Disclaimer

This presentation contains forward-looking statements that can be identified by terminology such as such as “potential,” “expected,” “will,” “planned,” or similar expressions, or by express or implied discussions regarding potential new products, potential new indications for existing products, or regarding potential future revenues from any such products; potential shareholder returns or credit ratings; or regarding the potential outcome of the announced review of options being undertaken to maximize shareholder value of the Alcon Division; or regarding the potential financial or other impact on Novartis or any of its divisions of the significant reorganizations of recent years, including the creation of the Pharmaceuticals and Oncology business units to form the Innovative Medicines Division, the creation of the Global Drug Development organization and Novartis Operations (including Novartis Technical Operations and Novartis Business Services), the transfer of the Ophthalmic Pharmaceuticals products of our Alcon Division to the Innovative Medicines Division, the transfer of selected mature, non-promoted pharmaceutical products from the Innovative Medicines Division to the Sandoz Division, and the transactions with GSK, Lilly and CSL; or regarding the potential impact of the share buyback plan; or regarding potential future sales or earnings of the Novartis Group or any of its divisions; or by discussions of strategy, plans, expectations or intentions. You should not place undue reliance on these statements. Such forward looking statements are based on the current beliefs and expectations of management regarding future events, and are subject to significant known and unknown risks and uncertainties. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those set forth in the forward looking statements. There can be no guarantee that any new products will be approved for sale in any market, or that any new indications will be approved for any existing products in any market, or that any approvals which are obtained will be obtained at any particular time, or that any such products will achieve any particular revenue levels. Nor can there be any guarantee that the review of options being undertaken to maximize shareholder value of the Alcon Division will reach any particular results, or at any particular time. Neither can there be any guarantee that Novartis will be able to realize any of the potential strategic benefits, synergies or opportunities as a result of the significant reorganizations of recent years, including the creation of the Pharmaceuticals and Oncology business units to form the Innovative Medicines Division, the creation of the Global Drug Development organization and Novartis Operations (including Novartis Technical Operations and Novartis Business Services), the transfer of the Ophthalmic Pharmaceuticals products of our Alcon Division to the Innovative Medicines Division, the transfer of selected mature, non-promoted pharmaceutical products from the Innovative Medicines Division to the Sandoz Division, and the transactions with GSK, Lilly and CSL. Neither can there be any guarantee that shareholders will achieve any particular level of shareholder returns. Nor can there be any guarantee that the Group, or any of its divisions, will be commercially successful in the future, or achieve any particular credit rating or financial results. In particular, management’s expectations could be affected by, among other things: regulatory actions or delays or government regulation generally; the potential that the strategic benefits, synergies or opportunities expected from the significant reorganizations of recent years, including the creation of the Pharmaceuticals and Oncology business units to form the Innovative Medicines Division, the creation of the Global Drug Development organization and Novartis Operations (including Novartis Technical Operations and Novartis Business Services), the transfer of the Ophthalmic Pharmaceuticals products of our Alcon Division to the Innovative Medicines Division, the transfer of selected mature, non-promoted pharmaceutical products from the Innovative Medicines Division to the Sandoz Division, and the transactions with GSK, Lilly and CSL may not be realized or may take longer to realize than expected; the inherent uncertainties involved in predicting shareholder returns or credit ratings; the uncertainties inherent in the research and development of new healthcare products, including clinical trial results and additional analysis of existing clinical data; our ability to obtain or maintain proprietary intellectual property protection, including the ultimate extent of the impact on Novartis of the loss of patent protection and exclusivity on key products which commenced in prior years and will continue this year; safety, quality or manufacturing issues; global trends toward health care cost containment, including ongoing pricing and reimbursement pressures, such as from increased publicity on pharmaceuticals pricing, including in certain large markets; uncertainties regarding actual or potential legal proceedings, including, among others, actual or potential product liability litigation, litigation and investigations regarding sales and marketing practices, intellectual property disputes and government investigations generally; general economic and industry conditions, including uncertainties regarding the effects of the persistently weak economic and financial environment in many countries; uncertainties regarding future global exchange rates; uncertainties regarding future demand for our products; and uncertainties regarding potential significant breaches of data security or data privacy, or disruptions of our information technology systems; and other risks and factors referred to in Novartis AG’s current Form 20-F on file with the US Securities and Exchange Commission. Novartis is providing the information in this presentation as of this date and does not undertake any obligation to update any forward-looking statements as a result of new information, future events or otherwise.
Agenda

1. Group review  Joseph Jimenez, Chief Executive Officer
2. Financial review  Harry Kirsch, Chief Financial Officer
3. Business updates  Paul Hudson, Pharmaceuticals | Mike Ball, Alcon
4. Development  Vas Narasimhan, Global Head Drug Development & CMO
5. Research  Jay Bradner, President NIBR
6. Closing  Joseph Jimenez, Chief Executive Officer
1. Group review

2016 in review

Industry trends & our strategy to win

The next growth phase
Last year we established 5 objectives for 2016

1. Deliver strong 
   Financial Results

2. Strengthen 
   Innovation

3. Improve 
   Alcon Performance

4. Capture 
   Cross-Divisional Synergies

5. Build a 
   High-Performing Organization
We broadly delivered on these, with some areas for improvement

Deliver strong Financial Results
- **Sales broadly in line** despite Glivec® loss of exclusivity in US

Strengthen Innovation
- **Launches:** Strong Cosentyx® launch; Entresto® uptake slower than expected
- **Breakthrough innovations:** LEE011, BAF312, AMG 334, Biosimilars

Improve Alcon Performance
- **Alcon improved, but did not return to growth:** Vision Care returned to growth, but Surgical taking longer

Capture Cross-Divisional Synergies
- **NBS-managed costs decreased,** scaling up 5 Global Service Centers

Build a High-Performing Organization
- **Major organizational changes** implemented without disruption
Sales broadly in line due to strong performance of Growth Products

### Deliver strong Financial Results

#### Continuing operations¹ (in USD bn)

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>% USD</th>
<th>% cc¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Sales</td>
<td>48.5</td>
<td>-2</td>
<td>0</td>
</tr>
<tr>
<td>Core Operating Income¹</td>
<td>13.0</td>
<td>-6</td>
<td>-2</td>
</tr>
<tr>
<td>Operating Income¹</td>
<td>8.3</td>
<td>-8</td>
<td>-3</td>
</tr>
<tr>
<td>Net Income</td>
<td>6.7</td>
<td>-5</td>
<td>+1</td>
</tr>
<tr>
<td>Core EPS (USD)¹</td>
<td>4.75</td>
<td>-5</td>
<td>-2</td>
</tr>
<tr>
<td>EPS (USD)</td>
<td>2.82</td>
<td>-3</td>
<td>+2</td>
</tr>
<tr>
<td>Free Cash Flow¹</td>
<td>9.5</td>
<td>+2</td>
<td></td>
</tr>
</tbody>
</table>

