Teleconference – H1 2018

August 2018
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Key product growth drives top and bottom line

- **Revenue**: Up 9% (14% in L.C.) to DKK 9.3 billion in H1 2018
- **Hedging**: Contributed DKK 277 million
- **Key products***: Up 21% to DKK 5.1 billion representing 55% of revenue
- **EBIT**: Up 46% to DKK 3.0 billion. EBIT margin significantly improved to 32.4%, but positively impacted by hedging gains
- **EPS**: Up 83% to DKK 11.07
- **FY2018**: Guidance revised

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### Revenue (DKKm)

- **H1 2017**: 6000
- **H1 2018**: 8000

**Key products***: +21%

**Other Products**: +9%

### EPS (DKK)

- **H1 2017**: 4
- **H1 2018**: 10

+83%

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* Includes Other revenue and effects from hedging

**Abilify Maintena, Brintellix/Trintellix, Northera, Onfi and Rexulti**
Solid revenue growth of 9% to DKK 9.3 billion in H1 2018 – in local currencies growth reached 14%

- **Key products** grew by DKK 874 million or 21% (33% in L.C.) with all products showing double digit growth in H1 2018
- Both **North America** and **International Markets** see significant currency headwind
- Growth in all regions in local currencies
- Largest markets are the U.S., Canada, China, France, Italy, Japan and Spain

![Key product* revenue (DKKm)](chart)

![Revenue distribution** (regional split)](chart)

*) Ability Maintena, Brintellix/Trintellix, Northera, Onfi and Rexulti
**) Excluding Other revenue and effects from hedging
North America grew 1% driven by Trintellix, Rexulti, Northera and Onfi – currency headwind had significant negative impact

- North America grew 1% (14% in L.C.) to DKK 5,287 million in H1 2018
- Key products# grew 19% and constituted 80% of revenue in H1 2018
- For FY2018, North America is expected to show growth in local currencies despite LOE on Onfi towards the end of the year

North America revenue (DKKm)

- Key products# grew 19% and constituted 80% of revenue in H1 2018
- Rest of World 39%
- North America 61%

*) Excluding Other revenue and effects from hedging
International Markets grew 3% in H1 2018 – up 11% in local currencies

- International Markets increased 3% (11% in L.C.) to DKK 1.9 billion in H1 2018
- Positive impact from stocking of DKK ~150 million
- Key products# grew by 23% and constituted 14% of sales
- Market exclusivity for Lexapro extended by two years in Japan
- Main markets are Brazil, China, Japan and South Korea
- For FY2018, International Markets is expected to show growth in local currencies
Europe grew 6% in H1 2018 driven by Abilify Maintena and Brintellix – up 7% in local currencies

- Europe grew 6% to DKK 1.5 billion in H1 2018
- Key products# grew 27% and constituted 42% of sales
- Largest markets are France, Italy and Spain
- Continued strong performance for Brintellix, especially in France, Italy and Spain
- Profitability significantly improved
- Rxulti approved in Europe with launch commencing in H1 2019
- For FY2018, Europe is expected to show growth in local currencies

![Europe revenue (DKKm)](chart)

- Europe’s contribution*)
  - Europe 17%
  - Rest of World 83%  
  *) Excluding Other revenue and effects from hedging

*) Abilify Maintena and Brintellix
Brintellix/Trintellix grew 26% to DKK 999 million in H1 2018 – in local currencies the growth was 36%

- **North America** grew by 20% (34% in L.C.) to DKK 542 million
- **Europe and International Markets** grew 33% (40% in L.C.) combined to DKK 457 million
- Largest markets are the U.S., Brazil, Canada, France, Italy, and Spain
- Growth mainly driven by France, Italy, Spain and the U.S.
- Brintellix continues to gain both volume and value share
- **PDUFA** on 21 October regarding TESD in patients with depression

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**Brintellix/Trintellix (DKKm)**

- Europe + Int. Markets
- North America

## Total Rx count (U.S. retail)

**Source:** Symphony Health Solutions/Bloomberg (monthly data ending 6/2018)

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PDUFA: Prescription Drug User Fee Act (FDA).
TESD: Treatment-Emergent Sexual Dysfunction
Rexulti grew 28% to DKK 752 million in H1 2018 – in local currencies the growth was 44%

- **Rexulti** approved in Europe
- Recently also approved in Honduras and Saudi Arabia
- Rexulti has 11.3% value share (U.S.)
- Third study in **AAD** commenced
- Pivotal programme in **bipolar mania** to conclude H1 2019
- PoC study in **PTSD** to conclude around year-end 2018
- Additional LCM activity progressing

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**Rexulti sales** (DKKm)

- North America
- Europe + Int. Markets

**Total Rx count** (U.S. retail)

<table>
<thead>
<tr>
<th>Year</th>
<th>North America</th>
<th>Europe + Int. Markets</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td></td>
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</tbody>
</table>

Lundbeck’s share of revenue.

