

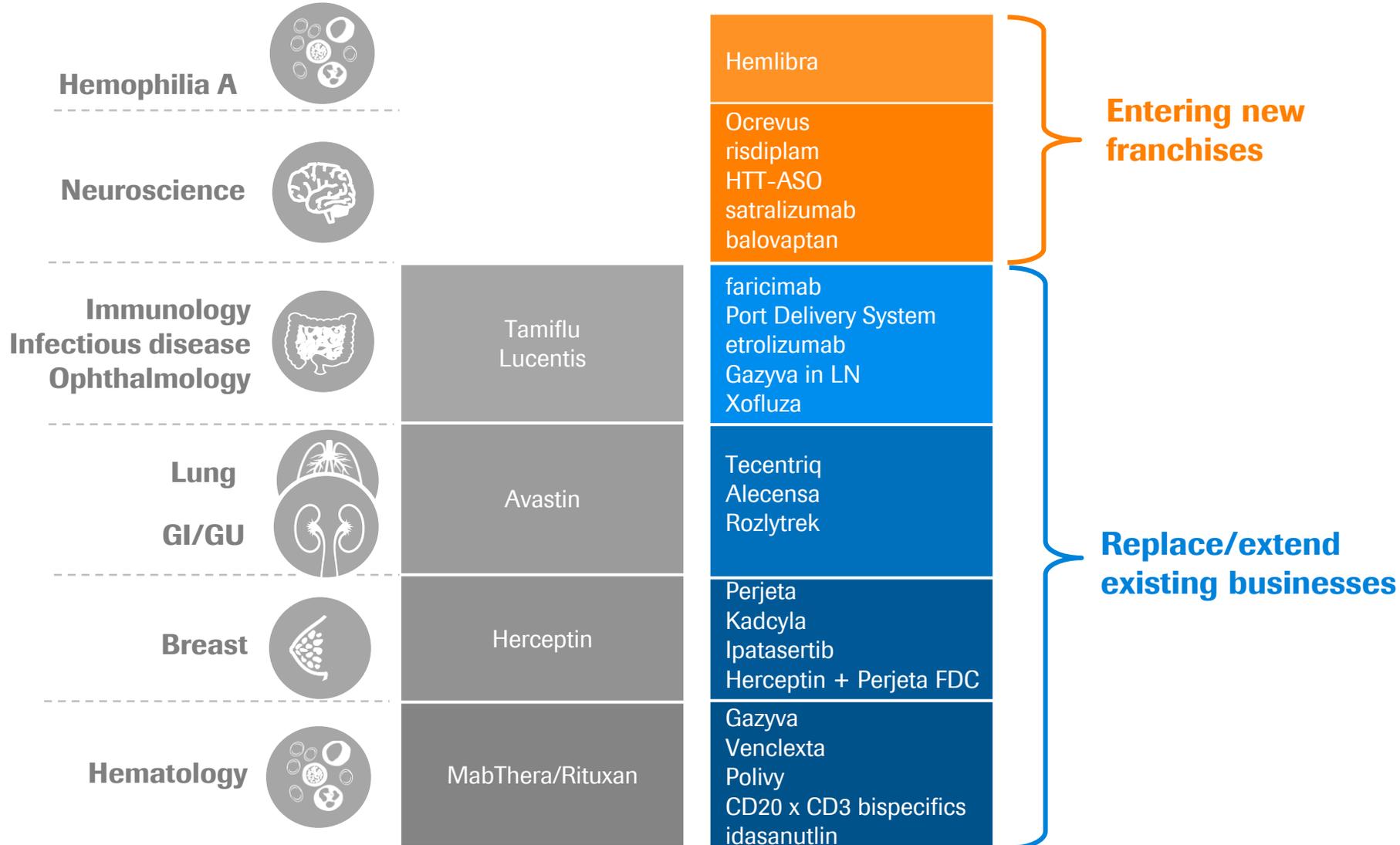
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## Roche Pharma Day 2019

### *Commercial Opportunities*

**Teresa Graham** | Head of Global Product Strategy

# Roche in a change: We are actively managing the transition



# Strong short term news flow

## *Diversifying the late stage pipeline and setting new standards of care*

Product	Indication	Filing Date	Market Opportunity	Product	Indication	Filing	Market Opportunity
<b>risdiplam</b>	SMA	2019 in type 1/2/3		<b>Tecentriq</b>	1L HCC	2019/20	
<b>satralizumab</b>	NMOSD	2019			Adj. MIBC	2020	
<b>HTT-ASO</b>	Huntington's	Ph II & III ongoing; filing latest 2022			FL Ovarian Cancer	2020	
<b>Gazyva</b>	Lupus Nephritis	initiating Ph III			1L BRAFm Melanoma	2020	
<b>etrolizumab</b>	UC/ Crohn's Disease	filing in UC in 2020			1L mUC	2019	
<b>PDS</b>	nAMD	fully recruited; filing in 2020			Neoadj. TNBC	2020	
<b>faricimab</b>	nAMD/DME	recruitment ahead of plan; filing in 2021/22			<b>ipatasertib</b>	1L/2L TNBC	2020
				1L+ HR+ BC (chemo treated only)	2020		
				1L mCRPC	2020		
				<b>idasanutlin</b>	R/R AML	2020	
				<b>H+P FDC-SC</b>	eBC, 1L HER2+ BC	2019/20	
				<b>Polivy</b>	1L DLBCL	2020/21	

Neuroscience	Ophthalmology
Immunology	Oncology

	Small: up to CHF 0.5 bn
	medium= CHF 0.5 to CHF 1bn
	large > CHF1bn

Source: Roche/Genentech, incidence/prevalence in the major markets (US, FR, DE, IT, ES, GB); <sup>1</sup> including China; SOC=standard of care; SMA=spinal muscular atrophy; NMOSD=neuromyelitis optica spectrum disorder; UC=ulcerative colitis; CD=Crohn's disease; nAMD=neovascular age-related macular degeneration; DME=diabetic macular edema; HCC=hepatocellular carcinoma; TNBC=triple-negative breast cancer; FL=front line; R/R AML=relapsed/refractory acute myeloid leukemia; FDC=fixed dose combination; HR=hormone receptor; mCRPC=metastatic castration resistant prostate cancer; DLBCL=diffuse large B-cell lymphoma; NSCLC=non-small cell lung cancer; AC=all comers

# Late stage pipeline

## ONCOLOGY / HEMATOLOGY



### Breast, Gyn

- HER2+ BC
- TNBC
- HR+ BC
- OC



### Lung, Skin, Rare

- NSCLC
- SCLC
- ALK+ NSCLC
- ROS1+ NSCLC
- NTRK+ pan tumor
- SCCHN
- Melanoma



### GI/GU

- RCC
- UC
- CRPC
- HCC



### Hematology

- CLL
- DLBCL
- iNHL
- AML
- MM
- Hemophilia A

## IMMUNOLOGY



- Ulcerative colitis
- Crohn's disease
- Nasal polyps
- Lupus Nephritis

## OPHTHALMOLOGY



- nAMD
- DME

## INFECTIOUS DISEASES



- Influenza A/B

## NEUROSCIENCE



- SMA
- DMD
- Huntington's
- Autism
- Alzheimer's
- NMOSD

# Oncology/Hematology portfolio

## ONCOLOGY / HEMATOLOGY



### Breast, Gyn

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- TNBC
- HR+ BC
- OC



### Lung, Skin, Rare

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- SCLC
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### GI/GU

- RCC
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- HCC



### Hematology

- CLL
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## IMMUNOLOGY



- Ulcerative colitis
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- Lupus Nephritis

