
Roche

Pipeline summary

Marketed products additional indications

Global Development late-stage trials

pRED (Roche Pharma Research & Early Development)

gRED (Genentech Research & Early Development)

Roche Group HY 2014 sales

Diagnostics

Foreign exchange rate information

Changes to the development pipeline
HY 2014 update

New to Phase I	New to Phase II	New to Phase III	New to Registration
3 NMEs added by pRED **RG7342** mGlu5 PAM schizophrenia **RG7775** MDM2 (4) antagonist IV prodrug AML **RG7935** a-synuclein MAb Parkinson's Disease **1 NME added by gRED** **RG7882** ADC - ovarian cancer	**4 NMEs moved from phase 1** **RG1662** GABRA5 NAM - Down syndrome **RG7155** CSF-1R MAb - PVNS **RG7604** taselisib (PI3k beta sparing) – solid tumors **RG7221** Ang2-VEGF MAb - colorectal cancer **1 AI** **RG7601** Bcl-2 inh – DLBCL **NME ACE910 shown as RG6013** FIXA/FX bispecific MAb – hemophilia A (inlicensed from Chugai)	**1 NME moved from phase 2** **RG7413** etrolizumab - ulcerative colitis **1 Chugai NME moved from phase 1** **IL6R** MAb in neuromyelitis optica **2 AIs** **RG3502** Kadcyla + Perjeta HER2-positive BC adjuvant **RG3502** Kadcyla + Perjeta HER2-positive BC neoadjuvant	**1 AI following EU/US submission** **RG435** Avastin – recurrent cervical cancer
Removed from Phase I	**Removed from Phase II**	**Removed from Phase III**	**Removed from Registration**
1 AI **RG3638** onartuzumab – liver cancer **2 NMEs** **RG7863** TLR7 agonist (2) - HBV **RG7598** ADC - multiple myeloma **1 NME terminated by Roche and Chugai** **RG7167** MEK inh - solid tumors	**1 AI** **RG3638** onartuzumab - mCRC 1st line **2 NMEs** **RG7415** rontalizumab – systemic lupus erythematosus **RG7652** PCSK9 MAb - metabolic diseases	**2 NMEs** **RG3638** onartuzumab - gastric cancer **RG3806** oral octreotide - acromegaly **2 AIs** **RG435** Avastin - HER2-neg. BC adjuvant **RG435** Avastin - high risk carcinoid	**1 AI following EU Approval** **RG1569** Actemra - RA sc formulation

Status as of July 24, 2014

Roche Group development pipeline

Phase I
(28 NMEs + 8 AIs)

Oncology

RG6016	LSD1 inh	AML
RG7116	HER3 MAb	solid tumors
RG7304	Raf & MEK dual inh	solid tumors
RG7388	MDM2 ant	solid & hem tumors
RG7446	PD-L1 MAb+Tarceva	NSCLC EGFR+
RG7446	PD-L1 MAb+Zelboraf	m. melanoma
RG7446	PD-L1 MAb+Avastin+chemo	solid tumors
RG7446	PD-L1 MAb+cobimetinib	solid tumors
RG7446	PD-L1 MAb	solid tumors
RG7450	Steap 1 ADC	prostate ca.
RG7458	MUC16 ADC	ovarian & pancreatic ca.
RG7600	Mesothelin ADC	pancreatic ca
RG7601	Bcl-2 inh + Gazyva	CLL
RG7601	Bcl-2 inh	heme indications
RG7636	ETBR ADC	metastatic melanoma
RG7666	PI3k inh	glioblastoma 2L
RG7741	ChK1 inh	solid tum & lymphoma
RG7775	MDM2 (4) IV prodrug	AML
RG7813	CEA IL2v	solid tumors
RG7841	ADC	solid tumors
RG7842	ERK inh	solid tumors
RG7845	-	heme tumors
RG7882	ADC	ovarian ca
CHU	PI3K inh	solid tumors

Other disease areas

RG7624	IL-17 MAb	autoimmune diseases
RG7795	TLR7 agonist	HBV
RG7641	aldosterone synth inh	kidney disease
RG7697	GIP/GLP-1 dual ago	type 2 diabetes
CHU	URAT 1 inh	gout
RG7203	PDE10A inh	schizophrenia
RG7342	mGlu5 PAM	schizophrenia
RG7410	TAAR1 ago	schizophrenia
RG7800	SMN2 splicer	spinal muscular atrophy
RG7935	a-synuclein MAb	Parkinson's Disease
RG3645	Lucentis sust. deliv.	AMD/RVO/DME
RG7716	VEGF-ANG2 MAb	wAMD

New Molecular Entity (NME)
Additional Indication (AI)

Oncology
Immunology
Infectious Diseases
CardioMetabolism
Neuroscience
Ophthalmology
Other

RG-No **Roche Genentech managed**
CHU **Chugai managed**

Status as of July 24, 2014

Roche Group development pipeline

Phase II
(29 NMEs + 8 AIs)

RG3616	Erivedge	AML
RG7155	CSF-1R MAb	PVNS
RG7221	Ang2-VEGF MAb	colorectal cancer
RG7321	pictilisib (PI3K inh)	solid tumors
RG7440	ipatasertib (AKT inh)	solid tumors
RG7446	PD-L1 MAb	NSCLC 2nd/3rd line
RG7446	PD-L1 MAb + Avastin	RCC
RG7446	PD-L1 MAb	bladder cancer
RG7593	pinatuzumab vedotin (CD22 ADC)	hem tumors
RG7596	polatuzumab vedotin (CD79bADC)	hem tumors
RG7597	HER3/EGFR MAb	m. epithelial tumors
RG7599	NaPi2b ADC	Pt-resistant ovarian cancer
RG7601	Bcl-2 inh	CLL rel/refract 17pdel
RG7601	Bcl-2 inh	DLBCL
RG7604	taselisib (PI3K inh beta sparing)	solid tumors
RG7686	glypican-3 MAb	liver cancer
RG7853	alectinib (ALK inhibitor)	NSCLC
RG1569	Actemra	systemic sclerosis
RG3637	lebrikizumab	idiopathic pulmonary fibrosis
RG7449	quilizumab	asthma
CHU	IL-31R MAb	atopic dermatitis
RG7128	mericitabine	HCV
RG7227	danoprevir	HCV
RG7667	CMV MAb	CMV
RG7745	Flu A MAb	influenza
RG7790	setrobuvir	HCV
RG7929	LptD antibiotic	antibacterial
RG1512	inclacumab	ACS/CVD
RG1577	MAO-B inh	Alzheimer's
RG1578	decoglurant (mGlu2 NAM)	depression
RG1662	GABRA5 NAM	Down Syndrome
RG1678	bitopertin	obsessive compulsive dis.
RG7090	basimglurant (mGlu5 NAM)	TRD
RG7314	V1 receptor antag	autism
RG7412	crenezumab	Alzheimer's
RG7417	lampalizumab (factor D)	geo. atrophy
RG6013	FIXa /FX bispecific MAb	hemophilia A

Phase III
(8 NMEs + 18 AIs)

RG435	Avastin	NSCLC adj
RG435[1]	Avastin	ovarian cancer 1st line
RG435[1]	Avastin	rel. ovarian ca. Pt-sensitive
RG1273	Perjeta	HER2+ mBC 2nd line
RG1273	Perjeta	HER2+ BC adj
RG1273	Perjeta	HER2+ gastric cancer
RG3502	Kadcyla	HER2+ gastric cancer
RG3502	Kadcyla +/- Perjeta	HER2+ mBC 1st l
RG3502	Kadcyla	HER2+ BC adj
RG3502	Kadcyla + Perjeta	HER2+ BC adj
RG3502	Kadcyla + Perjeta	HER2+ BC neoadj
RG7159	Gazyva (obinutuzumab)	DLBCL
RG7159	Gazyva (obinutuzumab)	iNHL relapsed
RG7159	Gazyva (obinutuzumab)	iNHL front-line
RG7204	Zelboraf	m. melanoma adj
RG7421	cobimetinib + Zelboraf	m. melanoma
RG7446	PD-L1 MAb	NSCLC 2nd line
RG7601	Bcl-2 inh	CLL rel/refract
RG1569	Actemra	giant cell arteritis
RG3637	lebrikizumab	severe asthma
RG7413	etrolizumab	ulcerative colitis
CHU	Suvenyl	enthesopathy
CHU	IL-6R MAb	neuromyelitis optica
RG1450	gantenerumab	Alzheimer's
RG1594	ocrelizumab	RMS
RG1594	ocrelizumab	PPMS

Registration
(1 NME + 4 AIs)

RG435	Avastin	recurrent cervical cancer
RG435	Avastin	rel. ovarian ca. Pt-resistant
RG435[2]	Avastin	glioblastoma 1st line
RG7159[3]	Gazyvaro (obinutuzumab)	CLL
RG1569[4]	Actemra	early RA

1 US only: FDA submission decision pending
2 Submitted in EU, US filing pending
3 Approved in US, submitted in EU
4 Submitted in EU

New Molecular Entity (NME)
Additional Indication (AI)

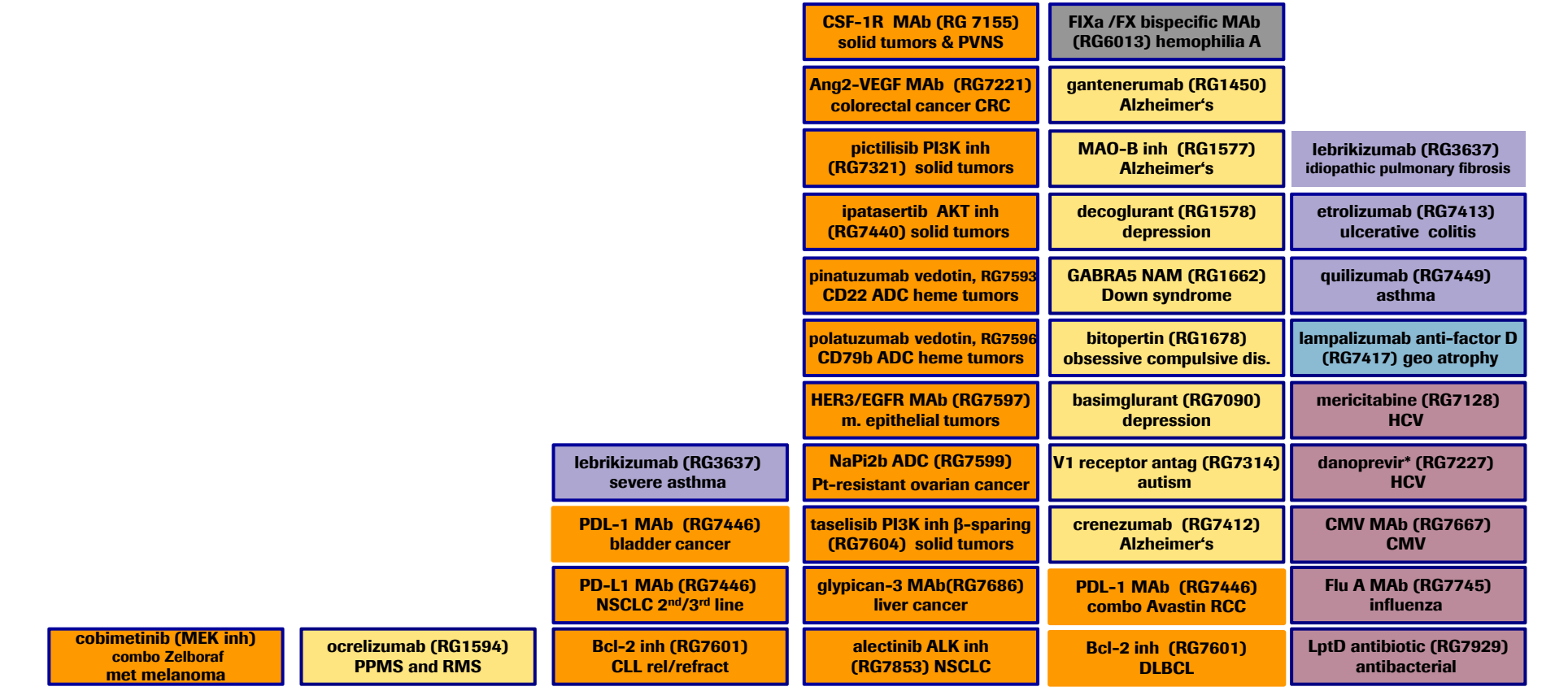
Oncology
Immunology
Infectious Diseases
CardioMetabolism
Neuroscience
Ophthalmology
Other

RG-No Roche Genentech managed
Chugai managed
RG105 MabThera is branded as Rituxan in US and Japan
RG1569 Actemra is branded as RoActemra in EU
RG7159 Gazyva is branded as Gazyvaro in EU

Status as of July 24, 2014

NME submissions and their additional indications

Projects currently in phase 2 and 3



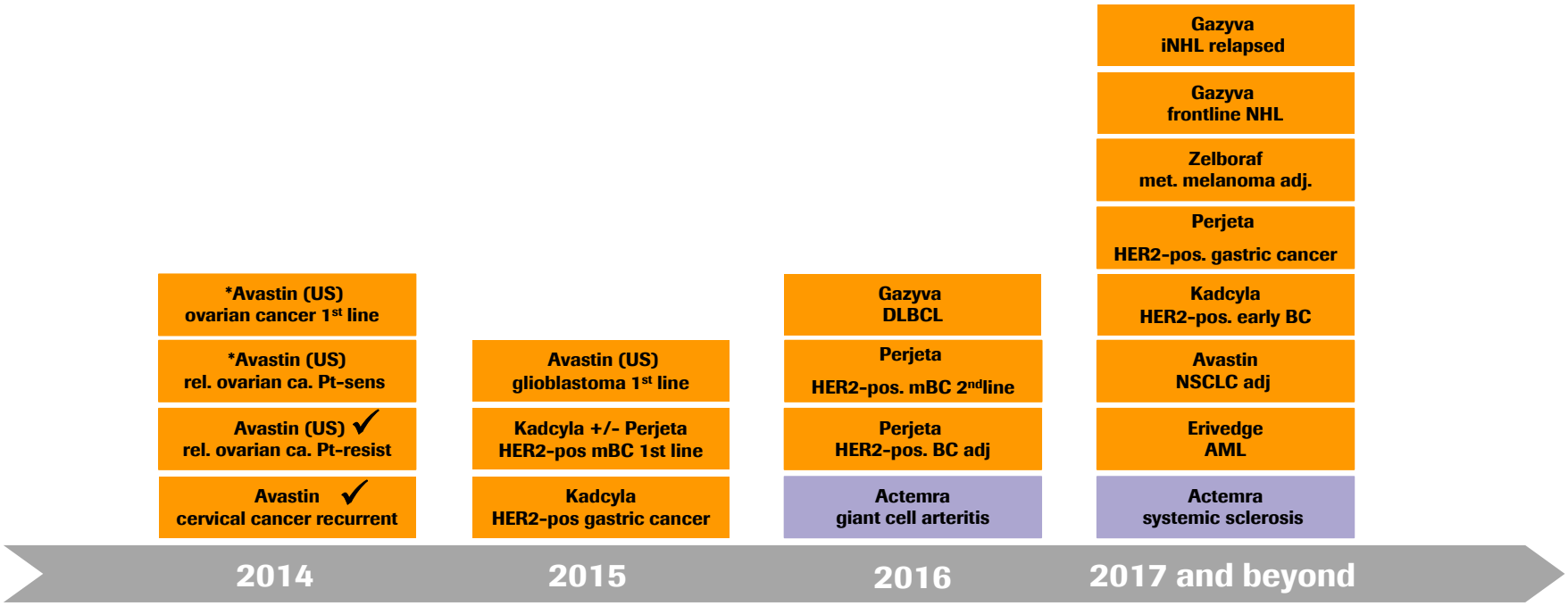
Unless stated otherwise, submissions are planned to occur in US and EU

* lead market China

Status as of July 24, 2014

Submissions of additional indications for existing products

Projects currently in phase 2 and 3



✓ Indicates submission to health authorities has occurred.

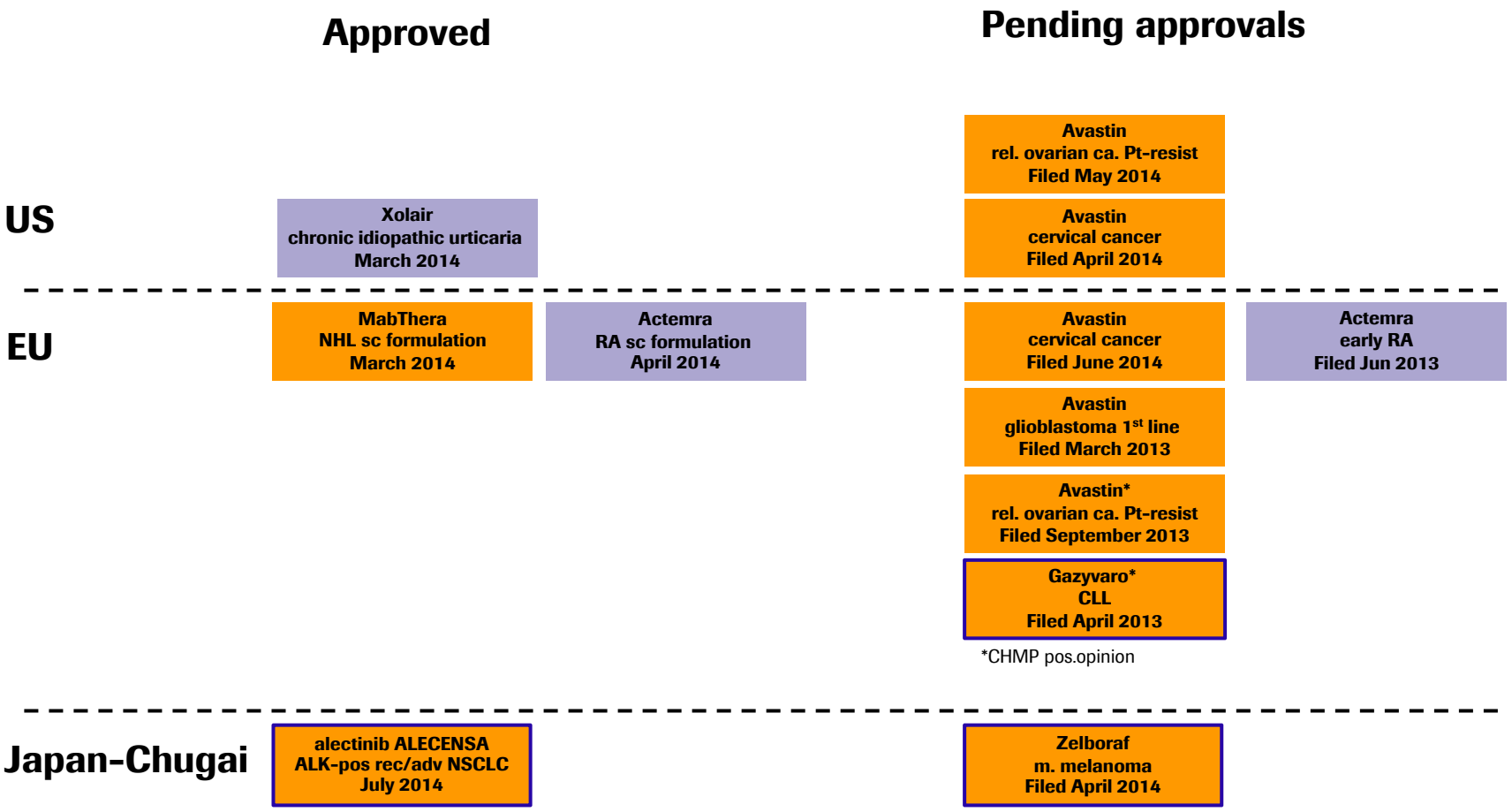
* Approved in the EU

Unless stated otherwise, submissions are planned to occur in US and EU.

