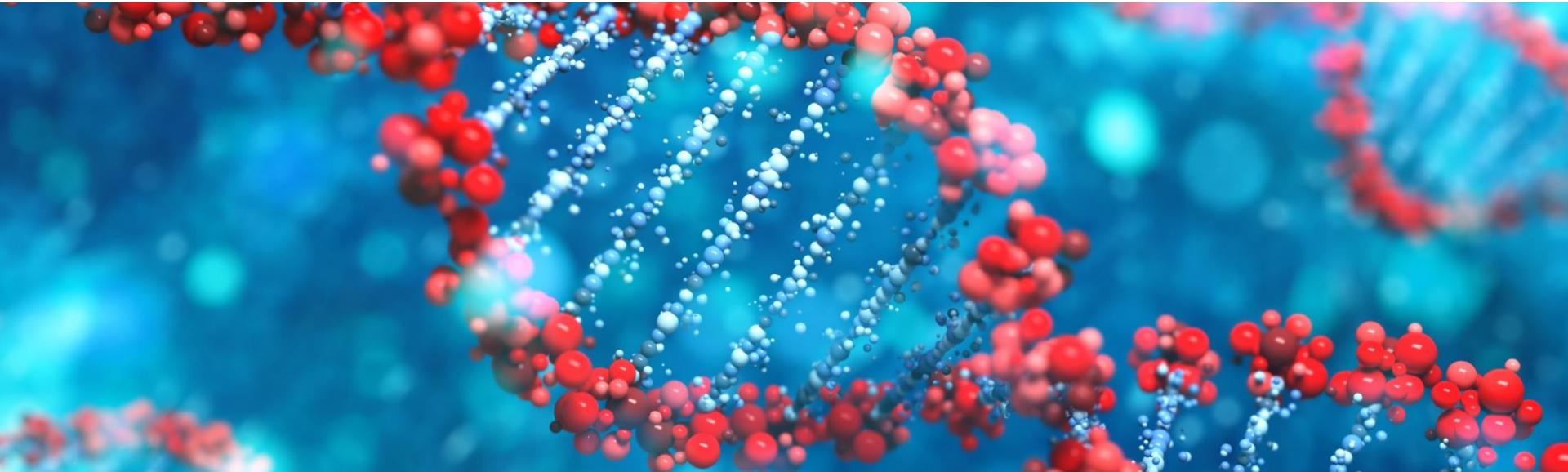
Turning innovation into patients benefit

Karl Mahler, Head Investor Relations

Zuerich, August 2016



This presentation contains certain forward-looking statements. These forward-looking statements may be identified by words such as ‘believes’, ‘expects’, ‘anticipates’, ‘projects’, ‘intends’, ‘should’, ‘seeks’, ‘estimates’, ‘future’ or similar expressions or by discussion of, among other things, strategy, goals, plans or intentions. Various factors may cause actual results to differ materially in the future from those reflected in forward-looking statements contained in this presentation, among others:

1 pricing and product initiatives of competitors;
2 legislative and regulatory developments and economic conditions;
3 delay or inability in obtaining regulatory approvals or bringing products to market;
4 fluctuations in currency exchange rates and general financial market conditions;
5 uncertainties in the discovery, development or marketing of new products or new uses of existing products, including without limitation negative results of clinical trials or research projects, unexpected side-effects of pipeline or marketed products;
6 increased government pricing pressures;
7 interruptions in production;
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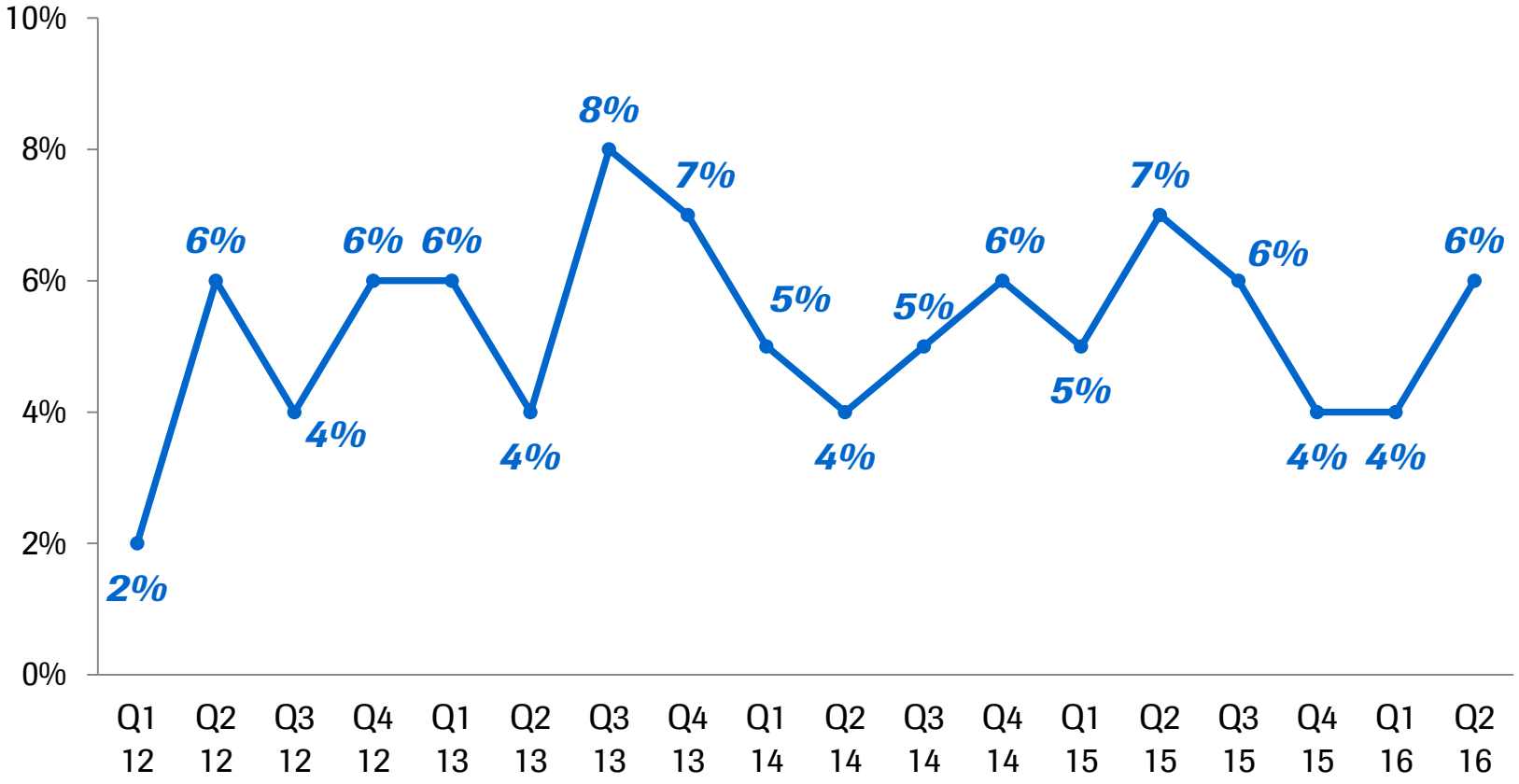
Performance update

