

### **Pipeline summary**

Marketed products additional indications

**Global Development late-stage trials** 

pRED (Roche Pharma Research & Early Development)

gRED (Genentech Research & Early Development)

Roche Group 2014 sales

**Diagnostics** 

Foreign exchange rate information

## Changes to the development pipeline FY 2014 update Roche

New to Phase I	New to Phase II	New to Phase III	New to Registration
RG6047 SERD (2) – ER-pos (HER2-neg) mBC RG6078 IDO inh - solid tumors RG7802 CEA CD3 TCB - solid tumors RG7876 CD40 iMAb+PD-L1 MAb - solid tumors RG7787 MSLN-PE cFP - solid tumors RG7689 NME - infectious diseases RG7680 NME - autoimmune diseases RG7625 NME - autoimmune diseases RG6080 DBO β-lactamase inh - bacterial infections RG7345 TAU pS422 MAb - AD RG7597 HER3/EGFR DAF+cobimetinib - KRAS mutation-pos tumors 2Als RG7155 CSF-1R+PD-L1 MAb - solid tumors RG7446 PD-L1 MAb + Gazyva - lymphoma	2NMEs transitioned from Ph1 RG6046 SERD ER-pos (HER2-neg) mBC CHU: URAT 1 inh - gout 5 Als RG3502 Kadcyla - HER2-pos advanced NSCLC RG435 Avastin + Tarceva - EGFR mut- pos. NSCLC RG6062 Esbriet - ILD, systemic sclerosis related RG7421 cobimetinib - triple negative breast cancer RG7601 venetoclax (Bcl-2-inh)+ Rituxan - rel/ref follicular lymphoma	3 Als RG7601 venetoclax (Bcl-2 inh)+ Gazyva - CLL 1st line RG7446 PD-L1 bladder cancer 2nd line CHU Actemra - large-vessel vasculitis (added by Chugai)	1 Al following EU submission RG105 MabThera – CLL subcutaneous formulation
Removed from Phase I	Removed from Phase II	Removed from Phase III	Removed from Registration
3 NMEs RG7666 Pl3K inh - glioblastoma 2L RG7624 IL-17 MAb - autoimmune diseases RG7458 MUC16 ADC - ovarian and pancreatic cancer	6 NMEs RG7593 pinatuzumab vedotin (CD22 ADC) - heme tumors RG7449 quilizumab - asthma RG7128 mericitabine - HCV RG1512 inclacumab - ACS/CVD RG1578 decoglurant (mGluR2 NAM) -	1 Al removed by Chugai Suvenyl - enthesopathy	1 Al following US approval RG435 Avastin - rel. ovarian ca. Pt- resistant
Status as of January 28, 2015	depression  RG7597 HER3/EGFR DAF m. epithelial tumors		79





### Phase I

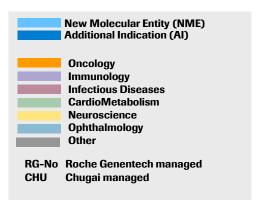
(33 NMEs + 11 Als)

### Oncology

LSD1 inh AML
SERD (2) ER+(HER2-neg) mBC
HIF1 alpha LNA solid tumors
IDO inh solid tumors
HER3 MAb solid tumors
CSF-1R + PDL-1 MAb solid tumors
Raf & MEK dual inh solid tumors
MDM2 ant solid & hem tumors
PD-L1 MAb+Tarceva NSCLC EGFR+
PD-L1 MAb+Zelboraf+/-cobimetinib m. melanoma
PD-L1 MAb+Avastin+chemo solid tumors
PD-L1 MAb+cobimetinib solid tumors
PD-L1 MAb+ipi/IFN solid tumors
PD-L1 MAb solid tumors
PD-L1 MAb+Gazyva lymphoma
Steap 1 ADC prostate ca.
HER3/EGFR DAF+ cobi KRAS+ s. tumors
venetoclax (Bcl-2)+ Gazyva CLL
venetoclax (Bcl-2) heme indications
venetoclax (Bcl-2) heme indications  ChK1 inh solid tum & lymphoma
• • •
ChK1 inh solid tum & lymphoma
ChK1 inh solid tum & lymphoma MDM2 (4) IV prodrug AML
ChK1 inh solid tum & lymphoma MDM2 (4) IV prodrug AML MSLN PE cFP solid tumors
ChK1 inh solid tum & lymphoma MDM2 (4) IV prodrug AML MSLN PE cFP solid tumors CEA CD3 TCB solid tumors CEA IL2v solid tumors ADC solid tumors
ChK1 inh solid tum & lymphoma MDM2 (4) IV prodrug AML MSLN PE cFP solid tumors CEA CD3 TCB solid tumors CEA IL2v solid tumors ADC solid tumors ERK inh solid tumors
ChK1 inh solid tum & lymphoma  MDM2 (4) IV prodrug AML  MSLN PE cFP solid tumors  CEA CD3 TCB solid tumors  CEA IL2v solid tumors  ADC solid tumors  ERK inh solid tumors  CD40 iMAb+PD-L1 MAb solid tumors
ChK1 inh solid tum & lymphoma MDM2 (4) IV prodrug AML MSLN PE cFP solid tumors CEA CD3 TCB solid tumors CEA IL2v solid tumors ADC solid tumors ERK inh solid tumors

#### Other disease areas

RG7625	autoi	mmune diseases
RG7880	- auto	immune diseases
RG6080	DBO β-lactamase inh	bact. infections
RG7689	- in	fectious diseases
RG7795	TLR7 agonist	HBV
RG7641	aldosterone synth inh	met. diseases
RG7203	PDE10A inh	schizophrenia
RG7342	mGlu5 PAM	schizophrenia
RG7345	TAUpS422 MAb	Alzheimer's
RG7410	TAAR1 ago	schizophrenia
RG7893	Nav1.7 inh	pain
RG7800	SMN2 splicer spinal i	muscular atrophy
RG7935	a-synuclein MAb Pa	rkinson's Disease
RG3645	Lucentis sust. deliv.	AMD/RVO/DME
RG7716	VEGF-ANG2 MAb	wAMD



### Roche Group development pipeline



### **Phase II**

(23 NMEs + 12 Als)

	(23 INIVILS + 12 AIS)
RG435	Avastin+Tarceva EGFR mut+ NSCLC
RG3502	Kadcyla HER2+ NSCLC
RG6013	FIXa /FX bispecific MAb hemophilia A
RG6046	SERD ER+(HER2-neg) mBC
RG7155	CSF-1R MAb PVNS/solid tumors
RG7221	Ang2-VEGF MAb colorectal cancer
RG7321	pictilisib solid tumors
RG7421	cobimetinib TNBC
RG7440	ipatasertib (AKT inh) solid tumors
RG7446	PD-L1 MAb NSCLC 2 <sup>nd</sup> /3 <sup>rd</sup> line
RG7446	PD-L1 MAb + Avastin RCC
RG7446	PD-L1 MAb bladder cancer 1/2l
RG7596	polatuzumab vedotin (CD79bADC) hem tumors
RG7599	lifastuzumab vedotin (NaPi2bADC)Pt-resist. OC
RG7601	venetoclax (Bcl-2) C LL rel/refract 17pdel
RG7601	venetoclax (Bcl-2) DLBCL
RG7601	venetoclax (Bcl-2)+ Rituxan rel/ref FL
RG7604	taselisib (mutant-selective) solid tumors
RG7686	glypican-3 MAb liver cancer
RG1569	Actemra systemic sclerosis
RG3637	lebrikizumab IPF
RG6062	Esbriet SSc – interstitial lung disease
CHU	IL-31R MAb atopic dermatitis
RG7227	danoprevir HCV
RG7745	Flu A MAb influenza
RG7790	setrobuvir HCV
RG7929	LptD antibiotic antibacterial
RG7697	GIP/GLP-1 dual ago type 2 diabetes
CHU	URAT 1 inh gout
RG1577	MAO-B inh Alzheimer's
RG1662	GABRA5 NAM Down Syndrome
RG1678	bitopertin obsessive compulsive dis.
RG7090	basimglurant (mGlu5 NAM) TRD
RG7314	V1 receptor antag autism
RG7412	crenezumab Alzheimer's

#### **Phase III**

(9 NMEs + 21 Als)

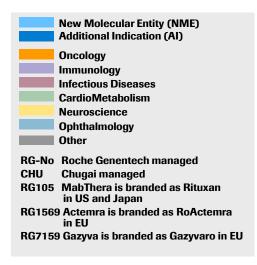
RG435 <sup>1</sup>	Avastin glioblastoma 1st line
RG435 <sup>1</sup>	Avastin ovarian cancer 1st line
RG435 <sup>1</sup>	Avastin rel. ovarian ca. Pt-sensitive
RG435	Avastin NSCLC adj
RG1273	Perjeta HER2+ mBC 2 <sup>nd</sup> line
RG1273	Perjeta HER2+ BC adj
RG1273	Perjeta HER2+ gastric cancer 1st line
RG3502	Kadcyla HER2+ gastric cancer 2nd line
RG3502	Kadcyla +/- Perjeta HER2+ mBC 1st I
RG3502	Kadcyla HER2+ BC adj
RG3502	Kadcyla + Perjeta HER2+ BC adj
RG3502	Kadcyla + Perjeta HER2+ BC neoadj
RG7159	Gazyva DLBCL 1st line
RG7159	Gazyva iNHL rituximab refractory
RG7159	Gazyva follicular lymphoma 1st line
RG7204	Zelboraf melanoma adj
RG7446	PD-L1 MAb NSCLC 2 <sup>nd</sup> line
RG7446	PD-L1 MAb bladder cancer 2 <sup>nd</sup> line
RG7601	venetoclax (Bcl-2) + Rit. CLL rel/ref
RG7601	venetoclax+Gazyva (Bcl-2) CLL 1st line
RG7853	alectinib (ALK inhibitor) NSCLC
RG1569	Actemra giant cell arteritis
RG3637	lebrikizumab severe asthma
RG7413	etrolizumab ulcerative colitis
CHU	Actemra large-vessel vasculitis
CHU	IL-6R MAb neuromyelitis optica
RG1450	gantenerumab Alzheimer's
RG1594	ocrelizumab RMS
RG1594	ocrelizumab PPMS
RG7417	lampalizumab (factor D) geo. atrophy

### Registration

(1 NME + 4 Als)

RG105	MabThera SC		CLL
RG435 <sup>2</sup>	Avastin re	ecurrent cen	ical cancer
RG1273 <sup>2</sup>	Perjeta	HER2+	BC neoadj
RG7421	cobimetinib + Zel	boraf m	. melanoma
RG3645 <sup>3</sup>	Lucentis	diabetic	retinopathy

- US only: FDA submission decision pending
- 2 Approved in US, submitted in EU
- 3 Submitted in US





### NME submissions and their additional indications Projects currently in phase 2 and 3

gantenerumab (RG1450) Alzheimer's **SERD (RG6046)** MAO-B inh (RG1577) Alzheimer's ER+(HER2-neg) mBC GABRA5 NAM (RG1662) FIXa /FX bispecific MAb (RG6013) hemophilia A Down syndrome **CSF-1R MAb (RG7155)** bitopertin (RG1678) **PVNS** and solid tumors obsessive compulsive dis. Ang2-VEGF MAb (RG7221) basimglurant (RG7090) colorectal cancer depression V1 receptor antag (RG7314) ipatasertib AKT inh (RG7440) solid tumors autism crenezumab (RG7412) polatuzumab vedotin (RG7596 lebrikizumab (RG3637) **CD79b ADC heme tumors** Alzheimer's idiopathic pulmonary fibrosis ocrelizumab (RG1594) etrolizumab (RG7413) pictilisib PI3K inh cobimetinib **PPMS** TNBC ulcerative colitis (RG7321) solid tumors lebrikizumab (RG3637) lifastuzumab (RG7599) PDL-1 MAb (RG7446) lampalizumab anti-factor D severe asthma combo Avastin RCC (RG7417) geo atrophy NaPi2b ADC Pt resistant OC venetoclax (Bcl-2i, RG7601) PDL-1 MAb (RG7446) taselisib (PI3Ki, RG7604) danoprevir\* (RG7227) bladder cancer + Rituxan rel/ref FL HCV mutant-selective) solid tumors PD-L1 MAb (RG7446) glypican-3 Mab (RG7686) Flu A MAb (RG7745) venetoclax (Bcl-2i, RG7601) NSCLC 2<sup>nd</sup>/3<sup>rd</sup> line liver cancer + Gazyva CLL 1st line influenza venetoclax (Bcl-2i, RG7601) alectinib (RG7853) venetoclax (Bcl-2i, RG7601) LptD antibiotic (RG7929) CLL rel/ref **ALK-pos. NSCLC** antibacterial + Gazyva DLBCL

cobimetinib (MEK inh) combo Zelboraf met melanoma

2014

ocrelizumab (RG1594)

2015

2016

2017 and beyond

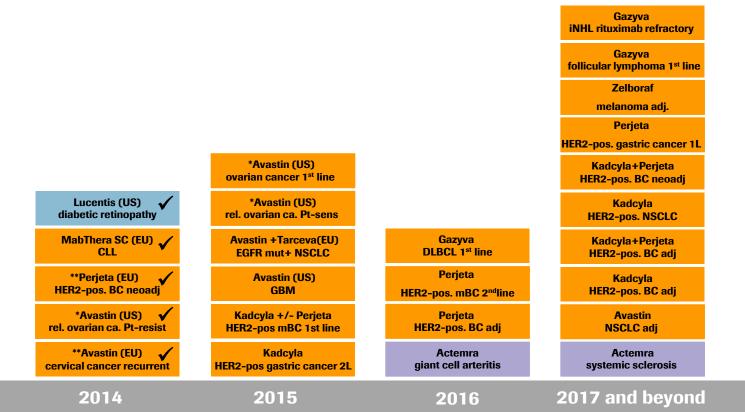
Unless stated otherwise, submissions are planned to occur in US and EU \* lead market China





## Submissions of additional indications for existing products

### Projects currently in phase 2 and 3



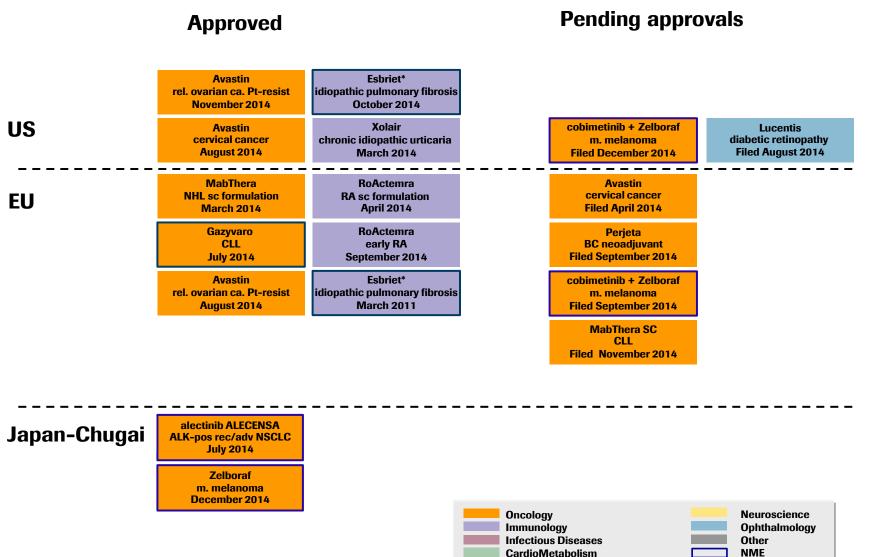
<sup>✓</sup> Indicates submission to health authorities has occurred.

<sup>\*</sup> approved in EU; \*\* approved in US Unless stated otherwise, submissions are planned to occur in US and EU.



