

# Q1 2014 results

**Flemming Ornskov, MD**  
**Chief Executive Officer**

**James Bowling**  
**Interim Chief Financial Officer**

**Perry Sternberg**  
**Head of Neuroscience**  
**Business Unit**

Our purpose  
We enable people with life-altering conditions to lead better lives.



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

Statements included in this announcement that are not historical facts are forward-looking statements. 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, that:

- Shire’s products may not be a commercial success;
- revenues from ADDERALL XR are subject to generic erosion and revenues from INTUNIV will become subject to generic competition starting in December 2014;
- the failure to obtain and maintain reimbursement, or an adequate level of reimbursement, by third-party payors in a timely manner for Shire’s products may impact future revenues, financial condition and results of operations;
- Shire conducts its own manufacturing operations for certain of its Rare Diseases products and is reliant on third party contractors 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 development, approval and manufacturing of Shire’s products is subject to extensive oversight by various regulatory agencies and regulatory approvals or interventions associated with changes to manufacturing sites, ingredients or manufacturing processes could lead to significant delays, increase in operating costs, lost product sales, an interruption of research activities or the delay of new product launches;
- 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 impact Shire’s revenues, financial conditions or results of operations;
- 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 the distraction of senior management, significant legal costs and the payment of substantial compensation or fines;
- adverse outcomes in legal matters 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 Shire’s revenues, financial condition or results of operations;
- Shire faces intense competition for highly qualified personnel from other companies, academic institutions, government entities and other organizations. Shire is undergoing a corporate reorganization and the consequent uncertainty could adversely impact Shire’s ability to attract and/or retain the highly skilled personnel needed for Shire to meet its strategic objectives;
- failure to achieve Shire’s strategic objectives with respect to the acquisition of ViroPharma Incorporated may adversely affect Shire’s financial condition and results of operations;
- and other risks and uncertainties detailed from time to time in Shire’s filings with the U.S. Securities and Exchange Commission, including its most recent Annual Report on Form 10-K.



# Strategic focus and operational discipline drive 38% Non GAAP EPS growth and long-term outlook

**Strategy  
Shift**

**Commercial  
excellence**

**Operational  
Discipline**

ViroPharma acquisition adds growth and pipeline opportunities

Increasing the value in our innovative pipeline

Commercial focus delivers double digit product sales growth

Exploring new opportunities to drive future growth and value

One Shire generating operating leverage and driving strong EPS growth

Strong cash generation enables BD flexibility

# Multiple drivers of double digit sales performance



- CINRYZE delivered \$86m since Jan 24
  - Over 1,100 patients on therapy in the US



- FIRAZYR sales +80%
  - Strong US growth continues – more than 1,800 patients have used FIRAZYR since launch



- ELAPRASE sales +13%
  - Driven by continued growth in the number of treated patients



- LIALDA strong performance continues, +28%
  - Continued market share gains in the US
  - Strong TRx performance continues through 1Q 2014



- VYVANSE sales +18%
  - US growth driven by price and volume
  - International sales show strong growth

# Financial Review

James Bowling  
Interim Chief Financial Officer

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# Strong first quarter performance

	Q1 2014 \$m <sup>(1)</sup>	Q1 2013 \$m <sup>(1)</sup>	Reported Growth	Like for Like Growth <sup>(2)</sup>
<b>Product sales</b>	<b>1,308</b>	<b>1,098</b>	<b>+19%</b>	<b>+20%</b>
<b>Product sales excluding ViroPharma</b>	<b>1,215</b>	<b>1,098</b>	<b>+11%</b>	<b>+11%</b>
<b>Royalties and Other Revenues</b>	<b>39</b>	<b>45</b>	<b>-14%</b>	<b>-15%</b>
<b>Total revenues</b>	<b>1,347</b>	<b>1,143</b>	<b>+18%</b>	<b>+19%</b>
<b>EBITDA<sup>(3)</sup></b>	<b>628</b>	<b>449</b>	<b>+40%</b>	<b>+41%</b>
<b>EBITDA % of product sales<sup>(3)(4)</sup></b>	<b>45%</b>	<b>37%</b>	<b>823bp</b>	
<b>EPS - ADS<sup>(3)</sup></b>	<b>\$2.36</b>	<b>\$1.72</b>	<b>+38%</b>	
<b>Cash generation<sup>(3)</sup></b>	<b>331</b>	<b>257</b>	<b>+29%</b>	

(1) Results exclude DERMAGRAFT, which is treated as a discontinued operation following divestment on January 17, 2014.

(2) 'Like for Like Growth' excludes movements in exchange rates by applying Q1 2013 exchange rates to Q1 2014 results.

