
Roche Pharma Day 2021

Pharma Strategy: Sustainable growth by delivering more patient benefits at reduced cost to society

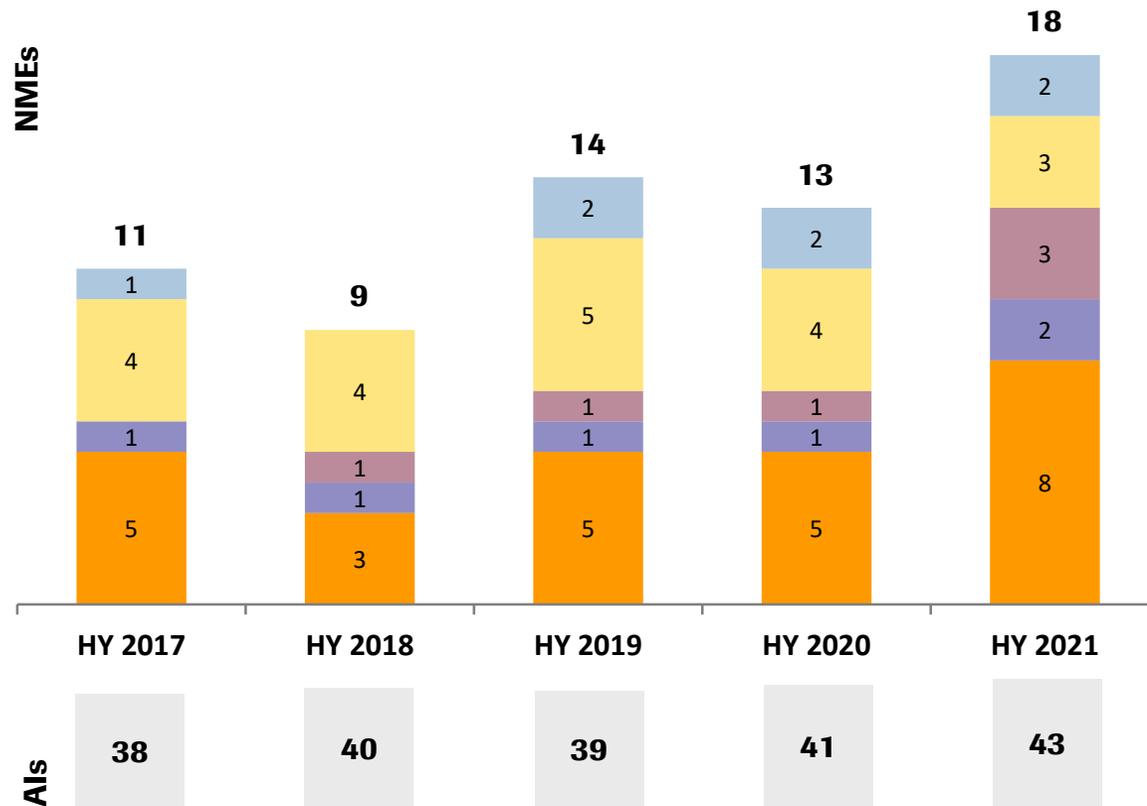
Bill Anderson | CEO Roche Pharmaceuticals

What has changed since Pharma Day 2020?

Pipeline at all times high: Assets in Ph III & registration

Continued momentum in the second half

Outlook H2 2021: 10 new Ph III studies planned

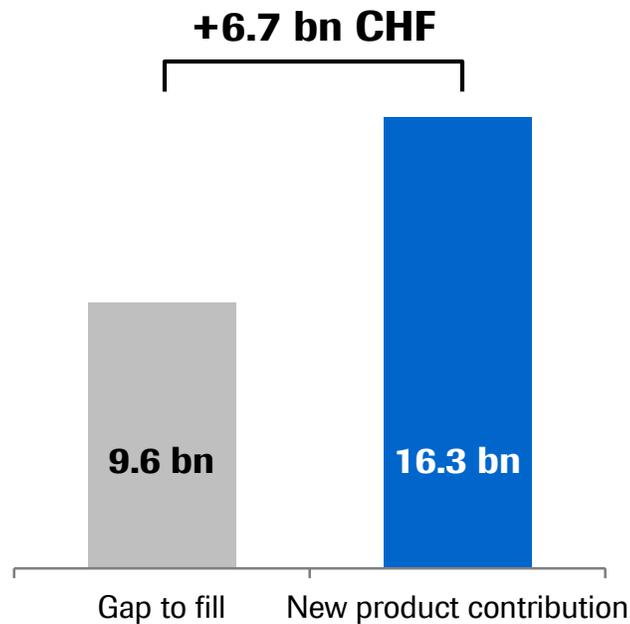


- Tecentriq + lurbinectedin** in 1L maintenance ES-SCLC
 - Venclexta** in adults with AML in first remission after chemo
 - Gavreto** in RET-mutant medullary thyroid cancer
 - mosunetuzumab** in 2L+ FL
 - giredestrant** in ER+ adj BC
 - Enspryng** in generalised Myasthenia Gravis
 - SRP-9001** in DMD (collaboration with Sarepta)
 - Gazyva** in systemic lupus erythematosus
 - crovalimab** in adults with aHUS
 - crovalimab** in pediatrics with aHUS
- Neuroscience Infectious Diseases Immunology
 Oncology/Hematology Ophthalmology

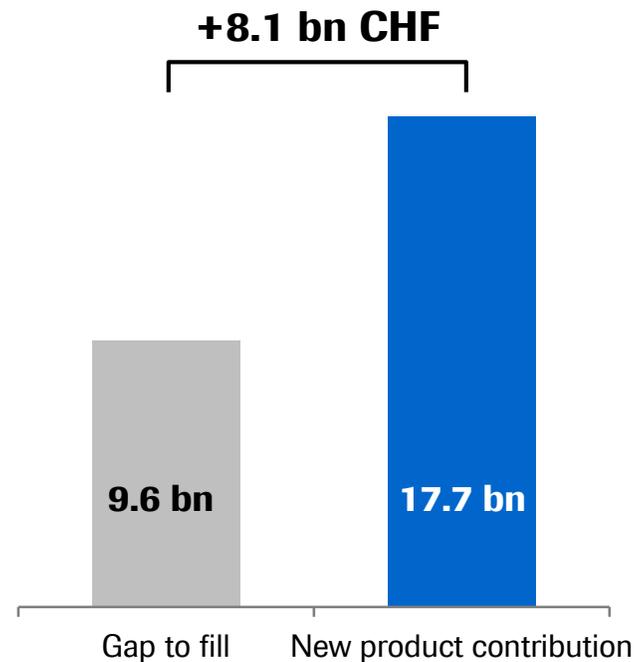
What has changed since our Pharma day a year ago?