## OPHTHALMOLOGY



- nAMD
- DME

## INFECTIOUS DISEASES



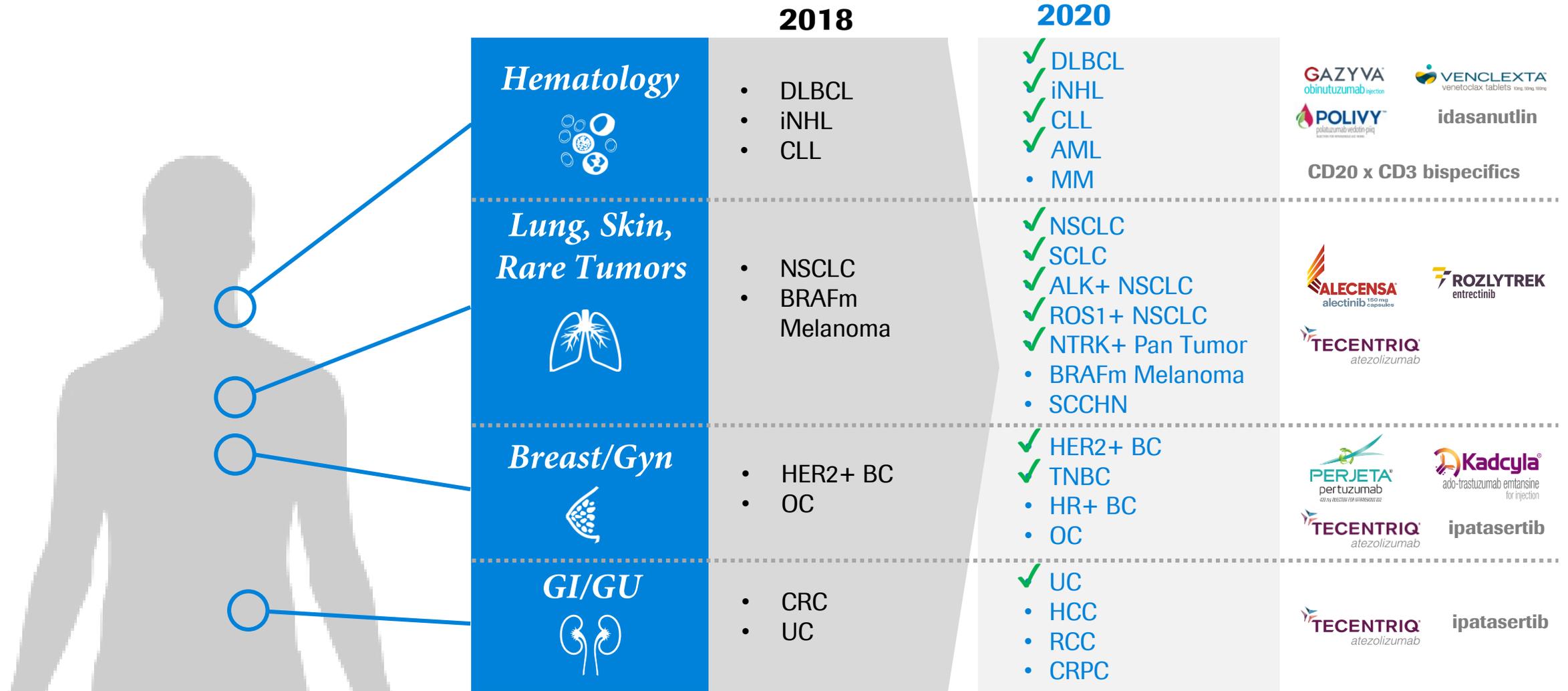
- Influenza A/B

## NEUROSCIENCE



- SMA
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- NMOSD

# Expanding oncology franchise into new tumor types



CLL=Chronic lymphoid leukemia; DLBCL=Diffuse large B-cell lymphoma; iNHL=Indolent Non-Hodgkin's lymphoma; AML=Acute myeloid leukemia; MM=Multiple myeloma; NSCLC = Non-Small Cell Lung Cancer; SCLC = Small Cell Lung Cancer; SCCHN = Head & Neck Squamous Cell Carcinoma; TNBC = Triple Negative Breast Cancer; OC=Ovarian Cancer; UC = Urothelial Carcinoma; HCC = Hepatocellular Carcinoma; RCC = Renal Cell Carcinoma; CRPC = Castration Resistant Prostate Cancer; CRC = Colorectal Cancer; IVenclexta in collaboration with AbbVie

# Advancing medicines into early disease

## *Curative potential for the largest number of patients*

**Breast / Gyn**

*>80% of TNBC pts treated in the adjuvant setting*

**Lung, Skin, Rare**

*25-35% of NSCLC patients have resectable disease*

**GI / GU**

*>2.5x more patients with early UC than metastatic UC*



- IMpassion030: Adj. TNBC
- IMpassion031: Neoadj. TNBC
- GEPARDOUZE: Neoadj/adj. TNBC
- IMpassion050: Neoadj. HER2+ BC



