[1]

1. FDA Summary of Clinical Superiority Findings: https://www.fda.gov/industry/designating-orphan-product-drugs-and-biological-products/clinical-superiority-findings

Neuroscience: Strong Execution and Enhanced Capabilities

xywav™

- PDUFA target action date set for August 12 in IH; planned commercial launch in 4Q21[1] after REMS implementation
- Granted ODE in narcolepsy

Epidiolex®

- Planned Phase 3 pivotal trial in EMAS in 1H22
- Epidiolex is currently indicated in three refractory seizure disorders
- EMAS is characterized by generalized myoclonic-atonic seizures; trial will provide first randomized, controlled clinical trial data in this seizure type

PIPELINE

- Nabiximols: Planned initiation of 3rd MS spasticity trial in 2021
- JZP385: Planned Phase 2b initiation in essential tremors in late 2021
- JZP150: Planned Phase 2 initiation in PTSD in late 2021

1. Subject to FDA approval

Oncology: Expanded Indications & Opportunities to Benefit Patients

RYLAZE™

- Plan to submit additional data to support U.S. label update
- Advancing ex-US regulatory strategy

ZEPZELCA™

- PharmaMar plans to initiate confirmatory trial in 2L SCLC in 2021
- Collaborating with Roche to initiate a Phase 3 trial for Zepzelca in combination with I/O in 1L ES-SCLC in 2021
- Plan to initiate Phase 2 basket trial evaluating monotherapy in advanced or metastatic tumors in early 2022
- Initiated Phase 4 observational study to collect safety and efficacy data in real-world setting

Vyxeos™

- Approved by Health Canada
- Ongoing clinical development in additional populations/indications

Significant R&D Momentum

Upcoming Clinical Trial Initiations

Neuroscience

2H21

Nabiximols: Ph 3 MS spasticity

JZP385: Ph 2b essential tremor

JZP150: Ph 2 PTSD

1H22

Epidiolex: Ph 3 Epilepsy with Myoclonic-Atonic Seizures (EMAS, also known as Doose syndrome)

Oncology

2H21

Zepzelca: confirmatory 2L SCLC[1]

Zepzelca: Ph 3 1L combination with I/O[2]

1H22

Zepzelca: Ph 2 basket trial (advanced urothelial, large cell neuroendocrine tumor of lung, HRD+ cancers)

