



Fourth Quarter and Full Year 2018
Earnings Call
February 4, 2019



4Q and 2018 Earnings Call Agenda

Introduction	Susan Altschuller, Ph.D., Vice President, Investor Relations
CEO Opening Remarks	Ludwig Hantson, Ph.D., Chief Executive Officer
Financial Update	Paul Clancy, Chief Financial Officer
R&D Highlights	John Orloff, M.D., Head of R&D
Commercial Highlights	Brian Goff, Chief Commercial Officer
CEO Closing Remarks	Ludwig Hantson, Ph.D., Chief Executive Officer
Q&A	All

Forward-Looking Statements

This presentation contains forward-looking statements, including statements related to: guidance regarding anticipated financial results for 2019 (and all of the assumptions and estimates related to such guidance); ambition to continue to deliver double-digit revenue growth; investments will drive revenue growth; Alexion's strong foundation will deliver continued growth; each of the Company's 2019 key objectives (including goals for converting PNH patients to Ultomiris); Company's plans to initiate proof-of-concept studies in ALS and PPMS; the goal of building out the clinical pipeline; the expected benefits of the Four Pillars of growth; the Company is building durable, blockbuster franchises in PNH/aHUS, metabolics, neurology and FcRn; products and product candidates are potential growth drivers; anticipated developments and advancements in the products in the Company's pipeline (including subcutaneous formulations of certain products) and for new products to enter the product pipeline; plans to make future regulatory filings for approval of certain of our products, including eculizumab and ALXN1210, and the expected timing of such filings (as well as the expected timing of the receipt of certain regulatory approvals to market a product); Company's plans for future clinical trials, the timing for the commencement of future clinical trials and the expected timing of the receipt of results of certain clinical trials and studies; potential benefits of current products and products under development and in clinical trials (including further extended dosing intervals); potential transformative impact of certain products and pipeline products; there is a growing set of patients for certain of our products (and our Mg portfolio is growing); certain products have the potential to be the new standard of care for certain indications; anticipated timing of product launches; ambitions to increase customer base; future growth in gMG and other potential neurological indications; growth potential for each of our products and product candidates; future growth in gMG patients; and Alexion's future clinical, regulatory, and commercial plans for Ultomiris and other product candidates. Forward-looking statements are subject to factors that may cause Alexion's results and plans to differ materially from those forward-looking statements, including for example: our dependence on sales from our principal product (SOLIRIS); our ability to facilitate the timely conversion of PNH patients (and any future indications) from Soliris to Ultomiris; payer, physician and patient acceptance of Ultomiris as an alternative to Soliris; appropriate pricing for Ultomiris; future competition from biosimilars and novel products; decisions of regulatory authorities regarding the adequacy of our research, marketing approval or material limitations on the marketing of our products; delays or failure of product candidates to obtain regulatory approval; delays or the inability to launch product candidates due to regulatory restrictions, anticipated expense or other matters; interruptions or failures in the manufacture and supply of our products and our product candidates; failure to satisfactorily address matters raised by the FDA and other regulatory agencies; results in early stage clinical trials may not be indicative of full results or results from later stage or larger clinical trials (or broader patient populations) and do not ensure regulatory approval; the possibility that results of clinical trials are not predictive of safety and efficacy and potency of our products (or we fail to adequately operate or manage our clinical trials) which could cause us to halt trials, delay or prevent us from making regulatory approval filings or result in denial of approval of our product candidates; unexpected delays in clinical trials; unexpected concerns that may arise from additional data or analysis obtained during clinical trials; future product improvements may not be realized due to expense or feasibility or other factors; uncertainty of long-term success in developing, licensing or acquiring other product candidates or additional indications for existing products; inability to complete acquisitions or grow the product pipeline through acquisitions; the possibility that current rates of adoption of our products are not sustained; the adequacy of our pharmacovigilance and drug safety reporting processes; failure to protect and enforce our data, intellectual property and proprietary rights and the risks and uncertainties relating to intellectual property claims, lawsuits and challenges against us; the risk that third party payors (including governmental agencies) will not reimburse or continue to reimburse for the use of our products at acceptable rates or at all; failure to realize the benefits and potential of investments, collaborations, licenses and acquisitions; the possibility that expected tax benefits will not be realized; potential declines in sovereign credit ratings or sovereign defaults in countries where we sell our products; delay of collection or reduction in reimbursement due to adverse economic conditions or changes in government and private insurer regulations and approaches to reimbursement; uncertainties surrounding legal proceedings, company investigations and government investigations, including investigations of Alexion by the U.S. Securities and Exchange Commission (SEC) and U.S. Department of Justice; the risk that estimates regarding the number of patients with PNH, aHUS, gMG, HPP and LAL-D and other future indications we are pursuing are inaccurate; the risks of changing foreign exchange rates; risks relating to the potential effects of the Company's restructuring; risks related to the acquisition of Syntimmune and other companies and co-development efforts; and a variety of other risks set forth from time to time in Alexion's filings with the SEC, including but not limited to the risks discussed in Alexion's Quarterly Report on Form 10-Q for the period ended September 30, 2018 and in our other filings with the SEC. Alexion disclaims any obligation to update any of these forward-looking statements to reflect events or circumstances after the date hereof, except when a duty arises under law.

In addition to financial information prepared in accordance with GAAP, this presentation also contains non-GAAP financial measures that Alexion believes, when considered together with the GAAP information, provide investors and management with supplemental information relating to performance, trends and prospects that promote a more complete understanding of our operating results and financial position during different periods. The non-GAAP results exclude the impact of the following GAAP items: share-based compensation expense, fair value adjustment of inventory acquired, amortization of purchased intangible assets, changes in fair value of contingent consideration, restructuring and related expenses, upfront payments related to licenses and collaborations, acquired in-process research and development assets, impairment of intangible assets, change in value of strategic equity investments, litigation charges, gain or loss on sale of a business or asset and certain adjustments to income tax expense. These non-GAAP financial measures are not intended to be considered in isolation or as a substitute for, or superior to, the financial measures prepared and presented in accordance with GAAP, and should be reviewed in conjunction with the relevant GAAP financial measures. Please refer to the attached Reconciliations of GAAP to non-GAAP 2018 Financial Results and GAAP to non-GAAP 2019 Financial Guidance for explanations of the amounts adjusted to arrive at non-GAAP net income and non-GAAP earnings per share amounts for the three and twelve month periods ended December 31, 2018 and 2017 and projected twelve months ending December 31, 2019.

Amounts may not foot due to rounding.



CEO Opening Remarks

Ludwig Hantson, Ph.D.
Chief Executive Officer

Delivered on 2018 Key Objectives

- 1 Grow In-Line Business**
 - ✓ Strong top-line execution in complement and metabolic portfolios
 - ✓ Full Year Total Revenues: \$4.13B; +16% Revenue Growth and 20% Volume Growth vs 2017
- 2 Drive SOLIRIS® Launch in gMG**
 - ✓ Best Alexion launch with SOLIRIS® in gMG
 - ✓ 788 patients on therapy in the US as of December 31, 2018
 - ✓ Continued neurology investments to further accelerate revenue growth
- 3 Extend Complement Leadership with ULTOMIRIS™ (ALXN1210)**
 - ✓ Positive Phase 3 results in PNH naïve and switch patients
 - ✓ Early FDA approval for PNH in December 2018, filings accepted for PNH in EU and Japan
 - ✓ Positive Phase 3 results in aHUS
 - ✓ Enrolling and dosing patients in Phase 3 once-weekly subcutaneous bridging study
- 4 Advance and Rebuild the Pipeline**
 - ✓ Filed for approval for SOLIRIS® in NMOSD in US and EU
 - ✓ Acquired two clinical stage assets and announced two complement research collaborations
 - ✓ Initiated Phase 1 study for ALXN1810* with potential for Q2W or Q4W subcutaneous dosing
- 5 Delivered on Financial Ambitions**
 - ✓ Double-digit revenue and non-GAAP EPS growth
 - ✓ Non-GAAP operating margin exceeded 50%

4Q and 2018 Key Performance Metrics

4Q18 Financial Performance

\$1,129M

Total Revenue

24%

Revenue Growth

30%

Volume Growth

\$(0.20)

