

### Second Quarter 2018

Earnings Call July 26, 2018



# Q2 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
ALXN1210 Update	John Orloff, M.D., Head of R&D & 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 for purposes of the Private Securities Litigation Reform Act of 1995, including statements related to future expectations for the on-going launch of Soliris for gMG (and future increased sales), updated guidance regarding anticipated GAAP and non-GAAP financial results for 2018 and operating margin for 2019 (including the assumptions and specific drivers related to such guidance and future operating margin results and R&D expenses), Alexion's development plans for ALXN1210 (including the goal of improving the standard of care and providing subcutaneous formulations), regulatory approval for ALXN1210 for PNH, the potential medical benefits of ALXN1210 for the treatment of PNH and other indications. Alexion's future clinical, regulatory filings, and commercial launch plans for ALXN1210 (including the plan to launch as a treatment for PNH next year), continuing expansion of the Company's complement leadership with ALXN1210, future ALXN1210 product pipeline candidates and indications (and the anticipated timing of regulatory filings and product launches for each) for 2018 through 2022, intention to work with regulators on the review of regulatory filings for ALXN1210, confidence in converting patients to ALXN1210, goal of building out the clinical pipeline and future business development activity, the enrollment, completion and timing for the release of information from on-going and future planned studies and clinical trials, expected benefits of product candidates, plans and timing for regulatory filings and clinical programs for our other product candidates, future growth opportunities and expectations for Soliris and Strensig, potential benefits of ALXN1810, CP010 and other product candidates, future potential expenses related to restructuring efforts; and the potential benefits of WTX101 (including as a new standard of care) and the acquisition of Wilson Therapeutics. 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, decisions of regulatory authorities regarding the adequacy of our research, marketing approval or material limitations on the marketing of our products; delays or the 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; the possibility that results of clinical trials are not predictive of safety and efficacy results of our products in broader patient populations; the possibility that current rates of adoption of Soliris® in PNH, aHUS, gMG or other diseases and Strensig® and Kanuma® are not sustained; the possibility that clinical trials of our product candidates could be delayed or terminated prior to completion; the adequacy of our pharmacovigilance and drug safety reporting processes; 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; the possibility that expected tax benefits will not be realized; assessment of impact of recent accounting pronouncements; 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 anticipated regulatory filings are delayed; the risk that estimates regarding the number of patients with PNH, aHUS, gMG, HPP and LAL-D are inaccurate; the risks of changing foreign exchange rates, risks relating to the potential effects of the Company's restructuring and relocation of its corporate headquarters; risks related to the acquisition of Wilson Therapeutics and the codevelopment with Complement Pharma; 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 March 31, 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, acquisition-related costs, 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 equity securities without readily determinable fair values, litigation charges 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 Financial Results and GAAP to non-GAAP 2018 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 six month periods ended June 30, 2018 and 2017 and projected twelve months ending December 31, 2018.

Prior year amounts may have been adjusted to conform to current year rounding presentation. Amounts may not foot due to rounding.





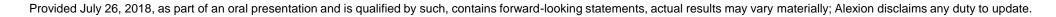
# CEO Opening Remarks

Ludwig Hantson, Ph.D. Chief Executive Officer

# Executing on 2018 Key Objectives

Strong First Half 2018

1)-	Grow In-Line Business	<ul> <li>Strong momentum for complement and metabolic franchises</li> <li>Q2 Total Revenues: \$1.045B; +14% Revenue Growth, +16% Volume Growth vs 2Q17</li> <li>First quarter with &gt;\$1B in revenue</li> </ul>
2)	Drive Soliris <sup>®</sup> Launch in gMG	<ul> <li>On track to meet ambition of being the best launch of any Soliris<sup>®</sup> indication</li> <li>375 patients on therapy in US at end of June</li> </ul>
3	Extend Complement Leadership with ALXN1210	<ul> <li>Positive ALXN1210 Phase 3 read-outs in largest clinical program in PNH</li> <li>Submitted filings for ALXN1210 approval for PNH in US and EU</li> <li>On track to file for approval in Japan 2H2018</li> <li>Phase 3 enrollment for ALXN1210 in aHUS completed late May</li> </ul>
4)	Advance and Rebuild the Pipeline	<ul> <li>Completed Wilson Therapeutics acquisition (Phase 3 program in Wilson Disease)</li> <li>Began Complement Pharma collaboration (Preclinical program targeting C6)</li> </ul>
5	Deliver on Financial Ambitions	<ul> <li>Guidance updated to reflect strength of top and bottom-line performance</li> </ul>
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Financial Update Paul Clancy Chief Financial Officer

# Second Quarter 2018 Key Performance Metrics

Total Revenues	\$1.045B	1	14%	vs 2Q17	<ul> <li>Soliris<sup>®</sup> sales grew 10% driven by 11% increase in volume</li> <li>Metabolic sales grew 48% driven by 54% increase in volume</li> <li>Favorably impacted by tender orders primarily in rest of world markets compared to 1Q18</li> <li>Includes ~\$18M due to order timing related to the July 4th holiday</li> </ul>
GAAP <sup>(1)</sup> Operating Margin	(38.3%)	₽	-6,313bps	vs 2Q17	<ul> <li>GAAP operating margin includes expense of \$804M for IPR&amp;D asset acquired in connection with Wilson Therapeutics</li> </ul>
Non-GAAP <sup>(1)</sup> Operating Margin	54.3%	1	+719bps	vs 2Q17	<ul> <li>Delivered 719bps non-GAAP operating margin improvement</li> </ul>
GAAP <sup>(1)</sup> EPS	(\$2.05)	₽	(381%)	vs 2Q17	<ul> <li>GAAP EPS includes expense of \$804M for IPR&amp;D asset acquired in connection with Wilson Therapeutics as well as \$18M in restructuring and related expenses</li> </ul>
Non-GAAP <sup>(1)</sup> EPS	\$2.07		33%	vs 2Q17	<ul> <li>Non-GAAP EPS growth of 33% driven by topline growth and strong operating expense control</li> </ul>



<sup>(1)</sup> A reconciliation of our GAAP to non-GAAP financial results is set forth in our second quarter 2018 financial results issued July 26, 2018.

