Committed to innovation and growth

Roland Diggelmann,
COO Roche Diagnostics

Atlanta, 28 July 2015
HY 2015 Group results

Diagnostics

Business model & strategy
HY 2015 overview
Building a leading sequencing solution
Outlook
**HY 2015: Highlights**

**Growth**

**Sales**
- Group sales $+6\%_1$ driven by HER2 franchise ($+21\%$), Avastin ($+9\%$), Actemra ($+25\%$) and Professional Diagnostics ($+7\%$)
- Outperformance in all major regions: US ($+6\%_1$), Japan ($+6\%_1$) and International ($+9\%_1$)

**Profit**
- $+7\%$ core EPS growth$^{1,2}$ driven by strong underlying business

**Innovation**

**Oncology**
- Strong ASCO newsflow
- Atezolizumab (aPDL1): POPLAR, FIR, Chemo combos
- Alectinib: Phase II in 2L ALK+ NSCLC
- Gazyva: Phase III (GADOLIN) in R/R iNHL
- Cobimetinib + Zelboraf: Phase III (coBRIM) in 1L BRAF+ mM

**Neuroscience**
- Ocrelizumab: OPERA I and II met primary and secondary endpoints

**Hematology**
- ACE910 (aFIXa/FX): Updated phase Ib

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1. At Constant Exchange Rates (CER)
2. Excluding sale of filgrastim rights in 2014
## HY 2015: Strong sales growth

<table>
<thead>
<tr>
<th></th>
<th>HY 2015 CHFbn</th>
<th>HY 2014 CHFbn</th>
<th>Change in %</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pharmaceuticals Division</strong></td>
<td>18.4</td>
<td>17.9</td>
<td>3</td>
</tr>
<tr>
<td><strong>Diagnostics Division</strong></td>
<td>5.2</td>
<td>5.1</td>
<td>2</td>
</tr>
<tr>
<td><strong>Roche Group</strong></td>
<td>23.6</td>
<td>23.0</td>
<td>3</td>
</tr>
</tbody>
</table>

*CER=Constant Exchange Rates*
Q2 2015: Sales growth for fifth consecutive year

All growth rates at Constant Exchange Rates (CER)
HY 2015: Both divisions with strong sales growth

All growth rates at Constant Exchange Rates (CER)
HY 2015: Strong underlying Group core operating profit & margin

CER=Constant Exchange Rates

* Excluding sale of filgrastim rights in 2014 at CER
Progressing in Personalised Healthcare

60% of phase 2 & 3 products have PHC component

<table>
<thead>
<tr>
<th>Phase 2</th>
<th>Phase 3/Registration</th>
<th>Marketed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anti-FIXa/FX biMAb</td>
<td>GABRA5 NAM</td>
<td>atezolizumab</td>
</tr>
<tr>
<td>SERD</td>
<td>basimglurant</td>
<td>venetoclax</td>
</tr>
<tr>
<td>emactuzumab</td>
<td>V1 receptor antagonist</td>
<td>alectinib</td>
</tr>
<tr>
<td>vanucizumab</td>
<td>MAO-B inhibitor</td>
<td>taselisib</td>
</tr>
<tr>
<td>ipatasertib</td>
<td>bitopertin</td>
<td>cobimetinib</td>
</tr>
<tr>
<td>polatuzumab vedotin</td>
<td>olesoxime</td>
<td>lebrikizumab</td>
</tr>
<tr>
<td>lifastuzumab vedotin</td>
<td>danoprevir</td>
<td>etrolizumab</td>
</tr>
<tr>
<td>Anti-glypican-3 MAb</td>
<td>Anti-Flu A MAb</td>
<td>crenezumab</td>
</tr>
<tr>
<td></td>
<td>TLR7 agonist</td>
<td>gantenerumab</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ocrelizumab</td>
</tr>
</tbody>
</table>
|                  |                       | lampalizumab           | Tarceva®
|                  |                       | Zelboraf®              |
|                  |                       | Erivedge®              |
|                  |                       | Rituxan®               |
|                  |                       | Gazyva®                |
|                  |                       | Herceptin®             |
|                  |                       | Perjeta®               |
|                  |                       | Kadcyla®               |
|                  |                       | Avastin®               |
|                  |                       | Xeloda®                |
|                  |                       | Esbriet®               |
|                  |                       | Pulmozyme®             |
|                  |                       | Xolair®                |
|                  |                       | Actemra®               |
|                  |                       | Lucentis®              |