### Major granted and pending approvals 2014







### **Pipeline summary**

### Marketed products additional indications

**Global Development late-stage trials** 

pRED (Roche Pharma Research & Early Development)

gRED (Genentech Research & Early Development)

**Roche Group 2014 results** 

**Diagnostics** 

Foreign exchange rate information





### Ovarian cancer clinical development programme

Indication	Front-line metastatic ovarian cancer		
Phase/study	Phase III GOG-0218	Phase III ICON7	
# of patients	N=1,873	N=1,528	
Design	<ul> <li>ARM A: Paclitaxel and carboplatin for 6 cycles plus 5 cycles of concurrent placebo followed by placebo alone for up to 22 cycles (15 months)</li> <li>ARM B: Paclitaxel and carboplatin for 6 cycles plus 5 cycles of concurrent Avastin followed by placebo alone for up to 22 cycles (15 months)</li> <li>ARM C: Paclitaxel and carboplatin for 6 cycles plus 5 cycles of concurrent Avastin followed by Avastin alone for up to 22 cycles (15 months)</li> </ul>	<ul> <li>ARM A: Paclitaxel and carboplatin for 6 cycles</li> <li>ARM B: Paclitaxel and carboplatin plus concurrent Avastin for 6 cycles followed by Avastin alone for up to 18 cycles (12 months)</li> </ul>	
Avastin dose	■ 15 mg/kg q3 weeks	■ 7.5 mg/kg q3 weeks	
Primary endpoint	Progression-free survival	Progression-free survival	
Status	<ul> <li>Study met its primary endpoint in Q1 2010</li> <li>Data presented at ASCO 2010 and 2011</li> <li>Results: NEJM 2011 Dec 29;365(26):2484-96</li> </ul>	<ul> <li>Study met its primary endpoint Q3 2010</li> <li>Data presented at ESMO 2010 and ASCO 2011</li> <li>Results: NEJM 2011 Dec 29;365(26):2473-83</li> <li>OS data presented at ECC 2013</li> </ul>	
	<ul> <li>EMA approval granted Q4 2011</li> <li>Re-evaluate FDA submission in 2015</li> </ul>		





### Ovarian cancer clinical development programme

Indication	Relapsed platinum-sensitive ovarian cancer	Relapsed platinum-resistant ovarian cancer
Phase/study	Phase III OCEANS	Phase III AURELIA
# of patients	N=484	N=361
Design	<ul> <li>ARM A: Carboplatin, gemcitabine, and concurrent placebo for 6-10 cycles, followed by placebo alone until disease progression</li> <li>ARM B: Carboplatin, gemcitabine, and concurrent Avastin for 6-10 cycles, followed by Avastin alone until disease progression.</li> </ul>	doxorubicin  • ARM B: Paclitaxel, topotecan or liposomal
Avastin dose	■ 15 mg/kg q3 weeks	• 10 mg/kg q2 weeks or 15 mg/kg q3 weeks
Primary endpoint	Progression-free survival	Progression-free survival
Status	<ul> <li>Study met its primary endpoint Q1 2011</li> <li>EMA approval granted Q4 2012</li> <li>Final data presented at SGO 2014</li> <li>Re-evaluate FDA submission in 2015</li> </ul>	<ul> <li>Study met its primary endpoint Q2 2012</li> <li>Data presented at ASCO 2012</li> <li>Results published in JCO 2014 May 1;32(13):1309-16</li> <li>EMA approval granted Q3 2014</li> <li>FDA approval granted Q4 2014</li> </ul>





# Cervical and brain cancer clinical development programmes

Indication	Stage IVB, recurrent or persistent cervical cancer	Newly diagnosed glioblastoma
Phase/study	Phase III GOG-240	Phase III AVAglio
# of patients	N=452	N=920
Design	<ul> <li>ARM A: Paclitaxel, cisplatin</li> <li>ARM B: Paclitaxel, cisplatin plus Avastin</li> <li>ARM C: Paclitaxel, topotecan</li> <li>ARM D: Paclitaxel, topotecan plus Avastin</li> </ul>	<ul> <li>ARM A: Concurrent radiation and temozolomide plus placebo; followed by maintenance TMZ plus placebo for 6 cycles; then placebo until disease progression</li> <li>ARM B: Concurrent radiation and TMZ plus Avastin; followed by maintenance TMZ plus Avastin for 6 cycles; then Avastin (15mg/kg q3 weeks) monotherapy until disease progression</li> </ul>
Avastin dose	■ 15 mg/kg q3 weeks	• 10 mg/kg q2 weeks or 15 mg/kg q3 weeks
Primary endpoint	Overall survival	<ul><li>Progression-free survival</li><li>Overall survival</li></ul>
Status	<ul> <li>Study met its primary endpoint Q1 2013</li> <li>Results published in NEJM Feb. 2014; 370(8):734-43</li> <li>Filed globally Q2 2014</li> <li>FDA approval granted Q3 2014</li> </ul>	<ul> <li>Co-primary endpoint of PFS met Q3 2012</li> <li>Overall survival data presented at ASCO 2013</li> <li>Filed in EU Q1 2013</li> <li>Negative CHMP opinion Q3 2014</li> <li>US filing pending</li> </ul>





### Lung and breast cancer development programmes

Indication	Adjuvant lung cancer	First-line HER2-negative metastatic breast cancer
Phase/study	Phase III ECOG 1505	Phase III MERIDIAN
# of patients	N=1,500	N=480
Design	<ul> <li>ARM A: Cisplatin plus vinorelbine, docetaxel, gemcitabine or pemetrexed</li> <li>ARM B: Cisplatin plus vinorelbine, docetaxel, gemcitabine or pemetrexed plus Avastin up to 12 months</li> </ul>	<ul> <li>ARM A: Paclitaxel + Avastin</li> <li>ARM B: Paclitaxel + Placebo</li> </ul>
Avastin dose	■ 15 mg/kg q3 weeks	■ 10 mg/kg q2 weeks
Primary endpoint	Overall survival	<ul><li>PFS in ITT</li><li>PFS in patients with high plasma VEGF-A</li></ul>
Status	<ul><li>Recruitment completed Q4 2013</li><li>Expect data in 2016</li></ul>	<ul><li>Recruitment completed</li><li>Expect data in 2015</li></ul>



### **Erivedge**

# A novel small molecule inhibitor of the hedgehog signaling pathway

Indication	Locally advanced or metastatic basal cell carcinoma	Idiopathic pulmonary fibrosis
Phase/study	Phase II STEVIE	Phase II
# of patients	N=1,200	N=129
Design	Single ARM: 150 mg Erivedge orally once daily	<ul><li>ARM A: Erivedge 150mg daily</li><li>ARM B: placebo</li></ul>
Primary endpoint	Safety: Incidence of adverse events	Change in forced vital capacity (FVC)
Status	■ FPI Q2 2011	<ul> <li>FPI pending in anticipation of trial design amendment to incorporate new standard of care pirfenidone.</li> </ul>

In collaboration with Curis

### **Esbriet**



## Small molecule with activity in fibrotic diseases

Indication	Systemic sclerosis-related interstitial lung disease (SSc-ILD)
Phase/study	Phase II LOTUSS
# of patients	N=63
Design	<ul> <li>Open-label, randomized, parallel-group, safety and tolerability study</li> <li>week vs. 4 week dose titration regimens</li> </ul>
Primary endpoint	Safety
Status	<ul><li>LPI Q3 2014</li><li>Data to be presented in 2015</li></ul>

In collaboration with Curis

### Gazyva/Gazyvaro



### Type II, glycoengineered anti-CD20 monoclonal antibody

Indication	Previously untreated or relapsed/refractory chronic lymphocytic leukemia	Diffuse large B-cell lymphoma (DLBCL)
Phase/study	Phase III GREEN	Phase III GOYA
# of patients	N=800	N=1,418
Design	<ul> <li>Single-arm cohort study: Gazyva alone or in combination with different chemotherapy regimens (FC, Bendamustin or Clb), investigation of different strategies to reduce IRRs</li> </ul>	<ul> <li>ARM A: Gazyva 1000mg IV plus CHOP</li> <li>ARM B: MabThera/Rituxan plus CHOP</li> </ul>
Primary endpoint	<ul> <li>Safety in combination with different chemotherapy regimens</li> </ul>	<ul> <li>Progression-free survival</li> </ul>
Status	<ul> <li>FPI Q4 2013</li> <li>Initial safety data presented at ASH 2014</li> </ul>	<ul><li>Recruitment completed Q2 2014</li><li>Expect data in 2015</li></ul>





### Type II, glycoengineered anti-CD20 monoclonal antibody

Indication	Indolent non-Hodgkin's lymphoma MabThera/Rituxan refractory	Front-line indolent non-Hodgkin's lymphoma
Phase/study	Phase III GADOLIN Induction and maintenance study	Phase III GALLIUM Induction and maintenance study
# of patients	N=411	N=1,401
Design	<ul> <li>ARM A: Gazyva 1000mg ilV plus bendamustine followed by Gazyva mainteinance</li> <li>ARM B: bendamustine</li> </ul>	<ul> <li>ARM A: Gazyva 1000mg IV plus chemotherapy followed by Gazyva maintenance</li> <li>ARM B: MabThera/Rituxan plus chemotherapy followed by MabThera/Rituxan maintenance</li> <li>Chemotherapy:</li> <li>For follicular lymphoma: CHOP, CVP or bendamustine</li> <li>For non-follicular lymphoma: physician's choice</li> </ul>
Primary endpoint	Progression-free survival	Progression-free survival
Status	<ul><li>LPI Q4 2014</li><li>Expect data in 2017</li></ul>	<ul><li>Recruitment completed</li><li>Expect data in 2017</li></ul>



### Kadcyla

# Evaluating new treatment options in HER2-positive early breast cancer

Indication	HER2-positive neoadjuvant breast cancer	HER2-positive early breast cancer high-risk patients	Operable HER2-positive early breast cancer
Phase/study	Phase III KRISTINE	Phase III KATHERINE	Phase III KAITLIN
# of patients	N=432	N=1,484	N=2,500
Design	Before surgery patients will receive 6 cycles of:  • ARM A: Herceptin plus Perjeta plus docetaxel plus carboplatin  • ARM B: Kadcyla plus Perjeta  After surgery patients will receive:  • ARM A: Herceptin plus Perjeta  • ARM B: Kadcyla plus Perjeta	<ul> <li>ARM A: Kadcyla 3.6mg/kg q3w</li> <li>ARM B: Herceptin</li> </ul>	<ul> <li>Following surgery and antracycline-based therapy:</li> <li>ARM A: Herceptin 6mg/kg q3w plus Perjeta 420 mg/kg q3w plus taxane</li> <li>ARM B: Kadcyla 3.6mg/kg q3w plus Perjeta 420mg/kg q3w</li> </ul>
Primary endpoint	<ul> <li>Pathologic Complete Response (pCR)</li> </ul>	<ul> <li>Invasive disease-free survival (IDFS)</li> </ul>	<ul> <li>Invasive disease-free survival (IDFS)</li> </ul>
Status	■ FPI Q2 2014	• FPI Q1 2013	• FPI Q1 2014





# Evaluating new treatment options in HER2-positive breast and gastric cancer

Indication	Previously untreated HER2 pos. metastatic breast cancer	Previously treated locally advanced or metastatic HER2-positive gastric cancer	HER2-positive advanced (2L+) NSCLC
Phase/study	Phase III MARIANNE	Phase II/III GATSBY	Phase II
# of patients	N=1,092	N=412	N=40
Design	<ul> <li>ARM A: Herceptin plus taxane</li> <li>ARM B: Kadcyla 3.6mg/kg q3w plus Perjeta</li> <li>ARM C: Kadcyla 3.6 mg/kg q3w plus placebo</li> </ul>	<ul> <li>ARM A: Kadcyla 3.6mg/kg q3w</li> <li>ARM B: Kadcyla 2.4mg/kg weekly</li> <li>ARM C: docetaxel or paclitaxel</li> </ul>	<ul> <li>Single-agent Kadcyla 3.6 mg/kg</li> </ul>
Primary endpoint	<ul> <li>Progression-free survival assessed by IRF</li> </ul>	<ul><li>Phase II: Dose-finding</li><li>Phase III: Overall survival</li></ul>	Overall response rate and safety
Status	<ul> <li>Recruitment completed Q2 2012</li> <li>Study met non-inferiority endpoint, showing similar progression-free survival (PFS) among the three arms Q4 2014</li> <li>Study did not meet PFS superiority endpoint for Kadcyla-containing regimens Q4 2014</li> </ul>	• FPI Q3 2012	• FPI Q4 2014





### Oncology development programme

Indication	Previously untreated chronic lymphocytic leukemia			
Phase/study	Phase Ib SAWYER Subcutaneous study Study being conducted ex-US			
# of patients	N=225			
Design	<ul> <li>Two-stage design:         <ul> <li>Stage 1 (dose-finding, N=55)</li> </ul> </li> <li>Stage 2 (N=170): CLL dose confirmation:</li> <li>ARM A: MabThera IV plus chemotherapy (fludarabine and cyclophosphamide)</li> <li>ARM B: MabThera 1600mg SC plus chemotherapy (fludarabine and cyclophosphamide)</li> </ul>			
Primary endpoint	<ul> <li>Part 1: PK (dose selection)</li> <li>Part 2: PK of MabThera IV versus MabThera SC (arm A vs. arm B)</li> </ul>			
Status	<ul> <li>Stage 2 data confirmed non-inferior PK and comparable safety/efficacy of MabThera 1600mg SC vs. MabThera IV</li> <li>Presented at ASH 2014</li> <li>Filed in EU Q4 2014</li> </ul>			





### First in a new class of HER dimerization inhibitors

Indication	Neoadjuvant HER2- <sub>l</sub>	Adjuvant HER2-positive breast cancer	
Phase/ study	Phase II NEOSPHERE	Phase II TRYPHAENA	Phase III APHINITY
# of patients	N=417	N=225	N=4,803
Design	<ul> <li>ARM A: Herceptin plus docetaxel</li> <li>ARM B: Perjeta (840mg loading, 420mg q3w) plus Herceptin and docetaxel</li> <li>ARM C: Perjeta plus Herceptin</li> <li>ARM D: Perjeta plus docetaxel</li> </ul>	<ul> <li>ARM A: FEC followed by Taxane with Herceptin and pertuzumab (H+P given concurrently)</li> <li>ARM B: FEC followed by Taxane with Herceptin + pertuzumab (H+P given sequentially)</li> <li>ARM C: TCH + pertuzumab (H+P given concurrently)</li> </ul>	<ul> <li>ARM A: Perjeta (840mg loading, 420 q3w) plus Herceptin for 52 weeks plus chemotherapy (6-8 cycles)</li> <li>ARM B: placebo plus Herceptin (52 weeks) plus chemotherapy (6-8 cycles)</li> </ul>
Primary endpoint	<ul> <li>Pathologic complete response (pCR)</li> </ul>	Safety	• Invasive disease-free survival (IDFS)
Status	<ul> <li>Positive data presented at SABCS 2010</li> <li>Biomarker data presented SABCS 2011</li> </ul>	<ul> <li>Positive safety and efficacy data presented at SABCS 2011</li> </ul>	<ul><li>Recruitment completed Q3 2013</li><li>Expect data in 2016</li></ul>
	<ul><li>FDA appropriate Filed in Experiments</li></ul>	roval granted Q3 2013 U Q3 2014	





### First in a new class of HER dimerization inhibitors

Indication	Second-line HER2- positive metastatic breast cancer	Advanced HER2-positive gastric cancer	Neoadjuvant/adjuvant HER2-positive breast cancer
Phase/ study	Phase III PHEREXA	Phase III JACOB	Phase II BERENICE
# of patients	N=450	N=780	N=400
Design	<ul> <li>ARM A: Herceptin plus Xeloda</li> <li>ARM B: Perjeta plus Herceptin and Xeloda</li> </ul>	<ul> <li>ARM A: Perjeta (840mg loading, 420mg q3w) plus Herceptin and chemotherapy</li> <li>ARM B: placebo plus Herceptin and chemotherapy</li> </ul>	<ul> <li>Neoadjuvant treatment:</li> <li>ARM A: ddAC q2w x4 cycles followed by weekly paclitaxel for 12 weeks, with P+H x4 cycles</li> <li>ARM B: FEC+P+H x4 cycles followed by docetaxel+P+H x4 cycles</li> <li>Adjuvant treatment:</li> <li>P+H q3w to complete 1 year of HER2 therapy</li> <li>Hormonal and radiation therapy as indicated</li> </ul>
Primary endpoint	Progression-free survival	Overall survival	Safety
Status	<ul><li>Recruitment completed Q3 2013</li><li>Expect data in 2015</li></ul>	■ FPI Q2 2013	• FPI Q3 2014





# A selective novel small molecule that inhibits mutant BRAF

Indication	Adjuvant therapy in patients with resected cutaneous BRAF mutation positive melanoma	
Phase/study	Phase III BRIM8	
# of patients	N=725	
Design	<ul><li>52-week treatment</li><li>ARM A: Zelboraf 960mg bid</li><li>ARM B: Placebo</li></ul>	
Primary endpoint	Disease-free survival	
Status	• FPI Q3 2012	





## Interleukin 6 receptor inhibitor

Indication	Systemic sclerosis	Giant Cell Arteritis
Phase/study	Phase II faSScinate Proof-of-concept study	Phase III GiACTA
# of patients	N=86	N=250
Design	<ul> <li>Blinded 48-week treatment with weekly dosing:</li> <li>ARM A: Actemra SC 162mg</li> <li>ARM B: Placebo SC</li> </ul> Open-label weekly dosing at weeks 49 to 96: <ul> <li>Actemra SC 162mg</li> </ul>	<ul> <li>Part 1: 52-week blinded period</li> <li>ARM A: Actemra SC 162mg qw + 26 weeks prednisone taper</li> <li>ARM B: Actemra SC 162mg q2w + 26 weeks prednisone taper</li> <li>ARM C: Placebo+ 26 weeks prednisone taper</li> <li>ARM D: Placebo+ 52 weeks prednisone taper</li> <li>Part II:</li> <li>104-week open label extension – patients in remission followed off of the study drug; Patients with active disease receive open label Actemra SC 162mg qw</li> </ul>
Primary endpoint	<ul><li>Change in modified Rodnan skin score (mRSS) at week</li><li>24</li><li>Safety</li></ul>	<ul> <li>Proportion of patients in sustained remission at week 52</li> </ul>
Status	<ul> <li>48 week data presented at ACR 2014</li> <li>Primary and all key secondary endpoints showed trend for improved efficacy</li> </ul>	• FPI Q3 2013



