

# Executing Our Growth Strategy

Flemming Ornskov, MD, MPH - **CEO**

Jeff Poulton - **CFO**

Full Year 2016 Financial Results

February 16, 2017



# “Safe Harbor” Statement Under The Private Securities Litigation Reform Act Of 1995

Statements included herein that are not historical facts, including without limitation statements concerning future strategy, plans, objectives, expectations and intentions, the anticipated timing of clinical trials and approvals for, and the commercial potential of, inline or pipeline products, are forward-looking statements. Such forward-looking statements involve a number of risks and uncertainties and are subject to change at any time. In the event such risks or uncertainties materialize, Shire's results could be materially adversely affected. The risks and uncertainties include, but are not limited to, the following:

- Shire's products may not be a commercial success;
- increased pricing pressures and limits on patient access as a result of governmental regulations and market developments may affect Shire's future revenues, financial condition and results of operations;
- Shire conducts its own manufacturing operations for certain of its products and is reliant on third party contract manufacturers to manufacture other products and to provide goods and services. Some of Shire's products or ingredients are only available from a single approved source for manufacture. Any disruption to the supply chain for any of Shire's products may result in Shire being unable to continue marketing or developing a product or may result in Shire being unable to do so on a commercially viable basis for some period of time;
- the manufacture of Shire's products is subject to extensive oversight by various regulatory agencies. Regulatory approvals or interventions associated with changes to manufacturing sites, ingredients or manufacturing processes could lead to, among other things, significant delays, an increase in operating costs, lost product sales, an interruption of research activities or the delay of new product launches;
- certain of Shire's therapies involve lengthy and complex processes, which may prevent Shire from timely responding to market forces and effectively managing its production capacity;
- Shire has a portfolio of products in various stages of research and development. The successful development of these products is highly uncertain and requires significant expenditures and time, and there is no guarantee that these products will receive regulatory approval;
- the actions of certain customers could affect Shire's ability to sell or market products profitably. Fluctuations in buying or distribution patterns by such customers can adversely affect Shire's revenues, financial conditions or results of operations;
- Shire's products and product candidates face substantial competition in the product markets in which it operates, including competition from generics;
- adverse outcomes in legal matters, tax audits and other disputes, including Shire's ability to enforce and defend patents and other intellectual property rights required for its business, could have a material adverse effect on the combined company's revenues, financial condition or results of operations;

- inability to successfully compete for highly qualified personnel from other companies and organizations;
- failure to achieve the strategic objectives, including expected operating efficiencies, cost savings, revenue enhancements, synergies or other benefits at the time anticipated or at all with respect to Shire's acquisition of NPS Pharmaceuticals Inc., Dyax Corp. or Baxalta Incorporated may adversely affect Shire's financial condition and results of operations;
- Shire's growth strategy depends in part upon its ability to expand its product portfolio through external collaborations, which, if unsuccessful, may adversely affect the development and sale of its products;
- a slowdown of global economic growth, or economic instability of countries in which Shire does business, as well as changes in foreign currency exchange rates and interest rates, that adversely impact the availability and cost of credit and customer purchasing and payment patterns, including the collectability of customer accounts receivable;
- failure of a marketed product to work effectively or if such a product is the cause of adverse side effects could result in damage to Shire's reputation, the withdrawal of the product and legal action against Shire;
- investigations or enforcement action by regulatory authorities or law enforcement agencies relating to Shire's activities in the highly regulated markets in which it operates may result in significant legal costs and the payment of substantial compensation or fines;
- Shire is dependent on information technology and its systems and infrastructure face certain risks, including from service disruptions, the loss of sensitive or confidential information, cyber-attacks and other security breaches or data leakages that could have a material adverse effect on Shire's revenues, financial condition or results of operations;
- Shire incurred substantial additional indebtedness to finance the Baxalta acquisition, which may decrease its business flexibility and increase borrowing costs; and

a further list and description of risks, uncertainties and other matters can be found in Shire's most recent Annual Report on Form 10-K and in Shire's subsequent Quarterly Reports on Form 10-Q, in each case including those risks outlined in "ITEM 1A: Risk Factors", and in subsequent reports on Form 8-K and other Securities and Exchange Commission filings, all of which are available on Shire's website.

All forward-looking statements attributable to us or any person acting on our behalf are expressly qualified in their entirety by this cautionary statement. Readers are cautioned not to place undue reliance on these forward-looking statements that speak only as of the date hereof. Except to the extent otherwise required by applicable law, we do not undertake any obligation to update or revise forward-looking statements, whether as a result of new information, future events or otherwise.

# Agenda

## 1. Business update

Rare diseases leader  
fueling growth



Flemming Ornskov, MD, MPH

## 2. Financial review



Jeff Poulton

## 3. Summary



Flemming Ornskov, MD, MPH

## 4. Q & A

# 2016 was a transformational year for Shire

## RARE DISEASE LEADERSHIP



- Completed the integration of Dyax and acquisition of Baxalta
- Solidified our leadership position in rare diseases and specialty conditions with a unique business model
- Achieved record product sales and Non GAAP earnings performance
- Delivered Non GAAP EPS at top end of our previously stated 2016 guidance

## EXECUTION



- Pipeline advancing across all therapeutic areas and stages of development
- Key products launched, including XIIDRA in the U.S.
- Baxalta integration proceeding ahead of relevant benchmarks
- Synergy targets ahead of plan since deal close, and on-track for Year 3 guidance

## GROWTH



- Product sales CER<sup>(1)(2)</sup> growth of 79%, including YoY CER growth of 15% from Shire legacy products and 8% from legacy Baxalta products on a pro forma basis
- Key new product approvals across multiple therapeutic areas
- Most innovative clinical pipeline in Shire's history with numerous promising late-stage programs



(1) Growth rates are at Constant exchange rates ("CER"), a Non GAAP financial measure. CER performance is determined by comparing 2016 performance (restated using 2015 exchange rates for the relevant period) to actual 2015 reported performance.

(2) See slide 44 for a list of items excluded from the US GAAP equivalent used to calculate all Non GAAP measures detailed above. See slides 37 to 43 for a reconciliation of Non GAAP financial measures to the most directly comparable measure under US GAAP.

# Rare Diseases is an attractive segment of the market that is both large and growing faster than the broader market



## Incredible opportunity for innovation

Debilitating, often **life-threatening conditions** with substantial impact on patients and their caregivers

**Focused patient groups** actively looking for solutions

- Affect fewer than 5 in 10,000 people (or under 200,000 in the U.S.)
- Over 7,000 diseases, of which only 5% have treatments
- Often pediatric indications

**R&D incentives** like Orphan Drug Status, Breakthrough Therapy Designation, Fast Track approvals

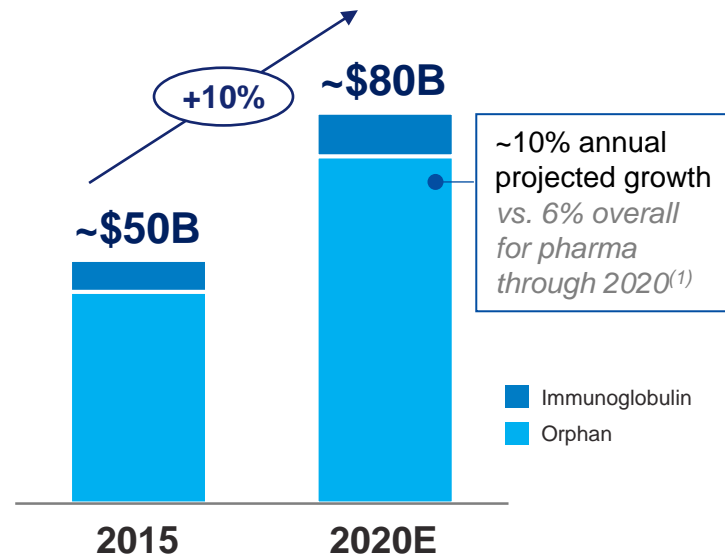
**Growing interest** and engagement by regulatory authorities

- Approx. 23% of new US drug approvals since 2014



## Extraordinary impact for patients and health systems

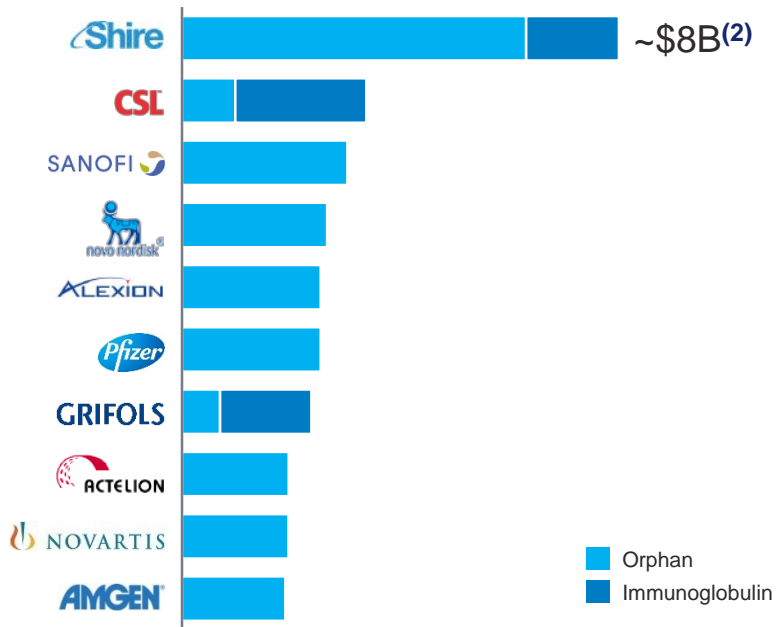
## ACTUAL AND PROJECTED REVENUES FOR RARE DISEASES DRUGS<sup>(1)</sup>



# Shire is the largest player in Rare Diseases and our growth continues to out-pace many of our peers

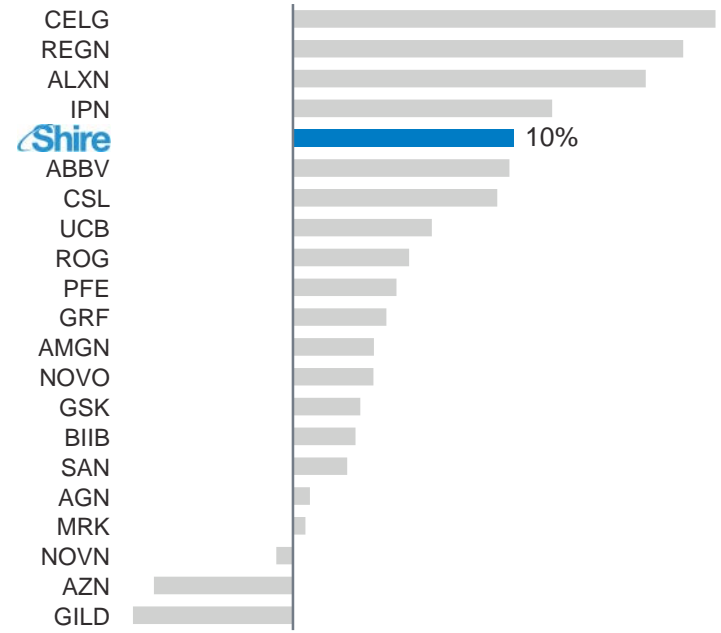
## TOP 10 COMPANIES BY RARE DISEASES PRODUCT SALES<sup>(1)</sup>

2015 Product Revenues, \$B



## REVENUE GROWTH 2015-2017<sup>(3)</sup>

Projected CAGR % - Selected BioPharma Peers



(1) EvaluatePharma, accessed February 6, 2017 - Rare Diseases market includes all orphan drugs . Limited to drugs where the FDA Orphan designation is for primary indication. Excludes sales in oncology and multiple sclerosis.  
 (2) Shire sales include 2015 pro forma sales reported by Baxter / Baxalta in 2015.  
 (3) Shire 2017 revenue growth based on midpoint of 2017 guidance. FactSet data of consensus estimates used for all other companies; FactSet accessed January 31, 2017.