Oncology
Immunology
Infectious Diseases
CardioMetabolism
Neuroscience
Ophthalmology
Other
NME

Status as of July 24, 2014

Major granted and pending approvals 2014



Status as of July 24, 2014

Pipeline summary

Marketed products additional indications

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Foreign exchange rate information

Avastin

Ovarian cancer clinical development programme

Patient population	Front-line metastatic ovarian cancer	
Phase/study	**Phase III GOG-0218**	**Phase III ICON7**
# of patients	N=1,873	N=1,528
Design	▪ **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) ▪ **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) ▪ **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)	▪ **ARM A:** Paclitaxel and carboplatin for 6 cycles ▪ **ARM B:** Paclitaxel and carboplatin plus concurrent Avastin for 6 cycles followed by Avastin alone for up to 18 cycles (12 months)
Avastin dose	▪ 15 mg/kg q3 weeks	▪ 7.5 mg/kg q3 weeks
Primary endpoint	▪ Progression-free survival	▪ Progression-free survival
Status	▪ Study met its primary endpoint in Q1 2010 ▪ Data presented at ASCO 2010 and 2011 ▪ Results: NEJM 2011 Dec 29;365(26):2484-96	▪ Study met its primary endpoint Q3 2010 ▪ Data presented at ESMO 2010 and ASCO 2011 ▪ Results: NEJM 2011 Dec 29;365(26):2473-83 ▪ OS data presented at ECC 2013
	▪ EMA approval Q4 2011 ▪ Re-evaluate FDA submission in 2014	

ASCO=American Society of Clinical Oncology; ESMO=European Society for Medical Oncology

Avastin

Ovarian cancer clinical development programme

Patient population	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	▪ **ARM A:** Carboplatin, gemcitabine, and concurrent placebo for 6-10 cycles, followed by placebo alone until disease progression ▪ **ARM B:** Carboplatin, gemcitabine, and concurrent Avastin for 6-10 cycles, followed by Avastin alone until disease progression.	▪ **ARM A:** Paclitaxel, topotecan or liposomal doxorubicin ▪ **ARM B:** Paclitaxel, topotecan or liposomal doxorubicin plus Avastin
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	▪ Study met its primary endpoint Q1 2011 ▪ Data presented at ASCO 2011 ▪ EMA approval received Q4 2012 ▪ Re-evaluate FDA submission in 2014	▪ Study met its primary endpoint Q2 2012 ▪ Data presented at ASCO 2012 ▪ Results published in JCO 2014 May 1;32(13):1309-16 ▪ Filed in EU Q3 2013 ▪ CHMP positive opinion Q2 2014 ▪ Filed with the FDA Q2 2014 ▪ FDA priority review granted July 2014

ASCO=American Society of Clinical Oncology; ECC=European Cancer Congress

Avastin

Cervical cancer clinical development programme

Patient population	Stage IVB, recurrent or persistent cervical cancer
Phase/study	**Phase III** **GOG-240**
# of patients	N=452
Design	▪ **ARM A:** Paclitaxel, cisplatin ▪ **ARM B:** Paclitaxel, cisplatin plus Avastin ▪ **ARM C:** Paclitaxel, topotecan ▪ **ARM D:** Paclitaxel, topotecan plus Avastin
Avastin dose	▪ 15 mg/kg q3 weeks
Primary endpoint	▪ Progression-free survival
Status	▪ Study met its primary endpoint Q1 2013 ▪ Results published in NEJM Feb. 2014; 370(8):734-43 ▪ Filed globally Q2 2014 ▪ FDA Priority Review granted July 2014

Avastin

High risk carcinoid, brain and breast cancer development programmes

Patient population	High risk carcinoid	Newly diagnosed glioblastoma	First-line HER2-negative metastatic breast cancer
Phase/study	**Phase III SWOG SO518**	**Phase III AVAglio**	**Phase III MERiDiAN**
# of patients	N=424	N=920	N=480
Design	▪ **ARM A:** Depot octreotide plus interferon alpha ▪ **ARM B:** Depot octreotide plus Avastin	▪ **ARM A:** Concurrent radiation and temozolomide plus placebo; followed by maintenance TMZ plus placebo for 6 cycles; then placebo until disease progression ▪ **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	▪ **ARM A:** Paclitaxel + Avastin ▪ **ARM B:** Paclitaxel + Placebo
Avastin dose	▪ 15 mg/kg q3 weeks	▪ 10 mg/kg q2 weeks or 15 mg/kg q3 weeks	▪ 10 mg/kg q2 weeks
Primary endpoint	▪ Progression-free survival	▪ Progression-free survival ▪ Overall survival	▪ PFS in ITT ▪ PFS in patients with high plasma VEGF-A
Status	▪ Recruitment completed ▪ Stopped at interim due to futility Q2 2014	▪ Co-primary endpoint of PFS met Q3 2012 ▪ Overall survival data presented at ASCO 2013 ▪ Filed in EU Q1 2013 ▪ Negative CHMP opinion Q2 2014 ▪ Re-examination ongoing	▪ FPI Q3 2012 ▪ Expect data in 2015

TMZ=temozolomide
ASCO=American Society of Clinical Oncology

Avastin

Adjuvant clinical development programme

Patient population	Adjuvant lung cancer	Adjuvant breast cancer
Phase/study	**Phase III** **ECOG 1505**	**Phase III** **ECOG 5103** HER2-negative
# of patients	N=1,500	N=4,950
Design	▪ **ARM A:** Cisplatin plus vinorelbine, docetaxel, gemcitabine or pemetrexed ▪ **ARM B:** Cisplatin plus vinorelbine, docetaxel, gemcitabine or pemetrexed plus Avastin up to 12 months	▪ **ARM A:** Anthracycline plus cyclophosphamide (AC) followed by paclitaxel ▪ **ARM B:** AC plus Avastin followed by paclitaxel plus Avastin ▪ **ARM C:** AC plus Avastin followed by paclitaxel plus Avastin, followed by Avastin up to 12 months
Avastin dose	▪ 15 mg/kg q3 weeks	▪ 15 mg/kg q3 weeks
Primary endpoint	▪ Overall survival	▪ Disease-free survival
Status	▪ Recruitment completed Q4 2013 ▪ Expect data in 2016	▪ Primary endpoint not met Q2 2014 ▪ Data presented at ASCO 2014

Erivedge

A novel small molecule inhibitor of the hedgehog signaling pathway

Patient population	Locally advanced or metastatic basal cell carcinoma	Acute myelogenous leukemia and relapsed refractory high-risk myelodysplastic syndrome
Phase/study	**Phase II STEVIE**	**Phase II**
# of patients	N=1,200	N=60
Design	▪ **Single ARM:** 150 mg Erivedge orally once daily	▪ **ARM A**: 150mg Erivedge orally once daily ▪ **ARM B**: Cytarabine
Primary endpoint	▪ Safety: Incidence of adverse events	▪ Overall response rate
Status	▪ FPI Q2 2011	▪ FPI Q3 2013

In collaboration with Curis

Gazyva

Type II, glycoengineered anti-CD20 monoclonal antibody

Patient population	Front-line chronic lymphocytic leukaemia Patients with comorbidities	Previously untreated or relapsed/refractory chronic lymphocytic CLL
Phase/study	**Phase III CLL11**	**Phase III GREEN**
# of patients	N=781	N=800
Design	▪ **ARM A:** Gazyva 1000mg iv plus chlorambucil ▪ **ARM B:** MabThera/Rituxan plus chlorambucil ▪ **ARM C:** Chlorambucil alone	▪ Single-arm cohort study: Gazyva alone or in combination with different chemotherapy regimens (FC, Bendamustin or Clb)
Primary endpoint	▪ Progression-free survival	▪ Safety in combination with different chemotherapy regimens
Status	▪ Filed globally Q2 2013 ▪ FDA approval granted Q4 2013 ▪ Positive CHMP opinion Q2 2014 ▪ Full data published NEJM Mar 2014; 370(12):1101-10	▪ FPI Q4 2013

In collaboration with Biogen Idec

Gazyva

Type II, glycoengineered anti-CD20 monoclonal antibody

Patient population	Diffuse large B-cell lymphoma (DLBCL)	Indolent non-Hodgkin's lymphoma MabThera/Rituxan refractory	Front-line indolent non-Hodgkin's lymphoma
Phase/study	**Phase III** **GOYA**	**Phase III** **GADOLIN** Induction and maintenance study	**Phase III** **GALLIUM** Induction and maintenance study
# of patients	N=1,400	N=410	N=1,400
Design	▪ **ARM A:** Gazyva 1000mg iv plus CHOP ▪ **ARM B:** MabThera/Rituxan plus CHOP	▪ **ARM A:** Gazyva 1000mg iv plus bendamustine followed by Gazyva mainteinance ▪ **ARM B:** bendamustine	▪ **ARM A:** Gazyva 1000mg iv plus chemotherapy followed by Gazyva maintenance ▪ **ARM B:** MabThera/Rituxan plus chemotherapy followed by MabThera/Rituxan maintenance ▪ Chemotherapy: ▪ For follicular lymphoma: CHOP, CVP or bendamustine ▪ For non-follicular lymphoma: physician's choice
Primary endpoint	▪ Progression-free survival	▪ Progression-free survival	▪ Progression-free survival
Status	▪ Recruitment completed Q2 2014 ▪ Expect data in 2015	▪ FPI Q2 2010 ▪ Expect data in 2017	▪ Recruitment completed ▪ Expect data in 2017

In collaboration with Biogen Idec

CHOP=Cyclophosphamide, Doxorubicin, Vincristine and Prednisone; CVP=Cyclophosphamide, Vincristine and Prednisolone

Kadcyla

Evaluating new treatment options in HER2-positive early breast cancer

Patient population	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	▪ **ARM A:** Kadcyla 3.6mg/kg q3w ▪ **ARM B:** Herceptin	▪ Following surgery and antracycline-based therapy: ▪ **ARM A:** Herceptin 6mg/kg q3w plus Perjeta 420 mg/kg q3w plus taxane ▪ **ARM B:** Kadcyla 3.6mg/kg q3w plus Perjeta 420mg/kg q3w
Primary endpoint	▪ Pathologic Complete Response (pCR)	▪ Invasive disease-free survival (IDFS)	▪ Invasive disease-free survival (IDFS)
Status	▪ FPI Q2 2014	▪ FPI Q1 2013	▪ FPI Q1 2014

In collaboration with ImmunoGen, Inc.

Kadcyla

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

Patient population	Previously untreated HER2 pos. metastatic breast cancer	Previously Treated Locally Advanced Or Metastatic Her2-Positive Gastric Cancer
Phase/study	**Phase III MARIANNE**	**Phase II/III GATSBY**
# of patients	N=1,092	N=412
Design	▪ **ARM A:** Herceptin plus taxane ▪ **ARM B:** Kadcyla 3.6mg/kg q3w plus Perjeta ▪ **ARM C:** Kadcyla 3.6 mg/kg q3w plus placebo	▪ **ARM A**: Kadcyla 3.6mg/kg q3w ▪ **ARM B**: Kadcyla 2.4mg/kg weekly ▪ **ARM C**: Docetaxel or paclitaxel
Primary endpoint	▪ Progression-free survival assessed by IRF	▪ Phase II: Dose-finding ▪ Phase III: Overall survival
Status	▪ Recruitment completed Q2 2012 ▪ Expect data in 2014	▪ FPI Q3 2012

In collaboration with ImmunoGen, Inc.

MabThera/Rituxan

Oncology development programme

Patient population	Previously untreated chronic lymphocytic leukemia
Phase/study	**Phase Ib** **SAWYER** Subcutaneous study *Study being conducted ex-US*
# of patients	N=225
Design	▪ Two-stage design: - Stage 1 (dose-finding, N=55) - Stage 2 (N=170): CLL dose confirmation: ▪ **ARM A**: MabThera iv plus chemotherapy (fludarabine and cyclophosphamide) ▪ **ARM B**: MabThera 1600mg sc plus chemotherapy (fludarabine and cyclophosphamide)
Primary endpoint	▪ Part 1: PK (dose selection) ▪ Part 2: PK of MabThera iv versus MabThera sc (arm A vs arm B)
Status	▪ FPI (stage 2) Q3 2012 ▪ Stage 1 data presented at ASH 2012

Subcutaneous MabThera : applies Enhanze technology, partnered with Halozyme
ASH=American Society of Hematology.

Perjeta

First in a new class of HER dimerization inhibitors

Patient population	Neoadjuvant HER2-positive breast cancer		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	▪ **ARM A:** Herceptin plus docetaxel ▪ **ARM B:** Perjeta (840mg loading, 420mg q3w) plus Herceptin and docetaxel ▪ **ARM C:** Perjeta plus Herceptin ▪ **ARM D:** Perjeta plus docetaxel	▪ **ARM A:** FEC followed by Taxane with Herceptin and pertuzumab (H+P given concurrently) ▪ **ARM B:** FEC followed by Taxane with Herceptin + pertuzumab (H+P given sequentially) ▪ **ARM C:** TCH + pertuzumab (H+P given concurrently)	▪ **ARM A:** Perjeta (840mg loading, 420 q3w) plus Herceptin for 52 weeks plus chemotherapy (6-8 cycles) ▪ **ARM B**: Placebo plus Herceptin (52 weeks) plus chemotherapy (6-8 cycles)
Primary endpoint	▪ Pathologic complete response (pCR)	▪ Safety	▪ Invasive disease-free survival (IDFS)
Status	▪ Positive data presented at SABCS 2010 ▪ Biomarker data presented SABCS 2011	▪ Positive safety and efficacy data presented at SABCS 2011	▪ Recruitment completed Q3 2013 ▪ Expect data in 2016
	▪ Filed in US Q2 2013 ▪ FDA approval granted Q3 2013 ▪ EU submission in preparation		

FEC = Fluorouracil, Epirubicin, and Cyclophosphamide; TCH = Docetaxel, Carboplatin, Herceptin; SABCS=San Antonio Breast Cancer Symposium.

Perjeta

First in a new class of HER dimerization inhibitors

Patient population	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=780
Design	▪ **ARM A:** Herceptin plus Xeloda ▪ **ARM B:** Perjeta plus Herceptin and Xeloda	▪ **ARM A:** Perjeta (840mg loading, 420mg q3w) plus Herceptin and chemotherapy ▪ **ARM B:** Placebo plus Herceptin and chemotherapy	Neoadjuvant treatment: ▪ **ARM A:** ddAC q2w x4 cycles followed by weekly paclitaxel for 12 weeks, with P+H x4 cycles ▪ **ARM B:** FEC+P+H x4 cycles followed by docetaxel+P+H x4 cycles Adjuvant treatment: ▪ P+H q3w to complete 1 year of HER2 t herapy ▪ Hormonal and radiation therapy as indicated
Primary endpoint	▪ Progression-free survival	▪ Overall survival	▪ Safety
Status	▪ Recruitment completed Q3 2013 ▪ Expect data in 2015	▪ FPI Q2 2013	▪ FPI expected Q3 2014

ddAC=dose-dense doxorubicin plus cyclophosphamide; FEC = Fluorouracil, Epirubicin, and Cyclophosphamide;

Zelboraf

A selective novel small molecule that inhibits mutant BRAF

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

In collaboration with Plexxikon, a member of Daiichi Sankyo Group
See also combinations with: cobimetinib (MEK inhibitor) and anti-PDL1 (RG7446)

Actemra/RoActemra

Interleukin 6 receptor inhibitor

Patient population	Early moderate-to-severe rheumatoid arthritis	Moderate-to-severe rheumatoid arthritis	Moderate-to-severe rheumatoid arthritis
Phase/study	**Phase III** **FUNCTION**	**Phase III** **SUMMACTA** Subcutaneous study	**Pivotal Phase III** **BREVACTA** Subcutaneous study
# of patients	N=1,162	N=1,262	N=656
Design	▪ 104 week treatment ▪ **ARM A**: Actemra IV 8 mg/kg q4w plus placebo MTX ▪ **ARM B:** Actemra IV 8 mg/kg q4w plus MTX ▪ **ARM C:** Actemra IV 4 mg/kg q4w plus MTX ▪ **ARM D:** MTX alone	▪ Add-on to DMARD therapy ▪ Weekly dosing for 104 weeks ▪ **ARM A:** Actemra SC 162mg weekly plus placebo IV q4w ▪ **ARM B:** Actemra IV 8mg/kg q4w plus placebo SC weekly	▪ Add-on to DMARD therapy ▪ Dosing every two weeks for 104 weeks ▪ **ARM A:** Actemra SC 162mg q2w ▪ **ARM B:** Placebo SC q2w
Primary endpoint	▪ DAS28 remission at 24 weeks, 1 year and 2 years	▪ ACR 20 at week 24	▪ ACR 20 at week 24
Status	▪ Primary endpoint met Q3 2012 ▪ Data presented at EULAR 2013 ▪ Filed in EU Q3 2013	▪ Primary endpoint met Q2 2012 ▪ Presented at ACR 2012 ▪ Filed in US and EU in Q4 2012	▪ Primary endpoint met Q3 2012 ▪ Presented at ACR 2012 ▪ Filed in US and EU in Q4 2012
		▪ FDA approval received Q4 2013 ▪ Approved in EU Q2 2014	

In collaboration with Chugai
MTX=methotrexate; DMARD=Disease-Modifying Anti-Rheumatic Drugs
EULAR=The European League Against Rheumatism, ACR=American College of Rheumatology

Actemra/RoActemra

Interleukin 6 receptor inhibitor

Patient population	Systemic sclerosis	Giant Cell Arteritis
Phase/study	**Phase II** **faSScinate** Proof-of-concept study	**Phase III** **GiACTA**
# of patients	N=86	N=250
Design	▪ Blinded 48-week treatment with weekly dosing: ▪ **ARM A:** Actemra SC 162mg ▪ **ARM B:** Placebo SC ▪ Open-label weekly dosing at weeks 49 to 96: ▪ Actemra SC 162mg	▪ Part 1: 52-week blinded period ▪ **ARM A:** Actemra SC 162mg qw + 26 weeks prednisone taper ▪ **ARM B:** Actemra SC 162mg q2w + 26 weeks prednisone taper ▪ **ARM C:** Placebo+ 26 weeks prednisone taper ▪ **ARM D:** Placebo+ 52 weeks prednisone taper ▪ Part II: ▪ 104-weel open label extension – patients in remission followed off of the study drug; Patients with active disease receive open label Actemra SC 162mg qw
Primary endpoint	▪ Change in modified Rodnan skin score (mRSS) at week 24 ▪ Safety	▪ Proportion of patients in sustained remission at week 52
Status	▪ Primary endpoint not met, trend with improved efficacy with longer treatment observed ▪ Adboard to advise on phase 3 held in June 2014 ▪ Study is ongoing in a blinded manner to week 48	▪ FPI Q3 2013

In collaboration with Chugai

Pipeline summary

Marketed products additional indications

Global Development late-stage trials

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pRED (Roche Pharma Research & Early Development)

gRED (Genentech Research & Early Development)

Roche Group HY 2014 sales

Diagnostics

Foreign exchange rate information

Alectinib (ALK inhibitor, RG7853, AF802)

New brain-penetrating inhibitor of anaplastic lymphoma kinase

Patient population	ALK-positive crizotinib-naïve advanced NSCLC	ALK-positive advanced NSCLC patients who failed crizotinib treatment	Tretment-naïve ALK-positive advanced NSCLC
Phase/study	**Phase I/II**	**Phase I/II**	**Phase III ALEX**
# of patients	N=70	N=269	N=286
Design	▪ **Part 1**: Dose escalation monotherapy ▪ **Part 2**: Monotherapy, dose selected based on the results of Part 1	▪ **Part 1**: Dose escalation monotherapy ▪ **Part 2**: Monotherapy, dose selected based on the results of Part 1	▪ **ARM A**: alectinib 600mg BID ▪ **ARM A**: crizotinib 250mg BID
Primary endpoint	▪ Safety and efficacy	▪ Safety and efficacy	▪ Progression-free survival
Status	▪ Study in crizotinib-naïve patients in Japan completed; crizotinib-failure patients in US ongoing ▪ Data presented at ECC 2013 ▪ Japan study results: Lancet Oncology 2013 Jun;14(7):590-8 ▪ Approved in Japan with a brand name Alecensa July 2014	▪ Phase II FPI Q2 2013	▪ Expect FPI Q3 2014
	▪ Breakthrough therapy designation granted by the FDA June 2013		

In collaboration with Chugai
ECC=European Cancer Congress

Anti-PDL1 (MPDL3280A, RG7446)

Novel approach in cancer immunotherapy

Patient population	Metastatic NSCLC 2nd line	Locally advanced or metastatic NSCLC PD-L1 positive	Locally advanced or metastatic NSCLC PD-L1 positive	Locally advanced or metastatic NSCLC (2nd/3rd 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=850	N=130	N=300	N=300	N=32
Design	▪ RG7446 1200mg q3w ▪ docetaxel	▪ Single arm study ▪ 1200mg of RG7446 q3w for maximum of 16 cycles	▪ Single arm study ▪ 1200mg of RG7446 q3w for maximum of 16 cycles	▪ **ARM A**: RG7446 1200mg IV q3w, up to 16 cycles ▪ **ARM A**: Docetaxel IV q3w	▪ RG7446 plus Tarceva[1]
Primary endpoint	▪ Overall survival	▪ Overall response rate	▪ Objective response rate	▪ Overall survival	▪ Safety
Status	▪ FPI Q1 2014	▪ Recruitment completed Q2 2014	▪ FPI Q1 2014	▪ Recruitment completed Q2 2014	▪ FPI Q1 2014

[1]Tarceva is a registered trademark of OSI Pharmaceuticals, LLC, a subsidiary of Astellas US, LLC;

Anti-PDL1 (MPDL3280A, RG7446)

