Committed to innovation and growth

Roland Diggelmann, CEO Roche Diagnostics

Paris, November 30, 2016
Q3 2016 Group results

Diagnostics

Business model & strategy
Q3 2016 overview
Investing in innovation
Outlook
YTD Sept 2016: Highlights

**Growth**

**Sales**
- Group sales +4%\(^1\) driven by HER2 (+9%), CD20 (+4%), and Immunology franchises (+12%), new launches, and Professional Diagnostics (+9%)
- Good growth\(^1\) in all regions

**Portfolio progress Q3**

**Oncology**
- Cancer immunotherapy: Tecentriq launched in bladder cancer (US), sales off to a good start, approved in lung cancer (US) with broad label
- Tecentriq in 2/3L NSCLC: OAK data with survival benefit (ESMO)
- Alecensa: 1\(^{st}\) line ALK - BTD granted (US)
- Perjeta: APHINITY read out expected in Q1 2017

**Hematology**
- Emicizumab (ACE 910): Ph III in patients without FVIII inhibitors trial started

**Neuroscience**
- OCREVUS: Filings accepted in EU and US; PDUFA date Dec 28, 2016

**Immunology**
- Actemra: Ph III in giant cell arteritis met primary end point - BTD granted
- Lucentis: Priority Review for myopic choroidal neovascularization granted (US)

**Diagnostics**
- Successful launch of cobas e 801, high throughput immunodiagnostics analyser

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\(^1\) All growth rates at constant exchange rates (CER)
YTD Sept 2016: Good sales growth in both divisions

<table>
<thead>
<tr>
<th></th>
<th>2016 CHFbn</th>
<th>2015 CHFbn</th>
<th>Change in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pharmaceuticals Division</td>
<td>29.1</td>
<td>27.7</td>
<td>5</td>
</tr>
<tr>
<td>Diagnostics Division</td>
<td>8.4</td>
<td>7.8</td>
<td>7</td>
</tr>
<tr>
<td>Roche Group</td>
<td>37.5</td>
<td>35.5</td>
<td>6</td>
</tr>
</tbody>
</table>

CER=Constant Exchange Rates
Q3 2016: Sales growth for fifth consecutive year

All growth rates at Constant Exchange Rates (CER)
YTD Sept 2016: Good sales growth in International, US and Europe

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

% of sales

CHFbn

HY 2012: 8.6
HY 2013: 9.5
HY 2014: 9.4
HY 2015: 9.2
HY 2016: 9.9

+5% at CER

CER=Constant Exchange Rates
Continued leadership in innovation
Launches at historical high

5 NME launches in a year

Roche significantly advancing patient care
Recognition for innovation 2013-present

14 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>14</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>4</td>
<td>Merck</td>
<td>9</td>
</tr>
<tr>
<td>5</td>
<td>AbbVie</td>
<td>7</td>
</tr>
<tr>
<td>6</td>
<td>Pfizer</td>
<td>7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>Molecule</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td><strong>Actemra</strong> (Giant cell arteritis)</td>
</tr>
<tr>
<td></td>
<td><strong>Alecensa</strong> (1L ALK+ NSCLC)</td>
</tr>
<tr>
<td></td>
<td><strong>Ocrevus</strong> (PPMS)</td>
</tr>
<tr>
<td></td>
<td><strong>Venclexta</strong> (AML)</td>
</tr>
<tr>
<td></td>
<td><strong>Venclexta + Rituxan</strong> (R/R CLL)</td>
</tr>
<tr>
<td>2015</td>
<td><strong>Actemra</strong> (Systemic sclerosis)</td>
</tr>
<tr>
<td></td>
<td><strong>Tecentriq</strong> (NSCLC)</td>
</tr>
<tr>
<td></td>
<td><strong>Venclexta</strong> (R/R CLL 17p del)</td>
</tr>
<tr>
<td></td>
<td><strong>Emicizumab/ACE 910</strong> (Hemophilia A)</td>
</tr>
<tr>
<td>2014</td>
<td><strong>Esbriet</strong> (IPF)</td>
</tr>
<tr>
<td></td>
<td><strong>Lucentis</strong> (Diabetic retinopathy)</td>
</tr>
<tr>
<td></td>
<td><strong>Tecentriq</strong> (Bladder)</td>
</tr>
<tr>
<td>2013</td>
<td><strong>Alecensa</strong> (2L ALK+ NSCLC)</td>
</tr>
<tr>
<td></td>
<td><strong>Gazyva</strong> (1L CLL)</td>
</tr>
</tbody>
</table>