# Significant delivery of major milestones in 2016

## ORGANIZATIONAL MILESTONES

- Completion of Dyax integration
- Acquisition of Baxalta
- \$12.1B bond issuance
- Significant progress towards Baxalta integration
- License of SHP647
  - Antibody program from Pfizer for Inflammatory Bowel Disease
- Significant upgrade to global footprint and capabilities

## MAJOR APPROVALS & LAUNCHES

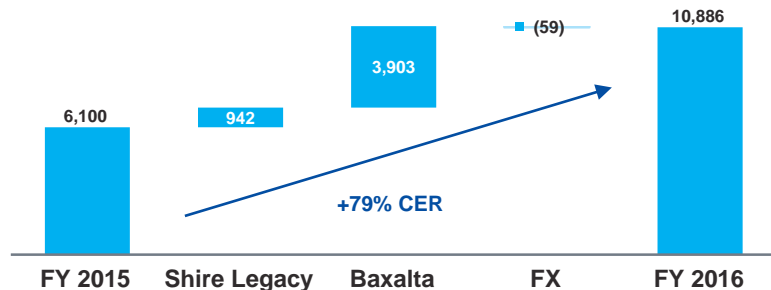
- Approval and launch of XIIDRA for signs and symptoms of Dry Eye Disease in the U.S.
- Approval and launch of CUVITRU for Primary Immunodeficiency in the EU and U.S.
- Approval and launch of ONIVYDE for 2nd Line Metastatic Pancreatic Cancer in the EU
- Launch of VONVENDI for Von Willebrand Disease in adults in the U.S.
- 2 new indications for ADYNOVATE in the U.S.; Pediatric and surgery indications

## PIPELINE PROGRESS

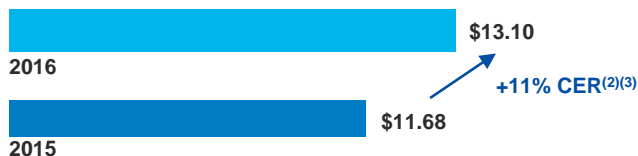
- Resubmission for FDA approval of SHP465 (ADHD)
- Breakthrough Therapy Designations
  - SHP621 (EoE)
  - SHP625 (PFIC2)
- Fast Track FDA Designation
  - SHP626 (NASH)
- Completed Enrollment for key Phase 3 Studies
  - SHP609 (Hunter CNS)
  - SHP643 (HAE)
- Key Phase 3 trials initiated
  - SHP620 (CMV Infection)
  - SHP621 (EoE)

# Record product sales and Non GAAP earnings

## PRODUCT SALES (\$MM)



## NON GAAP DILUTED EARNINGS PER ADS<sup>(2)(3)</sup>



## FINANCIAL HIGHLIGHTS

- Addition of Baxalta franchises led to record product sales of \$10.9B and 79% CER<sup>(1)(2)</sup> growth over 2015 reported sales
- On a pro forma CER basis, total product sales were 12% higher in 2016 compared to 2015
  - Legacy Shire franchises delivered 15% growth, while legacy Baxalta franchises grew 8% on a pro forma CER basis
- Non GAAP diluted earnings per ADS CER<sup>(2)(3)</sup> growth of 11% reflecting strong business fundamentals and discipline
- 2016 results inline or ahead of guidance for all P&L lines



# Strong 2016 sales performance across a diversified portfolio

## Hematology

sales \$3,688MM; +3%<sup>(1)(2)</sup>



- Growth in hematology driven by increasing prophylaxis treatment rates and increased share for select Shire brands
- Additional growth fueled by geographic expansion

## Genetic Diseases

sales \$2,698MM; +14%<sup>(1)</sup>



- Growth in FIRAZYR and LSD portfolio primarily due to an increase in number of patients on therapy
- Increase to the number of patients on therapy with CINRYZE despite some supply constraints in Q3

## Immunology

sales \$2,507MM; +9%<sup>(1)(2)</sup>



- Immunoglobulin sales grew at 9% on a pro forma CER basis primarily driven by a strong performance with increased adoption of HYQVIA
- CUVITRU launched in Q4 in the U.S. with European launches expected to follow in 2017

## Neuroscience

sales \$2,490MM; +14%<sup>(1)</sup>



- VYVANSE continued to perform strongly, with growth driven by increased use in adults in the U.S., pricing improvement, and continued growth in international markets

## Internal medicine

sales \$1,756MM; +17%<sup>(1)</sup>



- LIALDA sales benefiting from continued market share growth
- Growth from new patient adds on GATTEX and NATPARA

## Oncology

sales \$215MM; +147%<sup>(1)(2)</sup>



- ONCASPAR continues to perform well in the U.S.; further growth expected internationally, as commercial launches are initiated across EU
- European approval for ONIVYDE granted - the first and only approved treatment option for adult patients with metastatic adenocarcinoma of the pancreas, in combination with 5-fluorouracil and leucovorin who have progressed following gemcitabine-based therapy

## Ophthalmics

sales \$54MM; N/A



- Positive contribution from XIIDRA, with strong early prescription trends and market share gains, as well as increasing levels of managed care access

# Key priorities for 2017



Commercial execution and new product launches



Further integration



Pipeline progression



Optimize portfolio and strengthen focus

















Debt pay-down



**RARE DISEASES LEADER ▶ FUELING GROWTH**

# Numerous 2017 launches<sup>(1)</sup> expected to help fuel our growth

THERAPEUTIC AREA	PRODUCTS	SELECT COUNTRY LAUNCHES
Hematology	 ADYNOVATE [Antihemophilic Factor (Recombinant), PEGylated]	<ul style="list-style-type: none"> <li>• Key EU countries</li> </ul>
Genetic Diseases	  	<ul style="list-style-type: none"> <li>• Various international markets</li> </ul>
Neuroscience	  	<ul style="list-style-type: none"> <li>• U.S. (SHP465<sup>(1)</sup>)</li> <li>• Key EU countries, Japan (INTUNIV)</li> <li>• Canada, Australia (VYVANSE- BED)</li> </ul>
Immunology	 	<ul style="list-style-type: none"> <li>• Key EU countries, Canada (CUVITRU), Brazil (HyQvia)</li> </ul>
Internal Medicine	 	<ul style="list-style-type: none"> <li>• Initial EU launch (NATPARA)</li> <li>• Key EU countries (GATTEX)</li> </ul>
Ophthalmics		<ul style="list-style-type: none"> <li>• Canada</li> </ul>
Oncology	 	<ul style="list-style-type: none"> <li>• Key EU countries</li> </ul>



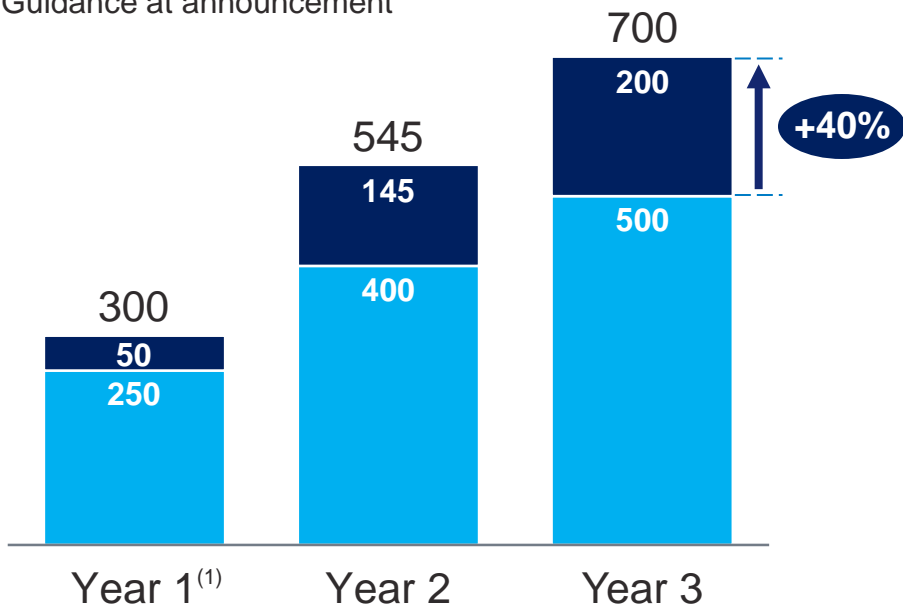
(1) Subject to regulatory approval.

Note: This list is not exhaustive.

Blue = 1<sup>st</sup> launch in this region Black = Subsequent country launches

# On track to achieve at least \$700m cost synergy post Baxalta close in year 3

- Updated guidance as of Q2 2016 earnings release
- Guidance at announcement



## RECENT PROGRESS

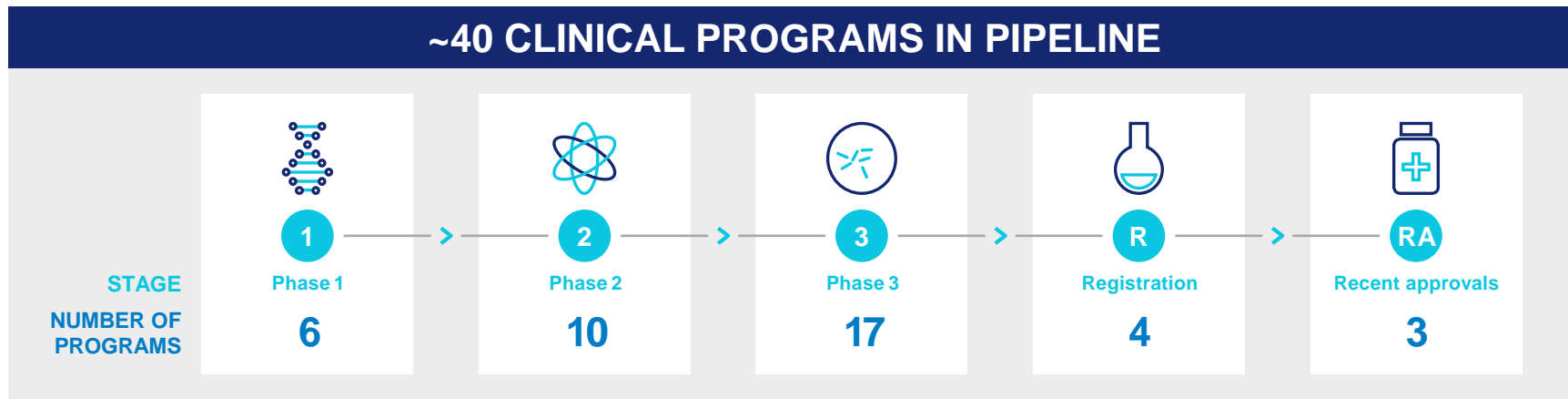
- Synergy realization is ahead of plan
- Portfolio prioritization initiative completed
- Decision made to exit biosimilars, streamline oncology business
- Manufacturing network optimization initiated
- Initiated closure of part of a facility in our Los Angeles manufacturing site
- First international commercial site consolidations completed