1. Continuing operations are defined on page 41 of the Condensed Financial Report. Constant currencies (cc), core results, and free cash flow are non-IFRS measures. An explanation of these measures can be found on page 50 of the Condensed Financial Report.
Launches: Cosentyx® and Entresto®

• Full year sales USD 1,128m
• Launched in major markets
• Leading positions in NBRx¹
• Sustained efficacy²:
  – PsO (4 years³)
  – PsA (3 years⁴)
  – AS (2 years⁵)

1. Leading NBRx share among biologics in PsA/AS segment in US (IMS NBRx Rheumatology specialty allocated for PsA/AS indications based on anonymized patient data), DE, FR and in PsO segment in DE, FR, SP, UK
2. PsO – Psoriasis; PsA – Psoriatic Arthritis; AS – Ankylosing Spondylitis
6. Class I recommendations in the ACC/AHA/ESC Heart Failure Guidelines

• Full year sales USD 170m
• Access: 23% of Medicare patients without prior authorization
• Positive treatment guidelines⁶
• Continuing FF expansion

1. Leading NBRx share among biologics in PsA/AS segment in US (IMS NBRx Rheumatology specialty allocated for PsA/AS indications based on anonymized patient data), DE, FR and in PsO segment in DE, FR, SP, UK
2. PsO – Psoriasis; PsA – Psoriatic Arthritis; AS – Ankylosing Spondylitis
6. Class I recommendations in the ACC/AHA/ESC Heart Failure Guidelines
Pipeline: 2016 was a strong year for innovation

1. LEE011
   - **Positive Ph III data**: Filed in the US and EU

2. BAF312
   - **Positive Ph III**: Reduction of disability progression in SPMS

3. AMG 334
   - **Positive Ph III & Ph II**: In episodic and chronic migraine

4. Ultibro® Breezhaler®
   - **FLAME data**: Demonstrates superiority over Seretide®

5. Erelzi®
   - **US approval**: Unanimous vote by Arthritis Advisory Committee

6. Rituximab
   - **EMA submission accepted**: Demonstrated bioequivalence

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1. SPMS: Secondary progressive multiple sclerosis  
2. In collaboration with Amgen; Novartis has AMG 334 rights outside of US, Canada and Japan  
3. Clinicaltrials.gov. QVA149 vs. Salmeterol/ Fluticasone, 52-week Exacerbation Study (FLAME). NCT01782326. Seretide® is a registered trademark of GlaxoSmithKline

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| Novartis Q4 and FY 2016 Results | January 25, 2017 | Novartis Investor Presentation | 9 |
Alcon: Vision Care turning but Surgical taking longer

**Vision Care**

- Continued strong global growth of Dailies Total1®
- Contact lens share positively impacted in US, EU
- Introduced new innovation e.g., Dailies Total1 Multifocal®

**Surgical**

- Continued solid growth of cataract consumables and vitreoretinal
- Weaker performance of IOLs and equipment
- Introduced new innovations: CyPass® and NGENUITY®
Novartis Business Services: costs under management decreased, while quality improved

- Reducing costs in IT and Facilities Services, e.g.
  - Initiated standardization of infrastructure services at manufacturing sites
  - Consolidation of facilities services from 100+ to 3
  - Significant reduction of IT applications

- Selective offshoring to our 5 Global Service Centers continues to optimize geographical footprint
Integrating manufacturing and drug development across divisions: Seeing early benefits

• **Manufacturing**: Integration around technology platforms

• **Drug development**: Integration of global functions

1. Improved transparency
2. Better resource allocation
3. More collaboration
1. Group review

2016 in review

Industry trends & our strategy to win

The next growth phase
The demand for healthcare is growing...

The population is getting ...

... larger

+1bn
By 2030

... older

~1 in 3
Over 50 years old

... sicker

Chronic diseases
>70% of all deaths

...creating opportunities in key diseases

Expected high growth areas (2025)

- Heart disease and cancer alone expected to cause 50% of all deaths
- More than 2bn people expected to suffer from presbyopia and ~18m cases of cataracts expected in US

Source: WHO, OECD
However, the same forces creating this demand, are putting pressure on the industry

- Increased pressure on pricing and access
- Increasing attention to Real World Evidence

If unchecked, healthcare spending forecast to double by 2030

To win in this environment, we are rethinking all aspects of our business

We are “Reimagining Medicine”

1 How we **innovate**  
2 How we **sell**  
3 How we **operate**
1. Reimagining: How we innovate

Pioneering new technologies

Second Generation Immunotherapy
- 11+ clinical assets
- 2 pre-clinical assets

CTL019:
- Pediatric ALL filing expected in early 2017
- DLBCL filing expected in H2 2017

CRISPR
- Novartis candidates for Sickle Cell disease entered safety studies
2. Reimagining: How we sell

New commercial approaches

Contracting based on outcomes

Novartis Access
3. Reimagining: How we operate

A new operating model

- Innovation at our core
- Customer focused
- More efficient

Expect at least USD 1bn savings annually by 2020
1. Group review

2016 in review

Industry trends & our strategy to win

The next growth phase
Novartis is positioned well for the future

- Pipeline strong and broad
- Lower risk profile
- Strong capital allocation discipline
FY 2017-2020: Growth drivers expected to more than offset Generics

Illustrative Sales FY 2017–2020 (in cc)

- **Mainly:** Cosentyx®
- **Mainly:** New Onco LEE011 Jakavi®
- **Mainly:** Gilenya® US Afinitor® Ophtha Glivec®
- **Biosimilars & Alcon growth**

<table>
<thead>
<tr>
<th>Year</th>
<th>Pharma Growth Drivers</th>
<th>Onco Growth Drivers</th>
<th>Gx impact</th>
<th>Sandoz and Alcon</th>
</tr>
</thead>
</table>

2020 |
... without including other key pipeline assets with blockbuster potential

- AMG 334 (erenumab)
- BAF312 (siponimod)
- RLX030 (serelaxin)
- OMB157 (ofatumumab)
- ACZ885 (Ilaris®)
- QVM149 (indacaterol, glycopyrronium, mometasone)
- QAW039 (fevipiprant)
Biosimilars: Potential for substantial future sales growth

Plan to launch 5 biosimilars of major oncology and immunology biologics by 2020

- **Etanercept**
  - FDA approved for all indications

- **Rituximab**
  - Submission accepted by EMA

- **Infliximab**
  - Phase III trial demonstrated equivalent efficacy

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1. All trademarks are the property of the respective originator companies
Less exposed to Pricing or IP risks

Balanced global presence

35% sales in US

Balanced portfolio

Gx, Biosimilars
Creating Shareholder Value

We will continue to aggressively manage our capital structure and allocation to deliver shareholder value.