# 2Q18 Net Product Sales

**Net Product Sales by Geography** \$1,045 \$930 **\$912** \$909 159 \$859 130 142 167 101 120 92 93 86 88 Millions (\$) 276 271 265 260 261 509 437 409 399 390 2Q17 1Q18 3Q17 4Q17 2Q18 ■US ■Europe ■ APAC ■ ROW

### **2Q18 Net Product Sales Analysis** +15% YoY +1% +16% Millions (\$) -2% \$1,045 \$912 **FX**<sup>1</sup> 2Q17 Price Volume 2Q18 2Q17 vs 2Q18

<sup>1</sup> Net of hedging activities

# Soliris® Net Product Sales

Soliris<sup>®</sup> Net Product Sales

#### \$898 \$800 \$814 \$792 \$756 155 128 166 137 118 94 86 Millions (\$) 87 81 82 253 251 249 247 248 396 336 318 322 308 2Q17 3Q17 4Q17 1Q18 2Q18 ■US ■Europe APAC ROW

#### 2Q18 Highlights

- +10% YoY revenue growth; +11% YoY volume growth
- 2Q18 favorably impacted by tender orders primarily in rest of world markets compared to 1Q18 and included ~\$9M due to order timing ahead of the July 4th holiday
- Contribution from gMG continues to grow
- Strong growth in the US and Japan



# Metabolic Franchise Net Product Sales



### 2Q18 Highlights

### **Strensiq**<sup>®</sup>

- +50% YoY revenue growth
  - +55% YoY volume growth
- Continued growth in US and Germany
- 2Q18 included ~\$8M due to order timing ahead of the July 4<sup>th</sup> holiday

### Kanuma®

- +40% YoY revenue growth
  - +51% YoY volume growth
- 2Q18 included ~\$1M due to order timing ahead of the July 4<sup>th</sup> holiday



# 2Q18 Financial Performance

\$ Millions, Except EPS         GAAP (2)         Non-GAAP (2)         GAAP (2)         Non-GAAP (2)           Total Revenue         \$1,045         \$1,045         \$913         \$913         \$913           Soliris® Revenue         \$898         \$898         \$813         \$813         \$813           Strensiq® Revenue         \$125         \$125         \$84         \$84         \$84           Kanuma® Revenue         \$21         \$21         \$15         \$15         \$15           COGS         \$95         \$89         \$84         \$78         \$9%         \$9%         \$9%         \$9%         \$9%         \$9%         \$2%	
Soliris® Revenue         \$898         \$898         \$813         \$813           Strensiq® Revenue         \$125         \$125         \$84         \$84           Kanuma® Revenue         \$21         \$21         \$15         \$15           COGS % of Total Revenue         \$95         \$89 9%         \$89         \$84         \$78 9%         \$9%           R&D % of Total Revenue         \$173         \$158 17%         \$198 22%         \$178 20%         \$178 20%           SG&A % of Total Revenue         \$277 27%         \$230 22%         \$266 29%         \$228 25%         \$25%           Acquired In-process R&D <sup>(1)</sup> \$804         -         -         -	<sup>2)</sup> YoY Change Non-GAAP <sup>(2)</sup>
Strensiq® Revenue         \$125         \$125         \$84         \$84           Kanuma® Revenue         \$21         \$21         \$15         \$15           COGS % of Total Revenue         \$95         \$89 9%         \$84         \$78 9%         \$95         \$89 9%         \$84         \$78 9%         \$96         \$158         \$198         \$178 22%         \$20%         \$178 20%         \$20%         \$27%         \$230         \$266         \$228 25%         \$25%           SG&A % of Total Revenue         \$27%         \$220         \$29%         \$25%         \$25%           Acquired In-process R&D <sup>(1)</sup> \$804         -         -         -         -	+14%
Kanuma® Revenue         \$21         \$15         \$15           COGS % of Total Revenue         \$95 9%         \$89 9%         \$89 9%         \$84 9%         \$78 9%           R&D % of Total Revenue         \$173 17%         \$158 15%         \$198 22%         \$178 20%           SG&A % of Total Revenue         \$277 27%         \$230 22%         \$266 29%         \$228 25%           Acquired In-process R&D <sup>(1)</sup> \$804         -         -         -	+10%
COGS % of Total Revenue         \$95 9%         \$89 9%         \$89 9%         \$84 9%         \$78 9%           R&D % of Total Revenue         \$173 17%         \$158 15%         \$198 22%         \$178 20%           SG&A % of Total Revenue         \$277 27%         \$230 22%         \$266 29%         \$228 25%           Acquired In-process R&D <sup>(1)</sup> \$804         -         -         -	+50%
% of Total Revenue       9%       9%       9%       9%       9%         R&D       \$173       \$158       \$198       \$178         % of Total Revenue       17%       15%       22%       20%         SG&A       \$277       \$230       \$266       \$228         % of Total Revenue       27%       22%       29%       25%         Acquired In-process R&D <sup>(1)</sup> \$804       -       -       -	+40%
% of Total Revenue       17%       15%       22%       20%         SG&A % of Total Revenue       \$277       \$230       \$266       \$228         Acquired In-process R&D <sup>(1)</sup> \$804       -       -       -	0 bps
% of Total Revenue         27%         22%         29%         25%           Acquired In-process R&D <sup>(1)</sup> \$804         -         -         -	-431 bps
	-288 bps
	-
Restructuring and Related Expenses\$18-\$3-	-
<b>Operating (Loss) Income</b> (\$400) \$567 \$227 \$430	+32%
Operating Margin         (38%)         54%         25%         47%	+719 bps
<b>Effective Tax Rate</b> (9%) 14% 20% 13%	+101 bps
Earnings (Loss) Per Share(\$2.05)\$2.07\$0.73\$1.56	+33%

<sup>(1)</sup> Acquired in-process R&D relates to the value of the in-process research and development asset acquired in connection with the Wilson Therapeutics AB acquisition completed in the second quarter of 2018.

<sup>(2)</sup> A reconciliation of GAAP to non-GAAP financial results is set forth in our second quarter 2018 financial results issued July 26, 2018



# Updated FY2018 Guidance

#### Increasing Non-GAAP FY Outlook

\$ Millions, Except EPS	Previous Guidance	Updated Guidance <sup>(1)(2)</sup>	YoY Growth <sup>(1)(2)</sup>
Total Revenue	\$3,925 to \$3,985	\$3,980 to \$4,010	+13%
Soliris <sup>®</sup> Revenue	\$3,380 to \$3,420	\$3,420 to \$3,440	+9%
Metabolic Revenue	\$545 to \$565	\$560 to \$570	+39%
<b>R&amp;D</b> (% of Total Revenue) GAAP <sup>(3)</sup> Non-GAAP	41% to 44% 18% to 20%	20% to 21% 18% to 19%	-424 bps -223 bps
<b>SG&amp;A</b> (% of Total Revenue) GAAP Non-GAAP	26% to 28% 23% to 24%	26% to 27% 22% to 23%	-432 bps -363 bps
<b>Operating Margin</b> GAAP Non-GAAP	8% to 11% 48% to 49%	11% to 14% 49% to 50%	-517 bps +441 bps
Earnings Per Share GAAP Non-GAAP	\$1.35 to \$1.75 \$6.75 to \$6.90	\$1.25 to \$1.50 \$7.00 to \$7.15	-30% +21%