# Innovation is the lifeblood of our current and future success

We focus our innovation across areas with **high unmet medical need**

We aim to **expand our rare disease expertise** and offerings through **research and partnerships**, and to extend our existing portfolio of products to **new indications and therapeutic areas**

## ~40 CLINICAL PROGRAMS IN PIPELINE



# Significant progress expected for our pipeline in 2017

THERAPEUTIC AREA	DATA READ-OUTS	PHASE 3 STARTS	REGULATORY FILINGS AND APPROVALS <sup>(3)</sup>
<b>Hematology</b>	<ul style="list-style-type: none"> <li>• SHP656 (Hemophilia A) – Phase 1/2</li> </ul>	<ul style="list-style-type: none"> <li>• SHP656<sup>(1)</sup> (Hemophilia A)</li> <li>• SHP655 (hTTP)</li> </ul>	<ul style="list-style-type: none"> <li>• VONVENDI filing (VWD) – EU</li> <li>• ADYNOVATE approval (Hemophilia) – EU</li> </ul>
<b>Genetic Diseases</b>	<ul style="list-style-type: none"> <li>• SHP643 (HAE) – Phase 3</li> <li>• CINRYZE SC (HAE) – Phase 3</li> <li>• SHP609 (Hunter CNS) – Phase 2/3</li> <li>• SHP611 (MLD) – Phase 1/2</li> </ul>	<ul style="list-style-type: none"> <li>• SHP611<sup>(1)</sup> (MLD)</li> </ul>	<ul style="list-style-type: none"> <li>• SHP643<sup>(1)</sup> (HAE) filing – U.S.</li> </ul>
<b>Neuroscience</b>			<ul style="list-style-type: none"> <li>• SHP465 approval (ADHD) – U.S.</li> <li>• VYVANSE filing (ADHD) – Japan</li> </ul>
<b>Internal Medicine</b>		<ul style="list-style-type: none"> <li>• SHP647 (Inflammatory Bowel Disease)</li> <li>• SHP607<sup>(2)</sup> (Complications of Prematurity)</li> <li>• SHP625 (ALGS)</li> </ul>	<ul style="list-style-type: none"> <li>• NATPARA approval (Hypoparathyroidism) – EU</li> <li>• SHP555 / RESOLOR (Chronic Constipation) filing – U.S.</li> </ul>
<b>Ophthalmics</b>		<ul style="list-style-type: none"> <li>• SHP640 (Conjunctivitis)</li> </ul>	<ul style="list-style-type: none"> <li>• XIIDRA filing (Dry Eye Disease) – EU</li> </ul>



(1) Subject to positive data read-out and decision to advance program in 2017.  
 (2) Phase 2/3 trial and subject to regulatory feedback.  
 (3) Subject to regulatory approval.

Note: This list is not exhaustive of all pipeline progress expected in 2017.

# XIIDRA prescription growth continues to reinforce underlying demand and strong commercial execution

**274,386**

Total scripts through 1/27/17

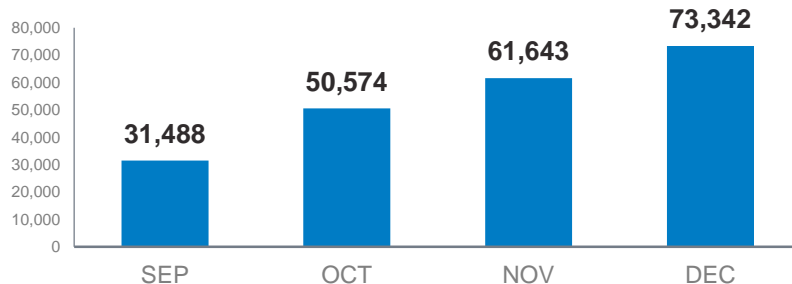
**19%**

TRx market share DEC 2016

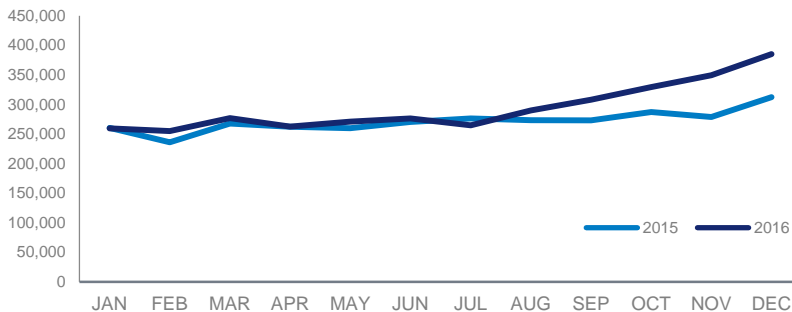
**50%**

NBRx market share

## MONTHLY XIIDRA U.S. TRX 2016



## MONTHLY DRY EYE DISEASE TRX MARKET VOLUME



## ADDITIONAL PROGRESS

- ~85% of commercial lives now covered under Tier 2 or 3
  - >100M commercial lives covered
- Overall market up 19% YoY Sep-Dec 2016 vs. Sep-Dec 2015
- ~65% of XIIDRA RXs are going to treatment-naïve patients
- Regulatory filing for Canada made in Q4 2016 and EU filing expected in Q3 2017



# 20+ Years of growth and innovation in ADHD; SHP465 is the next milestone



1996



2001



2006



2007



2015

2010



2009



2017

Vyvanse Chewable<sup>(1)</sup>

2017

SHP465<sup>(1)</sup>

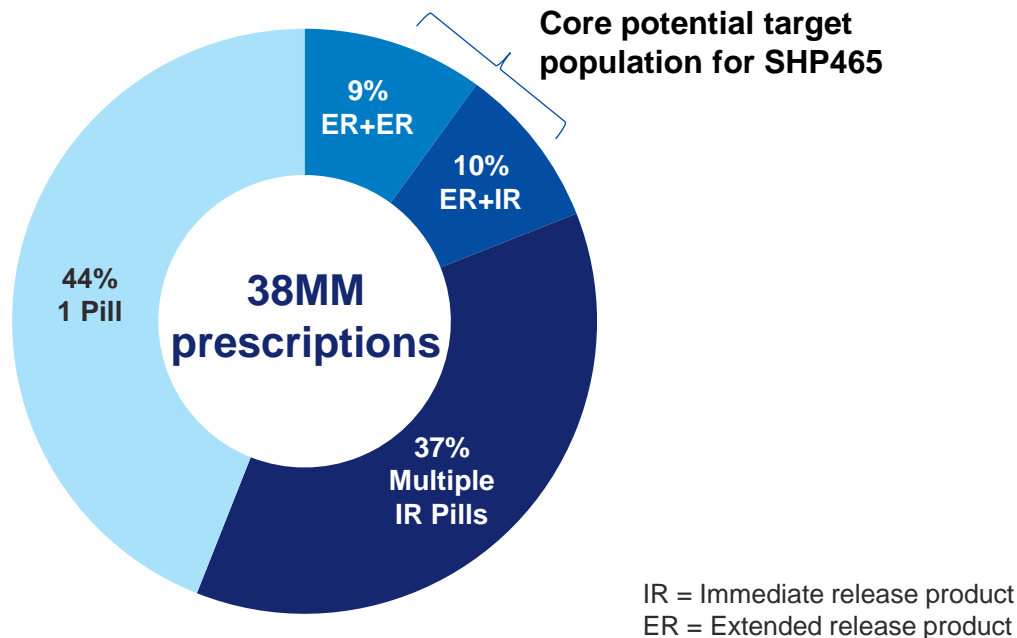
# Shire

## 20+ years of ADHD experience



# Significant potential market opportunity for SHP465 particularly in patients currently being prescribed > 1 pill per day

## ESTIMATED DISTRIBUTION OF U.S. ADULT ADHD TREATMENT



## SHP465<sup>(1)</sup>

- Long-acting amphetamine showed efficacy at 16 hours post-dose in clinical studies in ADHD, with onset at 2 or 4 hours post-dose
  - Expected to serve an increasing patient need in the marketplace
- FDA resubmission for SHP465 on December 20, 2016
- Accepted by FDA on January 17, 2017
- PDUFA date – June 20, 2017
- Potential commercial launch – H2 2017

# SHP643 has the potential to transform the HAE landscape

## SHIRE LEADERSHIP IN HAE



**SHP643<sup>(1)</sup>**

- Acquired in 2008 with Jerini
- 2016 WW Sales of \$579MM
- YoY Growth rate of 30%

- Acquired in 2014 with ViroPharma
- 2016 WW Sales of \$680MM
- YoY Growth rate of 10%

- Acquired in 2016 with Dyax
- Phase 3 trial on track for data read-out by Q2 2017
- Opportunity to improve on the efficacy, safety, and convenience of current treatment options
- SHP643 has received both an orphan drug designation and a breakthrough designation

# Financial Review

**Jeff Poulton**  
Chief Financial Officer



# FY 2016 reported key financials summary

	FY 2016 \$MM <sup>(1)</sup>	FY 2015 \$MM	Reported Growth	CER Growth <sup>(2)(10)</sup>	FY 2016 Guidance	Actual vs. Guidance
<b>Product sales</b>	10,886	6,100	+78%	+79%	\$10.8 - \$11 billion	✓
<b>Royalties and other revenues</b>	511	317	+61%	+59%	\$490 - \$530 million	✓
<b>Total revenue</b>	11,397	6,417	+78%	+78%		
<b>Non GAAP combined R&amp;D and SG&amp;A<sup>(3)(10)</sup></b>	4,178	2,608	+60%	+62%	\$4.1 - \$4.4 billion	✓
<b>Non GAAP EBITDA<sup>(4)(10)</sup></b>	4,710	2,924	+61%	+59%		
<b>Non GAAP EBITDA margin<sup>(5)(6)(10)</sup></b>	39%	43%	-4 ppc	n/a		
<b>Non GAAP effective tax rate<sup>(7)(10)</sup></b>	16%	16%	n/a	n/a	16% - 18%	✓
<b>Non GAAP diluted EPS – ADS<sup>(8)(10)</sup></b>	13.10	11.68	+12%	+11%	\$12.70 - \$13.10	✓
<b>Non GAAP cash generation<sup>(9)(10)</sup></b>	3,464	2,422	+43%	n/a		

(1) Results include Baxalta (acquired on June 3, 2016) and Dyax (acquired on January 22, 2016).

(2) Growth rates are at Constant exchange rates ("CER"), a Non GAAP financial measure. CER performance is determined by comparing 2016 performance (restated using 2015 exchange rates for the relevant period) to actual 2015 reported performance.

(3) This is a Non GAAP financial measure. The most directly comparable measure under US GAAP is Combined R&D and SG&A (FY 2016: \$4,455m, FY 2015: \$3,407m).

(4) This is a Non GAAP financial measure. The most directly comparable measure under US GAAP is Net income (FY 2016: \$327m, FY 2015: \$1,303m).

(5) Non GAAP EBITDA as a percentage of product sales, excludes royalties and other revenues and cost of sales related to contract manufacturing revenue.

(6) This is a Non GAAP financial measure. The most directly comparable measure under US GAAP is Net Income Margin (FY 2016: 3%, FY 2015: 20%).

(7) This is a Non GAAP financial measure. The most directly comparable measure under US GAAP is Tax Rate (FY 2016: benefit of 26%, FY 2015: charge of 3%).

(8) This is a Non GAAP financial measure. The most directly comparable measure under US GAAP is EPS-ADS (FY 2016: \$1.27, FY 2015: \$6.59).

(9) This is a Non GAAP financial measure. The most directly comparable measure under US GAAP is Net Cash provided by operating activities (FY 2016: \$2,659m, FY 2015: \$2,337m).