### Pipeline summary

Marketed products additional indications

### **Global Development late-stage trials**

pRED (Roche Pharma Research & Early Development)

gRED (Genentech Research & Early Development)

**Roche Group 2014 results** 

**Diagnostics** 

Foreign exchange rate information



### **Alectinib (ALK inhibitor, RG7853, AF802)**

### New CNS-active inhibitor of anaplastic lymphoma kinase

Indication	ALK-positive crizotinib-naïve advanced NSCLC	ALK-positive advanced NSCLC after progression on crizotinib treatment	ALK-positive advanced NSCLC after progression on crizotinib treatment	Treatment naïve ALK- positive advanced NSCLC
Phase/study	Phase I/II AF-001JP Japanese study	Phase I/II AF-002JG/NP28761 US study	Phase I/II ACCALIA/NP28673	Phase III ALEX
# of patients	N=70	Phase I: N=36 Phase II: N=85	N=130	N=286
Design	<ul> <li>Part 1: Dose escalation monotherapy</li> <li>Part 2: Monotherapy, dose selected based on the results of Part 1</li> </ul>	<ul> <li>Part 1: Dose escalation monotherapy</li> <li>Part 2: Monotherapy, dose selected based on the results of Part 1</li> </ul>	<ul> <li>Part 1: Dose escalation monotherapy</li> <li>Part 2: Monotherapy, dose selected based on the results of Part 1</li> </ul>	<ul> <li>ARM A: alectinib 600mg BID</li> <li>ARM A: crizotinib 250mg BID</li> </ul>
Primary endpoint	<ul> <li>Phase I: Determination of recommended dose</li> <li>Phase II: Safety and efficacy</li> </ul>	<ul> <li>Phase I: Determination of recommended dose</li> <li>Phase II: Safety and efficacy</li> </ul>	<ul> <li>Phase I: Determination of recommended dose</li> <li>Phase II: Safety and efficacy</li> </ul>	<ul> <li>Progression-free survival</li> </ul>
Status	<ul> <li>Results published in Lancet Oncology 2013 Jun;14(7):590-8</li> <li>Approved in Japan with brand name ALECENSA July 2014</li> </ul>	<ul> <li>Phase I data presented at ECC 2013</li> <li>Phase I full cohort including CNS data published in Lancet Oncology 2014, Sept.15(10):1119-28</li> <li>Phase II FPI Q3 2013</li> </ul>	■ Phase II FPI Q3 2013	■ FPI Q3 2014
	<ul> <li>Breakthrough therapy designation granted by the FDA June 2013</li> </ul>			

### Anti-PDL1 (MPDL3280A, RG7446)



Indication	Metastatic NSCLC 2 <sup>nd</sup> line	Locally advanced or metastatic NSCLC PD-L1 positive	Locally advanced or metastatic NSCLC PD-L1 positive	Locally advanced or metastatic NSCLC (2 <sup>nd</sup> /3 <sup>rd</sup> line)	Non-small cell lung cancer
Phase/study	Phase III OAK	Phase II FIR	Phase II BIRCH	Phase II POPLAR	Phase I
# of patients	N=1100	N=130	N=635	N=287	N=32
Design	<ul><li>RG7446 1200mg q3w</li><li>docetaxel</li></ul>	<ul><li>Single arm study</li><li>RG7446 1200mg q3w</li></ul>	<ul><li>Single arm study</li><li>RG7446 1200mg q3w</li></ul>	• ARM A: RG7446 1200mg q3w • ARM B: Docetaxel	■ RG7446 plus Tarceva <sup>1</sup>
Primary endpoint	Overall survival	Overall response rate	Objective response rate	Overall survival	<ul> <li>Safety</li> </ul>
Status	■ FPI Q1 2014	<ul> <li>Recruitment completed Q2 2014</li> </ul>	<ul> <li>Recruitment completed Q4 2014</li> </ul>	<ul> <li>Recruitment completed Q2 2014</li> </ul>	• FPI Q1 2014



### **Anti-PDL1 (MPDL3280A, RG7446)**

Indication	Locally advanced or metastatic urothelial bladder cancer	Locally advanced or metastatic urothelial bladder cancer	Untreated advanced renal cell carcinoma
Phase/study	Phase III	Phase II	Phase II
# of patients	N=767	N=330	N=150
Design	Patients who progressed on at least one platinum-containing regimen will receive:  • ARM A: RG7446 1200mg q3w  • ARM B: chemotherapy (vinflunine, paclitaxel or docetaxel)	RG7446 1200mg q3w  Cohort 1: Treatment-naive and cisplatin-ineligible patients Cohort 2: Patients with disease progression following or during platinum-containing treatment	<ul> <li>ARM A: RG7446 plus Avastin</li> <li>ARM B: RG7446; following</li> <li>PD: RG7446 plus Avastin</li> <li>ARM C: sunitinib; following</li> <li>PD: RG7446 plus Avastin</li> </ul>
Primary endpoint	Overall survival	Objective response rate	<ul> <li>Progression free survival</li> </ul>
Status	• FPI January 2015	• FPI Q2 2014	• FPI Q1 2014



### **Anti-PDL1 (MPDL3280A, RG7446)**

Indication	Solid tumors	Solid tumors	Locally advanced or metastatic solid tumors	Relapsed/Refractory follicular lymphoma and DLBCL
Phase/study	Phase I	Phase I	Phase I	Phase I
# of patients	N=160	N=110	N=200	N=52
Design	<ul> <li>Part 1: sequential administration of RG7446 and RG7876 (CD40 iMAb)</li> <li>Part 2: concomitant administration of RG7446 and RG7876</li> <li>Part 3: study drugs schedule in specific indication per Part 2</li> </ul>	RG7446 in combination with RG7155 (anti-CSF1R)  Part 1: dose escalation Part 2: expansion	<ul> <li>ARM A: RG7446 plus ipilimumab</li> <li>ARM B: RG7446 plus interferon alpha-2b</li> </ul>	Stage 1: safety evaluation RG7446 plus Gazyva  Stage 2: expansion RG7446 plus Gazyva
Primary endpoint	<ul> <li>Safety</li> </ul>	<ul> <li>Safety</li> </ul>	<ul> <li>Safety</li> </ul>	<ul> <li>Safety</li> </ul>
Status	• FPI Q4 2014	• FPI January 2015	■ FPI Q3 2014	• FPI Q4 2014





Indication	Solid tumors	Previously untreated metastatic melanoma BRAF mutation positive	Locally advanced or metastatic tumors	Solid tumors
Phase/study	Phase I	Phase I	Phase I	Phase I
# of patients	N=180	N=44	N=90	N=344
Design	<ul> <li>ARM A: RG7446 + Avastin</li> <li>ARM B: RG7446 + Avastin</li> <li>+ FOLFOX</li> <li>ARM C: RG7446 + Avastin</li> <li>+ carboplatin+paclitaxel</li> <li>ARM D: RG7446 + Avastin</li> <li>+ carboplatin+ pemetrexed</li> <li>ARM E: RG7446 + Avastin + carboplatin+ nab-paclitaxel</li> </ul>	<ul> <li>Dose-finding study of RG7446 (anti-PDL1) + Zelboraf¹ and RG7446 (anti-PDL1) + Zelboraf¹ + cobimetinib combinations</li> </ul>	<ul> <li>ARM A: Dose-finding – RG7446 plus cobimetinib<sup>2</sup></li> <li>ARM B: Dose-expansion – RG7446 plus cobimetinib</li> </ul>	<ul> <li>Dose escalation study</li> </ul>
Primary endpoint	■ Safety/PK	<ul><li>Safety/PK</li></ul>	<ul> <li>Safety</li> </ul>	<ul><li>Safety/PK</li></ul>
Status	• FPI Q2 2012	• FPI Q4 2012	• FPI Q4 2013	<ul> <li>FPI Q2 2011</li> <li>Initial efficacy data presented at ASCO 2013</li> <li>Updated data presented at ECC 2013</li> <li>Data from bladder cohort presented at ASCO and ESMO 2014</li> </ul>

<sup>&</sup>lt;sup>1</sup>Zelboraf in collaboration with Plexxikon, a member of Daiichi Sankyo Group;



### **Cobimetinib (RG7421, GDC-0973)**

## Selective small molecule inhibitor of mitogenactivated protein kinase kinase

Indication	Previously untreated metastatic melanoma BRAF mutation positive	First-line metastatic triple negative breast cancer
Phase/study	Phase III coBRIM	Phase II
# of patients	N=495	N=112
Design	<ul> <li>ARM A: Zelboraf¹ plus cobimetinib</li> <li>ARM B: Zelboraf¹ plus placebo</li> </ul>	<ul> <li>ARM A: cobimetinib plus paclitaxel</li> <li>ARM B: placebo plus paclitaxel</li> </ul>
Primary endpoint	Progression-free survival	Progression-free survival, safety
Status	<ul> <li>Primary endpoint met Q3 2014</li> <li>Data presented at ESMO and SMR 2014</li> <li>Results published NEJM 2014 Nov 13;371(20):1867-76</li> <li>Filed in EU Q3 2014</li> <li>Filed in US Q4 2014</li> </ul>	■ FPI January 2015



### **Cobimetinib (RG7421, GDC-0973)**

## Selective small molecule inhibitor of mitogenactivated protein kinase kinase

Indication	Locally advanced or metastatic tumors	Previously untreated metastatic melanoma BRAF mutation positive	Locally advanced or metastatic tumors with mutant KRAS
Phase/study	Phase I	Phase I	Phase I
# of patients	N=90	N=44	N=50
Design	<ul> <li>ARM A: Dose-finding -         cobimetinib plus RG7446 (anti-PDL1)</li> <li>ARM B: Dose-expansion -         cobimetinib plus RG7446 (anti-PDL1)</li> </ul>	<ul> <li>Dose-finding study of RG7446+Zelboraf<sup>1</sup> and RG7446+Zelboraf<sup>1</sup>+ cobimetinib combinations</li> </ul>	<ul> <li>Dose finding of cobimetinib plus RG7597 (anti-HER3/EGFR DAF)</li> </ul>
Primary endpoint	Safety	Safety/PK	<ul> <li>Safety</li> </ul>
Status	• FPI Q4 2013	■ FPI Q4 2012	• FPI Q4 2013



### **Pictilisib (RG7321, GDC-0941)**

# Pan-PI3 kinase inhibitor with potential activity in multiple cancers

Indication	2L ER-positive metastatic breast cancer	Previously untreated advanced or recurrent NSCLC	Locally recurrent or metastatic HER2-negative HR-positive breast cancer
Phase	Phase II FERGI	Phase II FIGARO	Phase II PEGGY
# of patients	N=340	N=302	N=180
Design	<ul> <li>ARM A: pictilisib plus hormonal therapy</li> <li>ARM B: apitolisib plus hormonal therapy (ARM B discontinued)</li> <li>ARM C: Hormonal therapy + placebo</li> </ul>	<ul> <li>ARM A: pictilisib + carboplatin + paclitaxel</li> <li>ARM B: placebo + carboplatin + paclitaxel</li> <li>ARM C: pictilisib+ carboplatin + paclitaxel + Avastin</li> <li>ARM D: placebo + carboplatin + paclitaxel + Avastin</li> </ul>	<ul> <li>ARM A: pictilisib + paclitaxel</li> <li>ARM B: placebo + paclitaxel</li> </ul>
Primary endpoint	<ul> <li>Progression-free survival</li> </ul>	<ul> <li>Progression-free survival</li> </ul>	<ul> <li>Progression-free survival</li> </ul>
Status	<ul><li>Recruitment completed Q1 2014</li><li>Data presented at SABCS 2014</li></ul>	• FPI Q1 2012	• Recruitment completed Q2 2014



### Polatuzumab vedotin (RG7596)

# Antibody drug conjugate targeting CD79b for the treatment of B-cell malignancies

Indication	Non-Hodgkin's lymphoma	Non-Hodgkin's lymphoma	Relapsed or Refractory follicular lymphoma and DLBCL
Phase	Phase II ROMULUS	Phase Ib	Phase Ib/II
# of patients	N=120	N=90	N=224
Design	<ul> <li>ARM A: pinatuzumab vedotin plus Rituxan</li> <li>ARM B: polatuzumab vedotin plus Rituxan</li> <li>ARM C: polatuzumab vedotin plus Gazyva</li> </ul>	<ul> <li>Dose escalation study in combination with Rituxan and chemotherapy</li> </ul>	<ul> <li>Plb: dose escalation</li> <li>P2: polatuzumab vedotin + BR vs. BR</li> <li>P2 expansion: polatuzumab vedotin +Gazyva non-randomised</li> </ul>
Primary endpoint	Safety and anti-tumor activity	<ul> <li>Safety</li> </ul>	<ul> <li>Safety</li> </ul>
Status	<ul> <li>Recruitment completed Q1 2014</li> <li>Pinatuzumab vedotin portion of the study completed</li> <li>Updated data presented at ASH 2014</li> <li>FPI in Gazyva arm expected in Q1 2015</li> </ul>	• FPI Q4 2013	• FPI Q4 2014



### **Taselisib (RG7604, GDC-0032)**

# Mutant-selective PI3 kinase inhibitor targeting commonly mutated oncogene

Indication	HER2-negative ER-positive metastatic breast caner patients who progressed after aromatase inhibitor therapy	Neoadjuvant HER2-negative ER- positive breast cancer
Phase	Phase III SANDPIPER	Phase II LORELEI
# of patients	N=600	N=330
Design	<ul> <li>ARM A: taselisib plus Fulvestrant</li> <li>ARM B: placebo plus Fulvestrant</li> </ul>	<ul> <li>ARM A: taselisib plus letrozole</li> <li>ARM B: placebo plus letozole</li> </ul>
Primary endpoint	<ul> <li>Progression-free survival</li> </ul>	<ul> <li>Response rate and pCR</li> </ul>
Status	■ Expect FPI Q1 2015	■ FPI Q4 2014



### **Taselisib (RG7604, GDC-0032)**

# Mutant-selective PI3 kinase inhibitor targeting commonly mutated oncogene

Indicationx	Solid tumors and HER2-negative HR-positive breast cancer	HER2-negative HR-positive locally recurrent or metastatic breast cancer	PI3KCAmut-pos. 2L squamous NSCLC Lung Master Protocol
Phase	Phase I/II	Phase I	Phase II Lung-MAP
# of patients	N=320	N=65	N=120
Design	<ul> <li>Phase I</li> <li>taselisib</li> <li>taselisib plus letrozole or fulvestrant</li> <li>Phase II</li> <li>taselisib (multiple doses) plus letrozole or fulvestrant</li> </ul>	<ul> <li>taselisib plus docetaxel</li> <li>taselisib plus paclitaxel</li> </ul>	• taselisib vs. chemo
Primary endpoint	<ul> <li>Safety/PK/efficacy</li> </ul>	■ Safety	<ul> <li>Progression-free survival</li> </ul>
Status	<ul> <li>Recruitment completed Q2 2014</li> <li>Updated data presented at SABCS 2014</li> </ul>	• FPI Q2 2013	• FPI Q2 2014



### Venetoclax (RG7601, ABT-199/GDC-0199)

### Novel small molecule Bcl-2 selective inhibitor

Indication	Relapsed or Refractory CLL	Untreated CLL patients with coexisting medical conditions	Relapsed or Refractory CLL with 17p deletion
Phase/study	Phase III MURANO	Phase III CLL14	Phase II
# of patients	N=370	N=432	N=100
Design	<ul> <li>ARM A: venetoclax plus Rituxan</li> <li>ARM B: Rituxan plus bendamustine</li> </ul>	<ul> <li>ARM A: venetoclax plus Gazyva</li> <li>ARM B: chlorambucil plus Gazyva</li> </ul>	<ul> <li>Single-agent venetoclax</li> </ul>
Primary endpoint	<ul> <li>Progression-free survival</li> </ul>	<ul> <li>Progression-free survival</li> </ul>	Safety/MTD
Status	■ FPI Q1 2014	■ FPI Q4 2014	<ul> <li>Recruitment completed Q2 2014</li> </ul>



#### Venetoclax (RG7601, ABT-199/GDC-0199)

#### Novel small molecule Bcl-2 selective inhibitor

Indication	Relapsed or Refractory CLL	Relapsed CLL and SLL	Relapsed or Refractory or previously untreated CLL	Relapsed or Refractory or previously untreated CLL
Phase/stud y	Phase II	Phase Ib	Phase Ib	Phase Ib
# of patients	N=40	N=50	N=70	N=74
Design	<ul><li>venetoclax after ibrutinib therapy</li><li>venetoclax after idelalisib therapy</li></ul>	<ul> <li>Dose-escalation study in combination with MabThera/Rituxan</li> </ul>	<ul> <li>venetoclax in combination with MabThera/Rituxan and bendamustine</li> </ul>	<ul> <li>venetoclax in combination with Gazyva</li> </ul>
Primary endpoint	Overall response rate	Safety/MTD	Safety/MTD	Safety/MTD
Status	■ FPI Q3 2014	<ul><li>FPI Q3 2012</li><li>Data presented at ASCO 2014</li></ul>	• FPI Q2 2013	• FPI Q1 2014