Source: [http://www.focr.org/breakthrough-therapies](http://www.focr.org/breakthrough-therapies) as at Oct 2016; PPMS=Primary Progressive Multiple Sclerosis; CLL=Chronic Lymphocytic Leukemia; NSCLC=Non-Small Cell Lung Cancer; IPF=Idiopathic Pulmonary Fibrosis
### Q3 2016: Pipeline / launch activities on track

<table>
<thead>
<tr>
<th>Pharma</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Venclexta</td>
<td>OCREVUS</td>
<td>Lampalizumab</td>
</tr>
<tr>
<td></td>
<td>R/R CLL with 17p del</td>
<td>RMS / PPMS</td>
<td>Geographic atrophy</td>
</tr>
<tr>
<td></td>
<td>Cotell + Zelboraf</td>
<td>Emicizumab (ACE910)</td>
<td>Tecentriq + Avastin+chemo</td>
</tr>
<tr>
<td></td>
<td>BRAFmut melanoma</td>
<td>Hemophilia A</td>
<td>1L NSCLC</td>
</tr>
<tr>
<td></td>
<td>Alecensa</td>
<td>Perjeta + Herceptin</td>
<td>Tecentriq + Avastin</td>
</tr>
<tr>
<td></td>
<td>2L ALK+ NSCLC</td>
<td>eBC HER2+ (APHINITY)</td>
<td>Alecensa</td>
</tr>
<tr>
<td></td>
<td>Tecentriq</td>
<td>Gazyva</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2L+ bladder cancer</td>
<td>1L iNHL (GALLIUM)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tecentriq</td>
<td>Actemra</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2L+ lung cancer</td>
<td>Giant cell arteritis</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gazyva</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Refractory iNHL (GADOLIN)</td>
<td></td>
<td></td>
</tr>
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</table>

#### Diagnostics

- cobas e 801 launch in immunodiagnostics
- cobas t 511
cobas t 711
- cobas 6000 (new)

**Legend:**
- **Oncology/hematology**
- **Neuroscience**
- **Ophthalmology**
- **Immunology**
- **FDA Breakthrough Therapy Designation**

Outcome studies are event-driven: timelines may change. Standard approval timelines of 1 year assumed.
## 2016 outlook

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td><strong>Group sales growth(^1)</strong></td>
<td>Low to mid-single digit</td>
</tr>
<tr>
<td><strong>Core EPS growth(^1)</strong></td>
<td>Ahead of sales growth</td>
</tr>
<tr>
<td><strong>Dividend outlook</strong></td>
<td>Further increase dividend in Swiss francs</td>
</tr>
</tbody>
</table>

\(^1\) At Constant Exchange Rates (CER)
Q3 2016 Group results

Diagnostics

Business model & strategy
Q3 2016 overview
Investing in innovation
Outlook
In-Vitro Diagnostics market overview
Large and growing market; Roche market leader

Market size

USD 52 bn

- Professional Diagnostics
- Molecular Diagnostics
- Tissue Diagnostics
- Diabetes Monitoring

Market share

Roche 20%
Abbott 11%
Siemens 9%
Biomerieux 8%
J&J 4%
Danaher 3%
Others 45%

Source: Roche Analysis, Company reports for 2015 validated by an independent IVD consultancy
Our business model