Novel approach in cancer immunotherapy

Patient population	Untreated advanced renal cell carcinoma	Locally advanced or metastatic urothelial bladder cancer	Solid tumors	Locally advanced or metastatic solid tumors
Phase/study	**Phase II**	**Phase II**	**Phase I**	**Phase I**
# of patients	N=150	N=330	N=154	N=200
Design	▪ **ARM A**: RG7446 plus Avastin ▪ **ARM B**: RG7446; following PD: RG7446 plus Avastin ▪ **ARM C**: sunitinib; following PD: RG7446 plus Avastin	▪ **Cohort 1**: Treatment-naive and cisplatin-ineligible patients ▪ **Cohort 2**: Patients with disease progression following or during platinum-containing treatment	▪ **ARM A**: RG7446 + Avastin ▪ **ARM B**: RG7446 + Avastin + FOLFOX ▪ **ARM C**: RG7446 + Avastin + carboplatin+paclitaxel ▪ **ARM D**: RG7446 + Avastin + carboplatin+ pemetrexed ▪ **ARM E**: RG7446 + Avastin + carboplatin+ nab-paclitaxel	▪ **ARM A:** RG7446 plus ipilimumab ▪ **ARM B:** RG7446 plus interferon alpha-2b
Primary endpoint	▪ Progression free survival	▪ Objective response rate	▪ Safety/PK	▪ Safety
Status	▪ FPI Q1 2014	▪ FPI Q2 2014	▪ FPI Q2 2012	▪ FPI expected Q3 2014

Anti-PDL1 (MPDL3280A, RG7446)

Novel approach in cancer immunotherapy

Patient population	Previously untreated metastatic melanoma BRAF mutation positive	Locally advanced or metastatic tumors	Solid tumors
Phase/study	**Phase I**	**Phase I**	**Phase I**
# of patients	N=44	N=90	N=344
Design	▪ Three-arm study with different doses of RG7446-Zelboraf[1] combination	▪ **ARM A:** Dose-finding – RG7446 plus cobimetinib[2] ▪ **ARM B:** Dose-expansion - RG7446 plus cobimetinib	▪ Dose escalation study
Primary endpoint	▪ Safety/PK	▪ Safety	▪ Safety/PK
Status	▪ FPI Q4 2012	▪ FPI Q4 2013	▪ FPI Q2 2011 ▪ Initial efficacy data presented at ASCO 2013 ▪ Updated data presented at ECC 2013 ▪ Data from bladder cohort presented at ASCO 2014

[1]Zelboraf in collaboration with Plexxikon, a member of Daiichi Sankyo Group;
[2]Cobimetinib in collaboration with Exelixis

Bcl-2 inhibitor (RG7601, ABT-199/GDC-0199)

Novel small molecule Bcl-2 selective inhibitor

Patient population	Relapsed or Refractory CLL	Relapsed CLL and SLL	Relapsed/Refractory or previously untreated CLL	Relapsed/Refractory or previously untreated CLL
Phase/study	**Phase III MURANO**	**Phase Ib**	**Phase I**	**Phase I**
# of patients	N=370	N=50	N=70	N=74
Design	▪ **ARM A**: RG7601 plus Rituxan ▪ **ARM B**: Rituxan plus bendamustine	▪ Dose-escalation study in combination with MabThera/Rituxan	▪ RG7601 in combination with MabThera/Rituxan and bendamustine	▪ RG7601 in combination with Gazyva
Primary endpoint	▪ Safety/MTD	▪ Safety/MTD	▪ Safety/MTD	▪ Safety/MTD
Status	▪ FPI Q1 2014	▪ FPI Q3 2012 ▪ Data presented at ASCO 2014	▪ FPI Q2 2013	▪ FPI Q1 2014

Joint project with AbbVie in collaboration with WEHI (The Walter and Eliza Hall Institute)
CLL=Chronic Lymphocytic Leukemia; NHL=Non-Hodgkin's Lymphoma; SLL=Small Lymphocytic Lymphoma
ASH=American Society of Hematology; ASCO=American Society of Clinical Oncology

Bcl-2 inhibitor (RG7601, ABT-199/GDC-0199)

Novel small molecule Bcl-2 selective inhibitor

Patient population	Relapsed/Refractory CLL with 17p deletion	Relapsed or Refractory follicular non-Hodgkin's lymphoma
Phase/study	**Phase II**	**Phase II**
# of patients	N=100	N=156
Design	▪ Single-agent RG7601	▪ **ARM A:** RG7601 plus Rituxan ▪ **ARM B:** RG7601 plus Rituxan plus bendamustine ▪ **ARM C:** Rituxan plus bendamustine
Primary endpoint	▪ Safety/MTD	▪ Overall response rate
Status	▪ FPI Q3 2013	▪ Expect FPI Q3 2014

Joint project with AbbVie in collaboration with WEHI (The Walter and Eliza Hall Institute)

Bcl-2 inhibitor (RG7601, ABT-199/GDC-0199)

Novel small molecule Bcl-2 selective inhibitor

Patient population	Front-line DLBCL	Relapsed or Refractory NHL	Relapsed/Refractory CLL and NHL
Phase/study	**Phase I/II**	**Phase I**	**Phase I**
# of patients	N=230	N=40	N=121
Design	▪ **ARM A:** RG7601+R-CHOP ▪ **ARM B:** RG7601+G-CHOP	▪ Dose escalation of RG7601 in combination with Rituxan and bendamustine	▪ Dose-escalation study
Primary endpoint	▪ Safety and efficacy	▪ Safety/MTD	▪ Safety/PK/Response rate
Status	▪ FPI Q2 2014	▪ FPI Q2 2012 ▪ Study resumed Q3 2013	▪ FPI Q2 2011 ▪ CLL and NHL data presented at ASCO 2013 ▪ Updated CLL and SLL data presented at ASH 2013 ▪ Updated CLL, SLL and NHL (DLBCL and FL) data presented at ASCO 2014

Joint project with AbbVie in collaboration with WEHI (The Walter and Eliza Hall Institute)
CLL=Chronic Lymphocytic Leukemia; NHL=Non-Hodgkin's Lymphoma; SLL=Small Lymphocytic Lymphoma
ASH=American Society of Hematology; ASCO=American Society of Clinical Oncology

Bcl-2 inhibitor (RG7601, ABT-199/GDC-0199)

Novel small molecule Bcl-2 selective inhibitor

Patient population	Relapsed/Refractory multiple myeloma	Relapsed/Refractory multiple myeloma	Acute myelogenous leukemia (AML)
Phase/study	**Phase I**	**Phase I**	**Phase I/II**
# of patients	N=30	N=30	N=54
Design	▪ Patients receiving Bortezomib and Dexamethasone as standard therapy: ▪ Dose escalation cohort: RG7601+bortezomib+dexamethasone ▪ Safety expansion cohort: RG7601+bortezomib+dexamethasone	▪ Dose escalation cohort ▪ Safety expansion cohort	▪ Dose escalation of RG7601
Primary endpoint	▪ Safety/MTD	▪ Safety/MTD	▪ Overall response rate
Status	▪ FPI Q4 2012	▪ FPI Q4 2012	▪ FPI Q4 2013

Joint project with AbbVie in collaboration with WEHI (The Walter and Eliza Hall Institute)

Cobimetinib (RG7421, GDC-0973)

Selective small molecule inhibitor of mitogen-activated protein kinase kinase

Patient population	Previously untreated metastatic melanoma BRAF mutation positive	Metastatic melanoma BRAF mutation positive	Locally advanced or metastatic tumors	Locally advanced or metastatic tumors with mutant KRAS
Phase/study	**Phase III coBRIM**	**Phase Ib BRIM7**	**Phase I**	**Phase I**
# of patients	N=500	N=~100	N=90	N=50
Design	▪ **ARM A:** Zelboraf[1] plus cobimetinib ▪ **ARM B:** Zelboraf[1] plus placebo	▪ Dose escalation study evaluating Zelboraf[1] plus cobimetinib	▪ **ARM A:** Dose-finding - cobimetinib plus RG7446 (anti-PDL1) ▪ **ARM B:** Dose-expansion - cobimetinib plus RG7446 (anti-PDL1)	▪ Dose finding of cobimetinib plus RG7597 (anti-HER3/EGFR DAF)
Primary endpoint	▪ Progression-free survival	▪ Safety/PK	▪ Safety	▪ Safety
Status	▪ Enrollment completed Q1 2014 ▪ Primary endpoint met July 2014 ▪ Data to be presented H2 2014	▪ Enrollment completed ▪ Final data presented at EADO and ASCO 2014	▪ FPI Q4 2013	▪ FPI Q4 2013

In collaboration with Exelixis

[1]Zelboraf In collaboration with Plexxikon, a member of Daiichi Sankyo Group; [2]ipatasertib in collaboration with Array BioPharma

EADO=European Association of Dermato-Oncology; ASCO=American Society of Clinical Oncology

Pictilisib (RG7321, GDC-0941)

Pan-PI3 kinase inhibitor with potential activity in multiple cancers

Patient population	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	▪ **ARM A:** pictilisib plus hormonal therapy ▪ **ARM B:** apitolisib plus hormonal therapy (ARM B discontinued) ▪ **ARM C:** Hormonal therapy + placebo	▪ **ARM A:** Pictilisib + carboplatin + paclitaxel ▪ **ARM B:** Placebo + carboplatin + paclitaxel ▪ **ARM C:** Pictilisib+ carboplatin + paclitaxel + bevacizumab ▪ **ARM D:** Pictilisib+ carboplatin + paclitaxel + bevacizumab	▪ **ARM A**: Pictilisib+ paclitaxel ▪ **ARM B**: Placebo + paclitaxel
Primary endpoint	▪ Progression-free survival	▪ Progression-free survival	▪ Progression-free survival
Status	▪ Recruitment completed Q1 2014	▪ FPI Q1 2012	▪ Recruitment completed Q2 2014

Polatuzumab vedotin (RG7596)

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

Patient population	Non-Hodgkin's lymphoma	Non-Hodgkin's lymphoma
Phase	**Phase II ROMULUS**	**Phase Ib**
# of patients	N=120	N=90
Design	▪ **ARM A:** RG7593 plus Rituxan ▪ **ARM B:** RG7596 plus Rituxan	▪ Dose escalation study in combination with Rituxan and chemotherapy
Primary endpoint	▪ Safety and anti-tumor activity	▪ Safety
Status	▪ Recruitment completed Q1 2014 ▪ Initial data presented at ASCO 2014	▪ FPI Q4 2013

In collaboration with Seattle Genetics
ASCO=American Society of Clinical Oncology

Taselisib(RG7604, GDC-0032)

Beta isoform sparing PI3 kinase inhibitor targeting commonly mutated oncogene

Patient population	**Solid tumors and HER2-negative HR-positive breast cancer**	**HER2-negative 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=260	N=65	N=120
Design	▪ **Phase I** ▪ RG7604 ▪ RG7604 plus letrozole or fulvestrant ▪ **Phase II** ▪ RG7604 (multiple doses) plus letrozole or fulvestrant	▪ RG7604 plus docetaxel ▪ RG7604 plus paclitaxel	▪ RG7604 vs. chemo
Primary endpoint	▪ Safety/PK/efficacy	▪ Safety	▪ Progression-free survival
Status	▪ Recruitment completed Q2 2014 ▪ Data presented at SABCS 2013 ▪ Biomarker data presented at AACR 2014	▪ FPI Q2 2013	▪ FPI Q2 2014

SABCS=San Antonio Breast Cancer Symposium; AACR=American Association for Cancer Research

Bitopertin (GlyT-1, RG1678)

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

Patient population	Sub-optimally controlled symptoms of schizophrenia	Obsessive-compulsive disorder
Phase/study	**Phase III** **NIGHTLYTE**	**Phase II** **SKYLYTE**
# of patients	N=600	N=99
Design	▪ Add-on therapy to anti-psychotics ▪ 52-week treatment period ▪ **ARM A:** bitopertin daily (10 mg) ▪ **ARM B:** bitopertin daily (20 mg) ▪ **ARM C:** Placebo	▪ 16-week treatment period ▪ Background therapy of selective serotonin reuptake inhibitors (SSRI) ▪**ARM A**: bitopertin daily (30 mg) ▪**ARM B**: bitopertin daily (10 mg) ▪**ARM C**: Placebo
Primary endpoint	▪ PANSS positive symptom factor at week 12	▪ Change in total score on Yale-Brown Obsessive Compulsive Scale
Status	▪ FPI Q4 2010 ▪ 10 mg dose arm met primary endpoint Q2 2014 ▪ Further steps under evaluation	▪ FPI Q4 2012

PANSS=Positive and Negative Syndrome Scale

Gantenerumab (RG1450)

Fully human monoclonal antibody against amyloid-beta

Patient population	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	▪ 104-week subcutaneous treatment period ▪ **ARM A:** Gantenerumab (225 mg) ▪ **ARM B:** Gantenerumab (105 mg) ▪ **ARM C:** Placebo	▪ 104-week subcutaneous treatment period ▪ **ARM A:** Gantenerumab ▪ **ARM B:** Placebo
Primary endpoint	▪ Change in CDR-SOB at 2 years ▪ Sub-study: change in brain amyloid by PET at 2 years	▪ Change in ADAS-Cog and ADCS-ADL at 2 years (co-primary)
Status	▪ Phase I PET data: Archives of Neurology 2012 Feb;69(2):198-207 ▪ Enrollment completed Q4 2013 ▪ Data expected in 2016	▪ FPI Q1 2014

In collaboration with Morphosys
CDR-SOB=Clinical Dementia Rating scale Sum of Boxes

Etrolizumab (RG7413)

A humanized monoclonal antibody against beta 7 integrin

Patient population	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	▪ **ARM A:** etrolizumab 105mg SC q4w + adalimumab placebo ▪ **ARM B:** etrolizumab placebo + adalimumab ▪ **ARM C:** etrolizumab placebo + adalimumab placebo	▪ **ARM A:** etrolizumab 105mg SC q4w + adalimumab placebo ▪ **ARM B:** etrolizumab placebo + adalimumab ▪ **ARM C:** etrolizumab placebo + adalimumab placebo	Time on treatment 54 weeks ▪ **ARM A:** etrolizumab 105mg SC q4w + placebo IV ▪ **ARM B:** placebo SC q4w + adalimumab SC
Primary endpoint	▪ Induction of remission compared with placebo as determined by the Mayo Clinic Score (MCS) at week 10	▪ Induction of remission compared with placebo as determined by the Mayo Clinic Score (MCS) at week 10	▪ Proportion of patients in sustained clinical remission as determined by Mayo Clinic Score (MCS) at weeks 10, 30 and 54
Status	▪ Expect FPI Q3 2014	▪ Expect FPI Q3 2014	▪ Expect FPI Q3 2014

Etrolizumab (RG7413)

A humanized monoclonal antibody against beta 7 integrin

Patient population	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	▪ Maintenance of remission (at week 62) among randomized patients in remission at Week 10 as determined by the Mayo Clinic Score (MCS)	▪ Clinical Remission (Mayo Clinic Score, MCS) at Week 14 ▪ Remission maintenance (by MCS, at Week 66) among patients with remission at Week 14
Status	▪ Expect FPI Q3 2014	▪ FPI Q2 2014

UC=ulcerative colitis

Etrolizumab (RG7413)

A humanized monoclonal antibody against beta 7 integrin

Patient population	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	▪ Patients who were enrolled in EUCALYPTUS study and meet enrollment criteria will receive etrolizumab 105 sc q4w	▪ Patients who were previously enrolled in etrolizumab phase III studies and meet enrollment criteria will receive etrolizumab 105 sc q4w
Primary endpoint	▪ Safety	▪ Long-term efficacy as determined by partial Mayo Clinic Score (pMCS) ▪ Incidence of adverse events
Status	▪ Recruitment completed	▪ Expect FPI Q3 2014

HCV: Mericitabine, danoprevir, setrobuvir

IFN-free combination of different direct-acting antivirals in treatment-naïve patients

Patient population	Hepatitis C patients Treatment-naïve or null-responders to interferon-based treatment
Phase/study	**Phase II** **ANNAPURNA**
# of patients	N=110
Design	▪ **ARM A:** GT1a including setrobuvir, danoprevir, ritonavir, ribavirin and mericitabine ▪ **ARM B:** GT1a including setrobuvir, danoprevir, ritonavir, ribavirin and mericitabine ▪ **ARM C:** GT1a including setrobuvir, danoprevir, ritonavir and ribavirin ▪ **ARM D:** GT1b including setrobuvir, danoprevir, ritonavir, ribavirin and mericitabine ▪ **ARM E:** GT1b including setrobuvir, danoprevir, ritonavir and ribavirin
Primary endpoint	▪ Sustained virological response at week 12 after the end of the study treatment
Status	▪ FPI Q2 2012 ▪ Recruitment Part 1 completed in Q4 2012 ▪ Data presented at APASL 2014 ▪ Publication is expected in 2015

Mericitabine (RG7128) licensed from Pharmasset, now part of Gilead; Danoprevir=RG7227; Setrobuvir=RG7790
APASL=Asian Pacific Association for the Study of the Liver

HCV: Danoprevir (RG7227)

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

Patient population	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	▪ **Without cirrhosis:** ▪ **ARM A:** Danoprevir 125 mg bid + Ritonavir 100mg bid+ Pegasys + Copegus for 12 weeks ▪ **With compensated cirrhosis:** ▪ **ARM B:** Danoprevir 125 mg bid + Ritonavir 100mg bid+ Pegasys + Copegus for 24 weeks
Primary endpoint	▪ Safety:
Status	▪ Recruitment completed Q4 2013 ▪ Study ongoing

In collaboration with Ascletis

Lampalizumab (RG7417)

Antibody fragment to selectively block activation of alternative complement pathway

Patient population	Geographic atrophy (GA) secondary to age-related macular degeneration
Phase/study	**Phase Ib/II** **MAHALO**
# of patients	N=143
Design	▪ **Part 1: Open-label** ▪ Multiple dosing ▪ **Part 2: Randomized** ▪ **ARM A:** Lampalizumab injection ▪ **ARM B:** Sham injection
Primary endpoint	▪ Part 1: Safety ▪ Part 2: Growth rate of GA lesions at month 18
Status	▪ Primary endpoint met Q3 2013 ▪ Efficacy data including biomarker presented at AAO 2013

AAO=American Academy of Ophthalmology

Lebrikizumab (RG3637)

A humanized monoclonal antibody designed to bind specifically to IL-13

	Severe uncontrolled adult asthma	
Patient population	**Adult patients whose asthma is uncontrolled with inhaled corticosteroids and a second controller medication**	
Phase/study	**Phase III LAVOLTA I**	**Phase III LAVOLTA II**
# of patients	N=1,050	N=1,050
Design	▪ Subcutaneous lebrikizumab q4w on top of SOC for 52 weeks safety follow-up ▪ **ARM A:** Lebrikizumab high dose ▪ **ARM B:** Lebrikizumab low dose ▪ **ARM C:** Placebo ▪ Patients will be tested for periostin level	▪ Subcutaneous lebrikizumab q4w on top of SOC for 52 weeks safety follow-up ▪ **ARM A:** Lebrikizumab high dose ▪ **ARM B:** Lebrikizumab low dose ▪ **ARM C:** Placebo ▪ Patients will be tested for periostin level
Primary endpoint	▪ Rate of asthma exacerbations during the 52-week placebo-controlled period	▪ Rate of asthma exacerbations during the 52-week placebo-controlled period
Status	▪ FPI Q3 2013	▪ FPI Q3 2013

Lebrikizumab (RG3637)

A humanized monoclonal antibody designed to bind specifically to IL-13

Patient population	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	▪ Subcutaneous lebrikizumab q4w on top of SOC for 52 weeks with 52 week double-blind active treatment extension ▪ **ARM A:** Lebrikizumab high dose, week 1-104 or week 52-104 ▪ **ARM B:** Lebrikizumab low dose, week 1-104 or week 52-104 ▪ **ARM C:** Placebo, week 1-52	▪ **ARM A:** Lebrikizumab SC q4w ▪ **ARM B:** Placebo
Primary endpoint	▪ Rate of asthma exacerbations during the 52-week placebo-controlled period	▪ Progression-free survival
Status	▪ FPI Q3 2013	▪ FPI Q4 2013

SOC=Standard of Care; OCS=Oral Corticosteroids

Lebrikizumab (RG3637)

A humanized monoclonal antibody designed to bind specifically to IL-13

Patient population	Adult asthma	Adult asthma mild-to-moderate patients
Phase/study	**Phase II VOCALS**	**Phase III STRETTO**
# of patients	N=130	N=300
Design	▪ **ARM A:** Lebrikizumab SC q4w ▪ **ARM B:** Placebo	▪ **ARM A:** Lebrikizumab SC q4w ▪ **ARM B:** Placebo ▪ **ARM C:** Montelukast
Primary endpoint	▪ Relative change in OCS dose at week 44	▪ Absolute change in FEV1 at week 12
Status	▪ FPI Q1 2014	▪ FPI Q2 2014