- IMpower030: Neoadj. NSCLC
- IMpower010: Adj. NSCLC
- IMvoke010: Adj. SCCHN



- IMvigor010: Adj. MIBC
- ALBAN: NMIBC
- IMmotion010: Adj. RCC



- ✓ NEOSPHERE: Neoadj. HER2+ BC
- ✓ APHINITY: Adj. HER2+ BC



- ALINA: Adj. ALK+ NSCLC

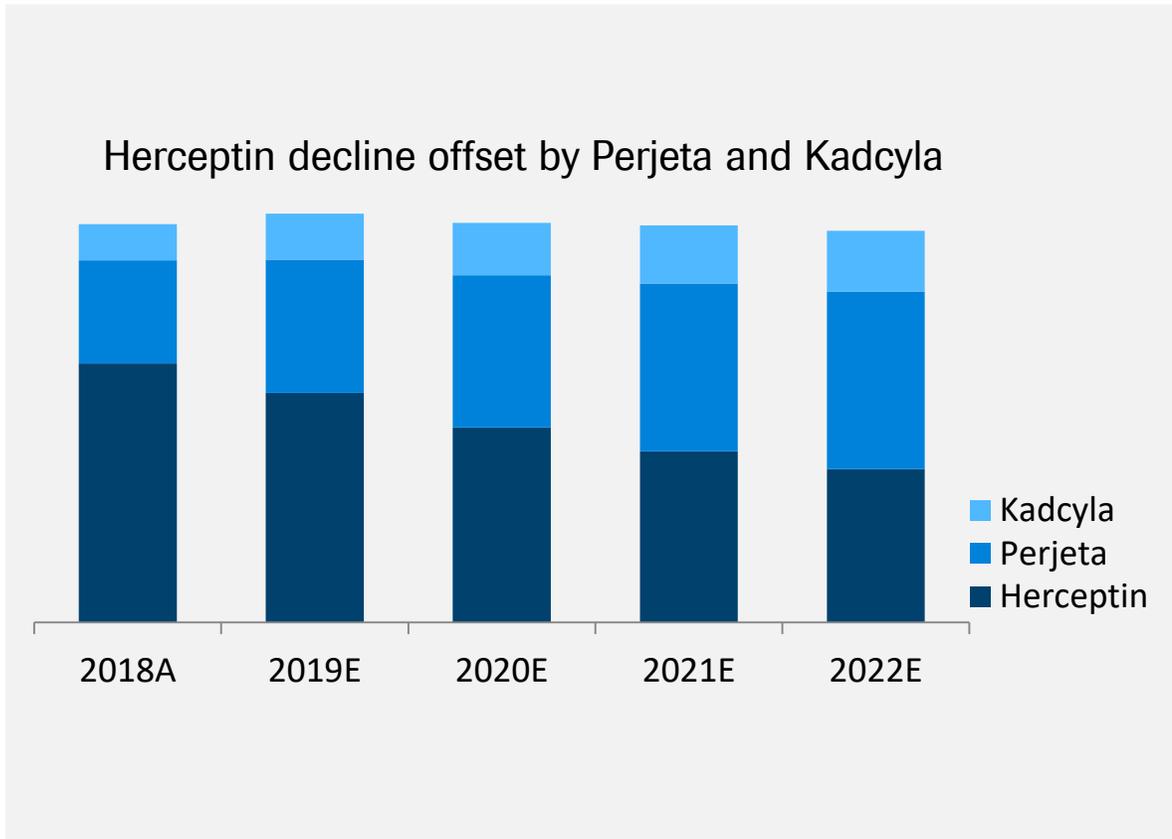


- ✓ KATHERINE: Adj. HER2+ BC
- KAITLIN: Adj. HER2+ BC

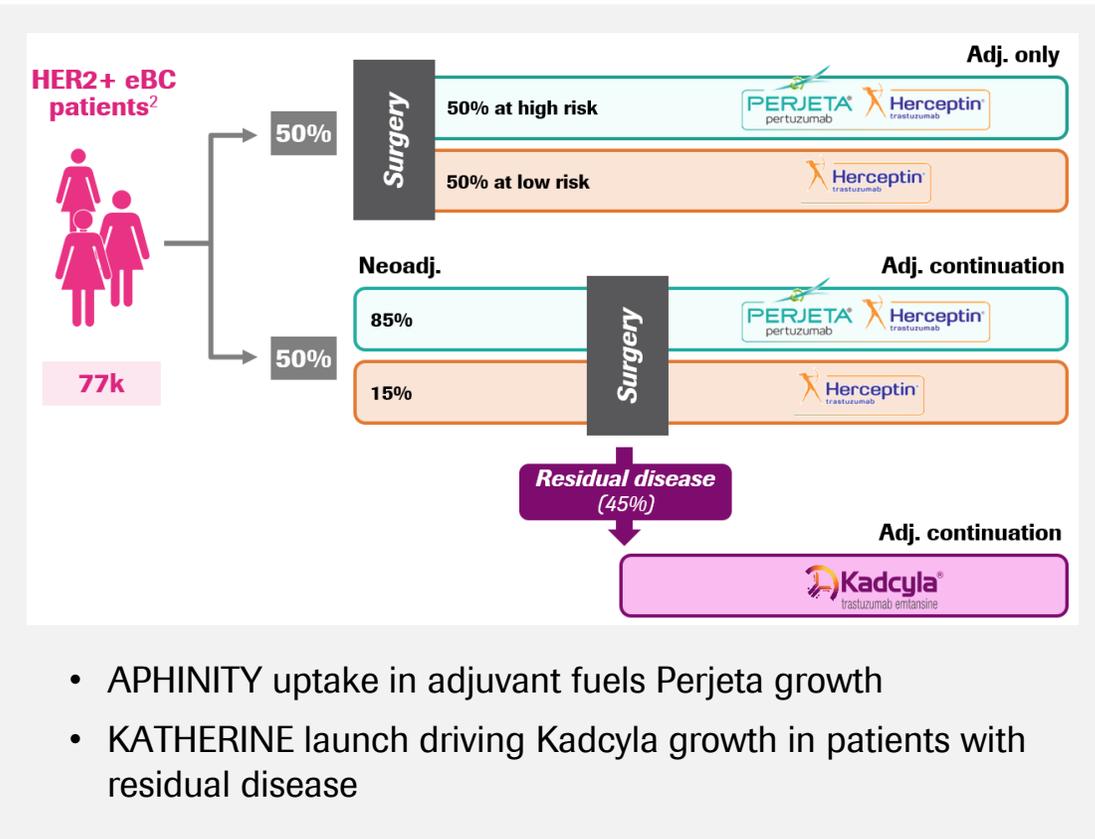
# HER2+ breast cancer

## *Perjeta and Kadcylla forecasted to offset biosimilar erosion of Herceptin*

### Consensus sales estimates: HER2+ franchise<sup>1</sup>



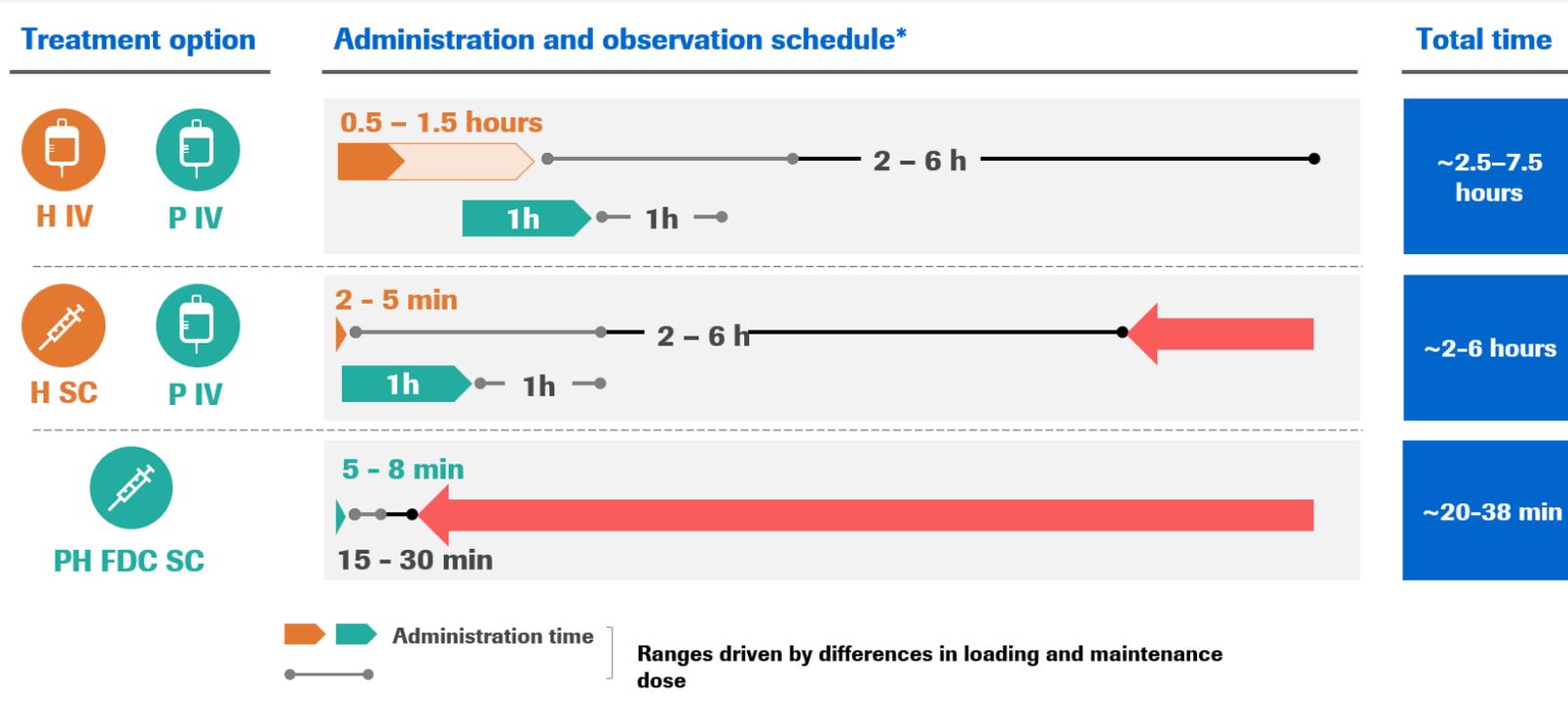
### Current standard of care in eBC<sup>3</sup>



1. Source: Evaluate Pharma; 2. Epidemiology EU5 & US; 3. Adapted based on St Gallen Breast Cancer Conference 2019; eBC=Early Breast Cancer

# Herceptin + Perjeta Subcutaneous Fixed Dose Combination

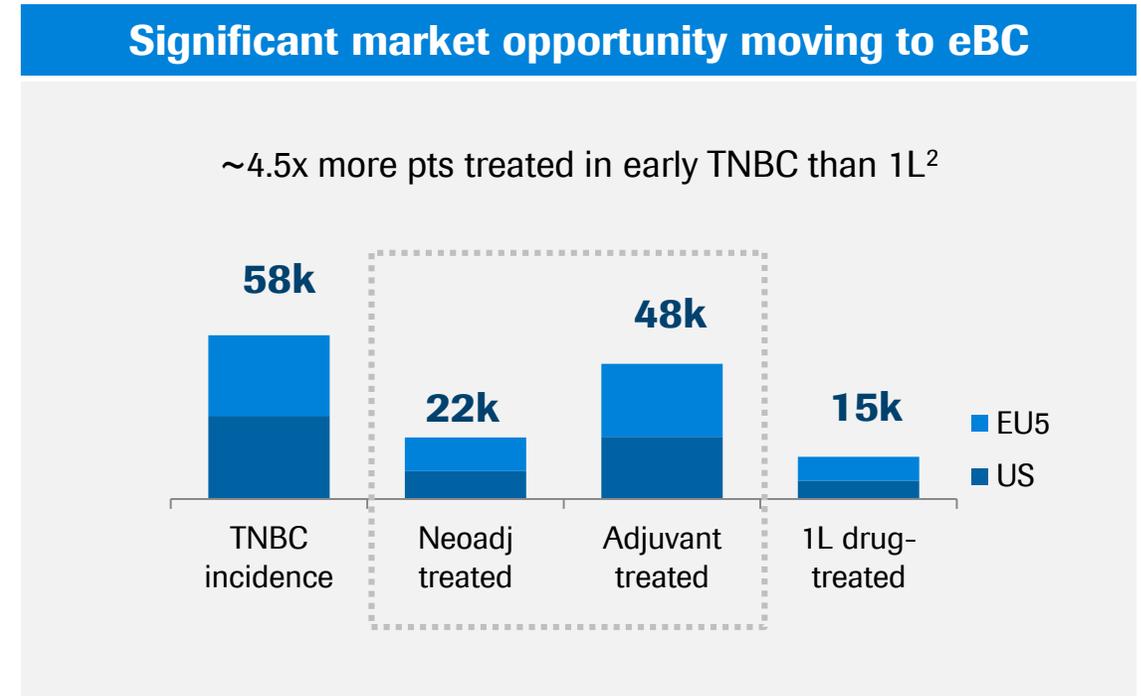
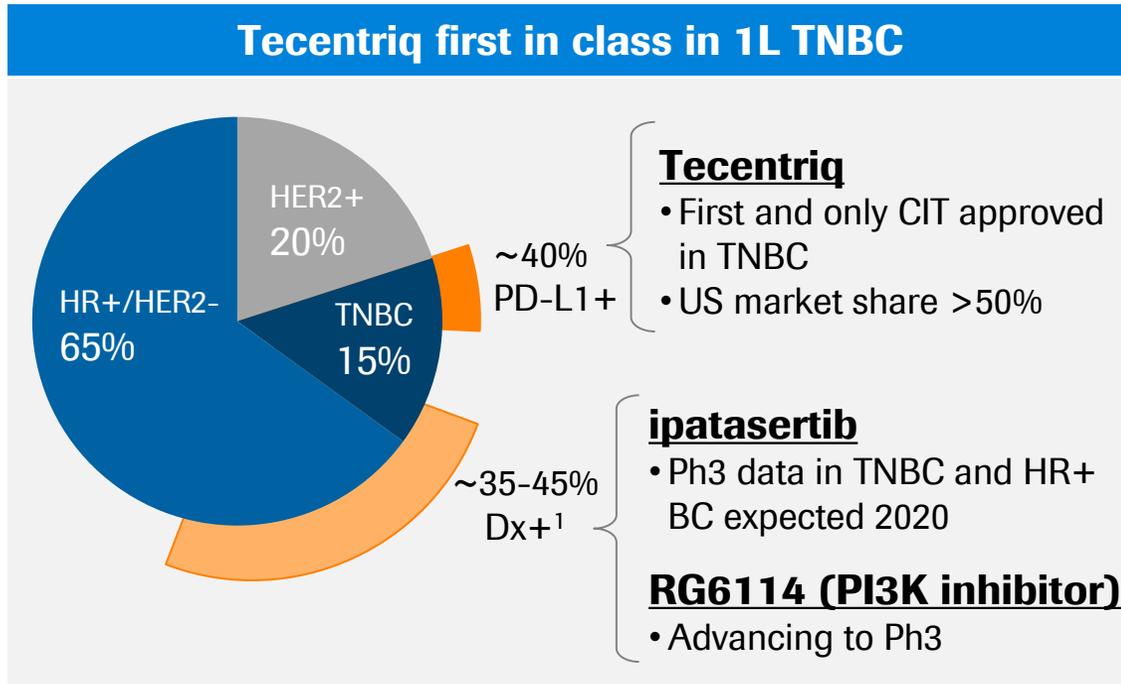
## *Reduced administration time, SC route strongly preferred by patients*