(10) See slide 44 for a list of items excluded from the US GAAP equivalent used to calculate all Non GAAP measures detailed above. See slides 37 to 43 for a reconciliation of Non GAAP financial measures to the most directly comparable measure under US GAAP.

# FY product sales performance pro forma<sup>(1)</sup>

<u>\$MM</u>	FY 2016 Sales			Pro forma growth vs. 2015	
	<u>U.S.</u>	<u>International</u>	<u>Total</u>	<u>Reported</u>	<u>CER<sup>(2)(3)</sup></u>
Hemophilia	1,389	1,486	2,875	1%	2%
Inhibitor Therapies	296	517	813	5%	7%
<b>Hematology Total</b>	<b>1,685</b>	<b>2,003</b>	<b>3,688</b>	<b>2%</b>	<b>3%</b>
CINRYZE	639	42	680	10%	10%
FIRAZYR	511	68	579	30%	30%
KALBITOR	52	-	52	n/a	n/a
ELAPRASE	151	438	589	7%	9%
REPLAGAL	-	452	452	3%	4%
VPRIV	155	190	346	1%	2%
<b>Genetic Disease Total</b>	<b>1,508</b>	<b>1,190</b>	<b>2,698</b>	<b>12%</b>	<b>14%</b>
VYVANSE	1,827	187	2,014	17%	17%
ADDERALL XR	342	22	364	0%	1%
Other Neuroscience	33	80	113	-2%	1%
<b>Neuroscience Total</b>	<b>2,202</b>	<b>289</b>	<b>2,490</b>	<b>13%</b>	<b>14%</b>
Immunoglobulin Therapies	1,514	376	1,890	8%	9%
Bio Therapeutics	285	332	617	7%	10%
<b>Immunology Total</b>	<b>1,799</b>	<b>708</b>	<b>2,507</b>	<b>8%</b>	<b>9%</b>
LIALDA	714	78	792	16%	16%
PENTASA	309	-	309	1%	1%
GATTEX	190	30	219	55%	55%
NATPARA	85	-	85	250%	250%
Other Internal Medicine	133	216	349	1%	2%
<b>Internal Medicine Total</b>	<b>1,432</b>	<b>323</b>	<b>1,756</b>	<b>17%</b>	<b>17%</b>
Oncology	174	41	215	146%	147%
Ophthalmology	54	-	54	n/a%	n/a
<b>Total Product Sales</b>	<b>8,854</b>	<b>4,555</b>	<b>13,408</b>	<b>11%</b>	<b>12%</b>



- (1) Growth rates represent the FY pro forma sales compared to recast 2015 pro forma sales as previously disclosed by Baxalta following the separation from Baxter.
- (2) Growth rates are at Constant exchange rates ("CER"), a Non GAAP financial measure. CER performance is determined by comparing 2016 performance (restated using 2015 exchange rates for the relevant period) to actual 2015 reported performance.
- (3) See slide 44 for a list of items excluded from the US GAAP equivalent used to calculate all Non GAAP measures detailed above. See slides 37 to 43 for a reconciliation of Non GAAP financial measures to the most directly comparable measure under US GAAP.

# FY 2016 reported performance metrics

<b>Year on Year Growth:</b>	<b>FY 2016<sup>(1)</sup></b>
<b>Product sales</b>	78%
<b>Non GAAP R&amp;D<sup>(2)(10)</sup></b>	46%
<b>Non GAAP SG&amp;A<sup>(3)(10)</sup></b>	68%
<b>Combined Non GAAP R&amp;D and SG&amp;A<sup>(4)(10)</sup></b>	60%

<b>Ratios: As % of Product Sales</b>	<b>FY 2016<sup>(1)</sup></b>	<b>FY 2015</b>
<b>Non GAAP gross margin<sup>(5)(10)</sup></b>	77.9%	85.5%
<b>Non GAAP R&amp;D<sup>(6)(10)</sup></b>	12%	14%
<b>Non GAAP SG&amp;A<sup>(7)(10)</sup></b>	27%	28%
<b>Non GAAP EBITDA<sup>(8)(9)(10)</sup></b>	39%	43%

(1) Results include Baxalta (acquired on June 3, 2016) and Dyax (acquired on January 22, 2016).

(2) This is a Non GAAP financial measure. The most directly comparable measure under US GAAP is R&D (FY 2016: -8%).

(3) This is a Non GAAP financial measure. The most directly comparable measure under US GAAP is SG&A (FY 2016: +64%).

(4) This is a Non GAAP financial measure. The most directly comparable measure under US GAAP is Combined R&D and SG&A (FY 2016: +31%)

(5) Non GAAP Gross Margin as a percentage of product sales, excludes royalties and other revenues and cost of sales related to contract manufacturing revenue. The most directly comparable measure under US GAAP is Gross Margin (FY 2016: 64.9%, FY 2015: 84.1%)

(6) This is a Non GAAP financial measure. The most directly comparable measure under US GAAP is R&D (FY 2016: 13%, FY 2015: 26%).

(7) This is a Non GAAP financial measure. The most directly comparable measure under US GAAP is SG&A (FY 2016: 28%, FY 2015: 30%).

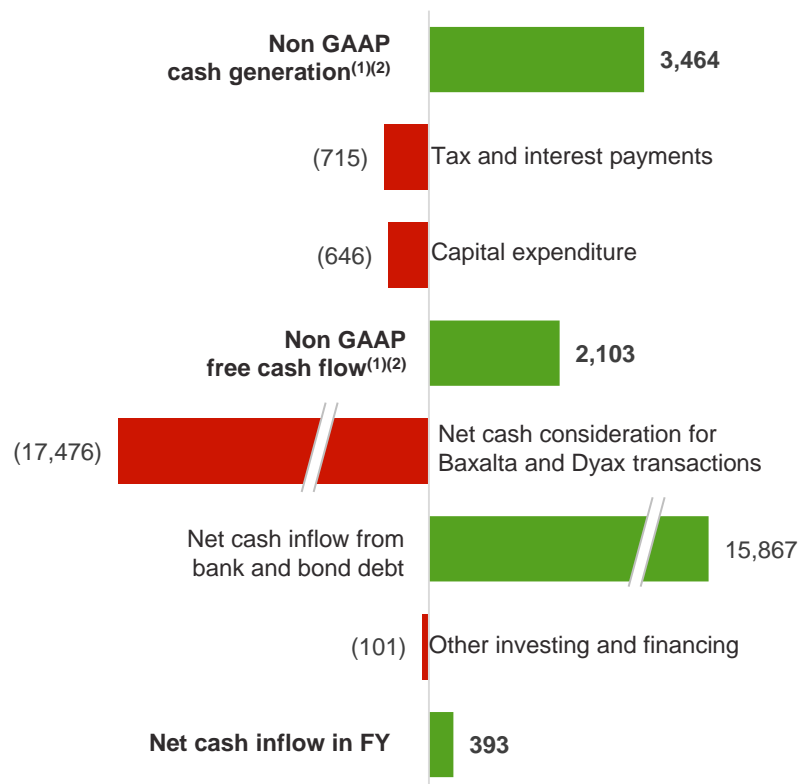
(8) This is a Non GAAP financial measure. The most directly comparable measure under US GAAP is Net Income Margin (FY 2016: 3%, FY 2015: 20%).

(9) Non GAAP EBITDA as a percentage of product sales, excludes royalties and other revenues and cost of sales related to contract manufacturing revenue.

(10) See slide 44 for a list of items excluded from the US GAAP equivalent used to calculate all Non GAAP measures detailed above. See slides 37 to 43 for a reconciliation of Non GAAP financial measures to the most directly comparable measure under US GAAP.

# Strong Non GAAP cash generation in 2016; Non GAAP net debt reduced \$0.9B in Q4

\$MM	December 31, 2016	September 30, 2016	December 31, 2015
Cash and cash equivalents	529	729	136
Long term borrowings	(19,553)	(20,989)	(70)
Short term borrowings	(3,062)	(2,737)	(1,512)
Capital leases and other debt	(354)	(349)	(13)
Non GAAP net debt <sup>(2)</sup>	(22,439)	(23,346)	(1,459)



(1) This is a Non GAAP financial measure. The most directly comparable measure under US GAAP is Net cash provided by operating activities (FY 2016: \$2,659m, FY 2015: \$2,337m).  
 (2) See slide 44 for a list of items excluded from the US GAAP equivalent used to calculate all Non GAAP measures detailed above. See slides 37 to 43 for a reconciliation of Non GAAP financial measures to the most directly comparable measure under US GAAP.

# 2017 Guidance

	Full year 2017 Dynamics	
	Guidance <sup>(1)</sup>	Impact of FX Rates on Guidance
Product Sales	\$14.5 - \$14.8 billion	-1% to -2%
Royalties & other revenues	\$600 - \$700 million	
Non GAAP gross margin (as % of total revenue)	74.5% - 76.5%	
Non GAAP combined R&D and SG&A	\$5.0 - \$5.3 billion	
Non GAAP depreciation	\$400 - \$450 million	
Non GAAP net interest/other	\$500 - \$600 million	
Non GAAP effective tax rate	16% - 17%	
Non GAAP diluted earnings per ADS	\$14.60 - \$15.20	-1% to -2%
2017 fully diluted weighted average shares	914 million	
Capital Expenditure	~\$1 billion	

Our 2017 Outlook is based on January 13, 2017 actual exchange rates (€:\$1.06, £:\$1.22, CHF:\$0.99, CAD:\$0.76, ¥:\$0.0087). The estimated impact of a 10% appreciation in the US Dollar against the respective currency, over the full year, on our 2017 Guidance is as follows:

	Revenue	Earnings
EUR	(1.4%)	(0.8%)
GBP	(0.2%)	(0.3%)
CHF	(0.1%)	0.1%
CAD	(0.1%)	(0.3%)
JPY	(0.2%)	(0.5%)
Other	(0.4%)	(0.3%)



(1) This is a Non GAAP financial measure. See our earnings release issued on February 16, 2017 and filed on Form 8-K for the related GAAP guidance. The earnings release will also be available on our website.