Ocrelizumab (RG1594)

2nd generation anti-CD20 monoclonal antibody

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

Pipeline summary

Marketed products additional indications

Global Development late-stage trials

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pRED (Roche Pharma Research & Early Development)

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gRED (Genentech Research & Early Development)

Roche Group HY 2014 sales

Diagnostics

Foreign exchange rate information

Oncology development programmes

Small molecules

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

ASCO=American Society of Clinical Oncology

Oncology development programmes
Monoclonal antibodies

Molecule	**Anti-glypican-3 MAb** (RG7686, GC33)	
Patient population	**Metastatic liver cancer (hepatocellular carcinoma)**	**2L metastatic liver cancer (hepatocellular carcinoma)**
Phase	**Phase Ib**	**Phase II**
# of patients	N= 40-50	N=171
Design	▪ Study US monotherapy ▪ Study Japan monotherapy ▪ Dose escalation study in combo with SOC	▪ Adaptive design study Double blind randomized 2:1 RG7686 : placebo ▪ Patients are stratified according to the level of GPC-3 expression in tumor
Primary endpoint	▪ Safety and tolerability	▪ Progression-free survival
Status	▪ Recruitment completed Q4 2013 ▪ Dose escalation completed for US and Japan monotherapy and combination therapy studies ▪ Patients continuing on combination treatment with SoC on study	▪ Recruitment completed Q1 2013 ▪ Results under internal review
Collaborator	Chugai	

SOC=standard of care

Oncology development programmes
Monoclonal antibodies (continued)

Molecule	GE-huMAb HER3 (RG7116)	
Patient population	**Solid tumors**	**HER2-low and HER3-positive metastatic breast cancer**
Phase	**Phase I**	**Phase I**
# of patients	N=105	N=40
Design	▪ Multiple ascending dose study with extension cohorts and imaging sub-study ▪ Combination arms with HER1-targeted therapies (erlotinib, cetuximab)	▪ Multiple ascending dose of RG7116 in combination with Perjeta and paclitaxel
Primary endpoint	▪ Safety, PK	▪ Safety
Status	▪ FPI Q4 2011 ▪ Biomarker data presented at AACR 2013 ▪ Data presented at ASCO 2014	▪ FPI Q3 2013

Oncology development programmes
Monoclonal antibodies (continued)

Molecule	Ang2-VEGF MAb (RG7221)		CSF-1R huMAb (RG7155)	CEA-IL2v (RG7813)
Patient population	Solid tumors	Metastatic colorectal cancer	Solid tumors and PVNS	Solid tumors
Phase	**Phase I**	**Phase II McCAVE**	**Phase I/II**	**Phase I**
# of patients	N≈80	N=140	N≈140	N~110
Design	▪ Multiple ascending dose study with extension cohorts in solid tumors to assess the PD effects and platinum resistant ovarian cancer	▪ **ARM A**: Induction: Avastin+mFOLFOX-6; followed by maintenance: Avastin+5-FU/LV ▪ **ARM B**: Induction: RG7221+mFOLFOX-6; followed by maintenance: RG7221+5-FU/LV	▪ Multiple ascending dose study +/- paclitaxel with extension cohorts	▪ Single and multiple dose escalation study with extension cohorts
Primary endpoint	▪ Safety, PK	▪ PFS	▪ Safety, PK, PD & preliminary clinical activity	▪ Safety, PK, PD
Status	▪ FPI Q4 2012 ▪ Dose escalation data presented at ASCO 2014	▪ FPI Q2 2014	▪ FPI Q4 2011 ▪ Biomarker data presented at AACR 2013 and AACR 2014 ▪ Data presented at ASCO 2014	▪ FPI Q4 2013

ASCO=American Society of Clinical Oncology

Neuroscience development programmes

Roche pRED

	Metabolic glutamate receptor pathway			
Molecule	**Decoglurant** (mGlu2 NAM, RG1578)	**Basimglurant** (mGlu5 NAM, RG7090)		
Patient population	**Adjunctive Treatment of Major Depressive Disorder**	**Adjunctive Treatment of Major Depressive Disorder**	**Fragile X Syndrome**	
Phase/study	**Phase II ArtDeCo**	**Phase II Marigold**	**Phase II Fragxis**	**Phase II FoXtail**
# of patients	N=480	N=300	N=180	N=45 Pediatric patients
Design	▪ **ARM A:** decoglurant 5 mg ▪ **ARM B:** decoglurant 15 mg ▪ **ARM C:** decoglurant 30 mg ▪ **ARM D:** matching placebo	▪ **ARM A:** basimglurant 0.5 mg ▪ **ARM B:** basimglurant 1.5 mg ▪ **ARM C:** matching placebo	▪ **ARM A:** basimglurant 0.5 mg ▪ **ARM B:** basimglurant 1.5 mg ▪ **ARM C :** matching placebo	▪ **ARM A:** basimglurant dose A ▪ **ARM B:** basimglurant dose B ▪ **ARM C :** matching placebo
Primary Endpoint	▪ Efficacy - Montgomery Asberg Depression Rating Scale	▪ Efficacy - Montgomery Asberg Depression Rating Scale	▪ Efficacy, safety and tolerability	▪ Safety ▪ Exploratory efficacy and tolerability
Status	▪ Recruitment completed ▪ Data in-house under review	▪ Study completed ▪ Data in-house under review ▪ Data presentation planned H2 2014	▪ Recruitment completed ▪ Data in-house under review	▪ Recruitment completed ▪ Data in-house under review

Neuroscience development programmes

Molecule	PDE10A inhibitor (RG7203)	TAAR1 agonist (RG7410)	GABRA5 NAM (RG1662)	mGlu5 PAM (RG7342)
Patient population	Schizophrenia	Schizophrenia	Down Syndrome	Schizophrenia
Phase	**Phase I**	**Phase I**	**Phase IIB CLEMATIS**	**Phase I**
# of patients	N=48	N= up to 56 (Part 1 and 2)	N=180	N=93
Design	▪ Multiple dose, double-blind study in schizophrenia patients ▪ **ARM A**: RG7203 plus risperidone ▪ **ARM B**: placebo plus risperidone	▪ **Part 1:** Double-blind, randomized, placebo controlled, sequential multiple ascending dose study in HVs ▪ **Part 2:** Double-blind, randomized, placebo controlled, parallel group, multiple dose study in type 2 diabetes	▪ For 26 weeks patients will receive: ▪ **ARM A**: RG1662 120mg twice daily ▪ **ARM B**: RG1662 120mg twice daily ▪ **ARM C**: Placebo	▪ Single ascending dose of RG7342
Primary endpoint	▪ Safety, tolerability, PK	▪ Part 1: Safety and tolerability in HVs ▪ Part 2: Safety and tolerability in patients with type 2 diabetes mellitus	▪ Cognition and adaptive behavior	▪ Safety, tolerability, PK and food effect
Status	▪ FSI Q1 2014	▪ Part 1 FSI July 2014	▪ FPI Q2 2014	▪ FPI July 2014

NAM=Negative allosteric modulator; HV= healthy volunteer

Neuroscience development programmes

Roche pRED

Molecule	Monoamine oxidase type B (MAO-B) inhibitor (RG1577, EVT-302)	V1 receptor antagonist (RG7314)	SMN2 splicing modifier (RG7800)
Patient population	Alzheimer's Disease	Autism	Spinal muscular atrophy
Phase	**Phase IIb MAyflOwer RoAD**	**Phase II VANILLA**	**Phase I**
# of patients	N=495	N=150	N=48
Design	▪ 52-week oral treatment ▪ **ARM A:** RG1577 (dose 1) ▪ **ARM B:** RG1577 (dose 2) ▪ **ARM C:** placebo	▪ Multi-center, randomized, double-blind, placebo-controlled proof-of-concept study in individuals with Autism Spectrum Disorder (ASD)	▪ Healthy volunteer study ▪ **ARM A:** RG7800 Single dose ▪ **ARM B:** Placebo
Primary endpoint	▪ Changes in ADAS-Cog at 52 weeks	▪ Safety and efficacy	▪ Safety, PK
Status	▪ Recruitment completed Q1 2014	▪ FSI Q3 2013	▪ FSI Q1 2014
Collaborator	Evotec		PTC Therapeutics/ SMA Foundation

Neuroscience development programmes

Roche pRED

Molecule	Anti-aSyn (RG7935, PRX002)	
Patient population	Parkinson's disease	
Phase	Phase I	Phase I
# of patients	N=40	N=up to 60
Design	▪ Double-blind, placebo-controlled, single ascending dose study of RG7935/PRX002 in healthy subjects	▪ Double-blind, placebo-controlled, multiple ascending dose study of RG7935/PRX002 in patients with Parkinson's disease
Primary endpoint	▪ Safety, tolerability, PK	▪ Safety and tolerability
Status	▪ FSI Q2 2014	▪ FPI July 2014
Collaborator	Prothena	

Infectious diseases programmes

Molecule	TLR7 agonist (RG7795)	LptD antibiotic (RG7929)
Patient population	Chronic hepatitis B	Pseudomonas infections (including MDR strains)
Phase	**Phase I**	**Phase II**
# of patients	N=50	N=~50
Design	▪ Healthy volunteer study ▪ **ARM A**: Single ascending dose of RG7795 ▪ **ARM B**: Placebo	▪ Patient study with RG7929
Primary endpoint	▪ Safety	▪ Safety, PK/PD and efficacy
Status	▪ FPI Q4 2013	▪ FPI Q4 2013 ▪ QIDP and fast track designation granted Q2 2014
Collaborator		Polyphor

QIDP=Qualified Infectious Disease Product designation

Metabolic development programmes

Molecule	**Inclacumab** (P-selectin huMAb, RG1512)	
Patient population	**Prevention of saphenous vein graft disease** Patients undergoing coronary artery bypass graft (CABG) surgery	**Acute Coronary Syndrome (ACS)** Patients undergoing percutaneous coronary intervention (PCI)
Phase/study	**Phase II** **SELECT-CABG**	**Phase II** **SELECT-ACS**
# of patients	N=384	N=516
Design	▪ 32-week treatment period ▪ **ARM A:** Inclacumab (20 mg/kg) ▪ **ARM B:** Placebo	▪ Single infusion ▪ **ARM A:** Inclacumab (5 mg/kg) ▪ **ARM B**: Inclacumab (20 mg/kg) ▪ **ARM C:** Placebo
Primary Endpoint	▪ Sapheneous vein graft re-occlusion	▪ Procedural damage (troponin)
Status	▪ Recruitment completed Q2 2012 ▪ Data to be published in 2014	▪ Recruitment completed ▪ Data presented at ACC 2013
	▪ Candidate for partnering-out	
Collaborator	Genmab	

ACC=American College of Cardiology

Metabolic, ophthalmology and hemophilia development programmes

Roche pRED

Molecule	GLP-1/GIP dual agonist (MAR709, RG7697)	Aldosterone synthase inhibitor (RG7641)	Anti-VEGF/Ang2 (RG7716)	Factor IX/X bispecific (RG6013, ACE910)
Patient population	Type 2 diabetes	Metabolic diseases	Wet age-related macular degeneration	Hemophilia Study in Japanese patients
Phase/study	Phase I	Phase I	Phase I	Phase I
# of patients	N=60	N=96	N=30	N=18
Design	▪ **ARM A:** RG7697 SC ▪ **AMR B:** placebo	▪ **ARM A:** RG7641 single dose ▪ **ARM B:** Placebo	▪ Healthy volunteer study ▪ Single ascending dose of RG7716	▪ Multiple ascending dose study with extension cohort
Primary Endpoint	▪ Safety, PK	▪ Safety	▪ Safety	▪ Safety, PK, PD
Status	▪ MAD study ongoing	▪ Recruitment completed Q2 2014	▪ FPI Q4 2013	▪ Recruitment completed Q2 2014 in Japan
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 HY 2014 sales

Diagnostics

Foreign exchange rate information

Oncology development programmes
Monoclonal antibodies

Genentech Research & Early Development

	Growth factor signaling			
Molecule	**Anti-HER3 EGFR DAF MAb** (RG7597)			
Patient population	**Metastatic/recurrent SCCHN**	**KRAS wild-type metastatic colorectal cancer**	**1L recurrent/metastatic squamous cell carcinoma of head and neck**	**Locally advanced or metastatic tumors with mutant KRAS**
Phase/study	**Phase II MEHGAN**	**Phase II DARECK**	**Phase Ib**	**Phase I**
# of patients	N=170	N=130	N=21	N=50
Design	▪ **ARM A:** RG7597 ▪ **ARM B**: Cetuximab	▪ **ARM A:** RG7597+FOLFIRI ▪ **ARM B**: Cetuximab+FOLFIRI	▪ Evaluating safety/tolerability with two chemo backbones ▪ **Arm A**: Cisplatin/5-FU ▪ **Arm B**: Carboplatin/Paclitaxel	▪ Dose finding of RG7597 plus cobimetinib[1]
Primary endpoint	▪ Progression-free survival	▪ Progression-free survival	▪ Safety, DLT, PK	▪ Safety
Status	▪ Recruitment completed Q2 2013 ▪ Data to be presented at ESMO 2014	▪ Recruitment completed Q4 2013	▪ Recruitment completed Q2 2014	▪ FPI Q4 2013

[1]cobimetinib in collaboration with Exelixis
SCCHN=Squamous Cell Carcinoma of the Head and Neck
FOLFOX=Folinic acid, Fluorouracil, Oxaliplatin; FOLFIRI=Folinic acid, Fluorouracil, Irinotecan

Oncology development programmes

Antibody drug conjugates

gRED Genentech Research & Early Development

	Antibody drug conjugates (ADCs)		
Molecule	**Anti-STEAP1 ADC** (RG7450)	**Anti-MUC16 ADC** (RG7458)	**NME ADC** (RG7882)
Patient population	**Prostate cancer**	**Ovarian and pancreatic cancer**	**Pt. resistant ovarian cancer or unrespectable pancreatic cancer**
Phase	**Phase I**	**Phase I**	**Phase I**
# of patients	N=67	N=57	N=75
Design	▪ Dose escalation study	▪ Dose escalation study	▪ Dose escalation study
Primary endpoint	▪ Safety	▪ Safety/PK	▪ Safety/PK
Status	▪ FPI Q1 2011 ▪ Data presented at ASCO 2013-2014 and AACR 2014	▪ Recruitment completed Q2 2014 ▪ Safety and PK data presented at AACR 2013	▪ FPI Q2 2014
Collaborator	Seattle Genetics and Agensys	Seattle Genetics	

ASCO=American Society of Clinical Oncology; AACR=American Association for Cancer Research

Oncology development programmes
Antibody drug conjugates (continued)

gRED Genentech Research & Early Development

	Antibody drug conjugates (ADCs)		
Molecule	**Anti-NaPi2b ADC** (RG7599)		
Patient population	**NSCLC and ovarian cancer**	**Platinum-sensitive ovarian cancer**	**Platinum-resistant ovarian cancer**
Phase	**Phase I**	**Phase Ib**	**Phase II HERAEA**
# of patients	N=96	N=42	N=92
Design	▪ Dose escalation study	▪ Dose escalation of RG7599in combination with carboplatin, with or without Avastin	▪ **ARM A**: RG7599 ▪ **ARM B**: Pegylated liposomal doxorubicin
Primary endpoint	▪ Safety	▪ Safety, PK	▪ Progression-free survival
Status	▪ FPI Q2 2011 ▪ Data presented at ASCO 2014	▪ FPI Q4 2013	▪ FPI Q1 2014
Collaborator	Seattle Genetics		

ASCO=American Society of Clinical Oncology

Oncology development programmes
Antibody drug conjugates (continued)

gRED Genentech Research & Early Development

	Antibody drug conjugates (ADCs)			
Molecule	**Anti-methoselin ADC** (RG7600)	**Anti-ETBR ADC** (RG7636)	**Pinatuzumab vedotin** (RG7593) **vs. polatuzumab vedotin** (RG7596)	**NME ADC** (RG7841)
Patient population	**Pancreatic and ovarian cancer**	**Metastatic or unresectable melanoma**	**Non-Hodgkin's Lymphoma**	**Refractory solid tumors**
Phase	**Phase I**	**Phase I**	**Phase II ROMULUS**	**Phase I**
# of patients	N=66-96	N=44-64	N=120	N=115
Design	▪ Dose escalation study	▪ Dose escalation study	▪ Pinatuzumab vedotin plus Rituxan ▪ Polatuzumab vedotin plus Rituxan	▪ Dose escalation study
Primary endpoint	▪ Safety	▪ Safety	▪ Safety and anti-tumor activity	▪ Safety
Status	▪ FPI Q4 2011 ▪ Data presented at ASCO 2014	▪ Recruitment completed Q1 2014 ▪ Data presented at AACR 2014	▪ Recruitment completed Q1 2014 ▪ Interim data presented at ASCO and EHA 2014	▪ FPI Q2 2014
Collaborator	Seattle Genetics			

AACR=American Association for Cancer Research; ASCO=American Society of Clinical Oncology

Oncology development programmes
Small molecules

gRED Genentech Research & Early Development

Molecule	**Ipatasertib** (AKT inhibitor, GDC-0068, RG7440)			
Patient population	**Solid tumors**	**2L Castration-resistant prostate cancer**	**Solid tumors**	**1L metastatic gastric or gastroesophageal junction adenocarcinoma**
Phase	**Phase Ib**	**Phase II A.MARTIN**	**Phase Ib**	**Phase II JAGUAR**
# of patients	N=120	N=262	N=62	N=120
Design	▪ Dose escalation with: ▪ **ARM A:** Docetaxel ▪ **ARM B:** Fluoropyrimidine plus oxaliplatin ▪ **ARM C:** Paclitaxel ▪ **ARM D:** Enzalutamide	▪ **ARM A**: Ipatasertib (400mg) + abiraterone ▪ **ARM B**: Ipatasertib (200mg) + abiraterone ▪ **ARM C**: Placebo + abiraterone	▪ Dose escalations study of ipatasertib in combination with cobimetinib* (MEK inhibitor)	▪ **ARM A:** Ipatasertib + mFOLFOX6 ▪ **ARM B:** Placebo + mFOLFOX6
Primary endpoint	▪ Safety	▪ Progression-free survival	▪ Safety/PK	▪ Progression-free survival
Status	▪ FPI Q3 2011 ▪ Data presented at ASCO and ESMO 2012	▪ FPI Q3 2013	▪ FPI Q2 2012 ▪ Data presented at AACR 2014	▪ FPI Q3 2013
Collaborator	Array BioPharma			

*cobimetinib in collaboration with Exelixis
mFOLFOX6=modified FOLFOX (Folinic acid, Fluorouracil, Oxaliplatin)
ASCO=American Society of Clinical Oncology; ESMO=European Society for Medical Oncology; AACR=American Association for Cancer Research

Oncology development programmes

Small molecules (continued)

gRED Genentech Research & Early Development

Molecule	ChK1 inhibitor (RG7741,GDC-0575)	ERK inhibitor (RG7842, GDC-0994)	NME (RG7845, GDC-0853)	PI3 Kinase inhibitor (RG7666, GDC-0084)
Patient population	**Solid tumors or lymphoma**	**Solid tumors**	**B-cell lymphoma and chronic lymphocytic leukemia**	**Progressive or recurrent high-grade glioma**
Phase I	**Phase I**	**Phase I**	**Phase I**	**Phase I**
# of patients	N=170	N=78	N=121	N=68
Design	▪ Dose escalation study	▪ Stage 1: Dose escalation ▪ Stage 2: Cohort expansion	▪ **Stage 1**: Dose escalation ▪ **Stage 2**: Cohort expansion	▪ Dose escalation study
Primary endpoint	▪ Safety/PK	▪ Safety, MTD, PK	▪ Safety/PK, MTD	▪ Safety/PK
Status	▪ FPI Q2 2012	▪ FPI Q2 2013	▪ FPI Q4 2013	▪ FPI Q2 2012
Collaborator	Array BioPharma			

Immunology development programmes

gRED Genentech Research & Early Development

Molecule	Quilizumab (Anti-M1 prime, RG7449)		anti-IL17 (RG7624)
Patient population	**Allergic asthma – inadequately controlled**	**Chronic spontaneous urticaria**	**Autoimmune diseases**
Phase/study	**Phase IIb COSTA**	**Phase II QUAIL**	**Phase Ib**
# of patients	N=560	N=30	N=21
Design	▪ SC administration on top of SOC ▪ **ARM A**: Quilizumab 300mg ▪ **ARM B**: Quilizumab 150mg ▪ **ARM C**: Quilizumab 450mg ▪ **ARM D**: Placebo	▪ **ARM A**: Quilizumab sc ▪ **ARM B**: Placebo sc	▪ Randomized, double-blind, placebo-controlled, multiple ascending dose escalation study
Primary endpoint	▪ Rate of protocol-defined exacerbations from baseline to week 36	▪ Efficacy and safety	▪ Safety and tolerability
Status	▪ Recruitment completed Q3 2013	▪ Recruitment completed Q2 2014	▪ Enrolment completed Q2 2012 ▪ Next study in preparation
Collaborator			NovImmune