Novartis Capital Allocation Priorities

1. Investments in organic business
2. Growing annual dividend in CHF
3. Value creating bolt-on
4. Share buybacks

1. Includes M&A and BD&L
Today, we are announcing two actions based on these priorities

### Alcon Review
Options to maximize shareholder value of the Alcon Division under consideration

### Share Buyback
We are initiating share buyback of up to USD 5 billion for 2017

These actions demonstrate our commitment to maximizing shareholder value and confidence in our future growth trajectory.
## 2017 priorities

| Deliver financial targets | • **Sales** broadly in line with prior year  
• **Core Operating Income** broadly in line with prior year or decline low single digits¹ |
|---------------------------|----------------------------------------------------------------------------------|
| Strengthen R&D            | • **Regulatory decisions**: LEE011, PKC412, Biosimilars  
• **Submissions**: CTL019, AMG 334  
• **Trial readouts**: RLX030, ACZ885, RTH258 |
| Ensure world-class        | • **Accelerate sales**: Cosentyx®, Entresto®  
• Successfully launch new approvals**: potentially LEE011, Biosimilars rituximab and etanercept, PKC412 |
| commercial execution      | Transform Alcon into an agile medical device company  
• Return **Alcon** to top-line growth  
• Strengthen innovation and commercial execution |
| Create a stronger company | • **Embed new operating model** & capture synergies  
• Strengthen quality, **compliance** and develop the best **talent** |
| for the future            | |

1. Barring unforeseen events
Agenda

1. Group review
   Joseph Jimenez, Chief Executive Officer

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   Vas Narasimhan, Global Head Drug Development & CMO

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   Jay Bradner, President NIBR

6. Closing
   Joseph Jimenez, Chief Executive Officer
2016 actuals in line with our guidance

Full Year Guidance, Q2 2016 – reconfirmed in Q3 2016

(in cc)

“Sales are expected to be broadly in line with prior year”

“Core operating income is expected to be broadly in line with prior year or decline low single digits”

Actual vs. PY

(in cc)

+0% ✓

-2% ✓
## Summary of Q4 2016 and FY financial results

### Continuing Operations¹ (in USD m)

<table>
<thead>
<tr>
<th></th>
<th>Q4 2016</th>
<th>Change vs. PY</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>% USD</td>
<td>% cc</td>
</tr>
<tr>
<td>Net Sales</td>
<td>12 322</td>
<td>-2</td>
</tr>
<tr>
<td>Core Operating Income</td>
<td>3 013</td>
<td>-1</td>
</tr>
<tr>
<td>Operating Income</td>
<td>1 455</td>
<td>-13</td>
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<tr>
<td>Net Income</td>
<td>936</td>
<td>-11</td>
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<tr>
<td>Core EPS (USD)</td>
<td>1.12</td>
<td>-2</td>
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<tr>
<td>EPS (USD)</td>
<td>0.40</td>
<td>-9</td>
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<tr>
<td>Free Cash Flow</td>
<td>2 976</td>
<td>1</td>
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</table>

### Change vs. FY

<table>
<thead>
<tr>
<th></th>
<th>FY 2016</th>
<th>Change vs. PY</th>
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<tbody>
<tr>
<td></td>
<td>% USD</td>
<td>% cc</td>
</tr>
<tr>
<td>Net Sales</td>
<td>48 518</td>
<td>-2</td>
</tr>
<tr>
<td>Core Operating Income</td>
<td>12 987</td>
<td>-6</td>
</tr>
<tr>
<td>Operating Income</td>
<td>8 268</td>
<td>-8</td>
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<tr>
<td>Net Income</td>
<td>6 698</td>
<td>-5</td>
</tr>
<tr>
<td>Core EPS (USD)</td>
<td>4.75</td>
<td>-5</td>
</tr>
<tr>
<td>EPS (USD)</td>
<td>2.82</td>
<td>-3</td>
</tr>
<tr>
<td>Free Cash Flow</td>
<td>9 455</td>
<td>2</td>
</tr>
</tbody>
</table>

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1. An explanation of continuing operations can be found on page 41 of the Condensed Interim Financial Report. Core results, constant currencies and free cash flow are non-IFRS measures. Further details regarding non-IFRS measures can be found starting on page 50 of the Condensed Interim Financial Report.
Q4 Core margin slightly improved with Innovative Medicines offsetting Alcon

<table>
<thead>
<tr>
<th></th>
<th>Q4 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Net sales change vs. PY (in % cc)</td>
</tr>
<tr>
<td>Innovative Medicines</td>
<td>-1</td>
</tr>
<tr>
<td>Sandoz</td>
<td>3</td>
</tr>
<tr>
<td>Alcon</td>
<td>0</td>
</tr>
<tr>
<td>Q4 continuing operations</td>
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</table>
12M free cash flow was USD 9.5bn

Continuing operations free cash flow (USD bn)

| Novartis Q4 and FY 2016 Results | January 25, 2017 | Novartis Investor Presentation |

12M 2015 9.3 12M 2016 9.5

Key drivers vs. PY:
+ Working capital
+ Lower CapEx
+ OTC/JV dividend
− Lower OpInc
CapEx discipline driving improved Cash Flow

Continuing operations CapEx
(In % of sales)

Illustrative

Expected ~3-4% of sales

<table>
<thead>
<tr>
<th>Year</th>
<th>CapEx</th>
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<tbody>
<tr>
<td>2013</td>
<td>5.6%</td>
</tr>
<tr>
<td>2014</td>
<td>5.0%</td>
</tr>
<tr>
<td>2015</td>
<td>4.8%</td>
</tr>
<tr>
<td>2016</td>
<td>3.8%</td>
</tr>
<tr>
<td>2020</td>
<td></td>
</tr>
</tbody>
</table>
Novartis follows a capital allocation framework focused on shareholder value

1. Investments in organic business
2. Growing annual dividend in CHF
3. Value-creating bolt-on¹
4. Share buybacks

Create sustainable shareholder value

¹. Includes M&A and BD&L
Novartis reinvests substantially back into the business

1. Investments in organic business

Key R&D investment in the pipeline

- LEE011 (ribociclib)
- AMG 334 (erenumab)
- BAF312 (siponimod)
- RLX030 (serelaxin)
- OMB157 (ofatumumab)
- Rest of pipeline +200 projects

Key M&S investment in current growth drivers

- Entresto®
- Cosentyx®
- Revolade®
- JAKAVI®
- Alcon
- Biosimilars
- Tafinlar®
- Mekinist®
Novartis proposes the 20th consecutive dividend increase to the AGM: 2.75 CHF / share

