55th ASCO Annual Meeting, Chicago

Roche Analyst Event

Monday, 3 June 2019

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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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11 adverse publicity and news coverage.

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ASCO 2019

Karl Mahler | Head of Investor Relations

Welcome

Karl Mahler, Head of Investor Relations

ASCO 2019 Key readouts across tumor types

Hematology

Nancy Valente, M.D., Global Head of Product Development - Hematology

Breast cancer, lung cancer & tumor agnostic

Alan Sandler, M.D., Global Head of Product Development - Solid Tumors

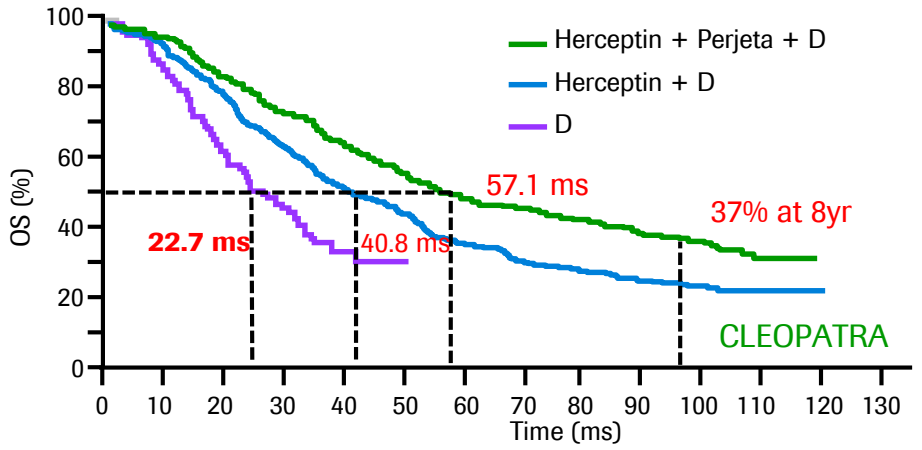
Roche Oncology strategy update

Bill Anderson, CEO Roche Pharmaceuticals

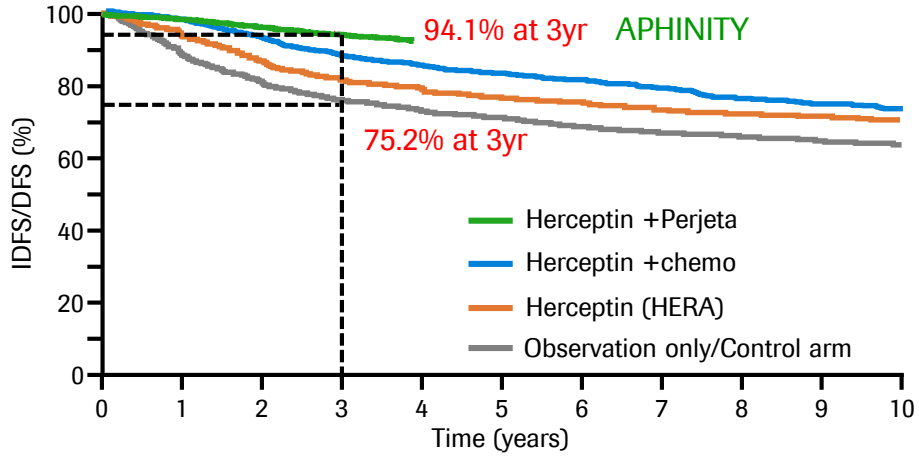
Q&A

Roche transforming BC over 2 decades and continuing the journey

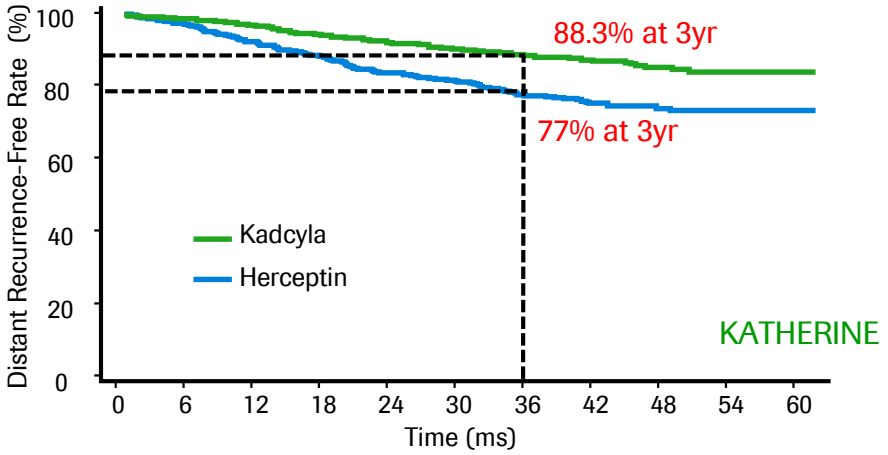
1L HER2+ mBC (1998- 2019)



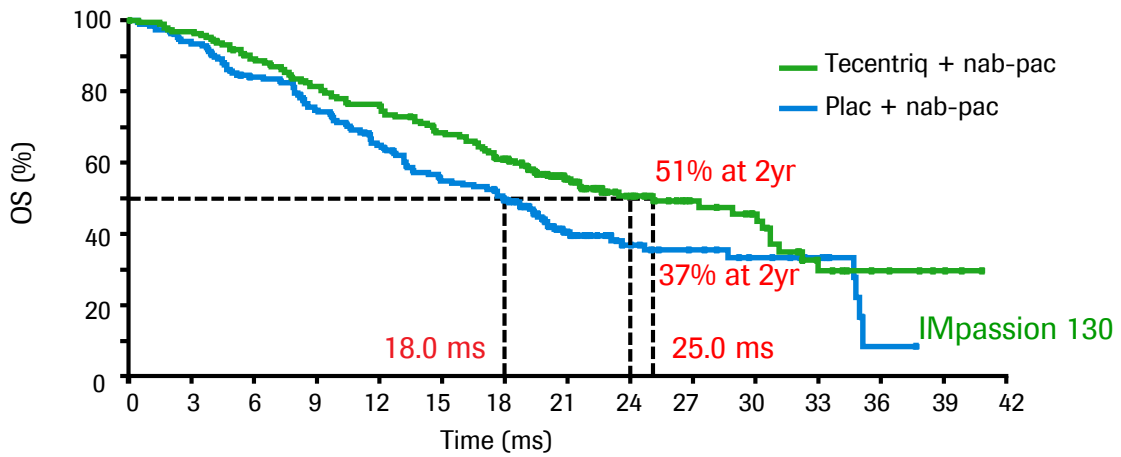
Adjuvant HER2+ BC (2003 - 2019)



Adjuvant HER2+ BC without pCR (2013-2018)



1L TNBC PD-L1+ (2015-2018/19)