SOC=Standard of Care

Neuroscience development programmes

gRED Genentech Research & Early Development

Molecule	**Crenezumab** (Anti-Aβ, RG7412)		
Patient population	**Alzheimer's Disease**		**Alzheimer's Prevention initiative (API) Colombia**
Phase/study	**Phase II ABBY** Cognition study	**Phase II BLAZE** Biomarker study	**Phase II** Cognition study
# of patients	N=450	N=91	N=300
Design	▪ **ARM A**: Crenezumab sc ▪ **ARM B**: Crenezumab iv ▪ **ARM C:** Placebo	▪ **ARM A**: Crenezumab sc ▪ **ARM B**: Crenezumab iv ▪ **ARM C:** Placebo	▪ **ARM A**: 100 carriers receive crenezumab sc ▪ **ARM B**: 100 carriers receive placebo ▪ **ARM C:** 100 non-carriers receive placebo
Primary endpoint	▪ Change in cognition (ADAS-cog) and Clinical Dementia Rating, Sum of Boxes (CDR-SOB) score from baseline to week 73	▪ Change in brain amyloid load from baseline to week 69	▪ Change on Alzheimer's Prevention Initiative (API) Composite Cognitive Test total score
Status	▪ Enrolment completed Q3 2012 ▪ Data presented at AAIC 2014	▪ Enrolment completed Q3 2012 ▪ Cognition data presented at AAIC 2014 ▪ Biomarker data to be presented at CTAD 2014	▪ FPI Q4 2013
Collaborator	AC Immune		AC Immune and Banner Alzheimer's Institute

AAIC=Alzheimer's Association International Conference; CTAD=Clinical Trials on Alzheimer's Disease

Metabolism and infectious diseases development programmes

gRED Genentech Research & Early Development

Molecule	Anti-CMV (RG7667)	Anti-Flu A (RG7745)
Patient population	Prevention of cytomegalovirus disease in kidney transplant recipients	Influenza
Phase/study	Phase II	Phase IIa
# of patients	N=120	N=100
Design	▪ **ARM A:** RG7667 ▪ **ARM B:** Placebo	▪ Healthy volunteers in an influenza challenge model ▪ ARM A: RG7745 ▪ ARM B: Placebo ▪ ARM C: Tamiflu
Primary endpoint	▪ Safety, clinical activity	▪ Reduction in viral activity
Status	▪ FPI Q4 2012 ▪ Enrollment completed Q2 2014	▪ Data positive with 98% reduction of viral load at 3600mg dose ▪ Presented at ISIRV 2014

ISIRV=International Society for Influenza and other Respiratory Virus Diseases

Pipeline summary

Marketed products additional indications

Global Development late-stage trials

pRED (Roche Pharma Research & Early Development)

gRED (Genentech Research & Early Development)

Roche Group HY 2014 sales

Diagnostics

Foreign exchange rate information

Geographical sales split by divisions and Group*

CHFm	HY 2014	HY 2013	% change CER
Pharmaceuticals Division	**17,834**	**18,162**	**+4**
United States	7,572	7,553	+5
Europe	4,775	4,652	+3
Japan	1,581	1,672	+7
International	3,906	4,285	+2
Diagnostics Division	**5,140**	**5,133**	**+6**
United States	1,147	1,139	+6
Europe	2,082	2,064	+2
Japan	222	242	+4
International	1,689	1,688	+12
Group	**22,974**	**23,295**	**+5**
United States	8,719	8,692	+5
Europe	6,857	6,716	+3
Japan	1,803	1,914	+6
International	5,595	5,973	+5

* Geographical sales split shown here does not represent operational organization; CER=Constant Exchange Rates

Pharma Division sales HY 2014 (vs. 2013)

Top 20 products

	Global		US		Europe		Japan		International	
	CHFm	% CER	CHFm	% CER	CHFm	% CER	CHFm	% CER	CHFm	% CER
MabThera/Rituxan	3,360	4	1,624	3	1,018	7	104	0	614	5
Avastin	3,097	6	1,300	6	983	5	332	10	482	8
Herceptin	3,082	6	937	10	1,138	3	130	4	877	6
Lucentis	828	6	828	6	-	-	-	-	-	-
Tarceva	651	-1	325	5	154	-12	49	22	123	-8
Pegasys	582	-15	137	-28	144	-26	32	31	269	-2
Actemra/RoActemra	568	22	180	26	207	20	100	24	81	15
Xeloda	474	-34	159	-47	58	-64	44	-9	213	-3
Xolair	437	19	437	19	-	-	-	-	-	-
CellCept	413	-6	95	-6	110	-7	28	-5	180	-6
Perjeta	388	276	237	183	92	423	37	-	22	*
Tamiflu	372	3	188	-7	72	*	62	-21	50	-23
Activase/TNKase	359	11	335	12	-	-	-	-	24	8
Valcyte/Cymevene	353	12	188	16	92	8	-	-	73	6
Pulmozyme	278	6	181	6	62	1	0	-	35	10
NeoRec./Epogin	231	-8	-	-	98	-12	29	-36	104	9
Kadcyla	227	188	143	83	63	*	9	-	12	*
Mircera	203	11	-	-	52	4	94	9	57	20
Zelboraf	155	-5	36	-43	100	10	-	-	19	73
Madopar	135	-9	0	-	53	-5	8	-1	74	-11

CER=Constant Exchange Rates

* over +500%

Pharma Division sales HY 2014 (vs. 2013)

Recently launched products

	Global		US		Europe		Japan		International	
	CHFm	% CER	CHFm	% CER	CHFm	% CER	CHFm	% CER	CHFm	% CER
Erivedge	57	111	35	33	19	*	-	-	3	*
Gazyva	18	-	18	-	-	-	-	-	-	-

CER=Constant Exchange Rates

* over +500%

Pharma Division CER sales growth[1] in %

Global top 20 products

	Q2/13	Q3/13	Q4/13	Q1/14	Q2/14
MabThera/Rituxan	0	12	7	3	5
Avastin	13	14	13	9	4
Herceptin	0	7	7	3	9
Lucentis	18	21	22	8	4
Tarceva	9	5	4	-5	3
Pegasys	-24	-16	-20	-19	-10
Actemra/RoActemra	33	33	23	23	21
Xeloda	3	6	-3	-19	-50
Xolair	10	14	17	15	22
CellCept	1	-2	-10	-1	-11
Perjeta	*	262	394	274	277
Tamiflu	44	115	-27	9	-36
Activase/TNKase	3	18	19	-1	26
Valcyte/Cymevene	8	0	26	12	12
Pulmozyme	7	0	18	3	8
NeoRec./Epogin	-20	-16	-14	-9	-8
Kadcyla	-	-	-	474	105
Mircera	35	29	23	21	2
Zelboraf	46	38	26	-2	-9
Madopar	-4	3	9	-20	3

[1] Q2-Q4/13 vs. Q2-Q4/12; Q1-Q2/14 vs. Q1-Q2/13

CER=Constant Exchange Rates

* over 500%

Pharma Division CER sales growth[1] in %

Top 20 products by region

	US				Europe				Japan				International			
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
MabThera/Rituxan	20	2	-2	8	6	0	6	8	8	8	20	-17	3	26	12	-2
Avastin	10	4	6	6	17	9	8	2	15	12	27	-5	19	49	7	9
Herceptin	14	3	4	17	-1	-2	2	4	7	11	23	-12	8	21	0	12
Lucentis	21	22	8	4	-	-	-	-	-	-	-	-	-	-	-	-
Tarceva	5	-8	-6	16	0	-3	-12	-12	8	25	42	6	13	27	-6	-9
Pegasys	-51	-55	-40	-14	-14	-14	-19	-32	-22	-28	16	45	18	1	-7	3
Actemra/RoActemra	33	20	22	30	26	21	20	20	26	24	49	5	59	31	3	28
Xeloda	8	-8	-15	-80	1	-9	-57	-71	3	0	8	-23	10	9	-3	-2
Xolair	14	17	15	22	-	-	-	-	-	-	-	-	-	-	-	-
CellCept	13	5	-7	-6	-11	-5	-10	-5	13	8	5	-14	-5	-24	6	-16
Perjeta	129	201	161	205	*	*	*	287	-	-	-	-	-	*	*	*
Tamiflu	*	-24	-9	22	-76	-	*	-71	-73	-47	-17	-74	-17	-72	-8	-44
Activase/TNKase	19	22	0	27	-	-	-	-	-	-	-	-	-1	-13	-4	19
Valcyte/Cymevene	10	19	26	8	-22	28	5	10	-	-	-	-	3	38	-7	24
Pulmozyme	6	16	2	10	6	1	2	-1	29	12	150	-	-25	41	10	9
NeoRec./Epogin	-	-	-	-	-26	-19	-14	-10	-22	-22	-26	-45	3	-2	7	12
Kadcyla	-	-	315	16	-	-	-	*	-	-	-	-	-	-	-	*
Mircera	-	-	-	-	74	29	8	-1	26	21	36	-12	11	20	8	32
Zelboraf	12	-1	-40	-46	36	17	12	8	-	-	-	-	489	425	98	56
Madopar	-	-	-	-	2	-1	-9	-2	5	3	4	-6	3	18	-29	7

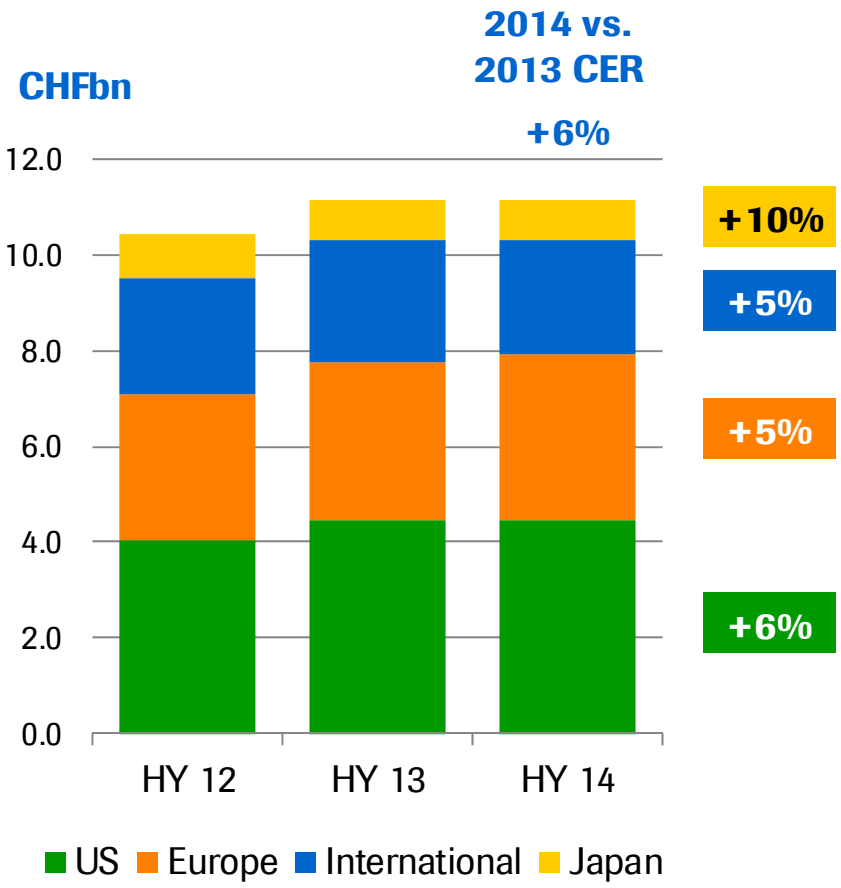
[1] Q3 2013 - Q4 2013 vs. 2012, Q1 2014 – Q2 2014 vs. 2013 CER=Constant Exchange Rates * over +500%

CER sales growth (%)
Quarterly development

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

CER=Constant Exchange Rates

HY 2014: Oncology franchise



HY 2014 sales of CHF 11.14bn

US

- HER2 Franchise (Perjeta: sustained growth of US patient shares), Avastin driving growth and performance

Europe

- Growth mainly driven by Perjeta and Kadcyla

International

- Strong growth for Avastin and Herceptin

Japan

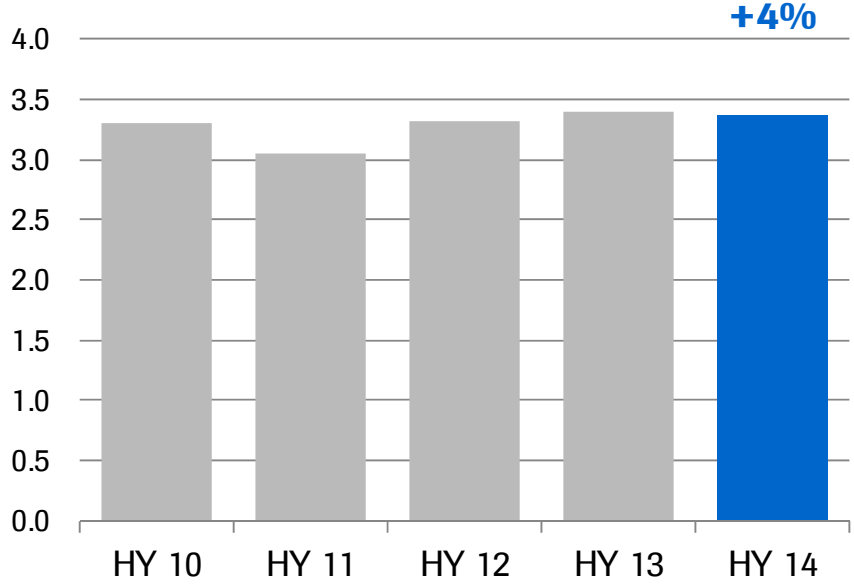
- Growth driven largely by Avastin

CER=Constant Exchange Rates

MabThera/Rituxan

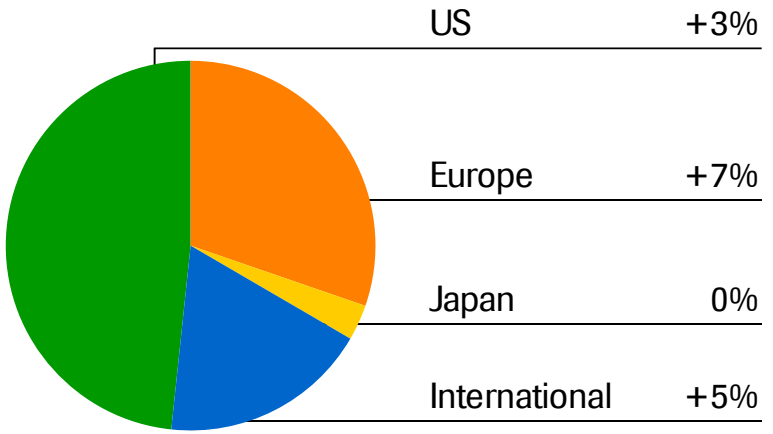
Global sales

CHFbn



CER growth +4%

Regional sales



CER growth

HY 2014 sales of CHF 3.360bn

- US and Europe: stable market shares in approved indications

CER=Constant Exchange Rates

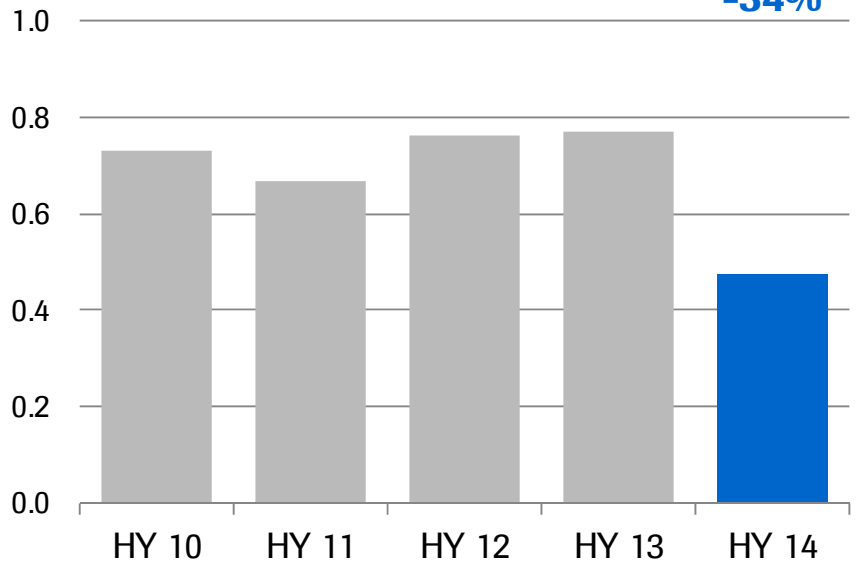
Xeloda

Global sales

CHFbn

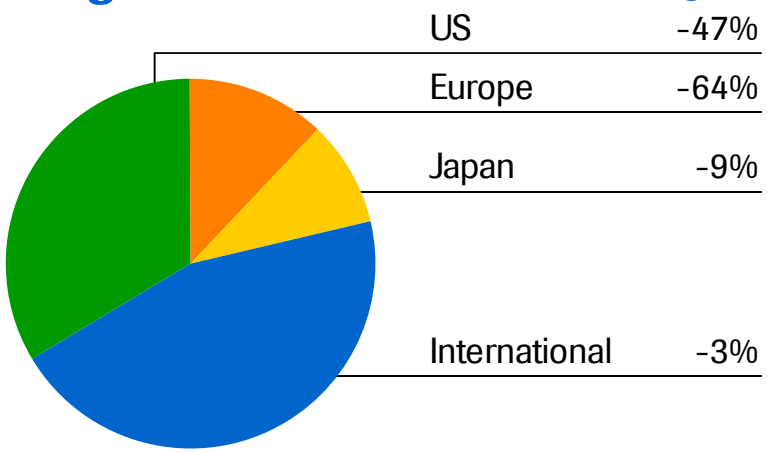
CER growth

-34%



Regional sales

CER growth



HY 2014 sales of CHF 0.474bn

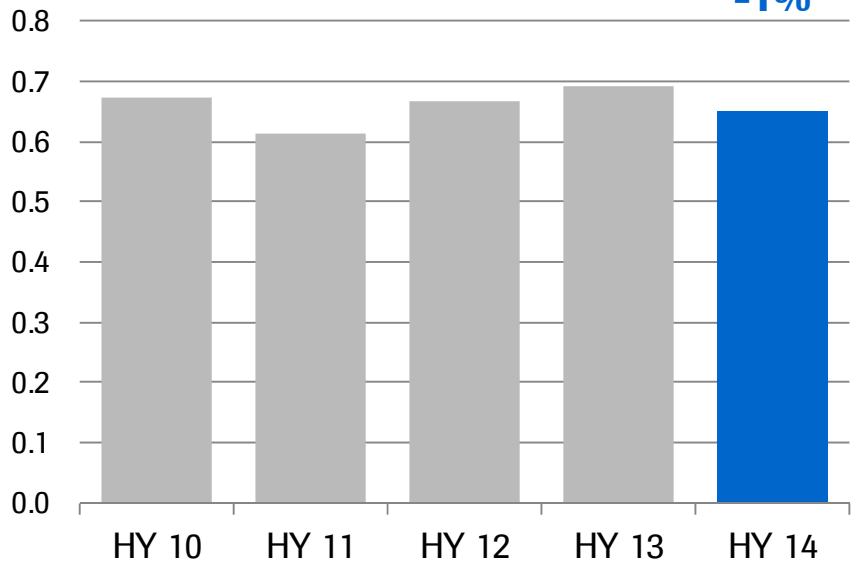
- US: LoE impacts: loss of exclusivity Feb 2014
- Europe: LoE impacts: loss of exclusivity Dec 2013