*Customer focus and place instruments to generate recurring revenues through reagent usage*

Roche Diagnostics Customers

- **Central lab**
- **Molecular Lab**
- **Pathology**
- **Point of Care**
- **Patients (Self Testing)**

Roche Diagnostics Business Model

- **Closed Systems**
Roche Diagnostics
Our competitive advantage

**Total solution offering**

- **Breadth of technologies**
- **Comprehensive menu**
- **IT and workflow connectivity**

**Strong commercial presence**

- **Active in all diagnostics segments**
- **Large installed base worldwide**
- **Millions of patients each day**

*1,383,000,000* total Elecsys tests p.a.

* = *3,789,041* tests per day

* = *42* tests per second
Q3 2016 Group results

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Q3 2016 overview
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Outlook
YTD Sept 2016: Diagnostics Division sales

Strong growth driven by clinical diagnostics

<table>
<thead>
<tr>
<th></th>
<th>2016 CHFm</th>
<th>2015 CHFm</th>
<th>Change in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diagnostics Division</td>
<td>8,365</td>
<td>7,835</td>
<td>7</td>
</tr>
<tr>
<td>Professional Diagnostics</td>
<td>4,884</td>
<td>4,487</td>
<td>9</td>
</tr>
<tr>
<td>Diabetes Care</td>
<td>1,484</td>
<td>1,533</td>
<td>-3</td>
</tr>
<tr>
<td>Molecular Diagnostics</td>
<td>1,345</td>
<td>1,248</td>
<td>8</td>
</tr>
<tr>
<td>Tissue Diagnostics</td>
<td>652</td>
<td>567</td>
<td>15</td>
</tr>
</tbody>
</table>

CER=Constant Exchange Rates; Underlying growth of Molecular Diagnostics excluding sequencing business: +2%
YTD Sept 2016: Diagnostics regional sales
Growth driven by all regions

North America
+4%
26% of divisional sales

Latin America
+21%
7% of divisional sales

EMEA
+2%
41% of divisional sales

Japan
+2%
4% of divisional sales

Asia Pacific
+17%
22% of divisional sales

+21% growth in E7 countries

1 Europe, Middle East and Africa; 2 Brazil, China, India, Mexico, Russia, South Korea, Turkey
All growth rates at Constant Exchange Rates
**YTD Sept 2016: Diagnostics highlights**

**Growth driven by immunodiagnostic products**

**YoY CER growth**

<table>
<thead>
<tr>
<th>Segment</th>
<th>YoY CER Growth</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional Dia</td>
<td>+9%</td>
<td>• Driven by immunodiagnostics (+14%) and clinical chemistry (+6%)</td>
</tr>
<tr>
<td>Diabetes Care</td>
<td>-2%</td>
<td>• Spillover of US reimbursement cuts to private sector</td>
</tr>
<tr>
<td>Molecular Dia</td>
<td>+7%</td>
<td>• Virology (+11%), HPV (+13%) and blood screening (+3%)</td>
</tr>
<tr>
<td>Tissue Dia</td>
<td>+13%</td>
<td>• Advanced staining portfolio (+9%); primary staining (+18%)</td>
</tr>
</tbody>
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1 Underlying growth of Molecular Diagnostics excluding sequencing business: +2%

CER=Constant Exchange Rates; EMEA=Europe, Middle East and Africa
The connected core laboratory
Launch of next generation immunoassay analyser
cobas e 801

- Latest addition to the cobas 8000 family
- Dedicated to high throughput laboratories
- Modularity and expansion potential
- Over 100 instruments delivered 3 months after launch
Meeting the molecular testing needs

Expanding virology solutions

**cobas® 4800 System**

- HIV-1
- HBV
- HCV
- HCV GT
- CMV*  
- HPV

**cobas® 6800/8800 System**

- HIV-1
- HBV
- HCV
- CMV
- HIV-1/2 Qual*

**Growth drivers**

- Increased HCV testing due to new treatment options
- Increased HBV testing driven by APAC
- Increased HIV testing due to Global Access Program in Sub-Saharan Africa
- Only CE marked and FDA approved CMV virology test
- Increased HPV testing driven by FDA approval for primary screening