#### Venetoclax (RG7601, ABT-199/GDC-0199)

#### Novel small molecule Bcl-2 selective inhibitor

Indication	Relapsed or Refractory follicular non-Hodgkin's lymphoma	Front-line DLBCL	Relapsed or Refractory NHL	Relapsed or Refractory CLL and NHL
Phase/study	Phase II	Phase I/II	Phase I	Phase I
# of patients	N=156	N=230	N=40	N=211
Design	<ul> <li>ARM A: venetoclax plus Rituxan</li> <li>ARM B: venetoclax plus Rituxan plus bendamustine</li> <li>ARM C: Rituxan plus bendamustine</li> </ul>	Dose finding:  • ARM A: venetoclax+R-CHOP  • ARM B: venetoclax+G-CHOP  Expansion:  • venetoclax+R/G-CHOP	Dose escalation of venetoclax in combination with Rituxan and bendamustine	<ul> <li>Dose-escalation study</li> </ul>
Primary endpoint	Overall response rate	<ul> <li>Safety and efficacy</li> </ul>	<ul><li>Safety/MTD</li></ul>	Safety/PK/Response rate
Status	■ FPI Q4 2014	• FPI Q2 2014	<ul><li>FPI Q2 2012</li><li>Study resumed Q3 2013</li></ul>	<ul> <li>FPI Q2 2011</li> <li>Updated CLL, SLL and NHL (DLBCL and FL) data presented at ASCO 2014</li> </ul>



#### Venetoclax (RG7601, ABT-199/GDC-0199)

#### Novel small molecule Bcl-2 selective inhibitor

Indication	Relapsed or refractory multiple myeloma		Acute myelogenous leukemia (AML)	
Phase/study	Phase I	Phase I	Phase II	Phase Ib
# of patients	N=30	N=30	N=54	N=89
Design	<ul> <li>Patients receiving         Bortezomib and         Dexamethasone as         standard therapy:         <ul> <li>Dose escalation cohort:                  venetoclax+bortezomib+de                  xamethasone</li> </ul> </li> <li>Safety expansion cohort:         venetoclax+bortezomib+de                  xamethasone</li> </ul>		<ul> <li>Dose escalation of venetoclax</li> </ul>	<ul> <li>venetoclax (dose escalation) +decitabine</li> <li>venetoclax (dose escalation) +azacitidine</li> </ul>
Primary endpoint	Safety/MTD	Safety/MTD	Overall response rate	Safety
Status	■ FPI Q4 2012	■ FPI Q4 2012	<ul><li>FPI Q4 2013</li><li>Data presented at ASH 2014</li></ul>	■ FPI Q4 2014



#### Factor IXa/X bispecific (RG6013, ACE910)

### Factor VIII mimetic for treatment of hemophilia A

Indication	Hemophilia A		
Phase/study	<b>Phase I</b> Study in Japan	Phase I/II Study in Japan	
# of patients	N=82	N≈18	
Design	<ul> <li>Enrolled 64 HVs and 18 patients</li> </ul>	<ul> <li>Expansion study in patients from phase 1</li> </ul>	
Primary endpoint	<ul> <li>Exploratory efficacy and safety</li> </ul>	<ul> <li>Exploratory efficacy and safety</li> </ul>	
Status	<ul> <li>Recruitment completed Q2 2014</li> <li>Data presented at ASH 2014</li> </ul>	• FPI Q3 2014	



#### Bitopertin (GlyT-1, RG1678)

## A small molecule first-in-class glycin reuptake inhibitor (GRI)

Indication	Obsessive-compulsive disorder	
Phase/study	Phase II SKYLYTE	
# of patients	N=99	
Design	<ul> <li>16-week treatment period</li> <li>Background therapy of selective serotonin reuptake inhibitors (SSRI)</li> <li>-ARM A: bitopertin daily (30 mg)</li> <li>-ARM B: bitopertin daily (10 mg)</li> <li>-ARM C: placebo</li> </ul>	
Primary endpoint	<ul> <li>Change in total score on Yale-Brown Obsessive Compulsive Scale</li> </ul>	
Status	• FPI Q4 2012	





### Fully human monoclonal antibody against amyloid-beta

Indication	Prodromal Alzheimer's Disease	Mild Alzheimer's Disease
Phase/study	Phase II/III SCarlet RoAD	Phase III Marguerite Road
# of patients	N=799	N=1,000
Design	<ul> <li>104-week subcutaneous treatment period</li> <li>ARM A: gantenerumab (225 mg)</li> <li>ARM B: gantenerumab (105 mg)</li> <li>ARM C: placebo</li> </ul>	<ul> <li>104-week subcutaneous treatment period</li> <li>ARM A: gantenerumab</li> <li>ARM B: placebo</li> </ul>
Primary endpoint	<ul> <li>Change in CDR-SOB at 2 years</li> <li>Sub-study: change in brain amyloid by PET at 2 years</li> </ul>	<ul> <li>Change in ADAS-Cog and ADCS-ADL at 2 years (co-primary)</li> </ul>
Status	<ul> <li>Phase I PET data: Archives of Neurology 2012 Feb;69(2):198-207</li> <li>Enrollment completed Q4 2013</li> <li>Study discontinued due to futility Q4 2014</li> </ul>	• FPI Q1 2014



#### **Etrolizumab (RG7413)**

# A humanized monoclonal antibody against beta 7 integrin

Indication	Ulcerative colitis patients who are TNF naïve		
Phase/study	Phase III HIBISCUS I Induction study	Phase III HIBISCUS II Induction study	Phase III GARDENIA Sustained remission study
# of patients	N=350	N=350	N=720
Design	<ul> <li>ARM A: etrolizumab 105mg SC q4w</li> <li>+ adalimumab placebo</li> <li>ARM B: etrolizumab placebo + adalimumab</li> <li>ARM C: etrolizumab placebo + adalimumab placebo</li> </ul>	<ul> <li>ARM A: etrolizumab 105mg SC q4w</li> <li>+ adalimumab placebo</li> <li>ARM B: etrolizumab placebo + adalimumab</li> <li>ARM C: etrolizumab placebo + adalimumab placebo</li> </ul>	Time on treatment 54 weeks  • ARM A: etrolizumab 105mg SC q4w + placebo IV  • ARM B: placebo SC q4w + adalimumab SC
Primary endpoint	<ul> <li>Induction of remission compared with placebo as determined by the Mayo Clinic Score (MCS) at week 10</li> </ul>	<ul> <li>Induction of remission compared with placebo as determined by the Mayo Clinic Score (MCS) at week 10</li> </ul>	<ul> <li>Proportion of patients in sustained clinical remission as determined by Mayo Clinic Score (MCS) at weeks 10, 30 and 54</li> </ul>
Status	■ FPI Q4 2014	• FPI Q4 2014	• FPI Q4 2014



#### **Etrolizumab (RG7413)**

# A humanized monoclonal antibody against beta 7 integrin

Indication	UC patient who are TNF naïve and refractory or intolerant to immunosuppressant and/or corticosteroid treatment	UC patient who are refractory or intolerant of TNF inhibitors
Phase/study	Phase III LAUREL Maintenance study	Phase III HICKORY Induction and maintenance study
# of patients	N=350	N=800
Design	Induction phase:  • ARM A: open label etrolizumab 105mg SC q4w  Maintenance study:  • ARM B: etrolizumab 105mg SC q4w  • ARM C: placebo	Cohort 1 (open-label):  • ARM A: etrolizumab induction + placebo maintenance  • ARM B: etrolizumab induction + maintenance  Cohort 2 (blinded):  • ARM A: etrolizumab induction + maintenance  • ARM B: placebo induction + maintenance
Primary endpoint	<ul> <li>Maintenance of remission (at week 62) among randomized patients in remission at Week 10 as determined by the Mayo Clinic Score (MCS)</li> </ul>	<ul> <li>Clinical Remission (Mayo Clinic Score, MCS) at Week 14</li> <li>Remission maintenance (by MCS, at Week 66) among patients with remission at Week 14</li> </ul>
Status	• FPI Q3 2014	• FPI Q2 2014



#### **Etrolizumab (RG7413)**

# A humanized monoclonal antibody against beta 7 integrin

Indication	Moderate to severe ulcerative colitis	Moderate to severe ulcerative colitis
Phase/study	Phase II SPRUCE Open label extension study	Phase III COTTONWOOD Open label extension study
# of patients	N=116	N=2,600
Design	<ul> <li>Patients who were enrolled in EUCALYPTUS study and meet enrollment criteria will receive etrolizumab 105 sc q4w</li> </ul>	<ul> <li>Patients who were previously enrolled in etrolizumab phase III studies and meet enrollment criteria will receive etrolizumab 105 sc q4w</li> </ul>
Primary endpoint	■ Safety	<ul> <li>Long-term efficacy as determined by partial Mayo Clinic Score (pMCS)</li> <li>Incidence of adverse events</li> </ul>
Status	Recruitment completed	■ FPI Q3 2014



#### **HCV: Danoprevir (RG7227)**

IFN-based triple regimen for treatment-naïve patients of Asian origin conducted in China

Indication	Treatment-naïve patients of Asian origin with chronic hepatitis C genotype 1 with or without cirrhosis
Phase/study	Phase II DAPSANG
# of patients	N=61
Design	<ul> <li>Without cirrhosis:         <ul> <li>ARM A: Danoprevir 125 mg bid + Ritonavir 100mg bid + Pegasys + Copegus for 12 weeks</li> </ul> </li> <li>With compensated cirrhosis:         <ul> <li>ARM B: Danoprevir 125 mg bid + Ritonavir 100mg bid + Pegasys + Copegus for 24 weeks</li> </ul> </li> </ul>
Primary endpoint	Safety:
Status	<ul><li>Recruitment completed Q4 2013</li><li>Study ongoing</li></ul>

In collaboration with Ascletis



#### **Lampalizumab (RG7417)**

# Antibody fragment to selectively block activation of alternative complement pathway

Indication	Geographic atrophy (GA) secondary to age-related macular degeneration		
Phase/study	Phase III CHROMA	Phase III SPECTRI	Phase II
# of patients	N=936	N=936	N=100
Design	<ul> <li>ARM A: lampalizumab 10mg q4w</li> <li>ARM B: lampalizumab 10mg q6w</li> <li>ARM C: placebo</li> </ul>	<ul> <li>ARM A: lampalizumab 10mg q4w</li> <li>ARM B: lampalizumab 10mg q6w</li> <li>ARM C: placebo</li> </ul>	<ul> <li>ARM A: lampalizumab 10mg q2w</li> <li>ARM B: lampalizumab 10mg q4w</li> <li>ARM C: placebo</li> </ul>
Primary endpoint	<ul> <li>Primary: change in GA area</li> <li>Secondary: change in BCVA and in additional measures of visual function</li> </ul>	<ul> <li>Primary: change in GA area</li> <li>Secondary: change in BCVA and in additional measures of visual function</li> </ul>	Change in GA area
Status	<ul> <li>FPI Q3 2014</li> <li>Design presented at EURETINA 2014</li> <li>Fast track designation received Q4 2014</li> </ul>	<ul> <li>FPI Q3 2014</li> <li>Design presented at EURETINA 2014</li> <li>Fast track designation received Q4 2014</li> </ul>	• FPI Q4 2014



	Severe uncontrolled adult asthma		
Indication	Adult patients whose asthma is uncontrolled with inhaled corticosteroids and a second controller medication		
Phase/study	Phase III Phase III LAVOLTA I LAVOLTA II		
# of patients	N=1,050	N=1,050	
Design	<ul> <li>Subcutaneous lebrikizumab q4w on top of SOC for 52 weeks safety follow-up</li> <li>ARM A: lebrikizumab high dose</li> <li>ARM B: lebrikizumab low dose</li> <li>ARM C: placebo</li> <li>Patients will be tested for periostin level</li> </ul>	<ul> <li>Subcutaneous lebrikizumab q4w on top of SOC for 52 weeks safety follow-up</li> <li>ARM A: lebrikizumab high dose</li> <li>ARM B: lebrikizumab low dose</li> <li>ARM C: placebo</li> <li>Patients will be tested for periostin level</li> </ul>	
Primary endpoint	<ul> <li>Rate of asthma exacerbations during the 52-week placebo-controlled period</li> </ul>	<ul> <li>Rate of asthma exacerbations during the 52-week placebo-controlled period</li> </ul>	
Status	<ul><li>Enrollment completed Q4 2014</li><li>Expect data in 2016</li></ul>	<ul><li>Enrollment completed Q4 2014</li><li>Expect data in 2016</li></ul>	



Indication	Adolescent patients whose asthma is uncontrolled with inhaled corticosteroids and a second controller medication	Idiopathic pulmonary fibrosis
Phase/study	Phase III ACOUSTICS	Phase II RIFF
# of patients	N=375	N=250
Design	<ul> <li>Subcutaneous lebrikizumab q4w on top of SOC for 52 weeks with 52 week double-blind active treatment extension</li> <li>ARM A: lebrikizumab high dose, week 1-104 or week 52-104</li> <li>ARM B: lebrikizumab low dose, week 1-104 or week 52-104</li> <li>ARM C: placebo, week 1-52</li> </ul>	<ul> <li>ARM A: lebrikizumab SC q4w</li> <li>ARM B: placebo</li> </ul>
Primary endpoint	<ul> <li>Rate of asthma exacerbations during the 52- week placebo-controlled period</li> </ul>	Progression-free survival
Status	■ FPI Q3 2013	• FPI Q4 2013



Indication	Adult asthma	Adult asthma mild-to-moderate patients
Phase/study	Phase II VOCALS	Phase III STRETTO
# of patients	N=225	N=300
Design	<ul> <li>ARM A: lebrikizumab high dose SC q4w</li> <li>ARM B: lebrikizumab low dose SC q4w</li> <li>ARM C: placebo</li> </ul>	<ul> <li>ARM A: lebrikizumab SC q4w</li> <li>ARM B: placebo</li> <li>ARM C: Montelukast</li> </ul>
Primary endpoint	<ul> <li>Relative change in OCS dose at week</li> <li>44</li> </ul>	<ul> <li>Absolute change in FEV1 at week 12</li> </ul>
Status	■ FPI Q1 2014	■ FPI Q2 2014



Indication	Adult asthma	Moderate-to-severe atopic dermatitis
Phase/study	Phase II CLAVIER Mechanistic biomarker study	Phase II
# of patients	N=120	N=300
Design	<ul> <li>ARM A: lebrikizumab SC q4w</li> <li>ARM B: placebo</li> </ul>	<ul> <li>ARM A: lebrikizumab dose 1</li> <li>ARM B: lebrikizumab dose 2</li> <li>ARM C: lebrikizumab dose 3</li> <li>ARM D: placebo</li> </ul>
Primary endpoint	<ul> <li>Relative change in airway inflammation (eosinophils/mm2) at week 12</li> </ul>	<ul> <li>Percentage of patients achieving a 50% reduction in Eczema Area and Severity Index (EASI) score (EASI-50) from baseline to week 12</li> </ul>
Status	• FPI Q1 2014	• Expect FPI Q1 2015



#### Ocrelizumab (RG1594)

### 2nd generation anti-CD20 monoclonal antibody

Indication	Relapsing multipl	Primary progressive multiple sclerosis (PPMS)	
Phase/study	Phase III OPERA I	1 11000 111	
# of patients	N=800	N=800	N=630
Design	<ul> <li>96-week treatment period:</li> <li>ARM A: Ocrelizumab 2x 300 mg iv followed by 600 mg iv every 24 weeks</li> <li>ARM B: Interferon β-1a</li> </ul>	<ul> <li>96-week treatment period:</li> <li>ARM A: Ocrelizumab 2x 300 mg iv followed by 600 mg iv every 24 weeks</li> <li>ARM B: Interferon β-1a</li> </ul>	<ul> <li>120-week treatment period:</li> <li>ARM A: Ocrelizumab 2x 300 mg iv every 24 weeks</li> <li>ARM B: Placebo</li> </ul>
Primary endpoint	<ul> <li>Annualized relapse rate at 96 weeks versus Rebif</li> </ul>	<ul> <li>Annualized relapse rate at 96 weeks versus Rebif</li> </ul>	<ul> <li>Sustained disability progression versus placebo by Expanded Disability Status Scale (EDSS)</li> </ul>
Status	<ul><li>enrollment completed Q1 2013</li><li>Expect data in 2015</li></ul>	<ul><li>enrollment completed Q1 2013</li><li>Expect data in 2015</li></ul>	<ul><li>enrollment completed Q1 2013</li><li>Expect data in 2015</li></ul>



**Pipeline summary** 

Marketed products additional indications

**Global Development late-stage trials** 

pRED (Roche Pharma Research & Early Development)

gRED (Genentech Research & Early Development)