Oncology  Immunology  Infectious Diseases  Neuroscience  Ophthalmology
Molecular Diagnostics  Tissue Diagnostics  Professional Diagnostics  Foundation Medicine  Professional Diagnostics
Roche: 6 new molecular entities (NMEs) for near-term readout

2015

- Alectinib (filing)
- Venetoclax (filing)
- Cobimetinib / Zelboraf (approval)

2016

- Atezolizumab (aPDL1)
  Lung and bladder (filings)
- Ocrelizumab (filing)
- Lebrikizumab (filing)
2015 outlook

- **Group sales growth**¹: Low to mid-single digit
- **Core EPS growth**¹: Ahead of sales growth²
- **Dividend outlook**: Further increase dividend in Swiss francs

¹ At Constant Exchange Rates (CER)
² Excluding sale of filgrastim rights in 2014
HY 2015 Group results

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In-Vitro Diagnostics market overview
Large and growing market; Roche is market leader

Market size

USD 55 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 2014 validated by an independent IVD consultancy
Our business model
Customer focus and place instruments to generate recurring revenues through reagent usage
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 in 2013
= 3,789,041 tests per day
= 42 tests per second
HY 2015 Group results

Diagnostics

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## HY 2015: Diagnostics Division sales

### Strong sales performance

<table>
<thead>
<tr>
<th></th>
<th>HY 2015</th>
<th>HY 2014</th>
<th>Change in %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CHFm</td>
<td>CHFm</td>
<td>CHF</td>
</tr>
<tr>
<td><strong>Diagnostics Division</strong></td>
<td>5,235</td>
<td>5,140</td>
<td>2</td>
</tr>
<tr>
<td>Professional Diagnostics</td>
<td>2,972</td>
<td>2,904</td>
<td>2</td>
</tr>
<tr>
<td>Diabetes Care</td>
<td>1,057</td>
<td>1,140</td>
<td>-7</td>
</tr>
<tr>
<td>Molecular Diagnostics</td>
<td>832</td>
<td>762</td>
<td>9</td>
</tr>
<tr>
<td>Tissue Diagnostics</td>
<td>374</td>
<td>334</td>
<td>12</td>
</tr>
</tbody>
</table>

Underlying growth of Molecular Diagnostics excluding Sequencing business: +9%

CER = Constant Exchange Rates
HY 2015: Diagnostics regional sales
Strong performance in APAC and EMEA

North America
+4%
27% of divisional sales

Latin America
+14%
7% of divisional sales

EMEA\(^1\)
+5%
43% of divisional sales

Japan
-6%
4% of divisional sales

Asia Pacific
+15%
19% of divisional sales

16% growth in E7 countries\(^2\)

\(^1\)Europe, Middle East and Africa; \(^2\)Brazil, China, India, Mexico, Russia, South Korea, Turkey
All growth rates at Constant Exchange Rates
HY 2015: Diagnostics
Growth driven by Professional Diagnostics

YoY CER growth

<table>
<thead>
<tr>
<th></th>
<th>CHFbn</th>
<th>+12%</th>
<th>+1%</th>
<th>+7%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional Dia</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diabetes Care</td>
<td></td>
<td></td>
<td>+1%</td>
<td></td>
</tr>
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<td>Molecular Dia</td>
<td></td>
<td></td>
<td>+12%</td>
<td></td>
</tr>
<tr>
<td>Tissue Dia</td>
<td></td>
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</table>

- Growth driven by immunodiagnostics (+12%) and coagulation monitoring (+11%)
- Accu-Chek Aviva/Performa (+4%) and insulin delivering systems (+12%)
- Virology (+13%) incl. HPV (+28%)
- Advanced staining portfolio (+12%)

1 Underlying growth of Molecular Diagnostics excluding Sequencing business: +9%
CER=Constant Exchange Rates; EMEA=Europe, Middle East and Africa; NIPT=Non-invasive prenatal testing
HY 2015: Diagnostics Division
Profit growth in line with sales growth

<table>
<thead>
<tr>
<th>HY 2015</th>
<th>2015 vs. 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHFm</td>
<td>% sales</td>
</tr>
<tr>
<td>Sales</td>
<td>5,235</td>
</tr>
<tr>
<td>Royalties &amp; other op. inc.</td>
<td>71</td>
</tr>
<tr>
<td>Cost of sales</td>
<td>-2,303</td>
</tr>
<tr>
<td>M &amp; D</td>
<td>-1,220</td>
</tr>
<tr>
<td>R &amp; D</td>
<td>-540</td>
</tr>
<tr>
<td>G &amp; A</td>
<td>-222</td>
</tr>
<tr>
<td>Core operating profit</td>
<td>1,021</td>
</tr>
</tbody>
</table>