Innovation and differentiation

Improving the standard of care

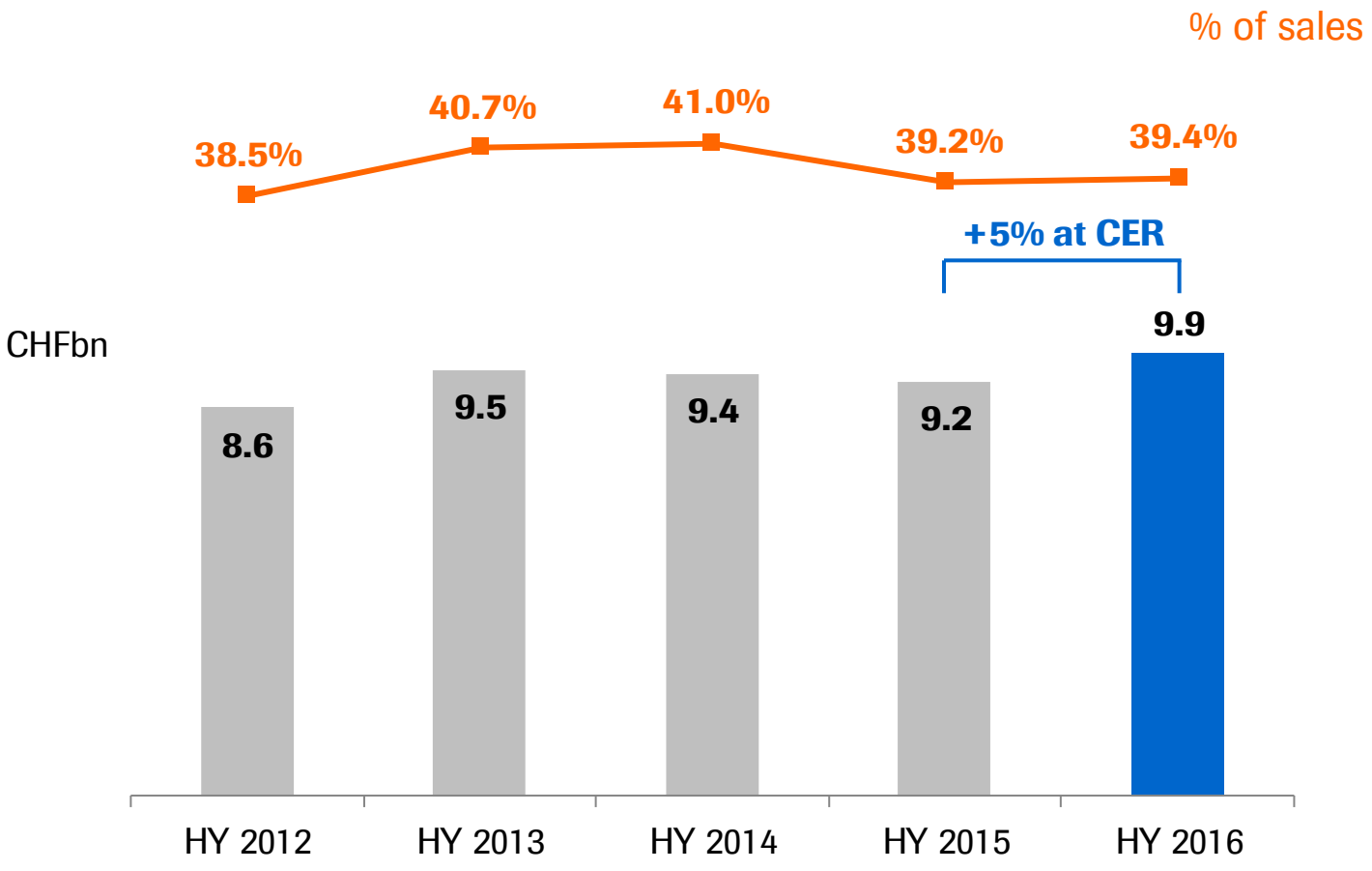
Outlook

Q2 2016: Sales growth for fifth consecutive year



All growth rates at Constant Exchange Rates (CER)

HY 2016: Strong core operating profit & margin

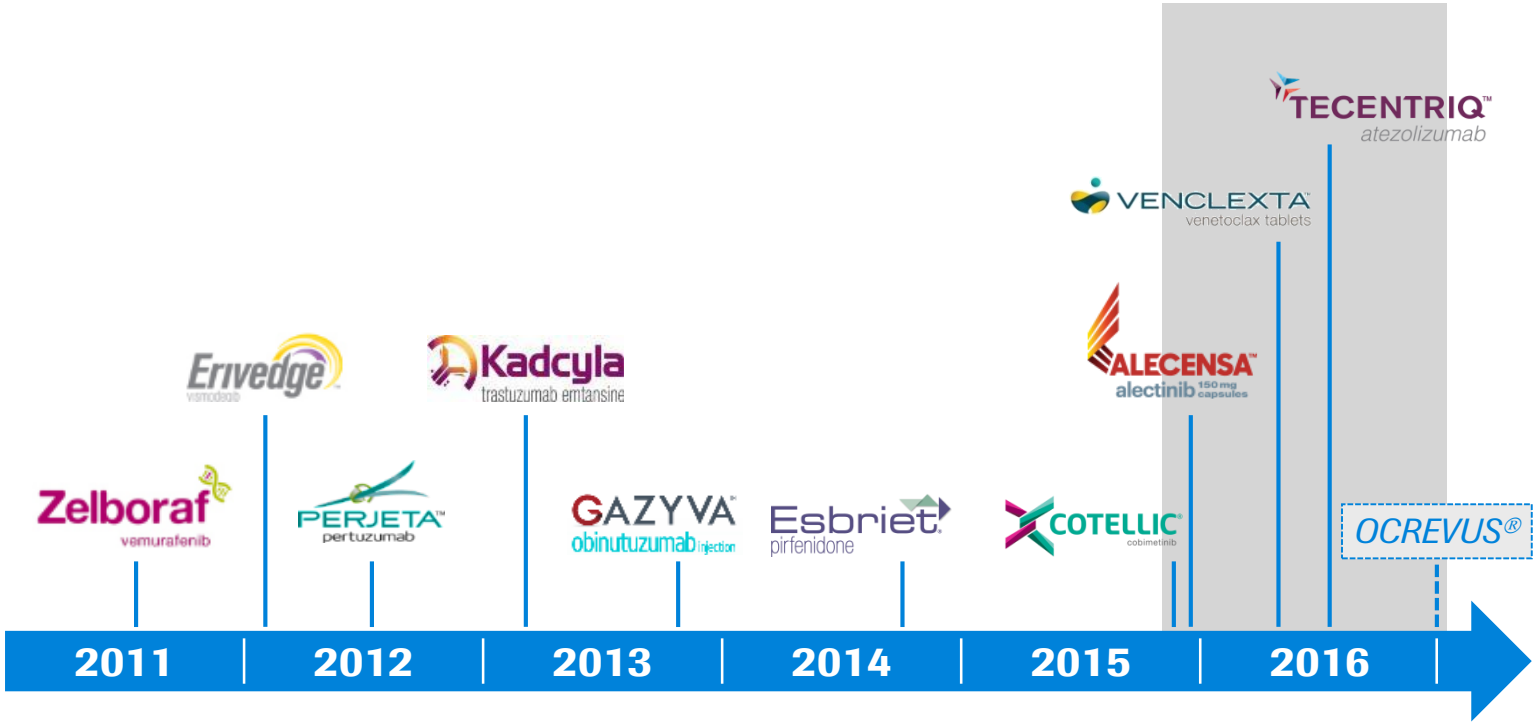


CER=Constant Exchange Rates

Continued leadership in innovation

Launches at historical high

5 NME launches in a year



Performance update

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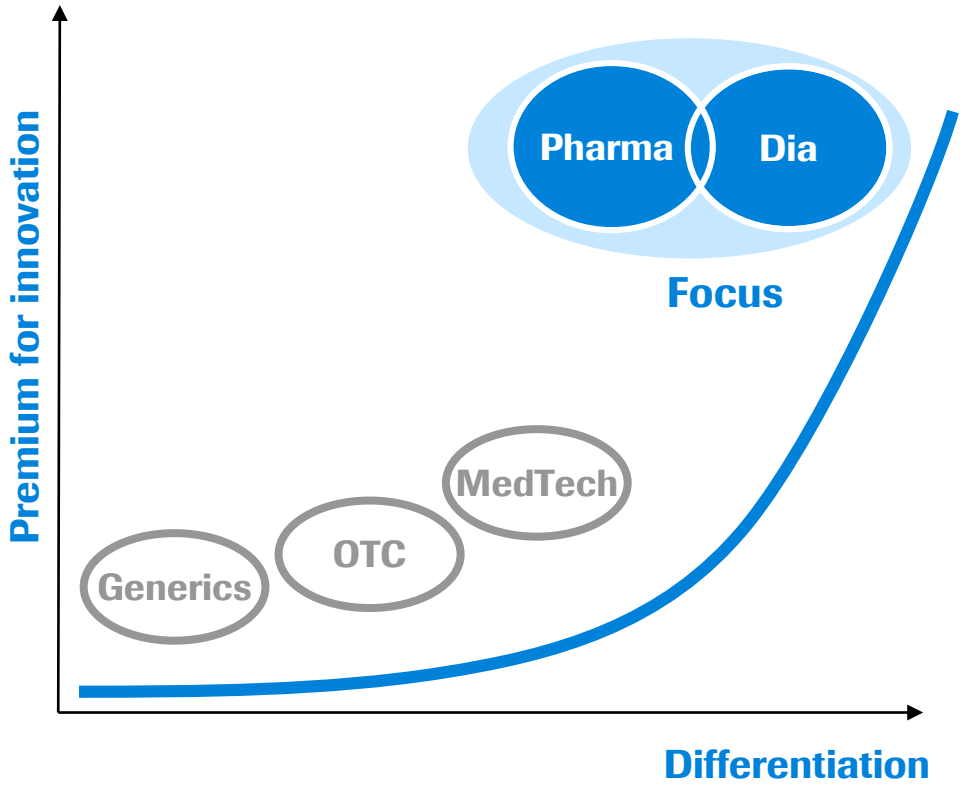
Improving the standard of care