- Positive Ph III (FeDeriCa) results show H+P FDC SC achieves equivalent serum concentrations as IV at cycle 7 in neoadjuvant HER2+ eBC
- SC formulations result in reduced drug delivery related healthcare costs and resource use
- US/EU filing in 2019/20

# TNBC and HR+/HER2- breast cancer

*Strong growth for Tecentriq in 1L TNBC, with potential expansion in eBC*



## Key readouts and new studies in TNBC and HR+ BC

### ipatasertib

- IPATUNITY130: 1L TNBC/HR+ mBC<sup>1</sup>
- IPATUNITY150: 1L HR+ mBC (+palbo)
- IPATUNITY170: 1L TNBC (+Tecentriq)

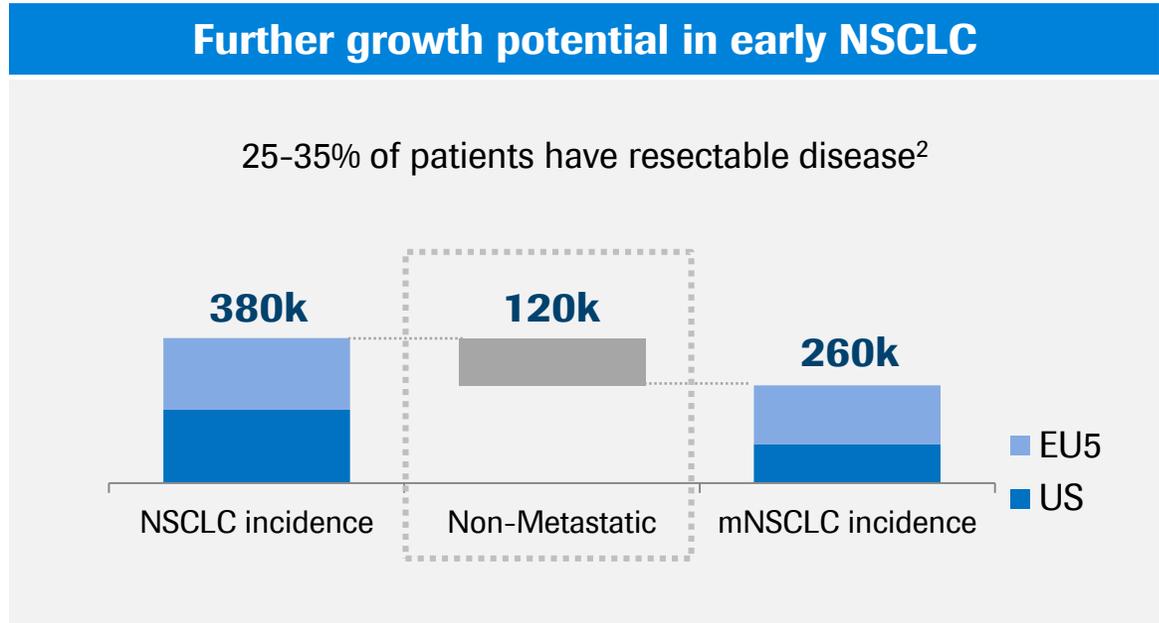
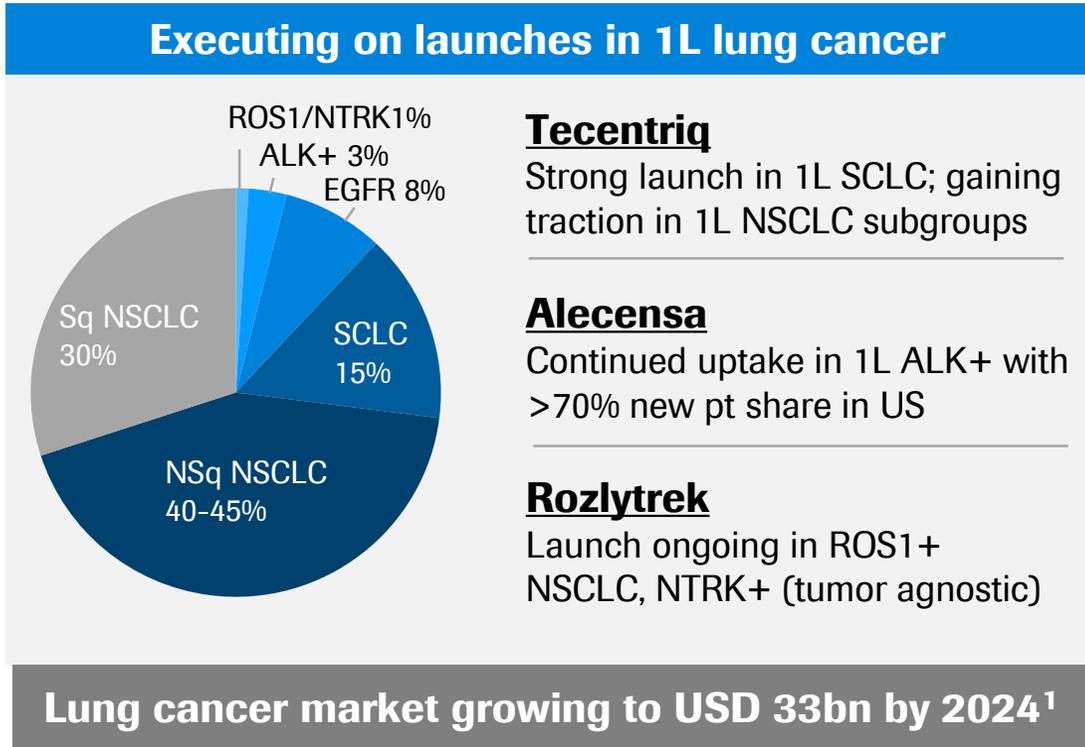


- IMpassion030: adjuvant TNBC
- IMpassion031: neoadjuvant TNBC
- GEPARDOUZE: neoadj./adj. TNBC

1. PI3K/AKT mutant/PTEN low; 2. Source: Roche; TNBC=Triple Negative Breast Cancer; eBC=Early Breast Cancer

# Lung cancer

## Broad coverage with differentiated growth opportunities



### Three pivotal trials ongoing in early NSCLC



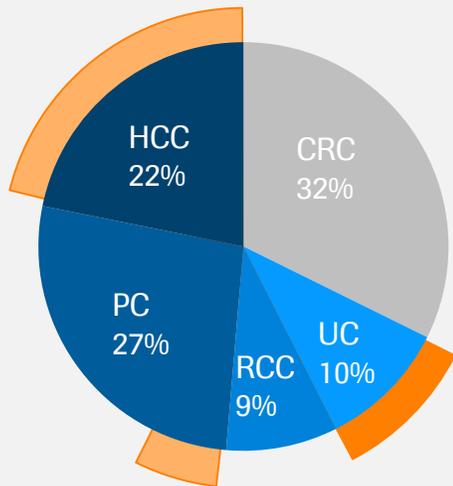
- IMpower030: Neoadj. NSCLC
- IMpower010: Adjuvant NSCLC
- ALINA: Adjuvant ALK+ NSCLC

1. Source: Evaluate Pharma; 2. Source: Roche; NSCLC=Non-Small Cell Lung Cancer

# Gastrointestinal (GI) and Genitourinary (GU) cancers

## *First-in-class potential in multiple tumor types*

### Growth opportunities in 1L mUC and 1L HCC



#### **Tecentriq**

- Positive Ph 3 data in 1L mUC ✓  
Expected to be first CIT agent in chemo-eligible patients
- Ph3 data in 1L HCC exp. 2019

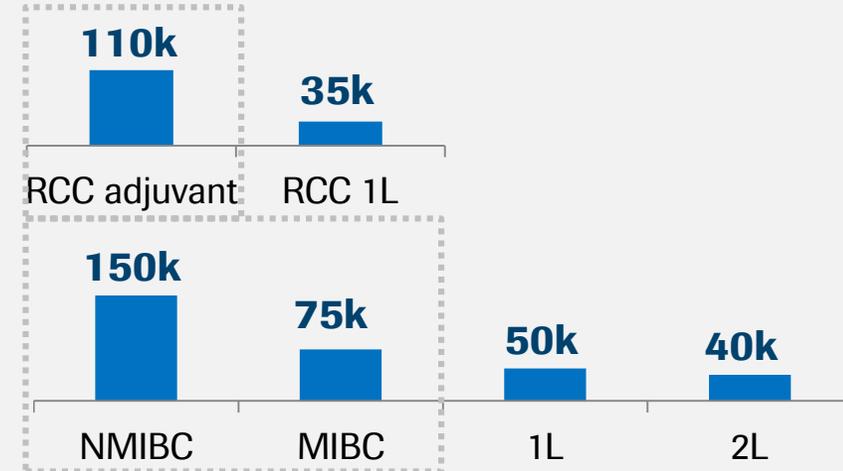
#### **ipatasertib**

- Ph3 data in mCRPC exp. 2020

**GI/GU market growing to 34b USD by 2024<sup>1</sup>**

### Further growth potential in early disease

First in-class potential for Tecentriq in adjuvant MIBC and RCC



### Key upcoming readouts in 1L GI/GU cancers

**TECENTRIQ**  
atezolizumab

- IMbrave150: 1L HCC

**ipatasertib**

- IPATENTIAL150: mCRPC

### Three ongoing trials in early GI/GU cancers

**TECENTRIQ**  
atezolizumab

- IMvigor010: Adjuvant MIBC
- ALBAN: High-risk NMIBC (BCG-naïve)
- IMmotion010: Adjuvant RCC