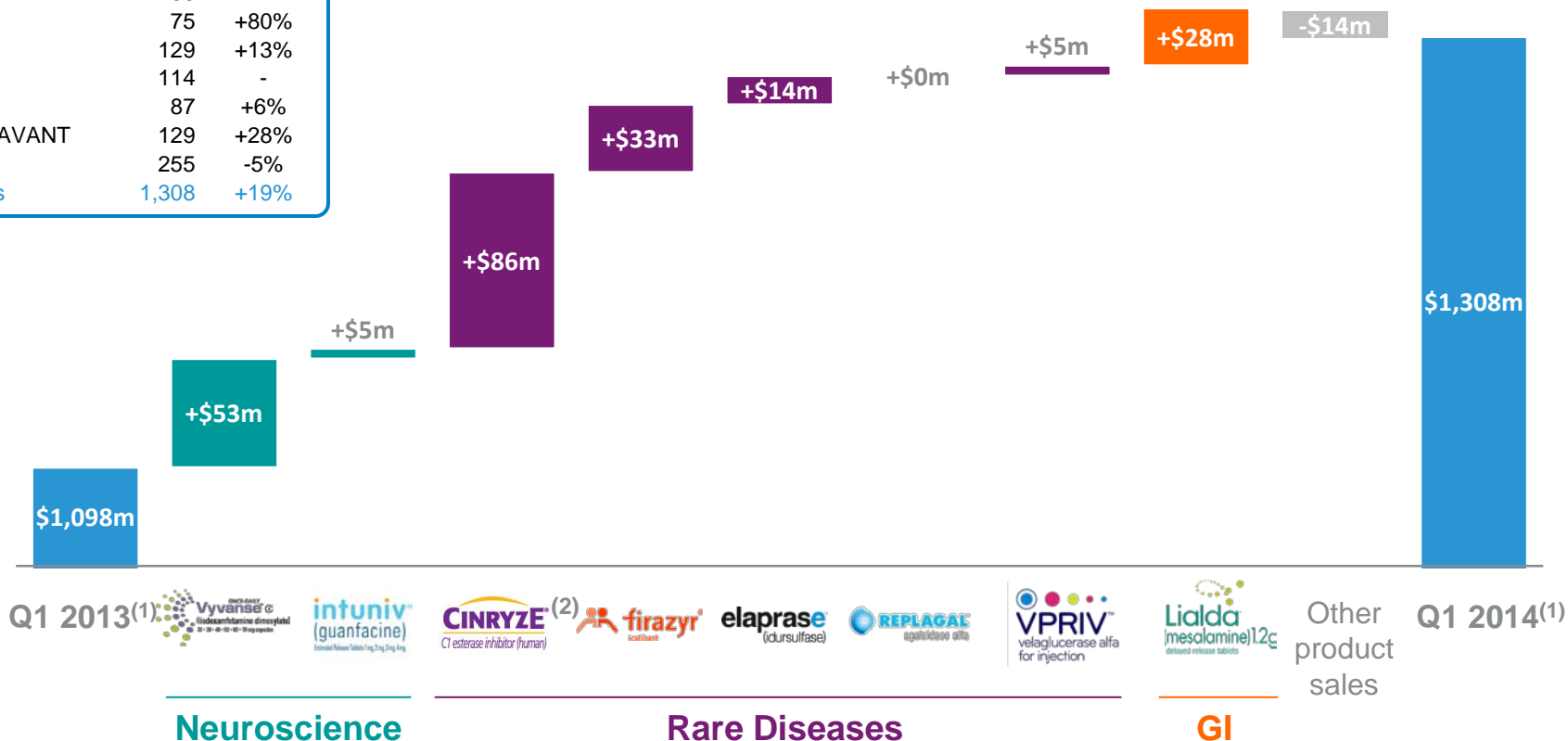
(3) These are Non GAAP financial measures. See appendix for a list of items excluded from the US GAAP equivalent used to calculate these measures.

(4) Excluding royalties and other revenues.



# \$210m of product sales growth from across the portfolio

	Q1 2014 \$m <sup>(1)</sup>	Reported Growth %
VYVANSE	351	+18%
INTUNIV	82	+6%
CINRYZE	86	-
FIRAZYR	75	+80%
ELAPRASE	129	+13%
REPLAGAL	114	-
VPRIV	87	+6%
LIALDA/MEZAVANT	129	+28%
OTHER	255	-5%
<b>Product Sales</b>	<b>1,308</b>	<b>+19%</b>



(1) Results exclude DERMAGRAFT, which is treated as a discontinued operation following divestment on January 17, 2014.  
 (2) CINRYZE acquired with ViroPharma Inc. on January 24, 2014.

# Continued delivery of operating leverage

	Q1 2014 <sup>(1)</sup>	Q1 2013 <sup>(1)</sup>
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## Year on Year:

<b>Product sales</b>	+19%	+4%
<b>R&amp;D<sup>(2)</sup></b>	-13%	+15%
<b>SG&amp;A<sup>(2)</sup></b>	+4%	-17%
<b>Combined R&amp;D and SG&amp;A<sup>(2)</sup></b>	-3%	-7%

## Ratios:

% of product sales		
<b>Gross margin<sup>(2)</sup></b>	86.2%	87.2%
<b>R&amp;D<sup>(2)</sup></b>	14%	20%
<b>SG&amp;A<sup>(2)</sup></b>	27%	31%
<b>EBITDA<sup>(2) (3)</sup></b>	45%	37%

- (1) Results exclude DERMAGRAFT, which is treated as a discontinued operation following divestment on January 17, 2014.
- (2) These are Non GAAP financial measures. See appendix for a list of items excluded from the US GAAP equivalents used to calculate these measures.
- (3) Excluding Royalties and Other Revenues.