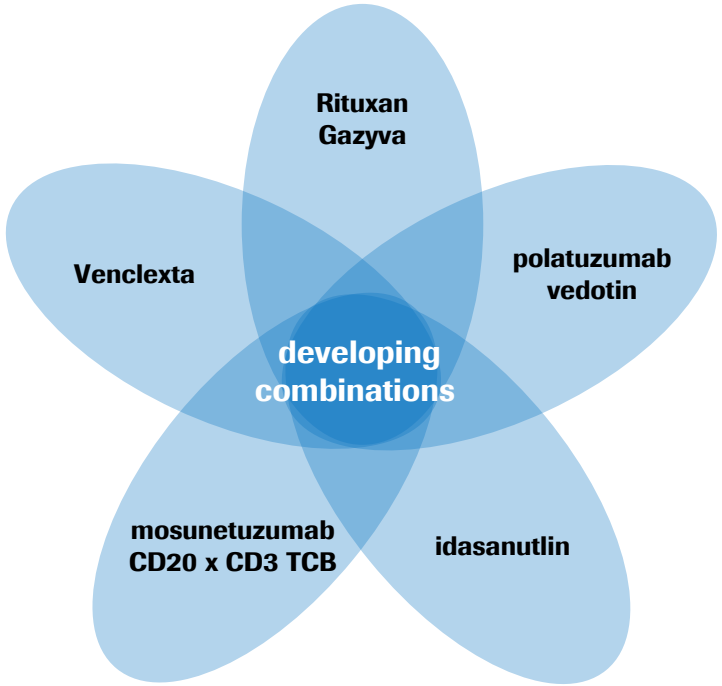


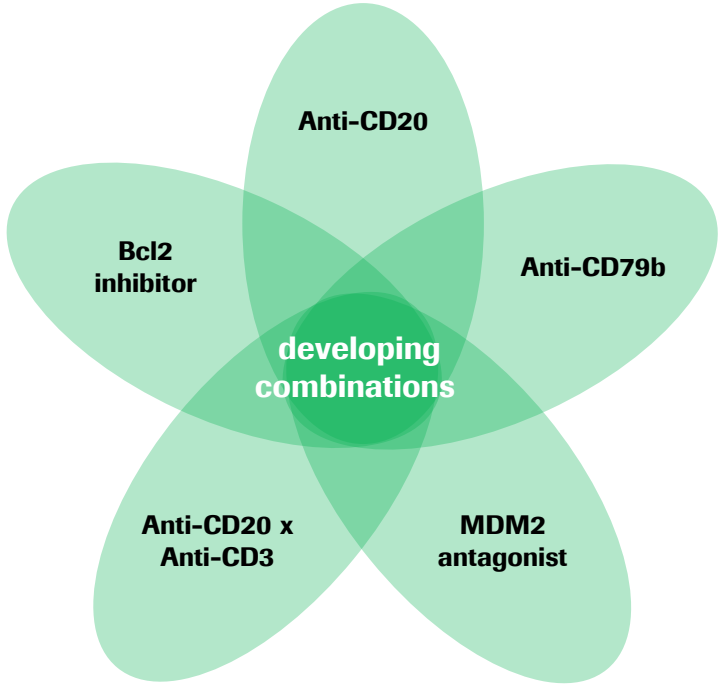
Hematology franchise

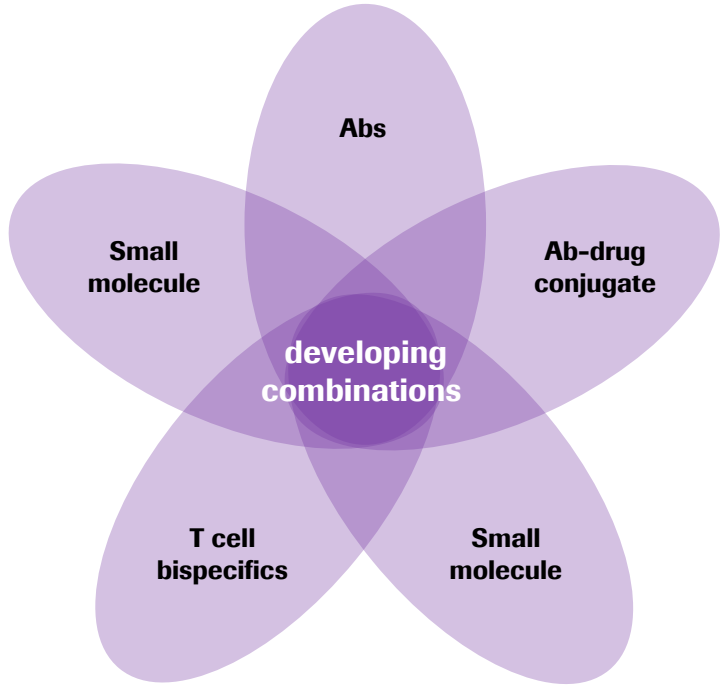
Nancy Valente, M.D. | Global Head of Product Development – Hematology

Uniquely positioned to improve SOC in hematology

Largest late stage portfolio allows to develop new combinations







7 molecules approved / late stage

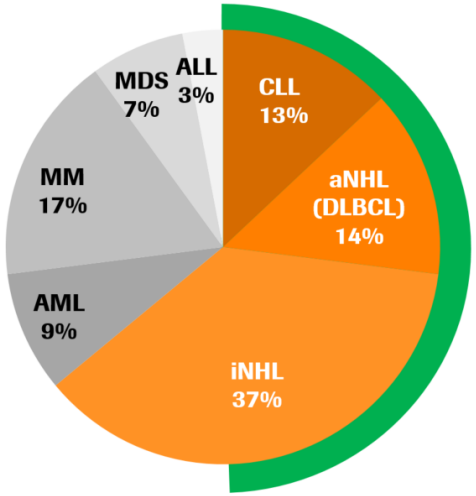
5 different MOAs

4 different platform technologies

Redefining the SOC in CLL, aNHL and iNHL

Hematology market

Incidence rates[1]



CD20 backbone

CLL

FDA BTD

Venclexta combinations induce deep responses, and long treatment-free remissions

SOC	R/R	1L
chemo	benda	clb
R+chemo	R+benda	R+clb
G+chemo		G+clb
Future SOC	R+Venclexta	G+Venclexta
	✓	✓

aNHL (DLBCL)

EMA PRIME
FDA BTD

Polatuzumab vedotin drives high CR rates with durable responses

	R/R	1L
	benda	CHOP
	R+benda	R-CHOP
	Pola+R+benda / CD20 x CD3	Pola+R-CHP/ CD20 x CD3
	Pola+R+benda filed	Ph III (POLARIX) on-going

iNHL

Gazyva established as SOC in 1L iNHL with estimated 3 yrs longer mPFS than Rituxan

R/R	1L
benda	chemo
R+benda	R+chemo
G+benda	G+chemo
CD20 x CD3	CD20 x CD3
	Gazyva listed on NCCN guidelines

Total CLL, NHL (DLBCL/iNHL) market growing to 9bn & 15bn, respectively by 2024[2]

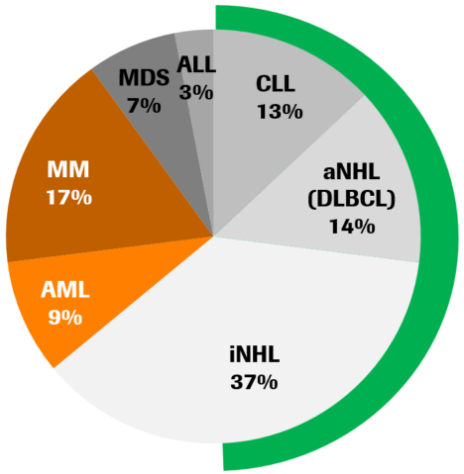
✓ = approved

SOC=standard of care; CLL=chronic lymphocytic leukemia; aNHL=agressive non-hodgkin's lymphoma; iNHL=indolent non-hodgkin's lymphoma; R/R=relapsed refractory; DLBCL=diffuse large B-cell lymphoma; R=Rituxan; G=Gazyva; clb=chlorambucil; benda=bendamustine; 1 Datamonitor: incidence rates includes the 7 major markets (US, Japan, France, Germany, Italy, Spain, UK); 2 Evaluate Pharma; Venclexta in collaboration with AbbVie

Expanding into AML and MM

Hematology market

Incidence rates[1]



CD20 backbone

AML

FDA BTD

Advancing the SOC in a market which has been historically difficult to treat

	R/R	*1L unfit (50% of 1L patients)*	
Historical SOC	LDAC low dose cytarabine	LDAC low dose cytarabine	HMAs azacitadine/decitabine
Future SOC	idasanutlin + LDAC	Venclexta + LDAC	Venclexta + HMA
	Ph III (MIRROS) results upcoming	✔ Confirmatory Ph III (Viale-C) on-going	✔ Confirmatory Ph III (Viale-A) on-going

MM

Multiple combinations in development to address 2/3L market;
focus on t(11;14) patients