2. Growing annual dividend

CAGR 8.9% in CHF and 11.0%² in USD

Proposed¹ dividend growth 2016 vs. 2015: 1.9% in CHF; 1.9% in USD

1. Proposal to shareholders at the 2017 Annual General Meeting, taking place on February 28, 2017
2. Converted at historic exchange rates on the dividend payment date as per Bloomberg; assumes an exchange rate of USD / CHF of 1.0001 as of January 23, 2017 for 2016
Novartis executed various value-creating bolt-on transactions to support growth

3. Value-creating bolt-on

Evaluation criteria

- Strategic priorities
- Financial discipline
- IRR and value creation

1. Subject to customary closing conditions  
2. Regulatory approval is required to exercise the option
Initiating a share buyback of up to USD 5 bn in 2017 reinforcing confidence in growth prospects

- Initiating a share buyback\(^1\) of up to USD 5 billion, reinforcing confidence in growth prospects
- Novartis aims to execute this buyback in 2017
- Novartis envisages to finance the buyback through new debt, actively using its strong balance sheet
- Attractive funding rates reflecting historically low interest rates

\(^1\) Under the existing authority of the seventh share buyback program granted by the AGM in February 2016
Expected key drivers of 2017 performance

• Pharmaceuticals growth products (including Cosentyx® and Entresto®)
• New oncology assets, Jakavi® and LEE011
• Expected biopharmaceuticals sales acceleration
• Capture NBS, NTO and GDD¹ cross divisional synergies

• Generics (mainly Glivec®)
• Launch investments
• Alcon growth plan investments

1. NBS = Novartis Business Services; NTO = Novartis Technical Operations; GDD = Global Drug Development
2017 Full Year Guidance

Barring unforeseen events (in cc)

• In 2017, we expect continued genericization of Glivec® to impact results

• **Group net sales** expected to be **broadly in line with PY**
  – IM Division broadly in line
  – Sandoz low single digit growth
  – Alcon broadly in line to low single digit growth

• **Group core operating income** expected to be **broadly in line with PY to low single digit decline**
Core OpInc trajectory expected to be stronger in H2 than H1

Key impacts in H1

**Innovative Medicines**
Full year impact of launch investments in H1 (Cosentyx® / Entresto® / potentially LEE011) with expected sales to accelerate throughout the year

Glivec® H1 2017 compares with prior year before LoE¹

**Sandoz**
Momentum from Biopharmaceuticals (including Glatopa® 40mg)

**Alcon**
Full year impact of growth plan investments

¹. Exclusivity period of the first Glivec® Gx in the US from Feb – July 2016
2017 Guidance on other financial KPIs

Barring unforeseen events (in cc)

- **Core tax**: FY core tax rate in the mid-teens consistent with prior years

- **FX impact\(^1\)**: FY: -2% in sales and -3% in core operating income
  Q1: -2% in sales and -2% in core operating income

- **Core associated companies**: Expected higher core income from Roche\(^2\) and OTC JV

- **Core Net Financial Income**: Expense of approx. USD 850m to 950m; increase mainly driven by higher interest costs associated with the share buyback

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1. Assuming mid January 2017 exchange rates prevail for the full year
2. Based on December 2016 consensus
## Agenda

1. **Group review**  
   Joseph Jimenez, Chief Executive Officer

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   Harry Kirsch, Chief Financial Officer

3. **Business updates**  
   - Paul Hudson, Pharmaceuticals  
   - Mike Ball, Alcon

4. **Development**  
   Vas Narasimhan, Global Head Drug Development & CMO

5. **Research**  
   Jay Bradner, President NIBR

6. **Closing**  
   Joseph Jimenez, Chief Executive Officer
Novartis Pharmaceuticals: Our priorities

1. Ensure Entresto® and Cosentyx® success

2. Focus on commercial execution

3. Prepare for data read-outs and new launches

4. Culture
Cosentyx® achieved blockbuster status

Quarterly sales evolution
USD m

Best-in-class¹ profile
- Strong efficacy uniquely sustained over 4 years²
- Only fully human IL17 mAb associated with high regain of response³

Strong uptake in PsA / AS
- Opportunity expected to exceed PsO
- No new competition expected near term⁴

Building long-term leadership
- Label expansion on track (nrAxSpA)

1. ‘Best-in-class’ refers to best in the IL17 class based on demonstrated long-term efficacy (4 years in PsO, 3 years in PsA, 2 years in AS), 2 year inhibition of disease progression data (PsA and AS), 95% recapture of response (PsO) and a favorable safety profile with very low injection site reactions and almost zero immunogenicity
2. The only published PhIII data of any IL17 relate to Cosentyx® (Source: Seminars in Cutaneous Medicine and Surgery (Supplement 7), Vol. 35, December 2016)
3. Based on PASI 75 (Blauvelt et al. Late Breaker Poster presentation, AAD 2016)
4. mAb entrants ony; ixekizumab expected to be approved for PsA at the end of 2017 / early 2018 and for AS in H2 2018; no other IL17 or p19 expected to be approved in PsA or AS in 2017-2019
Psoriasis: Strong uptake in major geographies; #1 in new to brand biologic prescriptions in EU¹

US: Weekly TRx comparison²

DE: Value segment share³

EU: NBRx share & rank¹

1. Patient share across naive and switch patients (UK refers to naive only) including all biologics and biosimilars (except for FR); Source: IMS (DE, FR, UK) and patient based research (SP)  
2. IMS NPA Weekly TRx across Dermatology, Rheumatology and Other specialties. Cosentyx® series 20 Feb to 18 Dec 2015; Taltz® series from 22 Apr to 30 Dec 2016  
3. Psoriasis segment value share (from May 2015 to Oct 2016). Segment defined as biologics (Cosentyx®, Enbrel®, Humira®, Stelara® and Remicade®) plus Otezla®; Source: IMS PSc DocSplit, office-based dermatologists only  
   All trademarks are the property of their respective owners.
PsA/AS: Leading position in new to brand prescriptions in less than one year

US: Share of NBRx\(^1\)

Europe: NBRx share & position

1. IMS NPA data week ending 8 Jan to 30 Dec 2016. NBRx from Rheumatology specialty and allocated for PsA and AS indications only based on anonymized patient data. Simponi\(^\text{®}\), Cimzia\(^\text{®}\) not shown. Remicade\(^\text{®}\) excluded from analysis
2. Source: IMS LRx pat.data 10/2016 - Biologics Market office based rheumatologist only ('Etanercept' comprises both Enbrel\(^\text{®}\) and Benepali\(^\text{®}\))
3. Source: MS LTD patient data 10/2016, Rolling quarter except for Cosentyx\(^\text{®}\) (its share is based on monthly data); segment defined without Infliximab

Note: All trademarks are the property of their respective owners
Significant opportunity in PsA/AS