#### **Key Assumptions**

- Soliris<sup>®</sup>: \$90M to \$110M headwind over prior year due to ALXN1210 and other trial enrollment
- Metabolics: Strong Strensiq<sup>®</sup> growth
- Pricing: Headwind of ~3%
- **FX:** Tailwind of approximately \$25M

#### R&D/SG&A:

- Ongoing expenses for WTX101 and additional 1210 programs
- Earmarked funds for business development

### Mid-point of Guidance: Revenue +13%, Non-GAAP Operating Profit +24%, Non-GAAP EPS +21%

<sup>(1)</sup> 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, changes in fair value of contingent consideration or restructuring and related activity outside the previously announced activities that may occur after the day prior to the date of this presentation.
 <sup>(2)</sup> A reconciliation of GAAP to non-GAAP financial guidance is set forth in our second quarter 2018 financial results issued July 26, 2018. YoY growth uses the mid point of the guidance range.
 <sup>(3)</sup> GAAP R&D (% of total revenues) previously included our preliminary financial impact for Wilson Therapeutics AB. The actual impact is now reflected in "Acquired in-process research and development" within the Statement of Operations and therefore excluded from updated GAAP R&D (% of total revenues) guidance.





R&D Highlights John Orloff, M.D. Head of R&D

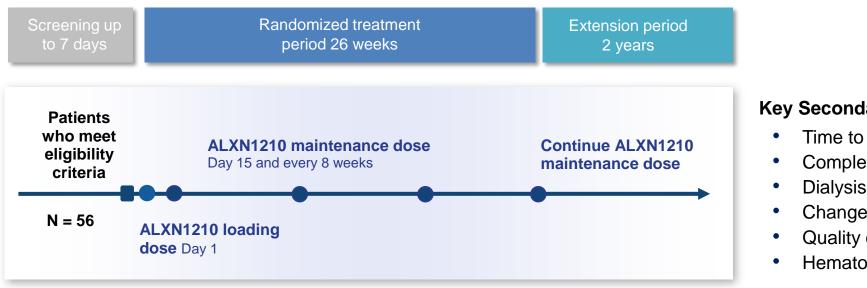
# Building Breadth in Our Portfolio

	Preclinical	Early Clinical	Advanced Clinical	Registration Filings	Marketed
Soliris®	Approved for PNH, aHUS a	and gMG			
Strensiq <sup>®</sup>	Approved for HPP				
Kanuma®	Approved for LAL-D				
Soliris <sup>®</sup> (NMO)	Phase 3 top-line data exped	cted YE2018			
ALXN1210 IV (PNH)	Filed in US and EU; on trac	k to file in Japan 2H18			
ALXN1210 IV (aHUS)	Phase 3 top-line data exped	cted 1Q19; Filing after PNH ap	proval		
LXN1210 IV 100mg/ml	Filing manufacturing sBLA	in 2H19			Progressing ALXN121
ALXN1210 SC QW	Initiating Phase 3 2H18				
ALXN1210 IV (gMG)	Initiating Phase 3 2H18				
ALXN1210 IV (IgAN)	Preclin dev't				
N1810 SC (1210+PH20)*	Initiate Phase 1 2H18				
X101 (Wilson Disease)	Ongoing Phase 3 Trial				Rebuilding Pipeline wi Wilson, Complement Phar
0 (Complement Pharma)	Preclin dev't				Internal Programs
tiple Internal Programs	Preclin dev't				<b>ALEXION</b>
4 	Strensiq®Kanuma®Soliris® (NMO)ALXN1210 IV (PNH)ALXN1210 IV (AHUS)ALXN1210 IV (aHUS)ALX	Soliris®Approved for PNH, aHUS aStrensiq®Approved for HPPKanuma®Approved for LAL-DSoliris® (NMO)Phase 3 top-line data experienceALXN1210 IV (PNH)Filed in US and EU; on tractALXN1210 IV (aHUS)Phase 3 top-line data experienceXN1210 IV 100mg/mlFiling manufacturing sBLAALXN1210 IV (gMG)Initiating Phase 3 2H18ALXN1210 IV (gMG)Initiating Phase 3 2H18ALXN1210 IV (gMG)Ongoing Phase 3 2H18ALXN1210 IV (gMG)Preclin dev'tMathematical StrengthPreclin dev'tMathematical StrengthPreclin dev'tMathematical StrengthPreclin dev'tMathematical StrengthPreclin dev'tMathematical StrengthPreclin dev'tMathematical StrengthPreclin dev't	Soliris®Approved for PNH, aHUS and gMGStrensiq®Approved for HPPKanuma®Approved for LAL-DSoliris® (NMO)Phase 3 top-line data expected YE2018ALXN1210 IV (PNH)Filed in US and EU; on track to file in Japan 2H18LXN1210 IV (aHUS)Phase 3 top-line data expected 1Q19; Filing after PNH approved for LAL-DKALXN1210 IV (aHUS)Filed in US and EU; on track to file in Japan 2H18LXN1210 IV (aHUS)Phase 3 top-line data expected 1Q19; Filing after PNH approved for LAL-DKALXN1210 IV (aHUS)Filing manufacturing sBLA in 2H19KALXN1210 IV (aHUS)Initiating Phase 3 2H18KALXN1210 IV (igAN)Preclin dev'tVI810 SC (1210+PH20)*Initiate Phase 1 2H18K101 (Wilson Disease)Ongoing Phase 3 TrialPreclin dev'tPreclin dev'tIple Internal ProgramsPreclin dev't	Soliris®Approved for PNH, aHUS and gMGStrensiq®Approved for HPPKanuma®Approved for LAL-DSoliris® (NMO)Phase 3 top-line data expected YE2018ALXN1210 IV (PNH)Filed in US and EU; on track to file in Japan 2H18LXN1210 IV (aHUS)Phase 3 top-line data expected 1Q19; Filing after PNH approvalK1210 IV 100mg/mlFiling manufacturing sBLA in 2H19ALXN1210 SC QWInitiating Phase 3 2H18LXN1210 IV (IgAN)Preclin dev'tK101 (Wilson Disease)Ongoing Phase 3 TrialOcmplement Pharma)Preclin dev't	Soliris®Approved for PNH, aHUS and gMGStrensiq®Approved for HPPKanuma®Approved for LAL-DSoliris® (NMO)Phase 3 top-line data expected YE2018ALXN1210 IV (PNH)Filed in US and EU; on track to file in Japan 2H18LXN1210 IV (aHUS)Phase 3 top-line data expected 1Q19; Filing after PNH approvalKatxN1210 IV (aHUS)Filing manufacturing sBLA in 2H19ALXN1210 IV (gMG)Initiating Phase 3 2H18KatxN1210 IV (gMG)Initiating Phase 3 2H18KatxN1210 IV (gMG)Initiating Phase 3 2H18KatxN1210 IV (gMG)Initiate Phase 1 2H18Katof (Wilson Disease)Ongoing Phase 3 TrialOrcomplement PharmajPreclin dev'tIppe Internal ProgramsPreclin dev't