Outlook

Roche strategy: Focused on medically differentiated therapies



Regulators:
Optimised benefit / risk ratio

Payors:
Optimised benefit / cost ratio

Pillars of early R&D

Preserving cultures – increasing collaboration in CIT

Genentech
A Member of the Roche Group

Roche

CHUGAI

COTELLIC (cobimetinib) tablets
VENCLEXTA venetoclax tablets
Kadcyla trastuzumab emtansine
PERJETA pertuzumab
Erivedge (vismodegib)

OCREVUS

lampalizumab

GAZYVA obinutuzumab injection
Zelboraf vemurafenib
Esbriet (pirfenidone) capsules

ALECENSA alectinib 150 mg capsules
ACTEMRA tocilizumab

emicizumab

TECENTRIQ atezolizumab

aOX40

IDOi

aCD20/CD3 TCB

aTIGIT

emactuzumab

aCD40

vanucizumab

aCEA/CD3 TCB

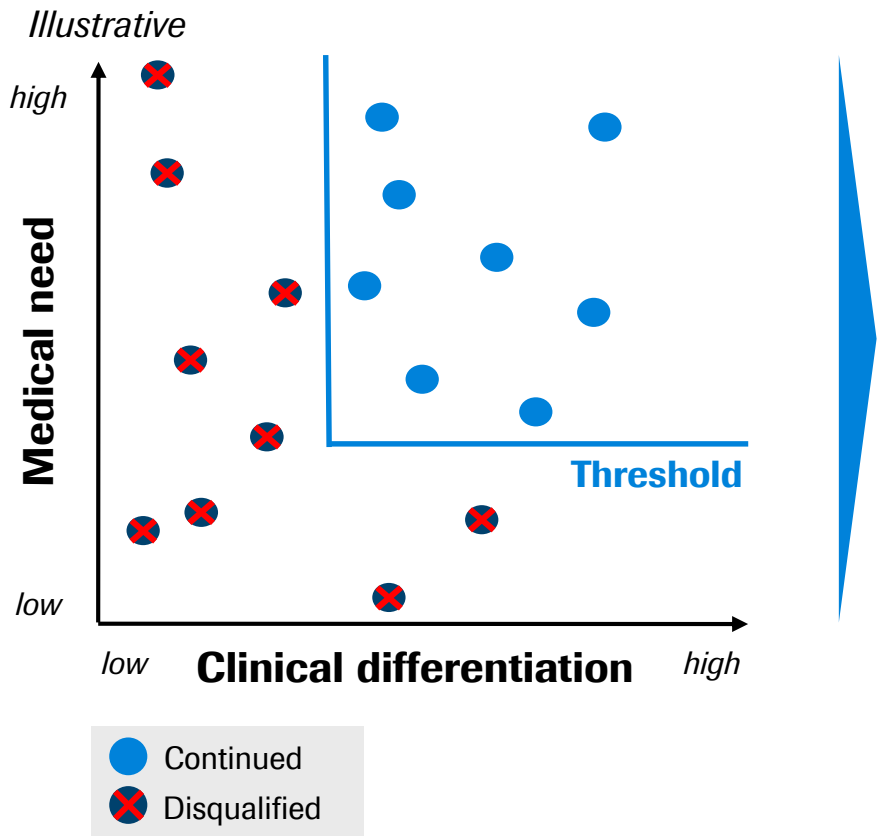
aFAP-IL2v FP

aCEA-IL2v FP

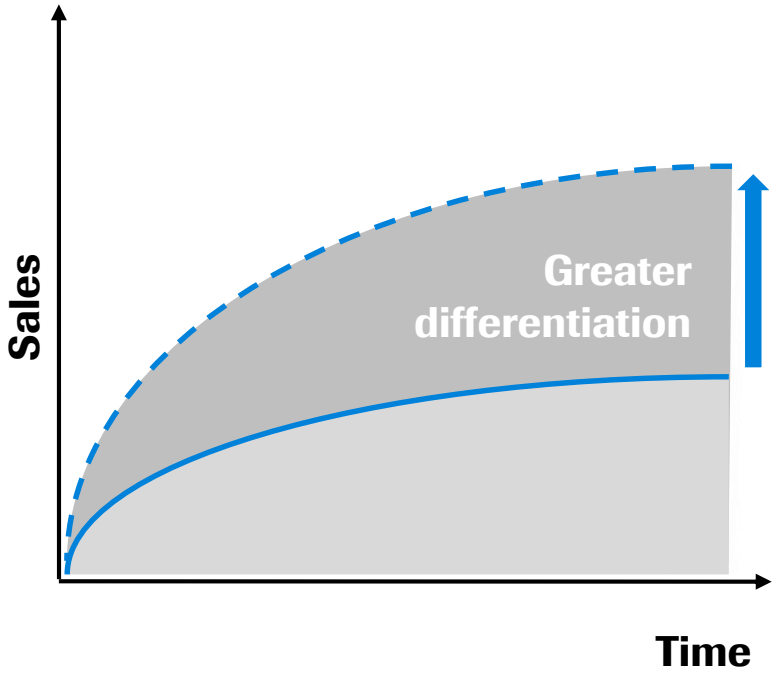
Cancer Immunotherapy

Approach towards innovation
Prioritizing rigorously

We select at late stage entry



…to increase sales potential



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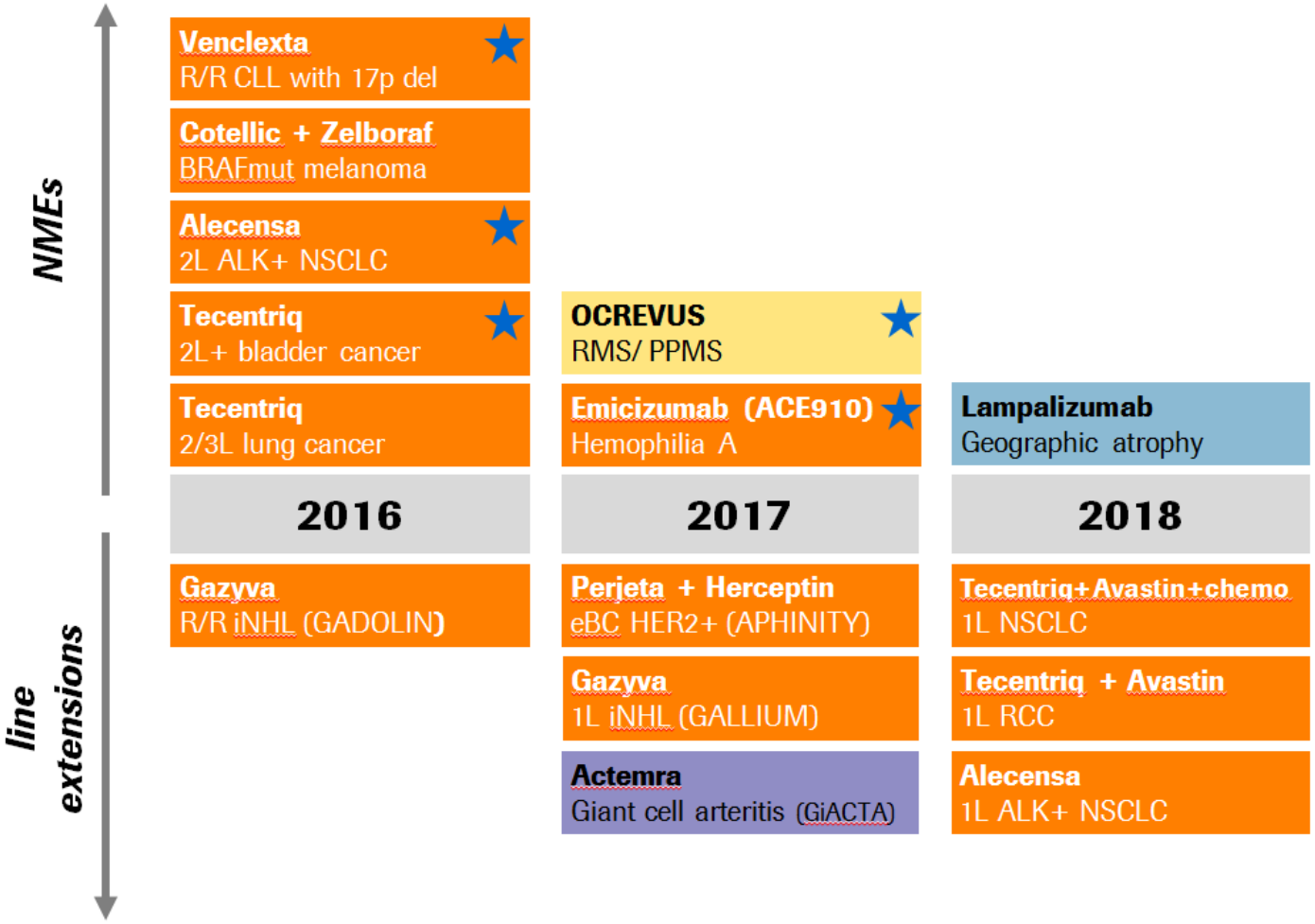
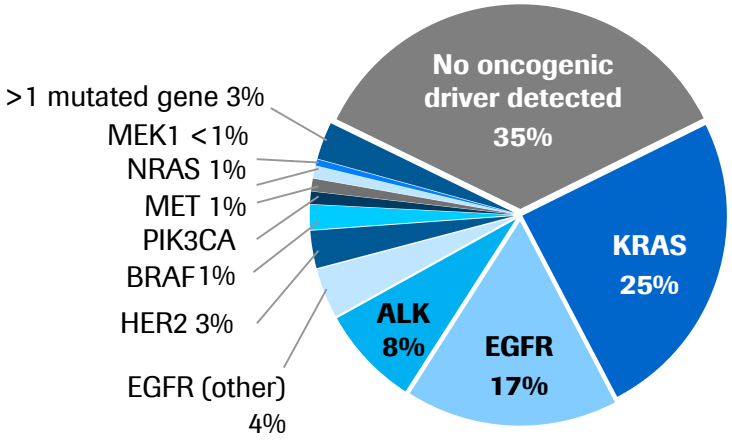
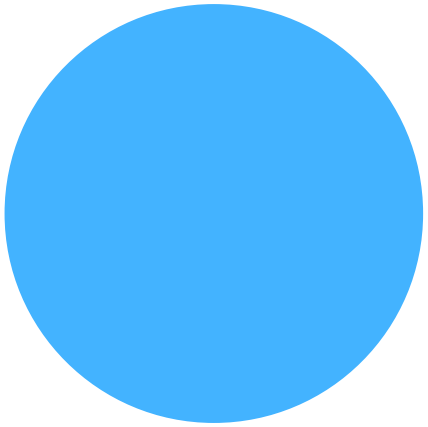
2016 onwards: Significant launch activities