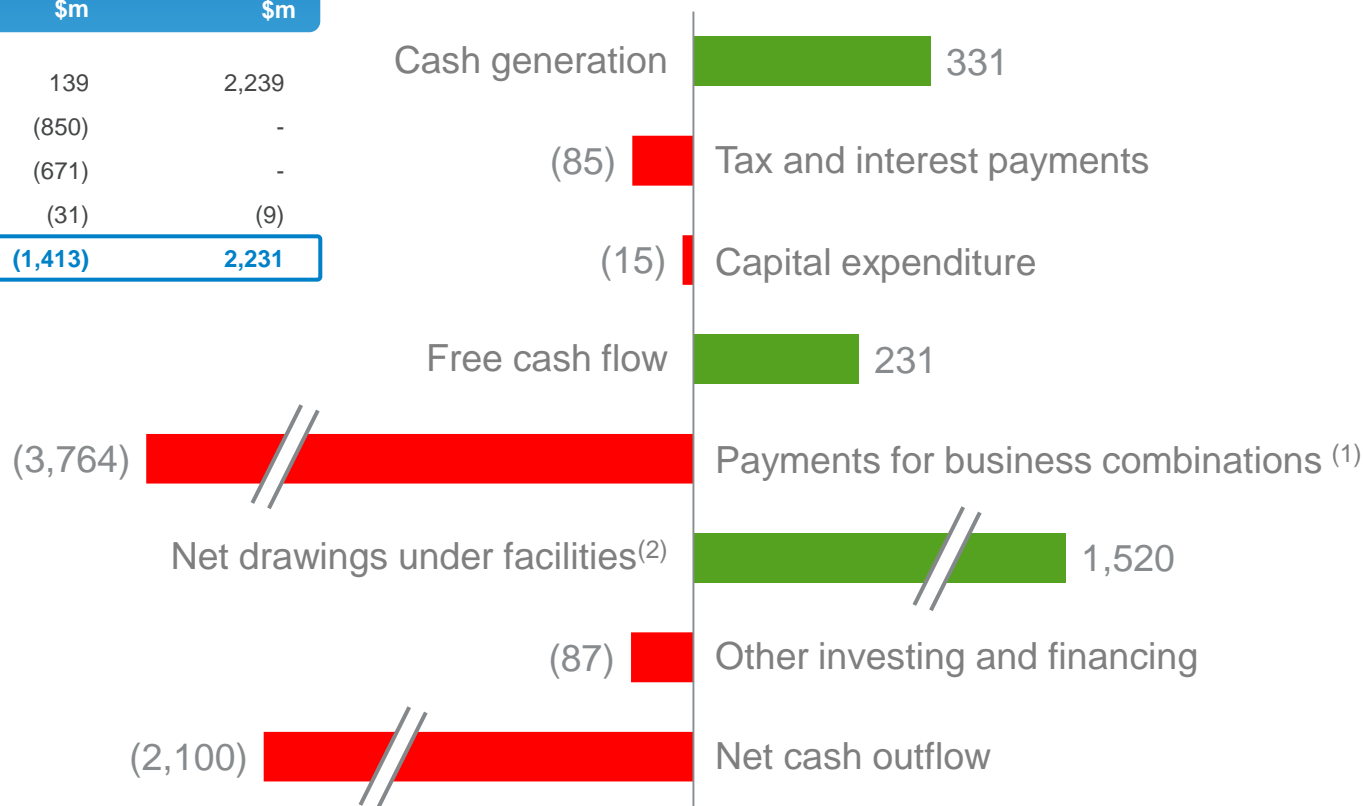


# Strong underlying cash generation continues

## Net debt of \$1.4bn at March 31, 2014

Millions of USD

	March 31, 2014 \$m	December 31, 2013 \$m
Cash and cash equivalents	139	2,239
Long term borrowings	(850)	-
Short term borrowings	(671)	-
Other debt	(31)	(9)
<b>Net (debt) / cash</b>	<b>(1,413)</b>	<b>2,231</b>



(1) Payment to acquire ViroPharma net of cash acquired.

(2) Drawings under facilities to fund the acquisition of ViroPharma, net of repayments.

# 2014 Outlook – Increased Non GAAP EPS growth expectations in 2014

## Full year 2014 dynamics

	Direction v. FY 2013 <sup>(1)</sup>	Current guidance	Previous guidance
<b>Product sales</b>	↑	Mid-to-high teens growth	
<b>Royalties and Other Revenues</b>	↓	10-15% lower than 2013	
<b>Gross margins</b>	↓	~1% lower than 2013	
<b>Combined R&amp;D and SG&amp;A</b>	↑	4-6% higher than 2013	6-8% higher than 2013
<b>Net interest expense</b>	≈	At a similar level to 2013	
<b>Tax rate</b>	≈	Core effective tax rate of 18-20%	
<b>Reported EPS-ADS</b>	↑	Growth in the mid-to-high twenty percent range	At a similar level to 2013

(1) Results exclude DERMAGRAFT, which is treated as a discontinued operation following divestment on January 17, 2014.

# Neuroscience: growth drivers and outlook

Perry Sternberg

Head of Neuroscience Business Unit

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# Shire's Neuroscience Growth Catalysts

- ✓ SHP 465 for adult patients with ADHD
- ✓ Pending new indication for Binge Eating Disorder (BED)
- ✓ Continued international expansion and growth

Catalysts provide us the opportunity to double the size of our existing Neuroscience business by 2020

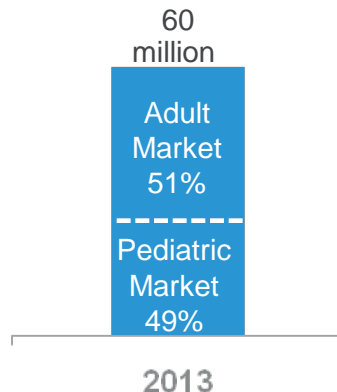
# US ADHD Market

- The US ADHD market is large and with modest growth could represent ~70M prescriptions in 2020
- The adult segment is the largest and fastest growing segment within the ADHD market

## ADHD Market in 2013

Market Size is currently  
> \$8 billion

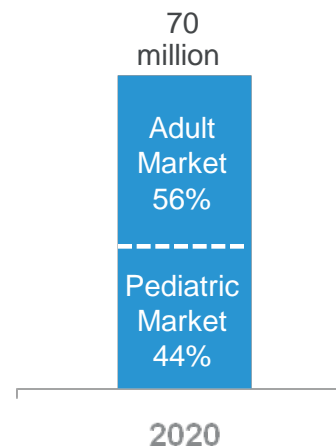
ADHD TRx Volume<sup>(1)</sup>



## ADHD Market in 2020

(Projection)