1. Source: Evaluate Pharma; HCC=Hepatocellular Carcinoma; mUC=metastatic urothelial carcinoma; CIT=Cancer Immunotherapy; CRPC=Castration Resistant Prostate Cancer; RCC=Renal Cell Carcinoma; NMIBC=Non-Muscle Invasive Bladder Cancer; MIBC=Muscle Invasive Bladder Cancer

# Hematology

*Building upon our leadership & experience with transformative medicines*

**Continuing to redefine the SOC in B-cell malignancies**

**Gazyva + Venclexta 1L CLL launch:**

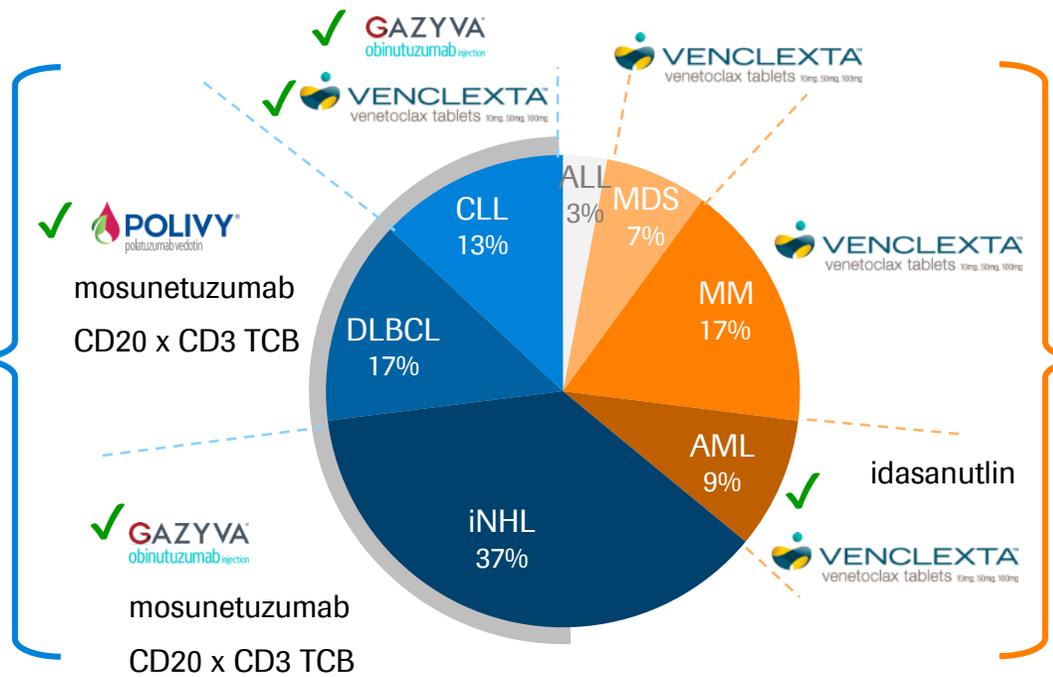
- Fixed dose, chemo free option for patients

**Polivy 3L+ DLBCL launch, pivotal trial ongoing in 1L DLBCL:**

- Off the shelf treatment with strong efficacy and safety profile

**CD20 x CD3 bispecifics:**

- Developing as monotherapy in later lines, rapidly moving into early line combinations



**Expanding into new hematologic diseases**

**Venclexta launch in 1L AML:**

- High unmet need in disease with few treatment options

**Venclexta in pivotal trial in MM**

- ~20% of MM patients with t11:14 translocation

Key upcoming readouts in NHL, CLL

**POLIVY** (polatuzumab vedotin-piq)

**CD20 x CD3 bispecifics**

POLARIX: 1L DLBCL

3L aNHL and FL

Key upcoming readouts in MM, AML

**VENCLEXTA** (venetoclax tablets)

**idasanutlin**

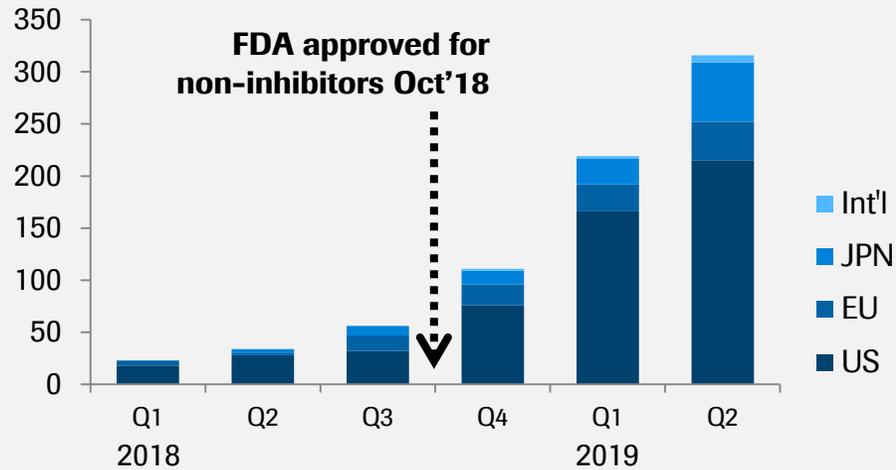
CANOVA: MM (t11:14)

MIRROS: R/R AML

# Hemophilia

## *Hemlibra provides a transformational advance for patients*

**Annualized sales >1bn**  
within 9m of approval in non-inhibitors

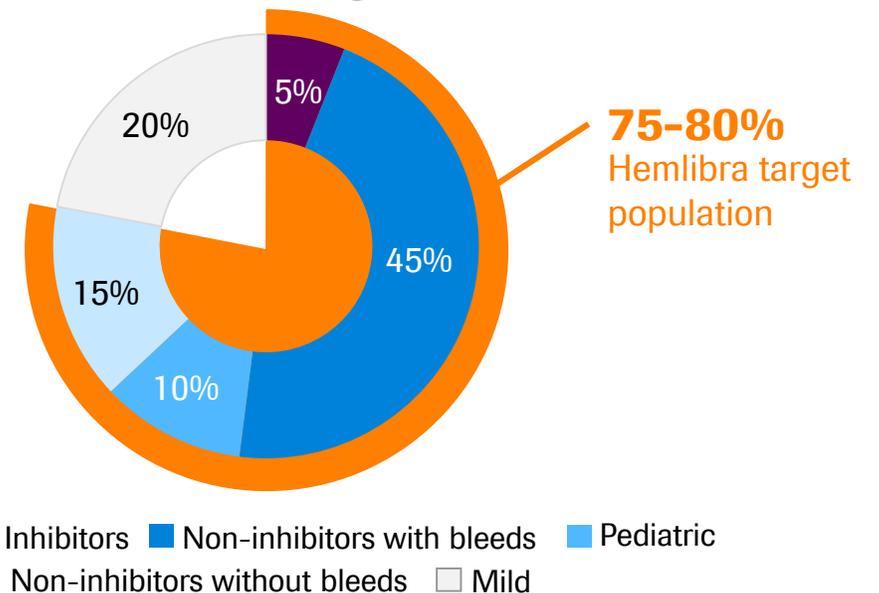


- US: ~14% total market share as of HY
- 95% of patients surveyed preferred Hemlibra to their prior therapy (5% had no preference)