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

Why cancer immunotherapy is transformative





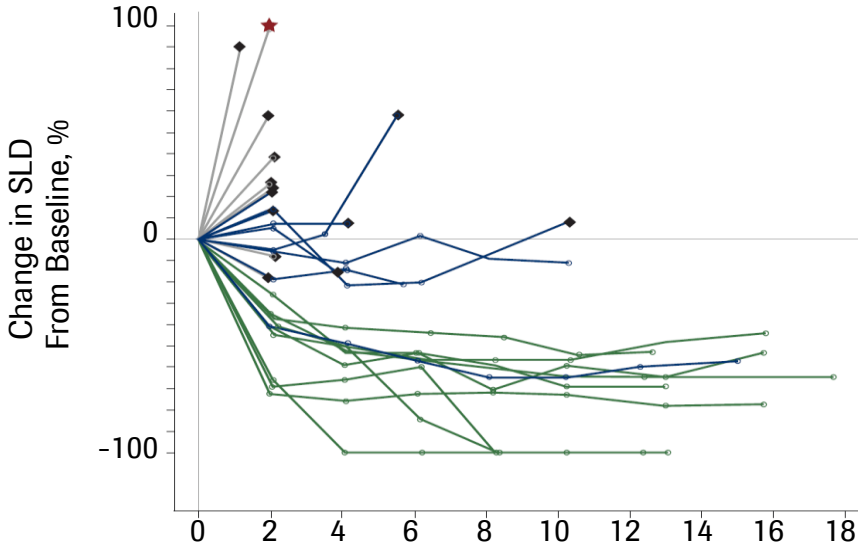
"In the last two decades we've focused on hundreds of oncogenes as drivers in cancer, each one defining a different disease and a different treatment….

The immune system sees cancer as one disease. Now we can turn our focus to enhancing the immune system's ability to see the tumour."

Gordon Freeman, Ph.D.
Dana Farber Cancer Institute
At CITC Advisory Board, Jan 21, 2016

Significant variability in treatment response to cancer immunotherapy

Ph1 Tecentriq monotherapy UBC: IC2/3



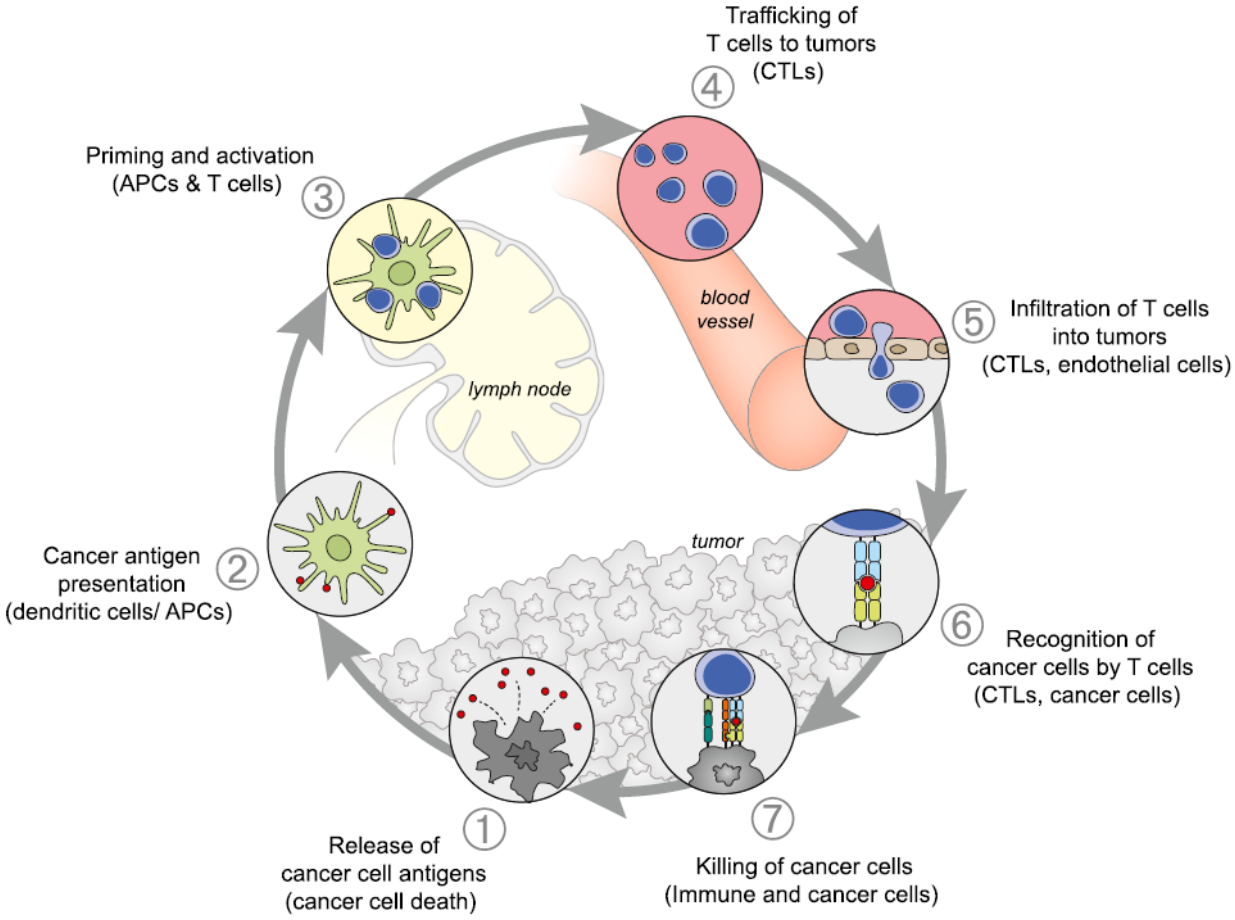
PROGRESSIVE DISEASE (PD)

STABLE DISEASE (SD)

DURABLE RESPONSES (PR/CR)

UBC=urinary bladder cancer ; PR=partial responses; CR=complete responses

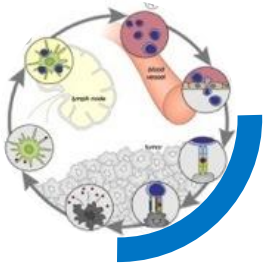
The 7 steps of the cancer immunity cycle guide our prioritization framework for development



Chen and Mellman. Immunity 2013

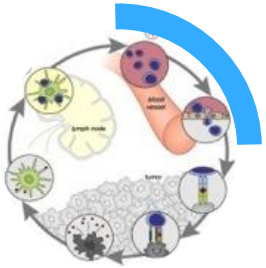
Different tumours show different immune phenotypes and will need different solutions