R/R t(11;14)

bortezomib + dexamethasone

Venclexta + dexamethasone

Ph III (BELLINI) data at EHA 2019

Ph III (CANOVA) in t(11;14) R/R MM initiated

Total MM & AML market growing to USD 25bn & 7bn, respectively by 2024[2]

✔ = approved

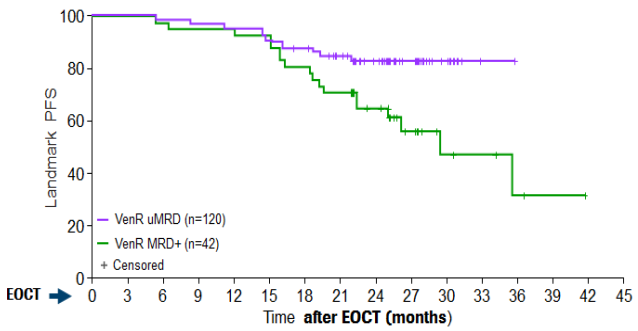
AML=Acute Myeloid Leukemia; MM=Multiple Myeloma; R/R=relapsed refractory; ; LDAC=low dose aracytarabine; HMA=hypomethylating agent1 Datamonitor: incidence rates includes the 7 major markets (US, Japan, France, Germany, Italy, Spain, UK); 2 Evaluate Pharma; Venclexta in collaboration with AbbVie

Deep MRD responses predictive of long term outcomes

Association with prolonged PFS and OS in various indications

R/R CLL[1]

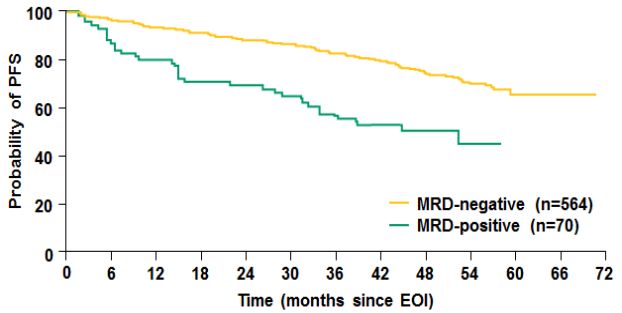
Venclexta + Rituxan (MURANO)



MRD-negativity associated with prolonged PFS

1L FL[2]

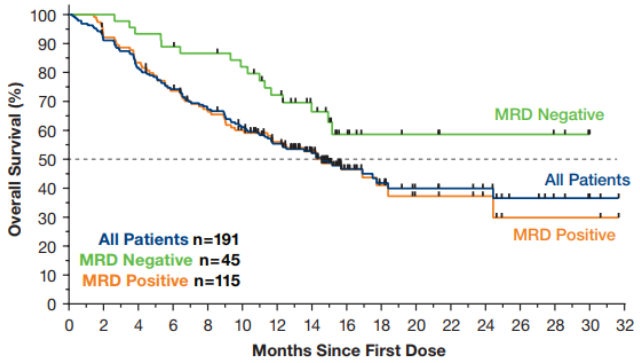
Gazyva + chemo (GALLIUM)



MRD-negativity associated with prolonged PFS

1L unfit AML[3]

Venclexta + HMAs



MRD-negativity associated with prolonged OS

Potential to develop fixed treatment courses instead of chronic treatments

1 Kater A., et al, ASH 2018; 2 Pott C., et al, ASH 2018; 3. Strickland, et al, EHA 2018; MRD=minimal residual disease; AML=acute myeloid leukemia; R/R=relapsed refractory; FL=follicular lymphoma; CLL=chronic lymphocytic leukemia; HMA=hypomethylating agent; PFS=progression free survival; OS=overall survival; Venclexta in collaboration with AbbVie

Venclexta + Gazyva in 1L unfit CLL

Fast track approval following outstanding PFS data

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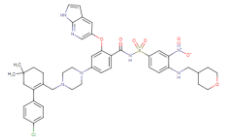
FDA BTD

Venclexta progam

Bcl-2 inhibitor



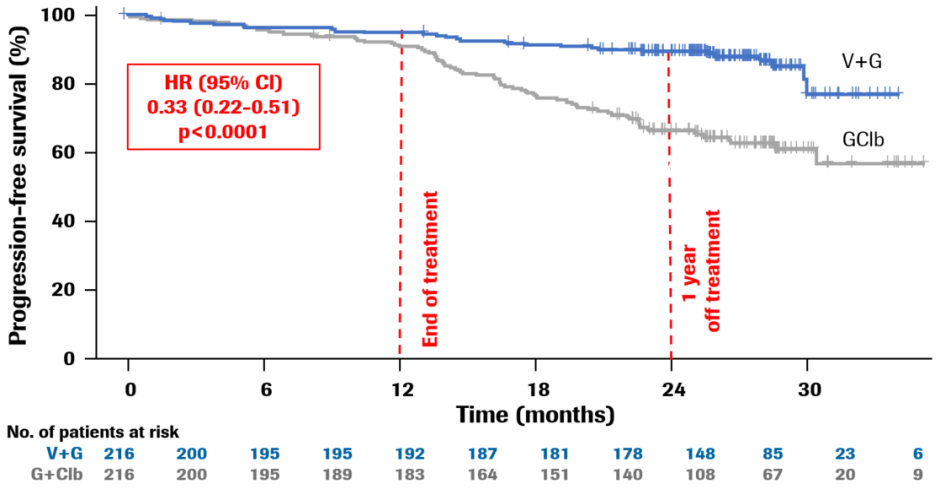
	Combination	Indication	Ph1	Ph2	Ph3
NHL	V+R/G+CHOP	1L DLBCL (aNHL)			
	V+R	DLBCL			
	V+pola+G/R	R/R DLBCL/FL			
CLL	V+G	1L CLL			✓
	V+R	R/R CLL			✓
	V	R/R CLL 17p			✓
	V	R/R CLL after ibru/idel			
	V+G	1L and R/R CLL			
MM	V+dex	t(11;14) R/R MM			
	V+bor+dex	R/R MM			
	V+Cotellic+/-T	R/R MM			
AML	V+aza	1L AML			✓
	V+LDAC	1L AML			✓
	V+idasanutlin	R/R AML unfit			
	V+Cotellic	R/R AML unfit			
	V+gilteritinib	R/R AML			
MDS	V+aza	1L MDS			
	V+/-aza	R/R MDS			

Ph III (CLL14) results:

Minimal residual disease

	V+G	G+Clb
MRD-negative, %, bone marrow (95%CI)	57 (50-64)	17 (12-23)
p-value	<0.0001	
MRD-negative, %, peripheral blood (95%CI)	76 (69-81)	35 (29-42)
p-value	<0.0001	

IRC assessed PFS



- PFS HR of 0.33 versus Gazyva + chlorambucil; mPFS not reached
- First fixed 12-month treatment, chemotherapy-free option
- Approval following 10 weeks after submission via the RTOR pilot program

Fischer K. *et al*., ASCO 2019; PFS=progression free survival; HR=hazard ratio; V=Venclexta; G=Gazyva; clb=chlorambucil; R=Rituxan; dex=dexamethasone; bor=bortezomib; T=Tecentriq; aza=azacitidine; LDAC=low dose cytarabine; RTOR=real-time oncology review; Venclexta in collaboration with AbbVie; Gazyva in collaboration with Biogen; Cotellic in collaboration with Exelixis

Polatuzumab vedotin + Gazyva + lenalidomide in R/R FL

Broad program with first approval to come

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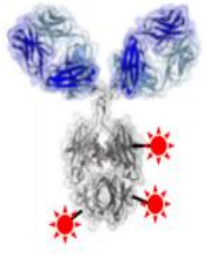
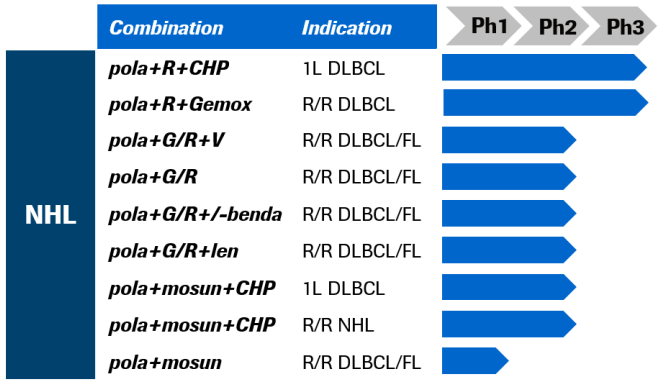
Polatuzumab program

anti-CD79b ADC





Ph I/II results in R/R FL:

Response N=18, n (%)	Modified Lugano 2014 (PET/CT)		Lugano 2014 (PET)	
	INV	IRC	INV	IRC
Objective response	**16 (89)**	**16 (89)**	**16 (89)**	**16 (89)**
CR*	**11 (61)[1]**	**12 (67)[1]**	**14 (78)**	**14 (78)**
PR	5 (28)	4 (22)	2 (11)	2 (11)
Stable disease	1 (6)	1 (6)	1 (6)	1 (6)
Progressive disease	0	0	0	0
Missing/NE	1 (6)	1 (6)	1 (6)	1 (6)

- Triplet combination (Pola+G+len) showed an OR rate of 89% and a CR rate of 78%
- Safety profile consistent with the individual drugs and manageable
- PDUFA date for Pola+R+benda in R/R DLBCL set for August 19
- Ph III (POLARIX) in 1L DLBCL on-going

Diefenbach C. *et al*., ASCO 2019; ADC=antibody drug conjugate; pola=polatuzumab; R=Rituxan; CHOP=cyclophosphamide, doxorubicin, vincristine, prednisone; Gemox=gemcitabine+oxaliplatin; G=Gazyva; V=venclexta; benda=bednamustin; len=lenalidomide; mosun=mosunetuzumab; CR=complete response; PR=partial response; NE=not available; PET=positron emission tomography; CT=computed tomography; INV=investigator assessed; IRC=independent review committee assessed; * Primary endpoint; 1 Modified Lugano: designation of a CR requires normal bone marrow by morphology for patients with bone marrow involvement at baseline; Polatuzumab in collaboration with Seattle Genetics

CD20 x CD3 in NHL

Strong efficacy and tolerable safety

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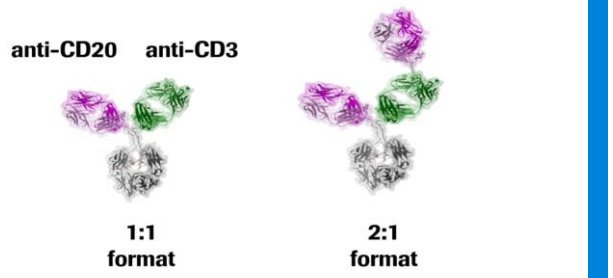
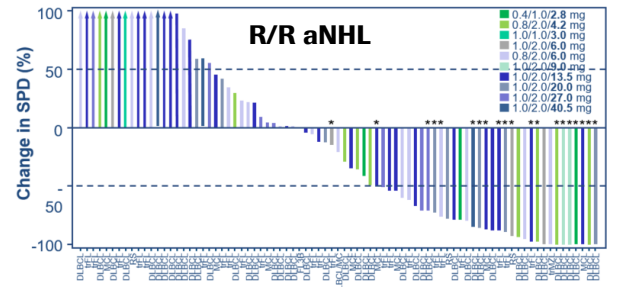
CD20 x CD3 program



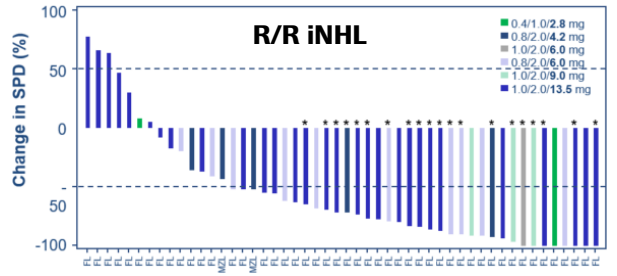
	Combination	Indication	Ph1	Ph2	Ph3
NHL	*mosun+CHOP*	1L DLBCL, R/R NHL			
	mosun+CHP+pola	1L DLBCL, R/R NHL			
	mosun	R/R DLBCL/FL/MCL			
	mosun+T	R/R DLBCL/FL/MCL			
	mosun+pola	R/R DLBCL/FL			
	mosun	1L unfit/elderly DLBCL			

	Combination	Indication	Ph1	Ph2	Ph3
NHL	*CD20xCD3*	R/R DLBCL/FL			
	CD20xCD3+R +CHOP	1L DLBCL			
	CD20xCD3+T	R/R DLBCL/FL			
	CD20xCD3+G/R +CHOP	R/R FL			
	CD20xCD3+G	R/R DLBCL/FL			

Mosunetuzumab (PhI dosing)

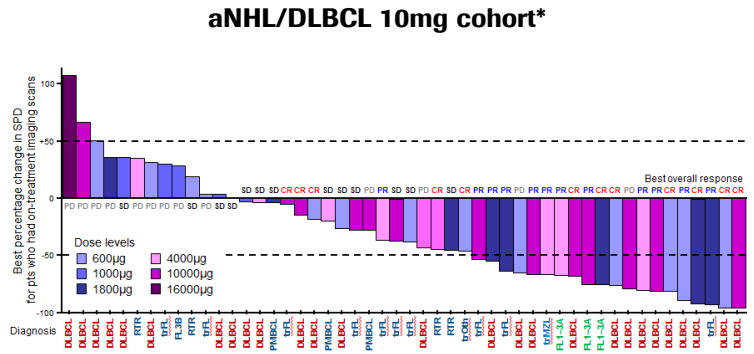


ORR 34/98 (35.1%); CR 20/98 (20.6%)



ORR 37/55 (67.3%); CR 20/55 (36.4%)

CD20 x CD3 (PhI dosing)



ORR 9/15 (60%)
CR 5/15 (33%)

- Durable CRs as single agent in 2L+ iNHL/aNHL; CRs in patients refractory to R-CHOP and CAR-T
- Dose escalation and combination trials with Tecentriq, polatuzumab and CHOP ongoing
- Efficacy update planned for H2 2019

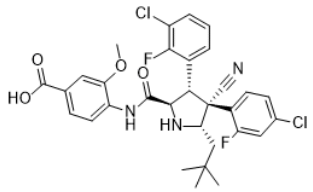
Bartlett N. L. et al, ASCO 2019; Hutchings, M., et al, ASH 2018; NHL=non-Hodgkin's lymphoma; mosun=mosunetuzumab; CHOP=cyclophosphamide, doxorubicin, vincristine, prednisone; pola=polatuzumab; T=Tecentriq; G=Gazyva; R=Rituxan; CR=complete response; SPD=sum of the product diameters; R/R=relapsed/refractory; CAR T cells=chimeric antigen receptor; AE=adverse event; *aNHL includes FL Grade 3B, DLBCL, trFL, PMBCL, MCL, trMZL, RS and DLBCL/MCL