**Total HA market growing to USD 12bn by 2024<sup>1</sup>**



### Needs-based segmentation



# Immunology, Ophthalmology, and Infectious Diseases

## ONCOLOGY / HEMATOLOGY



### Breast, Gyn

- HER2+ BC
- TNBC
- HR+ BC
- OC



### Lung, Skin, Rare

- NSCLC
- SCLC
- ALK+ NSCLC
- ROS1+ NSCLC
- NTRK+ pan tumor
- SCCHN
- Melanoma



### GI/GU

- RCC
- UC
- CRPC
- HCC



### Hematology

- CLL
- DLBCL
- iNHL
- AML
- MM
- Hemophilia A

## IMMUNOLOGY



- Ulcerative colitis
- Crohn's disease
- Nasal polyps
- Lupus Nephritis

## OPHTHALMOLOGY



- nAMD
- DME

## INFECTIOUS DISEASES



- Influenza A/B

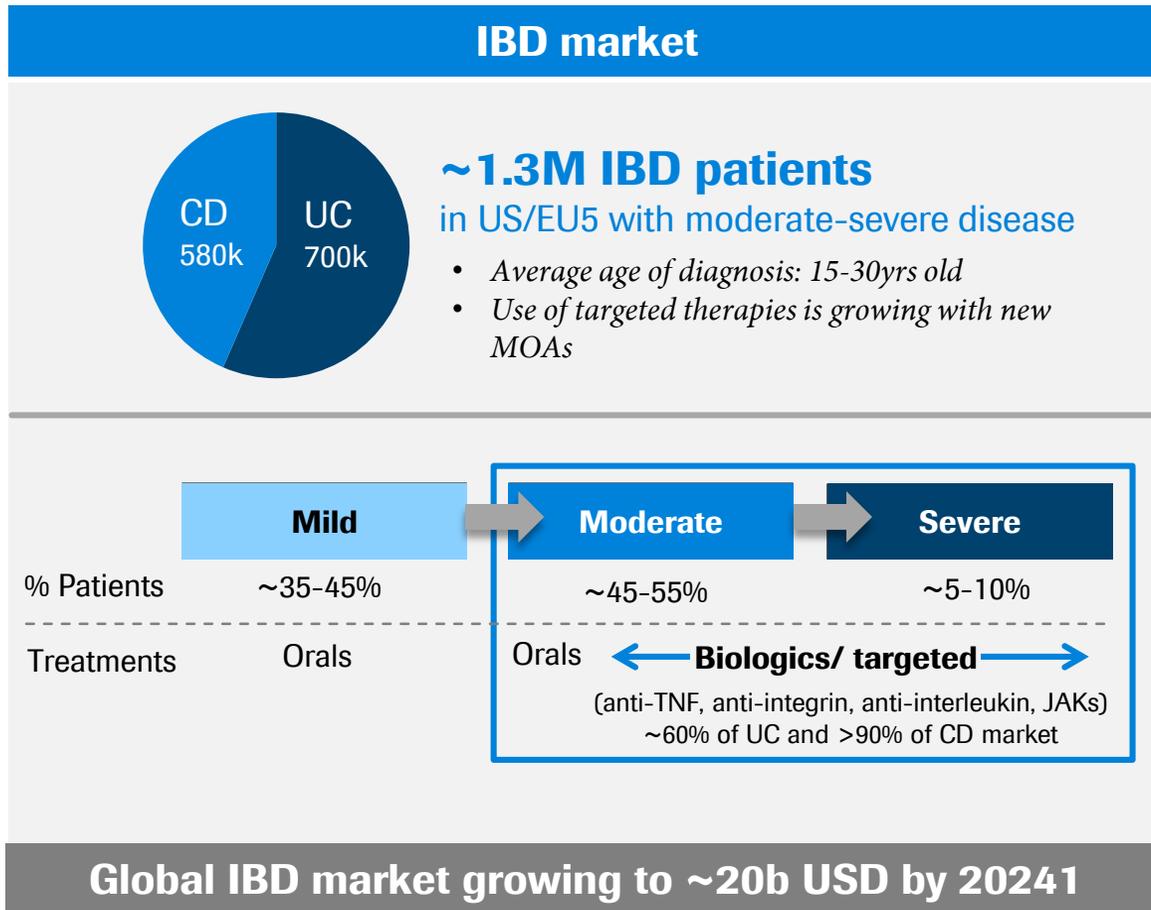
## NEUROSCIENCE



- SMA
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- Alzheimer's
- NMOSD

# Ulcerative Colitis (UC) and Crohn's Disease (CD)

*Potential for disease leading profile in markets with unmet need*



## etrolizumab

### Potential for improved efficacy

- High unmet need still in market with only 10-30% of patients achieving sustained remission and frequent surgical interventions
- Etrolizumab differentiated among integrin class by dual mode of action: blocking leukocyte trafficking (via  $\alpha 4\beta 7$ ) and lymphocyte retention (via  $\alpha E\beta 7$ )

### Best-class dosing profile

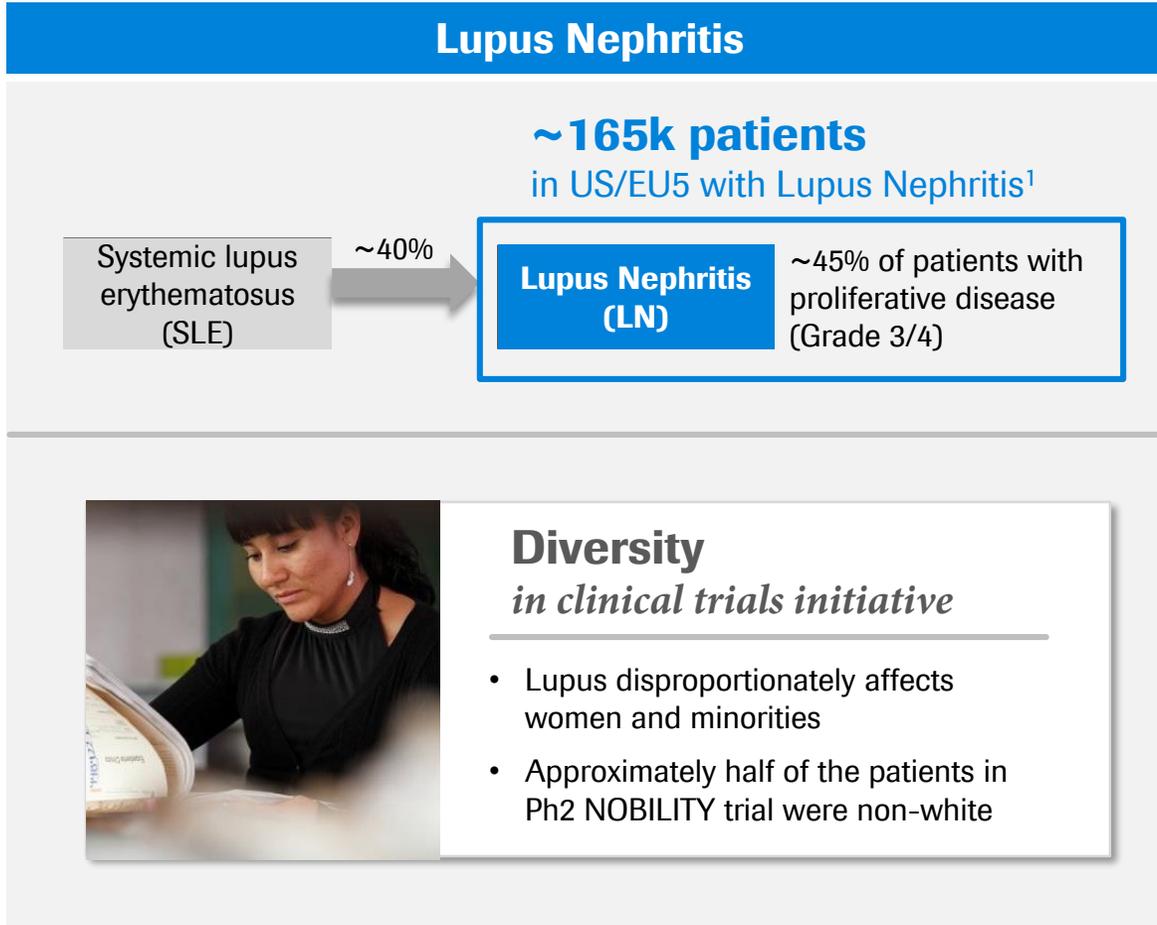
- Monthly SC administration

### Key upcoming readouts:

- |                   |   |
|-------------------|---|
| <b>UC</b><br>2020 | • <u>HIBISCUS I/II</u> : TNF-naïve, induction (vs. Humira)        |
|                   | • <u>GARDENIA</u> : TNF-naïve, sustained remission (vs. Remicade) |
|                   | • <u>LAUREL</u> : TNF-IR, maintenance                             |
|                   | • <u>HICKORY</u> : TNF-IR, induction and maintenance              |
| <b>CD</b><br>2021 | • <u>BERGAMOT</u> : moderate-to-severe CD                         |

# Lupus Nephritis (LN)

*Gazyva has the potential to be the first approved therapy in LN*



**GAZYVA**  
obinutuzumab injection

## Demonstrated efficacy in randomized Ph2 trial

- Data to be presented at upcoming medical conference

## No approved therapies for LN in the US

- >20% of patients currently progress to End Stage Renal Disease within 15 years

## Dosing convenience

- Exploring q6m dosing after first year

## BTD submission

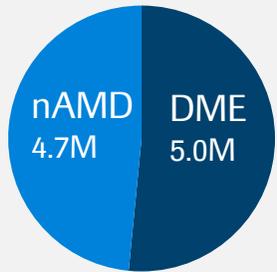
- Actively engaging with health authorities about path forward

1. Source: Roche; LN=Lupus Nephritis; SLE=Systemic lupus erythematosus ; BTD=breakthrough therapy designation

# Ophthalmology

## Roche has the broadest Ph3 pipeline in retina

### High unmet medical need in retinal diseases



**~9.7M patients**  
in US/EU5 with nAMD or DME

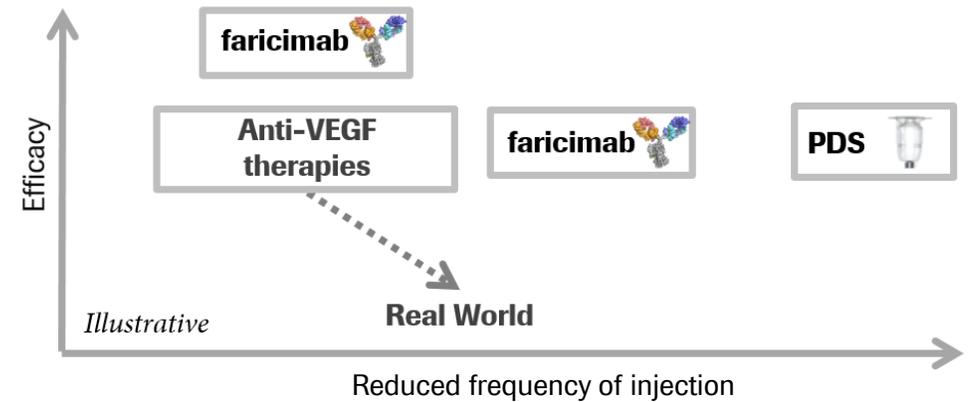
- Treatment rate in DME ~50%
- >2M additional patients in US/EU5 with RVO, where Lucentis is approved and treatment rates <50%

