Q3 2017 Results October 27, 2017

Flemming Ornskov, MD, MPH – CEO Jeff Poulton – CFO

Matt Walker - Head of Technical Operations





"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 Company's revenues, financial condition or results of operations;

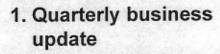
- · inability to successfully compete for highly qualified personnel from other companies and organizations;
- failure to achieve the strategic objectives, including expected operating efficiencies, cost savings, revenue enhancements, synergies or other benefits at the time anticipated or at all with respect to Shire's acquisitions, including 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 has increased its borrowing costs and may decrease its business flexibility; 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





Flemming Ornskov, MD, MPH

2. Financial review



Jeff Poulton

3. Manufacturing network review



Matt Walker

4. Summary and Q & A



Flemming Ornskov, MD, MPH

Shire

Shire is the leading global biotech focused on rare diseases

Clear Biotech Profile

with 65% of 2017 sales expected to come from biologic drugs 1 Rare Disease Leader

Innovative, rare disease-focused biotech committed to differentiated and high patient-impact medicines

2 Strong Immunology Franchise

With the addition of Baxalta, Immunology is now the fastest growing franchise

Robust R&D Pipeline

~40 programs in clinical development including 17 currently in Phase 3 trials; expected to be key drivers for future growth

Shire

Strong business performance continued in Q3

GROWTH



- Achieved quarterly product sales of \$3.5B
 - An increase of 7% from Q3 2016
- Delivered Non GAAP diluted earnings per ADS of \$3.81⁽¹⁾⁽³⁾
 - An increase of 20% from Q3 2016
- Continued advancement of our innovative late-stage clinical portfolio (e.g., MYDAYIS, SHP643, SHP555)

EFFICIENCY



- Baxalta integration continues to track ahead of plan
- Non GAAP EBITDA margin of 44%⁽²⁾⁽³⁾
- Manufacturing network review has identified >\$100MM in expected additional annual savings beginning in 2019 and expected to increase to \$300MM annually by 2023

CAPITAL ALLOCATION



- \$920MM reduction in Non GAAP net debt⁽³⁾ in Q3 2017
- On track to meet our 2-3x Non GAAP net debt / Non GAAP EBITDA target by end of 2017⁽³⁾
- Strategic review of Neuroscience franchise on track to read-out by year-end



This is a Non GAAP financial measure. The most directly comparable measure under US GAAP is Diluted EPS-ADS (Q3 2017; \$1.81).

This is a Non GAAP financial measure as a percentage of total revenue. The most directly comparable measure under US GAAP is Net Income Margin (Q3 2017: 15%).

See slide 39 for a list of items excluded from the US GAAP equivalent used to calculate all Non GAAP measures detailed above. See slides 33 to 38 for a reconciliation of Non GAAP financial measures to the most directly comparable measure under US GAAP.

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