# Summary

Flemming Ornskov, MD, MPH



# Key priorities for 2017



**Commercial execution and new product launches**



**Further integration**



**Pipeline progression**



**Optimize portfolio and strengthen focus**



**Debt pay-down**



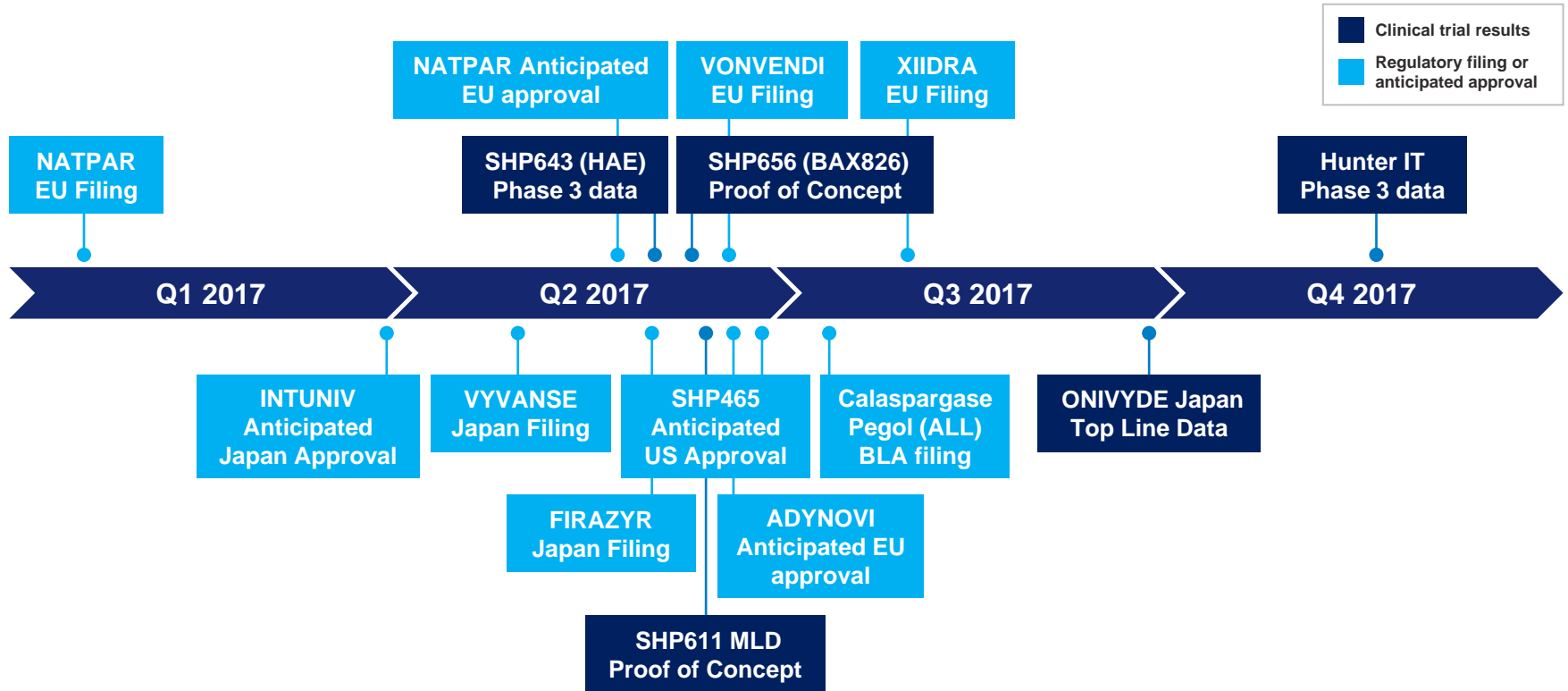
**RARE DISEASES LEADER ► FUELING GROWTH**

# Thank you... Questions and Answers



# APPENDIX

# Key anticipated events in next 12 months



Note: Timings are approximated to the nearest quarter and where appropriate subject to regulatory approval.

# Pipeline is robust at all stages of development

## RESEARCH AND PRECLINICAL

### 35+ programs

- Internally developed and via partnership
- Both rare disease and specialty conditions
- Multiple modalities including NCEs, MAbs, proteins, and gene therapy

RESEARCH AND PRECLINICAL	PHASE 1	PHASE 2	PHASE 3	REGISTRATION	RECENT APPROVALS		
	SHP611 (MLD)	Onivyde (Pancreatic Cancer, 1 <sup>st</sup> line)	SHP625 <sup>(4)</sup> (PFIC)	SHP609 (Hunter IT) Ph 2/3	Obizur (CHAWI surgery)	Natpar - EU (Hypoparathyroidism)	Cuvitru (PID)
	SHP622 (Friedreich's Ataxia)	Onivyde - Japan <sup>(2)</sup> (Pancreatic Cancer, post gemcitabine)	SHP625 (ALGS)	SHP621 <sup>(4)</sup> (EoE)	Calaspargase Pegol (ALL)	Adynovate <sup>(6)</sup> (Hemophilia A)	Xiidra (Dry eye)
	SHP623 <sup>(1)</sup> (rC1-INH) (NMO)	SHP607 <sup>(3)</sup> (BPD and IVH)	SHP626 (NASH)	SHP643 <sup>(4)</sup> (HAE Prophylaxis)	10% Hyqvia+Kiovig (CIDP)	Intuniv - Japan (ADHD)	Onivyde - EU (Pancreatic Cancer, Line 2)
	SHP631 (Hunter CNS)	SHP640 <sup>(5)</sup> (Infectious Conjunctivitis)	SHP647 <sup>(5)</sup> (CD)	Firazyr - Japan (Acute HAE) Ph 2/3	Obizur (CHAWI on demand)	SHP465 (ADHD)	
	SHP655 <sup>(5)</sup> (BAX930) (hTTP)	SHP647 <sup>(5)</sup> (UC)	SHP652 (SM101) (SLE)	Cinryze - Japan (HAE Prophylaxis)	Alpha-1 Antitrypsin (Acute GvHD)		
	SHP656 (BAX826) (Hemophilia A)			Cinryze SC (HAE Prophylaxis)	SHP555 - US (Chronic Constipation)		
				Cinryze (AMR)	Vyvanse - Japan (ADHD) Ph2/3		
				Gattex - Japan (Adult SBS)	SHP620 (CMV infection in transplant patients)		
				Vonvendi (VWD)			

Rare indication

Non-rare indication



Pipeline excludes: Oncaspar lyophilized, Alpha-1 prophylaxis, and Buccolam.

(1) rC1-INH previously being developed as SHP623 for HAE prophylaxis; After Ph1 completion will be developed for NMO; (2) Registrational study;

(3) SHP607 originally developed for ROP; (4) Granted breakthrough designation by FDA; (5) Phase 3 expected to start in 2017;

(6) Approved in U.S. for on-demand, prophylaxis in adults and children and in perioperative management. EU is in registration for on-demand in adults.

Note: Phase 2/3 programs shown as Phase 3.

# Q4 2016 reported key financials summary

	Q4 2016 \$MM <sup>(1)</sup>	Q4 2015 \$MM	Reported Growth	CER Growth <sup>(2)(10)</sup>
<b>Product sales</b>	3,621	1,624	+123%	+124%
<b>Royalties and other revenues</b>	185	92	+101%	+99%
<b>Total revenue</b>	3,806	1,716	+122%	+122%
<b>Non GAAP combined R&amp;D and SG&amp;A<sup>(3)(10)</sup></b>	1,354	688	+97%	+98%
<b>Non GAAP EBITDA<sup>(4)(10)</sup></b>	1,512	797	+90%	+86%
<b>Non GAAP EBITDA margin<sup>(5)(6)(10)</sup></b>	38%	43%	-5 ppc	n/a
<b>Non GAAP effective tax rate<sup>(7)(10)</sup></b>	17%	21%	n/a	n/a
<b>Non GAAP diluted EPS – ADS<sup>(8)(10)</sup></b>	3.37	2.97	+13%	+11%
<b>Non GAAP cash generation<sup>(9)(10)</sup></b>	1,289	813	+58%	n/a

(1) Results include Baxalta (acquired on June 3, 2016) and Dyax (acquired on January 22, 2016).

(2) This is a Non GAAP financial measure. constant exchange rate ("CER") performance is determined by comparing 2016 performance (restated using average 2015 foreign exchange rates for the relevant period) to actual 2015 reported performance.

(3) This is a Non GAAP financial measure. The most directly comparable measure under US GAAP is Combined R&D and SG&A (Q4 2016: \$1,406m, Q4 2015: \$839m).

(4) This is a Non GAAP financial measure. The most directly comparable measure under US GAAP is Net income (Q4 2016: \$457m, Q4 2015: \$281m).

(5) Non GAAP EBITDA as a percentage of product sales, excludes royalties and other revenues and cost of sales related to contract manufacturing revenue.

(6) This is a Non GAAP financial measure. The most directly comparable measure under US GAAP is Net Income Margin (Q4 2016: 12%, Q4 2015: 16%).

(7) This is a Non GAAP financial measure. The most directly comparable measure under US GAAP is Tax Rate (Q4 2016: 16%, Q4 2015: 16%).

(8) This is a Non GAAP financial measure. The most directly comparable measure under US GAAP is EPS-ADS (Q4 2016: \$1.51, Q4 2015: \$1.42).

(9) This is a Non GAAP financial measure. The most directly comparable measure under US GAAP is Net Cash provided by operating activities (Q4 2016: \$1,153m, Q4 2015: \$762m).

(10) See slide 44 for a list of items excluded from the US GAAP equivalent used to calculate all Non GAAP measures detailed above. See slides 37 to 43 for a reconciliation of Non GAAP financial measures to the most directly comparable measure under US GAAP.

# Q4 product sales performance pro forma<sup>(1)</sup>

<u>\$MM</u>	Q4 2016 Sales			Pro forma Growth vs. Q4 2015	
	U.S.	International	Total	Reported	CER <sup>(2)(3)</sup>
Hemophilia	356	455	811	3%	3%
Inhibitor Therapies	73	123	196	-10%	-10%
<b>Hematology Total</b>	<b>429</b>	<b>578</b>	<b>1,007</b>	<b>0%</b>	<b>0%</b>
CINRYZE	168	10	178	24%	24%
FIRAZYR	149	18	167	34%	34%
KALBITOR	13	-	13	n/a	n/a
ELAPRASE	39	126	165	12%	12%
REPLAGAL	-	112	112	-3%	-2%
VPRIV	38	49	86	0%	1%
<b>Genetic Disease Total</b>	<b>406</b>	<b>315</b>	<b>721</b>	<b>17%</b>	<b>17%</b>
VYVANSE	424	51	474	5%	5%
ADDERALL XR	77	5	83	-20%	-20%
Other Neuroscience	9	22	32	-5%	-2%
<b>Neuroscience Total</b>	<b>510</b>	<b>78</b>	<b>589</b>	<b>0%</b>	<b>0%</b>
Immunoglobulin Therapies	440	93	533	13%	13%
Bio Therapeutics	78	109	187	14%	17%
<b>Immunology Total</b>	<b>518</b>	<b>202</b>	<b>720</b>	<b>13%</b>	<b>14%</b>
LIALDA	201	21	222	10%	10%
PENTASA	87	-	87	19%	19%
GATTEX	56	9	65	40%	41%
NATPARA	27	-	27	128%	129%
Other Internal Medicine	35	54	89	6%	6%
<b>Internal Medicine Total</b>	<b>405</b>	<b>84</b>	<b>489</b>	<b>17%</b>	<b>18%</b>
Oncology	43	12	55	2%	3%
Ophthalmology	40	-	40	n/a	n/a
<b>Total Product Sales</b>	<b>2,352</b>	<b>1,269</b>	<b>3,621</b>	<b>9%</b>	<b>9%</b>



- (1) Growth rates represent the Q4 pro forma sales compared to recast Q4 2015 pro forma sales as previously disclosed by Baxalta following the separation from Baxter.
- (2) Growth rates are at Constant exchange rates ("CER"), a Non GAAP financial measure. CER performance is determined by comparing 2016 performance (restated using 2015 exchange rates for the relevant period) to actual 2015 reported performance.
- (3) See slide 44 for a list of items excluded from the US GAAP equivalent used to calculate all Non GAAP measures detailed above. See slides 37 to 43 for a reconciliation of Non GAAP financial measures to the most directly comparable measure under US GAAP.



# Q4 2016 reported performance metrics

<b>Year on Year Growth:</b>	<b>Q4 2016<sup>(1)</sup></b>
<b>Product sales</b>	123%
<b>Non GAAP R&amp;D<sup>(2)(10)</sup></b>	77%
<b>Non GAAP SG&amp;A<sup>(3)(10)</sup></b>	106%
<b>Combined Non GAAP R&amp;D and SG&amp;A<sup>(4)(10)</sup></b>	97%

<b>Ratios: As % of Product Sales</b>	<b>Q4 2016<sup>(1)</sup></b>	<b>Q4 2015</b>
<b>Non GAAP gross margin<sup>(5)(10)</sup></b>	75.1%	85.8%
<b>Non GAAP R&amp;D<sup>(6)(10)</sup></b>	11%	14%
<b>Non GAAP SG&amp;A<sup>(7)(10)</sup></b>	26%	28%
<b>Non GAAP EBITDA<sup>(8)(9)(10)</sup></b>	38%	43%

(1) Results include Baxalta (acquired on June 3, 2016) and Dyax (acquired on January 22, 2016).