**Roche Group 2014 results** 

**Diagnostics** 

Foreign exchange rate information



#### Small molecules

Molecule	MDM2 (4) antagonist (RG7388)	MDM2 (4) ant. IV prodrug (RG7775)	<b>LSD1 inhibitor</b> (RG6016)	Raf/MEK inhibitor (RG7304, CKI27)
Indication	Acute myeloid leukemia	Advanced cancers including AML	Acute Leukemia	Solid tumors
Phase	Phase I	Phase I	Phase I	Phase I
# of patients	N=100	N=90	N=30	N=52
Design	<ul> <li>Multiple ascending dose-escalation study</li> </ul>	<ul> <li>Dose-escalation study</li> <li>ARM A: patients with advanced solid tumors</li> <li>ARM B: patients with r/r AML</li> </ul>	<ul> <li>Multiple ascending dose-escalation study</li> </ul>	<ul> <li>Dose-escalation to MTD</li> </ul>
Primary endpoint	• MTD	• MTD	• MTD	MTD and tumor assessment
Status	<ul><li>FPI Q1 2013</li><li>Data presented at ASH 2014</li></ul>	■ FPI Q2 2014	• FPI Q1 2014	<ul><li>Initiated Q4 2008</li><li>enrollment stopped in Q4 2010</li></ul>
Collaborator			Oryzon Genomics, S.A.	Chugai



#### Monoclonal antibodies

Molecule	Anti-glypican-3 MAb (RG7686, GC33)			
Indication	Metastatic liver cancer 2L metastatic liver cancer (hepatocellular carcinoma) (hepatocellular carcinoma)			
Phase	Phase Ib	Phase II		
# of patients	N= 40-50	N=185		
Design	<ul> <li>Study US monotherapy</li> <li>Study Japan monotherapy</li> <li>Dose escalation study in combo with SOC</li> </ul>	<ul> <li>Adaptive design study         Double blind randomized 2:1 RG7686 : placebo     </li> <li>Patients are stratified according to the level of GPC-3 expression in tumor</li> </ul>		
Primary endpoint	Safety and tolerability	<ul> <li>Progression-free survival</li> </ul>		
Status	<ul> <li>Recruitment completed Q4 2013</li> <li>Dose escalation completed for US and Japan monotherapy and combination therapy studies</li> </ul>	<ul> <li>Recruitment completed Q1 2013</li> <li>Results under internal review</li> </ul>		
Collaborator	Chugai			



### Monoclonal antibodies (continued)

Molecule	<b>GE-huMAb HER3</b> (RG7116)				<b>EGF MAb</b> 7221)
Indication	Solid tumors	HER2-low and HER3- positive metastatic breast cancer	1L mNSCLC of squamous histology	Solid tumors	Metastatic colorectal cancer
Phase	Phase I	Phase I	Phase lb/II	Phase I	Phase II McCAVE
# of patients	N=105	N=40	N=53	N≈80	N=140
Design	<ul> <li>Multiple ascending dose study with extension cohorts and imaging sub-study</li> <li>Combination arms with HER1-targeted therapies (erlotinib, cetuximab)</li> </ul>	Multiple ascending dose of RG7116 in combination with Perjeta and paclitaxel	<ul> <li>RG7116 in combination with carboplatin and paclitaxel</li> </ul>	Multiple ascending dose study with extension cohorts in solid tumors to assess the PD effects and platinum-resistant ovarian cancer	<ul> <li>ARM A: Induction:         Avastin+mFOLFOX-6;         followed by         maintenance:         Avastin+5-FU/LV</li> <li>ARM B: Induction:         RG7221+mFOLFOX-6;         followed by         maintenance:         RG7221+5-FU/LV</li> </ul>
Primary endpoint	Safety, PK	Safety	Safety, ORR	Safety, PK	• PFS
Status	<ul> <li>FPI Q4 2011</li> <li>Initial data presented at ASCO 2013</li> </ul>	• FPI Q3 2013	• FPI Q4 2014	<ul> <li>FPI Q4 2012</li> <li>Dose escalation data presented at ASCO 2014</li> </ul>	• FPI Q2 2014



### Monoclonal antibodies (continued)

Molecule	<b>CSF-1R</b> (RG7	<b>CEA-IL2v</b> (RG7813)	
Indication	Solid tumors and PVNS	Solid tumors	Solid tumors
Phase	Phase I/II	Phase I	Phase I
# of patients	N≈140	N=110	N~110
Design	<ul> <li>Multiple ascending dose study +/- paclitaxel with extension cohorts</li> </ul>	RG7155 in combination with RG7446 (anti-PDL1) • Part 1: dose escalation • Part 2: expansion	Single and multiple dose escalation study with extension cohorts
Primary endpoint	<ul> <li>Safety, PK, PD &amp; preliminary clinical activity</li> </ul>	- Safety	Safety, PK, PD
Status	<ul> <li>FPI Q4 2011</li> <li>Biomarker data presented at AACR 2013 and AACR 2014</li> <li>Data presented at ASCO 2014</li> </ul>	• FPI January 2015	• FPI Q4 2013





### Monoclonal antibodies (continued)

Molecule	MSLN PEcFP (RG7787)	CEA CD3 T-cell bispecific (TCB) (RG7802)	CD40 iMAb (RG7876) in combination with anti-PDL1 (RG7446)
Indication	MSLN-positive solid tumors	CEA-positive solid tumors	Solid tumors
Phase	Phase I	Phase la	Phase I
# of patients	N=133	N=90	N=160
Design	<ul> <li>Part A: Single agent dose escalation and extensions</li> <li>Part B: Combination of RG7787 and gemcitabine/nab-paclitaxel dose escalation and extension</li> </ul>	<ul> <li>Multiple ascending dose study with extension cohorts and imaging sub- study</li> </ul>	<ul> <li>Part 1A: sequential administration of RG7876 and RG7446 (anti-PDL1)</li> <li>Part 1B: concomitant administration of RG7876 and RG7446 (anti-PDL1)</li> <li>Part 2: multiple doses of concomitant RG7876 and RG7446 (anti-PDL1)</li> <li>Part 3: study drugs schedule in specific indications per Part 2</li> </ul>
Primary endpoint	Safety, PK, PD	<ul> <li>Safety, PK/PD, imaging</li> </ul>	Safety
Status	■ FPI Q4 2014	• FPI Q4 2014	• FPI Q4 2014

#### Neuroscience development programmes



Molecule	PDE10A inhibitor (RG7203)	<b>TAAR1 agonist</b> (RG7410)	<b>GABRA5 NAM</b> (RG1662)	<b>mGlu5 PAM</b> (RG7342)
Indication	Schizophrenia	Schizophrenia	Down Syndrome	Schizophrenia
Phase	Phase I	Phase I	Phase IIB CLEMATIS	Phase I
# of patients	N=26	N= up to 40	N=180	N=93
Design	<ul> <li>Multiple dose, double-blind study in schizophrenia patients</li> <li>ARM A: RG7203 plus risperidone</li> <li>ARM B: placebo plus risperidone</li> </ul>	<ul> <li>Double-blind, randomized, placebo controlled, sequential multiple ascending dose study in HVs</li> </ul>	<ul> <li>For 26 weeks patients will receive:</li> <li>ARM A: RG1662 120mg twice daily</li> <li>ARM B: RG1662 120mg twice daily</li> <li>ARM C: Placebo</li> </ul>	<ul> <li>Single ascending dose of RG7342</li> </ul>
Primary endpoint	<ul> <li>Safety, tolerability, PK</li> </ul>	<ul> <li>Safety and tolerability in HVs</li> </ul>	<ul> <li>Cognition and adaptive behavior</li> </ul>	<ul> <li>Safety, tolerability, PK and food effect</li> </ul>
Status	<ul><li>Study completed</li><li>Results under internal review</li></ul>	<ul><li>Study completed Q4 2014</li><li>Results under internal review</li></ul>	• FPI Q2 2014	<ul><li>Study completed January 2015</li><li>Results under internal review</li></ul>





Molecule	V1 receptor antagonist (RG7314)	SMN2 splicing modifier (RG7800)	<b>Basimglurant</b> (mGlu5 NAM, RG7090)
Indication	Autism	Spinal muscular atrophy	Adjunctive Treatment of Major Depressive Disorder
Phase	Phase II VANILLA	Phase Ib MOONFISH	Phase II Marigold
# of patients	N=150	N=48	N=300
Design	<ul> <li>Multi-center, randomized, double-blind, placebo-controlled proof-of-concept study in individuals with Autism Spectrum Disorder (ASD)</li> </ul>	<ul> <li>Randomized, double-blind, 12- week, placebo-controlled multiple dose study in adult and pediatric patients</li> </ul>	<ul> <li>ARM A: basimglurant 0.5 mg</li> <li>ARM B: basimglurant 1.5 mg</li> <li>ARM C: matching placebo</li> </ul>
Primary endpoint	Safety and efficacy	Safety and tolerability	<ul> <li>Efficacy - Montgomery Asberg Depression Rating Scale</li> </ul>
Status	• FPI Q3 2013	• FPI Q4 2014	<ul> <li>Study completed</li> <li>Data in-house under review</li> <li>Data presented at ECNP and ACNP 2014</li> </ul>
Collaborator		PTC Therapeutics/ SMA Foundation	





Molecule	<b>Anti-aSynuclein</b> (RG7935, PRX002)		Monoamine oxidase type B (MAO-B) inhibitor (RG1577, EVT-302)	<b>MAb Tau-pS422</b> (RG7345)
Indication	Parkinso	n's disease	Alzheimer's Disease	Alzheimer's disease
Phase	Phase I Phase I		Phase IIb MAyflOwer RoAD	Phase I
# of patients	N=40	N=up to 60	N=495	N=48
Design	<ul> <li>Double-blind, placebo- controlled, multiple ascending dose study of RG7935 in healthy subjects</li> </ul>	<ul> <li>Double-blind, placebo- controlled, multiple ascending dose study of RG7935 in patients with Parkinson's disease</li> </ul>	<ul> <li>52-week oral treatment</li> <li>ARM A: RG1577 (dose 1)</li> <li>ARM B: RG1577 (dose 2)</li> <li>ARM C: placebo</li> </ul>	<ul> <li>Randomized, double-blind, placebo-controlled, single ascending dose study of RG7345 in healthy volunteers</li> </ul>
Primary endpoint	<ul> <li>Safety, tolerability, PK, immunogenicity</li> </ul>	Safety and tolerability	<ul> <li>Changes in ADAS-Cog at 52 weeks</li> </ul>	Safety
Status	• FSI Q2 2014	• FPI Q3 2014	<ul> <li>Recruitment completed Q1 2014</li> </ul>	• FPI Q4 2014
Collaborator	Pro	Prothena		





Molecule	<b>TLR7 agonist</b> (RG7795)	<b>LptD antibiotic</b> (RG7929)	<b>NME</b> (RG7689)	DBO Beta lactamase inhibitor (RG6080)
Indication	Chronic hepatitis B	Pseudomonas infections (including MDR strains)	Infectious diseases	Infectious diseases
Phase	Phase I	Phase II	Phase I	Phase I
# of patients	N=50	N=~50	N=77	N=40
Design	<ul> <li>Healthy volunteer study</li> <li>ARM A: Single ascending dose of RG7795</li> <li>ARM B: Placebo</li> </ul>	<ul> <li>Patient and HV study</li> </ul>	<ul> <li>Double-blind, randomized, placebo-controlled, single- ascending dose (SAD) and multiple-ascending dose (MAD) study in healthy volunteers</li> </ul>	<ul> <li>Randomized, double-blind, placebo-controlled, single- ascending dose study in healthy volunteers</li> </ul>
Primary endpoint	<ul> <li>Safety</li> </ul>	<ul> <li>Safety, PK/PD</li> </ul>	<ul> <li>Safety, PK/PD</li> </ul>	<ul> <li>Safety, PK</li> </ul>
Status	• LPI Q4 2014	<ul> <li>FPI Q4 2013</li> <li>QIDP and fast track designation granted Q2 2014</li> </ul>	• FPI Q4 2014	<ul> <li>Study completed</li> </ul>
Collaborator		Polyphor		Meiji and Fedora



## Metabolic, ophthalmology and immunology development programmes

Molecule	GLP-1/GIP dual agonist (MAR709, RG7697)	Aldosterone synthase inhibitor (RG7641)	Anti-VEGF/Ang2 (RG7716)	<b>NME</b> (RG7625)
Indication	Type 2 diabetes	Metabolic diseases	Wet age-related macular degeneration	Autoimmune diseases
Phase/study	Phase II	Phase I	Phase I	Phase I
# of patients	N=105	N=96	N=12	N=16
Design	<ul><li>ARM A: RG7697 SC</li><li>AMR B: Liraglutide</li><li>ARM C: Placebo</li></ul>	<ul><li>ARM A: RG7641 single dose</li><li>ARM B: Placebo</li></ul>	Patient study • Single ascending and multiple dose of RG7716	<ul> <li>Single ascending dose of RG7625 in healthy volunteers</li> </ul>
Primary Endpoint	■ HbA1c	<ul> <li>Safety</li> </ul>	<ul><li>Safety and PK</li></ul>	■ Safety, PK, PD
Status	• FPI Q3 2014	<ul> <li>Recruitment completed Q2 2014</li> </ul>	<ul> <li>Enrollment completed Q4 2014</li> </ul>	■ FPI Q4 2014
Collaborator	Marcadia Biotech, Inc. acquisition			



#### **Pipeline summary**

Marketed products additional indications

**Global Development late-stage trials** 

pRED (Roche Pharma Research & Early Development)

#### gRED (Genentech Research & Early Development)

Roche Group 2014 results

**Diagnostics** 

Foreign exchange rate information



#### Monoclonal antibodies

Molecule	<b>Duligotuzumab</b> (Anti-HER3 EGFR DAF MAb, RG7597)	<b>Anti-OX40</b> (RG7888, MOXR0916)
Indication	Locally advanced or metastatic tumors with mutant KRAS	Solid tumors
Phase/study	Phase I	Phase I
# of patients	N=50	N=400
Design	<ul> <li>Dose finding of duligotuzumab plus cobimetinib<sup>1</sup></li> </ul>	<ul> <li>RG7888 dose escalation and expansion study</li> </ul>
Primary endpoint	Safety	Safety
Status	■ FPI Q4 2013	■ FPI Q3 2014



### Antibody drug conjugates

	Antibody drug conjugates (ADCs)		
Molecule	Anti-STEAP1 ADC (RG7450)	<b>NME ADC</b> (RG7882)	<b>NME ADC</b> (RG7841)
Indication	Prostate cancer	Pt. resistant ovarian cancer or unresectable pancreatic cancer	Refractory solid tumors
Phase	Phase I	Phase I	Phase I
# of patients	N=93	N=75	N=115
Design	Dose escalation and expansion study	<ul> <li>Dose escalation study</li> </ul>	■ Dose escalation study
Primary endpoint	■ Safety	■ Safety/PK	Safety
Status	<ul> <li>Dose escalation study: enrollment completed Q1 2014</li> <li>Expansion study: FPI Q3 2014</li> <li>Data presented at ASCO 2013-2014 and AACR 2014</li> </ul>	• FPI Q2 2014	■ FPI Q2 2014
Collaborator	Seattle Genetics and Agensys	Seattle Genetics	



### Antibody drug conjugates (continued)

	Antibody drug conjugates (ADCs)		
Molecule	<b>Lifastuzumab vedotin</b> (anti-NaPi2b ADC, RG7599)		
Indication	NSCLC and ovarian cancer	Platinum-sensitive ovarian cancer and NSCLC	Platinum-resistant ovarian cancer
Phase	Phase I	Phase Ib	Phase II HERAEA
# of patients	N=96	N=54	N=92
Design	Dose escalation study	<ul> <li>Dose escalation of RG7599 in combination with carboplatin, with or without Avastin</li> </ul>	<ul> <li>ARM A: RG7599</li> <li>ARM B: Pegylated liposomal doxorubicin</li> </ul>
Primary endpoint	Safety	<ul><li>Safety, PK</li></ul>	<ul> <li>Progression-free survival</li> </ul>
Status	<ul><li>FPI Q2 2011</li><li>Data presented at ASCO 2014</li></ul>	• FPI Q4 2013	• FPI Q1 2014
Collaborator	Seattle Genetics		

### gRED Genentech Research & Early Development

#### Small molecules

Molecule	Ipatasertib (AKT inhibitor, GDC-0068, RG7440)		
Indication	2L castration-resistant prostate cancer	1L metastatic gastric or gastroesophageal junction adenocarcinoma	1L triple-negative breast cancer
Phase	Phase II A.MARTIN	Phase II JAGUAR	Phase II LOTUS
# of patients	N=262	N=153	N=120
Design	<ul> <li>ARM A: ipatasertib (400mg) + abiraterone</li> <li>ARM B: ipatasertib (200mg) + abiraterone</li> <li>ARM C: placebo + abiraterone</li> </ul>	<ul> <li>ARM A: ipatasertib + mFOLFOX6</li> <li>ARM B: placebo + mFOLFOX6</li> </ul>	<ul> <li>ARM A: ipatasertib + paclitaxel</li> <li>ARM B: placebo + paclitaxel</li> </ul>
Primary endpoint	<ul> <li>Progression-free survival</li> </ul>	<ul> <li>Progression-free survival</li> </ul>	Progression-free survival
Status	■ Enrollment completed Q4 2014	■ Enrollment completed Q4 2014	■ FPI Q3 2014
Collaborator	Array BioPharma		