* In Development

HBV: hepatitis B virus; HCV GT: hepatitis C virus genotyping; CMV: cytomegalovirus; HPV: human papillomavirus
Rapid Zika assay development in 2016
*Fast response and broadest solution*

<table>
<thead>
<tr>
<th>March 30</th>
<th>June 20</th>
<th>August 29</th>
</tr>
</thead>
<tbody>
<tr>
<td>• FDA - Investigational New Drug Application</td>
<td>• Available in markets accepting the CE mark</td>
<td>• FDA – Emergency Use Authorization</td>
</tr>
<tr>
<td>• Use with cobas® 6800/8800 Systems</td>
<td>• For use with Roche’s LightCycler® 480 or cobas z 480</td>
<td></td>
</tr>
</tbody>
</table>
cobas® Influenza A/B & RSV* test approved
Point of care lab quality PCR results in ~20 min

* RSV: respiratory cyncytial virus
Launch of CoaguChek INRange

First wireless self-testing for patients in VKA\(^1\) therapy

- **New:** connectivity to healthcare professionals improving patient convenience
- Target market: ~CHF 670m (+5% CAGR)

\(^1\) VKA: vitamin K antagonist

First liquid biopsy test approved by FDA

cobas EGFR v2 CDx for Tarceva

- Test can utilise plasma and tissue sample
- Leverages cobas 4800 platform
VENTANA HE 600 system
A new era of innovation in H&E* staining

- Launched November 2015
- Fully automated H&E platform with individual slide staining technology, avoids sample cross contamination
- Platform features
  - Unparalleled levels of stain consistency and reproducibility
  - Optimal workflow efficiency
  - Easy and safe to operate, no hazardous chemicals

*hematoxylin and eosin tissue staining
Immunotherapy diagnostics

PD-L1 test approved for bladder cancer and NSCLC

VENTANA PD-L1 (SP142) CDx Assay

- FDA approved SP142 to predict bladder cancer patient response to Tecentriq
- FDA approved SP142 to inform treatment decisions with Tecentriq in NSCLC
- PD-L1 IHC expression shown to correlate with and predict therapeutic outcomes
- Available on BenchMark ULTRA platform: Large global installed base
Q3 2016 Group results

Diagnostics

Business model & strategy
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Outlook
Acquisition of GeneWEAVE Bioscience Inc.
Enhancing Roche’s NAT microbiology portfolio

GeneWEAVE’s Smarticles™ technology:
Identifies multidrug-resistant organisms and assesses antibiotic susceptibility

- No need for sample preparation processes
- MRSA is first test to be launched; CRE¹, FRE², VRE³ in development
- Target market: ~CHF 2bn; +7%

1. CRE: carbapenem-resistant Enterobacteriaceae; 2. Fluoroquinolone-resistant Enterococci; 3. VRE: Vancomycin-resistant Enterococci
Developing a complete sequencing solution

Invest in best-in-class technologies

**SAMPLE PREPARATION**
- **MilliSect**: Tissue Dissection
- **Lumora**: Heat Elution
- **Kapa Biosystems**
- **AbVitro**: PETE**

**SEQUENCING**
- **Pacific Biosciences**: SMRT** sequencing
- **Genia**: Nanopore sequencing
- **Stratos** (collaboration)

**MENU**
- **Ariosa Diagnostics***: NIPT**
- **Signature Diagnostics***: Biobank
- **CAPP Medical***: Oncology

**INFORMATICS**
- **Bina Technologies**
- **Internal development**

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* 2015 acquisitions

**SMRT**: Single molecule real time; SMRT is a registered trademark of PacBio; PETE: primer enrichment technology; NIPT: Non invasive prenatal testing
Sequencing Investment Updates
Optimizing the portfolio