Idasanutlin in AML

Promising activity in combination

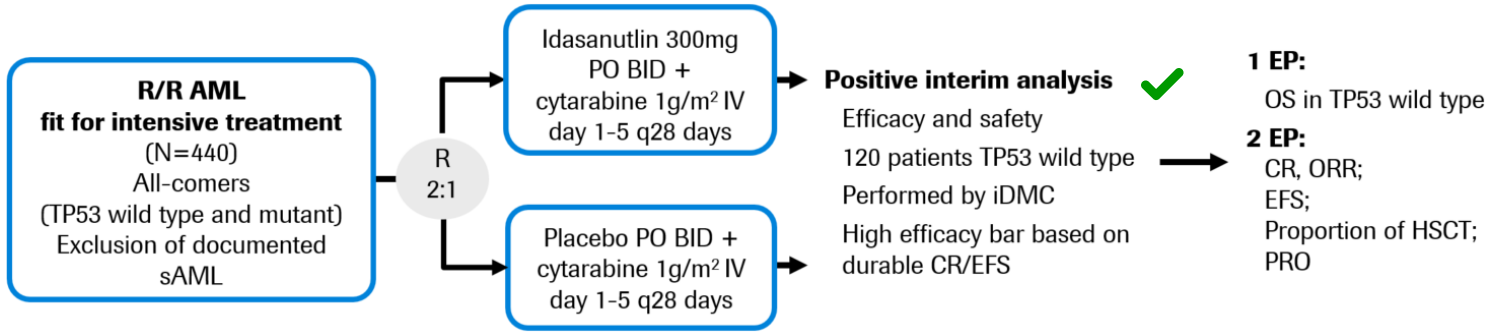
Idasanutlin program

MDM2 antagonist



	Combination	Indication	Ph1	Ph2	Ph3
AML	idasanutlin +cytarabine	R/R AML			
	idasanutlin+V	R/R AML unfit for chemo			
	idasanutlin +cytarabine +daunorubicin	1L AML			
PV	idasanutlin	Hydroxyurea resistant/ intolerant PV			

Ph III (MIRROS) trial design



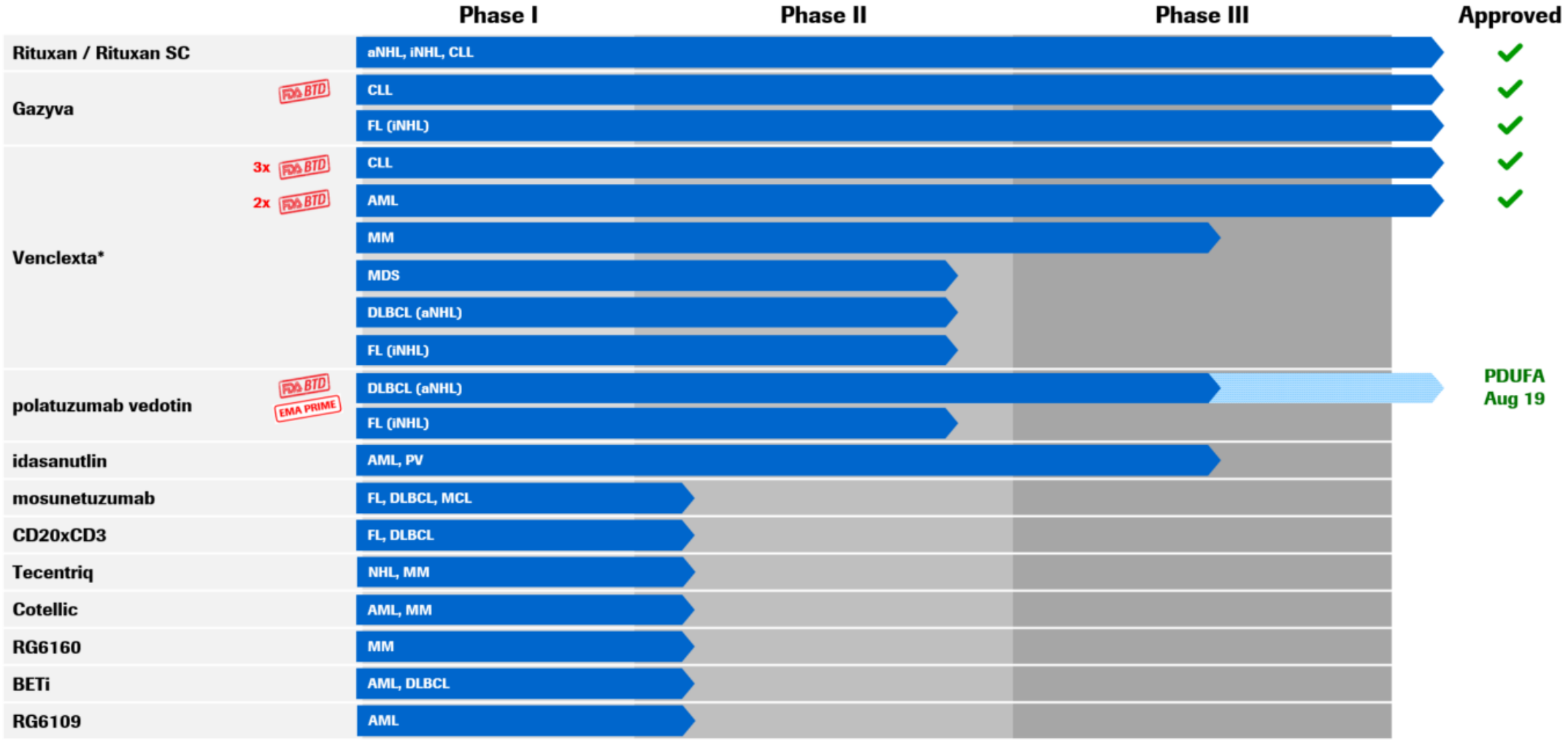
Responding patients may receive optional consolidation with up to 2 additional cycles

- Ph I in heavily pretreated AML patients: idasanutlin+cytarabine showed a 42% cCR rate in patients dosed with Ph III dose with a mDoR >8m
- Ph II combination: Venclexta+idasanutlin showed clinical activity (38% cCR with 600mg Venclexta and 200mg idasanutlin) in heavily pre-treated elderly unfit R/R AML
- Possible NME filing based on MIRROS in 2020

Martinelli G, et al., EHA 2016; Daver N. *et al*., ASH 2017; iDMC=independent data monitoring committee; OS=overall survival; cCR, composite response rate (CR+CRp+CRi); CR=complete remission rate; CRp=complete remission with incomplete platelet recovery; CRi=complete remission with incomplete count recovery, mDoR=median duration of response; V=Venclexta; PV=polycythemia vera

Hematology franchise with 7 BTDs

Broadest portfolio with 12 assets in combination trials



*Venclexta in collaboration with AbbVie; polatuzumab vedotin in collaboration with Seattle Genetics; Cotellic in collaboration with Exelixis; NHL=non-hodgkin`s lymphoma; FL = follicular lymphoma; CLL=chronic lymphoid leukemia; MM=multiple myeloma; MDS=myelodysplastic syndrom; AML=acute myeloid leukemia; MCL=mantle cell lymphoma; DLBCL=diffuse large B cell lymphoma