Small molecules (continued)

Molecule	<b>Ipatasertib</b> (AKT inhibitor, GDC-0068, RG7440)		
Indication	Solid tumors	Neoadjuvant TNBC	
Phase	Phase Ib	Phase II FAIRLANE	
# of patients	N=120	N=150	
Design	<ul> <li>Dose escalation with:</li> <li>ARM A: docetaxel</li> <li>ARM B: fuoropyrimidine plus oxaliplatin</li> <li>ARM C: paclitaxel</li> <li>ARM D: enzalutamide</li> </ul>	<ul> <li>ARM A: ipatasertib + paclitaxel</li> <li>ARM B: placepbo + paclitaxel</li> </ul>	
Primary endpoint	■ Safety	Pathalogic Complete Response	
Status	<ul><li>FPI Q3 2011</li><li>Data presented at ESMO and SABCS 2014</li></ul>	• FPI Q1 2015	
Collaborator	Array BioPharma		



Small molecules (continued)

Molecule	Indoleamine 2, 3- dioxygenase (IDO) Inhibitor (GDC-0919, NLG919)	ChK1 inhibitor (RG7741,GDC-0575)	<b>ERK inhibitor</b> (RG7842, GDC-0994)
Indication	Solid tumors	Solid tumors or lymphoma	Solid tumors
Phase	Phase I	Phase I	Phase I
# of patients	N=36	N=170	N=78
Design	<ul> <li>Dose escalation and expansion study</li> </ul>	<ul><li>Stage 1: Dose escalation</li><li>Stage 2: Cohort expansion</li></ul>	<ul><li>Stage 1: Dose escalation</li><li>Stage 2: Cohort expansion</li></ul>
Primary endpoint	• Safety	■ Safety/PK	Safety, MTD, PK
Status	■ FPI Q1 2014	• FPI Q2 2012	■ FPI Q2 2013
Collaborator	NewLink Genetics	Array BioPharma	



Small molecules (continued)

Molecule	Selective estrogen receptor degrader (SERD) (GDC-0810/ARN-810, RG6046)	Selective estrogen receptor degrader (SERD(2)) (GDC-0927/SRN-927, RG6047)	
Indication	Metastatic ER+ HER2- breast cancer	Metastatic ER+ HER2- breast cancer	
Phase	Phase I/IIa	Phase I	
# of patients	N=141	N=90	
Design	<ul><li>Phase I: dose escalation</li><li>Phase IIa: dose expansion</li></ul>	Dose escalation study	
Primary endpoint	■ Safety, PK, MTD	■ Safety	
Status	■ FPI Q4 2014	■ FPI Q4 2015	
Collaborator	Seragon acquisition		

#### Neuroscience development programmes



Molecule	<b>Crenezumab</b> (RG7412)		
Indication	Alzheimer's Disease		
Phase/study	Phase II ABBY Cognition study	<b>Phase II</b> <b>BLAZE</b> Biomarker study	
# of patients	N=446 N=91		
Design	<ul><li>ARM A: Crenezumab sc</li><li>ARM B: Crenezumab iv</li><li>ARM C: Placebo</li></ul>	<ul><li>ARM A: Crenezumab sc</li><li>ARM B: Crenezumab iv</li><li>ARM C: Placebo</li></ul>	
Primary endpoint	<ul> <li>Change in cognition (ADAS-cog) and Clinical Dementia Rating, Sum of Boxes (CDR-SOB) score from baseline to week 73</li> </ul>	<ul> <li>Change in brain amyloid load from baseline to week 69</li> </ul>	
Status	<ul> <li>enrollment completed Q3 2012</li> <li>Positive trend in cognition was observed in ARM B for people with milder disease</li> <li>Data presented at AAIC 2014</li> </ul>	<ul> <li>enrollment completed Q3 2012</li> <li>Cognition data presented at AAIC 2014</li> <li>Exploratory amyloid PET analysis suggests reduced amyloid accumulation in ARM B</li> <li>Biomarker data presented at CTAD 2014</li> </ul>	
Collaborator	AC Immune		

### Neuroscience development programmes



Molecule		<b>ezumab</b> 7412)	<b>Nav1.7</b> (RG7893, GDC-0276)			
Indication	Mild to Moderate Alzheimer's disease					
Phase/study	Phase I	Phase II Cognition study	Phase I			
# of patients	N=24	N=300	N=74			
Design	<ul> <li>ARM A: crenezumab dose level 1</li> <li>ARM B: placebo dose level 1</li> <li>ARM C: crenezumab dose level 2</li> <li>ARM D: placebo dose level 2</li> </ul>	<ul> <li>ARM A: 100 carriers receive crenezumab sc</li> <li>ARM B: 100 carriers receive placebo</li> <li>ARM C: 100 non-carriers receive placebo</li> </ul>	<ul> <li>Phase 1, randomized, placebo- controlled, double blinded study to determine safety, tolerability, and pharmacokinetics in healthy volunteers</li> </ul>			
Primary endpoint	<ul> <li>Safety (incidence and nature of MRI safety findings)</li> </ul>	<ul> <li>Change on Alzheimer's Prevention Initiative (API) Composite Cognitive Test total score</li> </ul>	<ul> <li>Safety, tolerability, and pharmacokinetics of single and multiple doses</li> </ul>			
Status	• Expect FPI Q1 2015	• FPI Q4 2013	• FPI Q3 2014			
Collaborator	AC Immune	AC Immune and Banner Alzheimer's Institute	Xenon Pharmaceuticals Inc.			

# Immunology and infectious diseases development programmes



Molecule	<b>NME</b> (RG7880)	<b>Anti-Flu A</b> (RG7745)							
Indication	Inflammatory diseases	Influenza							
Phase/study	Phase I	Phase IIa	Phase IIb						
# of patients	N=74	N=100	N~300						
Design	Healthy volunteer study	Healthy volunteers in an influenza challenge model  ARM A: RG7745  ARM B: placebo  ARM C: Tamiflu	Hospitalized patients requiring oxygen with severe influenza A  ARM A: RG7745 + Tamiflu  ARM B: placebo + Tamiflu						
Primary endpoint	<ul> <li>Safety and tolerability</li> </ul>	Reduction in viral activity	<ul> <li>Safety and efficacy (time to normalization of respiratory function)</li> </ul>						
Status	• FPI Q4 2014	<ul> <li>Data positive with 98% reduction of viral load at 3600mg dose</li> <li>Presented at ISIRV 2014</li> </ul>	• FPI expected Q1 2015						



### **Pipeline summary**

Marketed products additional indications

**Global Development late-stage trials** 

pRED (Roche Pharma Research & Early Development)

gRED (Genentech Research & Early Development)

### **Roche Group 2014 results**

**Diagnostics** 

Foreign exchange rate information

### 2014: One-off items



		20	14			2013				
СНҒт	Group	Pharma	Dia	Corpo- rate	Group	Pharma	Dia	Corpo- rate		
Sale of filgrastim rights (2014)	+428	+428								
Op. profit related to filgrastim revenue (2013)					+121	+121				
Past service income (2013)					+302	+131	+67	+104		
340B reserves release (2013)					+145	+145				
Core operating profit	+428	+428			+568	+397	+67	+104		
Income taxes	-93				-144					
Net income	+335				+424					

### **Geographical sales split by divisions and Group\***



CHFm	2014	2013	% change CER
Pharmaceuticals Division	36,696	36,304	+4
United States	15,822	15,097	+6
Europe	9,422	9,254	+3
Japan	3,301	3,405	+7
International	8,151	8,548	+2
<b>Diagnostics Division</b>	10,766	10,476	+6
United States	2,401	2,331	+4
Europe	4,131	4,077	+2
Japan	449	492	0
International	3,785	3,576	+13
Group	47,462	46,780	+5
United States	18,223	17,428	+6
Europe	13,553	13,331	+3
Japan	3,750	3,897	+6
International	11,936	12,124	+6

<sup>\*</sup> Geographical sales split shown here does not represent operational organization; CER=Constant Exchange Rates



### Pharma Division sales 2014 (vs. 2013) Top 20 products

	Glol	bal	U	S	Euro	ре	Jap	an	Interna	ational
	CHFm	% CER	CHFm	% CER	CHFm	% CER	CHFm	% CER	CHFm	% CER
MabThera/Rituxan	6,900	2	3,334	1	2,014	6	226	0	1,326	-1
Avastin	6,417	6	2,682	6	1,958	3	711	9	1,066	12
Herceptin	6,275	7	1,967	12	2,234	3	270	1	1,804	8
Lucentis	1,701	2	1,701	2	-	-	-	-	-	-
Tarceva	1,292	-1	641	7	303	-11	99	10	249	-10
Actemra/RoActemra	1,224	23	406	31	433	22	214	19	171	14
Pegasys	1,015	-20	194	-36	236	-33	60	28	525	-8
Xolair	975	25	975	25	-	-	-	-	-	-
Tamiflu	959	54	686	62	74	292	113	18	86	7
Perjeta	918	189	540	150	238	253	79	281	61	326
CellCept	811	-4	195	-3	216	-8	57	-9	343	-1
Xeloda	776	-46	185	-70	92	-70	90	-8	409	-9
Activase/TNKase	747	11	698	11	-	-	-	-	49	13
Valcyte/Cymevene	726	7	386	9	182	6	-	-	158	5
Pulmozyme	597	7	386	10	122	-1	0	-	89	5
Kadcyla	536	135	282	29	176	*	35	-	43	*
NeoRec./Epogin	460	-8	-	-	189	-12	57	-37	214	12
Mircera	417	5	-	-	101	-1	195	0	121	18
Zelboraf	301	-12	69	-44	188	-3	-	-	44	41
Madopar	292	-3	_	-	106	-4	17	-3	169	-1



# Pharma Division sales 2014 (vs. 2013) Recently launched products

	Glob	bal	U	IS	Eur	ope	Jap	oan	Intern	ational
	CHFm	% CER	CHFm	% CER						
Erivedge	128	75	83	27	39	399	-	-	6	*
Gazyva	49	*	43	*	5	-	-	-	1	-
Esbriet	44	-	5	_	36	-	-	-	3	-



# Pharma Division CER sales growth<sup>1</sup> in % *Global top 20 products*

	Q4/13	Q1/14	Q2/14	Q3/14	Q4/14
MabThera/Rituxan	7	3	5	1	-1
Avastin	13	9	4	6	7
Herceptin	7	3	9	9	7
Lucentis	22	8	4	2	-5
Tarceva	4	-5	3	0	-2
Actemra/RoActemra	23	23	21	28	20
Pegasys	-20	-19	-10	-22	-29
Xolair	17	15	22	33	29
Tamiflu	-27	9	-36	121	129
Perjeta	394	274	277	227	103
CellCept	-10	-1	-11	0	-4
Xeloda	-3	-19	-50	-61	-56
Activase/TNKase	19	-1	26	19	5
Valcyte/Cymevene	26	12	12	19	-9
Pulmozyme	18	3	8	13	4
Kadcyla	_	474	105	103	110
NeoRec./Epogin	-14	-9	-8	-12	-1
Mircera	23	21	2	-1	0
Zelboraf	26	-2	-9	-13	-24
Madopar	9	-20	3	-6	13

CER=Constant Exchange Rates <sup>1</sup> Q4/13 vs. Q4/12; Q1-Q4/14 vs. Q1-Q4/13



# Pharma Division CER sales growth<sup>1</sup> in % *Top 20 products by region*

\* over 500%

	US			Europe					Japan				International			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
MabThera/Rituxan	-2	8	-4	5	6	8	4	7	20	-17	5	-4	12	-2	9	-17
Avastin	6	6	3	7	8	2	1	3	27	-5	13	5	7	9	15	16
Herceptin	4	17	10	17	2	4	4	2	23	-12	5	-7	0	12	14	6
Lucentis	8	4	2	-5	-	-	-	-	-	_	-	-	-	-	-	-
Tarceva	-6	16	11	9	-12	-12	-9	-9	42	6	7	-6	-6	-9	-13	-13
Actemra/RoActemra	22	30	39	31	20	20	25	22	49	5	21	11	3	28	21	6
Pegasys	-40	-14	-51	-49	-19	-32	-38	-46	16	45	48	-1	-7	3	-8	-17
Xolair	15	22	33	29	-	-	-	-	-	-	-	-	-	-	-	-
Tamiflu	-9	22	155	127	*	-71	49	-93	-17	-74	238	190	-8	-44	37	350
Perjeta	161	205	202	86	*	287	228	171	-	-	375	32	*	*	341	177
CellCept	-7	-6	16	-18	-10	-5	-6	-11	5	-14	-12	-13	6	-16	-3	13
Xeloda	-15	-80	-93	-92	-57	-71	-76	-77	8	-23	-6	-8	-3	-2	-19	-10
Activase/TNKase	0	27	18	4	-	-	-	-	-	-	-	-	-4	19	27	12
Valcyte/Cymevene	26	8	21	-13	5	10	22	-9	-	_	-	-	-7	24	12	-1
Pulmozyme	2	10	20	9	2	-1	-5	-2	-	_	_	-	10	9	10	-1
Kadcyla	315	16	3	-7	-	*	*	*	-	-	-	-	-	*	*	*
NeoRec./Epogin	_	_	_	-	-14	-10	-15	-10	-26	-45	-38	-39	7	12	3	28
Mircera	_	_	-	-	8	-1	-3	-8	36	-12	-2	-11	8	32	1	30
Zelboraf	-40	-46	-38	-51	12	8	-12	-16	-	-	_	-	98	56	65	-1
Madopar	_	-	-	-	-9	-2	-5	-2	4	-6	-2	-5	-29	7	-7	24

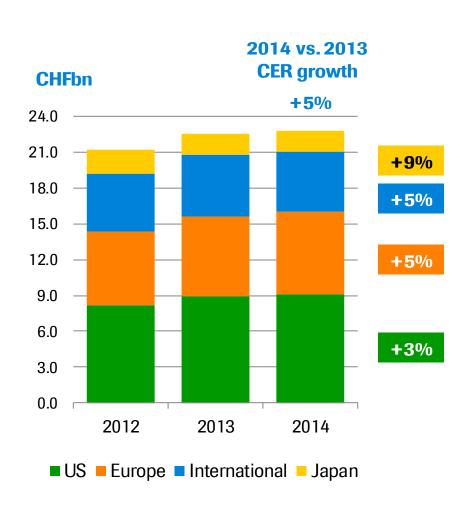


# **CER sales growth (%)** *Quarterly development*

	2	2013 vs. 2012 2014 vs.							
	Q1	Q2	Q3	Q4	Q1	Q2	<b>Q</b> 3	Q4	
Pharmaceuticals Division	7	4	9	7	4	4	4	5	
United States	13	7	16	5	3	8	4	10	
Europe	1	2	3	2	5	1	1	4	
Japan	2	2	4	2	19	-4	8	5	
International	8	2	5	18	1	3	6	0	
<b>Diagnostics Division</b>	1	4	7	5	7	5	7	7	
Roche Group	6	4	8	7	5	4	5	6	

### 2014: Oncology franchise





#### 2014 sales of CHF 22.797bn

#### US

 HER2 franchise (including strong uptake of PERJETA & Kadcyla), and Avastin (+6%) driving growth and performance

#### **Europe**

 Growth mainly driven by HER2 franchise (with strong uptake of PERJETA & Kadcyla), as well as MabThera (+6%)

#### International

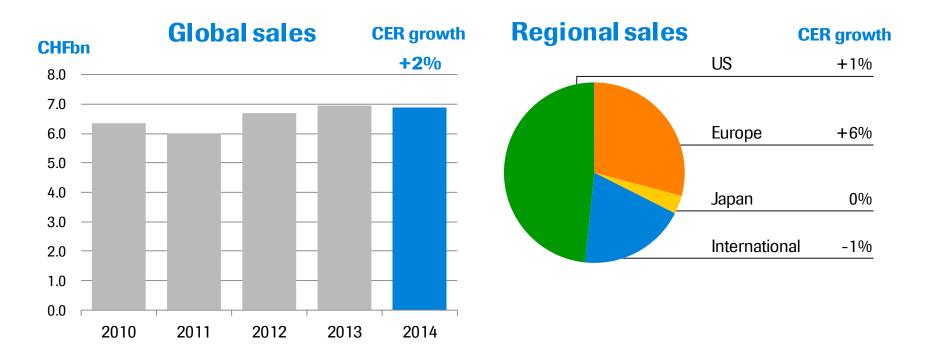
 Continued strong growth for Avastin (+12%) and Herceptin (+8%)

#### Japan

Growth driven largely by Avastin (+9%)