CER=Constant Exchange Rates

Tarceva

Global sales

CHFbn

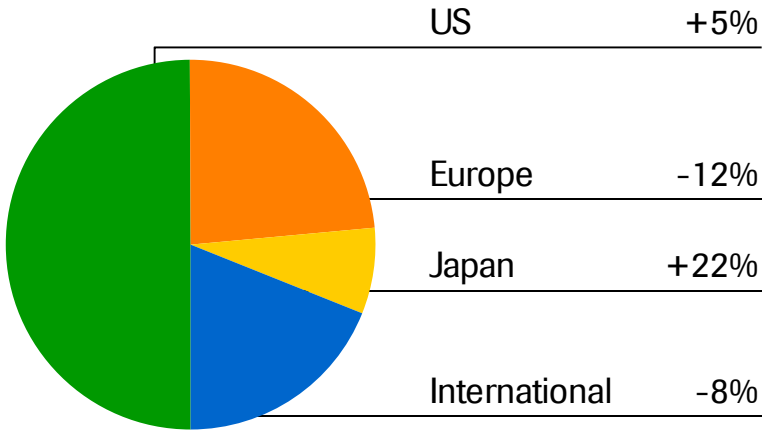


CER growth

-1%

Regional sales

CER growth

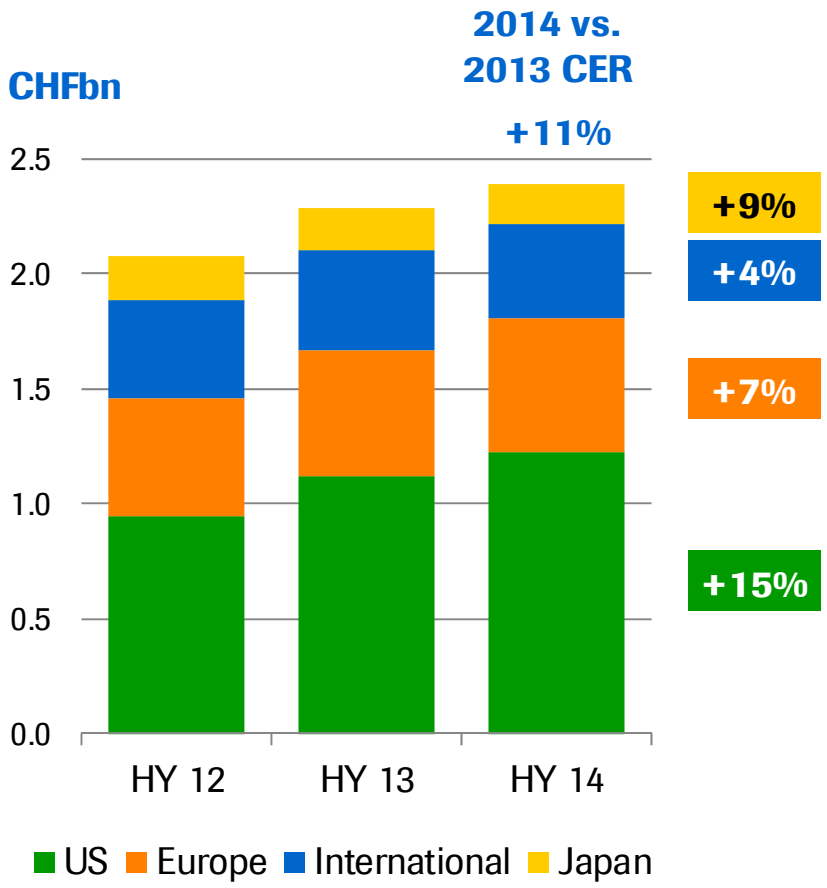


HY 2014 sales of CHF 0.651bn

- US: reversal of sales provisions
- Europe: increased competition in 1L EGFR Mut+ market
- International: local competition in China

CER=Constant Exchange Rates

HY 2014: Immunology franchise



HY 2014 sales of CHF 2.389bn

- Strong growth of Actemra/RoActemra and MabThera/Rituxan, CellCept declining

Actemra/RoActemra

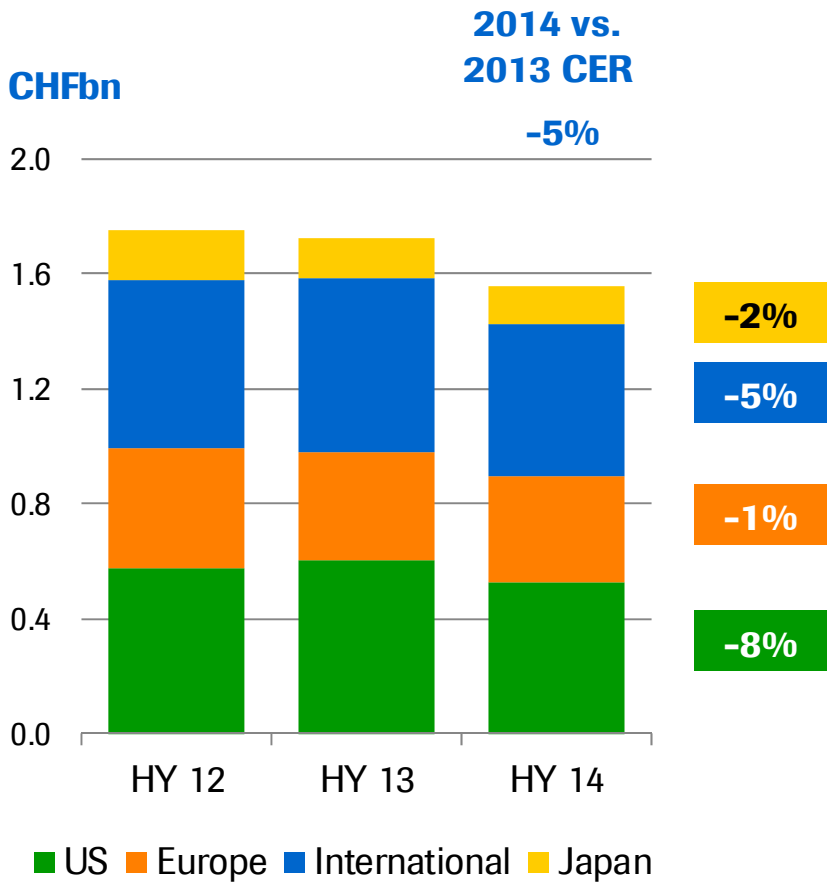
- EU: growth driven by a strong mono patient shares, very encouraging SC
- US: growth is driven by strong IV demand and SC patient share uptake (80% of new patients)

CellCept

- Decline of sales due to patent expiry key EU countries end 2010

CER=Constant Exchange Rates

HY 2014: Infectious diseases



HY 2014 sales of CHF 1.555bn

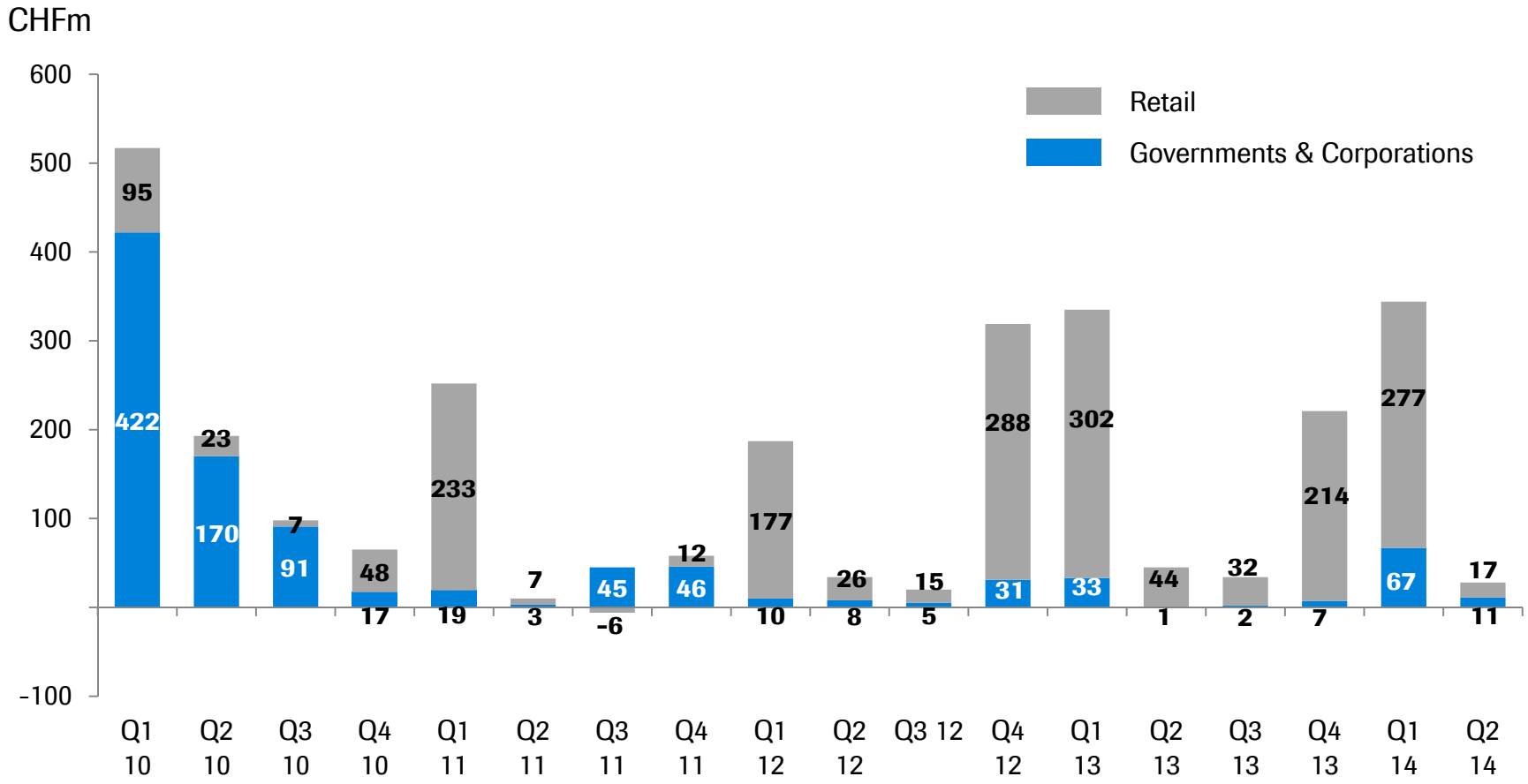
Pegasys sales in Q2 are decreasing at lower rates than previous Qs.

- 2nd generation uptake in the US has driven this change.
- Lower and shorter uptake of 2nd generation IFN based are driving sales decrease in Germany and France.
- Solid growth in several LATAM countries driven by market growth with 1st generation DAAs.

CER=Constant Exchange Rates

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 HY 2014 sales

Diagnostics

Foreign exchange rate information

Diagnostics Division CER growth

By Region and Business Area (vs. 2013)

	Global		North America		EMEA[1]		RoW	
	CHFm	% CER growth	CHFm	% CER growth	CHFm	% CER growth	CHFm	% CER growth
Professional Diagnostics	2,904	9	600	9	1,305	4	999	15
Diabetes Care	1,140	0	210	-6	718	0	212	6
Molecular Diagnostics	762	4	268	8	305	-1	189	4
Tissue Diagnostics	334	9	194	5	95	14	45	18
Diagnostics Division	**5,140**	**6**	**1,272**	**6**	**2,423**	**2**	**1,445**	**12**

CER=Constant Exchange Rates
[1] Europe, Middle East and Africa

Diagnostics Division quarterly sales and CER growth[1]

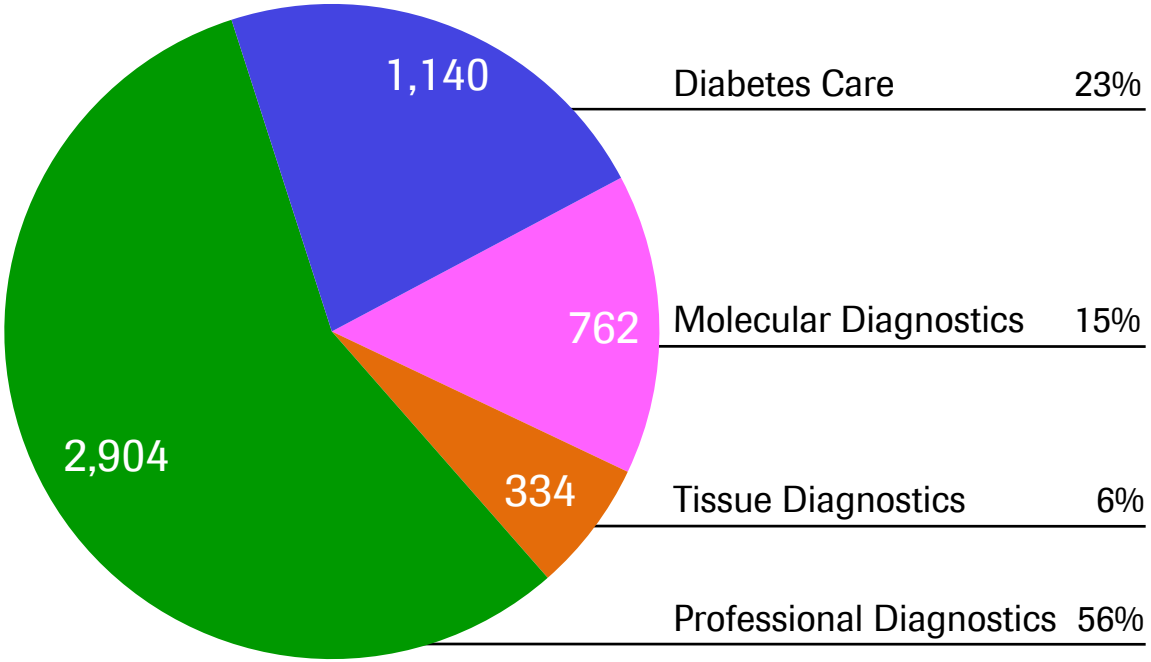
	Q1 13		Q2 13		Q3 13		Q4 13		Q1 14		Q2 14	
	CHFm	% CER	CHFm	% CER	CHFm	% CER	CHFm	% CER	CHFm	% CER	CHFm	% CER
Professional Diagnostics	1,345	4	1,480	8	1,426	9	1,521	10	1,392	9	1,512	8
Diabetes Care	539	-5	666	-4	576	3	678	-4	538	5	602	-4
Molecular Diagnostics	378	-3	403	6	383	4	416	3	370	4	392	3
Tissue Diagnostics	157	7	165	4	159	8	184	10	156	4	178	14
Dia Division	**2,419**	**1**	**2,714**	**4**	**2,544**	**7**	**2,799**	**5**	**2,456**	**7**	**2,684**	**5**