ADHD TRx Volume



**OVERALL CAGR = 3%**

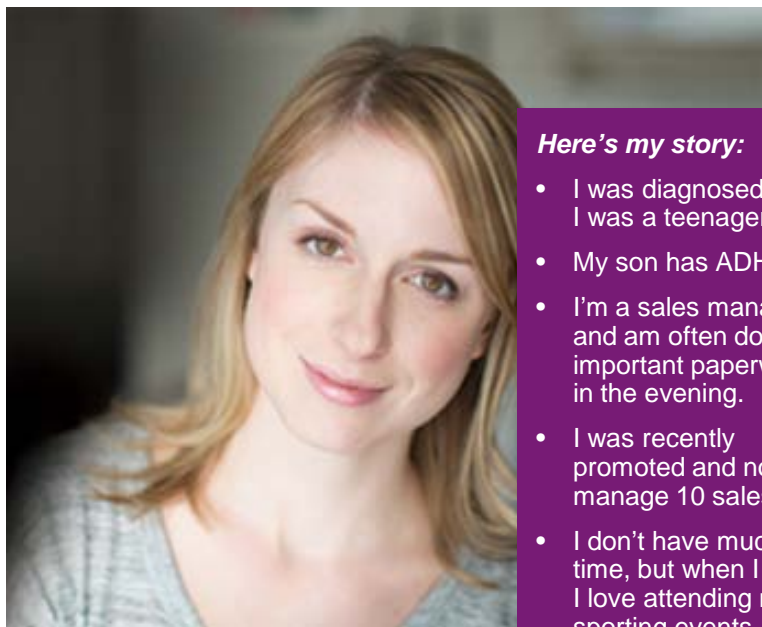
- Population growth
- Adult ADHD Awareness and Diagnosis <sup>(2)</sup>
- New products

(1) IMS Xponent Data.

(2) According to Decision Resources (ADHD Cognos Study 12/2010), the number of adult ADHD cases will increase almost 5% annually through 2020.

# Shire has an opportunity to gain additional share of the US adult market

## Day in the Life of Adult Patient



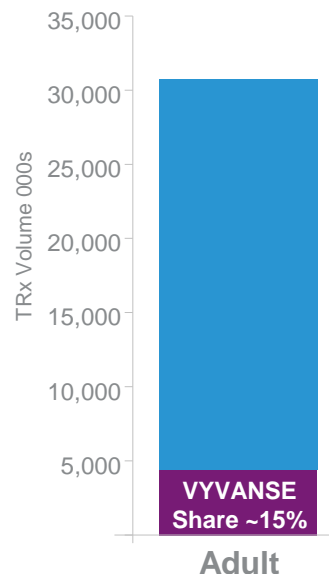
**Here's my story:**

- I was diagnosed when I was a teenager.
- My son has ADHD.
- I'm a sales manager and am often doing important paperwork in the evening.
- I was recently promoted and now manage 10 sales reps.
- I don't have much free time, but when I do – I love attending my kids' sporting events.

An adult's day is longer than a child's day – a medication controlling ADHD symptoms into the evening will be an attractive option for adults

## US Adult Market

2013 VYVANSE Volume & Market Share Among Adults (≥18)

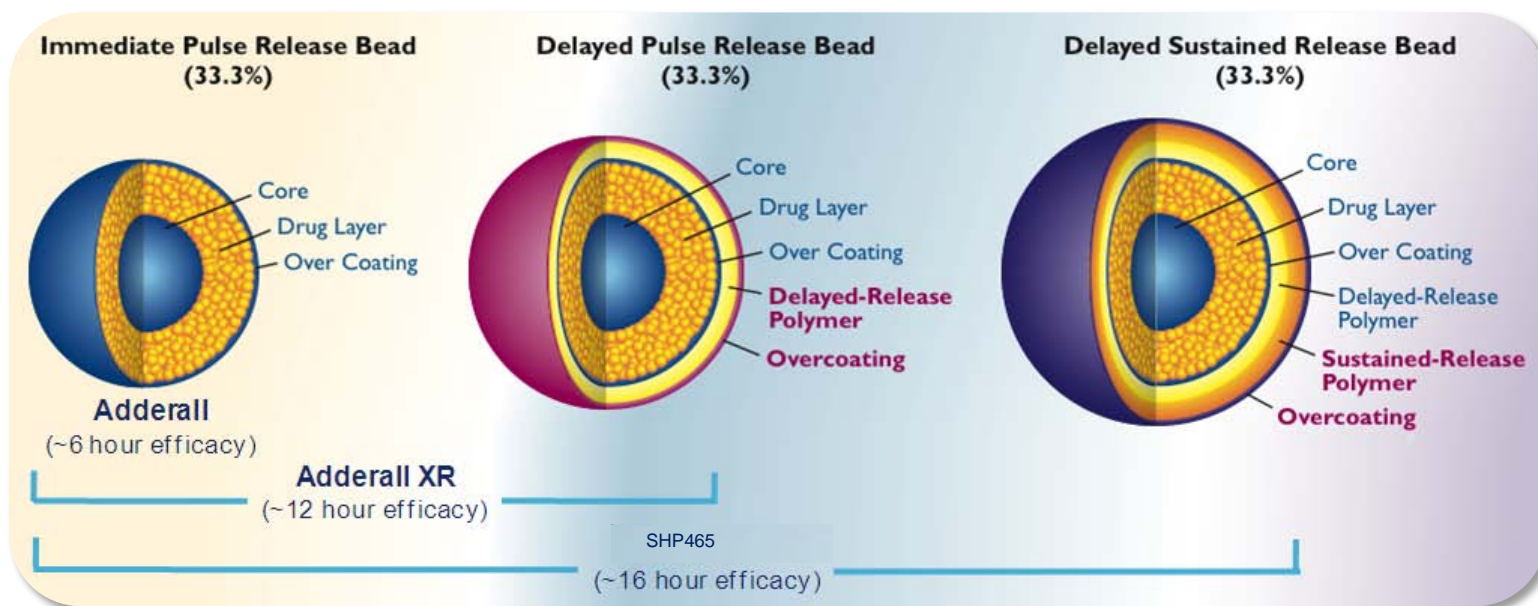


Top 5 Products in Adult Market (by Market Share)	
Total ADDERALL IR	36%
Total ADDERALL XR	22%
VYVANSE	15%
Methylphenidate	10%
Total Concerta	8%