Further increased confidence in delivering growth

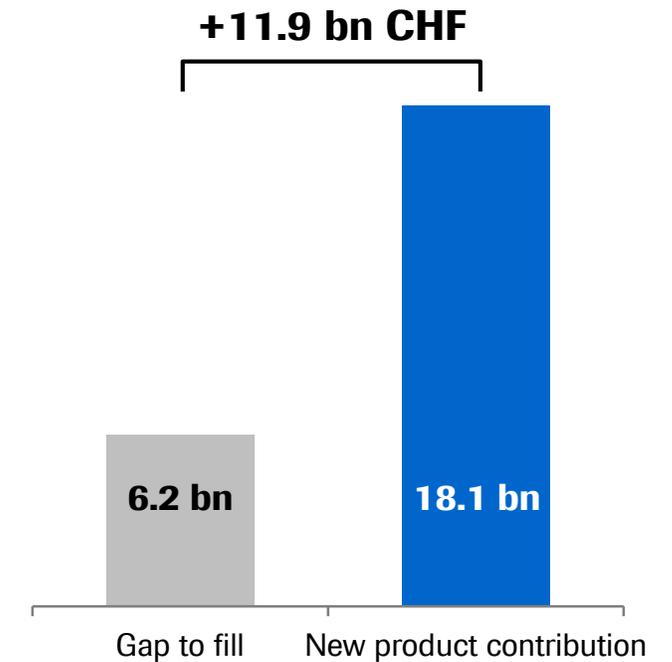
2018-2023 consensus view¹



2019-2024 consensus view²



2020-2025 consensus view³



Strong new product contribution and ongoing launches driving growth

¹ Roche Post-HY 2019 consensus survey; ² Roche Post-HY 2020 consensus survey; ³ Roche Post-HY 2021 consensus survey

Transformation is a key enabler of our Pharma Vision

Guiding principles & decentralized execution for maximum impact

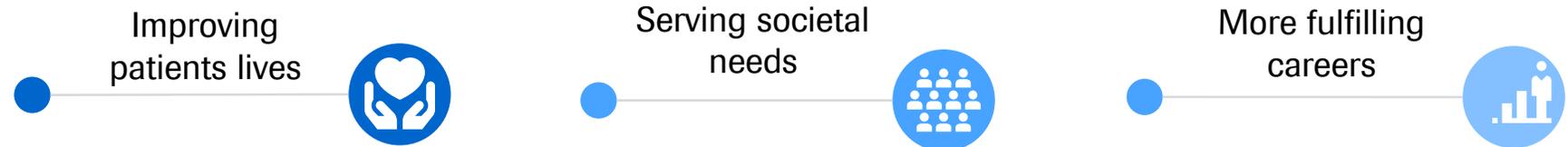
Decentralised execution



Following common principles



Resulting in

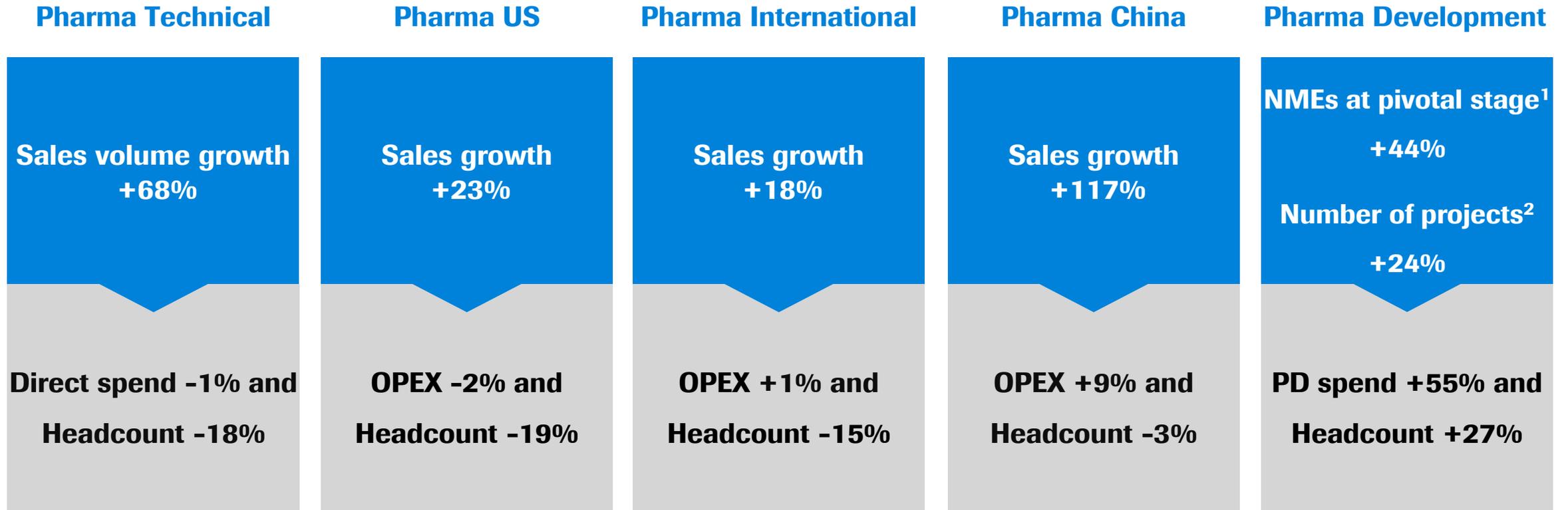


Pharma Vision 2030

Providing more patient benefit at less cost to society

Adjusting to the new environment: HY 2021 vs. HY 2016

Making a greater impact: Increasing financial flexibility



¹ Defined as per First Patient In (FPI) at pivotal stage clinical trial, and does not include NMEs already in registration/filing; ² Late-stage projects