GAAP⁽¹⁾ EPS

\$2.14

Non-GAAP⁽¹⁾ EPS

2018 Financial Performance

\$4,131M

Total Revenue

16%

Revenue Growth

20%

Volume Growth

\$0.35

GAAP⁽¹⁾ EPS

\$7.92

Non-GAAP⁽¹⁾ EPS

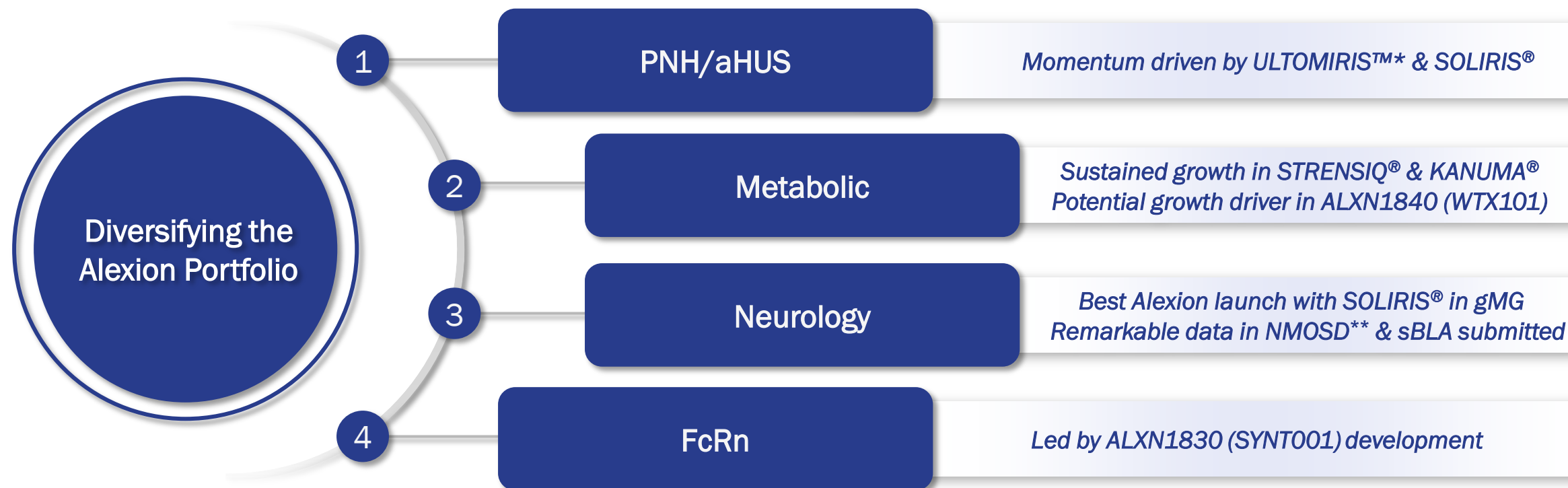
⁽¹⁾ A reconciliation of our GAAP to non-GAAP financial results is set forth in our fourth quarter 2018 financial results issued February 4, 2019 and is available at www.alexion.com.

Provided February 4, 2019, as part of an oral presentation and is qualified by such, contains forward-looking statements, actual results may vary materially; Alexion disclaims any duty to update.

Our 2019 Key Objectives

- 1 ULTOMIRIS™ Conversion in PNH; ALXN1210 aHUS filing
- 2 Accelerate Neurology Portfolio
- 3 Grow our Metabolic Portfolio
- 4 Execute and Expand the Pipeline
- 5 Deliver on Financial Ambitions

Building Four Durable, Growing Blockbuster Franchises



Financial Ambition to Continue to Deliver Double-Digit Revenue Growth

*Currently approved for adult PNH patients in the US

**Neuromyelitis Optica Spectrum Disorder

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Financial Update

Paul Clancy
Chief Financial Officer

Fourth Quarter 2018 Key Performance Metrics

Total Revenues **\$1.129B** **↑** **+24%** **vs 4Q17**

- SOLIRIS® sales grew 23% driven by 28% increase in volume, including contribution from gMG
- Metabolic sales grew 29% driven by 45% increase in volume
- Favorably impacted by ~\$17M of tender orders from certain non-US markets

GAAP⁽¹⁾ Operating Margin **4%** **↓** **-807bps** **vs 4Q17**

- GAAP operating margin includes \$379M IPR&D expense in connection with the Syntimmune asset acquisition

Non-GAAP⁽¹⁾ Operating Margin **53%** **↑** **+826 bps** **vs 4Q17**

- Delivered +826 bps non-GAAP operating margin improvement

GAAP⁽¹⁾ EPS **\$(0.20)** **↓** **-254%** **vs 4Q17**

- 4Q18 GAAP EPS includes \$379M IPR&D expense in connection with the Syntimmune asset acquisition. 4Q17 GAAP EPS includes \$95M in restructuring and related expenses

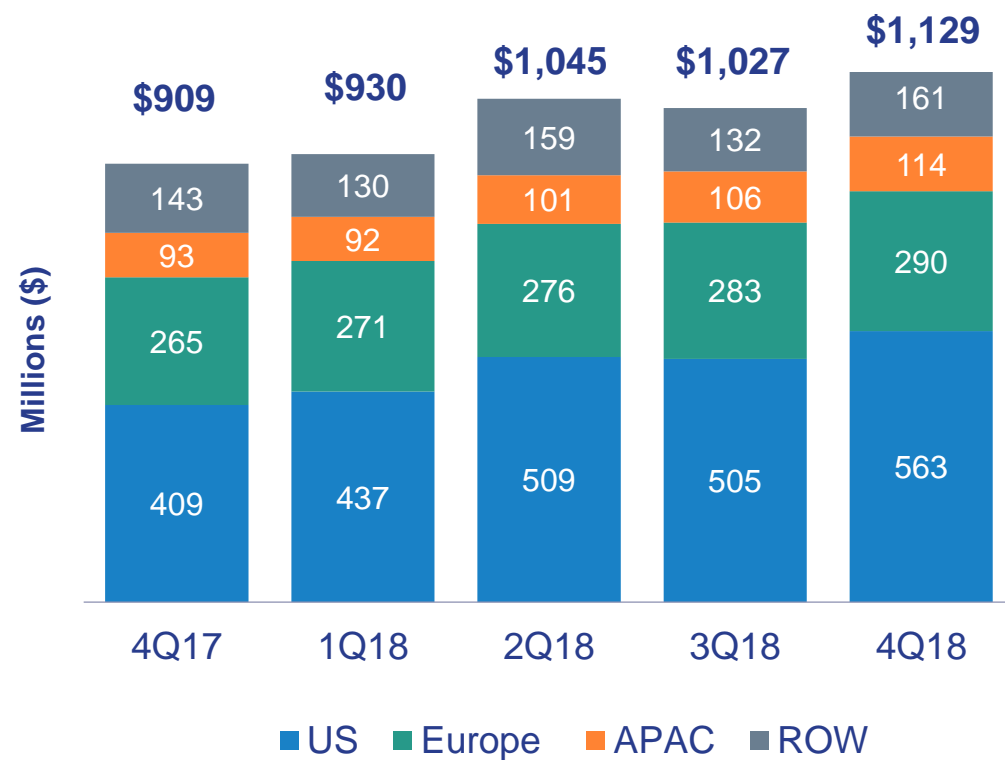
Non-GAAP⁽¹⁾ EPS **\$2.14** **↑** **+45%** **vs 4Q17**

- Non-GAAP EPS growth of 45% driven by topline growth and strong operating expense control

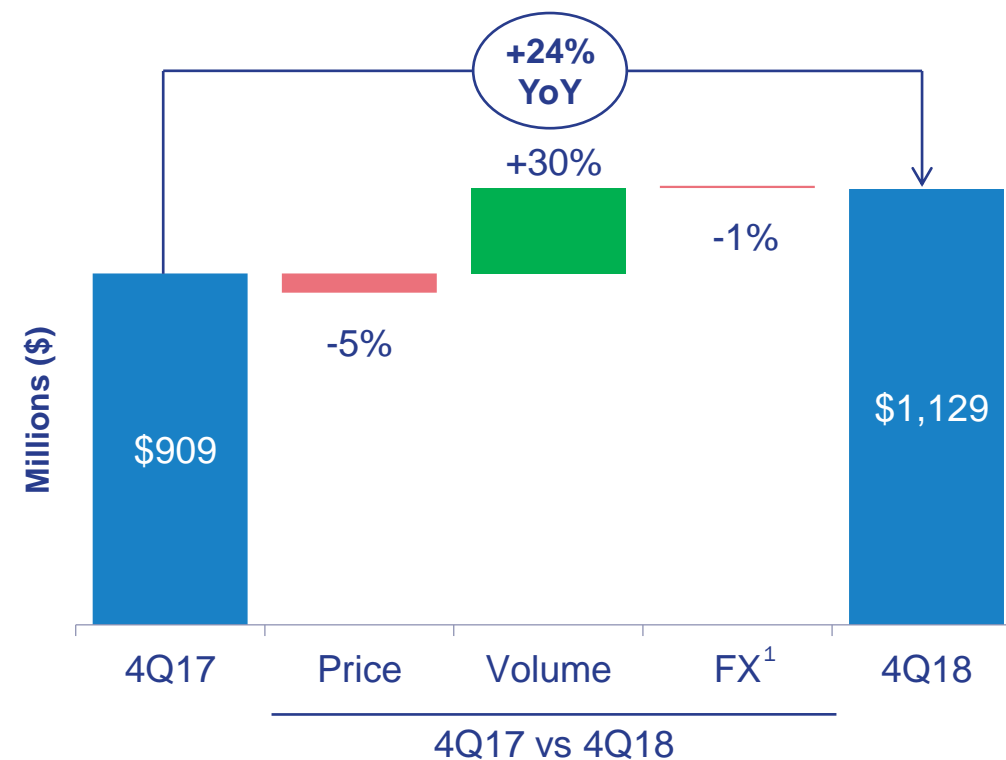
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4Q18 Net Product Sales