(2) This is a Non GAAP financial measure. The most directly comparable measure under US GAAP is R&D (Q4 2016: +18%).

(3) This is a Non GAAP financial measure. The most directly comparable measure under US GAAP is SG&A (Q4 2016: +104%).

(4) This is a Non GAAP financial measure. The most directly comparable measure under US GAAP is Combined R&D and SG&A (Q4 2016: +68%)

(5) This is a Non GAAP financial measure which excludes royalties and other revenues and cost of sales related to contract manufacturing revenue. The most directly comparable measure under US GAAP is Gross Margin (Q4 2016: 70.9%, Q4 2015: 84.6%)

(6) This is a Non GAAP financial measure. The most directly comparable measure under US GAAP is R&D (Q4 2016: 12%, Q4 2015: 22%).

(7) This is a Non GAAP financial measure. The most directly comparable measure under US GAAP is SG&A (Q4 2016: 27%, Q4 2015: 30%).

(8) This is a Non GAAP financial measure. The most directly comparable measure under US GAAP is Net Income Margin (Q4 2016: 12%, Q4 2015: 16%).

(9) Non GAAP EBITDA as a percentage of product sales, excludes royalties and other revenues and cost of sales related to contract manufacturing revenue.

(10) See slide 44 for a list of items excluded from the US GAAP equivalent used to calculate all Non GAAP measures detailed above. See slides 37 to 43 for a reconciliation of Non GAAP financial measures to the most directly comparable measure under US GAAP.

# Reported regional product sales and pro forma growth analysis

<b>Q4 2016</b>	<b>US</b>	<b>EU</b>	<b>LATAM</b>	<b>APAC<sup>(3)</sup></b>	<b>Other</b>	<b>Total</b>
<b>Product Sales \$MM<sup>(1)</sup></b>	2,352	595	164	250	260	3,621
<b>% of Product Sales</b>	65%	16%	5%	7%	7%	
<b>Pro Forma YoY Growth<sup>(2)</sup></b>	<b>10%</b>	<b>-1%</b>	<b>1%</b>	<b>42%</b>	<b>4%</b>	<b>9%</b>

<b>FY 2016</b>	<b>US</b>	<b>EU</b>	<b>LATAM</b>	<b>APAC<sup>(3)</sup></b>	<b>Other</b>	<b>Total</b>
<b>Product Sales \$MM<sup>(1)</sup></b>	7,411	1,872	427	526	651	10,886
<b>% of Product Sales</b>	68%	17%	4%	5%	6%	
<b>Pro Forma YoY Growth<sup>(2)</sup></b>	<b>14%</b>	<b>4%</b>	<b>1%</b>	<b>20%</b>	<b>-2%</b>	<b>11%</b>



(1) Results from continuing operations including Baxalta (acquired on June 3, 2016) and Dyax (acquired on January 22, 2016).

(2) Growth rates represent the Q4/FY pro forma sales compared to recast Q4/FY 2015 pro forma sales as previously disclosed by Baxalta following its separation from Baxter.

(3) APAC region includes Japan.

# Royalties and other revenues

	FY 2016 \$MM <sup>(1)</sup>	FY 2015 \$MM	Reported Growth	Q4 2016 \$MM <sup>(1)</sup>	Q4 2015 \$MM	Reported Growth
SENSIPAR	151	115	+32%	39	34	+14%
3TC and ZEFFIX	59	49	+20%	16	19	-19%
FOSRENOL	48	46	+5%	14	14	-1%
ADDERALL XR	32	26	+24%	17	4	+337%
Other Royalties	92	65	+41%	43	11	+292%
<b>Royalties</b>	<b>383</b>	<b>301</b>	<b>+27%</b>	<b>129</b>	<b>82</b>	<b>+57%</b>
Other Revenues	29	16	+80%	16	10	+58%
Contract Manufacturing Revenue <sup>(2)</sup>	99	-	n/a	41	-	n/a
<b>Total Royalties &amp; Other Revenues</b>	<b>511</b>	<b>317</b>	<b>+61%</b>	<b>185</b>	<b>92</b>	<b>+101%</b>



(1) Results include Baxalta (acquired on June 3, 2016) and Dyax (acquired on January 22, 2016).

(2) Prior to acquisition, Baxalta reported within Bio Therapeutics.

# Income statement growth analysis

\$MM	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2015 FY	2016 Q1 <sup>(1)</sup>	2016 Q2 <sup>(1)</sup>	2016 Q3 <sup>(1)</sup>	2016 Q4 <sup>(1)</sup>	2016 FY <sup>(1)</sup>
<b>Total Product Sales</b>	\$1,423	\$1,476	\$1,577	\$1,624	\$6,100	\$1,627	\$2,322	\$3,315	\$3,621	\$10,886
<i>versus prior year</i>	+9%	+0%	+2%	+8%	+5%	+14%	+57%	+110%	+123%	+78%
<b>Royalties &amp; Other Revenues</b>	\$65	\$82	\$78	\$92	\$317	\$82	\$107	\$137	\$185	\$511
<i>versus prior year</i>	+68%	+150%	+73%	+22%	+65%	+26%	+31%	+75%	+101%	+61%
<b>Total Revenue</b>	\$1,488	\$1,558	\$1,655	\$1,716	\$6,417	\$1,709	\$2,429	\$3,452	\$3,806	\$11,397
<i>versus prior year</i>	+11%	+4%	+4%	+9%	+7%	+15%	+57%	+109%	+122%	+78%
<b>Non GAAP Gross Margin<sup>(2)(7)</sup></b>	86%	86%	84%	86%	86%	86%	80%	75%	75%	78%
<b>Combined Non GAAP R&amp;D and SG&amp;A<sup>(3)(7)</sup></b>	\$571	\$697	\$652	\$688	\$2,608	\$651	\$934	\$1,239	\$1,354	\$4,178
<i>versus prior year</i>	+6%	+16%	+5%	+2%	+7%	+14%	+34%	+90%	+97%	+60%
<b>Non GAAP EBITDA Margin<sup>(4)(7)</sup></b>	46%	39%	43%	43%	43%	46%	40%	38%	38%	39%
<b>Non GAAP Tax Rate<sup>(5)(7)</sup></b>	17%	13%	10%	21%	16%	18%	16%	13%	17%	16%
<b>Non GAAP diluted Earnings per ADS<sup>(6)(7)</sup></b>	\$2.84	\$2.63	\$3.24	\$2.97	\$11.68	\$3.19	\$3.38	\$3.17	\$3.37	\$13.10
<i>versus prior year</i>	+20%	-2%	+11%	+13%	+10%	+12%	+29%	-2%	+13%	+12%

(1) Results from continuing operations including Baxalta (acquired on June 3, 2016) and Dyax (acquired on January 22, 2016).

(2) This is a Non GAAP financial measure which excludes royalties and other revenues and cost of sales related to contract manufacturing revenue. The most directly comparable measure under US GAAP is Gross Margin (Q4 2016: 70.9%, Q4 2015: 84.6%, FY 2016: 64.9%, FY 2015: 84.1%).

(3) This is a Non GAAP financial measure. The most directly comparable measure under US GAAP is Combined R&D and SG&A (Q4 2016: +68%, Q4 2015: +11%, FY 2016: +31%, FY 2015: +20%).

(4) This is a Non GAAP financial measure. The most directly comparable measure under US GAAP is Net income Margin (Q4 2016: 12%, Q4 2015: 16%, FY 2016: 3%, FY 2015: 20%).

(5) This is a Non GAAP financial measure. The most directly comparable measure under US GAAP is Tax rate (Q4 2016: 16%, Q4 2015: 16%, FY 2016: benefit of 26%, FY 2015: charge of 3%).

(6) This is a Non GAAP financial measure. The most directly comparable measure under US GAAP is EPS-ADS (Q4 2016: \$1.51, Q4 2015: \$1.42, FY 2016: \$1.27, FY 2015: \$6.59).

(7) See slide 44 for a list of items excluded from the US GAAP equivalent used to calculate all Non GAAP measures detailed above. See slides 37 to 43 for a reconciliation of Non GAAP financial measures to the most directly comparable measure under US GAAP.

# Non GAAP cash flow measures

Non GAAP cash generation <sup>(1)(2)</sup> and Non GAAP free cash flow <sup>(1)(2)</sup> reconciliation	FY 2016 \$MM	FY 2015 \$MM	Reported Growth	Q4 2016 \$MM	Q4 2015 \$MM	Reported Growth
<b>Non GAAP cash generation<sup>(1)(2)</sup></b>	<b>3,464</b>	<b>2,422</b>	<b>+43%</b>	<b>1,289</b>	<b>813</b>	<b>+58%</b>
Tax and interest payments, net	(715)	(85)		(136)	(51)	
Up-front payments in respect of in-licensed and acquired products	(90)	-		-	-	
<b>US GAAP Net cash provided by operating activities</b>	<b>2,659</b>	<b>2,337</b>	<b>+14%</b>	<b>1,153</b>	<b>762</b>	<b>+51%</b>
Capital expenditures	(646)	(115)		(247)	(53)	
Up-front payments in respect of in-licensed and acquired products	90	-		-	-	
<b>Non GAAP free cash flow<sup>(1)(2)</sup></b>	<b>2,103</b>	<b>2,222</b>	<b>-5%</b>	<b>906</b>	<b>709</b>	<b>+28%</b>



(1) This is a Non GAAP financial measure. The most directly comparable measure under US GAAP is Net cash provided by operating activities (see details above).

(2) See slide 44 for a list of items excluded from the US GAAP equivalent used to calculate all Non GAAP measures detailed above. See slides 37 to 43 for a reconciliation of Non GAAP financial measures to the most directly comparable measure under US GAAP.

# FY 2016 – Operating income US GAAP and Non GAAP

	FY 2016 \$MM <sup>(1)</sup>	FY 2015 \$MM	Reported Growth
<b>Non GAAP Operating Income<sup>(2)(3)</sup> from continuing operations</b>	<b>4,417</b>	<b>2,786</b>	<b>+59%</b>
Integration and acquisition costs	(2,112)	(71)	
Intangible asset amortization	(1,173)	(499)	
Impairment of IPR&D intangible assets	(9)	(644)	
Divestments and reorganizations	(124)	(83)	
Legal and litigation costs	(16)	(9)	
Other Non GAAP adjustments	(20)	(60)	
<b>US GAAP Operating Income from continuing operations</b>	<b>963</b>	<b>1,420</b>	<b>-32%</b>



(1) Results include Baxalta (acquired on June 3, 2016) and Dyax (acquired on January 22, 2016).

(2) This is a Non GAAP financial measure. The most directly comparable measure under US GAAP is US GAAP Operating Income (see details above).

(3) See slide 44 for a list of items excluded from the US GAAP equivalent used to calculate all Non GAAP measures detailed above. See slides 37 to 43 for a reconciliation of Non GAAP financial measures to the most directly comparable measure under US GAAP.