# ALXN1210 Phase 3 aHUS Study: Trial Design

Phase 3 Trial Enrollment Complete

- Primary Objective: To assess the efficacy of ALXN1210 to control disease activity in adolescent and adult patients with aHUS who have not previously used a complement inhibitor
- Primary Endpoint: Complete TMA Response at 26 weeks



#### Key Secondary Endpoint Measures:

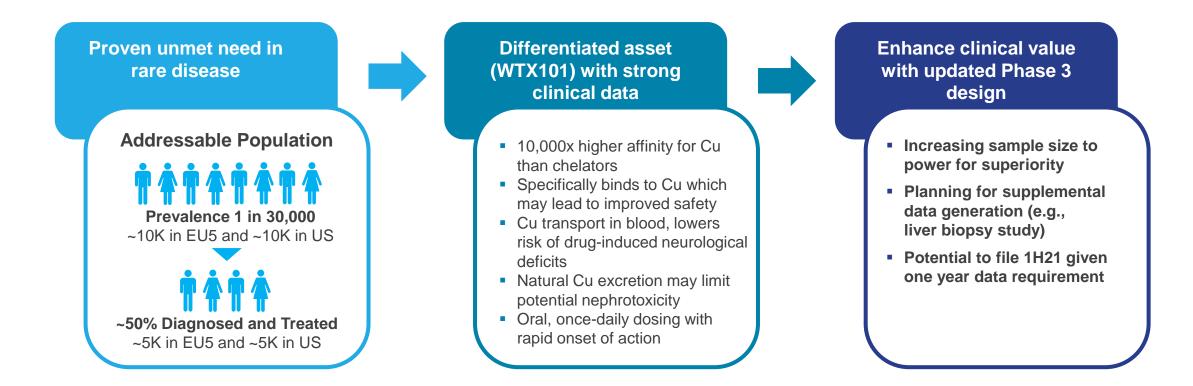
- Time to Complete TMA Response
- Complete TMA Response over time
- Dialysis requirement status
- Change from baseline in CKD stage
- Quality of life measures
- Hematologic parameters

### Expect top-line results 1Q2019



# Wilson Therapeutics: WTX101 Phase 3 Trial

**Powering for Superiority** 

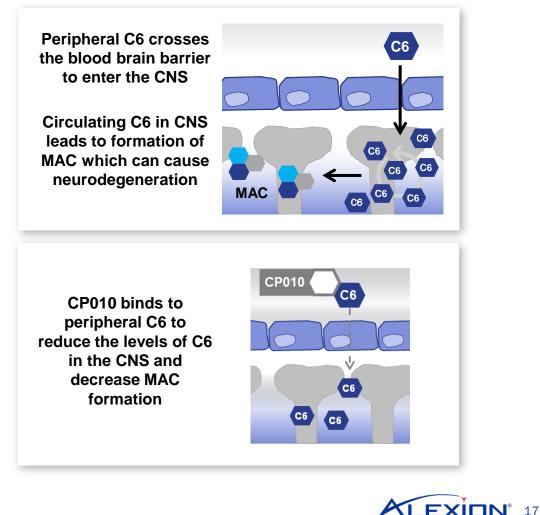


Differentiated profile of WTX101 has potential to address significant unmet need



### Complement Pharma: Strong Strategic Fit, Adds Preclinical Stage Asset to Complement Pipeline

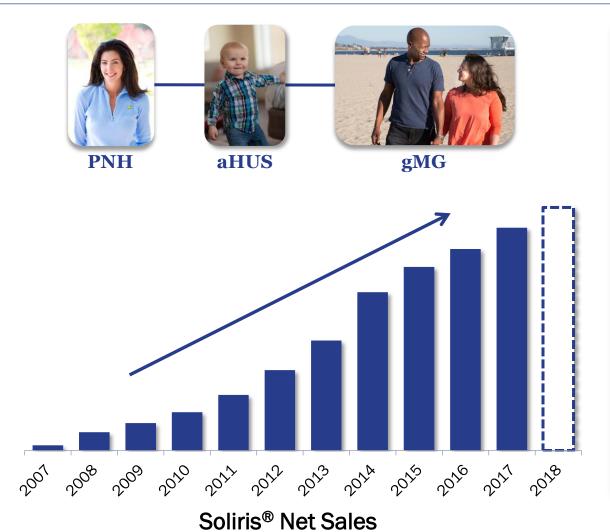
- Collaboration presents opportunity to expand our complement franchise with a novel asset (CP010) addressing neurological disorders
- Membrane attack complex (MAC) formation in central nervous system is dependent upon peripheral C6 as it is believed C6 is not produced in the CNS
- CP010 binds to peripheral C6 to decrease the level of C6 in the CNS to achieve effective inhibition of MAC formation
- We know of no other C6 modulating agent in active development





Commercial Highlights Brian Goff Chief Commercial Officer

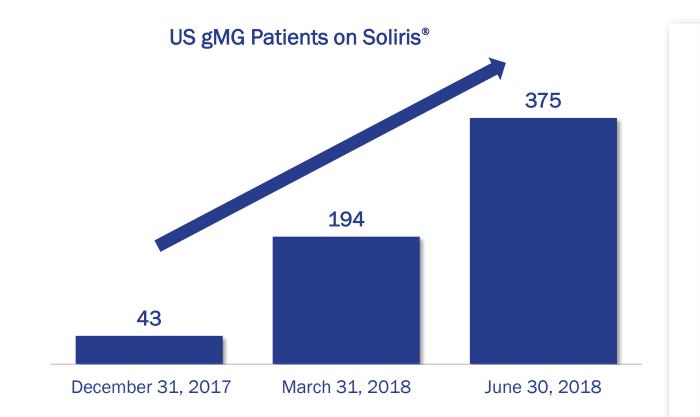
# Expanding the Soliris® Franchise



- We continue to expand our family of Soliris<sup>®</sup> patients in our 11<sup>th</sup> year of launch
- We have widened our patient outreach with our recent Soliris<sup>®</sup> gMG approval and launch
- Majority of patients with PNH have yet to initiate treatment
- Continue to believe that the opportunity with aHUS is even greater than that of PNH
- Soliris<sup>®</sup> revenue growth excluding FX has been consistent over time
- Underlying momentum builds strong platform for ALXN1210 conversion following regulatory approvals