Inflamed			Immune Excluded		Immune Desert	
Melanoma	Lung	Bladder	TNBC	Colorectal	Gastric	Ovarian



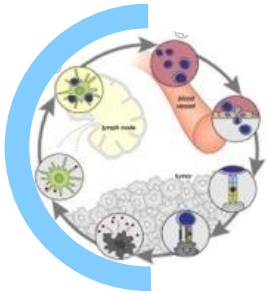
CD8+ T cells infiltrated, but non-functional

Accelerate or remove brakes on T-cell response



CD8+ T cells accumulated but not efficiently infiltrated

Bring T-cells in contact with cancer cells

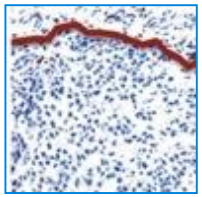


CD8+ T cells absent from tumor and periphery

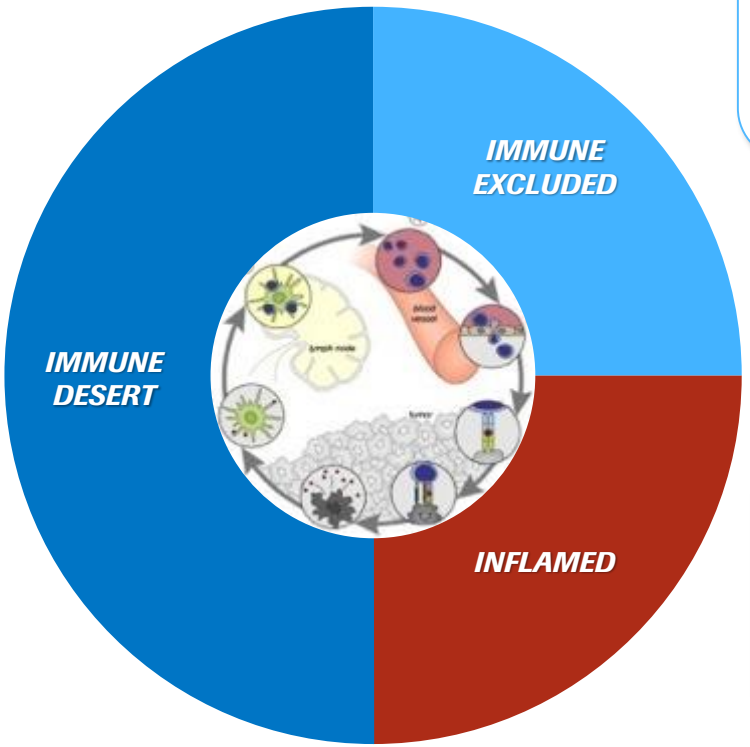
Increase number of antigen-specific T-cells or increase antigen presentation

Immune phenotypes and the cancer immunity cycle

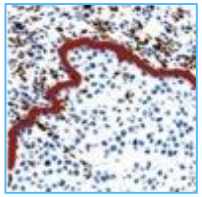
IMMUNE DESERT



CD8+ T cells are absent from tumor and its periphery



IMMUNE EXCLUDED

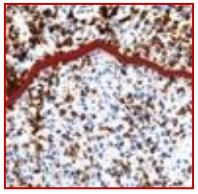


CD8+ T cells accumulated but have not efficiently infiltrated

Key questions:
- optimally support trafficking of T cells into tumors

Key Questions:
- *Main barriers?*
- *Optimally driving both antigen presentation and T cell activation*

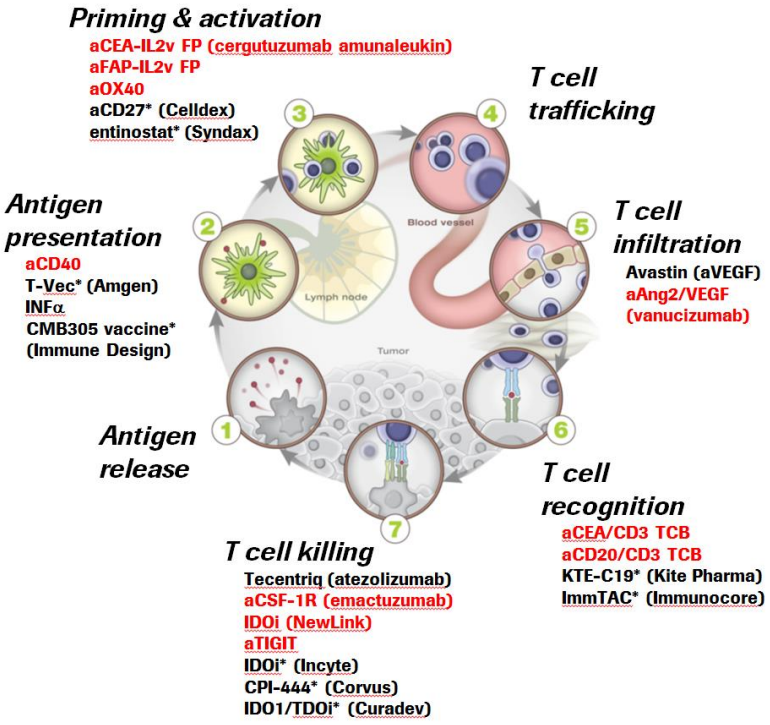
INFLAMED



CD8⁺ T cells infiltrated, but are non-functional

Key questions:
- enhance T cell function, role of tumor micro-environment

A rich pipeline: 9 NMEs and a minimum of 10 combinations reading out within 2 years



	Compound 1	Compound 2	Phase	Readout**
2	aCD40	+ Tecentriq	Ph I (n=110)	2017
	aCD40	+ vanucizumab	Ph I (n=170)	2017
	aCD40	+ emactuzumab	Ph I (n=120)	2017
3	aCEA-IL2v FP	+ Tecentriq	Ph I (n=75)	2017
	aFAP-IL2v FP		Ph I (n=60)	2017
	aOX40		Ph I (n=400)	2017
	aOX40	+ Tecentriq	Ph I (n=360)	2017
5	vanucizumab		Ph II McCave (n=190)	2016
	vanucizumab	+ Tecentriq	Ph I (n=40)	2017
6	aCEA/CD3 TCB		Ph I (n=100)	2017
	aCEA/CD3 TCB	+ Tecentriq	Ph I (n=100)	2017
	aCD20/CD3 TCB		Ph I (n=170)	2017
7	emactuzumab	+ Tecentriq	Ph I (n=162)	2017
	IDOi	+ Tecentriq	Ph I (n=224)	2017
	aTIGIT	+ Tecentriq	Ph I (n=300)	2017

Clinical data within 2 years

Chen and Mellman. Immunity 2013;
* CIT NMEs from partners in external collaborations; ** Outcome studies are event driven, timelines may change;
NME=new molecular entity; CIT=cancer immunotherapy; FP=fusion protein; TCB=T-cell bispecific;

A rich pipeline: Program by tumour type

Solid tumors

Solid tumors

Tecentriq		Ph1
Tecentriq	±chemo ±Avastin	Ph1
Tecentriq	+Cotellic	Ph1
aOX40	±Tecentriq	Ph1
aCEA/CD3 TCB	±Tecentriq	Ph1
IDOi	±Tecentriq	Ph1
emactuzumab	±Tecentriq	Ph1
aCEA-IL2v FP	±Tecentriq	Ph1
aFAP-IL2v FP		Ph1
aCD40	±Tecentriq	Ph1
emactuzumab	±aCD40	Ph1
aCD40	+vanucizumab	Ph1
Tecentriq	+vanucizumab	Ph1
aTIGIT	±Tecentriq	Ph1
Tecentriq	+daratumumab*	Ph1
Tecentriq	+IFN or ipilimumab*	Ph1
Tecentriq	+A2Ai*	Ph1
Tecentriq	+varlilumab*	Ph1

Bladder

Tecentriq	(2L+ UBC)	✓
Tecentriq	+BCG (NMIBC)	Ph1
Tecentriq	(2L+ UBC)	**Ph3**
Tecentriq	(Dx+ adjuvant MIBC)	**Ph3**
Tecentriq	+ chemo (1L mUC)	**Ph3**

Lung (NSCLC & SCLC)

Tecentriq	(2L/3L)	Ph2 filed/ **Ph3**
Tecentriq	(1L Dx+)	**Ph3**
Tecentriq	+chemo (3x 1L trials)	**Ph3**
Tecentriq	+chemo ±Avastin (1L)	**Ph3**
Tecentriq	(adjuvant)	**Ph3**
Tecentriq	+Tarceva or Alecensa	Ph1
Tecentriq	+chemo (SCLC)	**Ph3**
Tecentriq	+epacadostat*	Ph1