CER=Constant Exchange Rates
[1] versus same period of prior year

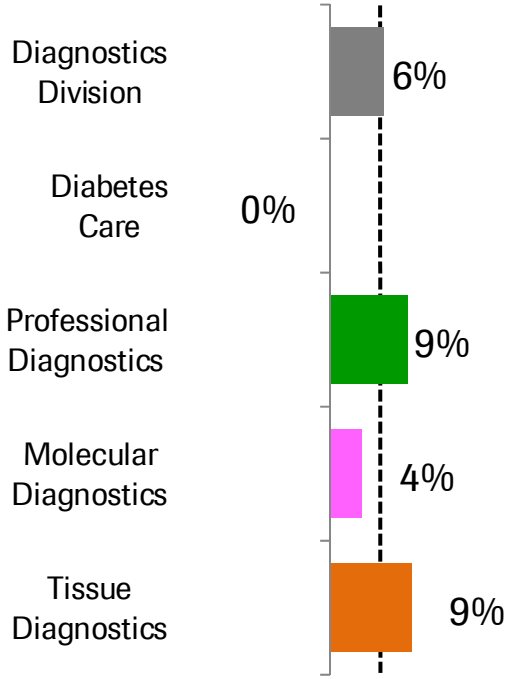
HY 2014: Diagnostics Division sales

Growth driven by Professional Diagnostics

CHF 5,140 m



CER sales growth

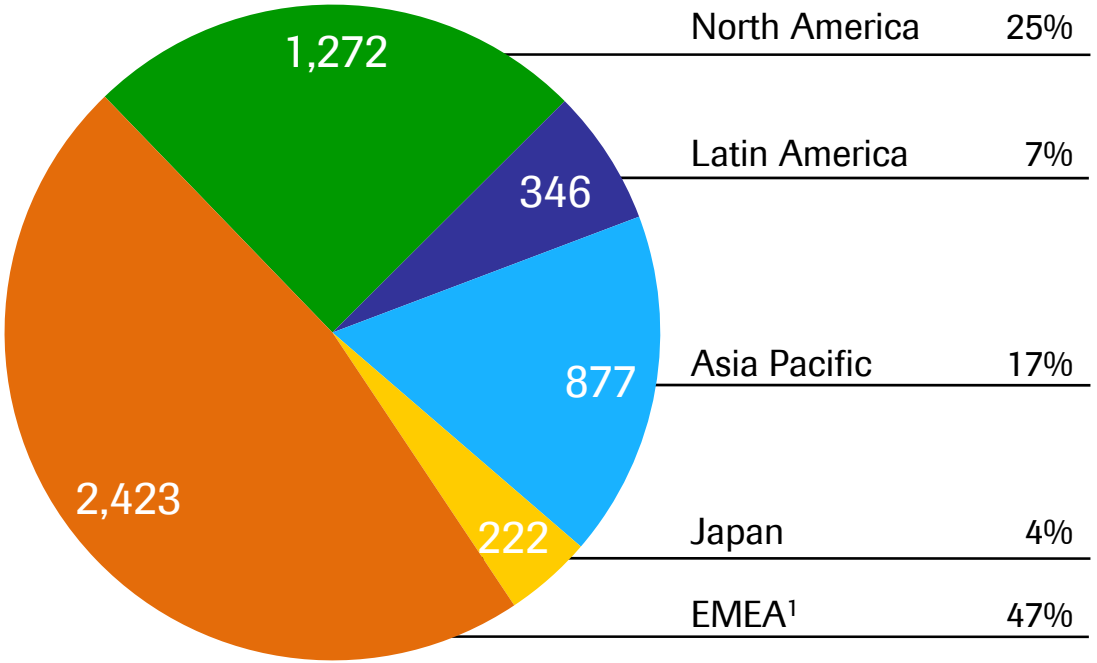


CER=Constant Exchange Rates

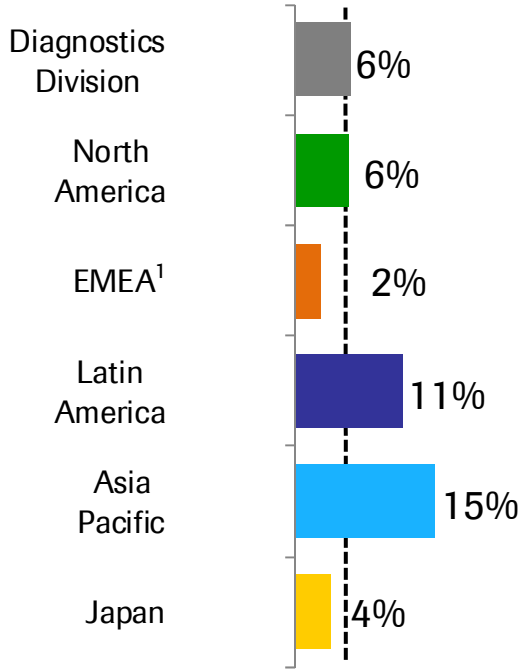
HY 2014: Diagnostics Division sales

Growth driven by Asia Pacific and North America

CHF 5,140 m



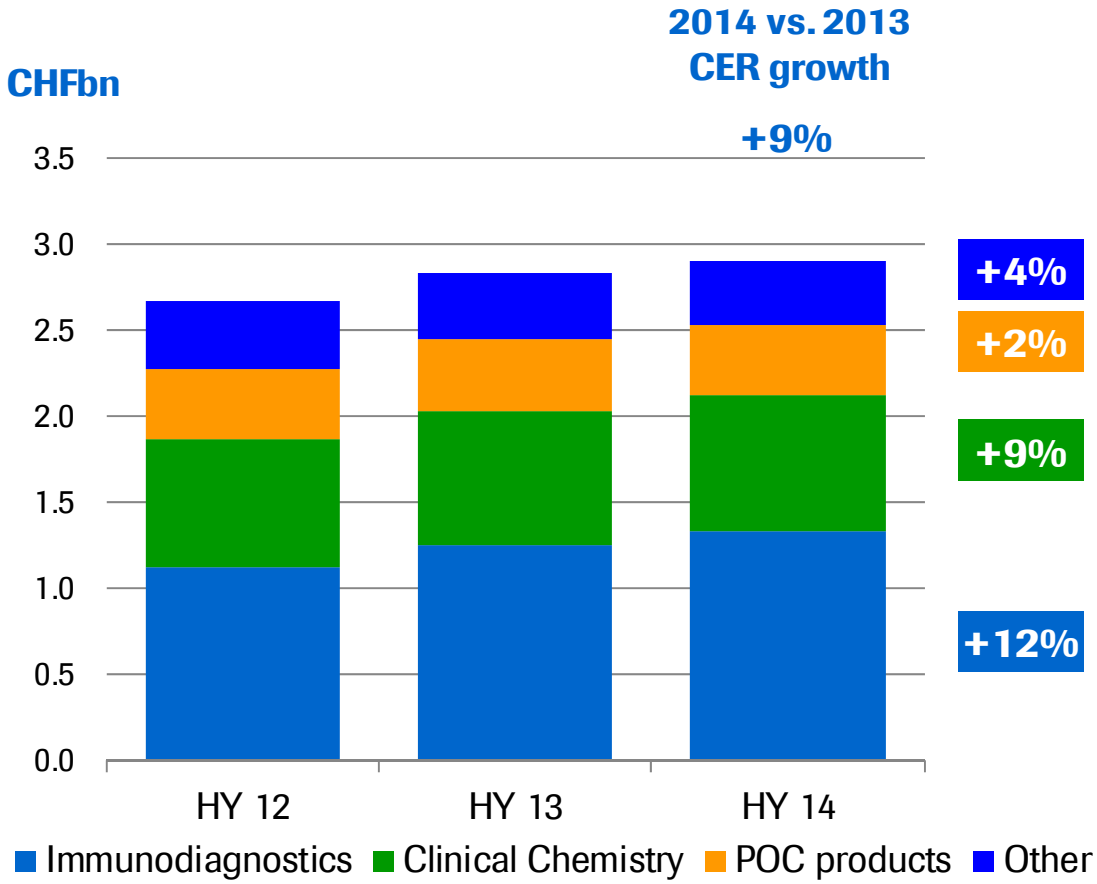
CER sales growth



CER=Constant Exchange Rates
[1] Europe, Middle East and Africa

Professional Diagnostics

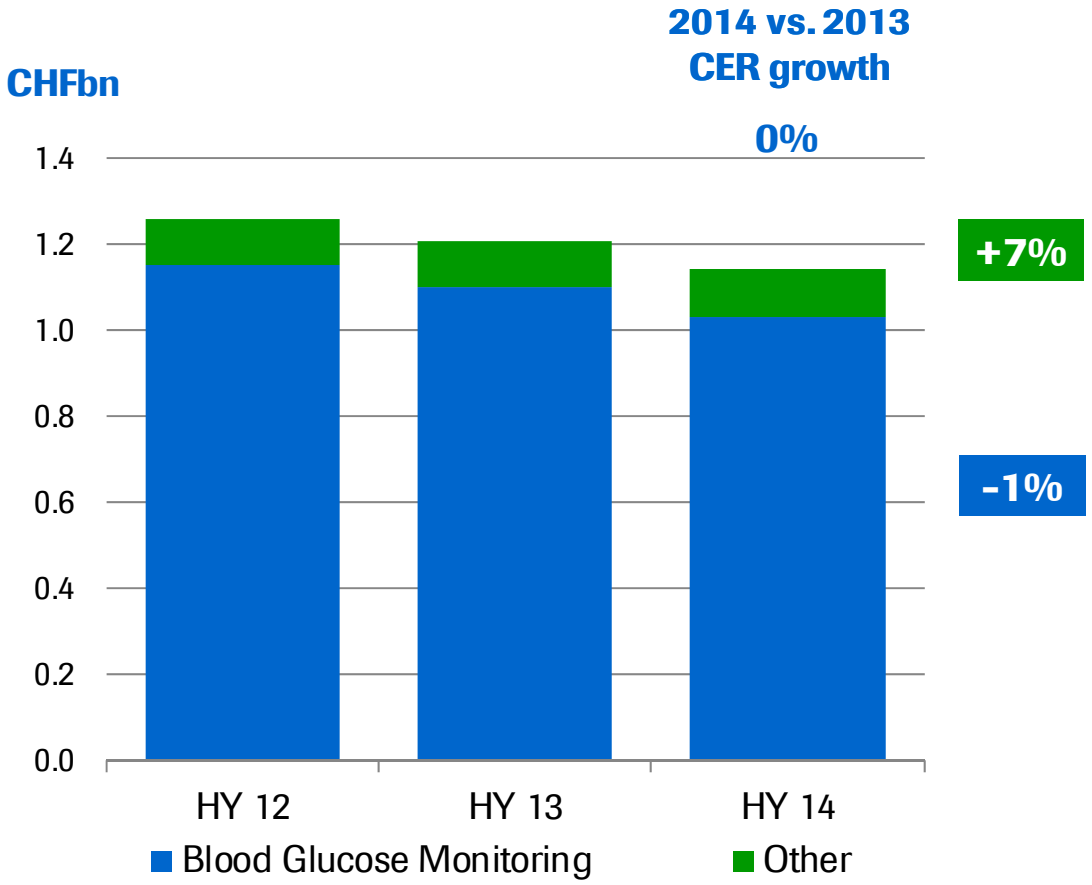
Strong growth driven by Immunodiagnostics



CER=Constant Exchange Rates

Diabetes Care

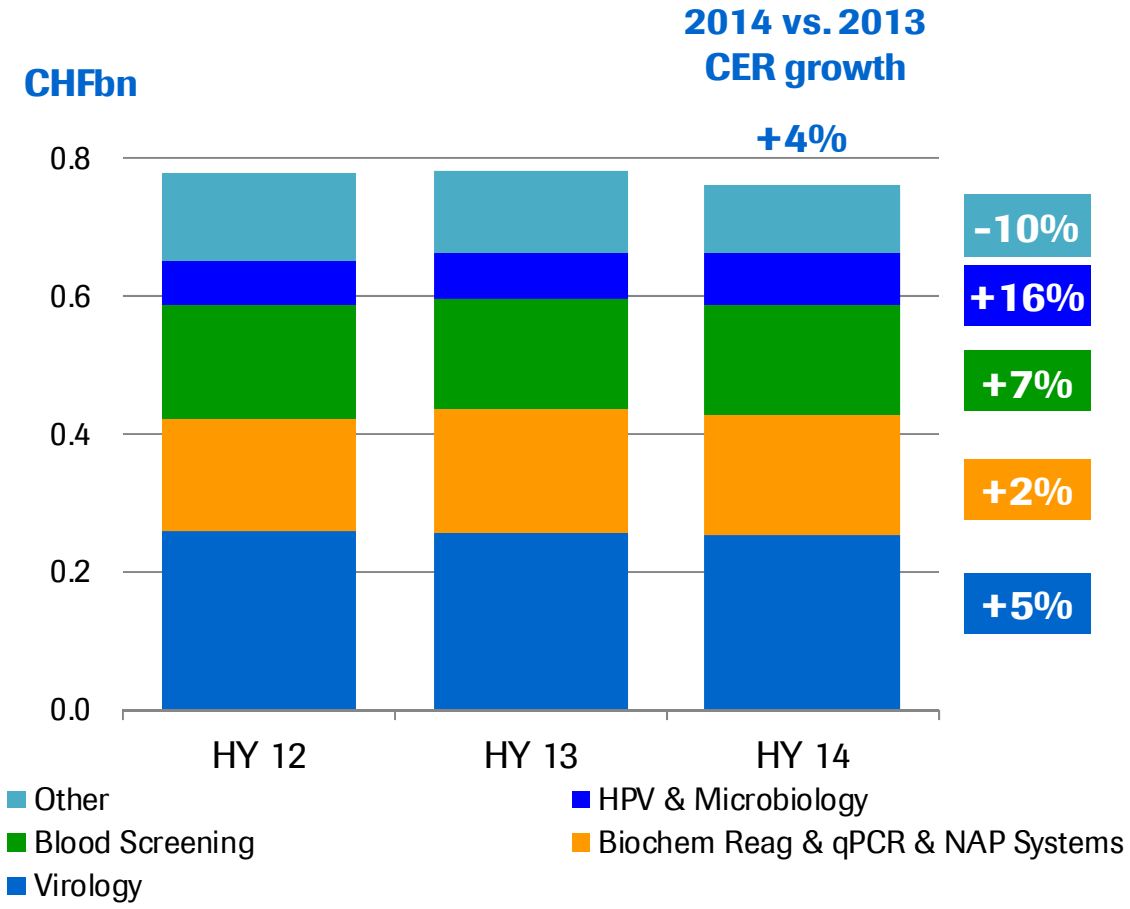
Adapting to a challenging market environment



CER=Constant Exchange Rates

Molecular Diagnostics

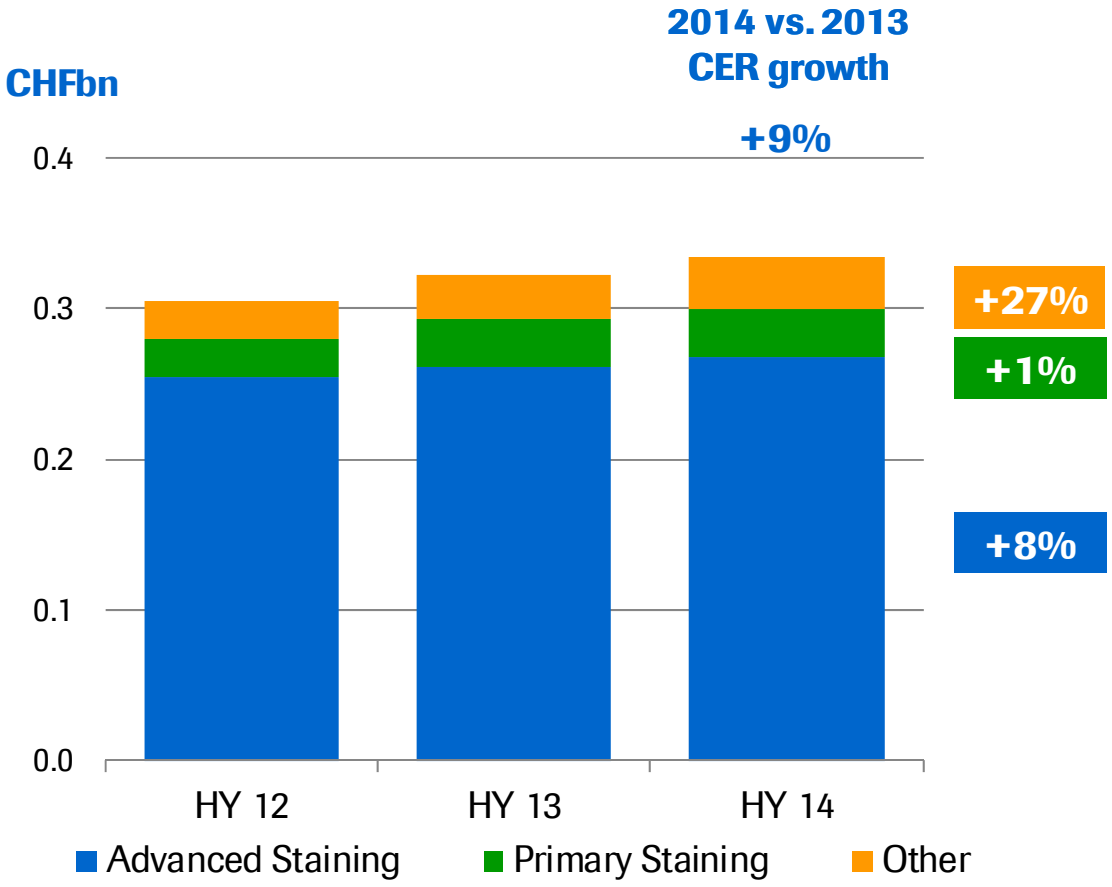
Growth driven by Virology and Blood Screening



CER=Constant Exchange Rates

Tissue Diagnostics

Strong growth in EMEA[1] and APAC[2]



CER=Constant Exchange Rates
[1] Europe, Middle East and Africa [2] Asia Pacific

2014: Key product launches
Professional Diagnostics

Product	Description	Region
cobas m 511	Fully integrated and automated Hematology system	EU
cobas 6500 (u 701)	Automated urinalysis work area platform including u701 microscopy analyzer	EU ✓
Syphilis	Immunoassay for the detection of *Treponema pallidum*	EU ✓
PE Prognosis	Claim extension for short-term prediction, rule in/out of Preeclampsia in pregnancy	EU
Anti Mullerian Hormone	Fully automated test for the assessment of ovarian reserve for fertility	EU

Planned launches may be delayed or not occur as a result of adverse regulatory decisions or other factors

2014: Key product launches

Diabetes Care

Product	Description	Region
Accu-Chek Connect	bG meter that connects wirelessly via Bluetooth to a smartphone app and cloud to transmit bG values	EU
Accu-Chek Insight	Next generation insulin delivery system combining an insulin pump and a blood glucose meter that functions as a pump remote control	EU ✓

Planned launches may be delayed or not occur as a result of adverse regulatory decisions or other factors

2014: Key product launches
Molecular Diagnostics

Product	Description	Region
cobas 6800/8800	Next generation PCR platform for molecular testing in virology and blood screening, serving mid to high volumes	WW*
MPX 2.0	Next generation multiplex test for blood screening for HIV, HCV and HBV	US
HSV 1 and 2 test	Detection of Herpes Simplex Virus on cobas 4800 platform	EU ✓
MRSA/SA test	Detection of MRSA/SA on cobas 4800	EU ✓
C-difficile test	Detection of C-difficile on cobas 4800	US ✓

* excluding US

Planned launches may be delayed or not occur as a result of adverse regulatory decisions or other factors

2014: Key product launches

Tissue Diagnostics

Product	Description	Region
Connect-V	Middleware providing connectivity for RTD instruments to simplify interfacing and connectivity to laboratory and hospital information systems	WW

Planned launches may be delayed or not occur as a result of adverse regulatory decisions or other factors

Pipeline summary

Marketed products additional indications

Global Development late-stage trials

pRED (Roche Pharma Research & Early Development)

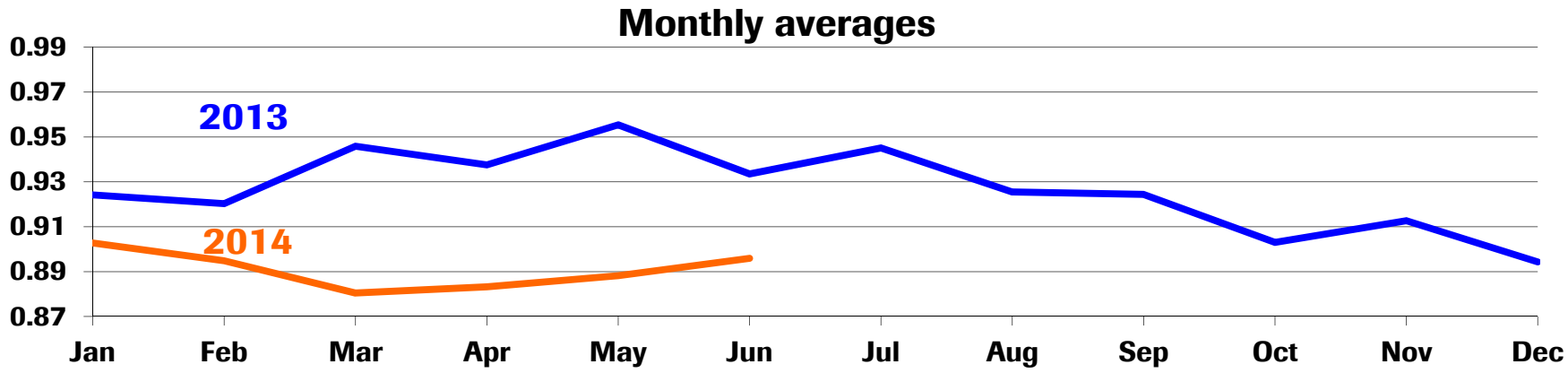
gRED (Genentech Research & Early Development)

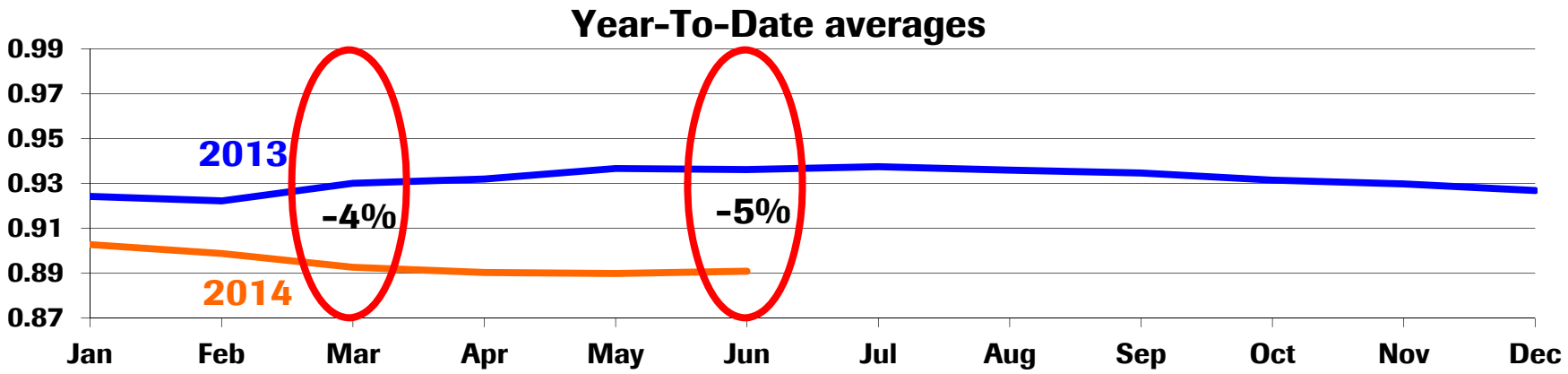
Roche Group HY 2014 sales

Diagnostics

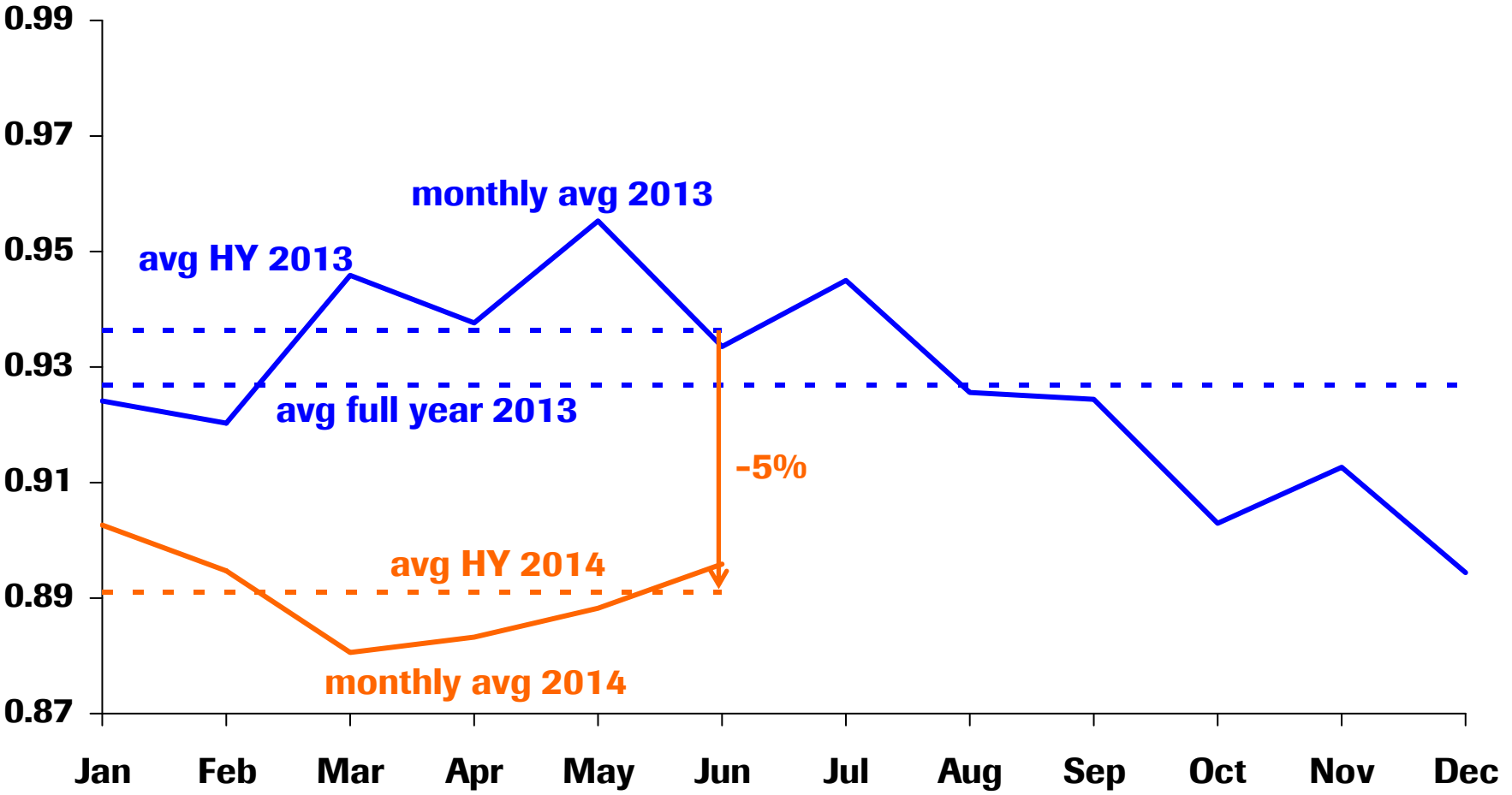
Foreign exchange rate information

CHF / USD

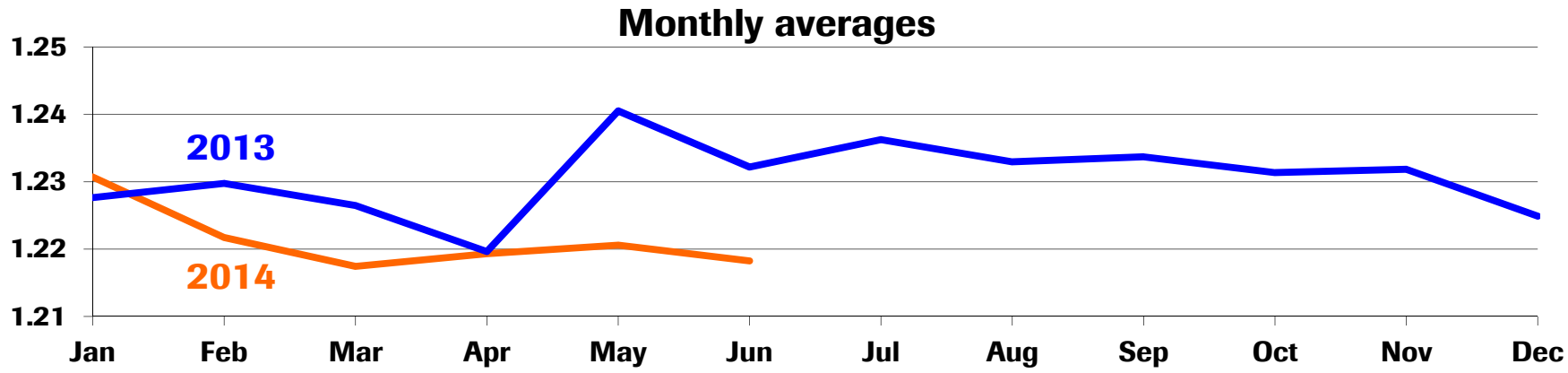

Monthly averages
0.99
0.97
0.95
0.93
0.91
0.89
0.87
2013
2014
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec


Year-To-Date averages
0.99
0.97
0.95
0.93
0.91
0.89
0.87
2013
2014
-4%
-5%
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec

CHF / USD


0.99
0.97
0.95
0.93
0.91
0.89
0.87
monthly avg 2013
avg HY 2013
avg full year 2013
-5%
avg HY 2014
monthly avg 2014
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec

CHF / EUR


Monthly averages
1.25
1.24
1.23
1.22
1.21
2013
2014
Jan
Feb
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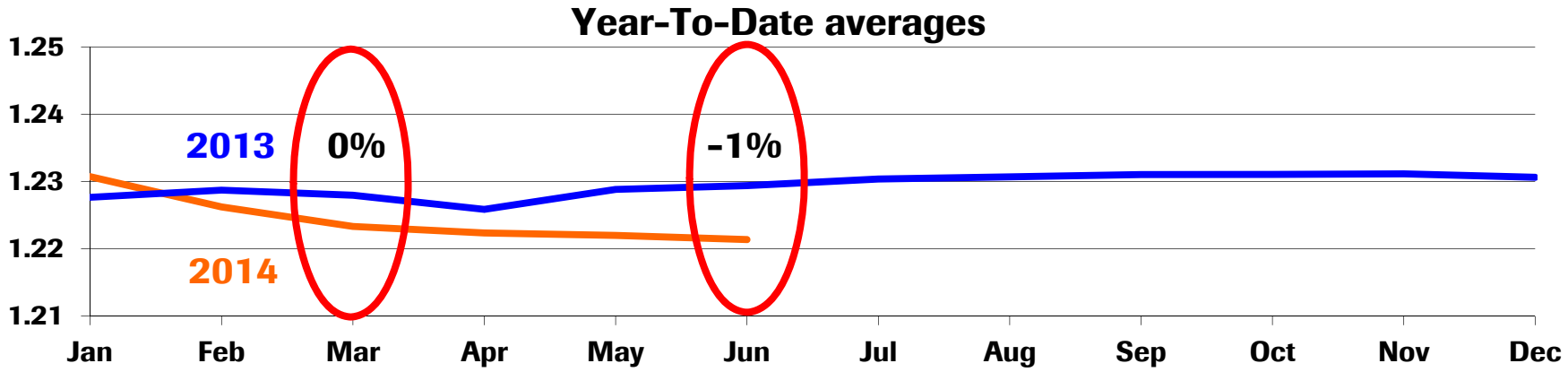
Oct
Nov
Dec


Year-To-Date averages
1.25
1.24
1.23
1.22
1.21
2013
2014
0%
-1%
Jan
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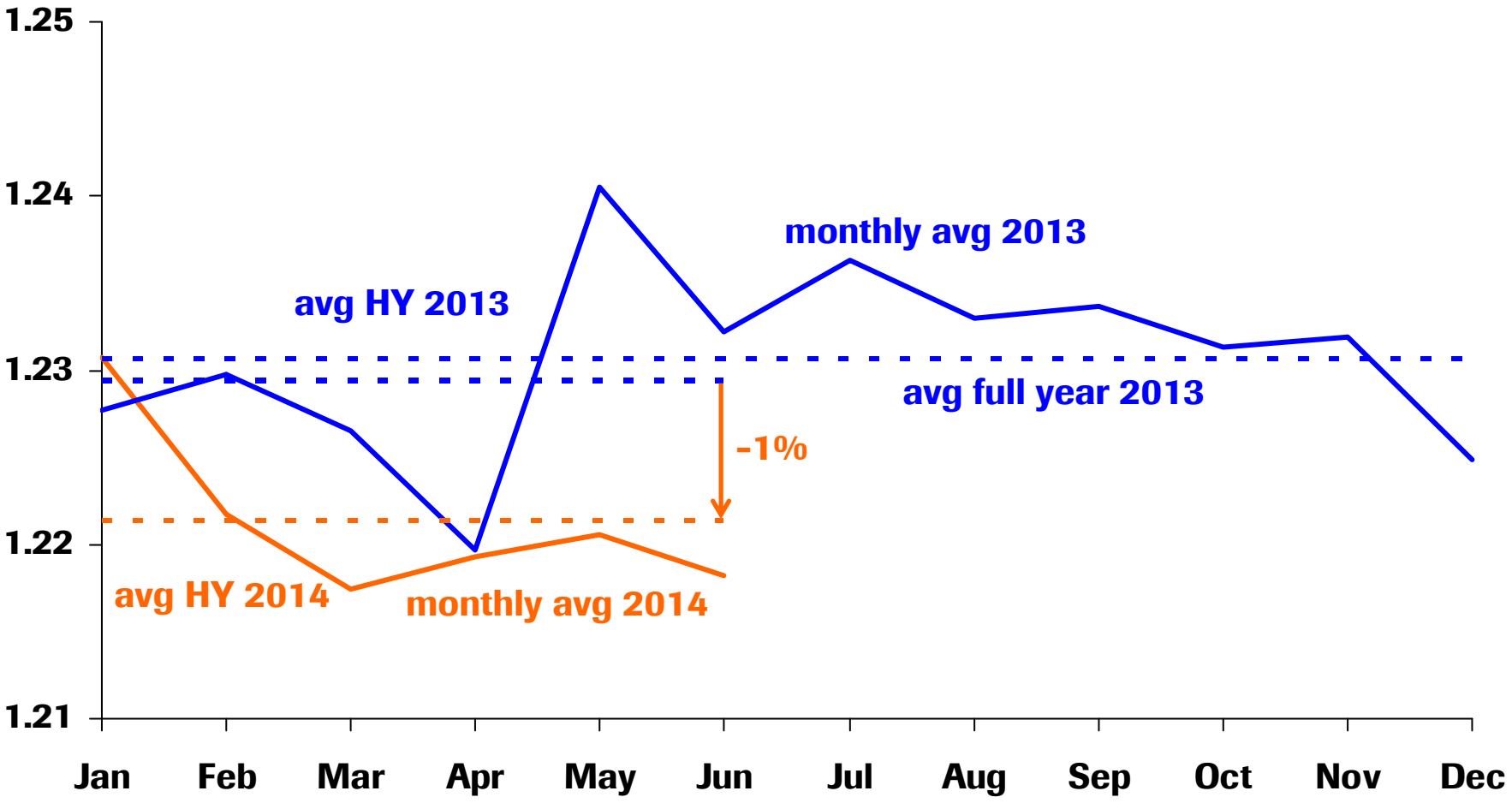
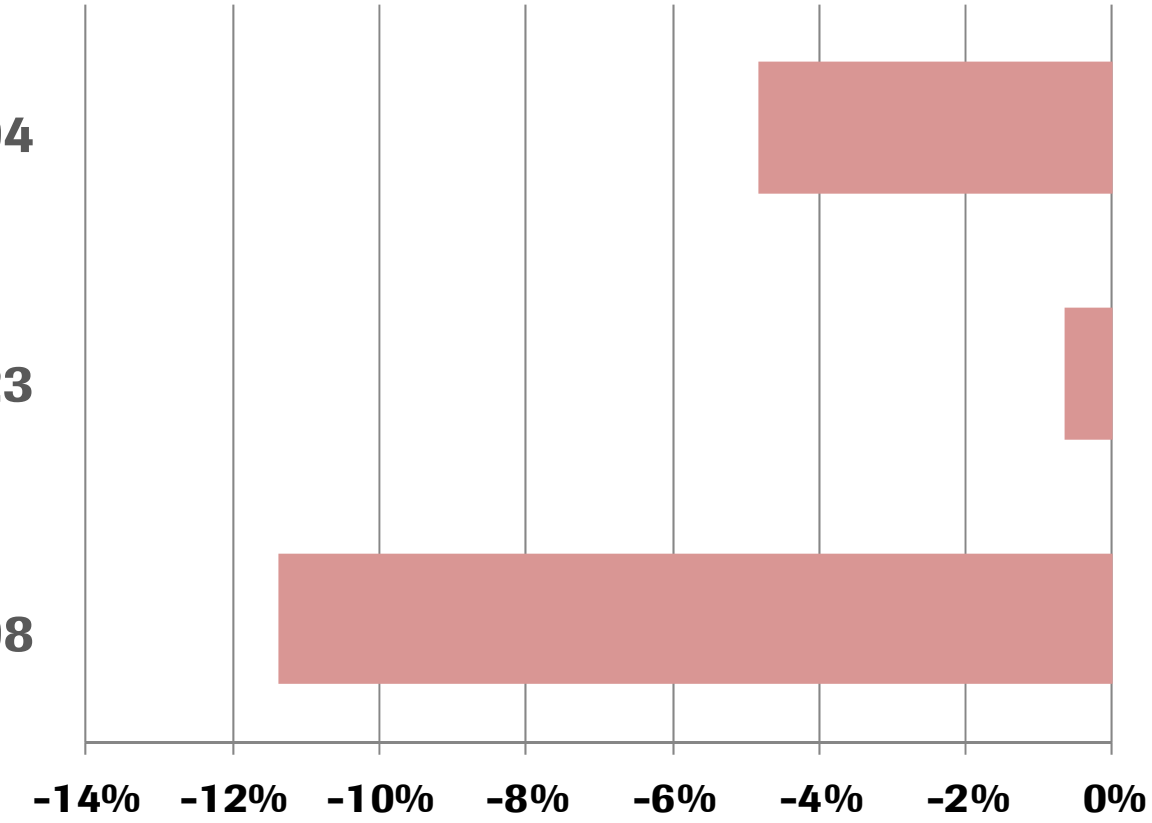
Nov
Dec

CHF / EUR


1.25
1.24
1.23
1.22
1.21
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
monthly avg 2013
avg HY 2013
avg full year 2013
-1%
avg HY 2014
monthly avg 2014

Average exchange rates

	HY 14	HY 13
USD	0.89	0.94
EUR	1.22	1.23
JPY	0.87	0.98

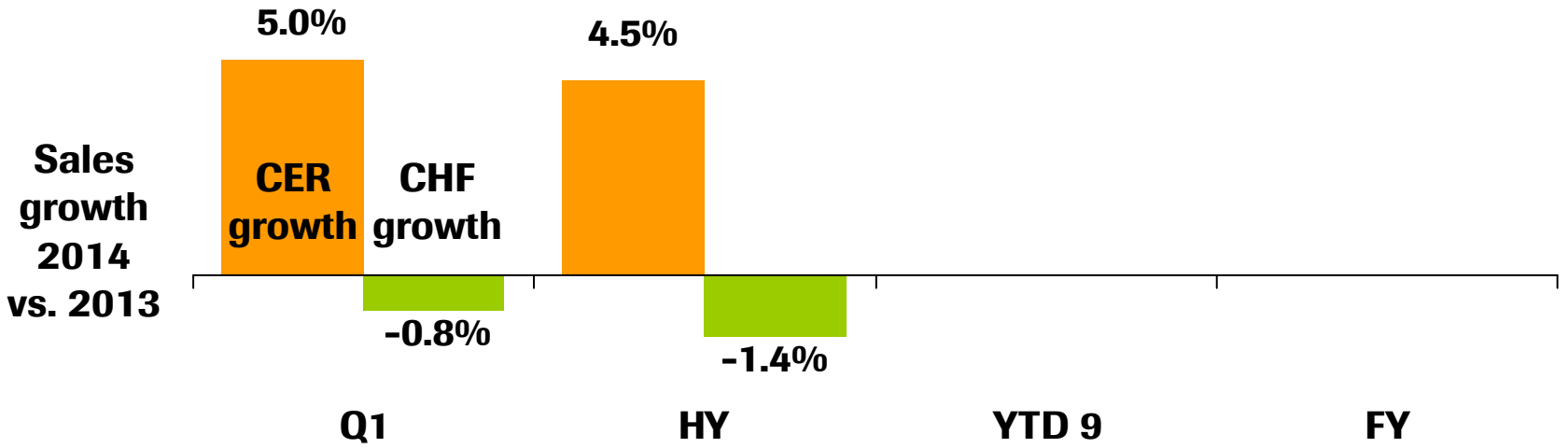


Exchange rate impact on sales growth

In H1 2014 negative impact from USD, Latin American currencies and JPY

Development of average exchange rates versus prior year period

CHF / EUR	-0.4%	-0.7%
CHF / USD	-4.0%	-4.8%
CHF / JPY	-13.9%	-11.4%
Difference in CHF / CER growth	-5.8%p	-5.9%p



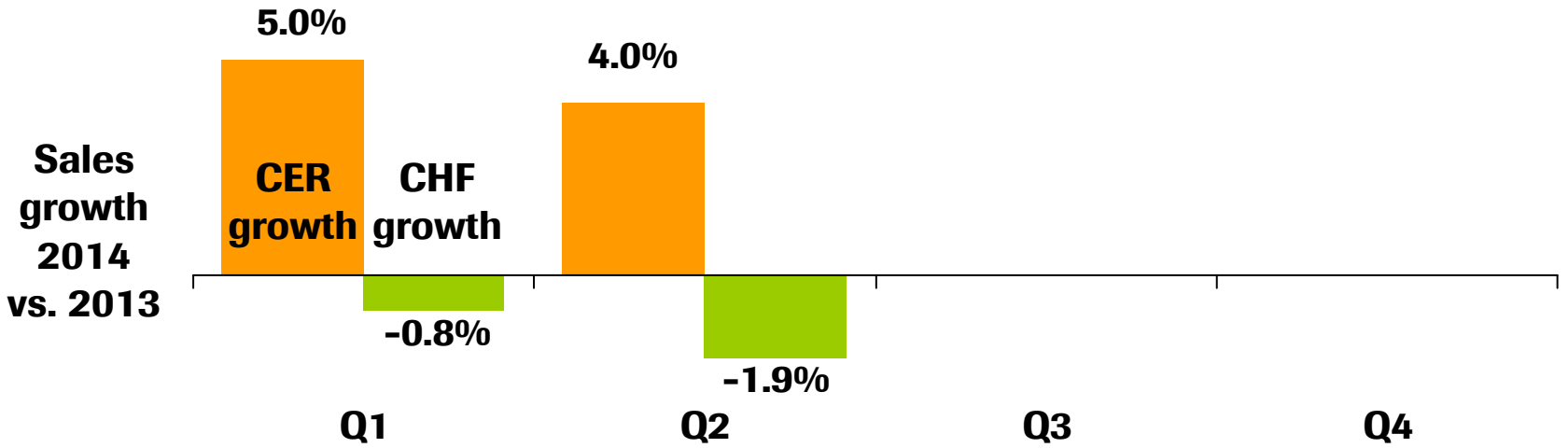
CER=Constant Exchange Rates

Exchange rate impact on sales growth

In H1 2014 negative impact from USD, Latin American currencies and JPY

Development of average exchange rates versus prior year period

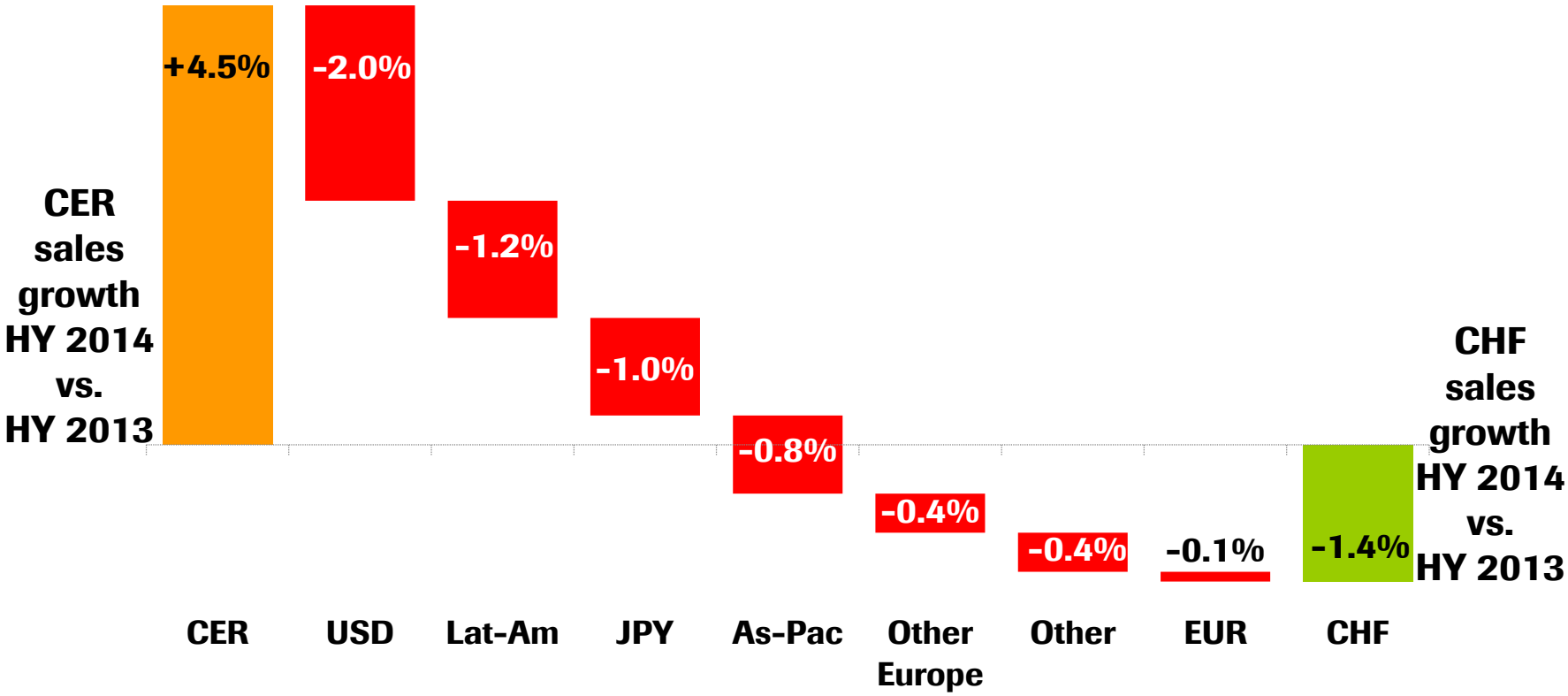
CHF / EUR	-0.4%	-0.9%
CHF / USD	-4.0%	-5.6%
CHF / JPY	-13.9%	-8.9%
Difference in CHF / CER growth	-5.8%p	-5.9%p



CER=Constant Exchange Rates

Exchange rate impact on sales growth

Negative impact from USD, Latin American currencies and JPY



CER=Constant Exchange Rates

Doing now what patients need next