Number of patients
US & EU5 (million)

Psoriasis

PsA and AS

Note: Area of circles represent patient numbers (Source: Decision Resources Epidemiology Database 2016 and IMS defined health 2015). Bx – biologics;

1. Number of patients refers to moderate to severe plaque psoriasis only 2. Of the total patient number of 4.2m PsA represents 76% and AS represents 26% 3. IMS PADDS Monthly, Medical Data, MAT Oct 2016 as last year of the 5-year period 2011-2016. PsO segment includes Remicade®, Humira®, Enbrel®, Stelara®, Cosentyx® and Taltz®; PsA segment includes Remicade®, Humira®, Enbrel®, Stelara® and Cosentyx®; AS segment includes Simponi®, Cimzia®, Remicade®, Humira®, Enbrel® and Cosentyx® Note: All trademarks are the property of their respective owners
Entresto® more than doubled in H2 vs. H1 2016

Net sales 2016
USD m

• US focus in 2016 has been on
  – Resourcing
  – Prior Authorizations
  – Co-pays / Access

• Access ex-US improved throughout 2016; expected to improve further in 2017
Quarter of Medicare patients now without PA

Entresto® PA criteria in US plans

<table>
<thead>
<tr>
<th></th>
<th>Mid 2016</th>
<th>End 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicare</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>No PA</td>
<td>23%</td>
<td>23%</td>
</tr>
<tr>
<td>Simple PA</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>Complex PA</td>
<td>72%</td>
<td>72%</td>
</tr>
<tr>
<td>Commercial Insurance</td>
<td>26%</td>
<td>26%</td>
</tr>
<tr>
<td>No PA</td>
<td>48%</td>
<td>48%</td>
</tr>
<tr>
<td>Simple PA</td>
<td>9%</td>
<td>9%</td>
</tr>
<tr>
<td>Complex PA</td>
<td>43%</td>
<td>43%</td>
</tr>
</tbody>
</table>

1. Prior authorizations (PA) influence the ease of access. “Simple” defined as “1 page Entresto® specific form with few check boxes based on label criteria.” “Complex” defined as “generic form (fill in info) and complex criteria.
2. Insured patients in either the Medicare or the commercial insurance segment. Both national and regional plans included in the analysis. The represented plans cover an estimated 2.2m HFrEF patients.
3. Share of patients that could have access to Entresto® under each of the three categories of PA criteria (Source: Formulary Data on file, Novartis Dec 2016)
Majority of patients incurred co-pay of < USD 10; Patient affordability is not a barrier in 2017

Entresto® formulary status in US plans

<table>
<thead>
<tr>
<th></th>
<th>Medicare</th>
<th>Commercial insurance</th>
</tr>
</thead>
<tbody>
<tr>
<td>YE 15</td>
<td>9%</td>
<td>43%</td>
</tr>
<tr>
<td>YE 16</td>
<td>88%</td>
<td>66%</td>
</tr>
</tbody>
</table>

1. Insured patients in either the Medicare or the commercial insurance segment. Both national and regional plans included in the analysis. The represented plans cover an estimated 2.2m HFrEF patients.

Incurred monthly co-pay for patients on Entresto® in Q4 2016 (USD)

<table>
<thead>
<tr>
<th></th>
<th>Medicare</th>
<th>Commercial insurance</th>
</tr>
</thead>
<tbody>
<tr>
<td>YE 15</td>
<td>15%</td>
<td>57%</td>
</tr>
<tr>
<td>YE 16</td>
<td>20%</td>
<td>58%</td>
</tr>
</tbody>
</table>

1. Share of patients that could have access to Entresto® under each of the three formulary categories (Source: Formulary Data on file, Novartis Dec 2016)

2. Monthly co-pay in each of the segments estimated based on filled prescriptions in Q4 2016
Resources now in place to support further uptake in the US

Relative field force size and coverage of HFrEF potential

Field force set to double in 2\textsuperscript{nd} expansion

- Completed 1\textsuperscript{st} expansion (Apr 2016; Cardiologists and PCPs)
- Ongoing 2\textsuperscript{nd} expansion (Sep 2016 – Feb 2017; PCPs only)
- Expansions allow increases in physician coverage and interaction frequency

---

1. HFrEF potential defined as TRx volume specific to HFrEF indication across two specialties, i.e., Cardiology and Primary Care (PCPs) (Source: IMS)
Entresto® expected to achieve worldwide sales of >USD 500m in 2017

Quarterly TRx volume (US)
(in '000)

At the end of 2016 (US):
• Growth in weekly NBRx (to >1,800) and TRx (to >10,000)
• Weekly new prescribers grew to >500

Expectation for 2017:
• TRx volume growth accelerates (US)
• Further access improvements ex-US
• Worldwide net sales >USD 500m

1. Quarterly TRx volume (Source: IMS) and management expectation
## Five strong franchises with expanding therapeutic depth

<table>
<thead>
<tr>
<th>Key assets</th>
<th>2016 net sales (USD m) and growth vs. PY (in cc)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Immunology Dermatology (I&amp;D)</strong></td>
<td><img src="image" alt="Cosentyx®" /> 1,128 (334%)</td>
</tr>
<tr>
<td><strong>Cardio-Metabolic (CM)</strong></td>
<td><img src="image" alt="Entresto®" /> 170 (n.m.)</td>
</tr>
<tr>
<td><strong>Respiratory</strong></td>
<td><img src="image" alt="Xolair" /> 835 (+15%)</td>
</tr>
<tr>
<td><strong>Ophthalmology</strong></td>
<td><img src="image" alt="Lucentis" /> 363 (+38%)</td>
</tr>
<tr>
<td><strong>Neuroscience</strong></td>
<td><img src="image" alt="Gilenya®" /> 1,835 (-8%)</td>
</tr>
<tr>
<td><strong>Internal assets and opportunities</strong></td>
<td><img src="image" alt="Cosentyx®" /> (NrAxSpA) 1,128 (334%)</td>
</tr>
<tr>
<td><img src="image" alt="LJN452" /></td>
<td><img src="image" alt="QAW039" /> 835 (+15%)</td>
</tr>
<tr>
<td><img src="image" alt="VAY736" /></td>
<td><img src="image" alt="QMF149" /> 363 (+38%)</td>
</tr>
<tr>
<td><img src="image" alt="CJM112" /></td>
<td><img src="image" alt="ACZ885" /> 1,835 (-8%)</td>
</tr>
<tr>
<td><img src="image" alt="RLX030 Entresto®" /></td>
<td><img src="image" alt="LIK066" /> 3,109 (+14%)</td>
</tr>
<tr>
<td><img src="image" alt="pEF, post-acute MI" /></td>
<td><img src="image" alt="QVM149" /></td>
</tr>
<tr>
<td><img src="image" alt="ACZ885" /></td>
<td><img src="image" alt="QVM149" /></td>
</tr>
<tr>
<td><img src="image" alt="Entresto®" /></td>
<td><img src="image" alt="QVM149" /></td>
</tr>
<tr>
<td><img src="image" alt="RLX030 Entresto®" /></td>
<td><img src="image" alt="QVM149" /></td>
</tr>
<tr>
<td><img src="image" alt="Ziarco" /></td>
<td><img src="image" alt="QVM149" /></td>
</tr>
<tr>
<td><strong>Recent deals</strong></td>
<td><strong>Examples incl. both BD&amp;L and M&amp;A</strong></td>
</tr>
<tr>
<td>Ziarco (Atopic Dermatitis)</td>
<td><img src="image" alt="Utibron® Breezhaler®" /></td>
</tr>
<tr>
<td>Conatus (NASH)</td>
<td><img src="image" alt="Encore Vision, Inc – Presbyopia" /></td>
</tr>
<tr>
<td>IONIS / AKCEA</td>
<td><img src="image" alt="Lubris" /> (dry eye)</td>
</tr>
<tr>
<td><img src="image" alt="IONIS" /> (AKCEA-APO(a)-LRx and AKCEA-APOCIII-LRx)</td>
<td><img src="image" alt="AMG 334" /> (migraine)</td>
</tr>
<tr>
<td><img src="image" alt="IONIS" /></td>
<td><img src="image" alt="OMB157" /> (RMS)</td>
</tr>
<tr>
<td><img src="image" alt="AKCEA-APO(a)-LRx" /></td>
<td><img src="image" alt="EMA401" /> (Pain)</td>
</tr>
</tbody>
</table>