~ 10% of the adult patients are using a combination of extended release with an immediate release treatment, most often for additional duration



# SHP465: A new product to meet an adult market need



- Demonstrated efficacy at 16 hours post-dosing in registration trials
- Based on positive feedback from FDA, we expect to launch in the 1<sup>st</sup> half of 2015
- We expect SHP465 to have 3-years of Hatch-Waxman exclusivity and we expect to have at least two patents listed in the Orange Book expiring as late as May 2023

**We believe with SHP465 as part of our portfolio can add 3-5% increase in overall US share for Shire**

# Binge Eating Disorder – The Facts

Binge Eating Disorder is not just about eating a lot...  
...It is that, plus being out of control and feeling bad about it

## DSM-5 Criteria: Binge Eating Disorder

**Amount** Eating large amount of food vs. most others (2hrs.)

**Lack of Control** Cannot stop eating or control what or how much one eats

**Additional Symptoms** ( $\geq 3$  of 5): (1) more rapid eating, (2) eat till uncomfortably full, (3) eats large amounts when not hungry (4) eating alone due to embarrassment (5) disgusted, depressed or guilty after eating

**Distress** Marked distress regarding bingeing

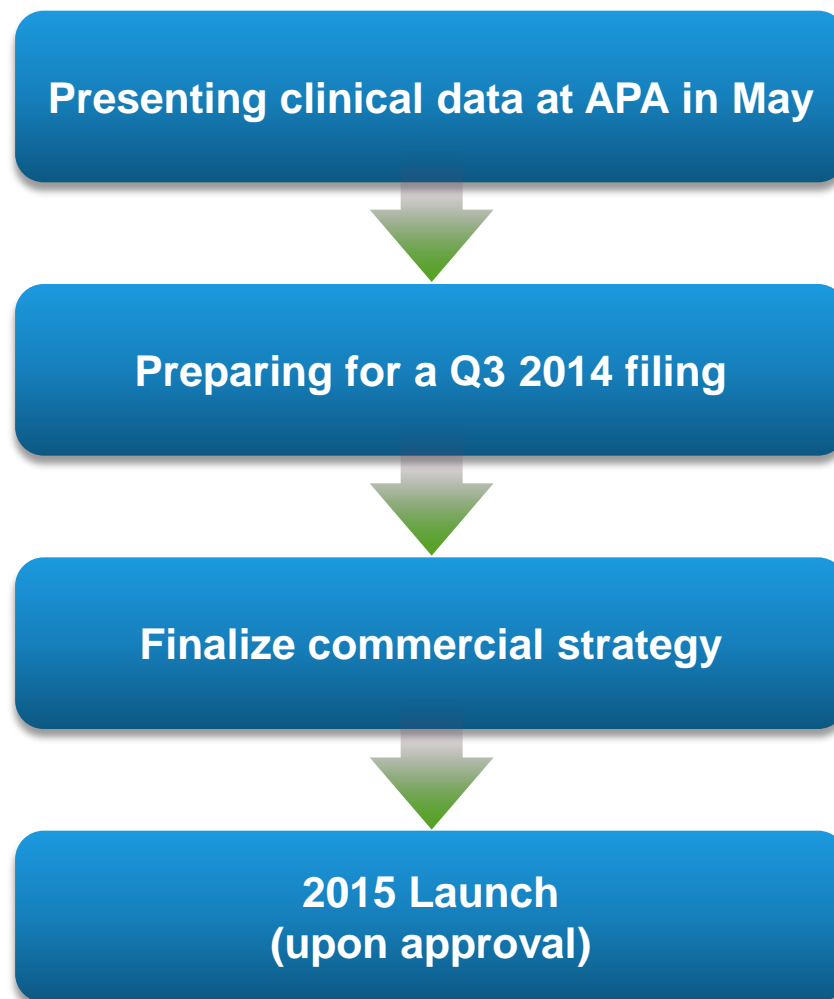
**Frequent** 1 day/week for 3 months

**Not associated** with recurrent compensatory behaviors (e.g. purging) or other ED

- US market size estimated at 2.8 MM adults
- In a survey of U.S. adults less than 7% of patients with BED reported receiving treatment over the past 12 month period
- Currently there are no approved treatments for BED









## LDX BED – next steps



# Continued Growth of International ADHD Portfolio

## Progression of LDX International Launches

### Launches (13)

- 2012: Canada  Brazil 
- 2013: Germany  Denmark  UK  Australia  Ireland 
- 2014: Sweden  Spain  FINLAND  NORWAY  ISRAEL  Mexico 

### 2020 Profile

- LDX's international footprint should exceed 20 countries
- INTUNIV should have a similar footprint
- We expect to have a much larger international business by 2020

# The Neuroscience Business Unit – Summary

NS has three significant growth catalysts in the near future and is poised to grow significantly

- ✓ SHP 465 for adult patients with ADHD
- ✓ Pending new indication for Binge Eating Disorder (BED)
- ✓ Continued international expansion and growth

Catalysts provide us the opportunity to double the size of our existing Neuroscience business by 2020