Half-Year 2021: Pharma Division performance

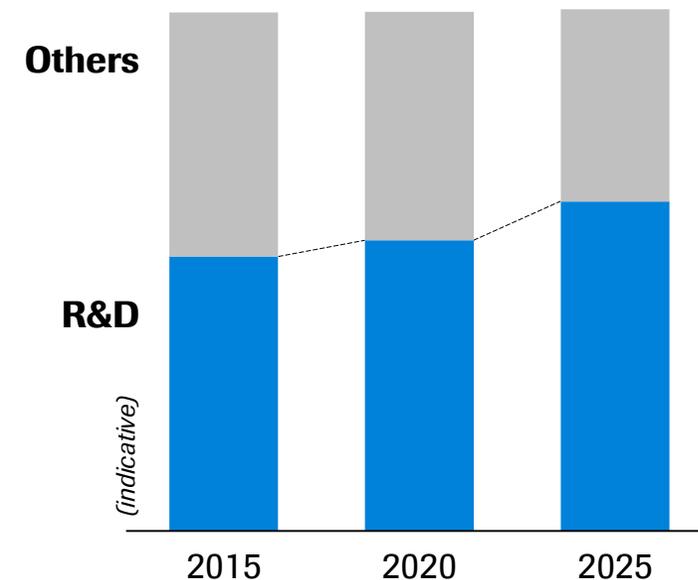
Continued investments into R&D to drive future growth & medical advances

HY 2021 – Pharma Division

	CHFm	CER growth vs PY
Sales	21,671	-3%
R&OOI	1,372	+34%
Cost of sales	-3,882	-4%
M&D	-2,962	-6%
R&D	-5,883	+19%
G&A	-754	-2%
Core operating profit	9,562	-8%
<i>Core OP, % of sales</i>	<i>44.1%</i>	



R&D investment allocation (% of OPEX)



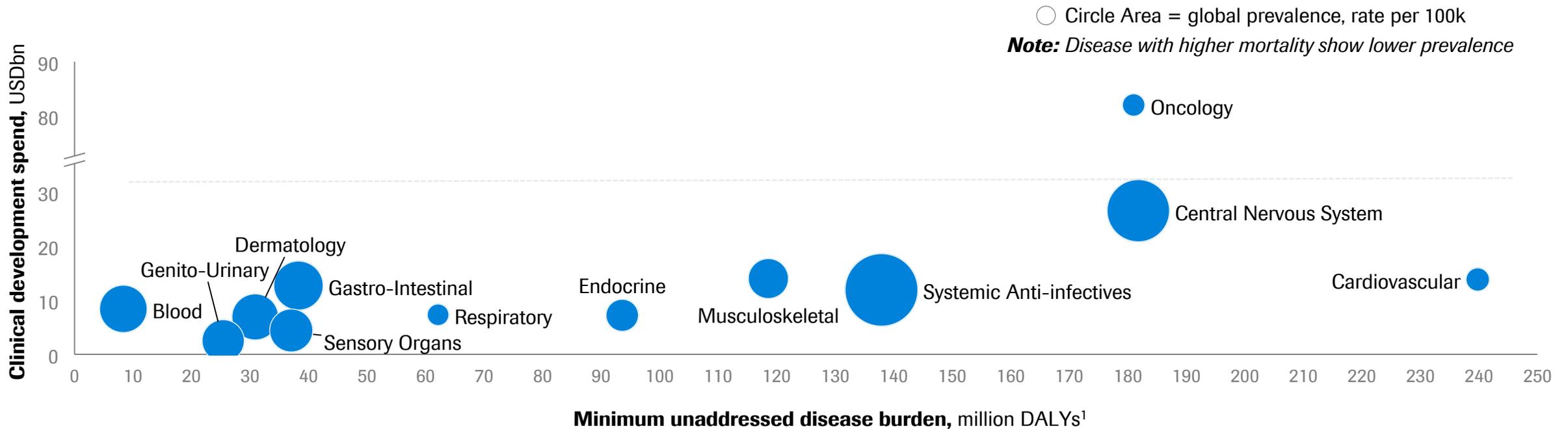
Principles for resource allocation

- Re-allocate resources into R&D while working on and protecting profitability
- All departments of Roche aligned on supporting innovation: transformation ongoing in G&A, M&D, Finance, R&D, etc.

Broad investment in early stage pipeline and new technologies

Many serious conditions lack adequate treatment

Total clinical development spend by therapeutic area vs. global disease burden



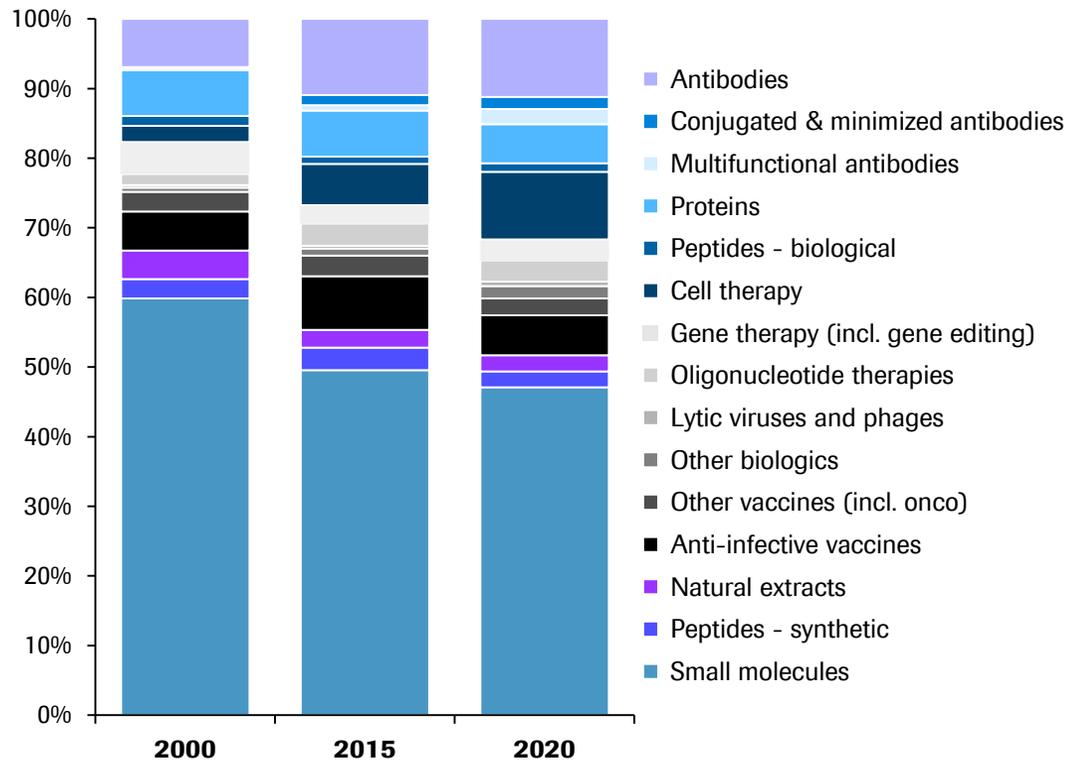
Source: Development spend and first in class ratio based on Evaluate Pharma World Preview 2020; Diseases burden based on Institute for Health Metrics and Evaluation 2021 (DALY in 2019);