1. Trial being conducted by PharmaMar; 2. Trial being conducted in collaboration with Roche

FINANCIAL UPDATE

RENÉE GALÁ
EXECUTIVE VICE PRESIDENT AND CHIEF FINANCIAL OFFICER

Jazz Pharmaceuticals®

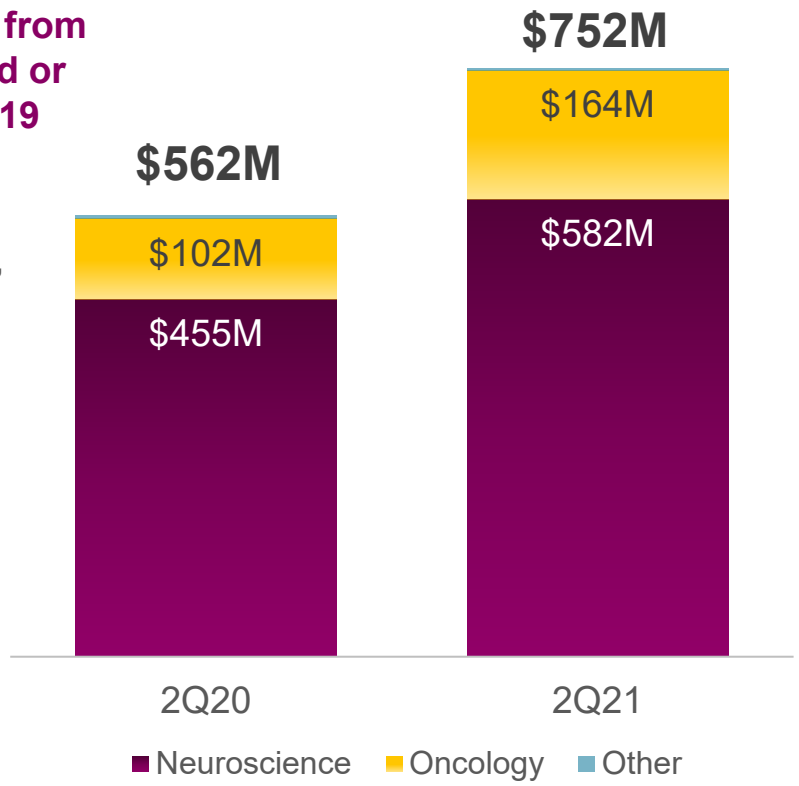
Financial Performance

Strong 2Q21 Performance, Driven by Products Launched or Acquired Since 2019[1, 2]

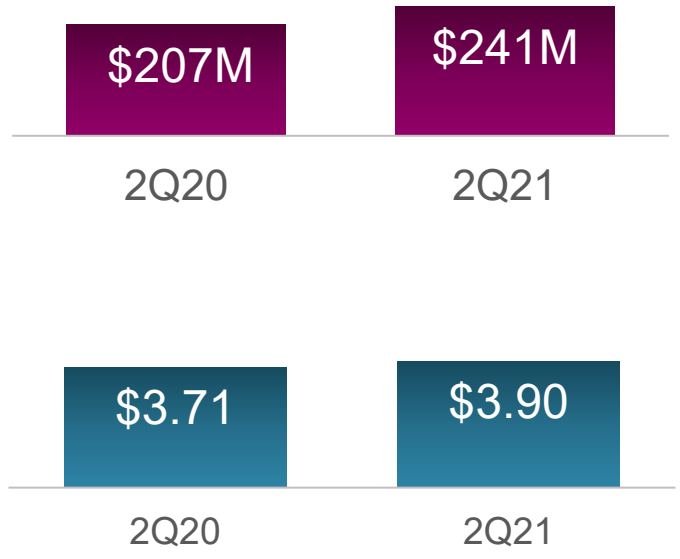
41% **net product sales from products launched or acquired since 2019**

- Significant adoption of Xywav, driving durable and growing revenues
- Addition of Epidiolex contributed to strong year-over-year quarter revenue

TOTAL REVENUES Increased 34% vs 2Q20



NON-GAAP ANI (absolute, and per-share)



1. Xywav, Zepzelca, Epidiolex, Sunosi, Sativex; 2. Reconciliations of GAAP net income to non-GAAP adjusted net income can be found in the Appendix at the end of this presentation

Goals

Aligned to Patient-Centric Strategy and Key Objectives

ROBUST AND PRODUCTIVE PIPELINE

Key Pipeline Milestones

- Initiate registrational trial of Epidiolex in EMAS in 1H22
- Initiate Phase 3 trial of Zepzelca in combo with I/O in 1L SCLC in 2021
- Initiate Phase 2b trial of JZP385 in ET in late 2021
- Initiate Phase 2 trial for JZP150 in PTSD in late 2021
- GW cannabinoid platform expands R&D opportunities

CONTINUED COMMERCIAL EXECUTION EXCELLENCE

Targeted launches

- Rylaze launched in July 2021
- Xywav in IH 4Q21[1]

Continue to focus on

- Rapid U.S. adoption and broad access for Xywav
- Driving Zepzelca as the treatment of choice for 2L SCLC patients

PATIENT-CENTRIC INNOVATION DRIVES OUR STRATEGY

Innovate to transform the lives of patients

- Expand our pipeline and diversify revenues through acquisitions, collaborations and internal initiatives
- Build a high value portfolio of assets through disciplined portfolio management and capital allocation