**NOTE**: Outside North America, Rexulti has only been launched in Australia

AAD: Agitation in Alzheimer’s disease; PoC: Proof of Concept; PTSD: Post-Traumatic Stress Disorder; LCM: Life-Cycle Mgmt.
Abilify Maintena grew 16% to DKK 771 million in H1 2018 – in local currencies the growth was 22%

- **Europe** and **International Markets** grew 19% (21% in L.C.) combined to DKK 446 million
- **North America** up 12% (24% in L.C.) to DKK 325 million
- Growth driven by Australia, Canada, France, Spain and the U.S.
- Largest markets are Australia, Canada, France, Spain and the U.S.
- Market share increasing - >20% volume share (LAI retail) in most markets
- **Total LAI market** reached USD 2.2 billion (+13%) in H1 2018

*LAI: Long-acting injectable anti-psychotics*
U.S. neurology products, Northera and Onfi, continue to show solid growth in local currency

**Northera**
- Up 16% (30% in L.C.) to DKK 849 million in H1 2018
- Northera impacted by seasonal swings in demand
- Expected continued growth

**Onfi**
- Up 19% (34% in L.C.) to DKK 1,762 million in H1 2018
- Expected to grow until generic clobazam is introduced, expectedly in Q4 2018
Maintaining strong cost focus while also investing in the business

- **Total costs** down 5% while growing topline by 9% in H1 2018
- **EBITDA margin** of 38.2% vs. 31.2% in H1 2017
- **EBIT margin** of 32.4% vs. 24.3% in H1 2017
- **COS%**: Expected to show continued improvements vs. 2017
- **S&D%**: Stable or modest additional improvements vs. 2017
- **G&A%**: Stable or modest additional improvements vs. 2017
- **R&D%**: Slightly increasing vs. 2017 depending on project execution

*Data adjusted for Other operating items, net*
Strong growth in earnings

- Significant negative impact from FX reducing revenue growth
- Growth for all key products and in all regions in L.C.
- EPS growth of 83%
- Significant EPS improvement driven by
  - Solid revenue growth
  - Strong improvement of profitability
  - Reduced tax rate as the U.S. tax reform has decreased the group tax rate from 40% in H1 2017 to 27%

### Financial results

<table>
<thead>
<tr>
<th></th>
<th>DKKm</th>
<th>H1.18</th>
<th>H1.17</th>
<th>Δ%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>9,288</td>
<td>8,494</td>
<td></td>
<td>9%</td>
</tr>
<tr>
<td>Gross margin</td>
<td>81.6%</td>
<td>76.9%</td>
<td></td>
<td>-</td>
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<tr>
<td>EBIT</td>
<td>3,006</td>
<td>2,061</td>
<td></td>
<td>46%</td>
</tr>
<tr>
<td>EBIT margin</td>
<td>32.4%</td>
<td>24.3%</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>Core EBIT</td>
<td>3,578</td>
<td>2,500</td>
<td></td>
<td>43%</td>
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<tr>
<td>Net profit</td>
<td>2,198</td>
<td>1,195</td>
<td></td>
<td>84%</td>
</tr>
<tr>
<td>EPS</td>
<td>11.07</td>
<td>6.05</td>
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<td>83%</td>
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### Revenue

(reported vs. L.C.)