ASCO 2019 Key readouts across tumor types

Breast cancer, lung cancer & tumor agnostic

Alan Sandler, M.D. | Global Head of Product Development – Solid Tumors

Breast cancer

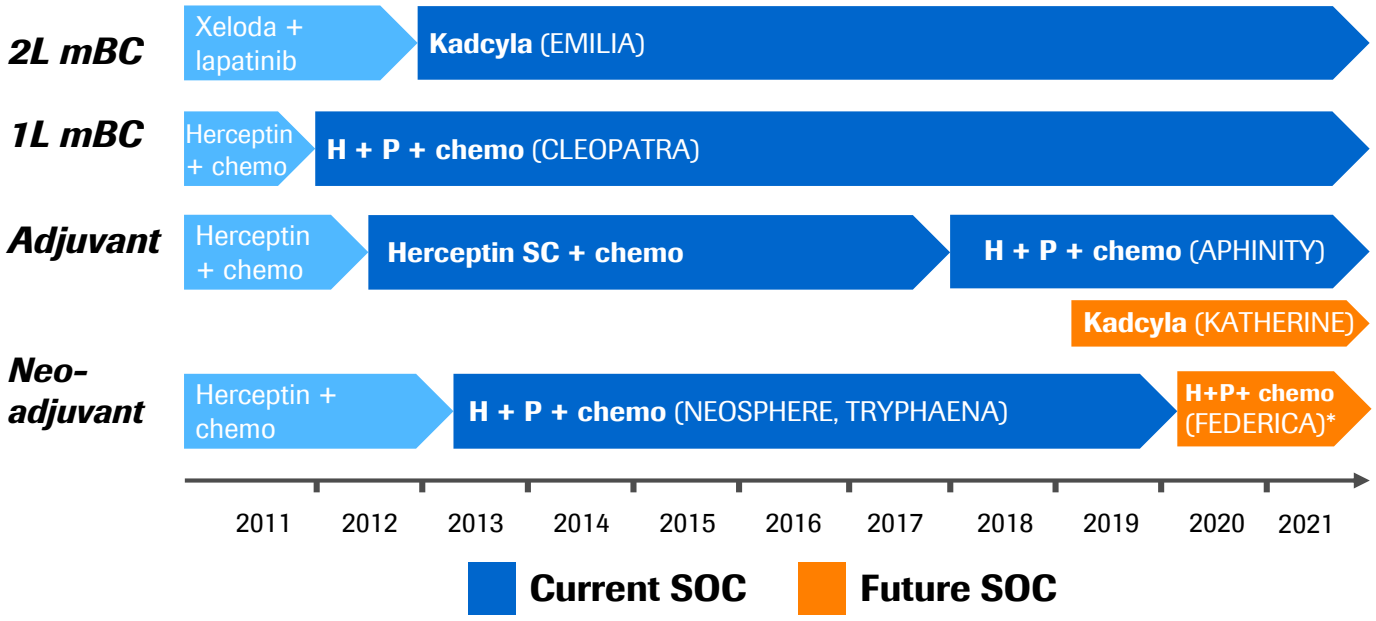
- IMpassion130: Tecentriq + nab-paclitaxel in 1L TNBC
- CLEOPATRA: Perjeta + Herceptin + chemo in 1L HER2+ mBC

Lung cancer

Tumor agnostic indications

Roche continuing to define SoC in HER2+ BC, launching in TNBC, pipeline targeting major subsets in breast cancer

Standard of care in HER2+ BC

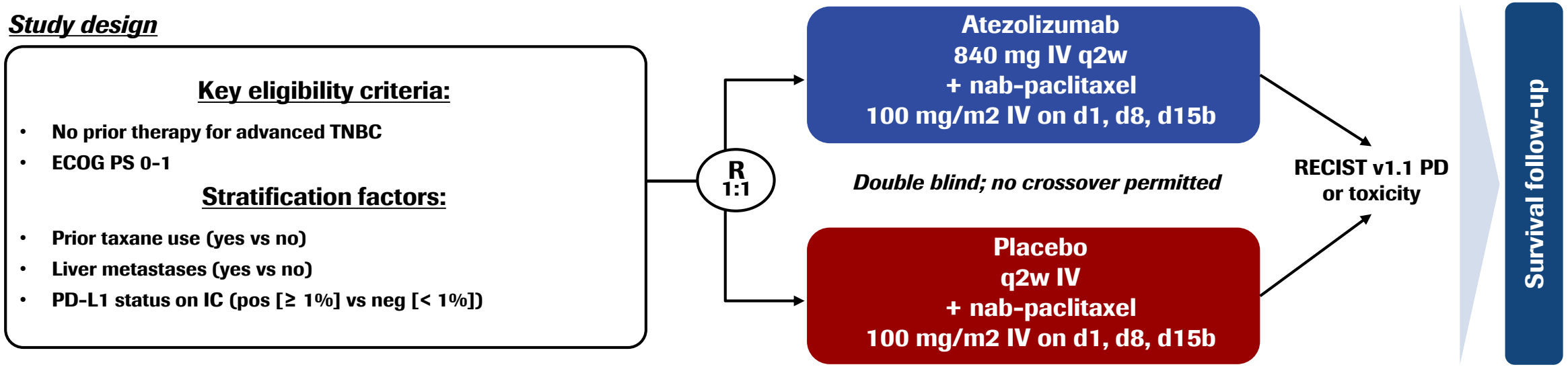


Expanding into areas with high unmet need

TNBC	ipatasertib	IPATunity130 (Ph III 1L Dx+)	
	Tecentriq	IMpassion130 (Ph III 1L)	✓
		IMpassion131 (Ph III 1L)	
		IMpassion132 (Ph III 1L)	
		IMpassion031 (Ph III neoadj)	
		IMpassion030 (Ph III adj)	
HER2-HR+	ipatasertib	IPATunity130 (Ph III Dx+ HR+ mBC)	
	Venclexta	Veronica (Ph II)	
	SERDi	RG6171 (Ph I)	
	PI3Ki	RG6114 (Ph I)	
HER2+	Kadcyla	KATHERINE (Ph III adj)	✓
	Tecentriq +H+P	IMpassion050 (Ph III neoadj)	
	HER2xCD3	RG6194 (Ph I)	
	ADC	RG6148 (Ph I)	

H+P=Herceptin+Perjeta; SC=subcutaneous; FEDERICA=fixed dose combination; SoC=standard of care: BC=breast cancer; TNBC=triple negative breast cancer

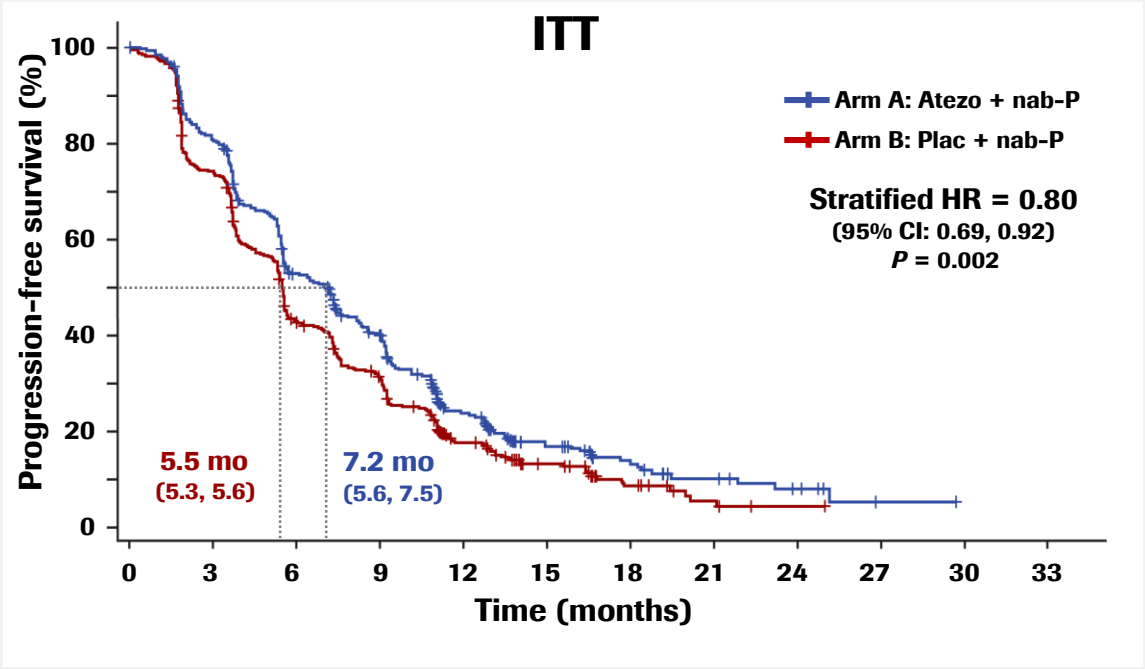
IMpassion130: First phase III cancer immunotherapy in mTNBC study to demonstrate clinical benefit in PD-L1+ patients