¹ Disease burden in DALY in 2019 reduced by the potential reduction in disease burden from existing interventions; DALY=disability-adjusted life year

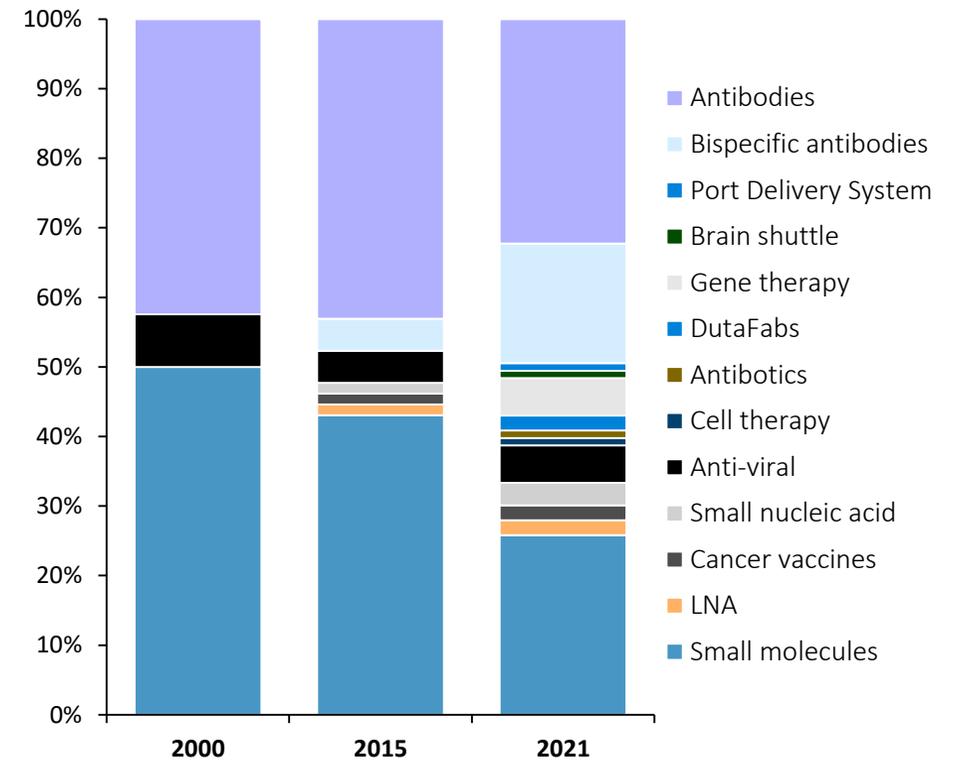
Roche pipeline evolution, increasing leverage of multiple modalities

Diversify the portfolio for future growth

Industry: Pipeline by therapeutic modality¹



Roche: Pipeline by therapeutic modality²



¹ Evaluate & Pharmaprojects 2020: Ph1-3 innovative drugs only, excluding reformulations and biosimilars; snapshot as of June each year with missing phases not approximated; development status based on most progressed indication; ² Roche disclosed pipeline half year results 2000, 2015 and 2021

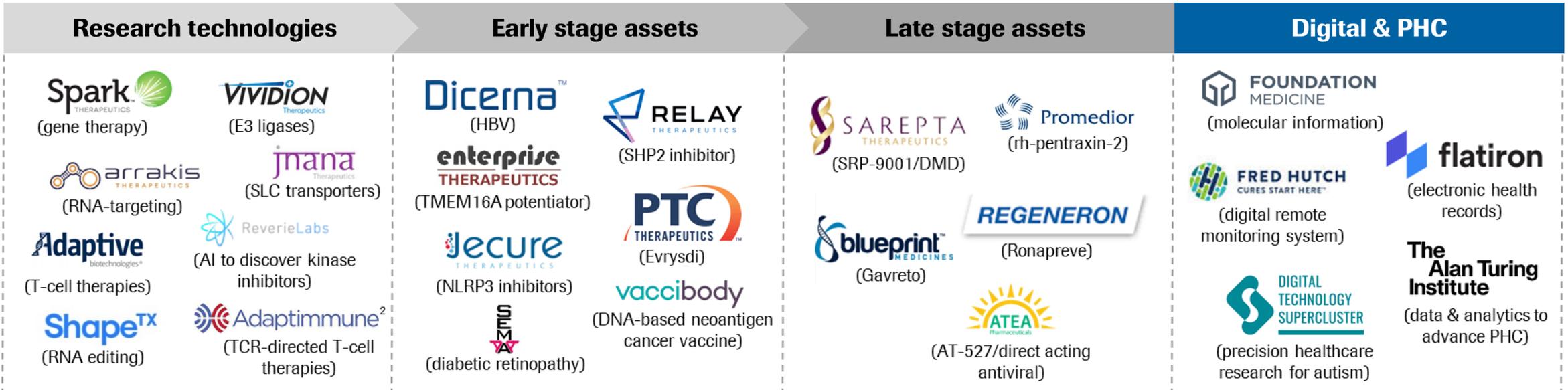
Roche with leading portfolio of multiple modalities