# Q4 2016 – Operating income US GAAP and Non GAAP

	Q4 2016 \$MM <sup>(1)</sup>	Q4 2015 \$MM	Reported Growth
<b>Non GAAP Operating Income<sup>(2)(3)</sup> from continuing operations</b>	<b>1,395</b>	<b>764</b>	<b>+83%</b>
Integration and acquisition costs	(166)	(95)	
Intangible asset amortization	(471)	(146)	
Impairment of IPR&D intangible assets	-	(120)	
Divestments and reorganizations	(9)	(37)	
Legal and litigation costs	-	(5)	
Other Non GAAP adjustments	(20)	(4)	
<b>US GAAP Operating Income from continuing operations</b>	<b>729</b>	<b>357</b>	<b>+104%</b>



(1) Results include Baxalta (acquired on June 3, 2016) and Dyax (acquired on January 22, 2016).

(2) This is a Non GAAP financial measure. The most directly comparable measure under US GAAP is US GAAP Operating Income (see details above).

(3) See slide 44 for a list of items excluded from the US GAAP equivalent used to calculate all Non GAAP measures detailed above. See slides 37 to 43 for a reconciliation of Non GAAP financial measures to the most directly comparable measure under US GAAP.

# GAAP to Non GAAP reconciliation

## For the twelve months ended December 31, 2016

(SMM)	GAAP	Adjustments						Non GAAP
		(a)	(b)	(c)	(d)	(e)	(f)	
<b>Total Revenues</b>	<b>11,396.6</b>	-	-	-	-	-	-	<b>11,396.6</b>
<b>Costs and expenses:</b>								
Cost of product sales	3,816.5	-	(1,118.0)	(18.9)	-	(10.0)	(160.8)	2,508.8
R&D	1,439.8	(8.9)	(110.0)	-	-	-	(34.1)	1,286.8
SG&A	3,015.2	-	-	-	(16.3)	(10.0)	(98.0)	2,890.9
Amortization	1,173.4	(1,173.4)	-	-	-	-	-	-
Integration and acquisition costs	883.9	-	(883.9)	-	-	-	-	-
Reorganization costs	121.4	-	-	(121.4)	-	-	-	-
Gain on sale of product rights	(16.5)	-	-	16.5	-	-	-	-
Depreciation	-	-	-	-	-	-	292.9	292.9
Total operating expenses	10,433.7	(1,182.3)	(2,111.9)	(123.8)	(16.3)	(20.0)	-	6,979.4
<b>Operating income</b>	<b>962.9</b>	<b>1,182.3</b>	<b>2,111.9</b>	<b>123.8</b>	<b>16.3</b>	<b>20.0</b>	<b>-</b>	<b>4,417.2</b>
Total other expense, net	(476.8)	-	93.6	6.0	-	-	-	(377.2)
Income from continuing operations before income taxes and equity losses of equity method investees	486.1	1,182.3	2,205.5	129.8	16.3	20.0	-	4,040.0
Income taxes	126.1	(295.4)	(422.7)	(41.8)	(5.9)	(1.1)	-	(640.8)
Equity in losses of equity method investees, net of taxes	(8.7)	-	-	-	-	-	-	(8.7)
<b>Income from continuing operations</b>	<b>603.5</b>	<b>886.9</b>	<b>1,782.8</b>	<b>88.0</b>	<b>10.4</b>	<b>18.9</b>	<b>-</b>	<b>3,390.5</b>
Loss from discontinued operations, net of tax	(276.1)	-	-	276.1	-	-	-	-
<b>Net income</b>	<b>327.4</b>	<b>886.9</b>	<b>1,782.8</b>	<b>364.1</b>	<b>10.4</b>	<b>18.9</b>	<b>-</b>	<b>3,390.5</b>
No. of shares	776.2							776.2
<b>Diluted earnings per ADS</b>	<b>\$1.27</b>	<b>\$3.43</b>	<b>\$6.89</b>	<b>\$1.41</b>	<b>\$0.04</b>	<b>\$0.07</b>	<b>-</b>	<b>\$13.10</b>

The following items are included in Adjustments:

- (a) **Amortization and assets impairments:** Impairment of SHP627 IPR&D intangible asset (\$8.9 million), amortization of intangible assets relating to intellectual property rights acquired (\$1,173.4 million), and tax effect of adjustments;
- (b) **Acquisition and integration activities:** Amortization of inventory fair value adjustments primarily associated with NPS, Dyax and Baxalta (\$1,118.0 million), acquisition and integration costs primarily associated with NPS, Dyax and Baxalta (\$873.0 million), SHP647 (Pfizer) upfront and milestone payment (\$110.0 million), charges related to the change in the fair value of contingent consideration liabilities (\$10.9 million), amortization of one-time upfront borrowing costs for Baxalta and Dyax (\$93.6 million), and tax effect of adjustments;
- (c) **Divestments, reorganizations and discontinued operations:** Inventory write-off (\$18.9 million) relating to the planned closure of a facility at the Los Angeles manufacturing site, and exit and severance costs (\$85.3 million), costs relating to termination of the Kremes, Austria building project (\$8.8 million), costs relating to the relocation of staff from Chesterbrook to Lexington and closure of the Basingstoke office (\$27.3 million), net gain on re-measurement of DAYTRANA contingent consideration to fair value (\$11.0 million), net gain on sale of assets (\$5.5 million), loss on divestment of non-core subsidiary (\$6.0 million), tax effect of adjustments and loss from discontinued operations, net of tax (\$276.1 million);
- (d) **Legal and litigation costs:** Costs related to litigation, government investigations, other disputes and external legal costs (\$16.3 million), and tax effect of adjustments;
- (e) **Other:** One-time adjustment to pension expense (\$20.0), and tax effect of adjustments; and
- (f) **Depreciation reclassification:** Depreciation of \$292.9 million included in Cost of product sales, R&D and SG&A for US GAAP separately disclosed for the presentation of Non GAAP earnings.



# GAAP to Non GAAP reconciliation

## For the twelve months ended December 31, 2015

(SMM)	GAAP	Adjustments						Non GAAP
		(a)	(b)	(c)	(d)	(e)	(f)	
<b>Total Revenues</b>	<b>6,416.7</b>	-	-	-	-	-	-	<b>6,416.7</b>
<b>Costs and expenses:</b>								
Cost of product sales	969.0	-	(31.1)	-	-	(7.1)	(46.1)	884.7
R&D	1,564.0	(643.7)	-	-	-	(14.5)	(21.7)	884.1
SG&A	1,842.5	-	-	-	(9.5)	(38.5)	(70.7)	1,723.8
Amortization	498.7	(498.7)	-	-	-	-	-	-
Integration and acquisition costs	39.8	-	(39.8)	-	-	-	-	-
Reorganization costs	97.9	-	-	(97.9)	-	-	-	-
Gain on sale of product rights	(14.7)	-	-	14.7	-	-	-	-
Depreciation	-	-	-	-	-	-	138.5	138.5
Total operating expenses	4,997.2	(1,142.4)	(70.9)	(83.2)	(9.5)	(60.1)	-	3,631.1
<b>Operating income</b>	<b>1,419.5</b>	<b>1,142.4</b>	<b>70.9</b>	<b>83.2</b>	<b>9.5</b>	<b>60.1</b>	<b>-</b>	<b>2,785.6</b>
Total other expense, net	(33.7)	-	-	(14.1)	-	(1.1)	-	(48.9)
Income from continuing operations before income taxes and equity losses of equity method investees	1,385.8	1,142.4	70.9	69.1	9.5	59.0	-	2,736.7
Income taxes	(46.1)	(258.4)	(67.9)	(25.8)	(3.5)	(22.7)	-	(424.4)
Equity in losses of equity method investees, net of taxes	(2.2)	-	-	-	-	-	-	(2.2)
<b>Income from continuing operations</b>	<b>1,337.5</b>	<b>884.0</b>	<b>3.0</b>	<b>43.3</b>	<b>6.0</b>	<b>36.3</b>	<b>-</b>	<b>2,310.1</b>
Loss from discontinued operations, net of tax	(34.1)	-	-	34.1	-	-	-	-
<b>Net income</b>	<b>1,303.4</b>	<b>884.0</b>	<b>3.0</b>	<b>77.4</b>	<b>6.0</b>	<b>36.3</b>	<b>-</b>	<b>2,310.1</b>
No. of shares	593.1	-	-	-	-	-	-	593.1
<b>Diluted earnings per ADS</b>	<b>\$6.59</b>	<b>\$4.47</b>	<b>\$0.02</b>	<b>\$0.39</b>	<b>\$0.03</b>	<b>\$0.18</b>	<b>-</b>	<b>\$11.68</b>

The following items are included in Adjustments:

- (a) Amortization and assets impairments: Impairment of SHP625 IPR&D intangible asset (\$467.0 million), impairment of SHP608 IPR&D intangible asset (\$176.7 million), amortization of intangible assets relating to intellectual property rights acquired (\$498.7 million), and tax effect of adjustments;
- (b) Acquisition and integration activities: Unwind of NPS inventory fair value adjustments (\$29.8 million), unwind of ViroPharma inventory fair value adjustments (\$1.3 million), acquisition and integration costs primarily associated with NPS, ViroPharma, Dyax and the announced combination with Baxalta (\$189.7 million), net credit related to the change in fair values of contingent consideration liabilities primarily relating to SHP625 and SHP608 (\$149.9 million), and tax effect of adjustments;
- (c) Divestments, reorganizations and discontinued operations: Net gain on divestment of non-core product rights and on re-measurement of DAYTRANA contingent consideration to fair value (\$13.6 million), gain on disposal of non-core product rights (\$1.1 million), costs relating to the One Shire reorganization, primarily costs relating to the relocation of staff from Chesterbrook to Lexington (\$97.9 million), gain on sale of long term investments (14.1 million), tax effect of adjustments and loss from discontinued operations, net of tax (\$34.1 million);
- (d) Legal and litigation costs: Costs related to litigation, government investigations, other disputes and external legal costs (\$9.5 million), and tax effect of adjustments;
- (e) Other: Costs associated with AbbVie's terminated offer for Shire (\$60.1 million), interest income received in respect of cash deposited with the Canadian revenue authorities (\$1.1 million), and tax effect of adjustments; and
- (f) Depreciation reclassification: Depreciation of \$138.5 million included in Cost of product sales, R&D and SG&A for US GAAP separately disclosed for the presentation of Non GAAP earnings.