1. Option to in-license subject to customary closing conditions and regulatory approval
## Agenda

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Group review</td>
<td>Joseph Jimenez, Chief Executive Officer</td>
</tr>
<tr>
<td>2. Financial review</td>
<td>Harry Kirsch, Chief Financial Officer</td>
</tr>
<tr>
<td><strong>3. Business updates</strong></td>
<td>Paul Hudson, Pharmaceuticals</td>
</tr>
<tr>
<td>4. Development</td>
<td>Vas Narasimhan, Global Head Drug Development &amp; CMO</td>
</tr>
<tr>
<td>5. Research</td>
<td>Jay Bradner, President NIBR</td>
</tr>
<tr>
<td>6. Closing</td>
<td>Joseph Jimenez, Chief Executive Officer</td>
</tr>
</tbody>
</table>
## Alcon: 2016 expectations vs. what happened

<table>
<thead>
<tr>
<th></th>
<th>2016 expectations</th>
<th>What happened (FY2016)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Vision Care</strong></td>
<td>Modest growth</td>
<td>Growth of +2%, improving Vision Care results to flat (vs. -2% in 2015)</td>
</tr>
<tr>
<td><strong>Contact lenses</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Surgical</strong></td>
<td>Growth throughout 2016</td>
<td>Growth of +4%, driven by a strong installed equipment base</td>
</tr>
<tr>
<td><strong>Consumables</strong></td>
<td>Growth in H2</td>
<td>Competitive pressures globally</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Supply issues through Q3 impacted customer service, but now improved</td>
</tr>
<tr>
<td><strong>IOLs</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Others</strong></td>
<td>Flat</td>
<td>Capital equipment purchases lower in the market</td>
</tr>
</tbody>
</table>
Alcon: Contact lenses growing following DTC investment

- Consumer market with 4 competitors and 3-4% growth per annum
- 1-2 ppt\(^2\) share increase in European markets with DTC\(^3\) investment
- New launches: Dailies Total1 Multifocal\(^{®}\) and AirOptix Plus HydraGlyde\(^{®}\)

**Alcon Global Contact Lenses Sales Growth**

<table>
<thead>
<tr>
<th>Quarter</th>
<th>3Q15</th>
<th>4Q15</th>
<th>1Q16</th>
<th>2Q16</th>
<th>3Q16</th>
<th>4Q16</th>
</tr>
</thead>
<tbody>
<tr>
<td>% vs. PY</td>
<td>-7%</td>
<td>0%</td>
<td>-4%</td>
<td>2%</td>
<td>1%</td>
<td>7%(^1)</td>
</tr>
</tbody>
</table>

1. Favorably impacted by PY destocking
2. ppt: percentage point
3. DTC: direct-to-consumer advertising

Source: Contact Lens Institute/Euromcontact Factory Sales Sharing Program/GfK
# Alcon: Fixing the foundation to drive customer satisfaction

<table>
<thead>
<tr>
<th>Service levels at 2-year high</th>
<th>Custom pak disassociation(^1) rate declined ~80%</th>
<th>Increased customer training and field service personnel by ~10%</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Systems improvements: SAP deployments now span 50% of Alcon revenue</th>
<th>Equipment quote turnaround improved by 60%</th>
<th>Customer ordering made easy: e-commerce platform launched in US</th>
</tr>
</thead>
</table>

**Establishing a nimble, customer-centric device culture**

---

1. Disassociations refer to instances when individual items within a custom pak arrive at the customer separately from the remainder of the custom pak
Alcon: IOLs declined in 2016; incremental innovation to counter competitive intrusion; new IOL platforms in pipeline

- UltraSert™ launched in all major markets by H2 2016
- Toric IOLs: US cataract patient education initiative
- PanOptix®: Solid uptake in EU; launching Toric version in Jan.
- Q4 2016 US FDA approval: ReSTOR® +3.0D Toric; +2.5D submitted
- EU submission imminent: Clareon™ (new material IOL platform)
- Developing accommodating IOL (e.g. PowerVision)
Alcon: conditions to return business to long-term sustainable growth are trending favorably

Flat to positive FY growth expected in 2017¹

1. Returning to best-in-class customer experience (customer service, partnering, and education)
2. Stabilized organization and re-focusing sales force to enhance sales and service execution
3. Adding and re-directing resources and investment to front-line promotion
4. Extending Alcon’s industry-leading portfolio through internal and external innovation

1. Barring unforeseen events

Innovating and executing to drive long-term, sustainable growth
Alcon: a leader in growing eye care market, which offers attractive returns

**Favorable megatrends**
- Patient desire for spectacle independence
- Aging population with high unmet need
- Emerging market opportunities

**Large, profitable, growing market**
- USD 20 bn market projected to grow ~3-4% per annum\(^1\)
- Medical device industry mean ROS\(^2\) of low-mid 20%
- Significant untapped market potential

USD ~20bn

- Short term: Complete the turnaround to growth
- Long term: Drive Alcon to sustainable growth, in line with industry ROS\(^2\)