# gMG on Track to be Best Launch of Any Soliris® Indication



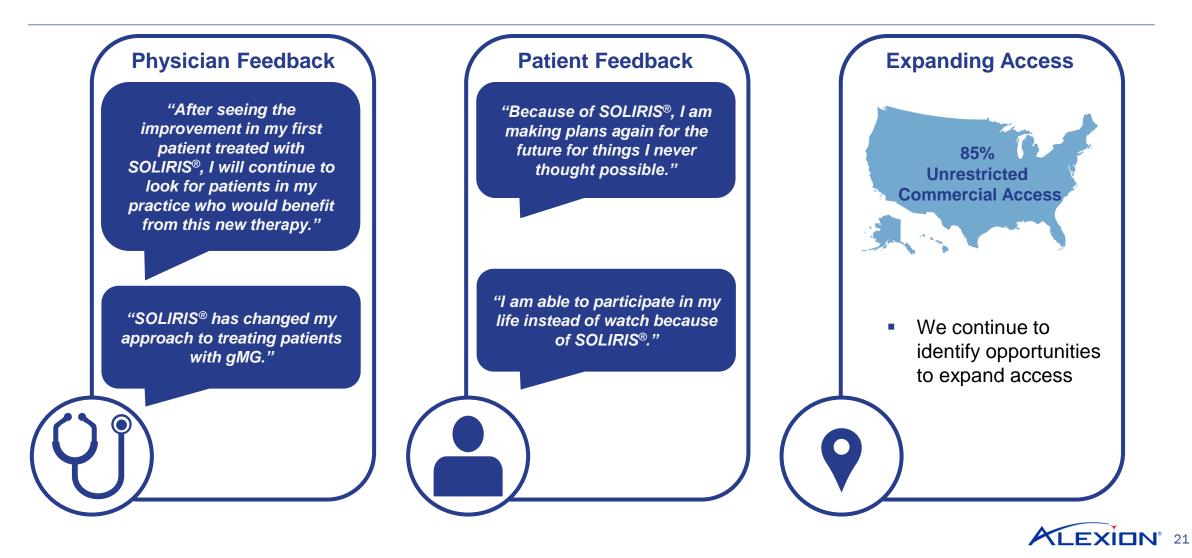
- Excellent patient growth in second quarter in US
- Growing number of patients enrolled in OneSource™
- Field teams educating neurologists on the role of complement in gMG and the benefits of Soliris<sup>®</sup>



Note: Patient data is as of month end.

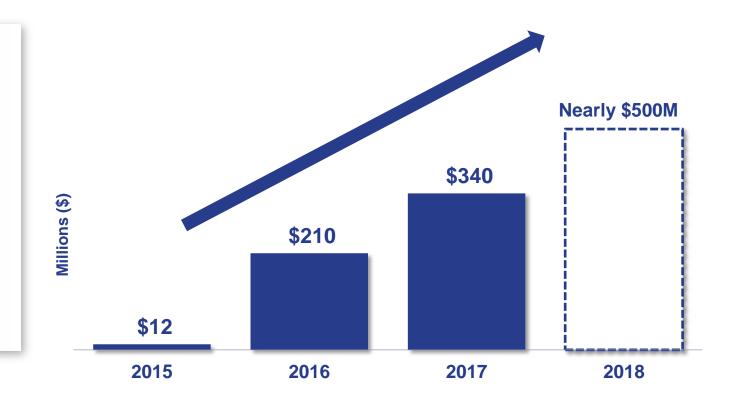
OneSource<sup>™</sup> is a program offered by Alexion Pharmaceuticals that provides education, assistance with access to Soliris<sup>®</sup>, and treatment support for people living with PNH, aHUS, gMG and their caregivers. Provided July 26, 2018, as part of an oral presentation and is qualified by such, contains forward-looking statements, actual results may vary materially; Alexion disclaims any duty to update.

# gMG on Track to be Best Launch of Any Soliris® Indication



# Strensiq<sup>®</sup> – Significant Growth Driver

- Strensiq<sup>®</sup> 2Q18 revenue \$125M
- Extending HPP disease education and diagnostic initiatives
- Serving patients in additional countries following funding agreements
- Believe significant growth opportunities ahead



#### Impressive launch with meaningful growth ahead



# Kanuma<sup>®</sup>: Continue to Educate and Drive Testing

- Continuing to identify new patients with LAL-D
- Further growth in the US, Germany and Japan
- Expand lab testing and establishing additional lab partnerships to drive testing and target enriched populations
- Improving funding agreements and increasing access; expect geographic expansion to additional countries