CER=Constant Exchange Rates

Investments in Sequencing

+3% in CHF
Professional Diagnostics: Global launch of cobas 8100 version 2

- Bidirectional sample flow between pre-analytical, analytical and post-analytical steps optimizes laboratory workflow
- Automated sample check reduces work load and enhances patient safety
cobas e801 exhibited at EuroMedLab
Double throughput with the same footprint

High throughput immunochemistry module in cobas 8000 series:
- Fastest time to result
- Highest accuracy
- Lower blood sample volume
- Minimum waste
- Minimized hands-on time
- High system uptime

Flexible cobas e pack sizes
Roche blood safety solution
Unique ability to combine nucleic acid testing and serology for bloodscreening

<table>
<thead>
<tr>
<th>Roche blood safety solution</th>
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<tbody>
<tr>
<td>HTLV-I/II</td>
</tr>
<tr>
<td>Anti-HBc</td>
</tr>
</tbody>
</table>

- Launch of Elecsys® HTLV-I/II Immunoassay
- Competitive assay to complete bloodscreening portfolio in serology
- Target market for serology bloodscreening: ~CHF 1bn

HIV: Human Immunodeficiency Virus; HCV: Hepatitis C Virus; HTLV : Human T-Lymphotropic Virus; HBsAg: Hepatitis B surface antigen
HBc: Hepatitis B core; HBs: Hepatitis B surface antigen
Molecular Diagnostics: Launch of HBV Test for cobas® 6800/8800 systems

Complements the viral load monitoring portfolio of cobas 6800/8800

• Lower sample requirement, higher sensitivity and faster test results across all genotypes
• Strengthens market lead in viral load testing and helps optimize therapy for patients
Entering Point of Care Molecular Diagnostics

CLIA waiver for Liat analyzer and Strep A test

- Fast readout and easy to use
- Influenza A/B also submitted for CLIA waiver
- Plans to extend menu in:
  - RSV tests
  - MRSA and C-difficile
- Target market: ~CHF 350m (+20%)

Point of Care: e.g. physician’s office, emergency rooms, ambulance, pharmacies; MRSA: methicillin resistant Staphylococcus aureus; RSV: respiratory syncytial virus
Diagnostic assays guiding our clinical strategy

More than 350 collaborations between Pharma and Dia

- 4 BTD were supported by having a Dx assay identifying patients to benefit
- Clinical outcomes correlate with patient stratification

<table>
<thead>
<tr>
<th>Molecule</th>
<th>Dx</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alectinib</td>
<td>ALK+ NSCLC</td>
</tr>
<tr>
<td>Atezolizumab</td>
<td>PD-L1+ NSCLC**</td>
</tr>
<tr>
<td>Atezolizumab</td>
<td>PD-L1+ UBC</td>
</tr>
<tr>
<td>Venetoclax</td>
<td>17p- CLL**</td>
</tr>
</tbody>
</table>

**Monotherapy data
** Achieved BTD in first half of 2015
HY 2015 Group results

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Roche is market leader in DNA testing
Complement offering with leading sequencing solution

DNA testing market*: 10-year estimates
Next-generation sequencing (NGS) will be the fastest-growing segment

DNA testing uses different technologies which are complementary in applications:

- Molecular (PCR):
  - virology
  - blood screening
  - Oncology
  - Infectious disease

- In situ hybridization (ISH)
  - oncology

- Sequencing:
  - Whole genome sequencing and targeted sequencing
  - Mutation detection
  - Oncology
  - Pre-natal, newborn
  - Infectious disease

* Includes Lab developed tests; PCR: polymerase chain reaction; Sanger: oldest sequencing technology; ISH: in situ hybridization
Sequencing strategy

Building a leading sequencing solution

**Grow through disruptive innovation**

<table>
<thead>
<tr>
<th>Developing complete sequencing solutions</th>
</tr>
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<tbody>
<tr>
<td>Sample preparation</td>
</tr>
</tbody>
</table>

- Abvitro: Technology acquisition
- Ariosa: Acquisition
- Genia: Acquisition
- Pacific Biosciences: Partnership
- Bina: Acquisition
- Foundation Medicine: Partnership
Updates on investments in sequencing
Ariosa receives CE mark for FORTE™ software;
Acquisition of CAPP Medical