Melanoma

Tecentriq	+Zelboraf ±Cotellic	Ph1

Ovarian

Tecentriq	+rucaparib*	Ph1

Breast (TNBC & HER2+)

Tecentriq	+chemo (TNBC)	**Ph3**
Tecentriq	+Kadcyla or Herceptin+ Perjeta (HER2+)	Ph1
Tecentriq	+T-VEC*	Ph1
Tecentriq	+entinostat*	Ph2

RCC

Tecentriq	±Avastin	Ph2
Tecentriq	+Avastin	**Ph3**

Sarcoma

Tecentriq	+CMB305 (NY-ESO-1)*	Ph2

Colon

Tecentriq	+Cotellic (3L+)	**Ph3**
Tecentriq	+T-VEC*	Ph1

Hematological tumors

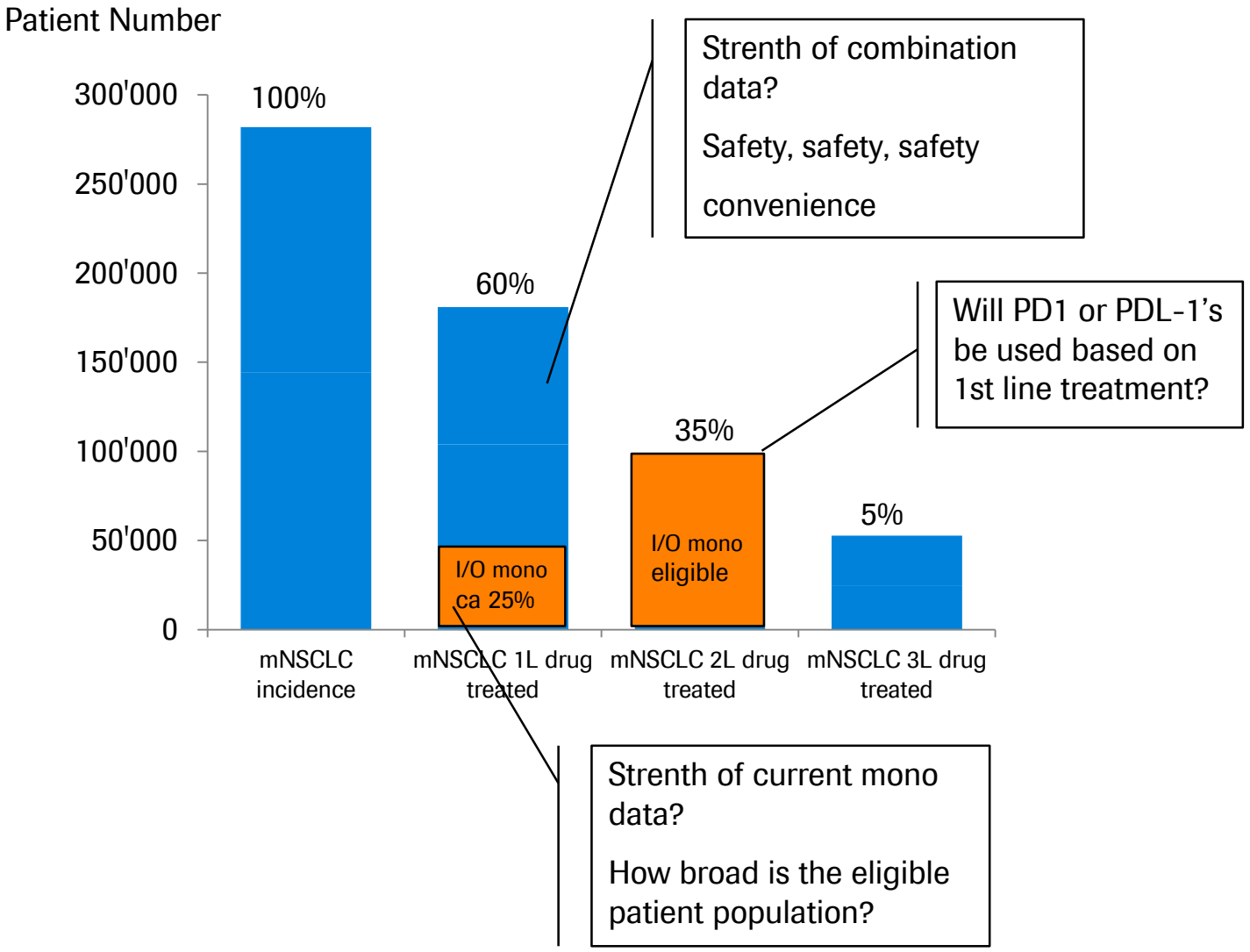
Tecentriq	±lenalidomide ±daratumumab*	(R/R MM)	Ph1
Tecentriq	±azacitidine	(MDS)	Ph1
Tecentriq	+Gazyva or +tazemetostat*	(R/R FL and DLBCL)	Ph1
Tecentriq	+Gazyva +polatuzumab	(R/R FL and DLBCL)	Ph2
Tecentriq	+Gazyva +lenalidomide	(R/R FL and DLBCL)	Ph1
Tecentriq	+Gazyva +bendamustin or CHOP	(1L FL and DLBCL)	Ph1
aCD20/CD3 TCB			Ph1
Tecentriq	+CD19 CAR-T*	(refractory aNHL)	Ph1