---

1. Includes Surgical and Vision Care ophthalmology/optometry products  
2. ROS: return on sales  
Source: Market Scope, LLC forecast, Alcon and competitors financial results, Contact Lens Institute/Euromcontact Factory Sales Sharing Program / GfK, Alcon internal estimate, Company filings
1. Group review  
   Joseph Jimenez, Chief Executive Officer

2. Financial review  
   Harry Kirsch, Chief Financial Officer

3. Business updates  
   Paul Hudson, Pharmaceuticals  |  Mike Ball, Alcon

4. Development  
   Vas Narasimhan, Global Head Drug Development & CMO

5. Research  
   Jay Bradner, President NIBR

6. Closing  
   Joseph Jimenez, Chief Executive Officer
In summary: Positioning the company for success

- Company positioned for next phase of growth
- Pipeline strong and broad
- Integrating and Focusing Further
- Lower risk profile (exposure to US pricing, Biosimilars, binary events)
**FY Core margin declined due to Glivec® US LoE and Growth Investment**

<table>
<thead>
<tr>
<th></th>
<th>Net sales change vs. PY (in % cc)</th>
<th>Core operating income change vs. PY (in % cc)</th>
<th>Core ROS (%)</th>
<th>Core margin change vs. PY (% pts cc)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Innovative Medicines</td>
<td>0</td>
<td>-1</td>
<td>31.8</td>
<td>-0.2</td>
</tr>
<tr>
<td>Sandoz</td>
<td>2</td>
<td>4</td>
<td>20.4</td>
<td>0.2</td>
</tr>
<tr>
<td>Alcon</td>
<td>-2</td>
<td>-27</td>
<td>14.6</td>
<td>-5.3</td>
</tr>
<tr>
<td>Continuing operations</td>
<td>0</td>
<td>-2</td>
<td>26.8</td>
<td>-0.7</td>
</tr>
</tbody>
</table>
Sales volume mostly offset by Gx Impact

Continuing operations FY 2016
(growth vs. PY in %)

Net sales

Volume before Gx 6
Generics impact -4
Price\(^1\) -2
CC growth 0
Currency -2
USD growth -2

Core operating income

USD growth -6
Currency -4
Generics impact -12

1. Includes the price impact of Generic entries
Expected currency impact for FY 2017

Assuming mid-Jan exchange rates prevail
Currency impact vs. PY (in % pts)

<table>
<thead>
<tr>
<th></th>
<th>FX impact on Net sales</th>
<th>FX impact on Core operating income</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Q4 FY Q1 FY</td>
<td>Q4 FY Q1 FY</td>
</tr>
<tr>
<td>2016 Actual</td>
<td>-2 -2 -2 -2</td>
<td>-2 -4 -2 -3</td>
</tr>
<tr>
<td>2017 Simulation</td>
<td>-2 -2 -2</td>
<td>-2 -2 -2 -2</td>
</tr>
</tbody>
</table>

Actual  Simulation
Net debt amounted to USD 16.0 bn at the end of 2016

Continuing operations FY 2016
(in USD bn)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-16.5</td>
<td>9.5</td>
<td>-16.0</td>
</tr>
<tr>
<td>Free Cash Flow</td>
<td>9.5</td>
<td>Dividends</td>
<td>-0.8</td>
</tr>
<tr>
<td>M&amp;A related payments</td>
<td>-6.5</td>
<td>Portfolio transformation transactions costs</td>
<td>-0.7</td>
</tr>
<tr>
<td>Others</td>
<td>-0.1</td>
<td>Treasury share transactions, net²</td>
<td>-0.9</td>
</tr>
</tbody>
</table>

1. Includes capital gains tax payments
2. Includes proceeds from options exercised
Appendix
Business Update - Pharmaceuticals
IL-17A is a key inflammatory cytokine with a central role in psoriasis and enthesitis in SpA

Source: Lynde et al. at JAAD 2014
Over 4 years, Cosentyx® sets new standard in long-lasting skin clearance

PASI responder rates

4-year data from SCULPTURE Phase III trial

- Cosentyx® sustains efficacy over 4 years in psoriasis
  - ~ 4 in 5 patients completed 4 years of treatment
  - Almost 100% of PASI 90 & 100 response rates maintained from year 1 to year 4
  - Average PASI improvement >90% out to year 4
  - High and sustained relief from patient burden of psoriasis
- Cosentyx® has a high recapture of response (95%) following retreatment after withdrawal at week 52

2. Bisonette et al. Late Breaker Poster presentation, EADV 2016
3. As observed analysis; PASI: Psoriasis Area and Severity Index score
4. As observed analysis; DLQI 0/1: Dermatology Life Quality Index score of 0 or 1
5. Based on PASI 75 (Blauvelt et al. Late Breaker Poster presentation, AAD 2016)
Cosentyx® provides sustained response in the joints and skin in PsA

ACR20/50/70 responder rates
3-year data from FUTURE 1 Phase III trial in anti–TNF-naive patients

- Cosentyx® sustained 3 year efficacy in signs and symptoms of PsA
- Approximately 7 in 10 patients completed 3 years of treatment
- Benefits seen in TNF-naive and TNF-failure patients
- EXCEED1 superiority head-to-head trial vs. adalimumab planned start date H1 2017

Cosentyx® demonstrated enduring improvements in the signs and symptoms of AS

ASAS 20/40 responder rates
2-year data from MEASURE 1 Phase III trial in anti-TNF-naive population

- Cosentyx® sustained improvements in signs and symptoms of AS through 2 years
- Benefits seen in TNF-naive and anti-TNF therapy failures
- Head-to-head trial in AS vs. adalimumab in preparation

1. ASAS responses as observed; N = number of patients randomized: n = 77 patients in secukinumab 150 mg group at Week 104
3. Novartis Data on File 2015. Week 104 Data Tables
4. In physical function, quality of life, and inflammation
Continued TRx growth for Cosentyx®; A leader in the non-TNF segment

IMS Weekly TRx
(across indications)¹

Symphony Weekly TRx
(across indications)²

¹ Weekly TRx across specialties, incl. Dermatology, Rheumatology and Other. (Source: IMS NPA week ending 30 Dec)
² Weekly TRx across specialties, incl. Dermatology, Rheumatology and Other. Cosentyx® series since Feb 2015; Taltz® series since April 2016 (Source: Symphony PHAST week ending 30 Dec) Note: IMS NPA data excludes Cosentyx® free bridge program, but includes bridge programs of Taltz® and Stelara®. Symphony PHAST data includes bridge programs for Cosentyx®, Taltz® and Stelara® Note: All trademarks are the property of their respective owners
Number of Cosentyx® prescribers continues to grow steadily

US: Prescribers (per quarter)¹

Dermatology
- US: ~65% of dermatologists prescribe biologics; of which ~40% prescribe Cosentyx®
- US: Number of Cosentyx® prescribers exceeded Taltz® at similar time points post launch²
- EU: ~30% of dermatologists prescribe biologics; of which ~55% prescribe Cosentyx®