Ariosa
• Business extension: licensing of FORTE software to labs in Europe
• FORTE provides more accurate assessment of fetal chromosome conditions than other statistical methods*
• Harmony test filed for CE-IVD certification

CAPP Medical
• Liquid biopsy for circulating tumour DNA for cancer therapy selection and monitoring.**

**Nature Medicine, 2014 May; 20(5):548-54
HY 2015 Group results

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- Outlook
# Key launches 2015

<table>
<thead>
<tr>
<th>Area</th>
<th>Product</th>
<th>Market</th>
<th>BA¹</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Instruments / Devices</strong></td>
<td><strong>Laboratory</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>cobas c 513 – dedicated HbA1C analyzer</td>
<td>EU</td>
<td>RPD</td>
</tr>
<tr>
<td></td>
<td>cobas t 411– core lab coagulation analyzer</td>
<td>EU</td>
<td>RPD</td>
</tr>
<tr>
<td></td>
<td>cobas 8100 V2 – Integrated pre- and post-analytical solution</td>
<td>WW</td>
<td>RPD</td>
</tr>
<tr>
<td></td>
<td>cobas® 6800/8800 – Medium to High volume automated real-time PCR</td>
<td>US</td>
<td>RPD</td>
</tr>
<tr>
<td></td>
<td>VENTANA HE 600 – automated H&amp;E staining platform</td>
<td>WW</td>
<td>RTD</td>
</tr>
<tr>
<td><strong>Diabetes Care</strong></td>
<td>Accu-Chek Active no-code– next-gen. bG meter, no coding of test strips</td>
<td>WW</td>
<td>RDC</td>
</tr>
<tr>
<td></td>
<td>Accu-Chek Connect – bG meter with connectivity to smartphones, mobile applications and cloud</td>
<td>US</td>
<td>RDC</td>
</tr>
<tr>
<td><strong>Point of Care</strong></td>
<td>CoaguChek® Pro II - professional system for PT and aPTT testing</td>
<td>EU</td>
<td>RPD</td>
</tr>
<tr>
<td><strong>Tests / Assays</strong></td>
<td><strong>Blood Screening</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>cobas® 6800/8800 MPX – Multiplex Bloodscreening test</td>
<td>US</td>
<td>RMD</td>
</tr>
<tr>
<td><strong>Infectious Diseases</strong></td>
<td>cobas® Liat Influenza A/B + RSV – POC detection</td>
<td>US</td>
<td>RMD</td>
</tr>
<tr>
<td></td>
<td>HTLV – human T-lymphotropic virus diagnostics test</td>
<td>EU</td>
<td>RPD</td>
</tr>
<tr>
<td><strong>Virology</strong></td>
<td>cobas® 6800/8800 HBV – Quantitative HBV viral load test</td>
<td>EU</td>
<td>RMD</td>
</tr>
<tr>
<td></td>
<td>cobas® 4800 HIV-1 - Quantitative HIV viral load test</td>
<td>EU</td>
<td>RMD</td>
</tr>
<tr>
<td></td>
<td>cobas® 4800 HCV – Quantitative HCV viral load test</td>
<td>EU</td>
<td>RMD</td>
</tr>
<tr>
<td></td>
<td>cobas® 4800 HBV – Quantitative HBV viral load test</td>
<td>EU</td>
<td>RMD</td>
</tr>
<tr>
<td><strong>Genomics &amp; Oncology</strong></td>
<td>cobas® EGFR Test v2 - detection of EGFR in plasma</td>
<td>EU</td>
<td>RMD</td>
</tr>
<tr>
<td><strong>Cardiac</strong></td>
<td>cobas h 232 Troponin T – Point of Care test version of Elecsys cTNT-hs</td>
<td>EU</td>
<td>RPD</td>
</tr>
</tbody>
</table>

¹ Business Areas. RPD: Roche Professional Diagnostics; RDC: Roche Diabetes Care; RMD: Roche Molecular Diagnostics; RTD: Roche Tissue Diagnostics
Outlook

Investing into future growth

• Continued strong growth in serum work area
• Focus on implementation of next generation platforms, e.g. cobas 6800/8800
• Continued investment into development of future sequencing solution
• Ongoing structural adjustments in Diabetes Care to adapt to continuing challenging market environment
• Strengthen leading presence in emerging markets
Doing now what patients need next