✓ = approved; *External collaborations; Other CIT NMEs besides Tecentriq

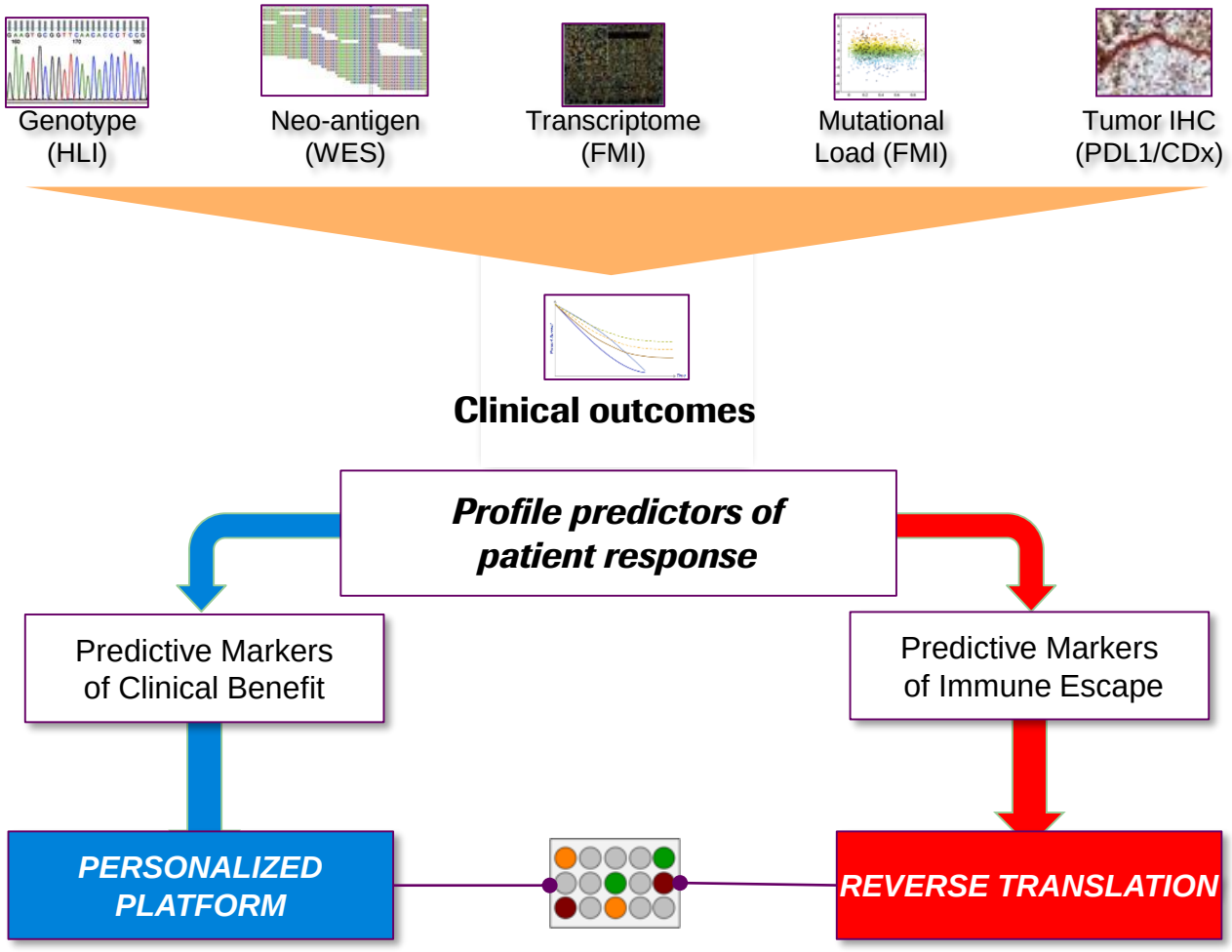
As of July 21, 2016

mNSCL: Treatment allgorism

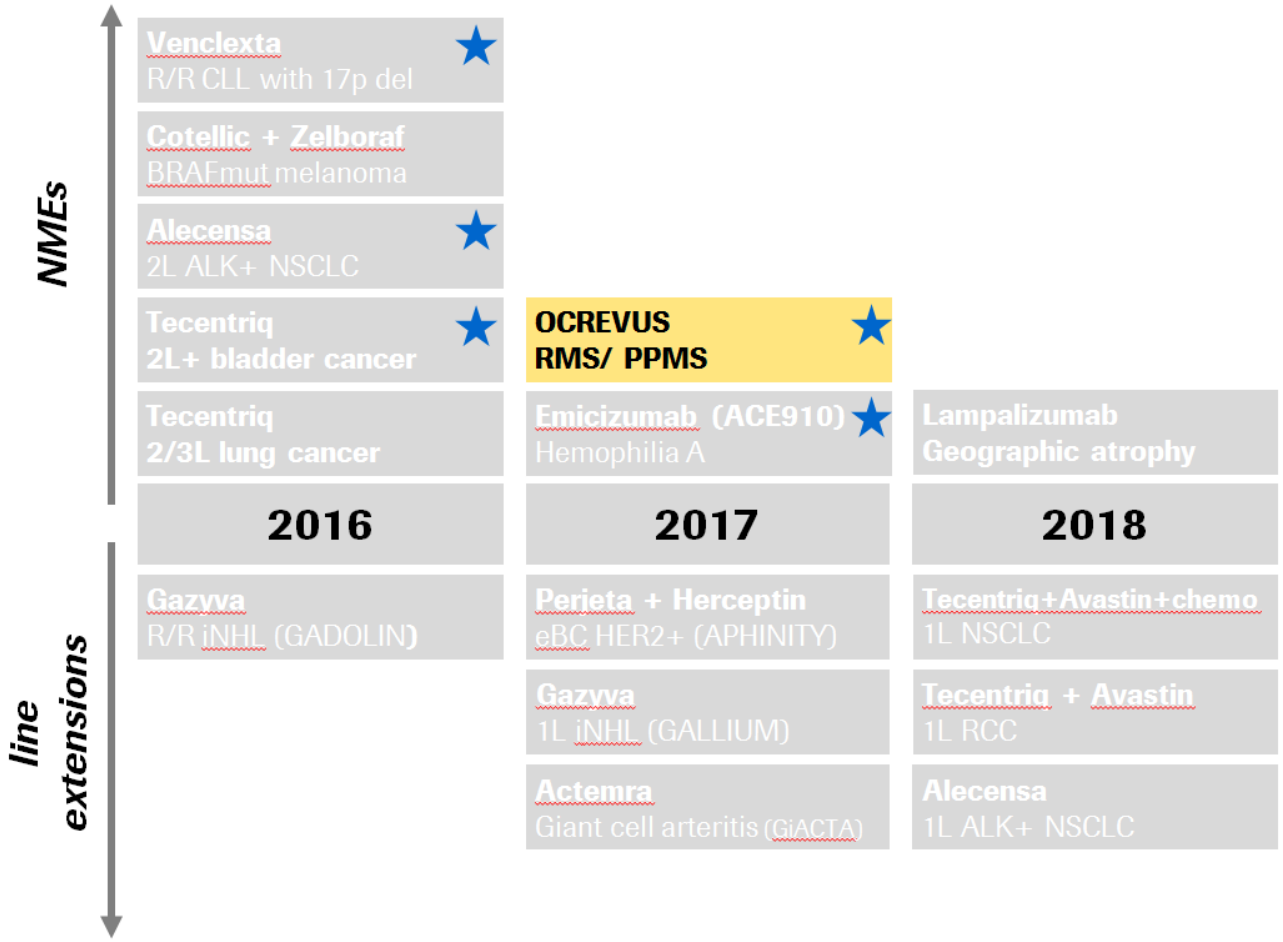
Efficacy but also safety will play a major role



Identify and utilize relevant biomarkers to deliver personalized medicine



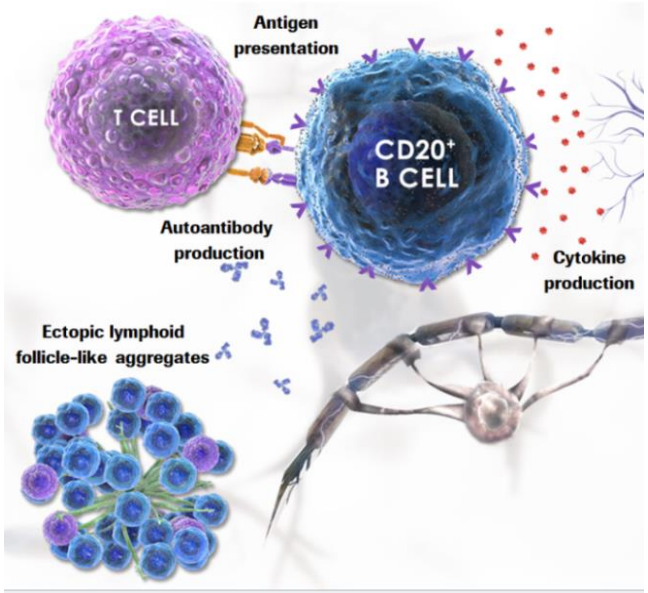
OCREVUS: First medicine active in RMS and PPMS



Oncology/ hematology | Neuroscience | Ophthalmology | Immunology | FDA Breakthrough Therapy Designation

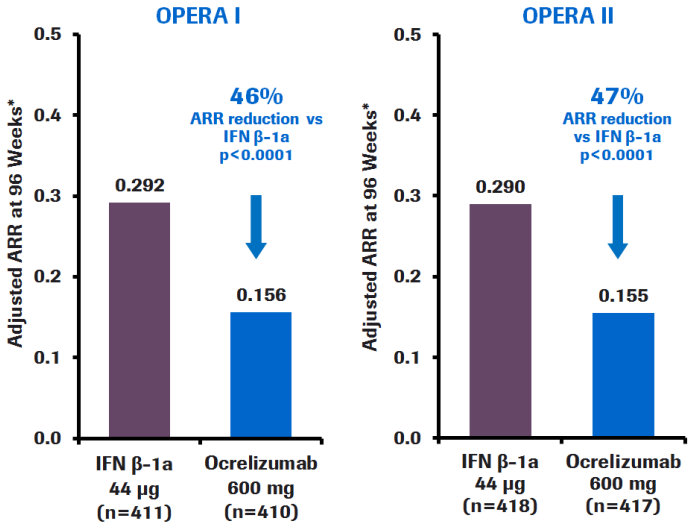
Outcome studies are event-driven: timelines may change. Standard approval timelines of 1 year assumed.

OCREVUS: Active in both RMS & PPMS

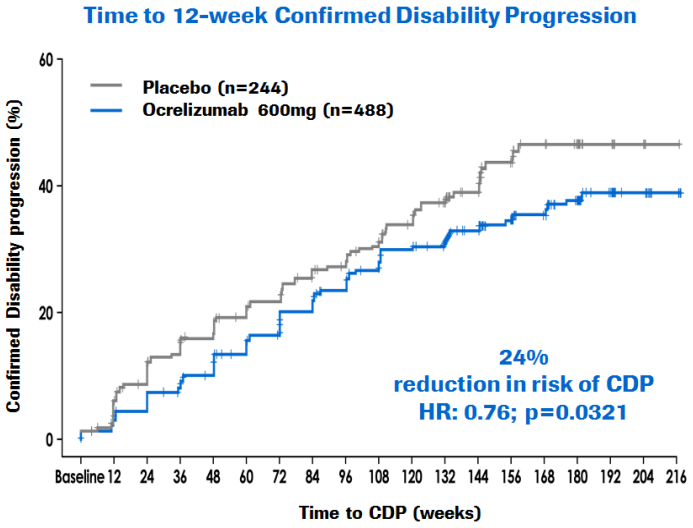


- Selective depletion of a B cell subset leaving the ability to generate new B cells intact
- Administered IV twice yearly