- High treatment burden of anti-VEGF therapies in real world associated with suboptimal visual outcomes<sup>1</sup>
- Growing market driven by aging population and incidence of diabetes

**Total retina medical market USD ~10bn in 2018<sup>2</sup>**

## faricimab, PDS

### Opportunities for improved durability or efficacy



### Key upcoming readouts in ophthalmology

**Port Delivery System**

ARCHWAY: nAMD

**faricimab**

YOSEMITE/RHINE: DME

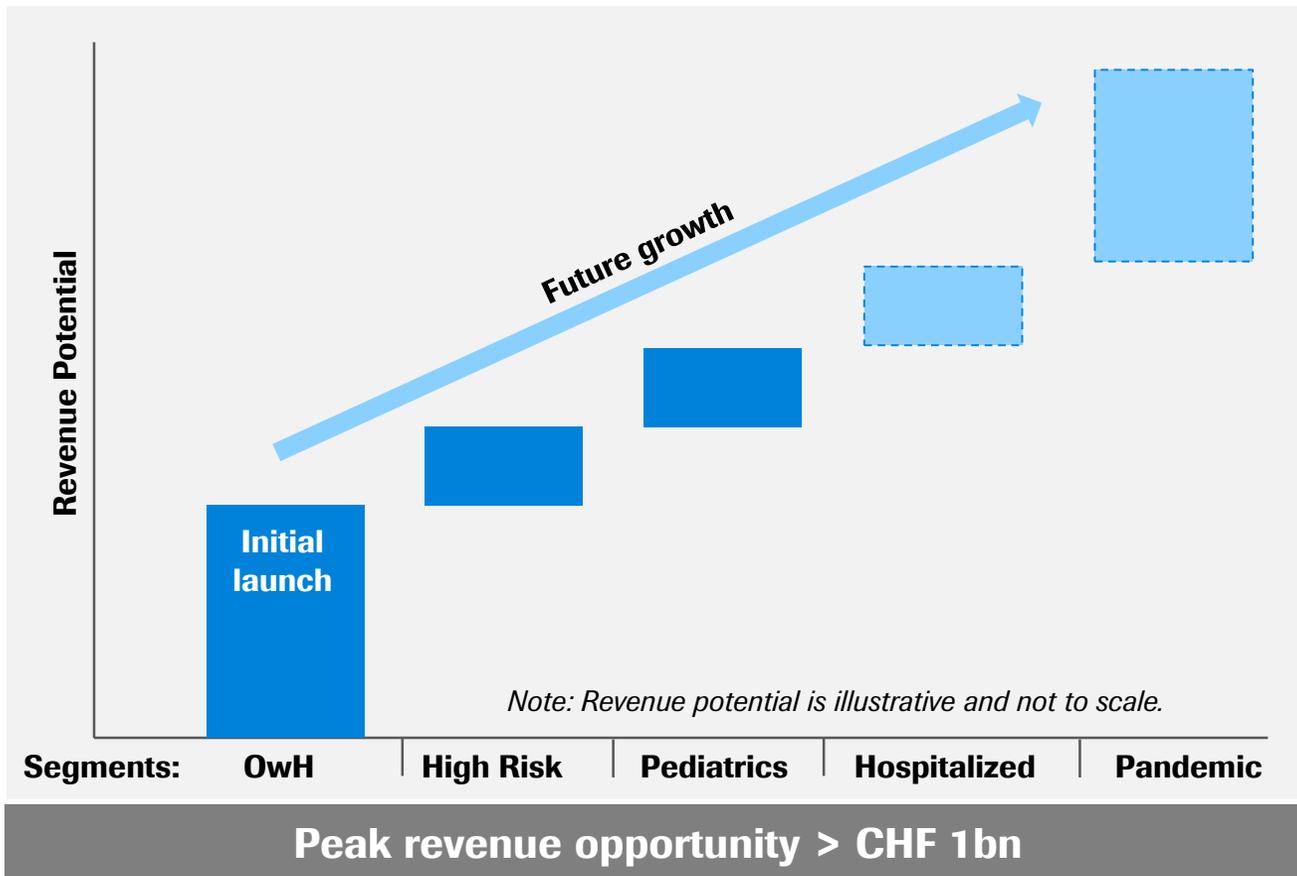
TENAYA/LUCERNE: nAMD

<sup>1</sup> F.G. Holz et al., Br J Ophthalmol 2015; <sup>2</sup> Evaluate Pharma; nAMD=neovascular age related macular degeneration; DME=diabetic macular edema; PDS=Port Delivery System with ranibizumab

# Influenza

## Expanding into new segments with first new MOA in 20 years

### Potential of first in disease in high-risk and hospitalized patients



**xofluza™**  
(baloxavir marboxil) tablets 40mg

#### Single dose

- Improved convenience, compliance vs. Tamiflu course of treatment (twice daily for 5 days)

#### Activity against Tamiflu resistant strains

#### Activity against avian strains H7N9 and H5N1

#### Safety comparable to placebo

- Less frequent nausea than Tamiflu in Ph 3 CAPSTONE study

#### Prophylaxis

- Xofluza reduced the risk of developing flu by 86% in Ph 3 post-exposure prophylaxis study (BLOCKSTONE)

# Neuroscience and Rare Diseases

## ONCOLOGY / HEMATOLOGY



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- HR+ BC
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- NTRK+ pan tumor
- SCCHN
- Melanoma



### GI/GU

- RCC
- UC
- CRPC
- HCC



### Hematology

- CLL
- DLBCL
- iNHL
- AML
- MM
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## IMMUNOLOGY



- Ulcerative colitis
- Crohn's disease
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- Lupus Nephritis

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- nAMD
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## INFECTIOUS DISEASES



- Influenza A/B

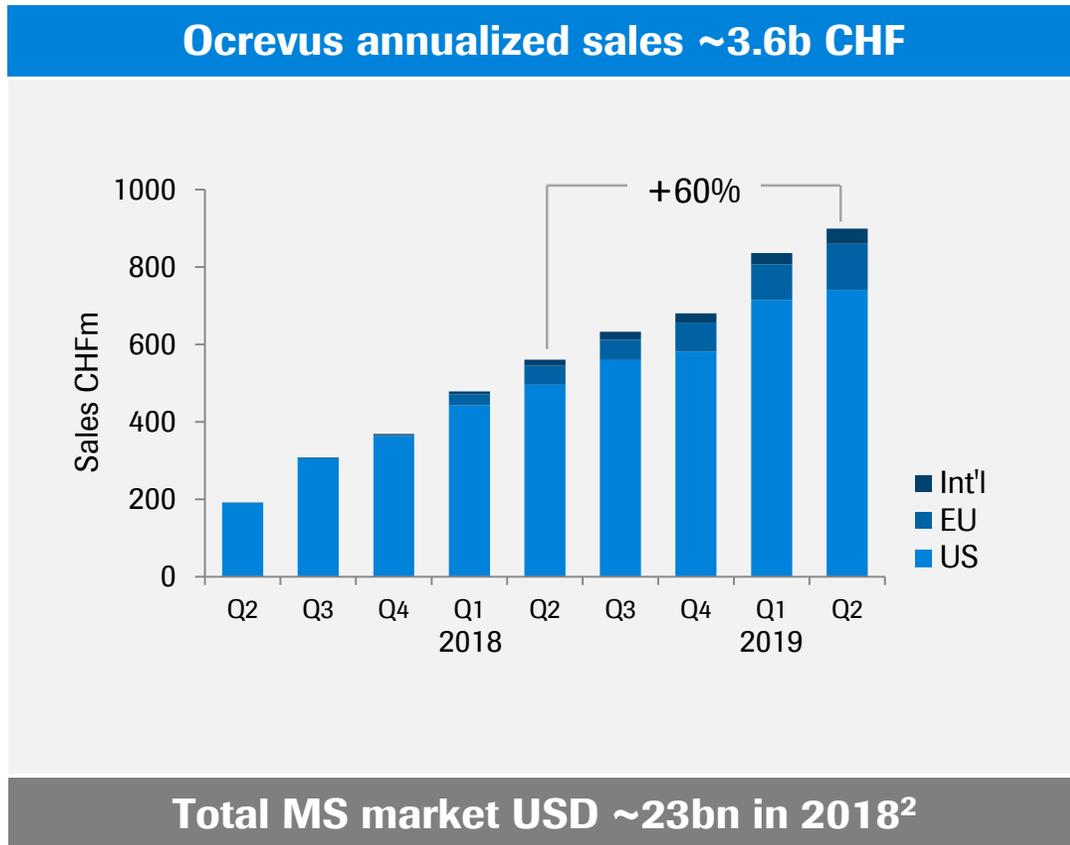
## NEUROSCIENCE



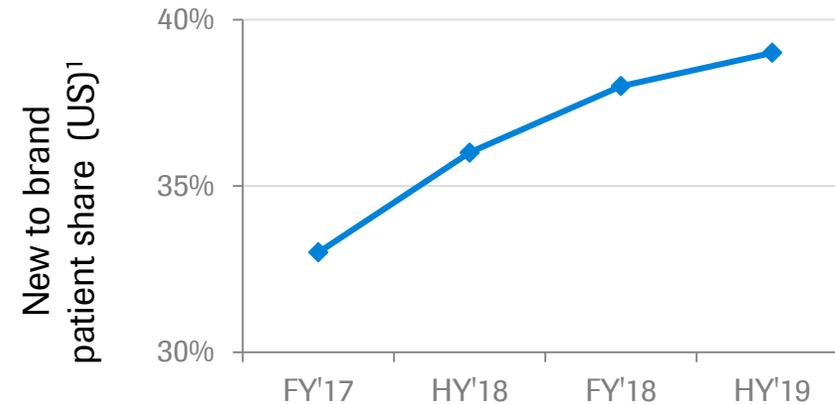
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- NMOSD