	Small molecules	Large molecules	Nucleic acid based medicines		Cell therapies	Vaccines	
Modalities	<p>Active site inhibitors; allosteric inhibitors; RNA modulators; protein degraders; macrocycles, etc.</p>	<p>Monoclonal antibodies; antibody fragments; bispecific antibodies; T cell directed antibodies; fusion proteins; targeted cytokines etc.</p>	<p>Antibody conjugates etc.</p>	<p>Antisense oligonucleotides; short interfering RNA; locked nucleic acids etc.</p>	<p>Technologies based on adenovirus vectors</p>	<p>Reprogrammed T cells with neo-antigen specificity</p>	<p>RNA vaccines, DNA vaccines against neo-antigens in oncology</p>
Examples	<p>giredestrant belvarafenib SHP2i KRAS G12C</p>	<p>glofitamab, mosunetuzumab, tiragolumab, faricimab, DutaFabs, MAGE-A4 ImmTAC PD1xTIM3, PD1xLAG3, cevostamab, gantenerumab brain shuttle, PD1-IL2v</p>	<p>Factor B ASO, HBV siRNA, UBE3A LNA</p>	<p>SPK-8011 SRP-9001</p>	<p>NEO-T cells</p>	<p>autogene cevumeran</p>	
Strategy	<p>Target currently “undruggable” targets; modify RNA splicing</p>	<p>Innovative protein engineering to improve multi-specificity and targeting and allow new mechanisms of action</p>	<p>Switching off a disease causing gene on the RNA level</p>	<p>Introducing back the wild-type gene to compensate for a disease causing gene mutation</p>	<p>Introduction of modified cells to induce a potent immune response or a regenerative effect</p>	<p>Using RNA or DNA based vaccines to induce a potent anti-tumor immune response</p>	

Recent deals and partnerships¹

Accelerate drug discovery and driving personalized healthcare

Technology stage at the time of licensing



92 new agreements in 2020
focused on

High disease burden / Promising targets / Novel enabling technologies / Decision support

¹ Non-exhaustive and illustrative overview of deals and partnerships signed over recent years; ² subject to regulatory clearance

Diversifying and deepening our portfolio

Strong commercial potential throughout late stage portfolio

+24 late-stage assets
with large sales potential

Xofluza	✓
Evrysdi	✓
Enspryng	✓
Phesgo	✓
Polivy	✓
Gavreto	✓

PDS w/ ranibizumab	AT-527
faricimab	prasinezumab
crovalimab	fenebrutinib
giredestrant	SRP-9001
inavolisib	anti-tau mAbs
tiragolumab	gantenerumab
glofitamab	etrolizumab
mosunetuzumab	Gazyva
ipatasertib	rhPentraxin-2

16 blockbusters

Ronapreve
Hemlibra
Tecentriq
Alecensa
Kadcyla
Venclexta ¹

10 blockbusters

Ocrevus	Lucentis
MabThera	Actemra
Herceptin	Esbriet
Avastin	Xolair
Perjeta	Activase

2018

Ocrevus	Lucentis
MabThera	Actemra
Herceptin	Esbriet
Avastin	Xolair
Perjeta	Activase

2021E consensus

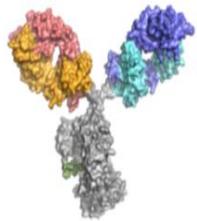
■ Neuroscience
 ■ Immunology
 ■ Ophthalmology
■ Oncology/Hematology
 ■ Infectious diseases
 ✓ launched

¹ Venclexta sales are booked by partner AbbVie; mAb=monoclonal antibody; Note: based on Post HY 2021 consensus

Broadening and deepening the ophthalmology portfolio

Core focus area for Roche

Faricimab



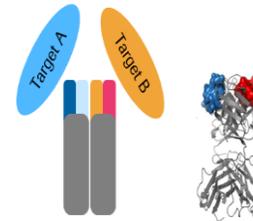
- Anti-VEGF/Ang2 bispecific mAb
- Positive readouts across DME & nAMD, trials in RVO in US/EU
- Expected US/EU launch in 2022

PDS with ranibizumab



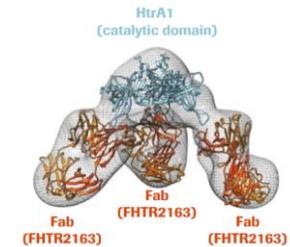
- First Roche intravitreal implant
- Positive readout in nAMD¹, DME and DR in 2022, Q9M extension initiated
- Potential approval in 2021 (US)

PDS with DutaFabs



- DutaMab technology enables creation of a novel bispecific Fab²
- Significantly smaller than bispecific antibodies
- Compatible with PDS

Geographic Atrophy



- Chronic progressive degeneration of the macula
- Leading to central scotomas and permanent loss of visual acuity
- Early collaborations ongoing

Improved patient outcome and reduced treatment burden

¹ Non-inferior and equivalent to monthly Lucentis; ² Fab is the region of an antibody that binds to antigens ; Anti-VEGF=anti-vascular endothelial growth factor; Ang2=angiopoietin-2; DME=diabetic macular edema; mAb=monoclonal antibody; nAMD=neovascular age related macular degeneration; PDS=Port delivery system; DR=diabetic retinopathy; Q9M=every 9 months

Committed to advancing the understanding of CNS diseases

Leveraging digital approaches to improve research & disease management

		Smarter, more efficient R&D	Patient care & access
	NeuroImmunology	MULTIPLE SCLEROSIS Internal decision endpoints Digital, MRI, PET, EEG, Genomics <div style="display: flex; justify-content: flex-end; gap: 10px;"> ○ ○ ● ● </div>	MULTIPLE SCLEROSIS Patient care tools Floodlight app <div style="display: flex; justify-content: flex-end; gap: 10px;"> ○ </div>
	NeuroMuscular diseases	DUCHENNE MUSCULAR DYSTROPHY Regulator enabling endpoints <div style="display: flex; justify-content: flex-end; gap: 10px;"> ○ </div>	SPINAL MUSCULAR ATROPHY Patient care tools Digital measure bulbar & motor function <div style="display: flex; justify-content: flex-end; gap: 10px;"> ○ </div>
	NeuroDevelopment & psychiatry	ANGELMAN SYNDROME Prognostic & diagnostic tools EEG, Gen Internal decision endpoints Digital, EEG, MRI, CSF, Genomics <div style="display: flex; justify-content: flex-end; gap: 10px;"> ○ ○ ○ ○ ● ● </div>	ANGELMAN SYNDROME Patient care tools, diagnostic tool Digital, Genomics <div style="display: flex; justify-content: flex-end; gap: 10px;"> ○ ● </div>
	NeuroDegenerative diseases	PARKINSON'S DISEASE Internal decision endpoints Digital; imaging and fluid BMs, Genomics <div style="display: flex; justify-content: flex-end; gap: 10px;"> ○ ○ ○ ○ </div>	ALZHEIMER'S DISEASE Patient care tools Digital, imaging and fluid BMs. Smart device and clinical decision support tools in consideration <div style="display: flex; justify-content: flex-end; gap: 10px;"> ○ ○ ○ ○ </div>