<table>
<thead>
<tr>
<th></th>
<th>DKKm</th>
<th>H1.18</th>
<th>Δ DKKm</th>
<th>Δ% L.C.</th>
</tr>
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<tbody>
<tr>
<td>Revenue</td>
<td>9,288</td>
<td></td>
<td>+794</td>
<td>+14%</td>
</tr>
<tr>
<td>- Abilify Maintena</td>
<td>771</td>
<td>+104</td>
<td>+22%</td>
<td></td>
</tr>
<tr>
<td>- Brintellix/Trintellix</td>
<td>999</td>
<td>+205</td>
<td>+36%</td>
<td></td>
</tr>
<tr>
<td>- Northera</td>
<td>849</td>
<td>+115</td>
<td>+30%</td>
<td></td>
</tr>
<tr>
<td>- Onfi</td>
<td>1,762</td>
<td>+285</td>
<td>+34%</td>
<td></td>
</tr>
<tr>
<td>- Rexulti</td>
<td>752</td>
<td>+165</td>
<td>+44%</td>
<td></td>
</tr>
<tr>
<td>North America</td>
<td>5,287</td>
<td>+77</td>
<td>+14%</td>
<td></td>
</tr>
<tr>
<td>Int. Markets</td>
<td>1,920</td>
<td>+51</td>
<td>+11%</td>
<td></td>
</tr>
<tr>
<td>Europe</td>
<td>1,518</td>
<td>+87</td>
<td>+7%</td>
<td></td>
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</table>
**Strong cash flow generation and improved ROIC**

- Cash flows from operating activities increased from DKK 1,217 million in H1 2017 to DKK 3,369 million in H1 2018.
- Acquisition of **Prexton Therapeutics** in Q1 impacts net cash flow by DKK 745 million.
- **Dividend payout** for 2017 increased to DKK 1.6 billion.
- **ROIC** increased from 26.6% in FY2017 to 53.2% in H1 2018.
2018 financial outlook revised

- Growth in all three regions in local currencies
- Continued growth for key products to outpace the decline from generic erosion
- Onfi revenue is expected to decline 40-50% compared to prior quarters in 2018
- Net financial items of DKK ±50 million expected in 2018
- No known additional one-off income and/or expenses
- Unchanged currencies from end-July 2018

### 2018 financial guidance

<table>
<thead>
<tr>
<th></th>
<th>DKKbn</th>
<th>2016</th>
<th>2017</th>
<th>Previous 2018 guidance</th>
<th>Revised 2018 guidance</th>
<th>~Δ% (y/y)</th>
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<tbody>
<tr>
<td>Revenue</td>
<td></td>
<td></td>
<td></td>
<td>17.2-18.0</td>
<td>17.6-18.0</td>
<td>2-5%</td>
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<tr>
<td>EBIT</td>
<td></td>
<td>2.3</td>
<td>4.4</td>
<td>4.8-5.2</td>
<td>4.9-5.2</td>
<td>11-18%</td>
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<tr>
<td>Implied EBIT margin</td>
<td></td>
<td>14.7%</td>
<td>25.6%</td>
<td>~27-30%</td>
<td>~27-30%</td>
<td>-</td>
</tr>
<tr>
<td>Tax rate</td>
<td></td>
<td>43.9%</td>
<td>38.7%</td>
<td>26-28%</td>
<td>26-28%</td>
<td>-</td>
</tr>
</tbody>
</table>
The value of Lundbeck’s R&D pipeline is increasing

- **Brexpiprazole**: Approved by the European Commission and in Switzerland

- **Vortioxetine**: Strong pivotal data in Japanese patients

- **Lu AF35700**: Finished recruiting in **DAYBREAK I**

- **Ability Maintena 2-month**: Single dose study finished now moving into multi-dose study

- **Lu AF76432**: Phase I initiated in May 2018 (schizophrenia)

- **Lu AF28996**: Phase I initiated in June 2018 (Parkinson’s)

- **Lu AF82422**: Phase I initiated in August 2018 (Parkinson’s)
Major clinical programme ongoing with Lu AF35700 – first results to be reported in Q4 2018

Lu AF35700

- For the treatment of treatment-resistant schizophrenia (TRS) which represents a major unmet medical need
- Antagonist at dopaminergic, serotonergic, and α adrenergic receptors. Unlike all currently available antipsychotics, Lu AF35700 has higher affinity for the human dopamine D₁ receptor than it has for the human dopamine D₂ receptor

Clinical studies in TRS

- **DAYBREAK I** evaluates the efficacy of 10 and 20 mg/day of Lu AF35700 on schizophrenia symptoms in patients with treatment-resistant schizophrenia (n = 964) (NCT02717195)
- **ANEW** evaluates the efficacy of 10 mg/day Lu AF35700 on symptoms of schizophrenia in patients with early-in-disease or late-in-disease treatment-resistant schizophrenia (n = 285) (NCT03230864)