# Multiple Sclerosis (MS)

*Ocrevus remains #1 approved therapy in the US; gaining share globally*



**Nearly 4/10 new patients prescribed Ocrevus in US**



- **Efficacy:** slowing progression of disease across RMS/PPMS
- **Safety:** >120k patients treated, no PML cases related to drug
- **Convenience:** dosing every 6 months
- **Access:** pricing strategy enables broad payer coverage

# Spinal Muscular Atrophy (SMA)

*Potential to be treatment of choice for majority of SMA patients*

## Unmet need remains across SMA

	<i>gene therapy</i>	<i>nusinersen</i>
<b>Durability, Administration</b> 	<b>Durability</b> <ul style="list-style-type: none"> <li>Little data beyond 3 years</li> <li>Potentially confounded by follow-on therapy</li> </ul>	<b>Burden of IT administration</b> <ul style="list-style-type: none"> <li>Especially significant with scoliosis</li> <li>Accumulation of repeat lumbar punctures</li> </ul>
<b>Safety</b> 	<b>Safety</b> <ul style="list-style-type: none"> <li>Acute serious liver injury warning</li> <li>Systemic corticosteroid immunosuppression for ≥ 2 months</li> </ul>	<b>Safety</b> <ul style="list-style-type: none"> <li>Meningitis and hydrocephalus cases</li> </ul>
<b>Addressable population</b> 	<b>Limited population</b> <ul style="list-style-type: none"> <li>Not approved &amp; limited data in pts &gt;2 years old (~90% of SMA)</li> </ul>	<b>Evidence in adults</b> <ul style="list-style-type: none"> <li>Lack of pivotal trial data in patients &gt; 9 years old at treatment initiation</li> </ul>



of U.S. SMA patients are not currently receiving disease modifying therapy

## risdiplam

### Oral therapy with best-in-class efficacy potential

- Compelling efficacy seen in Type 1, despite advanced age
- Durably increases SMN throughout CNS and periphery
- Rapid treatment sparing need for IT & immunosuppression

### Strong Safety Profile

- To date, no drug-related safety findings leading to withdrawal in any study

### Broadest clinical trial program

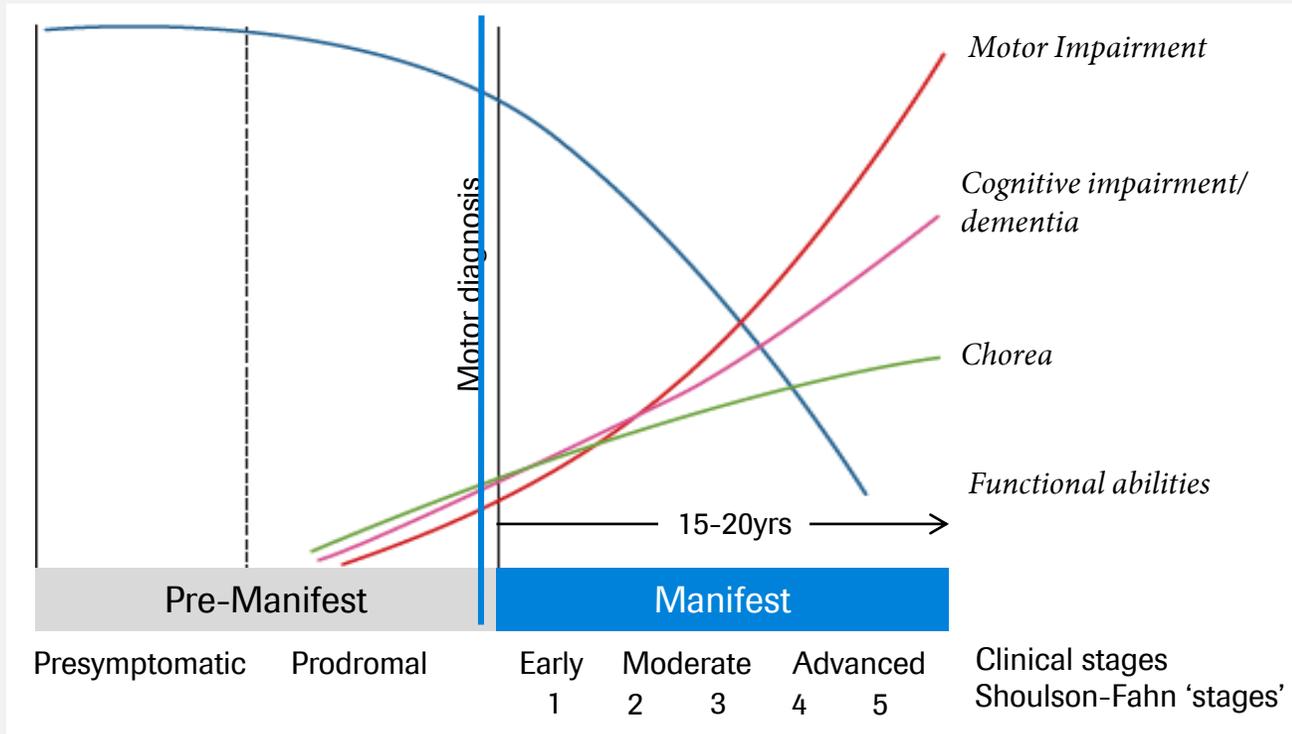
- Pre-symptomatic to older adults. Naïve & pre-treated.
- Ph3 RCT in 2-25 yr old Type 2/3 SMA reading out in 2019

- Filing for broad labels in 2019 (US) and 1H'20 (EU)

# Huntington's Disease (HD)

## *HTT-ASO has potential to be first disease modifying agent in HD*

~80k patients in the US/EU with 'Manifest' HD (4x size of SMA)



**HD market size estimated ~5bn USD<sup>1</sup>**

## HTT-ASO

### Strong mechanistic hypothesis

- Demonstrated reduction of mHTT beyond target levels (singular mechanistic driver of disease)

### First in disease potential

- No available therapies that prevent onset or slow progression. Ph 3 GENERATION HD1 trial actively recruiting patients; no other competitors in pivotal trials

### Broad coverage of all Huntington's alleles

- No additional genotyping required (lengthy, costly)

### Convenient dosing

- Dosing q8w and q16w

# Roche and healthcare systems work together to deliver rapid, broad and sustainable access to innovative therapies

## risdiplam access preparation

- > 30 countries are currently preparing for pre-approval access
- Expanding global access to risdiplam by addressing barriers in healthcare system capacity
  - Working with affiliates to demonstrate total risdiplam value to healthcare system across all patient segments
  - Working with patient community to improve access for SMA patients

## HTT-ASO access preparation

- Develop evidence for regulators and payers on total HTT-ASO value
- Provide faster access in all countries
  - Ensure infrastructure/capacity is in place including intrathecal (IT) administration that patients can start and stay on HTT-ASO
  - Understand funding and financing gaps in RoW markets and co-develop end to end access solutions

## satralizumab access preparation

- Optimize & accelerate sustainable access for NMOSD patients to satralizumab
  - Leveraging policy efforts to raise awareness on NMOSD unmet need and severity of disease
  - Working with affiliates to identify alternative innovative access solutions

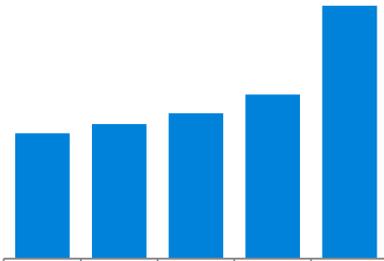
# Roche Pharma in China

*Multiple policies issued to encourage drug innovation*



## Company in oncology

#4 multinational Pharma company overall<sup>1</sup>



**>3b CHF**

annualized pharma sales  
(HY growth +54%)



## Full value chain

>3,500 Roche employees  
(R&D, Marketing, Medical,  
Manufacturing)

## China Market Changes

### REIMBURSEMENT



**Herceptin, Avastin, Mabthera added to NRDL**

1.4bn people covered by NRDL; 98% of healthcare spend under public insurance

### REGULATORY SPEED



**Alecensa China approval within 9 months of US**

1. Source: IMS Hospital audits 2018; NRDL: National Reimbursement Drugs List

*Doing now what patients need next*