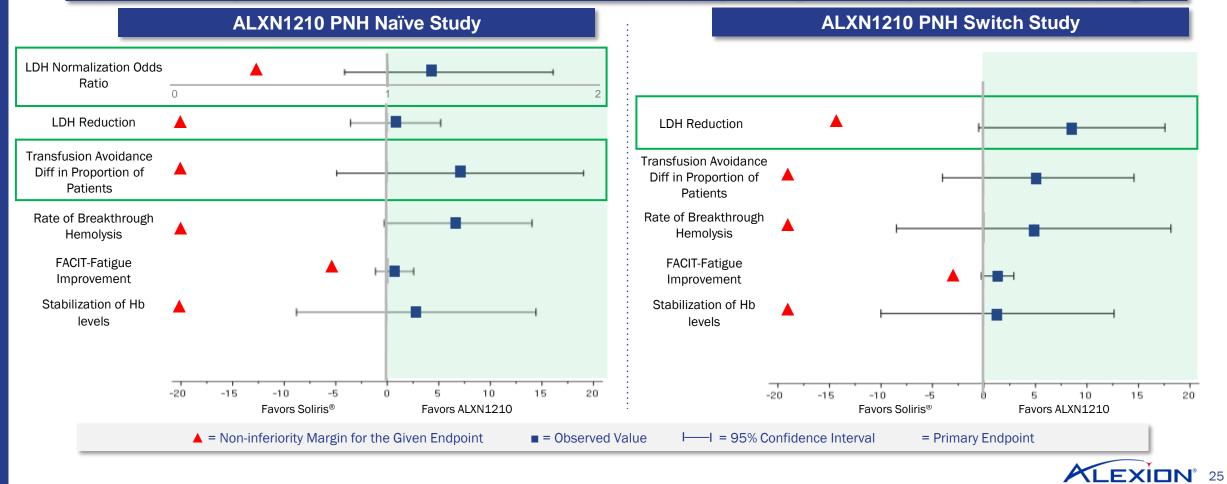


ALXN1210 Update John Orloff, M.D. Head of R&D

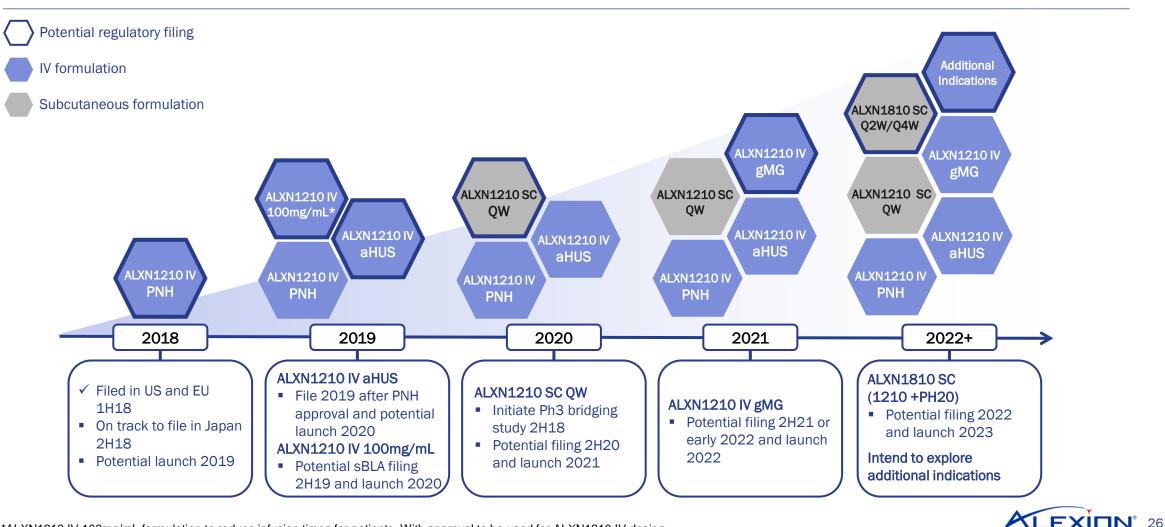
Brian Goff Chief Commercial Officer

### ALXN1210: Strong Data Across Largest PNH Phase 3 Program

More than 440 patients treated in Phase 3 and more than 400 patient years of exposure across the program



# ALXN1210: Advancing the Standard of Care



\*ALXN1210 IV 100mg/mL formulation to reduce infusion times for patients. With approval to be used for ALXN1210 IV dosing.

# ALXN1210: Differentiated Product Profile



### ALXN1210: Value Proposition Directly Maps to PNH Stakeholder Needs

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#### Physician Needs

- Totality of Phase 3 data
- Phase 3 results on three clinically meaningful measures in PNH:
- Reduction in LDH values
- Increased rates of transfusion avoidance
- Reduced incidence of breakthrough hemolysis events

#### Initial Market Research Feedback

- ~27% of physicians surveyed saw a spontaneous patient opportunity for switch<sup>(2)</sup>
- ~2/3 of target physicians (treating ~50% of PNH patients) indicated they would switch all or some of their existing patients to 1210<sup>(3)</sup>



#### Patient Needs

 Minimizing burden of treating the disease



 Extended duration of therapy and complete complement inhibition

#### Initial Market Research Feedback

- 93% of patients prefer Q8W IV infusion<sup>(1)</sup>
- ~2/3 of PNH patients expressed interest in trying a new 8W IV treatment within 1 to 2 months of its availability <sup>(1)</sup>

#### **Partnering with Payers**

Totality of Phase 3 data

- M
- Potential value proposition given differentiated profile

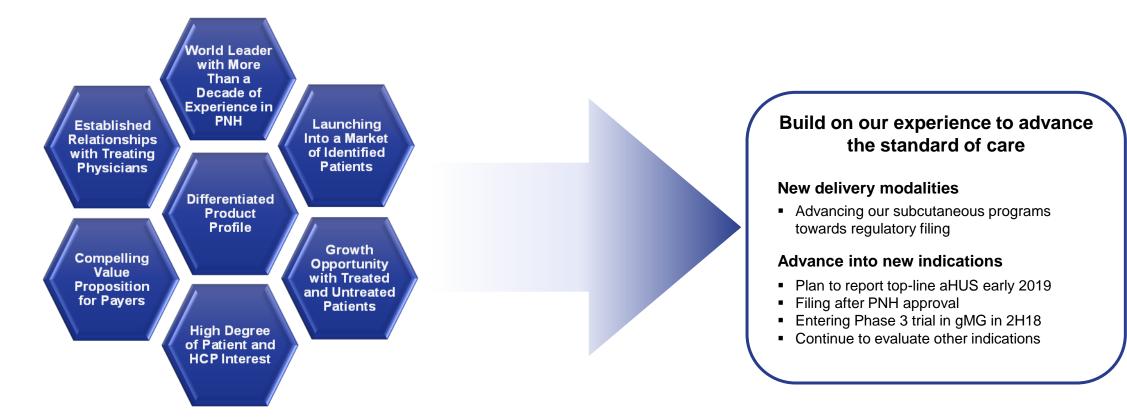
Build on existing partnerships developed over our 11+ years on market with Soliris

#### PNH Market Map , US Data:

- (1) Alexion Primary Research 2016 Patient Conjoint Qualitative Study
- (2) Corresponding slide in July 13th V3 preliminary findings deck Slide 8
- (3) Alexion Primary Research: PNH MD Segmentation Research



# ALXN1210: Our First Step Towards Advancing the Standard of Care



Continue to demonstrate launch excellence and deliver value for our growing patient family