Net Product Sales by Geography



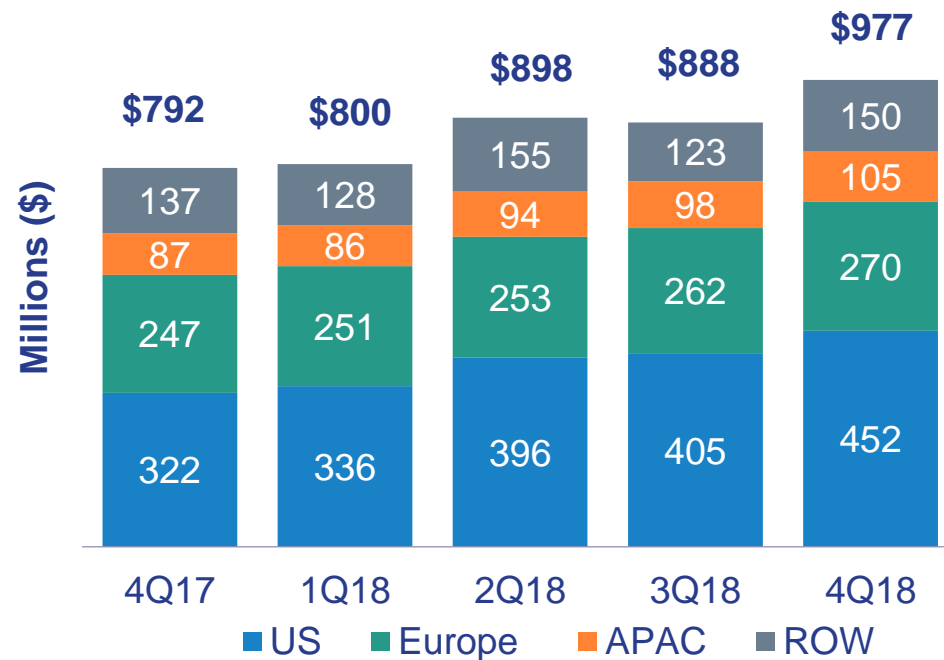
4Q18 Net Product Sales Analysis



¹ Net of hedging activities

SOLIRIS® Net Product Sales

SOLIRIS® Net Product Sales

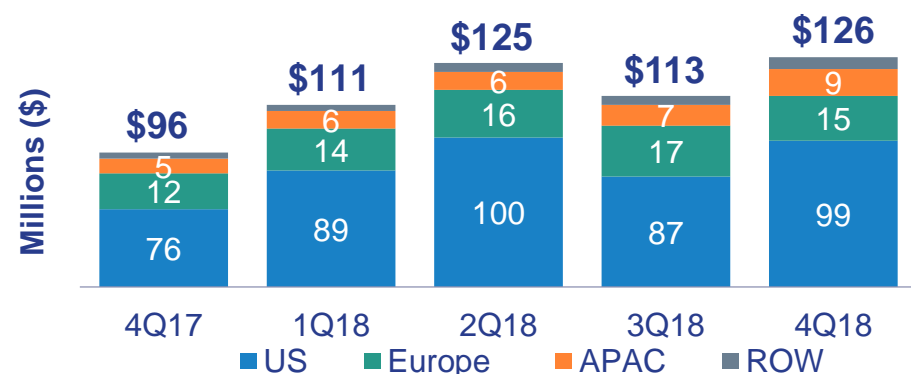


4Q18 Highlights

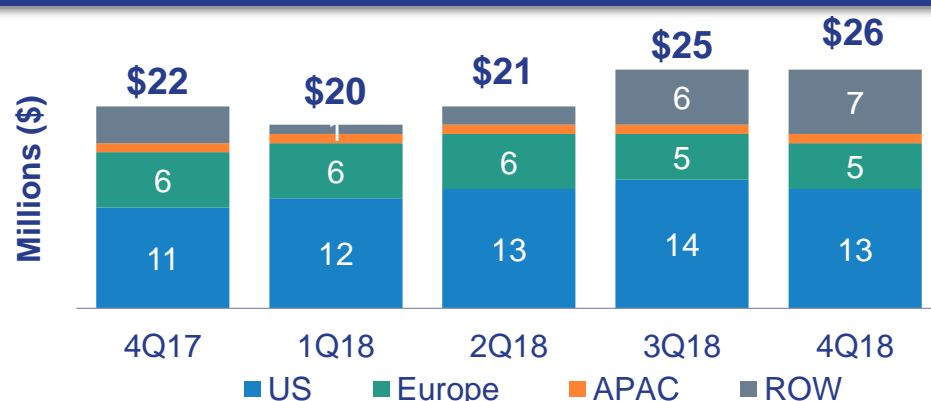
- +23% YoY revenue growth; +28% YoY volume growth
- Contribution from gMG continued to increase
- Strong growth in the US and Japan
- Favorably impacted by ~\$13M of tender orders from certain non-US markets compared to 4Q17

Metabolic Franchise Net Product Sales

STRENSIQ® Net Product Sales



KANUMA® Net Product Sales



4Q18 Highlights

STRENSIQ®

- +32% YoY revenue growth
 - +43% YoY volume growth
- Continued growth in US and Germany

KANUMA®

- +17% YoY revenue growth
 - +51% YoY volume growth
- Favorably impacted by ~\$3M of tender orders from certain non-US markets compared to 4Q17

4Q 2018 Financial Performance

\$ Millions, Except EPS	4Q '18		4Q '17		Δ Non-GAAP (1)
	GAAP (1)	Non-GAAP (1)	GAAP (1)	Non-GAAP (1)	
Total Revenue	\$1,129	\$1,129	\$910	\$910	+24%
SOLIRIS® Revenue	\$977	\$977	\$792	\$792	+23%
STRENSIQ® Revenue	\$126	\$126	\$96	\$96	+32%
KANUMA® Revenue	\$26	\$26	\$22	\$22	+17%
COGS <i>% of Total Revenue</i>	\$97 9%	\$93 8%	\$145 16%	\$73 8%	+27 bps
R&D <i>% of Total Revenue</i>	\$206 18%	\$164 15%	\$265 29%	\$189 21%	-620 bps
SG&A <i>% of Total Revenue</i>	\$319 28%	\$278 25%	\$296 33%	\$245 27%	-233 bps
Restructuring and Related Expenses	\$1	-	\$95	-	-
Acquired IPR&D	\$379	-	-	-	-
Operating Income	\$44	\$594	\$109	\$403	+47%
Operating Margin	4%	53%	12%	44%	+826 bps
Effective Tax Rate	(37%)	15%	66%	12%	+322 bps
Earnings (loss) Per Share	\$(0.20)	\$2.14	\$0.13	\$1.48	+45%

(1) A reconciliation of GAAP to non-GAAP financial results is set forth in our fourth quarter 2018 financial results issued February 4, 2019.

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FY2019 Outlook

\$ Millions, Except EPS	2019 Financial Guidance ⁽¹⁾⁽²⁾	YoY Growth ⁽²⁾
Total Revenue	\$4,625 to \$4,700	+13%
SOLIRIS®/ULTOMIRIS™	\$3,970 to \$4,020	+12%
Metabolic	\$655 to \$680	+18%
R&D (% of Total Revenue)		
GAAP	17% to 18%	-18 bps
Non-GAAP	16% to 17%	+86 bps
SG&A (% of Total Revenue)		
GAAP	23% to 24%	-341 bps
Non-GAAP	20% to 21%	-258 bps
Operating Margin		
GAAP	36% to 43%	+3,297 bps
Non-GAAP	54% to 55%	+175 bps
Earnings Per Share		
GAAP	\$6.14 to \$7.26	1,814%
Non-GAAP	\$9.10 to \$9.30	+16%

Key Assumptions

- **SOLIRIS®/ULTOMIRIS™**: Continued strength in gMG, ULTOMIRIS™ conversion, and modest contribution from potential SOLIRIS® launch in NMOSD
- **Metabolics**: Strong STRENSIQ® growth
- **Pricing**: Headwind of ~2%
- **FX**: Headwind of ~\$60 million
- **R&D/SG&A**:
 - R&D spend to increase with expansion of pipeline
 - Selling spend to increase with launch execution; offset by G&A efficiencies

Mid-point of Guidance: Revenue +13%, Non-GAAP Operating Profit +17%, Non-GAAP EPS +16%

⁽¹⁾ Alexion's financial guidance is based on current foreign exchange rates net of hedging activities and does not include the effect of acquisitions, license and collaboration agreements, intangible asset impairments, litigation charges, changes in fair value of contingent consideration or restructuring and related activity outside the previously announced activities that may occur after the issuance of this presentation.

⁽²⁾ A reconciliation of GAAP to non-GAAP financial guidance is set forth in our fourth quarter 2018 financial results issued February 4, 2019 and is available at www.alexion.com. YoY growth uses the mid-point of the guidance range.

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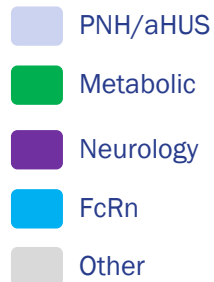
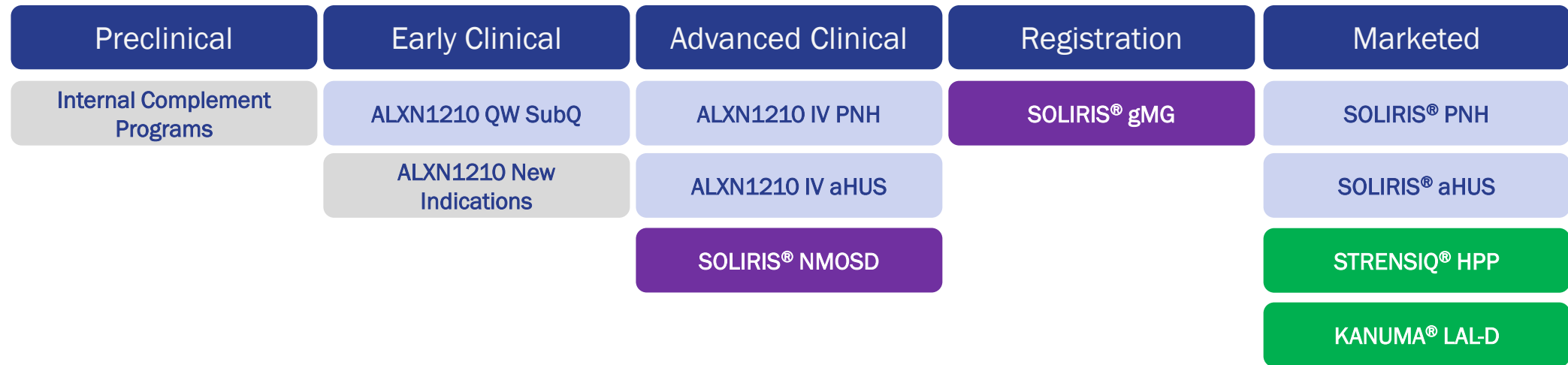


R&D Highlights

John Orloff, M.D.

