Turning science into patient benefits

Severin Schwan, CEO Roche Group

New York, June 2017
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Performance update

Strategy, pricing and innovation

Portfolio rejuvenation

Outlook
Q1 2017: Sales growth for the sixth consecutive year

All growth rates at Constant Exchange Rates (CER)
2016: Strong Core operating profit & stable margin

CHFbn

- 2012: 17.2
- 2013: 17.9
- 2014: 17.6
- 2015: 17.5
- 2016: 18.4

% of sales

- 2012: 37.7%
- 2013: 38.3%
- 2014: 37.2%
- 2015: 36.4%
- 2016: 36.4%

+CER=Constant Exchange Rates

+CER+4% at CER

CER=Constant Exchange Rates
Breakthrough designation impacting cycle times

15 Breakthrough Therapy Designations

<table>
<thead>
<tr>
<th>Rank</th>
<th>Company</th>
<th>#</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Roche</td>
<td>15</td>
</tr>
<tr>
<td>2</td>
<td>Novartis</td>
<td>11</td>
</tr>
<tr>
<td>3</td>
<td>BMS</td>
<td>10</td>
</tr>
<tr>
<td>3</td>
<td>Merck</td>
<td>9</td>
</tr>
<tr>
<td>4</td>
<td>AbbVie</td>
<td>7</td>
</tr>
<tr>
<td>4</td>
<td>Pfizer</td>
<td>7</td>
</tr>
</tbody>
</table>

Phase duration (years)

- No = 7.5
- Fast track = 5.8
- Accelerated review = 3.8
- Breakthrough therapy = 3.6

Source: [http://www.focr.org/breakthrough-therapies](http://www.focr.org/breakthrough-therapies) as of March 2017;
Launch of new medicines at a record high

- **2011**: Zelboraf (vemurafenib)
- **2012**: Erivedge (bertilumab)
- **2013**: Kadryla (trastuzumab emtansine)
- **2014**: Gaazyva (obinutuzumab)
- **2015**: Esbriet (pirfendone)
- **2016**: Alecensa (alectinib)
- **2017**: Tecentriq (atezolizumab)

*(Emicizumab also mentioned as an example)*
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Outlook
Roche strategy: Focused on medically differentiated therapies

- **Regulators:** Optimised benefit / risk ratio
- **Payors:** Optimised benefit / cost ratio
Roche’s evolving PHC Strategy

**Patient Scope**

- **Individuals**
- **Specific groups**
- **Broad segments**

**PHC 2.0**

- Individualised Treatments
- Molecular information
- Digitisation of healthcare data

**PHC**

- Targeted Medicines
- Better understanding of disease heterogeneity

**Blockbuster Drugs**

- until 1990s
- 2000/2010s
- 2020+

PHC: Personalised Healthcare
Oncology spending not reflected in disease burden

Source: WHO for "DALYs 2004 and 2015"; IMS MIDAS for "Pharma spending" and "Oncology spending"
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Outlook
Broad activities ongoing/accomplished to stabilise and grow the ‘big three’

<table>
<thead>
<tr>
<th>CD20</th>
<th>Her2+</th>
<th>Avastin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gazyva in iNHL, R/R iNHL, CLL</td>
<td>Kadcyla, Perjeta in metastatic setting</td>
<td>No direct successor</td>
</tr>
<tr>
<td>Venclexta, ADCs, T-cell bispecific, Tecentriq</td>
<td>Perjeta in eBC (APHINITY)</td>
<td>Strategy: Combinations with Tecentriq, MEKi etc.</td>
</tr>
<tr>
<td>Sub-cut</td>
<td>Sub-cut</td>
<td></td>
</tr>
</tbody>
</table>

1 Herceptin only
Ocrevus approved in the US
First treatment for both RMS and PPMS

• Broad label includes RMS (RRMS, relapsing SPMS) and PPMS without any limitations
• No black box warning, no additional screening or monitoring

RMS=relapsing forms of multiple sclerosis (MS) including patients with RRMS and SPMS with superimposed relapses; RRMS=relapsing-remitting MS; SPMS=secondary progressive MS; PPMS=primary progressive MS; Adapted from Lublin 1996, Arnold 2004; *=relapsing SPMS included in the label
Emicizumab: Positive results in adult & pediatric inhibitor patients