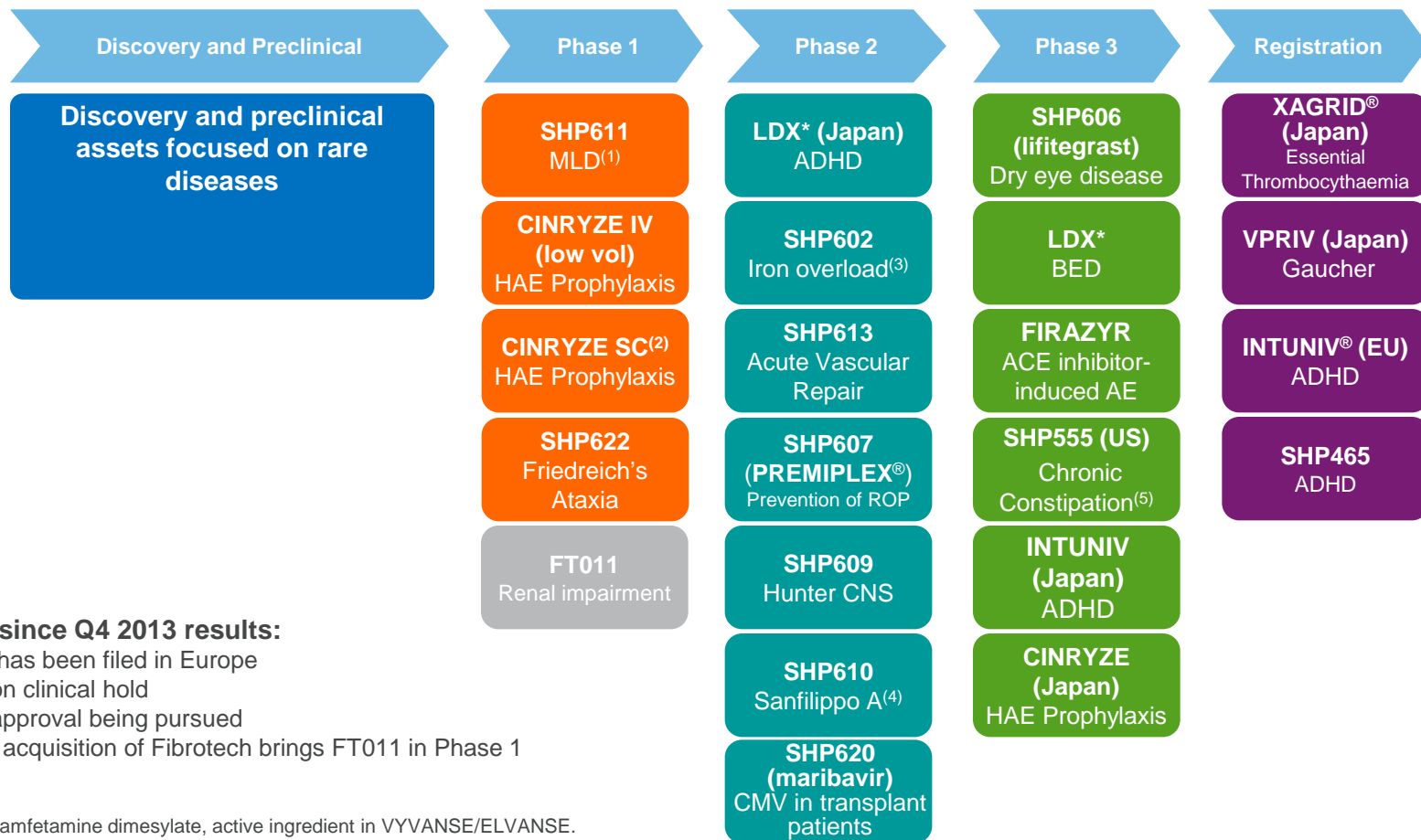
# Pipeline and summary

Flemming Ornskov, MD  
Chief Executive Officer

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# Strong innovative pipeline



## Changes since Q4 2013 results:

- INTUNIV has been filed in Europe
- SHP602 on clinical hold
- SHP465 approval being pursued
- Proposed acquisition of Fibrotech brings FT011 in Phase 1

## Notes

- \* Lisdexamfetamine dimesylate, active ingredient in VYVANSE/ELVANSE.
- (1) SHP611 is currently in a Phase 1/2 clinical trial.
  - (2) Subcutaneous formulation.
  - (3) SHP602 on clinical hold.
  - (4) SHP610 has completed its Phase 1/2 clinical trial and preparation is underway for a Phase 2b trial.
  - (5) Discussions are planned with the FDA to determine potential clinical development pathways.

# Maribavir for the treatment of Cytomegalovirus in transplant patients – no new anti CMV agents developed in over 10 years

## Patients

- ~50k solid organ transplants and ~20k hematopoietic stem cell transplants per year in US and EU5
- Current medications available to treat CMV are effective, but drug-resistant population is growing and bone marrow toxicity an issue

## Product

- Unique MOA inhibits viral encapsulation and spread of virus particles
- Studying Maribavir to treat CMV viremia as a first line therapy and to treat resistant CMV after other therapies have failed
- Orphan designation granted in US and EU

## Progress

- Interim Phase 2 efficacy data encouraging
- Clinical studies to date have shown good safety profile
- Phase 2 trials fully enrolled and expected to read out in H1 2015

## Potential

- Highly targeted prescriber base at transplant centres
- Potential value and strategic fit to be reassessed post Phase 2 data

# Fibrotech: strategic step in strengthening Shire's Rare Disease pipeline

- Expands Shire's pipeline with a novel clinical stage anti-fibrotic agent
- Strengthens our growing and innovative portfolio targeting renal and fibrotic diseases
- FT011, the lead molecule, targets an innovative, novel and previously undescribed mechanism of action and is currently completing a phase 1b trial in patients with renal impairment
- A phase 2 trial is planned for 2015 in patients with Focal Segmental Glomerulosclerosis (FSGS), a rare fibrotic kidney disease with high unmet medical need
- There are around 75,000 patients with primary FSGS in US & EU5
- The acquisition also diversifies our pipeline, giving us access to Fibrotech's library of novel molecules that are engineered to target fibrotic mechanisms across multiple indications of high unmet need