○ Digital tools ● Imaging tools ● Wet biomarkers ● Genomics

Investing in early disease in Oncology

Presenting the opportunity for cure

Lung / Rare

Molecule	Indication	Ph 1	Ph 2	Ph 3
Tecentriq	Adjuvant NSCLC	IMpower010		
	Neoadjuvant NSCLC	IMpower030		
	Adjuvant SCCHN	IMvoke010		
tiragolumab ¹	Stage III unres. NSCLC	SKYSCRAPER-03		
	Neoadj/Adj NSCLC	SKYSCRAPER-05		
Alecensa	Adjuvant ALK+ NSCLC	ALINA		

Breast / Gyn

Molecule	Indication	Ph 1	Ph 2	Ph 3
Tecentriq	Neoadj. TNBC ²	IMpassion031		
	Adj TNBC	IMpassion030		
giredestrant	Neoadj. HR+ BC	coopERA		
	Adjuvant HR+ BC ⁴	lidERA		

GI / GU

Molecule	Indication	Ph 1	Ph 2	Ph 3
Tecentriq	Adjuvant RCC	IMmotion010		
	Adjuvant HCC	IMbrave050		
	HR NMIBC	ALBAN		
	ctDNA+ HR MIBC	IMvigor011		
	MSI-H CRC	ATOMIC		
	BCG unresp. NMIBC	SWOG S1605		
tiragolumab ¹	Locally adv. ESCC	SKYSCRAPER-07		

Heme

Molecule	Indication	Ph 1	Ph 2	Ph 3
Polivy	1L DLBCL	POLARIX		
Venclexta	1L fit AML	VIALE-M		
Glofit/Mosun ³	1L DLBCL	Ph 1b		

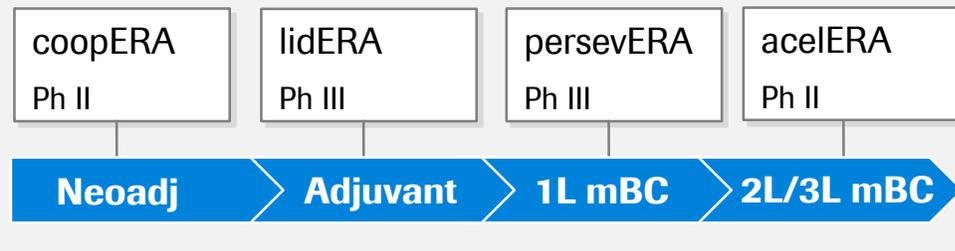
= met primary endpoint

¹ with Tecentriq; ² Positive for PCR; ³ +/- Polivy; ⁴ Planned trial; NSCLC=non-small cell lung cancer; SCCHN=squamous cell carcinoma head & neck; TNBC=triple negative breast cancer; RCC=renal cell carcinoma; HCC=hepatocellular carcinoma; NMIBC=non-muscle invasive bladder cancer; CRC=colorectal carcinoma; ESCC=esophageal squamous cell carcinoma; DLBCL=diffuse large b-cell lymphoma; AML=acute myeloid leukemia

Examples of addressing high unmet need in earlier lines

Giredestrant in HR+ BC: Potential best in class profile

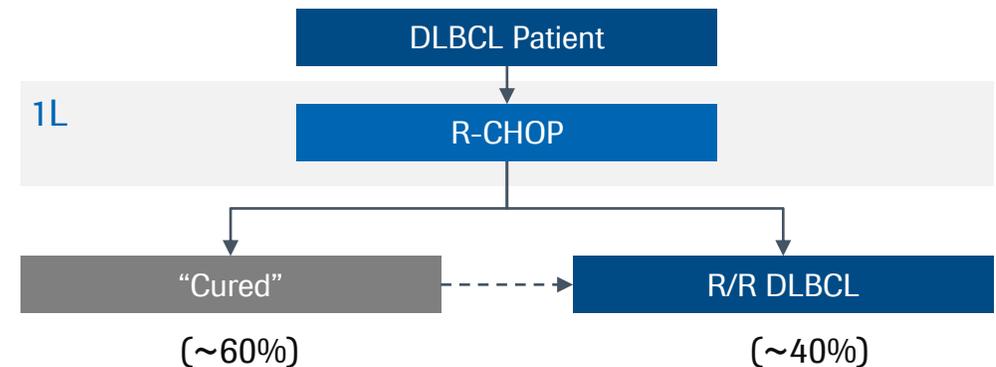
Ongoing / planned trials:



- Differentiated MOA: immobilizes ER in the nucleus prior to degradation
- High potency: 7-15x more potent than other SERDs
- Well tolerated: alone and in combination with CDK4/6i
- Standardized dose: once-daily selected for monotherapy/combo

Polivy in DLBCL: Addressing high unmet need in 1L

1L DLBCL offers the opportunity for cure



- Cure: ~40% of patients not cured with R-CHOP in 1L setting
- Patients with R/R DLBCL have poor prognosis: mOS < 2yrs
- No new 1L therapies approved since R-CHOP