Head of R&D

We Ended 2017 with a Prioritized Pipeline and a Mission to Grow and Diversify...



...Now in 2019, We Have a Robust Pipeline of Internal, In-licensed and Recently Acquired Programs

Preclinical	Early Clinical	Advanced Clinical	Registration	Marketed
Complement Pharma	ALXN1810 SubQ	ALXN1210 QW SubQ		ULTOMIRIS IV PNH*
Dicerna	CAEL-101	ALXN1210 IV aHUS	SOLIRIS® NMOSD	SOLIRIS® PNH
Internal Complement Programs	ALXN1830 (SYNT001) PV/PF	ALXN1210 High Concentration		SOLIRIS® aHUS
	ALXN1830 (SYNT001) Dose Optimization	ALXN1210 IV gMG		SOLIRIS® gMG
	ALXN1830 (SYNT001) WAIHA	ALXN1210 IV NMOSD		STRENSIQ® HPP
	ALXN1210 IV PPMS	ALXN1830 (SYNT001) gMG		KANUMA® LAL-D
	ALXN1210 IV ALS	ALXN1840 (WTX101) Wilson Disease		
		ALXN1830 (SYNT001) WAIHA		

	PNH/aHUS
	Metabolic
	Neurology
	FcRn
	Other

Italicized = plan to initiate in 2019

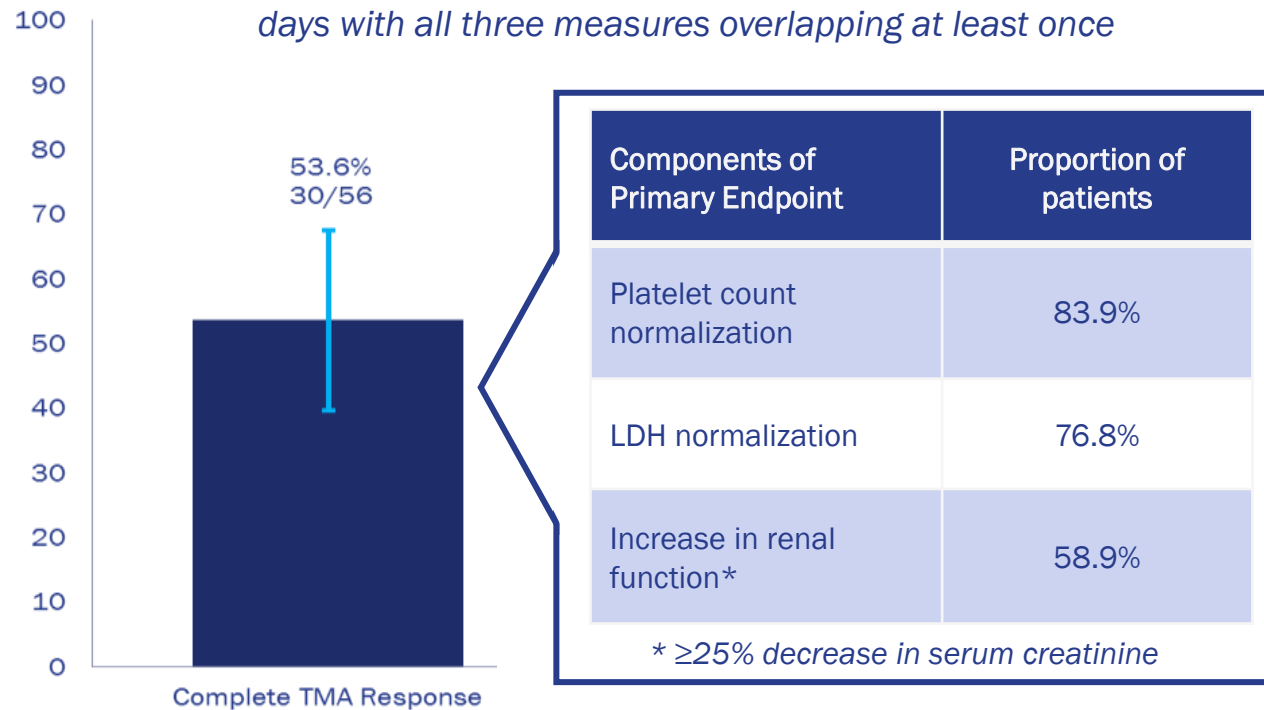
*Currently approved for adult PNH patients in the US; regulatory filings under review in EU and Japan

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ALXN1210 Achieved Primary Endpoint of Complete TMA Response in Complement-naïve aHUS Patients

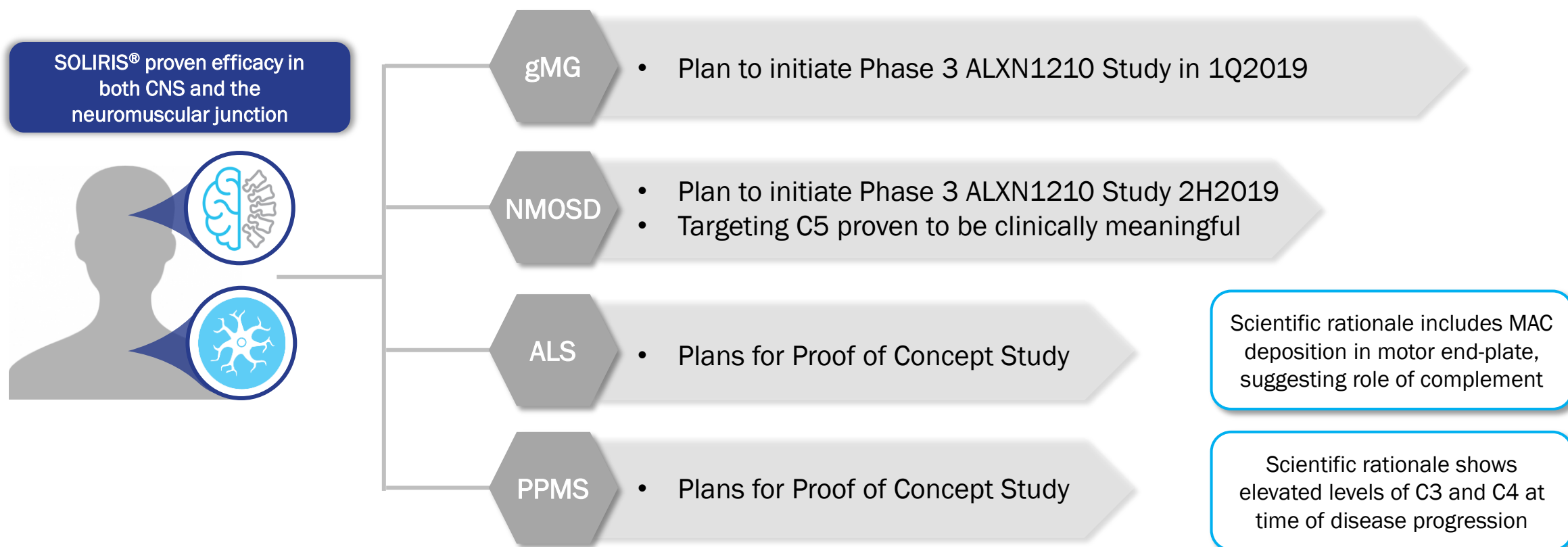
Positive results consistent with our expectations; working towards regulatory filings in the US, EU and Japan

In order to count as a complete TMA response, patients needed to achieve each laboratory measure for 28 consecutive days with all three measures overlapping at least once



- ALXN1210 was evaluated in a single-arm estimation trial with duration of 26 weeks, followed by 2 year extension
- During initial evaluation period:
 - 73% of patients achieved hematologic normalization
 - 71% of patients achieved hemoglobin response
- 59% (17/29) of patients on dialysis at baseline were weaned off by last available follow-up
- Safety consistent with that observed in 301 and 302 Phase 3 PNH trials
- Plan to submit regulatory filings for approval in the US in 1H19, followed by the EU and Japan

Advancing Our Neurology Strategy with ALXN1210



Providing Optionality for Patients with Development of Subcutaneous ALXN1210 Delivery

Advancing our ALXN1830 FcRn Program into WAIHA and gMG

ALXN1830 Unique Product Positioning

- High specificity to IgG
- No reduction in albumin observed
- Rapid onset of action in early studies
- Expertise in rare hematology and neurology diseases

ALXN1830 Dose Optimization



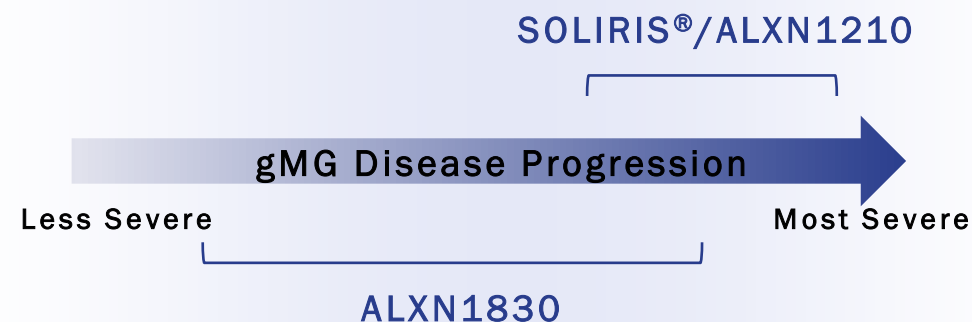
Anticipate Q2W IV Dosing in Phase 3 Studies