Supportive clinical studies

- Study to evaluate the pharmacokinetics of Lu AF35700 after a single dose tablet to subjects with renal impairment and compare that with healthy subjects (n = 32) (NCT03241147)
- Study to investigate the effect of multiple doses of the strong P450 enzyme inhibitor itraconazole on the pharmacokinetics of Lu AF35700 in healthy subjects (n = 23) (NCT03103646)
- Study to establish bioequivalence of Lu AF35700 between the clinical formulation and the commercial formulation for three tablet strengths; 5, 10 and 20 mg (n = 90) (NCT03394482)

Upcoming events

- Communicate headline results from first study (**DAYBREAK I**) in the pivotal programme during Q4 2018
Comprehensive LCM programme ongoing for brexpiprazole for further product value expansion

**Brexpiprazole**
- Several clinical programmes ongoing to address unmet medical needs and aiming for product value maximisation

**Bipolar I disorder**
- Two studies to demonstrate the efficacy in acute treatment of manic episodes, with or without mixed features, in subjects with a diagnosis of Bipolar I disorder (n = 320 in both studies) (NCT03257865, NCT03259555)
- Evaluating the safety and tolerability in the treatment of subjects with Bipolar I disorder (n = 384) (NCT03287869)

**Agitation in Alzheimer’s**
- Programme to compare the efficacy of 2 doses (2 mg and 3 mg) of brexpiprazole with placebo in subjects with agitation associated with dementia of the Alzheimer's type (n = 225) (NCT03548584, NCT03594123 (12-week extension study))

**PTSD**
- Evaluating the safety, efficacy and tolerability of brexpiprazole (with placebo) as monotherapy or combination therapy (Zoloft) in adults with PTSD (n = 332) (NCT03033069)

**Adolecents**
- To determine the safety and efficacy of brexpiprazole monotherapy in the treatment of adolescents with schizophrenia (n = 387) (NCT03198078)
- To further characterize the long-term safety and tolerability of brexpiprazole in adolescents with schizophrenia (n = 350) (NCT03238326)

**Upcoming events**
- Headline results from the PoC study in PTSD to be reported in Q1 2019
- Headline results from the pivotal programme in Bipolar mania to be reported in Q1 2019
Lu AF20513 to enter proof of concept-study during H1 2019

Lu AF20513

- An active vaccine inducing high affinity polyclonal antibodies that target beta-amyloid ("Abeta"), for the potential injectable prevention of progression of Alzheimer's dementia

Ongoing activities

- Open label study to determine if multiple immunizations with Lu AF20513 is tolerable and safe in patients with mild Alzheimer's disease (n = 50) (NCT02388152)
- Investigating if subjects are generating antibodies

Upcoming events

- PoC study expected to commence in H1 2019
Foliglurax is an innovative and highly attractive phase II compound being developed for symptomatic treatment of Parkinson’s disease

**Foliglurax**
- A small-molecule positive allosteric modulator of group III metabotropic glutamate receptor 4 (mGluR4 PAM), for the potential oral treatment of Parkinson's disease

**Ongoing activities**
- Phase II proof of concept study in subjects with Parkinson’s treated with a stable dose of levodopa who are experiencing both end-of-dose wearing off and Levodopa-Induced Dyskinesia (n = 165) (NCT03162874)

**Upcoming events**
- PoC study expected to finalize in Q3 2019
Pipeline progressing with further newsflow expected in the next 12 months

- **Lu AF35700: Data from first pivotal study**
  - Headline results from *DAYBREAK I* (Q4 2018)

- **Brexipiprazole: Data from life cycle management programme**
  - PoC headline results in PTSD (Q1 2019)
  - Pivotal data in bipolar mania (Q1 2019)

- **Trintellix sNDA**
  - The U.S. FDA accepted an sNDA for the drug to treat MDD in patients with treatment-emergent sexual dysfunction in February 2018. PDUFA is set to 21 October 2018

- **Lu AF20513: Entering clinical Proof of Concept study**
  - Based on the data from phase I, Lundbeck intends to advance Lu AF20513 into a phase II clinical study in Alzheimer’s disease patients (H1 2019)

- **Foliglurax: Clinical proof of concept**
  - Headline results from PoC study (Q3 2019)
Thank you!