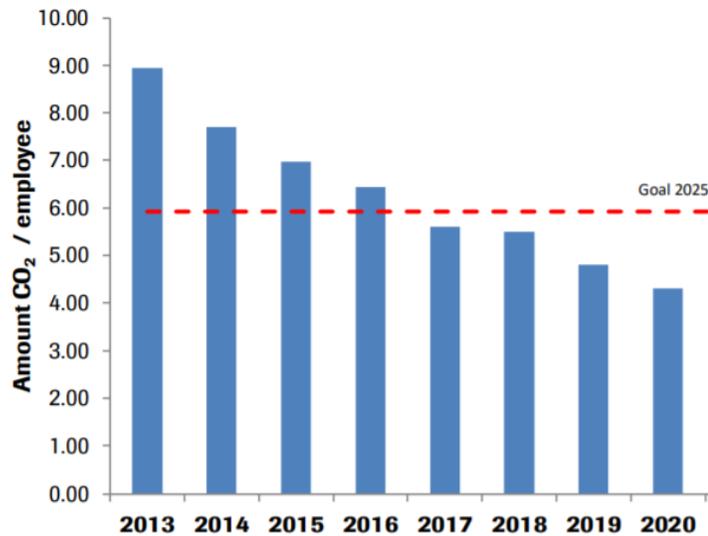
Making a sustainable impact

Our impact on society

Ranked most sustainable healthcare company by DJSI for the 11th time



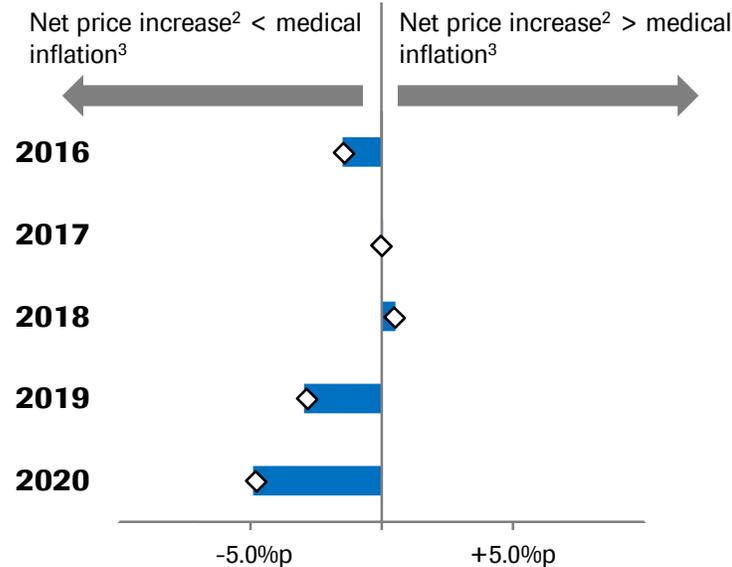
Environment



Goal: Scope 1&2 greenhouse gas emissions to real zero by 2050¹



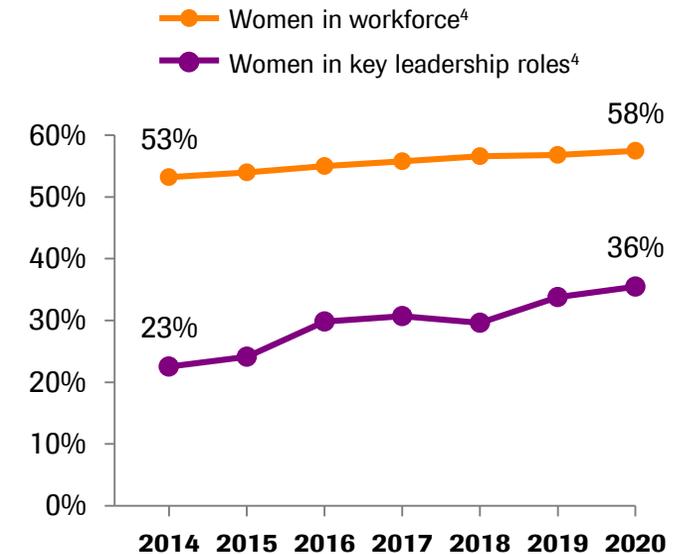
Access to our products



Net price increases in line with medical inflation in the US



Providing a great workplace



2020: 36% of women in key leadership roles

¹ Without buying CO₂ certificates; ² Genentech's annual average net price increase in the U.S., weighted by sales; ³ for inflation CPI-U Medical Care is used for all medical care expenditures (incl. prescription and non-prescription drugs, medical supplies, physicians' services, hospital services, and health insurance) – source: U.S. Bureau of Labor Statistics (US BLS); ⁴ for Roche Pharma

What can you expect from us?