Plan to pursue subcutaneous formulation

ALXN1830 remains the first and only anti-FcRn in development for warm autoimmune hemolytic anemia (WAIHA)

ALXN1830 to Expand Alexion Treatment Options for Patients with gMG



- Established proof-of-concept for anti-FcRn mechanism in gMG
- Aligned with broader company development efforts in Neurology
- Opportunity to leverage gMG development, regulatory and commercial expertise in potential earlier-line therapy

Caelum Collaboration: CAEL-101, Clinical Stage Hematology Asset for the Treatment of AL Amyloidosis

Strong Start to Business Development in 2019

CAEL-101: A Chimeric mAb specific to kappa and lambda light chains

- CAEL-101 has shown potential to eliminate existing light chain and amyloid fibrils that may infiltrate organs
- CAEL-101 demonstrated 36% improvement in mean NT-ProBNP levels after 4 weeks
- Believed to affect over 20k patients in the US and EU5
- Median survival time of less than 18 months following diagnosis

Amyloid Light Chain (AL) Amyloidosis

Characterized by overproduction of misfolded monoclonal light chain which can lead to organ failure



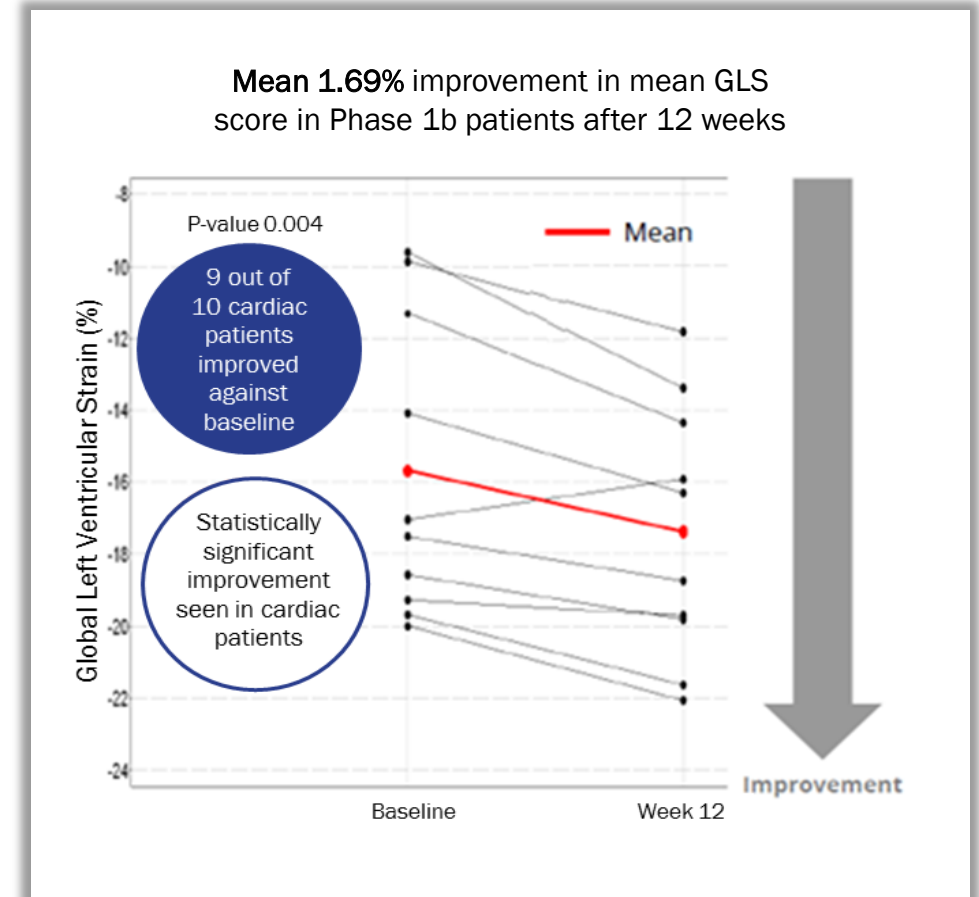
Protracted diagnosis; often coincides with organ failure including kidney and heart



Standard of care includes chemotherapy or ASCT* which does not restore organ function



Up to 80% of patients are ineligible for ASCT
40% of patients die within 1 yr of diagnosis



*Autologous Stem Cell Transplant

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Commercial Highlights

Brian Goff

Chief Commercial Officer

Building Momentum in ULTOMIRIS™ PNH Launch

Ingredients for Conversion

Launch Readiness

- Over 11 years of experience in PNH with a dedicated team
- Launch excellence from SOLIRIS® in gMG
- ULTOMIRIS REMs E-certification is in place

Clinical Profile

- Rapid, Sustained LDH Normalization
- Low incidence of Breakthrough Hemolysis
- Ability to safely switch from SOLIRIS®
- Every 8 week IV dosing preferred

Early Indicators of Success



~5% of SOLIRIS® PNH patients enrolled in OneSource™ for ULTOMIRIS*

~Half of these patients already treated with ULTOMIRIS*

Conversion Goal of >70% in First Two Years of Launch in US

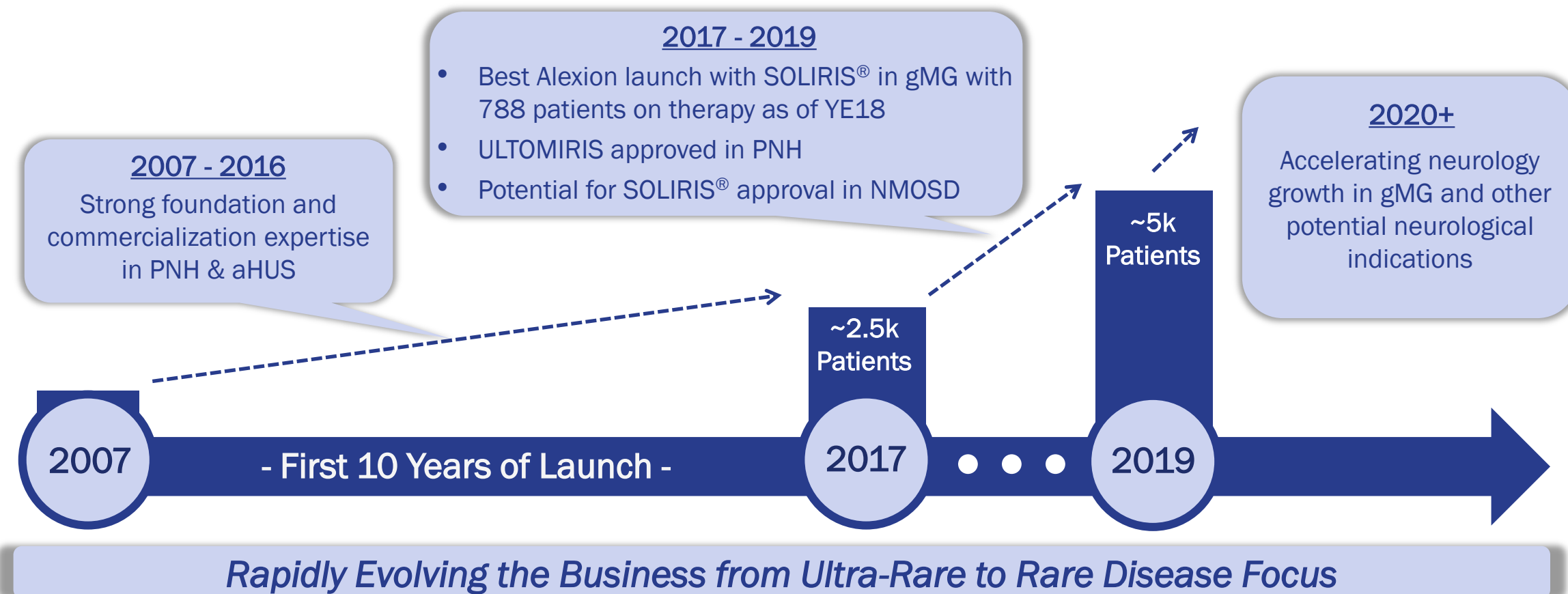
* as of Jan 31, 2019

ALEXION® 24

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Continuing to Expand SOLIRIS® & ULTOMIRIS™ Addressable Patient Populations