### MabThera/Rituxan



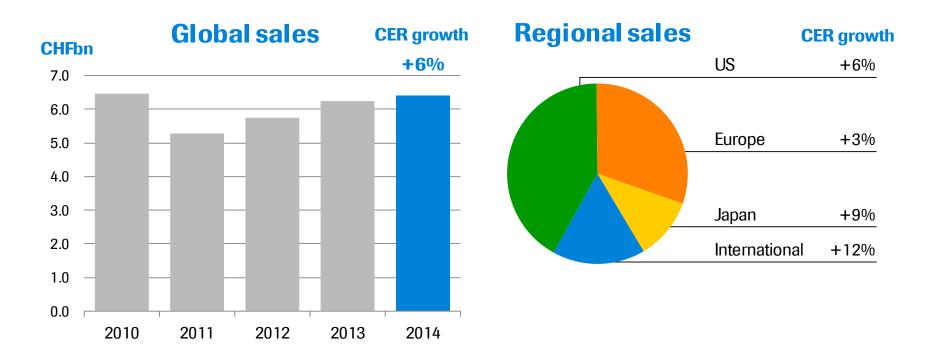


#### 2014 sales of CHF 6.900bn

- Europe: Growth driven by increased market share in follicular lymphoma, as well as CLL (1L)
- US: Sales stable but comparison distorted by 340B baseline effect (+5% excl. base effect)
- International: Growth impacted by economic conditions in Russia but demand remained strong in Latin America

### **Avastin**



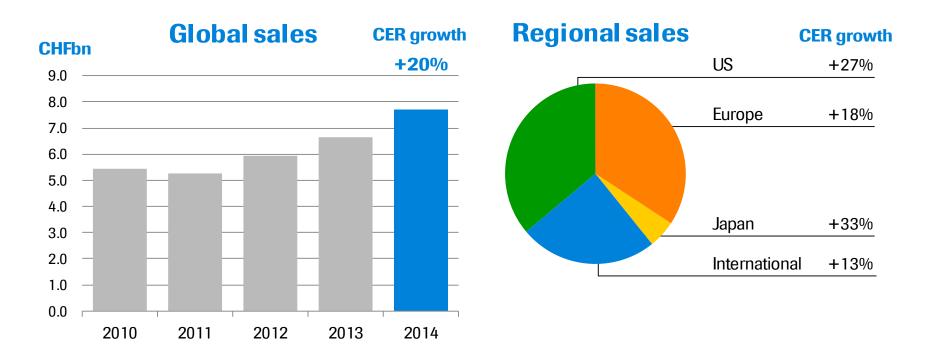


#### **2014 sales of CHF 6.417bn**

- Europe: Growth driven by further uptake in ovarian and strong demand across other indications
- US: Sales driven by growing demand in colorectal, cervical and ovarian cancer
- Japan: Driven by higher sales in breast cancer, as well as ovarian cancer and malignant glioma
- International: Strong growth driven by launches in a number of markets for ovarian cancer treatment, as well as by demand in colorectal cancer





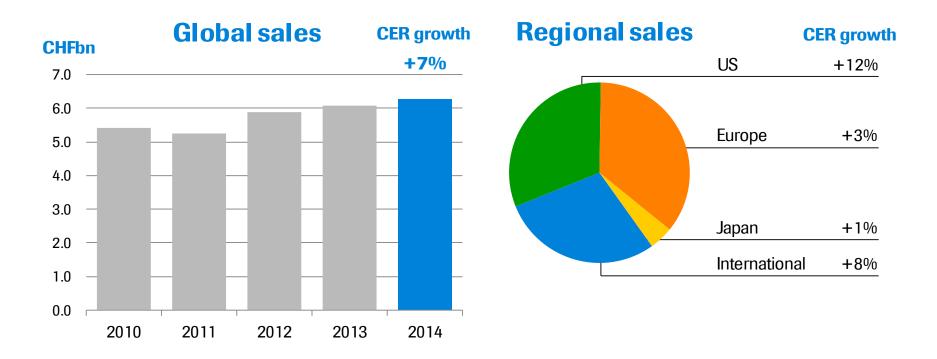


#### 2014 sales of CHF 7.729bn

- Strong growth driven by continued uptake of PERJETA in 1/2L mBC and in the neoadjuvant setting, (particularly US), as well as by Kadcyla in 2L mBC
- Continued strong growth in Herceptin benefiting from higher volumes / prolonged treatment times

### Herceptin





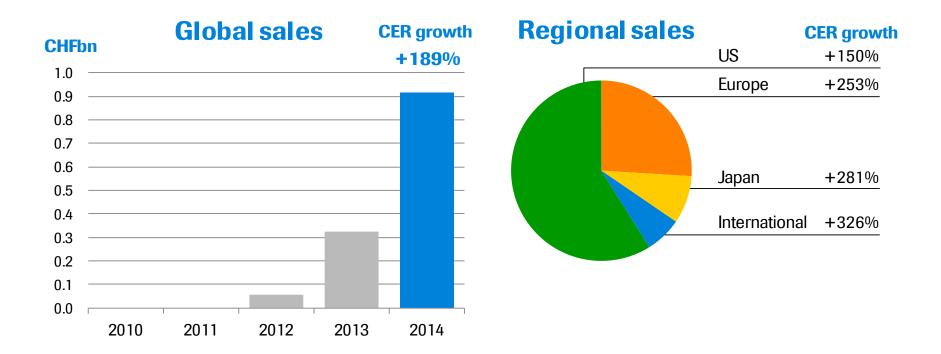
#### 2014 sales of CHF 6.275bn

- US: Continued growth in mBC (1L)
- Europe: Strong demand in Germany; subcutaneous formulation now available in many markets
- Japan: Increased usage in combination with PERJETA
- International: Strong growth in Latin America driven by access in public markets, as well as Asia, particularly from the patient assistance program in China

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### **Perjeta**



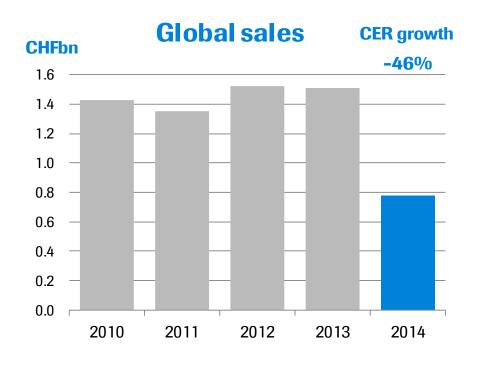


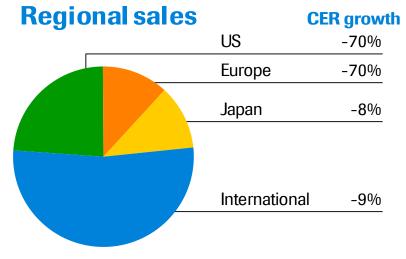
#### 2014 sales of CHF 0.918bn

- Perjeta sales grew in all regions with strong uptake in the US, Germany and France
  - Approved in all major markets for 1L mBC (US, EU, Japan and most E7)
  - Neoadjuvant Indication approved in several markets
  - Also benefitting from impressive OS results of CLEOPATRA study

### Xeloda





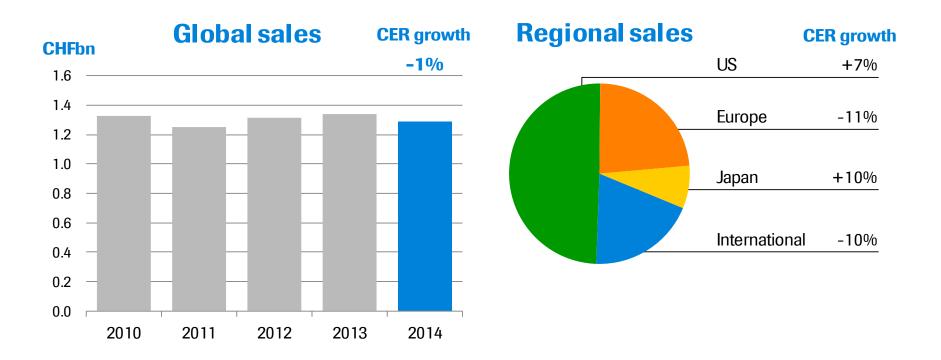


#### **2014 sales of CHF 0.776bn**

- Overall impact due to loss of exclusivity (LoE):
  - US: LoE in February 2014
  - Europe: LoE in December 2013

### **Tarceva**



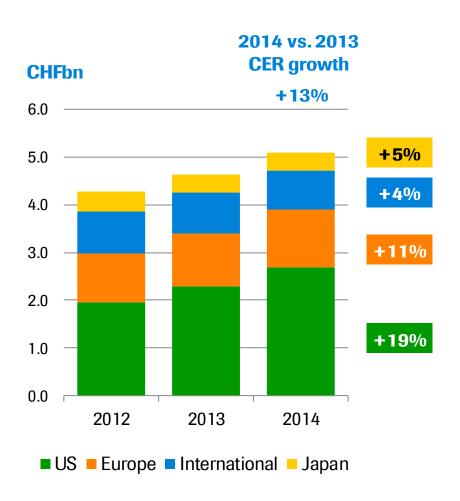


#### 2014 sales of CHF 1.292bn

- Europe: Increased demand in 1L EGFR Mut+ market offset by decline 2L EGFR WT NSCLC
- Japan: Good growth following launch of 1L Mut+ NSCLC indication in Q3 2014
- International: Local competition in China

### 2014: Immunology franchise





#### 2014 sales of CHF 5.087bn

 Overall strong demand for immunology medicines, notably in treatment of rheumatoid arthritis (RA) with Actemra (+23%) and Xolair (+25%) for chronic hives and allergic asthma

#### **Actemra/RoActemra**

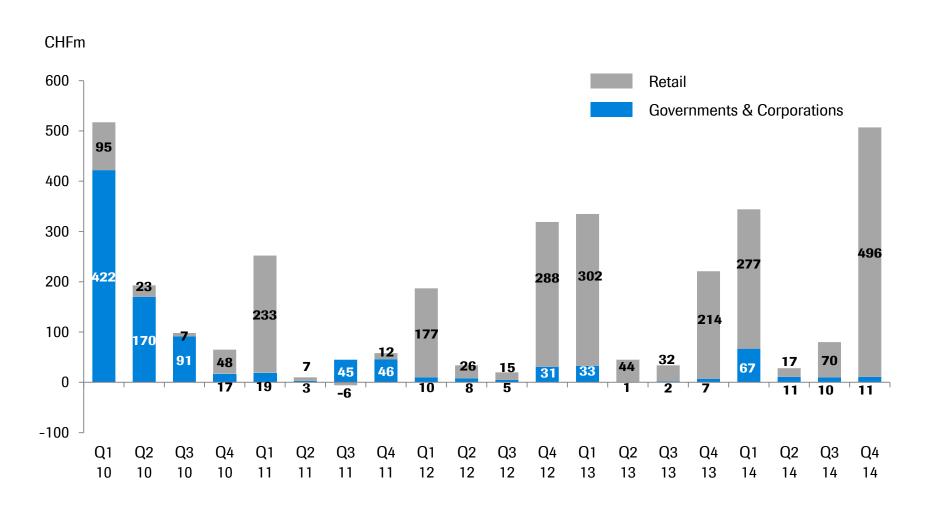
- US, EU & Japan: Strong growth driven by increased use in monotherapy and earlier use for RA, with significant uptake of new SC formulation. EU approval for early-stage RA
- International: Growth driven by strong launches in China & Turkey, and continued fast uptake in Australia & Argentina

#### **Xolair**

 Approved by FDA to treat a form of chronic hives in 2014, adding to its use in allergic asthma



# Tamiflu quarterly sales 2010 - 2014 Retail and Governments/Corporations





### **Pipeline summary**

Marketed products additional indications

**Global Development late-stage trials** 

pRED (Roche Pharma Research & Early Development)

gRED (Genentech Research & Early Development)

Roche Group 2014 results

### **Diagnostics**

Foreign exchange rate information



# Diagnostics Division CER growth By Region and Business Area (vs. 2013)

	Globa	L	North Amo	erica	<b>EMEA</b>	1	RoW	
	0/0	CER	%	CER	%	CER	9/0	CER
	CHFm gr	owth	CHFm gr	owth	CHFm gr	owth	CHFm g	rowth
Professional Diagnostics	6,045	8	1,236	6	2,585	4	2,224	15
Diabetes Care	2,392	1	442	-6	1,475	2	475	6
Molecular Diagnostics	1,613	6	579	10	628	4	406	3
Tissue Diagnostics	716	10	415	6	198	17	103	20
Diagnostics Division	10,766	6	2,672	4	4,886	4	3,208	12



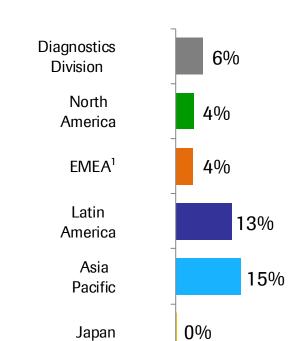
## Diagnostics Division quarterly sales and CER growth<sup>1</sup>

	<b>Q3 13</b> CHFm % 0		<b>Q4</b> 13		Q1 14 CHFm %		<b>Q2</b> 14		<b>Q3</b> 100 CHFm %		<b>Q4</b> 14 CHFm %	
Professional Diagnostics	1,426	9	1,521	10	1,392	9	1,512	8	1,493	8	1,648	8
Diabetes Care	576	3	678	-4	538	5	602	-4	581	4	671	1
Molecular Diagnostics	383	4	416	3	370	4	392	3	403	8	448	7
Tissue Diagnostics	159	8	184	10	156	4	178	14	175	13	207	10
Dia Division	2,544	7	2,799	5	2,456	7	2,684	5	2,652	7	2,974	7

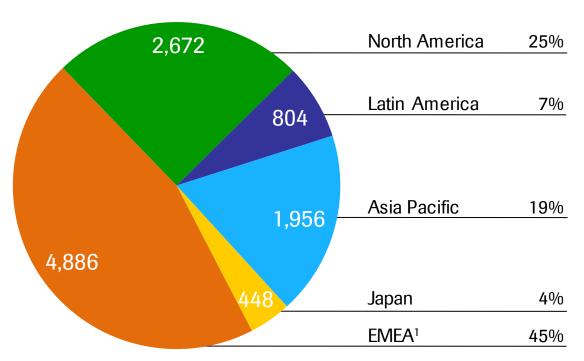


# **2014: Diagnostics Division sales** *Growth driven by Asia Pacific*



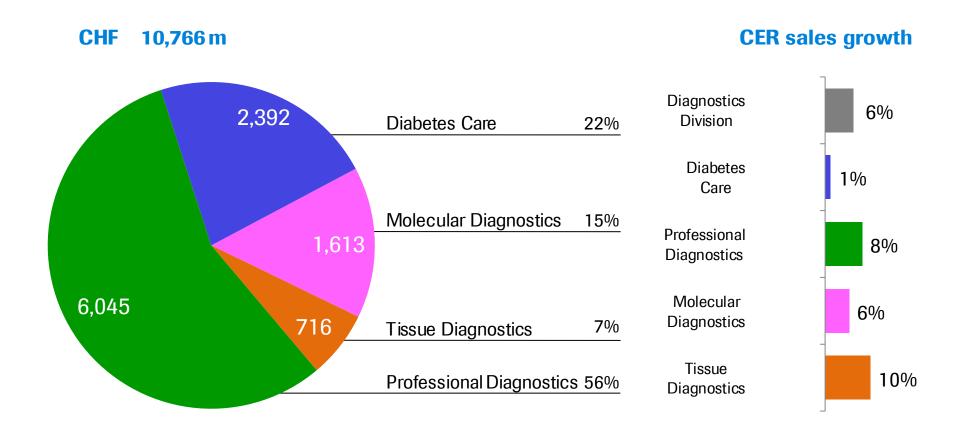


**CER** sales growth



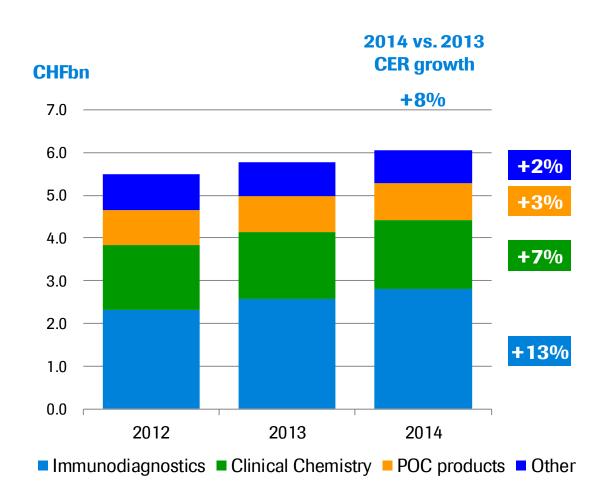


# **2014: Diagnostics Division sales** *Growth driven by Professional Diagnostics*





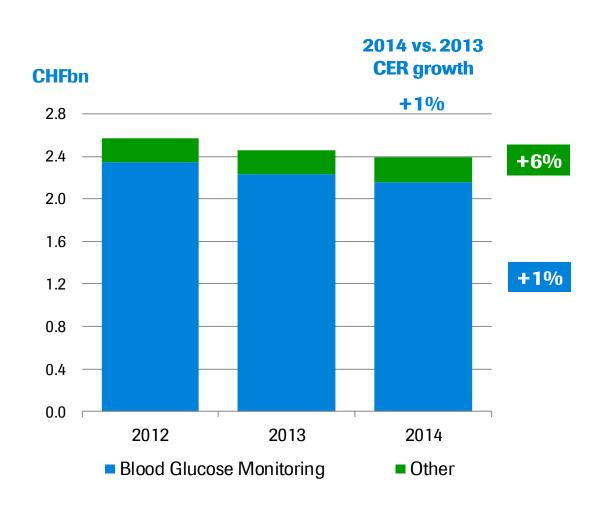
# Professional Diagnostics Strong growth driven by Immunodiagnostics