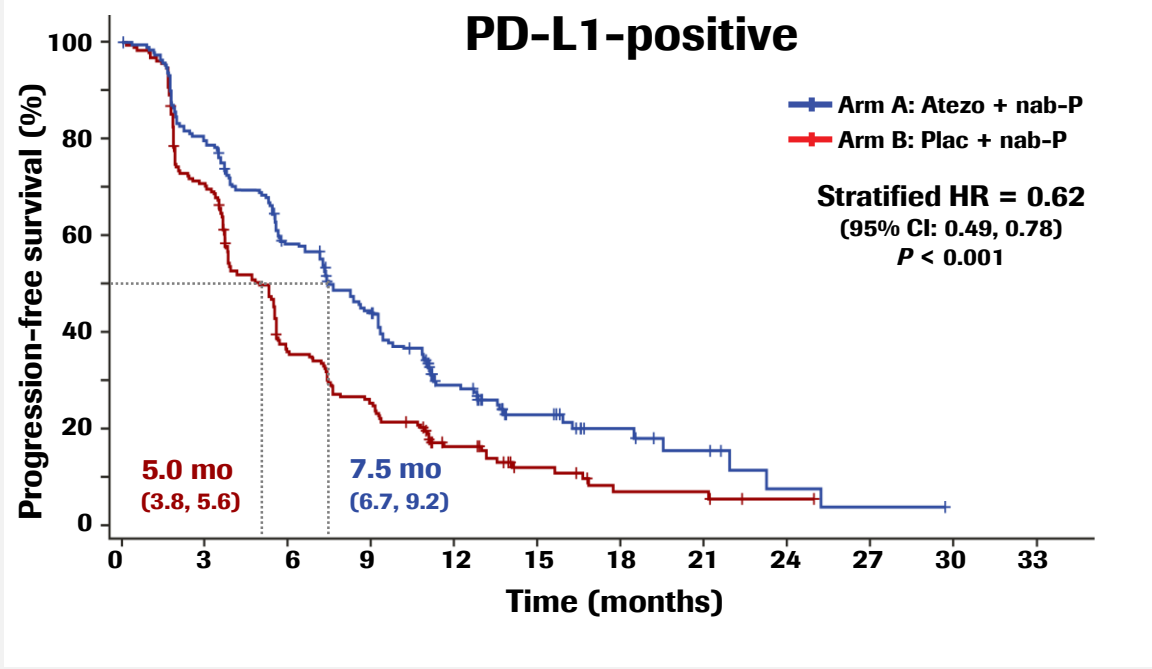


- Co-primary endpoints: PFS and OS in the ITT and PD-L1+ populations
- Prevalence of patients with PD-L1+ status: 41% in both treatment arms
- First OS IA: median follow-up: 12.9 months, 43% of death events had occurred (clinical cutoff April 17 2018)
- Second OS IA: median follow-up 18.0 months, 59% of death events (clinical cutoff Jan 2 2019)

IMpassion130: Primary PFS in ITT and PD-L1+ population

Co-primary endpoint of PFS met for Tecentriq + nab-paclitaxel[1]





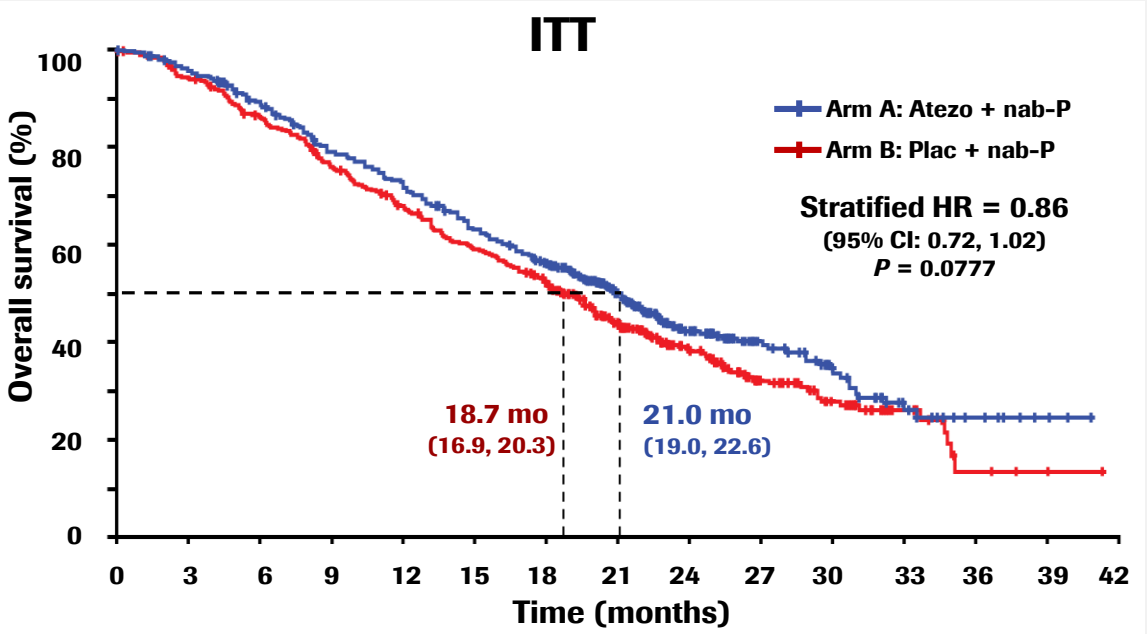
Tecentriq + nab-paclitaxel is approved by the FDA[2] and recommended for the treatment of patients with PD-L1 IC+ mTNBC by the NCCN[3] and AGO[4] guidelines

A, atezolizumab; *nab*-P, *nab*-paclitaxel; P, placebo. Data cutoff: 17 April 2018. Median follow-up (ITT): 12.9 months.

1. Schmid *New Engl J Med* 2018. 2. Atezolizumab USPI 2019. 3. NCCN Breast Cancer Guidelines v1 – March 2019. 4. AGO Guidelines (accessed April 2019).

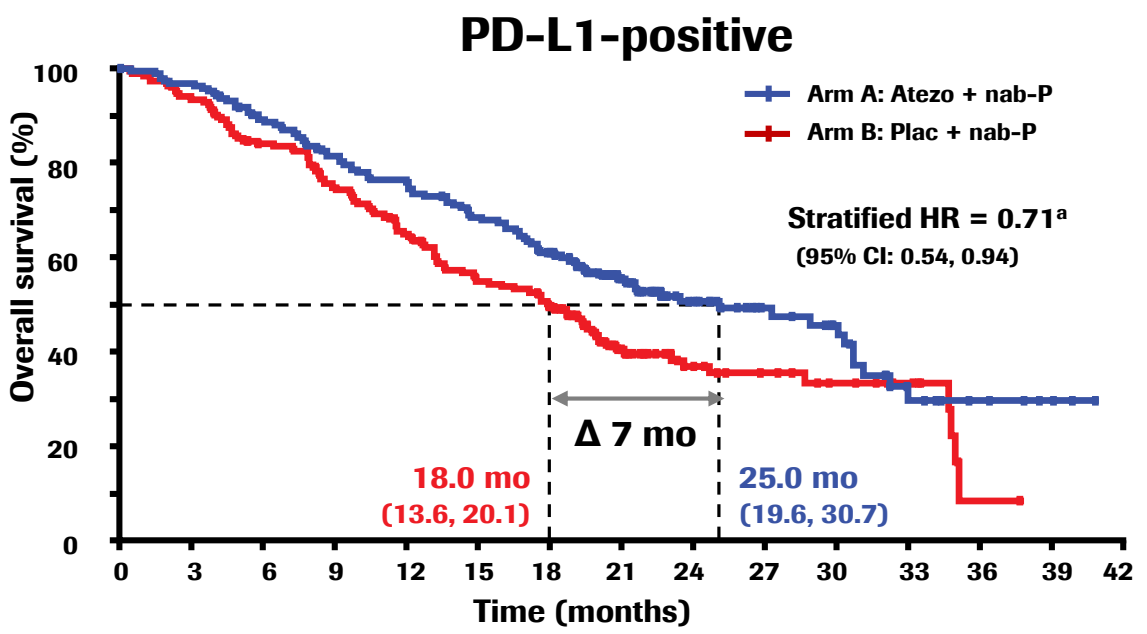
IMpassion130: 2nd interim OS in ITT and PD-L1+ population

Positive OS trend for Tecentriq + nab-P maintained



	Atezo + nab-P (N = 451)	Plac + nab-P (N = 451)
OS events, n	255	279
2-year OS (95% CI), %	42% (37, 47)	39% (34, 44)