Patient Growth in the US

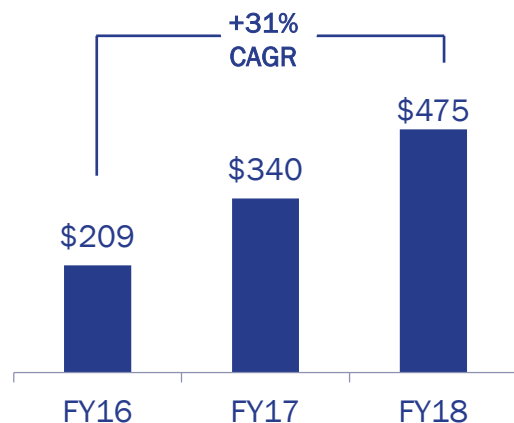


Growing Our Metabolics Portfolio



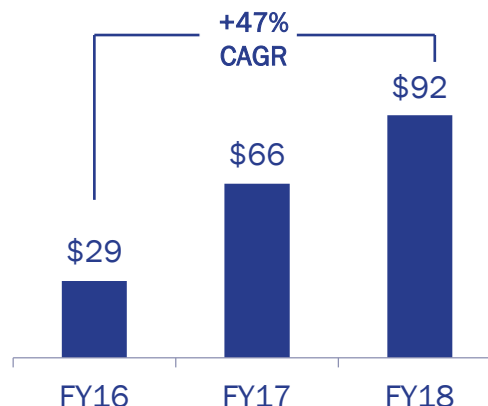
STRENSIQ®

- Continue to identify new patients
- Launched and reimbursed in 7 countries
- Ongoing work to secure additional ex-US agreements



KANUMA®

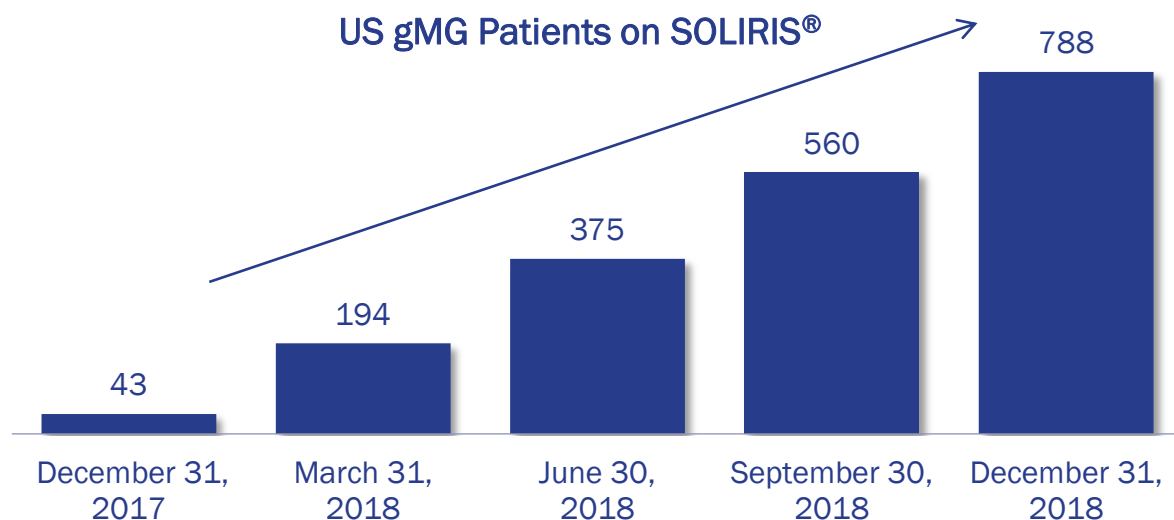
- Continue to identify new patients with LAL-D
- Launched and reimbursed in 8 countries
- Improving ex-US funding agreements



**ALXN1840
(WTX101)**

- Wilson Disease Hepatology call point synergy with KANUMA®
- ~10K diagnosed patients in each US and EU5
- Phase 3 superiority study v. standard of care chelators remains ongoing
- Conducting additional liver biopsy study, as part of Phase 3 program, to supplement findings
- Potential to become new standard of care for Wilson Disease

Demonstrating Launch Excellence in Neurology



- SOLIRIS® in gMG is best Alexion launch to date and OneSource™ enrollments continue at a steady rate
- Less than 10% penetration of upper band (~8k) of refractory gMG patient population currently on SOLIRIS®
- Continued neurology portfolio expansion with SOLIRIS® NMOSD sBLA filed in US and EU

Note: gMG = generalized myasthenia gravis

*SOLIRIS® not yet approved in NMOSD, sBLA filing submitted in US, filing submitted in EU

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Building Neurology Momentum for Growth

Expanding Infrastructure with Dedicated:

- ✓ Neurology Customer-Facing Team
- ✓ OneSource™ Case Managers
- ✓ Payer & Market Access

gMG

- Wide breadth of prescribing physicians with over 500 unique prescribers
- Growing depth with >30% of prescribing physicians have treated more than one patient
- 788 patients on therapy in US as of December 31, 2018
- Significant growth remaining, on track to become largest Alexion treated patient population by end of 2019

NMOSD

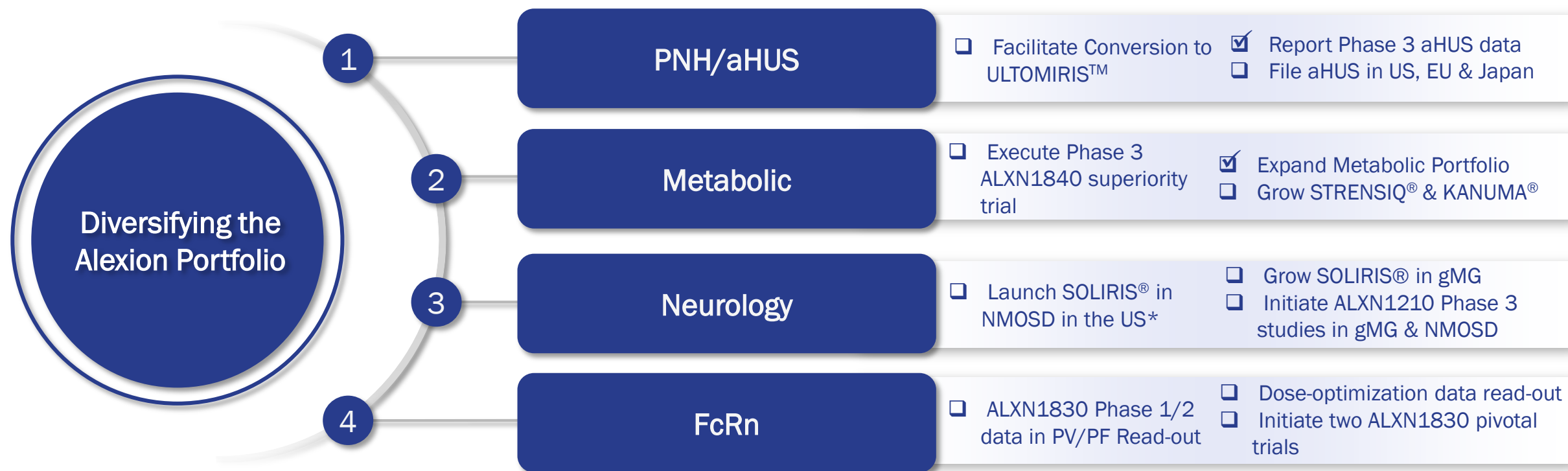
- SOLIRIS® NMOSD sBLA filing submitted in US, potential for approval in 2H19
- Currently no approved treatment options for patients
 - ~4.5k addressable patient population in the US
- Training and launch excellence planning across commercial and medical teams
- Relapse prevention is the primary goal of treatment