**Ariosa**
- Technology transfer to labs in Europe
- Harmony test CE-IVD certification in Q2 2016

**CAPP Medical**
- Liquid biopsy for circulating tumour DNA for cancer therapy selection and monitoring
- Launch as RUO assay in 2016

**Pacific Biosciences**
- Launch of first Roche SMRT platform as an integrated workflow solution including assays expected in H2 2016
Q3 2016 Group results

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## Key launches 2016

<table>
<thead>
<tr>
<th>Area</th>
<th>Product</th>
<th>Market</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Central Laboratory</strong></td>
<td><strong>cobas 8000 &lt; e 801&gt;</strong> - high throughput immunochemistry analyzer</td>
<td>EU</td>
</tr>
<tr>
<td></td>
<td><strong>cobas c 513</strong> - high throughput dedicated HbA1c analyzer</td>
<td>US</td>
</tr>
<tr>
<td><strong>Point of Care</strong></td>
<td><strong>CoaguChek INRange (Zenith)</strong> - modified analyzer for intuitive self testing with full blue tooth connectivity</td>
<td>EU</td>
</tr>
<tr>
<td><strong>Sequencing</strong></td>
<td><strong>Roche SMRT Sequencer</strong> - single molecule sequencer for clinical research (in collaboration with Pacific Biosciences)</td>
<td>WW</td>
</tr>
<tr>
<td><strong>Diabetes Care</strong></td>
<td><strong>Accu-Chek Guide</strong> - next-generation blood glucose monitoring system</td>
<td>EU</td>
</tr>
<tr>
<td></td>
<td><strong>Accu-Chek Insight CGM</strong> - new high-performance continuous glucose monitoring system</td>
<td>EU</td>
</tr>
<tr>
<td><strong>Virology</strong></td>
<td><strong>cobas 6800/8800 HIV Qual</strong> - early Infant Diagnosis and Confirmatory HIV Test</td>
<td>EU</td>
</tr>
<tr>
<td><strong>HPV / Microbiology</strong></td>
<td><strong>cobas 6800/8800 CT/NG</strong> - fully automated solution for screening and diagnosis of <em>Chlamydia trachomatis</em> and <em>Neisseria gonorrhoeae</em> in symptomatic &amp; asymptomatic patients</td>
<td>EU</td>
</tr>
<tr>
<td><strong>Point of Care</strong></td>
<td><strong>cobas Liat Influenza A/B plus RSV (CLIA)</strong> - automated multiplex real time RT–PCR assay for qualitative detection and discrimination of Influenza A virus, Influenza B virus and respiratory syncytial virus (RSV)</td>
<td>US</td>
</tr>
<tr>
<td><strong>Sequencing</strong></td>
<td><strong>ctDNA oncology panels</strong> - liquid biopsy for circulating tumor DNA for cancer therapy selection</td>
<td>US</td>
</tr>
<tr>
<td><strong>Companion Diagnostics</strong></td>
<td><strong>PD-L1 (SP142) for Bladder Cancer</strong> - complementary diagnostic for Tecentriq</td>
<td>US</td>
</tr>
<tr>
<td></td>
<td><strong>PD-L1 (SP142) for NSCLC</strong> - complementary diagnostic for Tecentriq</td>
<td>US</td>
</tr>
</tbody>
</table>

* achieve commercial readiness, dependent on Pharma label and approval
2016 Diagnostics outlook

- Focus on Innovation
- Provide integrated and connected solutions
- Expand leading market presence
- Concentrate on launch execution
- Continued strong sales momentum & increase margins
Doing now what patients need next
**Tecentriq in 2L+ non-small cell lung cancer**

*Survival benefit regardless of PD-L1 status*

**Barlesi et al, ESMO 2016; a Stratified HR; HR=hazard ratio; ITT=intention-to-treat**