2021

5 key launches through 2020 and 2021

2022

>65% of net product sales from products launched or acquired since 2019

2023

Majority of all oxybate patients on Xywav

1. Pending FDA approval

APPENDIX

Jazz Pharmaceuticals®

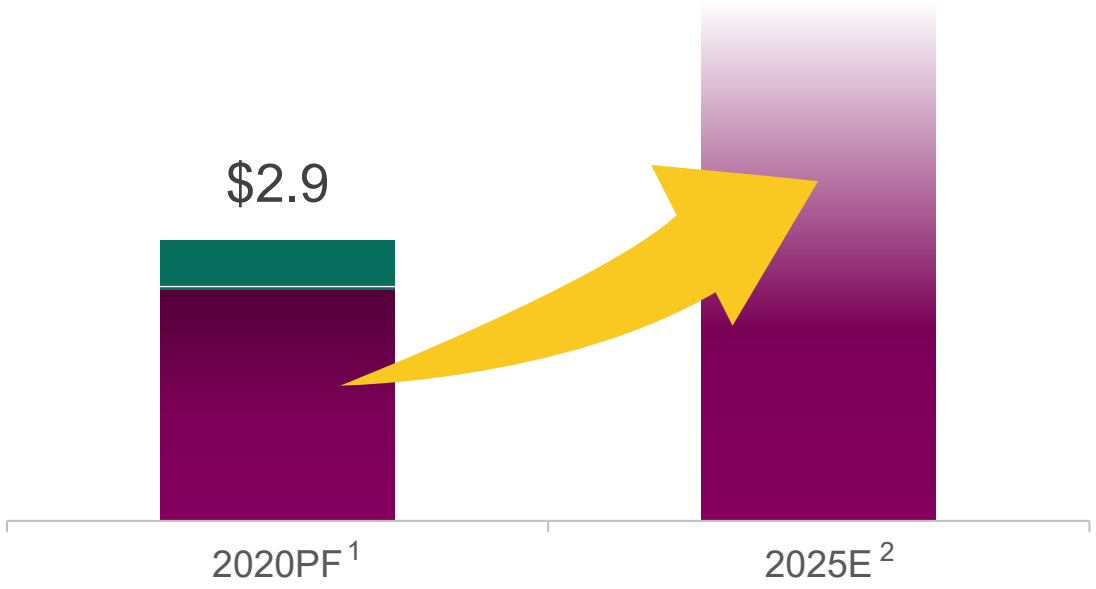
Delivering Meaningful Shareholder Value

- Patient-Centric Innovation to Drive Our Strategy
- Experienced Leadership Team to Execute on Strategy and Deliver Value
- Strong Financial and Operational Track Record Generating >$3B in Annual Revenue
- High Value Neuroscience and Oncology Products Poised for Continued Growth and Diversification
- Global Commercial Footprint and Operations to Rapidly Advance and Scale Products
- Robust and Productive Development Pipeline Designed for Sustainable Growth
- Strong Balance Sheet and Cash Flow to Enable Strategic and Disciplined Capital Deployment
- Multiple Important Catalysts in 2020–2021 Providing Foundation for Transformative Growth