- Positive phase III results in inhibitor patients ≥12 years (HAVEN 1) to be presented at ISTH
- Positive phase III interim results in inhibitor pediatrics (HAVEN 2) to be presented at ISTH
- Global filing based on HAVEN1 and HAVEN2 interim results and launch preparations on track

Emicizumab (ACE910) in collaboration with Chugai; QW=weekly dosing; Q2W=dosing every 2 weeks; Q4W=dosing every 4 weeks; OLE=open label extension; BTD=breakthrough therapy designation
A rich pipeline: We are investigating into multifold approaches across tumour phenotypes

Cancer Immunotherapy (CIT) medicines

Targeted medicine

CIT=cancer immunotherapy; 1) Dual roles in T eff activation and T reg inhibition suggest aOX40 activity in both desert and inflamed phenotypes; IND=new investigational drug application; *PCV=personalised cancer vaccine in collaboration with BioNTech; tba=to be announced
Lampalizumab in geographic atrophy (GA)
High unmet medical need

GA causes irreversible retinal cell death
Today, over 5 million people suffer from GA worldwide
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Outlook
2017: Another important year for our pipeline

Key read-outs

Outcome studies are event-driven: timelines may change
## ASCO 2017: Major oral presentations

<table>
<thead>
<tr>
<th>Tumor type</th>
<th>Trials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breast</td>
<td>• Herceptin + Perjeta: Ph III (APHINITY) in adjuvant HER2+ BC</td>
</tr>
<tr>
<td>Lung</td>
<td>• Alecensa: Ph III (ALEX) in 1L ALK+ NSCLC</td>
</tr>
<tr>
<td></td>
<td>• Tecentriq: Ph III (OAK) in 2L NSCLC</td>
</tr>
<tr>
<td>Colorectal</td>
<td>• aCEA/CD3 TCB +/- Tecentriq: Ph I in 3L CRC</td>
</tr>
<tr>
<td>Solid tumors</td>
<td>• Tecentriq + IDOi: Ph I</td>
</tr>
<tr>
<td>Renal</td>
<td>• Tecentriq + Avastin: Update Ph II (IMmotion150) in 1L RCC</td>
</tr>
</tbody>
</table>

IDOi in collaboration with NewLink Genetics; Alecensa in collaboration with Chugai
## 2017 outlook

<table>
<thead>
<tr>
<th>Feature</th>
<th>Outlook</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group sales growth(^1)</td>
<td>Low to mid-single digit</td>
</tr>
<tr>
<td>Core EPS growth(^1)</td>
<td>Broadly in line with sales growth</td>
</tr>
<tr>
<td>Dividend outlook</td>
<td>Further increase dividend in Swiss francs</td>
</tr>
</tbody>
</table>

\(^1\) At Constant Exchange Rates (CER)
Doing now what patients need next
CEA is expressed across a wide range of tumors

<table>
<thead>
<tr>
<th>Tumor Type</th>
<th>Proportion of Patients CEA High</th>
</tr>
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<tbody>
<tr>
<td>CRC</td>
<td>91%</td>
</tr>
<tr>
<td>PANC</td>
<td>74%</td>
</tr>
<tr>
<td>Gastric</td>
<td>64%</td>
</tr>
<tr>
<td>NSCL (adenocarcinoma)</td>
<td>65%</td>
</tr>
<tr>
<td>NSCL (adenosquamous)</td>
<td>30%</td>
</tr>
<tr>
<td>Breast</td>
<td>30%</td>
</tr>
</tbody>
</table>

Additional CEA expressing tumors
CEA- CD3 T-cell bispecific antibody

A new mode of action

Mode of action:
Binds T-cells and tumor cells simultaneously, leading to T-cell activation/proliferation and killing of tumor cells

Status
- Phase I study, FPI 4Q 2014
- Phase Ib combo with Tecentriq in multiple CEA-expressing tumors ongoing
- Data at ASCO 2017
Positive outlook

**Strong pipeline mitigates biosimilar impact**

**NME launches**
Venetoclax, Alectinib, Cotellic, Ocrelizumab, Atezolizumab, Lebrikizumab, ACE910, Lampalizumab

**Biosimilars**
MabThera, Herceptin, Avastin

Sales

Conceptual

Pipeline

Marketed products