### CEO Closing Remarks Ludwig Hantson, Ph.D.

Chief Executive Officer

# **Delivering on Our Commitments**



### **Executing on our 2018 Commitments**

- Continuing to grow complement and metabolic franchises
- Demonstrated excellence in launch of Soliris<sup>®</sup> in gMG
- Expanding our pipeline through disciplined business development efforts
  - Closed Wilson Therapeutics acquisition in Q2
  - Began Complement Pharma collaboration
- Reported positive Phase 3 ALXN1210 IV PNH in naïve and PNH switch patient population
- Filed ALXN1210 IV PNH in US and EU mid-year
  - On track to file ALXN1210 IV PNH in Japan 2H2018
- Delivering on financial ambitions





Q&A 2Q18 Earnings July 26, 2018



Appendix 2Q18 Earnings July 26, 2018

#### ALEXION PHARMACEUTICALS, INC. TABLE 1: CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS

#### (in millions, except per share amounts)

#### (unaudited)

	Three mor	ths ended	Six months ended				
	June 30		Jun	June 30			
	2018	<b>2017</b> <sup>(1)</sup>	2018	<b>2017</b> <sup>(1)</sup>			
et product sales	\$1,044.7	\$ 912.2	\$1,975.1	\$1,781.3			
ther revenue	0.3	0.5	0.8	1.0			
Total revenues	1,045.0	912.7	1,975.9	1,782.3			
ost of sales	95.3	83.6	186.9	152.6			
perating expenses:							
Research and development	173.4	198.2	350.0	417.7			
Selling, general and administrative	277.3	265.6	534.4	527.4			
Acquired in-process research and development	803.7	-	803.7	-			
Amortization of purchased intangible assets	80.1	80.1	160.1	160.1			
Change in fair value of contingent consideration	4.7	24.6	57.4	28.1			
Restructuring expenses	10.6	2.9	16.1	26.7			
Impairment of intangible assets	-	31.0	-	31.0			
Total operating expenses	1,349.8	602.4	1,921.7	1,191.0			
Operating (loss) income	(400.1)	226.7	(132.7)	438.7			
ther income and expense:							
Investment income	7.7	4.5	113.5	8.4			
Interest expense	(25.0)	(24.8)	(49.1)	(48.3)			
Other income (expense)	(1.2)	(0.1)	1.3	1.5			
(Loss) income before income taxes	(418.6)	206.3	(67.0)	400.3			
Income tax expense	38.8	41.1	141.3	65.0			
Net (loss) income	\$ (457.4)	\$ 165.2	\$ (208.3)	\$ 335.3			
Earnings (loss) per common share							
Basic	(\$2.05)	\$0.74	(\$0.94)	\$1.49			
Diluted	(\$2.05)	\$0.73	(\$0.94)	\$1.49			
Shares used in computing earnings (loss) per common share							
Basic	222.6	224.4	222.3	224.5			
Dusie	222.0		222.3	224.5			



<sup>(1)</sup> Prior year amounts may have been adjusted to conform to current year rounding presentation.

#### ALEXION PHARMACEUTICALS, INC. TABLE 2: RECONCILIATION OF GAAP TO NON-GAAP FINANCIAL RESULTS

#### (in millions, except per share amounts)

(unaudited)

	Three months ended June 30					ed		
		2018	2017 <sup>(7)</sup>		2018		2	<b>017</b> <sup>(7)</sup>
GAAP net (loss) income	\$	(457.4)	\$	165.2	\$	(208.3)	\$	335.3
Before tax adjustments:								
Cost of sales:								
Share-based compensation		5.5		3.1		8.8		4.9
Fair value adjustment in inventory acquired		-		2.5		-		5.2
Restructuring related expenses <sup>(1)</sup>		0.5		-		5.8		-
Research and development expense:								
Share-based compensation		15.1		20.1		30.0		36.3
Upfront payments related to licenses and collaborations		-		0.5		-		9.4
Restructuring related expenses <sup>(1)</sup>		-		-		0.1		-
Selling, general and administrative expense:								
Share-based compensation		33.3		38.1		66.4		73.8
Restructuring related expenses <sup>(1)</sup>		6.5		-		10.1		-
Litigation charges <sup>(2)</sup>		7.1		-		7.1		-
Acquired in-process research and development <sup>(3)</sup>		803.7		-		803.7		-
Amortization of purchased intangible assets		80.1		80.1		160.1		160.1
Change in fair value of contingent consideration <sup>(4)</sup>		4.7		24.6		57.4		28.1
Restructuring expenses <sup>(1)</sup>		10.6		2.9		16.1		26.7
Impairment of intangible assets		-		31.0		-		31.0
Investment income:								
Change in value of equity securities without readily determinable fair values <sup>(5)</sup> Other income:		-		-		(100.8)		-
Restructuring related expenses <sup>(1)</sup>						(0.1)		_
Adjustments to income tax expense <sup>(6)</sup>		(38.3)		(12.3)		(4.4)		(39.2)
Non-GAAP net income	\$	471.4	\$	355.8	\$	852.0	\$	671.6
GAAP earnings (loss) per common share - diluted		(\$2.05)		\$0.73		(\$0.94)		\$1.49
Non-GAAP earnings per common share - diluted		\$2.07		\$1.56		\$3.76		\$2.94
Shares used in computing diluted earnings (loss) per common share (GAAP)		222.6		225.5		222.3		225.7
Shares used in computing diluted earnings per common share (non-GAAP)		227.2		228.4		226.8		228.4

(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 June 30, 2018								Т	Three mon June 3																				
	Employee Separation			sset- lated					-	loyee ration		sset- elated																				
	С	osts	Ch	Charges		Other		Total		Costs		Costs		Costs		Costs		Costs		Costs		Costs		Costs		Costs		arges	C	Other	]	Fotal
Cost of Sales	\$	-	\$	0.5	\$	-	\$	0.5	\$	-	\$	5.8	\$	-	\$	5.8																
Research and Development		-		-		-	\$	-		-		0.1		-	\$	0.1																
Selling, General and Administrative	<b>;</b>	-		6.5		-	\$	6.5		-		10.1		-	\$	10.1																
Restructuring Expense		3.1		-		7.5	\$	10.6		4.1		-		12.0	\$	16.1																
Other (Income) Expense		-		-		-	\$	-		-		-		(0.1)	\$	(0.1)																
-	\$	3.1	\$	7.0	\$	7.5	\$	17.6	\$	4.1	\$	16.0	\$	11.9	\$	32.0																

(2) During the second quarter of 2018, we recorded \$7.1 million in litigation charges in connection with ongoing investigations.