GW Transaction Accelerates Growth and Enhances Diversification

INCREASED SCALE

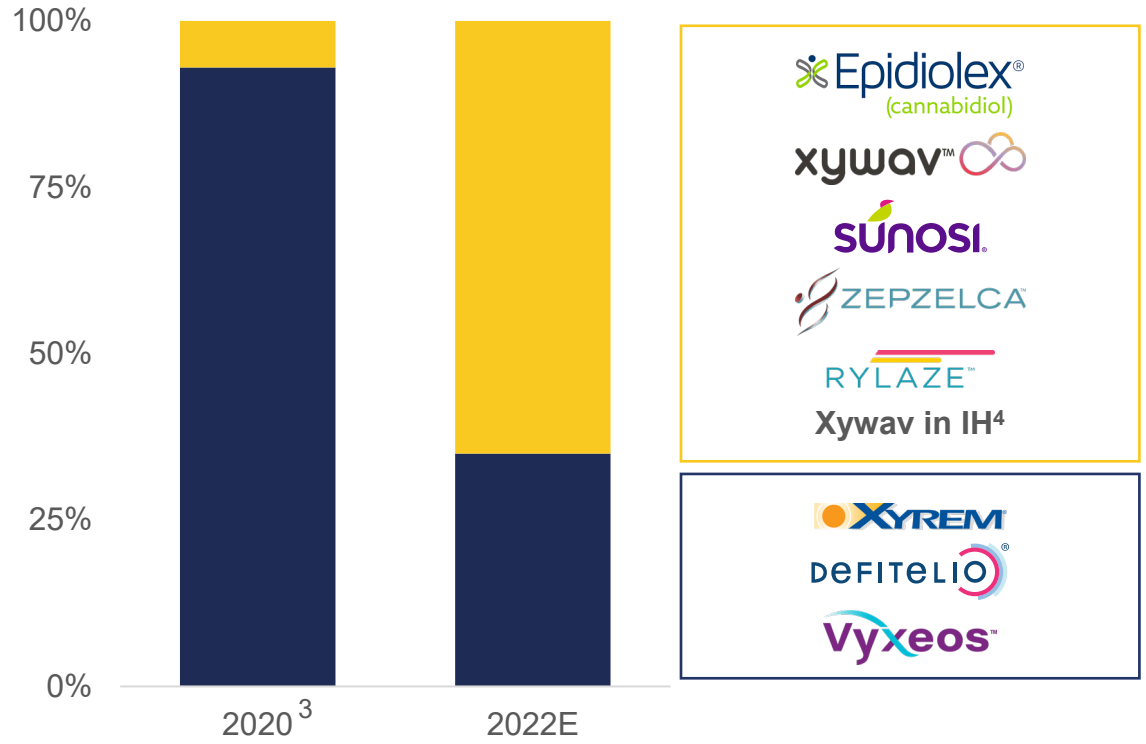
Total revenue ($B)



Accelerated, Double-Digit Top Line Revenue Growth

IMMEDIATE, ENHANCED DIVERSIFICATION

Revenue contribution



Products Acquired or Launched Since 2019 Expected to Contribute >65% of Net Product Sales in 2022

1. 2020 pro forma = Jazz actual + GW actual; 2. For illustrative purposes only; 3. 2020 revenues include Erwinaze; 4. Pending FDA approval

Robust and Productive Pipeline for Sustainable Growth

Targeted Investments Designed to Fuel Growth Through 2025 and Beyond

PRE-CLINICAL

Undisclosed targets
Neuroscience

CombiPlex
Exploratory activities

JZP341
(Long-acting *Erwinia* asparaginase)[1]
ALL/other hematological malignancies

Pan-Raf Inhibitor Program
Raf & Ras mutant tumors

Undisclosed targets
Ras/Raf/MAP kinase pathway[1]

Exosome targets (NRAS and 3 others)[1]
Hematological malignancies/solid tumors

Defibrotide
Exploratory activities

Undisclosed targets
Cannabinoids

PHASE 1

JZP324
Oxybate extended-release formulation

Vyxeos
Low Intensity Dosing for higher risk MDS[2]

Vyxeos + other approved therapies
- R/R AML or HMA Failure MDS[2]
- First-line, fit AML (Phase 1b)
- Low Intensity Therapy for first-line, unfit AML (Phase 1b)

Additional Cannabinoids
Neonatal hypoxic-ischemic encephalopathy

Additional Cannabinoids
Neuropsychiatry targets

PHASE 2

JZP385[3]
Essential tremor

JZP150[3]
PTSD

Zepzelca[3]
Basket trial: advanced urothelial cancer, large cell neuroendocrine tumor of the lung, HRD+ cancers

Vyxeos
- HR-MDS (EMSCO)[4]
- Newly diagnosed older adults with HR-AML[3,4]

Vyxeos + venetoclax
de novo or R/R AML[2]

Nabiximols[3]
PTSD

Additional Cannabinoids
Schizophrenia

Additional Cannabinoids
Autism spectrum disorders

PHASE 3

Zepzelca
1L treatment SCLC in combination with I/O agent[3]