# Strategy delivering strong results

**Focusing on those areas where we see high growth potential**

**Delivering commercial excellence and exploring additional targeted opportunities**

**Lean and scalable structure generating operating leverage and supporting future investments in growth**

**Investing to increase the value of our pipeline, adding new and valuable assets**



# Questions and Answers

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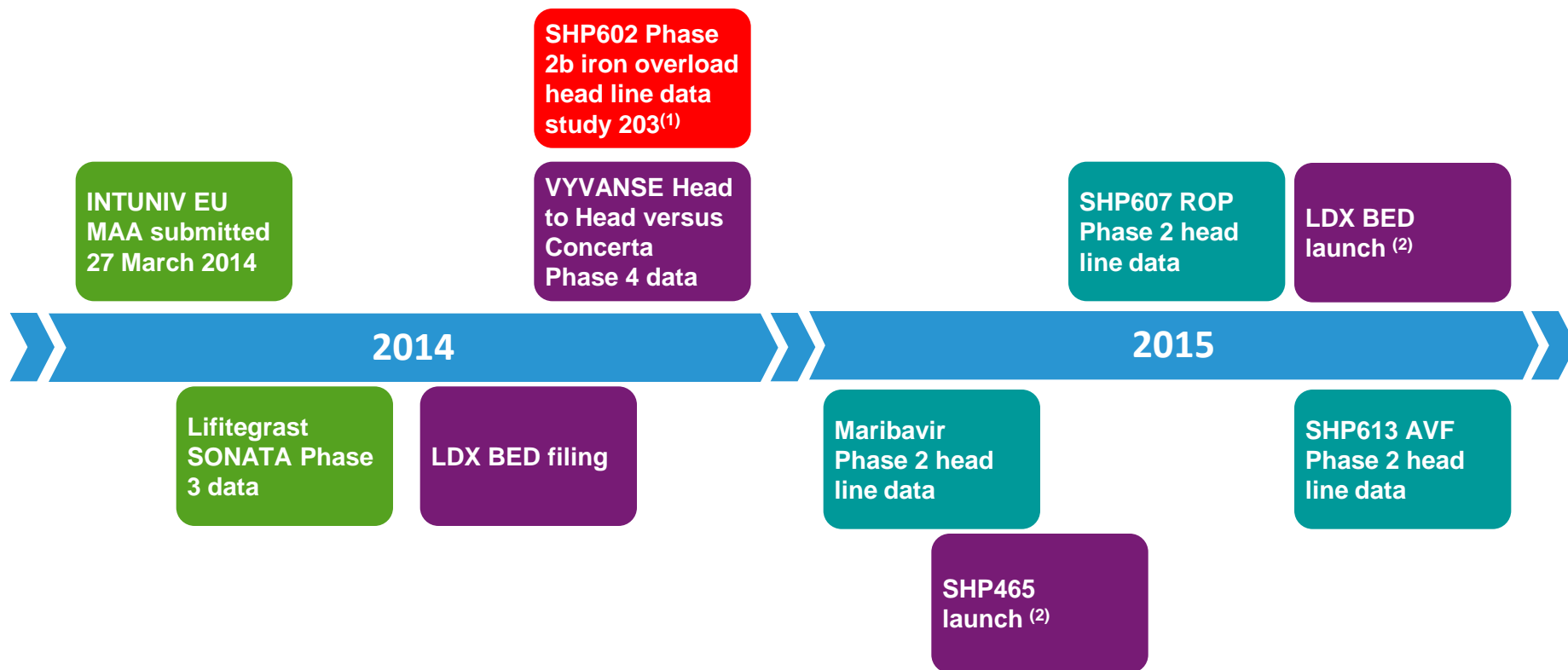


# Appendix

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# Pipeline milestones



- Registration and Phase 4
- Phase 3
- Phase 2

## Notes

- (1) SHP602 on clinical hold.
- (2) Subject to regulatory approval

# A Patient Perspective – Binge Eaters\*



- Bingeing for over 10 years
- Half are 24-44 years old
- 88% Female
- 57% have Psych co-morbidities (36% any anxiety disorder/depressions)
- 73% have BMI >30 (median 36)

What do they think?

*Something bad that I do vs.  
something I have*

How do they feel?

*Great guilt, shame, and  
embarrassment*

What do they want?

*Resist the urge to binge –  
to gain control over food*

# Product Sales – Regional Analysis

	US \$m	Europe \$m	LATAM \$m	Other \$m	Total \$m
<b>Q1 2014 product sales<sup>(1)</sup></b>	<b>912</b>	<b>276</b>	<b>28</b>	<b>92</b>	<b>1,308</b>
% of Product sales	70%	21%	2%	7%	100%
YoY growth	+23%	+12%	-13%	+19%	+19%
<b>FY 2013 product sales<sup>(1)</sup></b>	<b>3,178</b>	<b>1,018</b>	<b>207</b>	<b>354</b>	<b>4,757</b>
% of Product sales	67%	21%	4%	8%	100%
YoY growth	+15%	+4%	+21%	+9%	+12%

(1) Results exclude DERMAGRAFT, which is treated as a discontinued operation following divestment on January 17, 2014.