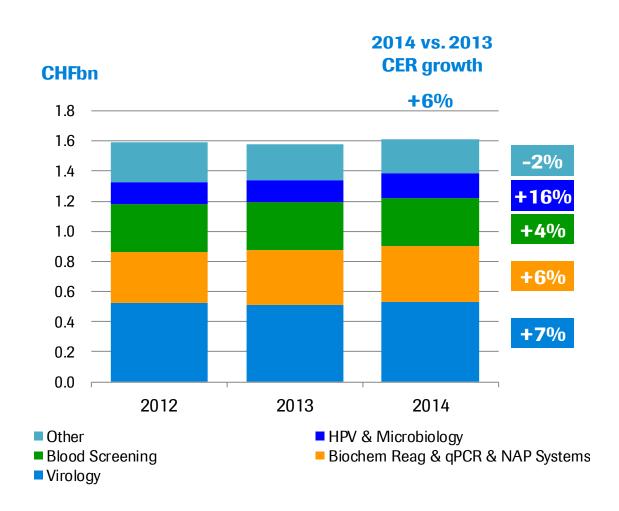
### **Diabetes Care**

### Adapting to a challenging market environment



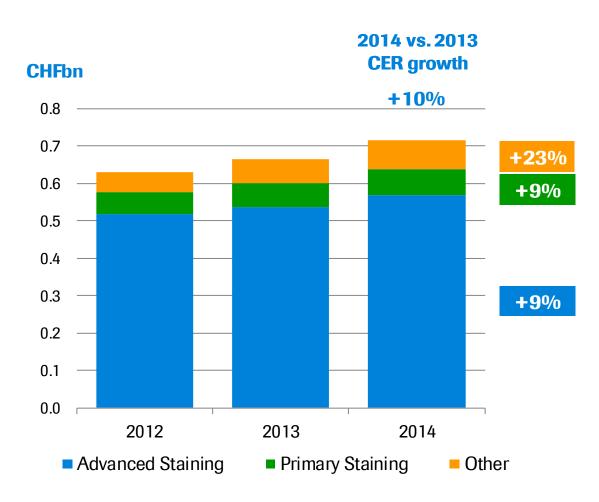


### Molecular Diagnostics Growth driven by Virology





# Tissue Diagnostics Strong growth in EMEA<sup>1</sup> and North America





# **2015: Key planned product launches** *Professional Diagnostics*

Product	Description	Region
cobas c 513	dedicated HbA1C analyzer	EU
cobas t 411	core lab coagulation analyzer	EU
Cobas 8100 V2	integrated pre- and post-analytical solution	WW
CoaguChek Pro II	professional system for PT and aPTT testing	EU
HTLV	human T-lymphotropic virus diagnostics test	EU
Cobas h 232 Troponin T	Point of Care test version of Elecsys cTNT-hs	EU



# **2015: Key planned product launches** *Molecular Diagnostics*

Product	Description	Region
cobas® 6800/8800	medium to high volume automated real-time PCR	US
cobas® 6800/8800 MPX	multiplex bloodscreening test	US
cobas® 6800/8800 HBV	quantitative HBV viral load test	EU
cobas® 4800 HIV-1 cobas® 4800 HCV cobas® 4800 HBV	quantitative HIV viral load test quantitative HCV viral load test quantitative HBV viral load test	EU
cobas® EGFR Test v2	detection of EGFR in plasma	EU
cobas® Liat Influenza A/B + RSV	POC detection	US



# **2015: Key planned product launches** *Tissue Diagnostics*

Product	Description	Region
VENTANA HE 600	automated H&E staining platform	WW



## **2015: Key planned product launches** *Diabetes Care*

Product	Description	Region
Accu-Chek Active no-code	next-gen. bG meter, no coding of test strips	WW
Accu-Chek Connect	bG meter with connectivity to smartphones, mobile applications and cloud	US



### **Pipeline summary**

Marketed products additional indications

**Global Development late-stage trials** 

pRED (Roche Pharma Research & Early Development)

gRED (Genentech Research & Early Development)

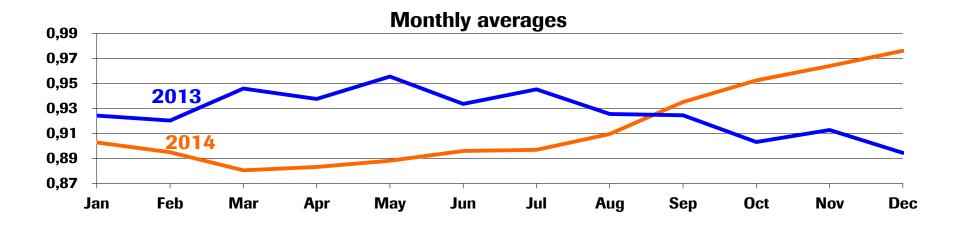
**Roche Group 2014 results** 

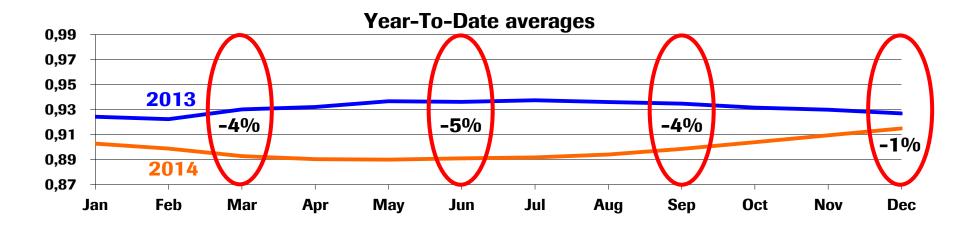
**Diagnostics** 

### Foreign exchange rate information

### **CHF / USD**

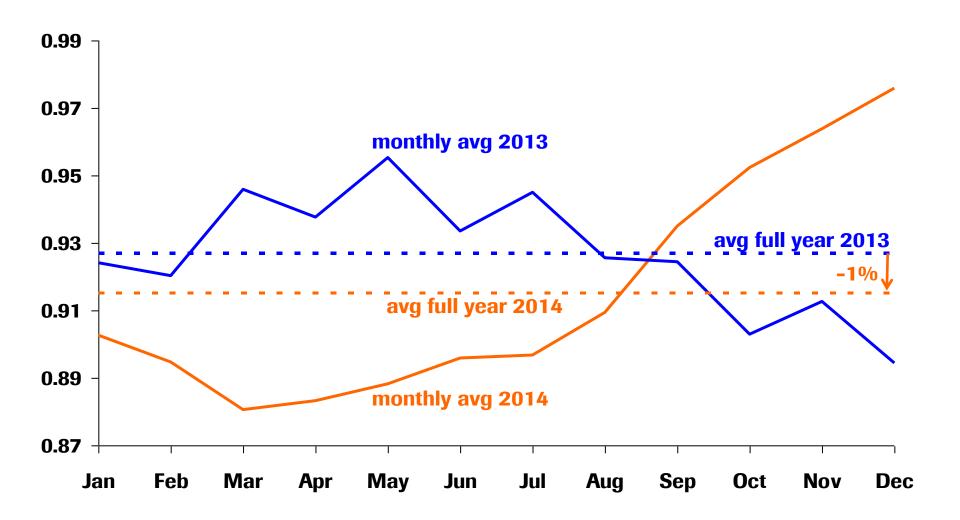






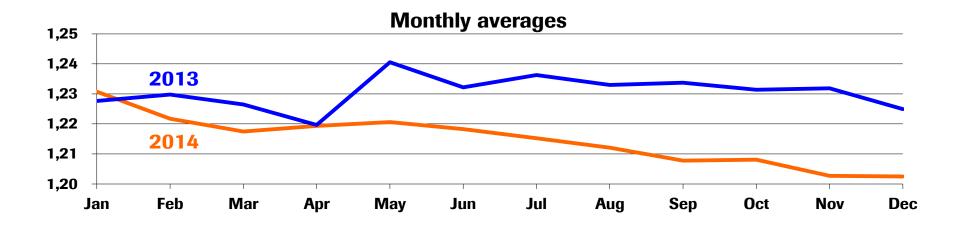
### **CHF / USD**

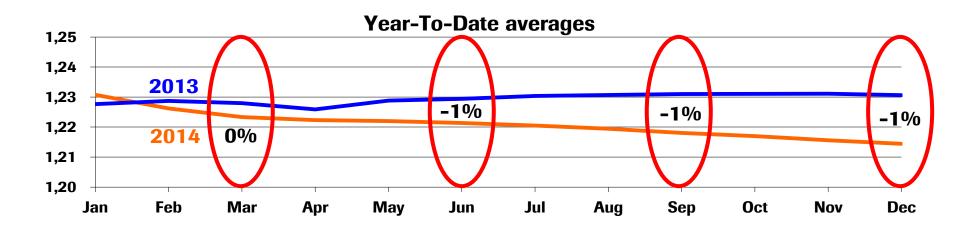




### **CHF / EUR**

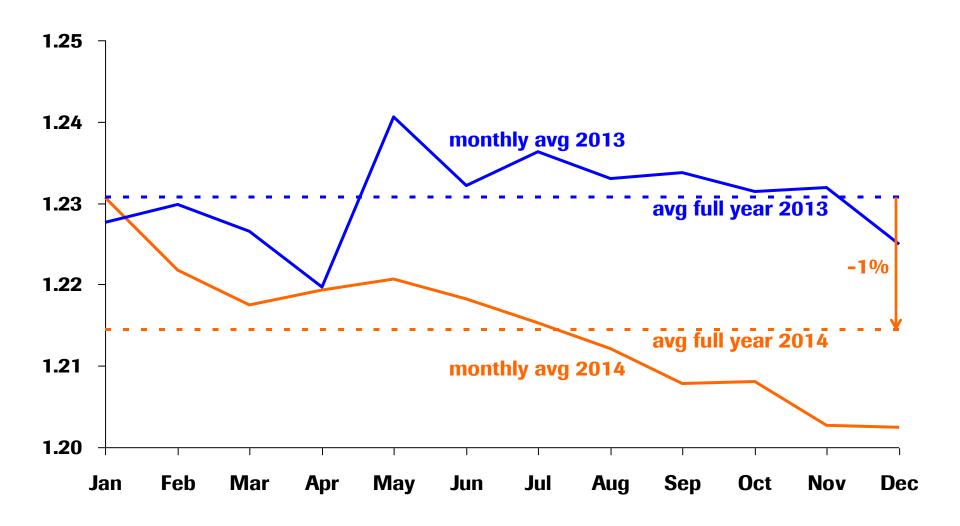






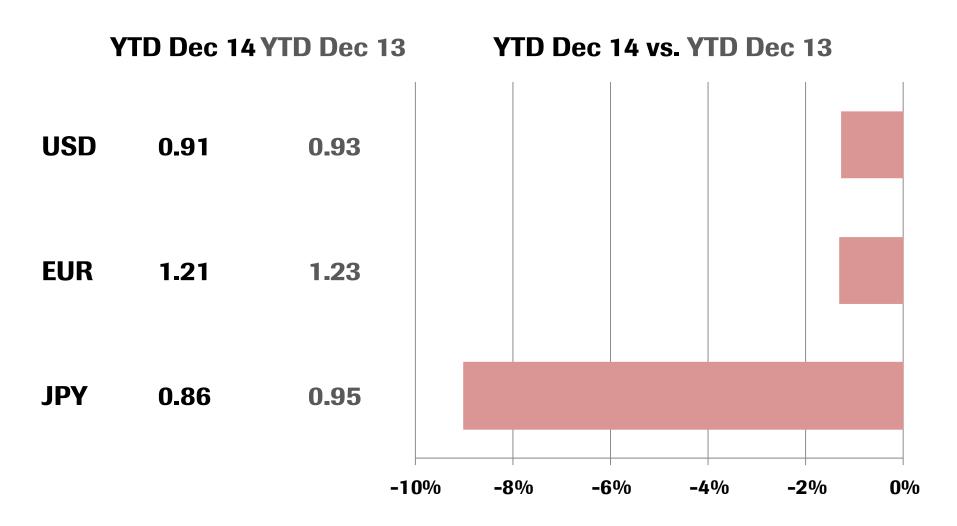
### **CHF / EUR**





### **Average exchange rates**





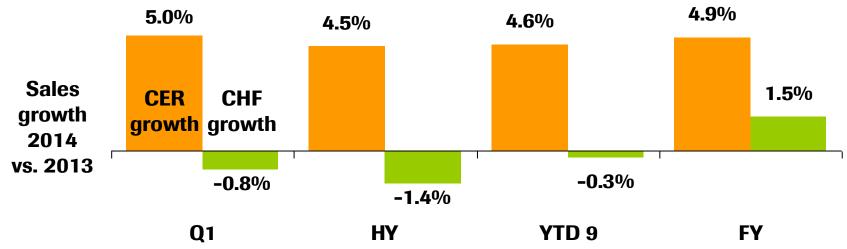


# Exchange rate impact on sales growth In 2014 negative impact from Latin American currencies, JPY and USD

#### Development of average exchange rates versus prior year period

CHF / EUR	<b>-0.4</b> %	<b>-0.7</b> %	-1.1%	-1.3%
CHF / USD	<b>-4.0</b> %	<b>-4.8</b> %	<b>-3.9</b> %	-1.3%
CHF / JPY	-13.9%	<b>-11.4</b> %	<b>-9.8</b> %	<b>-9.0</b> %





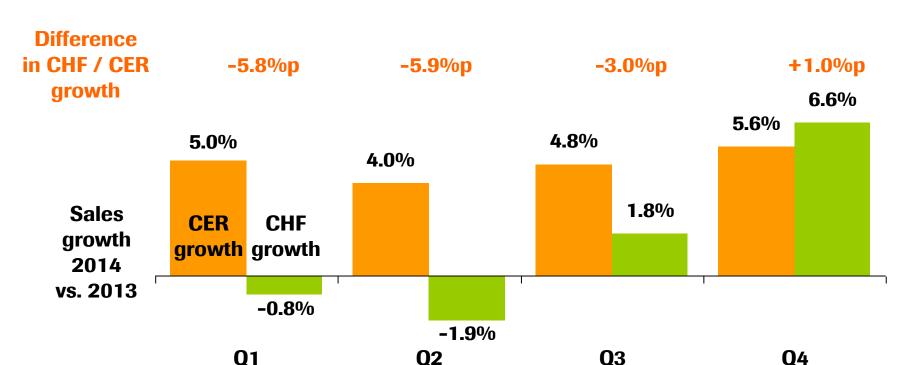
CER=Constant Exchange Rates



# Exchange rate impact on sales growth In 2014 negative impact from Latin American currencies, JPY and USD

#### Development of average exchange rates versus prior year period

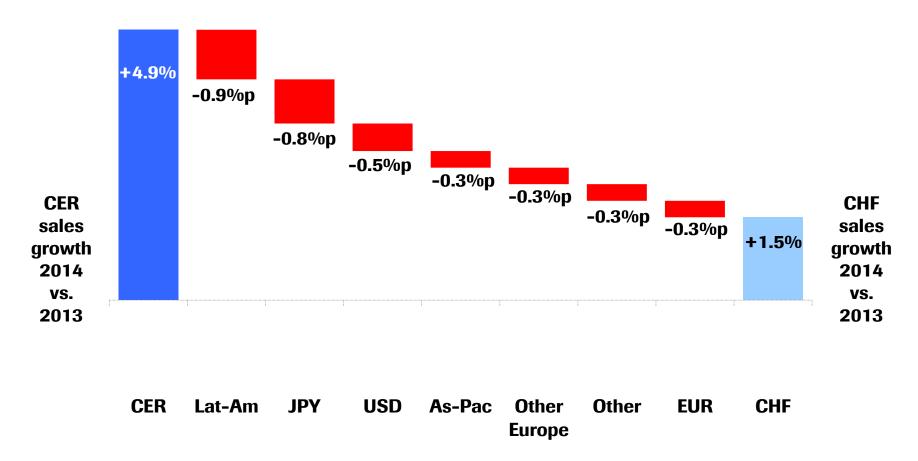
CHF / EUR	<b>-0.4</b> %	-0.9%	<b>-1.9</b> %	<b>-2.0</b> %
CHF / USD	<b>-4.0</b> %	<b>-5.6</b> %	-1.9%	+6.7%
CHF / JPY	<b>-13.9</b> %	-8.9%	<b>-6.6</b> %	<b>-6.3</b> %



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# Exchange rate impact on sales growth Negative impact from Latin American currencies, JPY and USD





## Doing now what patients need next