Vyxeos
- AML or HR-MDS >60yrs (AML18)[4]
- AML or HR-MDS >18yrs (AML19)[4]
- Newly diagnosed adults with standard- and HR-AML (AMLSG)[4]
- Newly diagnosed <22 yrs with AML (COG)[4]

Epidiolex[3]
EMAS

Nabiximols
MS spasticity

Nabiximols[3]
Spinal cord injury spasticity

REGULATORY

JZP258 (Xywav)[5]
Idiopathic hypersomnia

JZP458 (Rylaze)[6]
(recombinant *Erwinia* asparaginase)
ALL/LBL

Neuroscience
Oncology
Cannabinoids

1. Partnered collaboration; 2. Jazz & MD Anderson Cancer Center collaboration study; 3. Planned; 4. Cooperative group study;
5. Pending FDA approval; 6. FDA approval on June 30, 2021; plan to submit additional data to support U.S. label update

Reconciliation of GAAP Reported to Non-GAAP Adjusted Net Income

In millions, except per share amounts (unaudited)	**2Q21**	**2Q20**
GAAP reported net income (loss)	**$(363.3)**	**$114.8**
Intangible asset amortization	140.5	63.0
Share-based compensation expense	43.4	30.6
Transaction and integration related expenses[1]	133.3	-
Non-cash interest expense[2]	22.3	17.3
Acquisition accounting inventory fair value step-up	66.0	-
Income tax effect of above adjustments	(53.0)	(18.3)
Impact of U.K. tax rate change[3]	251.4	-
Non-GAAP adjusted net income	**$240.6**	**$207.3**
GAAP reported net income (loss) per diluted share	**$(6.11)**	**$2.06**
Non-GAAP adjusted net income per diluted share	$3.90	$3.71
Weighted-average ordinary shares used in diluted per share calculations – GAAP	59.4	55.9
Weighted-average ordinary shares used in diluted per share calculations – Non-GAAP	61.7	55.9

1. Transaction and integration related expenses related to the GW Acquisition; 2. Non-cash interest expense associated with debt discount and debt issuance costs; 3. Expense arising on the remeasurement of our U.K. net deferred tax liability, which arose primarily in relation to the GW Acquisition, due to a change in the statutory tax rate in the U.K. following enactment of the UK Finance Act 2021

Glossary of Terms

1L / 2L = 1st Line / 2nd Line
ALL = Acute Lymphoblastic Leukemia
AML (-MRC)= Acute Myeloid Leukemia (- Myelodysplasia-related Changes)
AMLSG = AML Study Group
ANI = Adjusted Net Income
COG = The Children's Oncology Group
EDS = Excessive Daytime Sleepiness
EMSCO = European Myelodysplastic Syndromes Cooperative Group
EMAS = Epilepsy with Myoclonic-Atonic Seizures
EPS = Earnings Per Share
ES-SCLC = Extensive Stage Small Cell Lung Cancer
ET = Essential Tremor
FDA = U.S. Food and Drug Administration
GW = GW Pharmaceuticals plc
HCP = Healthcare Professional
HMA = Hypomethylating Agent
HR-AML = High-Risk AML
HR-MDS = High-Risk MDS
HRD = Homologous Recombination Deficiency
IH = Idiopathic Hypersomnia
I/O = Immuno-Oncology
IV = Intravenous
LBL = Lymphoblastic Lymphoma
MDS = Myelodysplastic Syndrome
MS = Multiple Sclerosis
ODE = Orphan Drug Exclusivity
Oxybate = (Xyrem and Xywav)
PF = Pro-forma
PDUFA = The Prescription Drug User Fee Act
PharmaMar = Pharma Mar, S.A.
PTSD = Post-Traumatic Stress Disorder
R&D = Research & Development
Roche = F. Hoffman-La Roche Ltd.
R/R = Relapsed/Refractory
REMS = Risk Evaluation and Mitigation Strategies
RTOR = Real Time Oncology Review
SCLC = Small Cell Lung Cancer