Our replace and extend strategy is progressing well

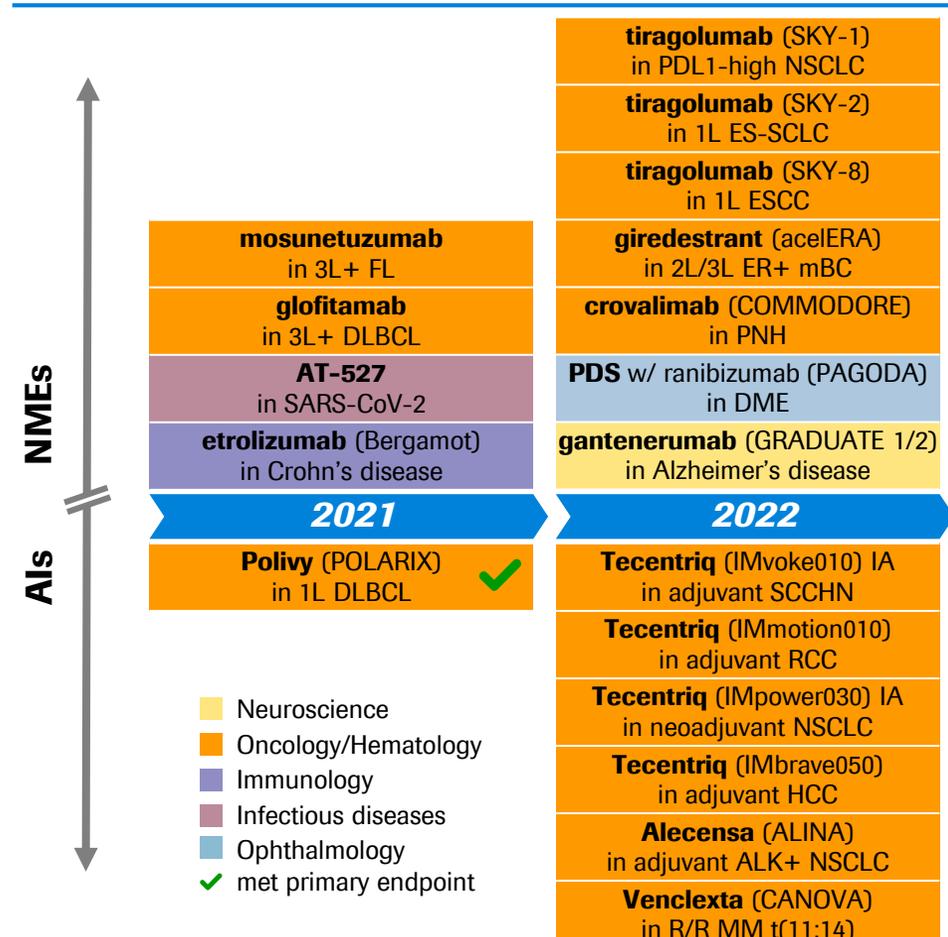
Replace ongoing franchises

MabThera/Rituxan	Gazyva, Venclexta, Polivy, mosunetuzumab, glofitamab
Herceptin	Perjeta, Kadcyca, Phesgo
Avastin	Tecentriq, Alecensa, Rozlytrek, tiragolumab
Lucentis	Port delivery system (PDS) faricimab
Tamiflu	Xofluza
Esbriet	rhPentraxin-2

Entering new franchises

Oncology: Tecentriq (mUC, SCLC, HCC, mM), ipatasertib (mCRPC), giredestrant (HR+ BC)
Non-malignant hem: Hemlibra, SPK-8011, crovalimab (PNH, aHUS)
Neuroscience: Ocrevus (RMS, PPMS), fenebrutinib (RMS, PPMS) Enspryng (NMOSD, gMG), Evrysdi (SMA), gantenerumab (AD), SRP-9001 (DMD)
Infectious diseases: Ronapreve (COVID-19), AT-527 (COVID-19)
Immunology: etrolizumab (CD), Gazyva (LN, MN, SLE)

Strong news flow ahead (data readout)



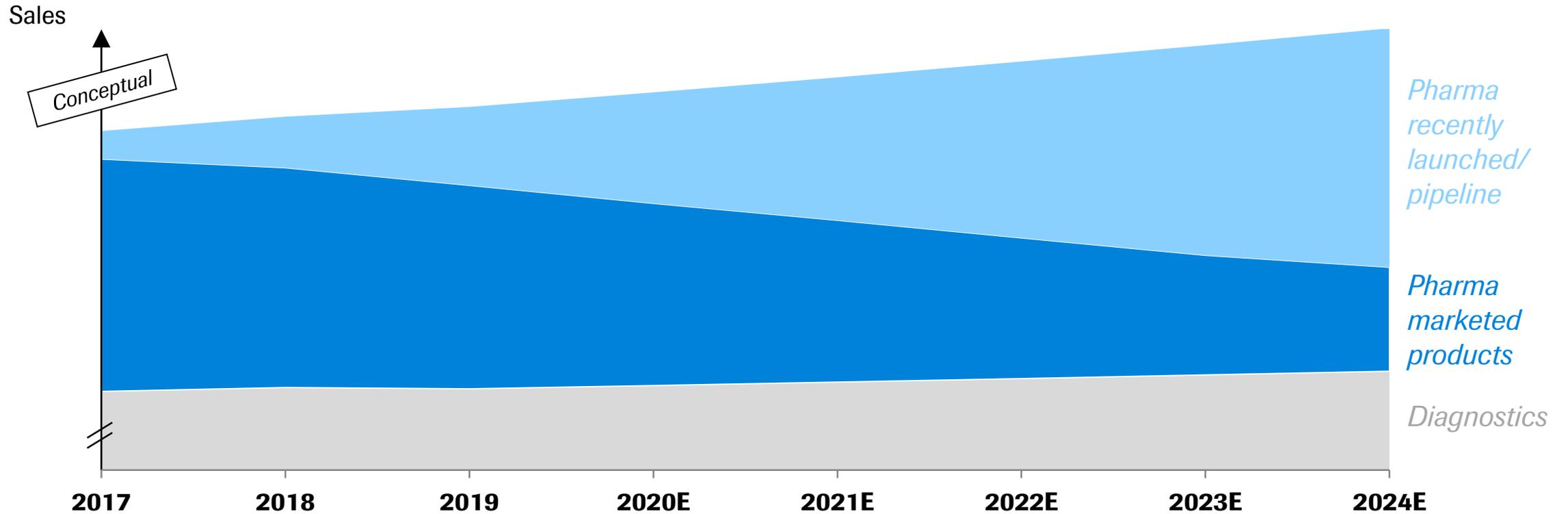
mUC=metastatic urothelial carcinoma; SCLC=small cell lung cancer; HCC=hepatocellular carcinoma; mM=metastatic melanoma; mCRPC=metastatic castration resistant prostate cancer; BC=breast cancer; PNH=paroxysmal nocturnal hemoglobinuria; aHUS=atypical hemolytic uremic syndrome; RMS=relapsing multiple sclerosis; PPMS=primary progressive MS; NMOSD=neuromyelitis optica spectrum disorder; SMA=spinal muscular atrophy; AD=Alzheimer's disease; DMD=duchenne muscular dystrophy; CD=Crohn's disease; SLE=systemic lupus erythematosus; FL=follicular lymphoma; DLBCL=diffuse large B cell lymphoma; NSCLC=non-small cell lung cancer; ESCC=esophageal squamous cell carcinoma; DME=diabetic macular edema; IA=interim analysis; SCCHN=squamous cell carcinoma of the head and neck; RCC=renal cell carcinoma; HCC=hepatocellular carcinoma

Positive outlook re-iterated

Pharma NME and Dia launches

Ocrevus, Perjeta, Hemlibra, Tecentriq, Venclexta, Gazyva, Alecensa, Xofluza, Polivy, Rozlytrek, Evrysdi, Enspryng, PHESGO, Gavreto, PDS, faricimab, etrolizumab, tiragolumab, gantenerumab, giredestrant, etc.

cobas 6800/8800, cobas 5800, cobas pure, cobas pro (high throughput), cobas Mass Spec, cobas Liat, etc.



Doing now what patients need next