- (3) During the second quarter of 2018, we completed the acquisition of Wilson Therapeutics AB. The acquisition was accounted for as an asset acquisition, as substantially all of the fair value of the gross assets acquired is concentrated in a single asset, WTX101, an early Phase III development asset. The value of the acquired in-process research and development asset related to WTX101 was expensed during the three and six months ended June 30, 2018 due to the stage of development of this asset.
- (4) The change in the expense associated with the fair value of contingent consideration for the three and six months ended June 30, 2018, as compared to the same periods in 2017 was primarily due to the timing of increases in the likelihood and anticipated timing of payments for contingent consideration.
- (5) On January 1, 2018, we adopted a new standard that changes the accounting for equity investments and, as a result, we recognized an unrealized gain of \$100.8 million in investment income during the first quarter and six months ended June 30, 2018, respectively, to adjust our investment in Moderna Therapeutics, Inc. to fair value.
- (6) 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.
- (7) Prior year amounts may have been adjusted to conform to current year rounding presentation.



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

(unaudited)

	1	Twelve months end December 31, 201		
		Low	]	High
GAAP net income	\$	283	\$	340
Before tax adjustments:				
Share-based compensation		228		210
Upfront payments related to licenses and collaborations		-		-
Acquired in-process research and development		804		804
Amortization of purchased intangible assets		320		320
Change in fair value of contingent consideration		67		67
Restructuring and related expenses		92		42
Change in value of equity securities without readily determinable fair values		(101)		(101)
Litigation charges		7		7
Adjustments to income tax expense		(104)		(59)
Non-GAAP net income	\$	1,596	\$	1,630
Diluted GAAP earnings per common share		\$1.25		\$1.50
Diluted non-GAAP earnings per common share		\$7.00		\$7.15
Operating expense and margin (% total revenues)				
GAAP research and development expense		21%		20%
Share-based compensation		21/0		20%
Upfront payments related to licenses and collaborations		270		- 27
Restructuring related expenses		_		_
Non-GAAP research and development expense		19%		18%
GAAP selling, general and administrative expense		27%		26%
Share-based compensation		3%		3%
Restructuring related expenses		-		-
Litigation charges				_
Non-GAAP selling, general and administrative expense		23%		- 22%
GAAP operating margin		11%		14%
Share-based compensation		6%		5%
•		070		370
Upfront payments related to license and collaborations Acquired in-process research and development		- 20%		- 20%
• •		20%		20%
Litigation charges		- 8%		- 8%
Amortization of purchased intangible assets				8% 2%
Change in fair value of contingent consideration		2%		
Restructuring and related expenses		2%		1%
Non-GAAP operating margin		49%		50%
Income tax expense (% of income before income taxes)				
GAAP income tax expense		40.0%		39.0%
Tax effect of pre-tax adjustments to GAAP net income and adjustments to Q4 2017 tax				
reform provisional accounting		(24.5)%		(24.5)%
reionn provisional accounting				



Amounts may not foot due to rounding.

#### ALEXION PHARMACEUTICALS, INC. TABLE 4: NET PRODUCT SALES BY GEOGRAPHY

#### (in millions)

#### (unaudited)

	Three months ended					Six months ended						
		Jun	ie 30	June 30								
		2018	<b>2017</b> <sup>(1)</sup>			2018		2017 <sup>(1)</sup>				
<u>Soliris</u>												
United States	\$	395.8	\$	317.8	\$	731.8	\$	605.9				
Europe		253.4		248.5		504.2		489.9				
Asia Pacific		93.6		80.8		179.1		159.6				
Rest of World		155.4		166.2		283.2		341.4				
Total Soliris	\$	898.2	\$	813.3	\$	1,698.3	\$	1,596.8				
<u>Strensiq</u>												
United States	\$	99.9	\$	70.0	\$	189.1	\$	133.3				
Europe		16.4		8.6		30.4		13.7				
Asia Pacific		6.3		4.4		12.0		8.1				
Rest of World		2.5		0.6		4.3		2.1				
Total Strensiq	\$	125.1	\$	83.6	\$	235.8	\$	157.2				
Kanuma												
United States	\$	13.0	\$	11.1	\$	24.9	\$	19.8				
Europe		5.8		3.3		11.7		5.1				
Asia Pacific		1.1		0.6		2.1		1.1				
Rest of World		1.5		0.3		2.3		1.3				
Total Kanuma	\$	21.4	\$	15.3	\$	41.0	\$	27.3				
Net Product Sales												
United States	\$	508.7	\$	398.9	\$	945.8	\$	759.0				
Europe		275.6		260.4		546.3		508.7				
Asia Pacific		101.0		85.8		193.2		168.8				
Rest of World		159.4		167.1		289.8		344.8				
Total Net Product Sales	\$	1,044.7	\$	912.2	\$	1,975.1	\$	1,781.3				

(1) Prior year amounts may have been adjusted to conform to current year rounding presentation.



#### ALEXION PHARMACEUTICALS, INC. TABLE 5: CONDENSED CONSOLIDATED BALANCE SHEETS

#### (in millions) (unaudited)

June 30 December 31  $2017^{\overline{(2)}}$ 2018 Cash and cash equivalents 727.5 \$ 584.4 \$ Marketable securities 449.5 889.7 Trade accounts receivable, net 853.7 726.5 Inventories 463.2 460.4 Prepaid expenses and other current assets 342.2 292.9 1,422.6 1,325.4 Property, plant and equipment, net Intangible assets, net 3,793.8 3,954.4 Goodwill 5,037.4 5,037.4 Other assets 400.5 312.2 Total assets 13,490.4 13,583.3 Accounts payable and accrued expenses \$ 664.0 \$ 710.2 Revolving credit facility 250.0 \_\_\_\_ Current portion of long-term debt 28.5167.4 Current portion of contingent consideration 70.3 \_\_\_\_ Other current liabilities (1) 74.9 31.6 Long-term debt, less current portion 2,564.9 2,720.7 Contingent consideration 156.0 168.9 Facility lease obligation 361.4 342.9 Deferred tax liabilities 464.0 365.0 Other liabilities 132.3 140.2 Total liabilities 4,723.0 4,690.2 Total stockholders' equity (1) 8,767.4 8,893.1 Total liabilities and stockholders' equity 13,490.4 13,583.3 -\$

(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. We recognized this amount in revenue in the first quarter of 2018.

(2) Prior year amounts may have been adjusted to conform to current year rounding presentation.



#### ALEXION PHARMACEUTICALS, INC. RECONCILIATION GAAP TO NON-GAAP 2019 OPERATING MARGIN

	Twelve months ending
	December 31, 2019
<u>Operating margin (% total revenues)</u>	
GAAP operating margin	37%
Share-based compensation	6%
Amortization of purchased intangible assets	7%
Change in fair value of contingent consideration	0%
Non-GAAP operating margin	50%