CEO Closing Remarks

Ludwig Hantson, Ph.D.
Chief Executive Officer

Positioning Alexion for the Future



Financial Ambition to Continue to Deliver Double-Digit Revenue Growth



Q&A

4Q18 Earnings
February 4, 2019

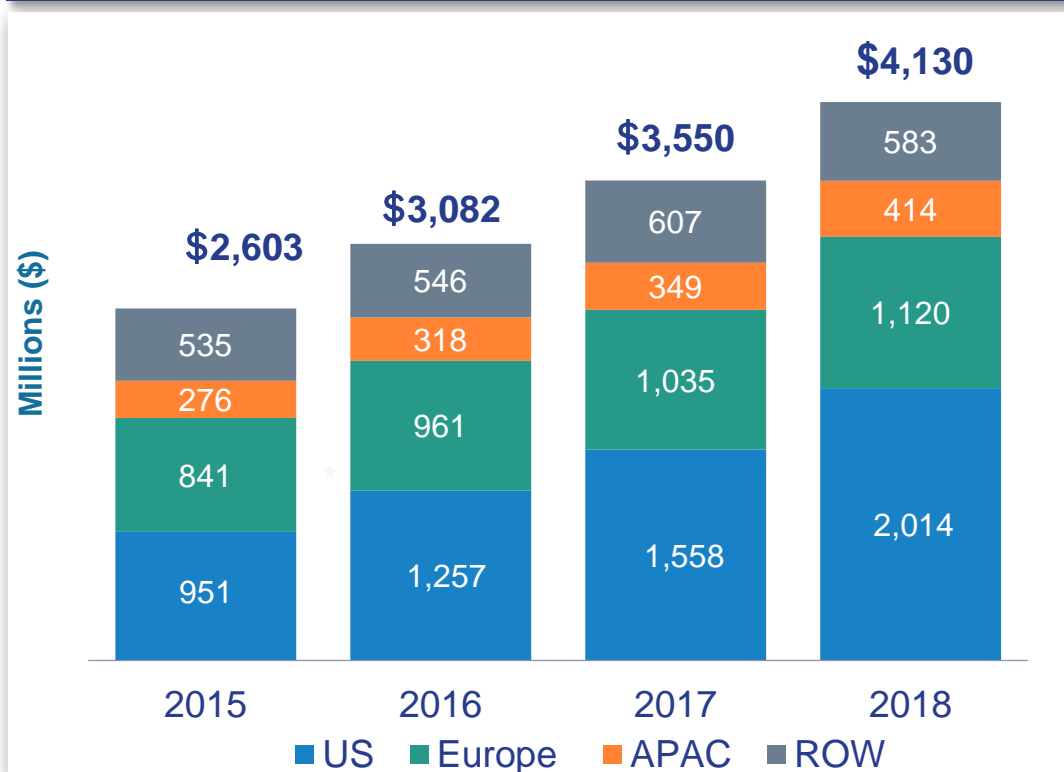


Appendix

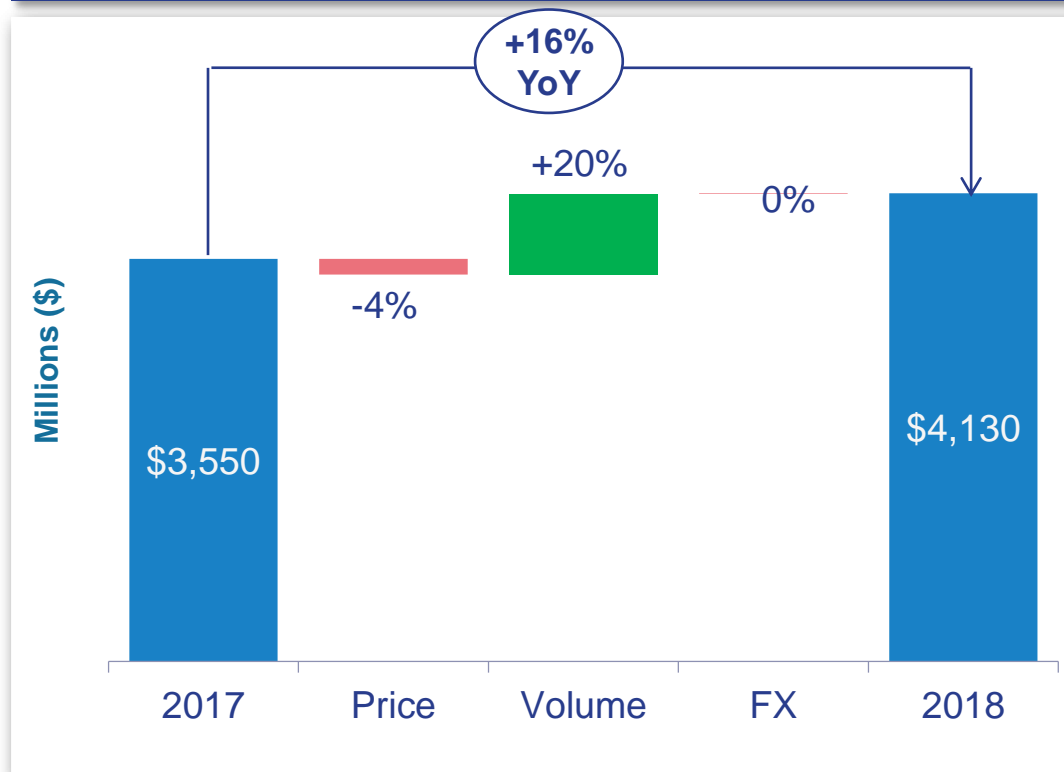
4Q18 Earnings
February 4, 2019

2018 Net Product Sales

Net Product Sales by Geography



2018 Net Product Sales Analysis



2018 Financial Performance

\$ Millions, Except EPS	2018		2017		Δ Non-GAAP ⁽¹⁾
	GAAP ⁽¹⁾	Non-GAAP ⁽¹⁾	GAAP ⁽¹⁾	Non-GAAP ⁽¹⁾	
Total Revenue	\$4,131	\$4,131	\$3,551	\$3,551	+16%
SOLIRIS® Revenue	\$3,563	\$3,563	\$3,144	\$3,144	+13%
STRENSIQ® Revenue	\$475	\$475	\$340	\$340	+40%
KANUMA® Revenue	\$92	\$92	\$66	\$66	+40%
COGS <i>% of Total Revenue</i>	\$374 9%	\$353 9%	\$454 13%	\$286 8%	+48 bps
R&D <i>% of Total Revenue</i>	\$730 18%	\$646 16%	\$878 25%	\$736 21%	-509 bps
SG&A <i>% of Total Revenue</i>	\$1,112 27%	\$953 23%	\$1,094 31%	\$928 26%	-305 bps
Restructuring and Related Expenses	\$51	-	\$287	-	-
Acquired IPR&D	\$1,183	-	-	-	-
Operating Income	\$270	\$2,179	\$627	\$1,601	+36%
Operating Margin	7%	53%	18%	45%	+766 bps
Effective Tax Rate	68%	15%	19%	12%	+245 bps
Earnings Per Share	\$0.35	\$7.92	\$1.97	\$5.86	+35%

⁽¹⁾ A reconciliation of GAAP to non-GAAP financial results is set forth in our fourth quarter 2018 financial results issued February 4, 2019.

Provided February 4, 2019, as part of an oral presentation and is qualified by such, contains forward-looking statements, actual results may vary materially; Alexion disclaims any duty to update.

ALEXION PHARMACEUTICALS, INC.
TABLE 1: CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(in millions, except per share amounts)
(unaudited)

	Three months ended December 31		Twelve months ended December 31	
	2018	2017	2018	2017
Net product sales	\$ 1,128.5	\$ 909.4	\$ 4,130.1	\$ 3,549.5
Other revenue	0.3	0.3	1.1	1.6
Total revenues	1,128.8	909.7	4,131.2	3,551.1
Cost of sales	96.8	144.6	374.3	454.2
Operating expenses:				
Research and development	205.6	265.0	730.4	878.4
Selling, general and administrative	318.7	296.4	1,111.8	1,094.4
Acquired in-process research and development	379.3	—	1,183.0	—
Amortization of purchased intangible assets	80.0	80.0	320.1	320.1
Change in fair value of contingent consideration	5.6	9.2	116.5	41.0
Restructuring expenses	(0.9)	5.9	25.5	104.6
Impairment of intangible assets	—	—	—	31.0
Total operating expenses	988.3	656.5	3,487.3	2,469.5
Operating income	43.7	108.6	269.6	627.4
Other income and expense:				
Investment (expense) income	(54.1)	5.6	65.3	18.5
Interest expense	(24.5)	(25.1)	(98.2)	(98.4)
Other income	2.0	0.2	5.5	0.3
Income (loss) before income taxes	(32.9)	89.3	242.2	547.8
Income tax expense	12.1	59.3	164.6	104.5
Net income (loss)	\$ (45.0)	\$ 30.0	\$ 77.6	\$ 443.3
Earnings (loss) per common share				
Basic	\$ (0.20)	\$ 0.13	\$ 0.35	\$ 1.98
Diluted	\$ (0.20)	\$ 0.13	\$ 0.35	\$ 1.97
Shares used in computing earnings (loss) per common share				
Basic	223.2	223.3	222.7	223.9
Diluted	223.2	225.0	224.5	225.4

ALEXION PHARMACEUTICALS, INC.
TABLE 2: RECONCILIATION OF GAAP TO NON-GAAP FINANCIAL RESULTS
(in millions, except per share amounts)
(unaudited)

	Three months ended December 31		Twelve months ended December 31	
	2018	2017	2018	2017
GAAP net income (loss)	\$ (45.0)	\$ 30.0	\$ 77.6	\$ 443.3
Before tax adjustments:				
Cost of sales:				
Share-based compensation	3.8	3.0	16.0	11.1
Fair value adjustment in inventory acquired	—	—	—	5.2
Restructuring related expenses ⁽¹⁾	—	69.1	5.8	152.1
Research and development expense:				
Share-based compensation	14.9	21.1	57.4	76.4
Upfront payments related to licenses and collaborations	26.7	40.0	26.7	49.4
Restructuring related expenses ⁽¹⁾	—	15.3	0.1	16.3
Selling, general and administrative expense:				
Share-based compensation	33.4	46.7	129.6	155.7
Restructuring related expenses ⁽¹⁾	1.4	4.5	19.4	10.9
Litigation charges ⁽²⁾	5.9	—	13.0	—
Gain on sale of asset ⁽³⁾	—	—	(3.5)	—
Acquired in-process research and development ⁽⁴⁾	379.3	—	1,183.0	—
Amortization of purchased intangible assets	80.0	80.0	320.1	320.1
Change in fair value of contingent consideration ⁽⁵⁾	5.6	9.2	116.5	41.0
Restructuring expenses ⁽¹⁾	(0.9)	5.9	25.5	104.6
Impairment of intangible assets	—	—	—	31.0
Investment (expense) income:				
Change in value of strategic equity investments ⁽⁶⁾	57.7	—	(43.1)	—
Other income:				
Restructuring related expenses ⁽¹⁾	—	0.3	(0.1)	2.6
Adjustments to income tax expense ⁽⁷⁾	(76.4)	12.5	(145.4)	(82.2)
Non-GAAP net income	<u>\$ 486.4</u>	<u>\$ 337.6</u>	<u>\$ 1,798.6</u>	<u>\$ 1,337.5</u>
GAAP earnings (loss) per common share - diluted	\$ (0.20)	\$ 0.13	\$ 0.35	\$ 1.97
Non-GAAP earnings per common share - diluted	\$ 2.14	\$ 1.48	\$ 7.92	\$ 5.86
Shares used in computing diluted earnings (loss) per common share (GAAP)	223.2	225.0	224.5	225.4
Shares used in computing diluted earnings per common share (non-GAAP)	227.4	227.6	227.1	228.1

(1) The following table summarizes the total restructuring and related expenses recorded by type of activity and the classification within the Reconciliation of GAAP to non-GAAP Financial Results:

	Three months ended December 31, 2018				Three months ended December 31, 2017			
	Employee Separation Costs	Asset- Related Charges	Other	Total	Employee Separation Costs	Asset- Related Charges	Other	Total
Cost of sales	\$ —	\$ —	\$ —	\$ —	\$ —	\$ 69.1	\$ —	\$ 69.1
Research and development	—	—	—	—	—	15.3	—	15.3
Selling, general and administrative	—	1.4	—	1.4	—	4.5	—	4.5
Restructuring expenses	(2.3)	—	1.4	(0.9)	1.0	—	4.9	5.9
Other expense	—	—	—	—	—	—	0.3	0.3
	<u>\$ (2.3)</u>	<u>\$ 1.4</u>	<u>\$ 1.4</u>	<u>\$ 0.5</u>	<u>\$ 1.0</u>	<u>\$ 88.9</u>	<u>\$ 5.2</u>	<u>\$ 95.1</u>

	Twelve months ended December 31, 2018				Twelve months ended December 31, 2017			
	Employee Separation Costs	Asset- Related Charges	Other	Total	Employee Separation Costs	Asset- Related Charges	Other	Total
Cost of sales	\$ —	\$ 5.8	\$ —	\$ 5.8	\$ —	\$ 152.1	\$ —	\$ 152.1
Research and development	—	0.1	—	0.1	—	16.3	—	16.3
Selling, general and administrative	—	19.4	—	19.4	—	10.9	—	10.9
Restructuring expenses	4.6	—	20.9	25.5	87.3	—	17.3	104.6
Other expense	—	—	(0.1)	(0.1)	—	—	2.6	2.6
	<u>\$ 4.6</u>	<u>\$ 25.3</u>	<u>\$ 20.8</u>	<u>\$ 50.7</u>	<u>\$ 87.3</u>	<u>\$ 179.3</u>	<u>\$ 19.9</u>	<u>\$ 286.5</u>

(2) During the year ended 2018, we recorded \$13.0 million in litigation charges in connection with ongoing investigations.

(3) In September 2018, we sold all assets, rights and obligations of the ALXN1101 program to a third party and, as a result, we recognized a gain on the sale of ALXN1101 during the third quarter of 2018.

(4) During the second and fourth quarters of 2018, we completed the acquisitions of Wilson Therapeutics and Syntimmune, respectively. The acquisitions were both accounted for as asset acquisitions, as substantially all of the fair value of the gross assets acquired were concentrated in a single asset. The value of the acquired in-process research and development assets were expensed during the quarters the acquisitions were completed due to the stage of development of the assets.

(5) The change in the expense associated with the fair value of contingent consideration for the year ended December 31, 2018, as compared to the year ended 2017 was primarily due to amending certain contingent milestone payments due under our prior merger agreement with Enobia Pharma Corp. in September 2018 as well as due to increases in the likelihood and anticipated timing of payments for contingent consideration.

(6) Our investments include strategic equity investments in Moderna Therapeutics, Inc. and Dicerna Pharmaceuticals, Inc. During the year ended December 31, 2018, we recognized an unrealized gain of \$43.1 million in investment income to adjust our strategic equity investments to fair value.

(7) Alexion's non-GAAP income tax expense excludes the tax effect of pre-tax adjustments to GAAP profit and adjustments to provisional estimates of the impact of Tax Cuts and Jobs Act we recorded in Q4 2017.

ALEXION PHARMACEUTICALS, INC.
TABLE 3: RECONCILIATION OF GAAP TO NON-GAAP FINANCIAL GUIDANCE
(in millions, except per share amounts and percentages)
(unaudited)

	Twelve months ending December 31, 2019	
	Low	High
GAAP net income	\$ 1,388	\$ 1,640
Before tax adjustments:		
Share-based compensation	231	214
Acquired in-process research and development	240	—
Amortization of purchased intangible assets	320	320
Change in fair value of contingent consideration	21	21
Restructuring and related expenses	25	20
Adjustments to income tax expense	(150)	(99)
Non-GAAP net income	<u>\$ 2,075</u>	<u>\$ 2,116</u>
Diluted GAAP earnings per common share	\$ 6.14	\$ 7.26
Diluted non-GAAP earnings per common share	<u>\$ 9.10</u>	<u>\$ 9.30</u>
Operating expense and margin (% total revenues)		
GAAP research and development expense	18%	17%
Share-based compensation	1%	1%
Non-GAAP research and development expense	<u>17%</u>	<u>16%</u>
GAAP selling, general and administrative expense	24%	23%
Share-based compensation	3%	3%
Restructuring related expenses	0%	0%
Non-GAAP selling, general and administrative expense	<u>21%</u>	<u>20%</u>
GAAP operating margin	36%	43%
Share-based compensation	5%	5%
Acquired in-process research and development	5%	—%
Amortization of purchased intangible assets	7%	7%
Change in fair value of contingent consideration	0%	0%
Restructuring and related expenses	1%	0%
Non-GAAP operating margin	<u>54%</u>	<u>55%</u>
Income tax expense (% of income before income taxes)		
GAAP income tax expense	15%	13%
Tax effect of pre-tax adjustments to GAAP net income	1%	1%
Non-GAAP income tax expense	<u>16%</u>	<u>14%</u>

Amounts may not foot due to rounding.



ALEXION PHARMACEUTICALS, INC.
TABLE 4: NET PRODUCT SALES BY GEOGRAPHY
(in millions)
(unaudited)

	Three months ended December 31		Twelve months ended December 31	
	2018	2017	2018	2017
<u>Soliris</u>				
United States	\$ 452.1	\$ 321.5	\$ 1,588.4	\$ 1,235.0
Europe	270.4	246.9	1,036.7	985.2
Asia Pacific	104.7	86.7	382.0	328.1
Rest of World	149.5	136.8	555.9	595.8
Total Soliris	\$ 976.7	\$ 791.9	\$ 3,563.0	\$ 3,144.1
<u>Strensiq</u>				
United States	\$ 98.6	\$ 76.2	\$ 374.3	\$ 280.1
Europe	14.7	12.3	61.7	35.6
Asia Pacific	8.7	5.3	27.9	18.6
Rest of World	4.1	1.8	11.2	5.5
Total Strensiq	\$ 126.1	\$ 95.6	\$ 475.1	\$ 339.8
<u>Kanuma</u>				
United States	\$ 12.7	\$ 11.2	\$ 51.3	\$ 42.4
Europe	5.2	5.9	21.6	14.6
Asia Pacific	0.8	0.9	3.7	2.7
Rest of World	7.0	3.9	15.4	5.9
Total Kanuma	\$ 25.7	\$ 21.9	\$ 92.0	\$ 65.6
<u>Net Product Sales</u>				
United States	\$ 563.4	\$ 408.9	\$ 2,014.0	\$ 1,557.5
Europe	290.3	265.1	1,120.0	1,035.4
Asia Pacific	114.2	92.9	413.6	349.4
Rest of World	160.6	142.5	582.5	607.2
Total Net Product Sales	\$ 1,128.5	\$ 909.4	\$ 4,130.1	\$ 3,549.5

ALEXION PHARMACEUTICALS, INC.
TABLE 5: CONDENSED CONSOLIDATED BALANCE SHEETS
(in millions)
(unaudited)

	December 31 2018	December 31 2017
Cash and cash equivalents	\$ 1,365.5	\$ 584.4
Marketable securities	198.3	889.7
Trade accounts receivable, net	922.3	726.5
Inventories	472.5	460.4
Prepaid expenses and other current assets	426.4	292.9
Property, plant and equipment, net	1,471.5	1,325.4
Intangible assets, net	3,641.3	3,954.4
Goodwill	5,037.4	5,037.4
Other assets	396.7	312.2
Total assets	<u>\$ 13,931.9</u>	<u>\$ 13,583.3</u>
Accounts payable and accrued expenses	\$ 698.2	\$ 710.2
Revolving credit facility	250.0	—
Current portion of long-term debt	93.8	167.4
Current portion of contingent consideration	97.6	—
Other current liabilities ⁽¹⁾	34.4	74.9
Long-term debt, less current portion	2,501.7	2,720.7
Contingent consideration	183.2	168.9
Facility lease obligations	361.0	342.9
Deferred tax liabilities	391.1	365.0
Other liabilities	155.6	140.2
Total liabilities	<u>4,766.6</u>	<u>4,690.2</u>
Total stockholders' equity ⁽¹⁾	<u>9,165.3</u>	<u>8,893.1</u>
Total liabilities and stockholders' equity	<u>\$ 13,931.9</u>	<u>\$ 13,583.3</u>

(1) In May 2014, the Financial Accounting Standards Board issued a comprehensive new standard which amends revenue recognition principles. We adopted this standard in the first quarter 2018. Upon adoption of the new standard, we reduced our deferred revenue balance reported in Other current liabilities by \$10.4 million, with an offsetting increase of \$6.0 million in retained earnings due to the cumulative impact of adopting this new standard. The adjusted deferred revenue balance, as of January 1, 2018, was \$5.5 million.

2019 Financial Guidance

Total revenues	\$4,625 to \$4,700 million
SOLIRIS/ULTOMIRIS revenues	\$3,970 to \$4,020 million
Metabolic revenues	\$655 to \$680 million
R&D (% total revenues)	
GAAP	17% to 18%
Non-GAAP	16% to 17%
SG&A (% total revenues)	
GAAP	23% to 24%
Non-GAAP	20% to 21%
Operating margin	
GAAP	36% to 43%
Non-GAAP	54% to 55%
Earnings per share	
GAAP	\$6.14 to \$7.26
Non-GAAP	\$9.10 to \$9.30