Rheumatology
- Majority of rheumatologists prescribe biologics (EU & US)
- Of these, ~20% (US) and ~40% (EU) prescribe Cosentyx®

¹ Number of prescribers across Dermatology and Rheumatology specialties (Source: Symphony sub-national data); Q4’16 corresponds to data of 3 month ending Nov’16
² Symphony Prescriber, sub-national data at 7 months post launch  Note: Taltz® is a registered trademark of Eli Lilly and Company
### Sizeable population suffers from HFrEF

#### Potentially eligible HFrEF population (NYHA II-IV)

<table>
<thead>
<tr>
<th>CHF patients diagnosed(^1)</th>
<th>HFrEF patients(^2)</th>
<th>Rx treated(^1)</th>
<th>Patients potentially eligible (NYHA II-IV)(^2,3)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3.2m</td>
<td>2.7m</td>
<td>2.2m</td>
</tr>
</tbody>
</table>

1. Decision Resources Patient Base 2012  
2. LEK research and Novartis internal data  
3. US label & patient inclusion criteria of PARADIGM study included NYHA II-IV whereas US guidelines (ACC/AHA) include only NYHA II-III (May 2016)
Majority of patients have <USD 10 co-pay

**Medicare**

### Patient Fill Rates\(^1\)
- Reversed: 7%
- Rejected: 9%
- Filled: 84%

### Distribution of incurred co-pays\(^2\)

<table>
<thead>
<tr>
<th>Co-pay Range</th>
<th>Q3 2016</th>
<th>Q4 2016 estimated</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0 - $10</td>
<td>55%</td>
<td>57%</td>
</tr>
<tr>
<td>$11 - $40</td>
<td>15%</td>
<td>13%</td>
</tr>
<tr>
<td>$41 - $50</td>
<td>10%</td>
<td>15%</td>
</tr>
<tr>
<td>$51 - $100</td>
<td>7%</td>
<td>4%</td>
</tr>
<tr>
<td>$100+</td>
<td>11%</td>
<td>8%</td>
</tr>
</tbody>
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**Commercial insurance**

### Patient Fill Rates\(^1\)
- Reversed: 11%
- Rejected: 9%
- Filled: 84%

### Distribution of incurred co-pays\(^2\)

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<tr>
<td>$41 - $50</td>
<td>10%</td>
<td>8%</td>
</tr>
<tr>
<td>$51 - $100</td>
<td>6%</td>
<td>7%</td>
</tr>
<tr>
<td>$100+</td>
<td>11%</td>
<td>9%</td>
</tr>
</tbody>
</table>

---

1. September 2016 claims (FTD) data  
2. Analysis based on filled and non-rejected claims
Investments in place to support further uptake among both cardiologists and PCPs

Share of HFrEF potential addressed\(^1\)

Weekly new prescribers\(^2\)

<table>
<thead>
<tr>
<th>1st wave</th>
<th>2nd wave</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apr 2016</td>
<td>Sep 2016 – Feb 2017</td>
</tr>
<tr>
<td>50%</td>
<td>70%</td>
</tr>
</tbody>
</table>

35%
Launch
Jul 2015

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1. HFrEF potential defined as TRx volume specific to HFrEF indication across a predefined group of physicians across both cardiology and PCPs (Source: IMS)
2. Weekly new prescribers across both cardiology and PCPs (Source: IMS); data from week ending Jul 10, 2015 to week ending Dec 23, 2016
More patients starting on Entresto® every week

Weekly NBRx\(^1\)

Weekly TRx\(^2\)

1. NBRx across specialties from week ending Jul 10, 2015 to Dec 23, 2016 (Source: IMS)  
2. TRx across specialties from week ending Jul 10, 2015 to Jan 13, 2017 (Source: IMS)
Volume growth throughout 2016; Reimbursement improves over time (Europe)

Relative uptake across countries

- 17 countries achieved reimbursement (>70% of eligible patients; 80% expected by end of 2017)²;
- Top-5: 1st reimbursement and current status
  - DE: Q1 2016 (price negotiations ongoing)³
  - FR: Q1 2016 (reimbursed under Art. 48 since Q1 2016; general reimbursement pending)⁴
  - UK: Q2 2016 with NICE positive recommendation⁵
  - SP: Q4 2016
  - IT: Reimbursed launch expected in Q1 2017⁶
- In addition, further improvements expected over time in CEE⁷

1. Selected countries in Europe (Source: Novartis analysis based on relative volume per capita)
2. 33 countries considered in the European region. Russia not included. First achievement of reimbursement; not necessarily reimbursement for all patients in all situations (Source: Novartis data on file)
3. Arbitration board expected in late Q1 2017
4. Reimbursement under Article 48, ie restricted to hospital dispensing and NYHA II with >1 hospitalization in past 12 months at max. doses of ACEi/ARBs OR NYHA III-IV at >50% of max. ACEi/ARBs
5. NICE positive recommendation for NYHA II-IV, LVEF < 35%, on a stable dose of ACEi/ARBs
6. Restriction under a therapeutic plan for specialist initiation only
7. Central Eastern European countries, incl. Poland and Hungary account for the majority of the 16 remaining countries to achieve reimbursement
Strong base for volume growth in 2017

2016

Access

✓ US: Substantial improvements in access throughout the year; PA impact diminishing, majority of patients incur co-pay <USD 10
✓ Ex-US: Reimbursement achieved in key markets

Treatment paradigm

✓ Class I inclusion in ACC/AHA/ESC Heart Failure Guidelines
✓ Key trials addressing in-hospital initiation (PIONEER & TRANSITION) ongoing
✓ Leading Heart Failure RWE generation (REPORT, CHAMP and GTW)

Investment expansion

✓ US: completed 1st and ongoing 2nd wave of FF expansions - increased interaction frequency (Cardiologists) and broader coverage (PCPs)
✓ US: DTC campaign
✓ Expansion of medical education

2017

Increasing volume across geographies
Outlook: Building an industry-leading Cardio-metabolic business franchise

- Entresto® launch in HFrEF, laying foundation for CM infrastructure
- Attractive pipeline based on differentiated biology addressing new pathways
- Driving growth in US, full geographic ownership of all pipeline assets

Early pipeline incl.
- LIK066 (weight loss), MAA868 (stroke prevention), LHW090 (resistant hypertension)

>2024
Leveraging neprilysin inhibition
Chronic Kidney Disease

2020-2021
Leveraging neprilysin inhibition in HF
(PARAGON and PARADISE)

2018-2019
Late stage pipeline
(RLX030 in AHF, ACZ885 in CVRR)

Now
Entresto HFrEF