# GAAP to Non GAAP reconciliation

## For the three months ended December 31, 2016

(SMM)	GAAP	Adjustments						Non GAAP
		(a)	(b)	(c)	(d)	(e)	(f)	
<b>Total Revenues</b>	<b>3,806.1</b>	-	-	-	-	-	-	<b>3,806.1</b>
<b>Costs and expenses:</b>								
Cost of product sales	1,053.6	-	(20.7)	(7.3)	-	(10.0)	(75.6)	940.0
R&D	416.8	-	-	-	-	-	(13.4)	403.4
SG&A	989.4	-	-	-	(0.2)	(10.0)	(28.6)	950.6
Amortization	470.9	(470.9)	-	-	-	-	-	-
Integration and acquisition costs	145.3	-	(145.3)	-	-	-	-	-
Reorganization costs	5.7	-	-	(5.7)	-	-	-	-
Gain on sale of product rights	(4.3)	-	-	4.3	-	-	-	-
Depreciation	-	-	-	-	-	-	117.6	117.6
<b>Total operating expenses</b>	<b>3,077.4</b>	<b>(470.9)</b>	<b>(166.0)</b>	<b>(8.7)</b>	<b>(0.2)</b>	<b>(20.0)</b>	<b>-</b>	<b>2,411.6</b>
<b>Operating income</b>	<b>728.7</b>	<b>470.9</b>	<b>166.0</b>	<b>8.7</b>	<b>0.2</b>	<b>20.0</b>	<b>-</b>	<b>1,394.5</b>
Total other expense, net	(153.7)	-	2.1	-	-	-	-	(151.6)
Income from continuing operations before income taxes and equity losses of equity method investees	575.0	470.9	168.1	8.7	0.2	20.0	-	1,242.9
Income taxes	(92.3)	(110.5)	(14.5)	6.9	(0.1)	(1.1)	-	(211.6)
Equity in losses of equity method investees, net of taxes	(6.8)	-	-	-	-	-	-	(6.8)
<b>Income from continuing operations</b>	<b>475.9</b>	<b>360.4</b>	<b>153.6</b>	<b>15.6</b>	<b>0.1</b>	<b>18.9</b>	<b>-</b>	<b>1,024.5</b>
Loss from discontinued operations, net of tax	(18.6)	-	-	18.6	-	-	-	-
<b>Net income</b>	<b>457.3</b>	<b>360.4</b>	<b>153.6</b>	<b>34.2</b>	<b>0.1</b>	<b>18.9</b>	<b>-</b>	<b>1,024.5</b>
No. of shares	911.1							911.1
<b>Diluted earnings per ADS</b>	<b>\$1.51</b>	<b>\$1.19</b>	<b>\$0.51</b>	<b>\$0.11</b>	<b>-</b>	<b>\$0.06</b>	<b>-</b>	<b>\$3.37</b>

The following items are included in Adjustments:

- (a) Amortization and assets impairments: Amortization of intangible assets relating to intellectual property rights acquired (\$470.9 million), and tax effect of adjustments;
- (b) Acquisition and integration activities: Amortization of inventory fair value adjustments primarily associated with Dyax and Baxalta (\$20.7 million), acquisition and integration costs primarily associated with NPS, Dyax and Baxalta (\$99.5 million). Charges related to the change in the fair value of contingent consideration liabilities (\$45.8 million), amortization of one-time upfront borrowing costs for Baxalta and Dyax (\$2.1 million), and tax effect of adjustments;
- (c) Divestments, reorganizations and discontinued operations: Inventory write-off (\$7.3 million) relating to the planned closure of a facility at the Los Angeles manufacturing site, and exit and severance net credit (\$0.9 million), net credit relating to termination of the Kremes, Austria building project (\$1.2 million), costs relating to the relocation of staff from Chesterbrook to Lexington and closure of the Basingstoke office (\$7.8 million), net loss on re-measurement of DAYTRANA contingent consideration to fair value (\$1.2 million), net gain on sale of assets (\$5.5 million), tax effect of adjustments and loss from discontinued operations, net of tax (\$18.6 million);
- (d) Legal and litigation costs: Costs related to litigation, government investigations, other disputes and external legal costs (\$0.2 million), and tax effect of adjustments;
- (e) Other: One-time adjustment to pension expense (\$20.0), and tax effect of adjustments; and
- (f) Depreciation reclassification: Depreciation of \$117.6 million included in Costs of product sales, R&D and SG&A for US GAAP separately disclosed for the presentation of Non GAAP earnings.

# GAAP to Non GAAP reconciliation

## For the three months ended December 31, 2015

(\$MM)	GAAP	Adjustments						Non GAAP
		(a)	(b)	(c)	(d)	(e)	(f)	
<b>Total Revenues</b>	<b>1,715.7</b>	-	-	-	-	-	-	<b>1,715.7</b>
<b>Costs and expenses:</b>								
Cost of product sales	250.5	-	(8.1)	-	-	(0.6)	(11.7)	230.1
R&D	353.2	(120.4)	-	-	-	(1.0)	(4.5)	227.3
SG&A	485.9	-	-	-	(5.1)	(2.5)	(17.2)	461.1
Amortization	146.4	(146.4)	-	-	-	-	-	-
Integration and acquisition costs	86.6	-	(86.6)	-	-	-	-	-
Reorganization costs	38.3	-	-	(38.3)	-	-	-	-
Gain on sale of product rights	(1.7)	-	-	1.7	-	-	-	-
Depreciation	-	-	-	-	-	-	33.4	33.4
Total operating expenses	1,359.2	(266.8)	(94.7)	(36.6)	(5.1)	(4.1)	-	951.9
<b>Operating income</b>	<b>356.5</b>	<b>266.8</b>	<b>94.7</b>	<b>36.6</b>	<b>5.1</b>	<b>4.1</b>	<b>-</b>	<b>763.8</b>
Total other expense, net	(17.4)	-	-	-	-	-	-	(17.4)
Income from continuing operations before income taxes and equity losses of equity method investees	339.1	266.8	94.7	36.6	5.1	4.1	-	746.4
Income taxes	(55.1)	(70.5)	(14.8)	(12.5)	(1.9)	(3.4)	-	(158.2)
Equity in losses of equity method investees, net of taxes	(0.6)	-	-	-	-	-	-	(0.6)
<b>Income from continuing operations</b>	<b>283.4</b>	<b>196.3</b>	<b>79.9</b>	<b>24.1</b>	<b>3.2</b>	<b>0.7</b>	<b>-</b>	<b>587.6</b>
Loss from discontinued operations, net of tax	(2.8)	-	-	2.8	-	-	-	-
<b>Net income</b>	<b>280.6</b>	<b>196.3</b>	<b>79.9</b>	<b>26.9</b>	<b>3.2</b>	<b>0.7</b>	<b>-</b>	<b>587.6</b>
No. of shares	593.3	-	-	-	-	-	-	593.3
<b>Diluted earnings per ADS</b>	<b>\$1.42</b>	<b>\$0.99</b>	<b>\$0.41</b>	<b>\$0.14</b>	<b>\$0.02</b>	<b>\$0.01</b>	<b>-</b>	<b>\$2.97</b>

The following items are included in Adjustments:

- (a) Amortization and assets impairments: Impairment of SHP625 IPR&D intangible asset (\$120.4 million), amortization of intangible assets relating to intellectual property rights acquired (\$146.4 million), and tax effect of adjustments;
- (b) Acquisition and integration activities: Unwind of NPS inventory fair value adjustments (\$8.1 million), acquisition and integration costs primarily associated with NPS, ViroPharma, Dyax and the announced combination with Baxalta (\$40.0 million), charges related to the change in fair value of contingent consideration liabilities (\$46.6 million), and tax effect of adjustments;
- (c) Divestments, reorganizations and discontinued operations: Gain on re-measurement of DAYTRANA contingent consideration to fair value (\$1.7 million), costs relating to the One Shire reorganization, primarily costs relating to the relocation of staff from Chesterbrook to Lexington (\$38.3 million), tax effect of adjustments, and loss from discontinued operations, net of tax (\$2.8 million);
- (d) Legal and litigation costs: Costs related to litigation, government investigations, other disputes and external legal costs (\$5.1 million), and tax effect of adjustments; and
- (e) Other: Costs associated with AbbVie's terminated offer for Shire (\$4.1 million), and tax effect of adjustments; and
- (f) Depreciation reclassification: Depreciation of \$33.4 million included in Cost of product sales, R&D and SG&A for US GAAP separately disclosed for the presentation of Non GAAP earnings.

# Non GAAP measures

This presentation contains financial measures not prepared in accordance with US GAAP. These measures are referred to as “Non GAAP” measures and include: Non GAAP operating income; Non GAAP net income; Non GAAP diluted earnings per ADS; effective tax rate on Non GAAP income before income taxes and (losses/earnings) of equity method investees (effective tax rate on Non GAAP income); Non GAAP CER; Non GAAP cost of product sales; Non GAAP gross margin; Non GAAP R&D; Non GAAP SG&A; Non GAAP other expense; Non GAAP cash generation; Non GAAP free cash flow, Non GAAP net debt, Non GAAP EBITDA and Non GAAP EBITDA margin (excluding royalties and other revenues and cost of sales related to contract manufacturing revenues).

The Non GAAP measures exclude the impact of certain specified items that are highly variable, difficult to predict, and of a size that may substantially impact Shire’s operations. Upfront and milestone payments related to in-licensing and acquired products that have been expensed as R&D are also excluded as specified items as they are generally uncertain and often result in a different payment and expense recognition pattern than ongoing internal R&D activities. Intangible asset amortization has been excluded from certain measures to facilitate an evaluation of current and past operating performance, particularly in terms of cash returns, and is similar to how management internally assesses performance. The Non GAAP financial measures are presented in this press release as Shire’s management believes that they will provide investors with an additional analysis of Shire’s results of operations, particularly in evaluating performance from one period to another.

Shire’s management uses Non GAAP financial measures to make operating decisions as they facilitate additional internal comparisons of Shire’s performance to historical results and to competitor’s results, and provides them to investors as a supplement to Shire’s reported results to provide additional insight into Shire’s operating performance. Shire’s Remuneration Committee uses certain key Non GAAP measures when assessing the performance and compensation of employees, including Shire’s executive directors.

The Non GAAP financial measures used by Shire may be calculated different from, and therefore may not be comparable to, similarly titled measures used by other companies - refer to the section “Non GAAP Financial Measure Descriptions” below for additional information. In addition, these Non GAAP financial measures should not be considered in isolation as a substitute for, or as superior to, financial measures calculated in accordance with US GAAP, and Shire’s financial results calculated in accordance with US GAAP and reconciliations to those financial statements should be carefully evaluated.

## Non GAAP Financial Measure Descriptions

Where applicable the following items, including their tax effect, have been excluded when calculating Non GAAP earnings and from our outlook:

### Amortization and asset impairments:

- Intangible asset amortization and impairment charges; and
- Other than temporary impairment of investments.

### Acquisitions and integration activities:

- Up-front payments and milestones in respect of in-licensed and acquired products;

- Costs associated with acquisitions, including transaction costs, fair value adjustments on contingent consideration and acquired inventory;
- Costs associated with the integration of companies; and
- Non-controlling interests in consolidated variable interest entities.

### Divestments, reorganizations and discontinued operations:

- Gains and losses on the sale of non-core assets;
- Costs associated with restructuring and reorganization activities;
- Termination costs; and
- Income/(losses) from discontinued operations.

### Legal and litigation costs:

- Net legal costs related to the settlement of litigation, government investigations and other disputes (excluding internal legal team costs).

Additionally, in any given period Shire may have significant, unusual or non-recurring gains or losses which it may exclude from its Non GAAP earnings for that period. When applicable, these items would be fully disclosed and incorporated into the required reconciliations from US GAAP to Non GAAP measures.

Depreciation, which is included in Cost of product sales, R&D and SG&A costs in our US GAAP results, has been separately disclosed for presentational purposes.

Cash generation represents net cash provided by operating activities, excluding up-front and milestone payments for in-licensed and acquired products, tax and interest payments.

Free cash flow represents net cash provided by operating activities, excluding up-front and milestone payments for in-licensed and acquired products, but including capital expenditure in the ordinary course of business.

Non GAAP net debt represents cash and cash equivalents less short and long term borrowings, capital leases and other debt.

Non GAAP CER growth is computed by restating 2016 results using average 2015 foreign exchange rates for the relevant period.

Average exchange rates used by Shire for the three months ended December 31, 2016 were \$1.26:£1.00 and \$1.09:€1.00 (2015: \$1.52:£1.00 and \$1.09:€1.00). Average exchange rates used by Shire for the twelve months ended December 31, 2016 were \$1.36:£1.00 and \$1.11:€1.00 (2015: \$1.53:£1.00 and \$1.11:€1.00).

See slides 37 to 43 for a reconciliation of Non GAAP financial measures to the most directly comparable measure under US GAAP.