RMS

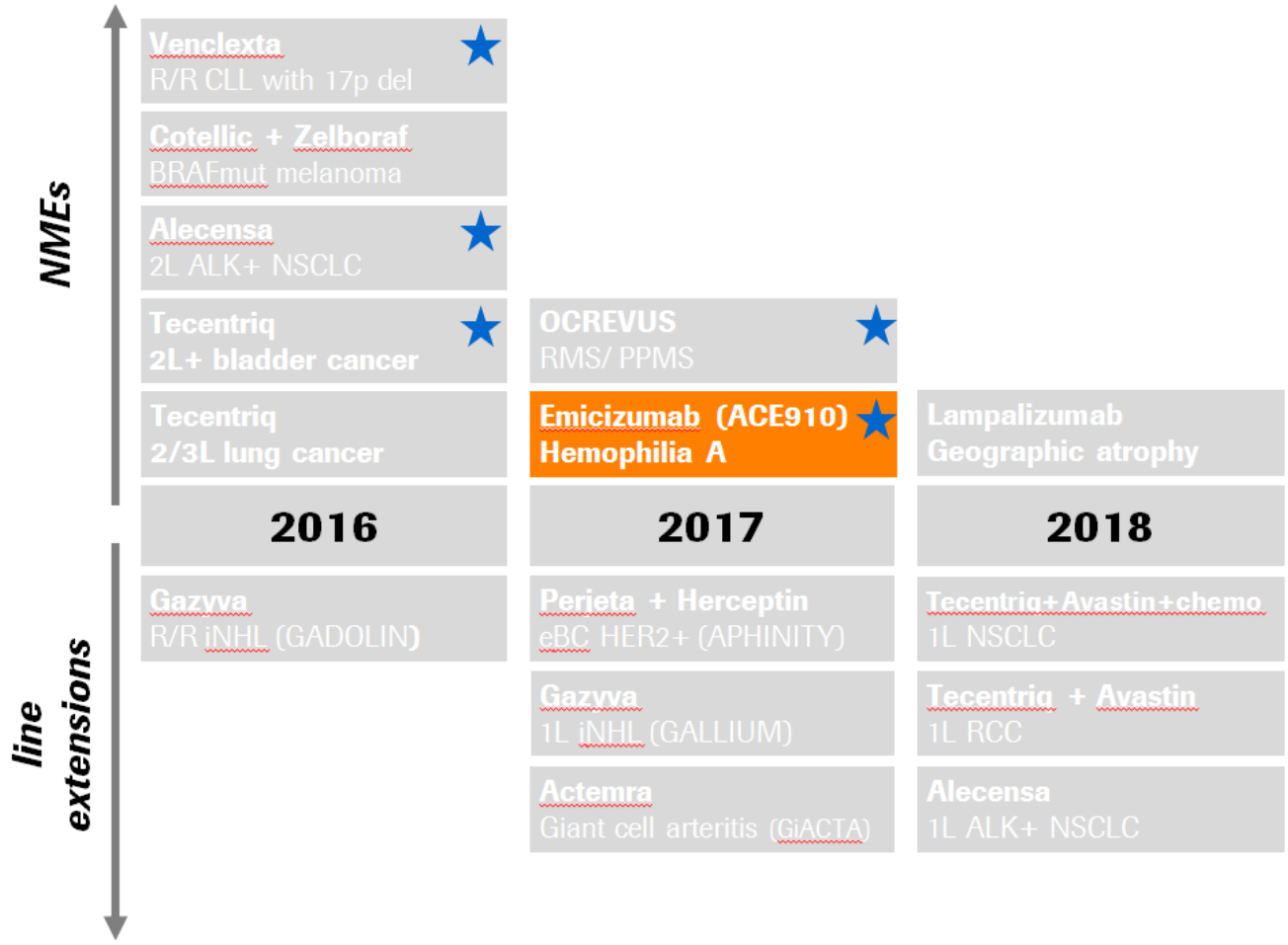


PPMS



RMS=relapsing forms of multiple sclerosis (MS) which includes patients with RRMS and SPMS with superimp
PPMS=primary progressive MS;

Emicizumab: Game changer in hemophilia A



Oncology/ hematology | Neuroscience | Ophthalmology | Immunology | FDA Breakthrough Therapy Designation

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

Emicizumab addresses major medical needs for both inhibitor and non-inhibitor patients

Roche

Emicizumab (ACE 910)

NON-INHIBITOR

On-demand treatment	Prophylaxis treatment
1-3 times/bleeding event, IV	3 times/week, IV

Less frequent & SC injection

Inhibiting Factor VIII antibodies in 20-30% of the patients

INHIBITOR

Immune Tolerance Induction
70-80 % success rate
limitation due to very high cost and heavy burden for patients

No potential to induce FVIII inhibitor

On-demand treatment with by-passing agents	Prophylaxis with by-passing agents
2-3h intervals, IV	Every other day, IV

Potentially more effective prophylaxis

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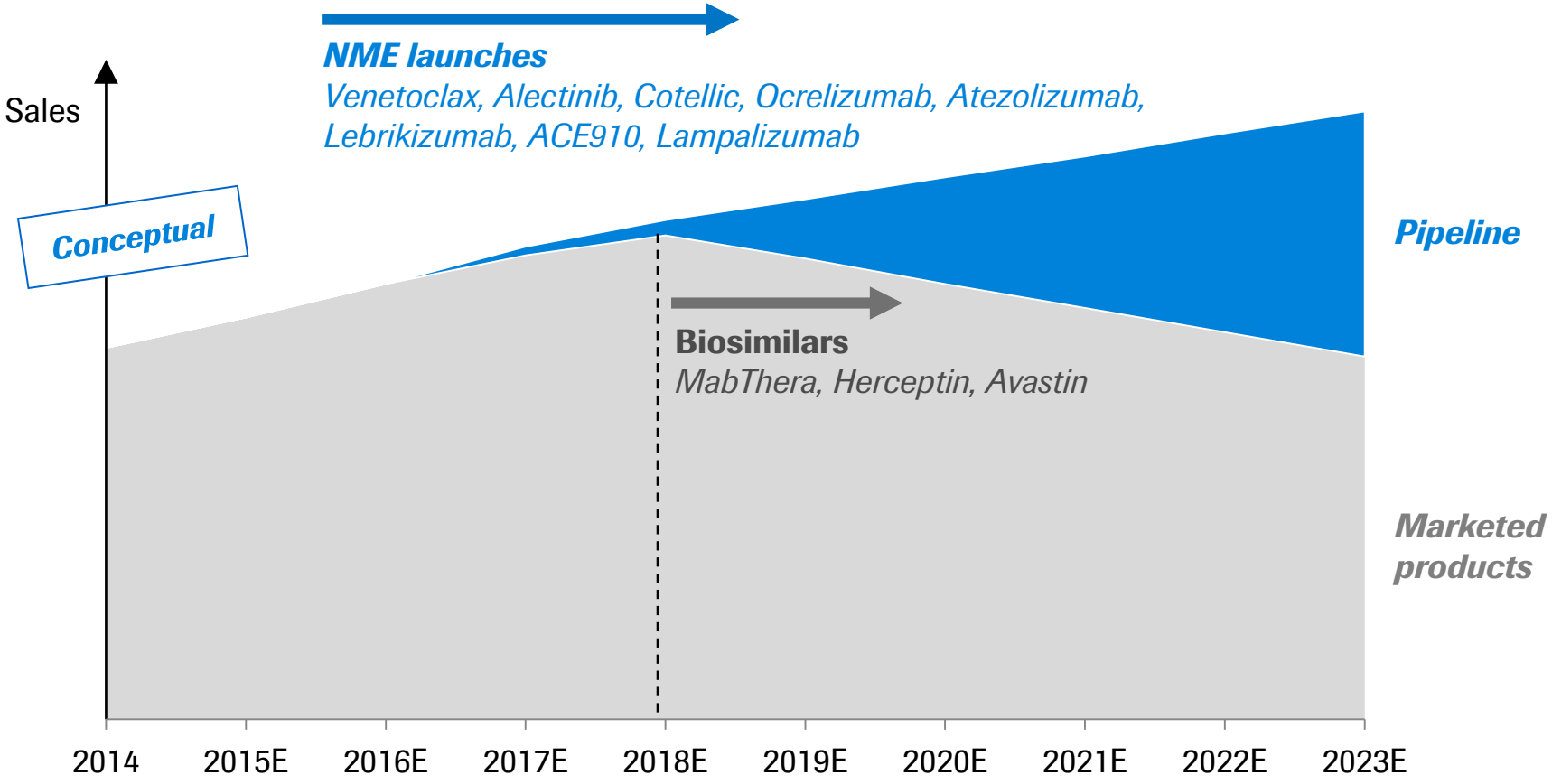
Positive outlook

Strong pipeline mitigates biosimilar impact



2016 outlook

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

[1] At Constant Exchange Rates (CER)

Doing now what patients need next