# Royalties & Other Revenues

	Q1 2014 \$m	Q1 2013 \$m	Reported Growth
FOSRENOL	13	9	+42%
ADDERALL XR	9	8	+11%
3TC and ZEFFIX	8	12	-40%
REMINYL & Other	2	9	-66%
<b>Royalties</b>	<b>32</b>	<b>38</b>	<b>-16%</b>
Other revenues	7	7	-4%
<b>Royalties &amp; Other Revenues</b>	<b>39</b>	<b>45</b>	<b>-14%</b>

# Shire income statement growth analysis

	2013 Q1 <sup>(1)</sup>	2013 Q2 <sup>(1)</sup>	2013 Q3 <sup>(1)</sup>	2013 Q4 <sup>(1)</sup>	2013 FY <sup>(1)</sup>	2014 Q1 <sup>(1)</sup>	Direction v. FY 13	FY 2014 Dynamics Explanations
<b>Total Product Sales</b>	\$1,098m	\$1,208m	\$1,171m	\$1,280m	\$4,757m	\$1,308m	↑	Mid-to-high teens growth
<b>versus prior year</b>	+4%	+10%	+15%	+19%	+12%	+19%		
<b>Royalties &amp; Other Revenues</b>	\$45m	\$44m	\$42m	\$46m	\$177m	\$39m	↓	10-15% lower than 2013
<b>versus prior year</b>	-30%	-26%	-9%	-56%	-36%	-14%		
<b>Total Revenues</b>	\$1,143m	\$1,252m	\$1,213m	\$1,326m	\$4,934m	\$1,347m		
<b>versus prior year</b>	+2%	+8%	+14%	+12%	+9%	+18%		
<b>Gross Margin<sup>(2) (3)</sup></b>	87%	87%	86%	87%	87%	86%	↓	~1% lower than 2013
<b>Combined R&amp;D and SG&amp;A<sup>(3)</sup></b>	\$554m	\$589m	\$561m	\$610m	\$2,314m	\$539m	↑	4-6% higher than 2013
<b>versus prior year</b>	-7%	+1%	+1%	-1%	-2%	-3%		
<b>Tax Rate<sup>(3)</sup></b>	20%	23%	20%	12%	19%	20%	≈	Core effective tax rate of 18-20%
<b>EPS – ADS<sup>(3)</sup></b>	\$1.72	\$1.88	\$1.84	\$2.27	\$7.66	\$2.36	↑	Growth in the mid-to-high twenty percent range
<b>versus prior year</b>	+16%	+12%	+31%	+36%	+23%	+38%		

(1) Results exclude DERMAGRAFT, which is treated as a discontinued operation following divestment on January 17, 2014.

(2) Gross margin calculated as a percentage of net product sales.

(3) These are Non GAAP financial measures. See appendix for a list of items excluded from the US GAAP equivalents used to calculate these measures.



# Non GAAP cash flow measures

Non GAAP cash generation and free cash flow reconciliation	Q1 2014 \$m	Q1 2013 \$m
<b>Non GAAP cash generation<sup>(1)</sup></b>	<b>331</b>	<b>257</b>
Tax and interest payments, net	(85)	(97)
<b>US GAAP net cash provided by operating activities</b>	<b>246</b>	<b>160</b>
Capital expenditure	(15)	(47)
<b>Non GAAP free cash flow<sup>(2)</sup></b>	<b>231</b>	<b>113</b>

(1) Non GAAP cash generation represents net cash provided by operating activities, excluding upfront and milestone payments for in-licensed and acquired products, tax and interest payments.

(2) Non GAAP free cash flow represents net cash provided by operating activities, excluding upfront and milestone payments for in-licensed and acquired products, but including capital expenditure in the normal course of business.



# Non GAAP cash flow measures

	March 31, 2014 \$m	December 31, 2013 \$m
Cash and cash equivalents	139	2,239
Long term borrowings	(850)	-
Short term borrowings	(671)	-
Other debt	(31)	(9)
<b>Net (debt) / cash</b>	<b>(1,413)</b>	<b>2,231</b>

Note: Shire has a revolving 5 year credit facility of \$1.2bn which matures in November 2015, a \$0.35bn 1 year term facility (with 1 year extension option) and a \$0.85bn 2 year term facility to fund the ViroPharma acquisition and related costs.

# Q1 2013 Continuing operations walk

	Continuing operations <sup>(1)</sup> \$m	DERMAGRAFT operations \$m	Total \$m
Product sales	1,098	19	1,117
Royalties and Other Revenues	45	-	45
Total revenues	1,143	19	1,162
EBITDA <sup>(2)</sup>	449	(27)	422
EBITDA % of product sales <sup>(2)(3)</sup>	37%	-	34%
EPS - ADS <sup>(2)</sup>	\$1.72	(\$0.09)	\$1.63

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(2) These are Non GAAP financial measures. See appendix for a list of items excluded from the US GAAP equivalent used to calculate these measures.

(3) Excluding Royalties and Other Revenues.



# Operating Income US GAAP and Non GAAP

	Q1 2014 \$m	Q1 2013 \$m	Reported Growth
<b>Non GAAP Operating income from continuing operations</b>	<b>591</b>	<b>421</b>	<b>+40%</b>
Impairment of IPR&D intangible asset	(166)	-	
Impairment of goodwill	-	(7)	
Intangible asset amortisation	(58)	(36)	
Other legal and litigation costs	(2)	(2)	
Integration and acquisition costs	(46)	(4)	
Gains on sale of non-core assets	36	7	
Reorganisation costs	(49)	(18)	
Other	1	1	
<b>US GAAP Operating income from continuing operations</b>	<b>307</b>	<b>362</b>	<b>-15%</b>

# Non GAAP measures

- This presentation contains financial measures not prepared in accordance with US GAAP.
- These Non GAAP financial measures are used by Shire's management to make operating decisions because they facilitate internal comparisons of the Company's performance to historical results and to competitors' results. They should not be considered in isolation from, as substitutes for, or superior to financial measures prepared in accordance with US GAAP.
- The following items are excluded from these non-GAAP financial measures:
  - Amortization and asset impairments:**
    - Intangible asset amortization and impairment charges; and
    - Other than temporary impairment of investments.
  - Acquisitions and integration activities:**
    - Upfront payments and milestones in respect of in-licensed and acquired products;
    - Costs associated with acquisitions, including transaction costs, and fair value adjustments on contingent consideration and acquired inventory;
    - Costs associated with the integration of companies; and
    - Non-controlling interest in consolidated variable interest entities.
  - Divestments, re-organizations and discontinued operations:**
    - Gains and losses on the sale of non-core assets;
    - Costs associated with restructuring and re-organization 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).