Clinically meaningful OS improvement for Tecentriq + nab-P



	Atezo + nab-P (N = 185)	Plac + nab-P (N = 184)
OS events, n	94	110
2-year OS (95% CI), %	51% (43, 59)	37% (29, 45)

Tecentriq + nab-paclitaxel: First therapy to cross the 2-year landmark OS benefit in PD-L1+ 1L mTNBC

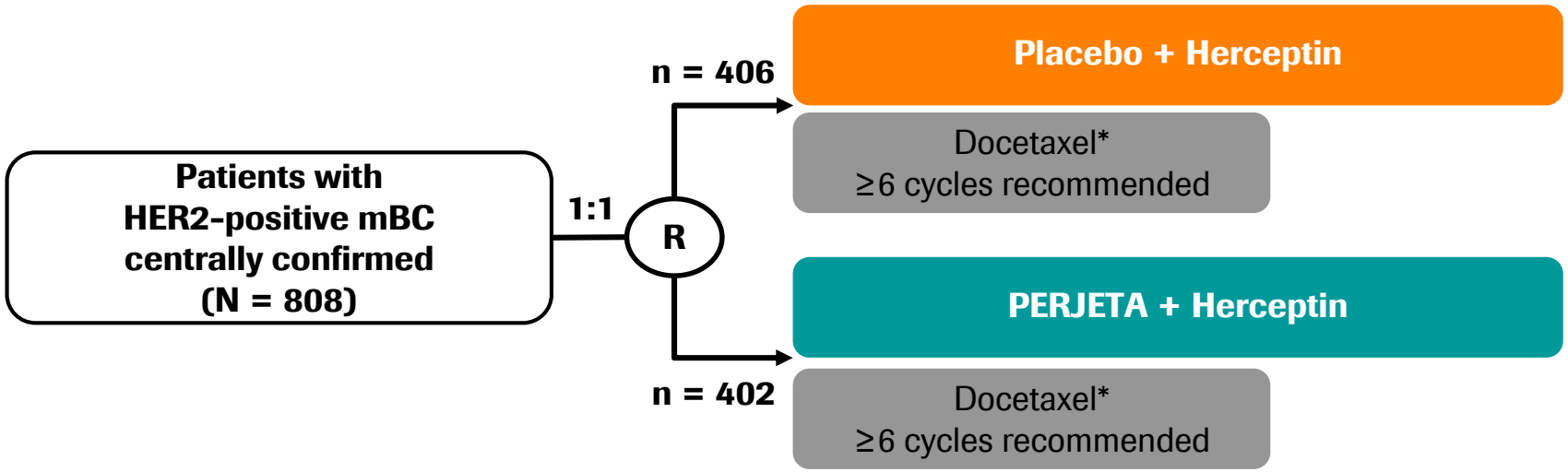
Data cutoff: January 2, 2019. Median OS durations (and 95% CI) are indicated on the plot. [a]Not formally tested due to pre-specified hierarchical analysis plan.
Median FU (ITT): 18.0 months. Schmid P, et al. ASCO 2019, abstract #1003; PD-L1 expression on ≥1% of tumor-infiltrating immune cells

IMpassion130 conclusions

- First and only Phase III study to show the clinically meaningful benefit of immunotherapy in 1L mTNBC; the combination of Tecentriq + nab-paclitaxel is approved by the FDA in PD-L1+ patients
- Although not formally testable due to the pre-specified statistical analysis plan, updated median OS improvement from 18 to 25 months was observed in the PD-L1+ population (HR 0.71)
- Tecentriq + nab-paclitaxel was well tolerated, with no cumulative toxicities and no new or late-onset safety signals
- For patients with PD-L1+ tumors Tecentriq + nab-paclitaxel is a new standard of care

CLEOPATRA: Perjeta+Herceptin and chemo in 1L HER2+ mBC

Study design



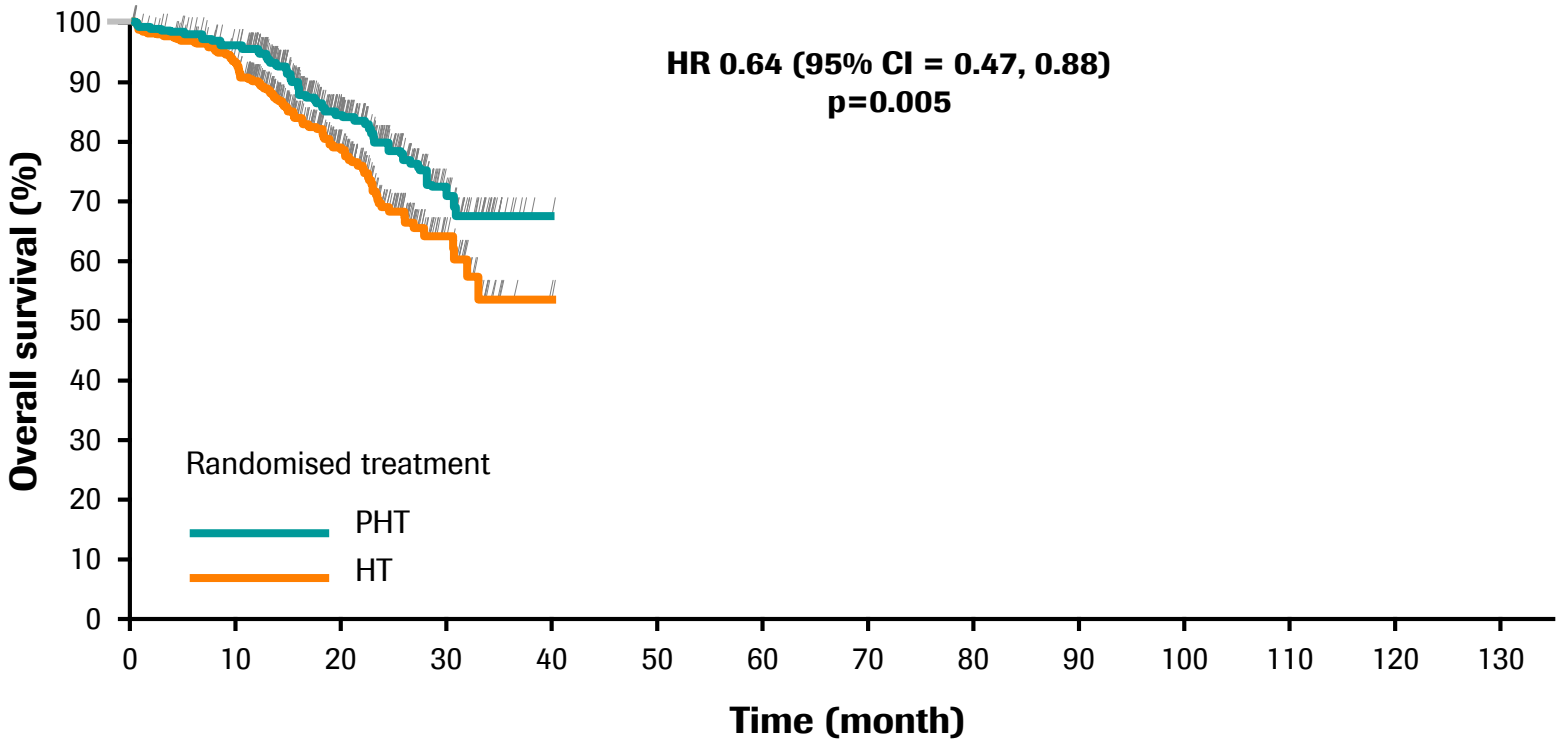
*<6 cycles allowed for unacceptable toxicity or PD;
>6 cycles allowed at investigator's discretion

- **Primary endpoint:** Independently-assessed PFS
- **Secondary endpoints:** Investigator-assessed PFS, OS, ORR, safety (monitored by an independent DMC and CRC)

DMC, data monitoring committee; PD, progressive disease; PFS, progression-free survival; mBC, metastatic breast cancer
ORR, overall response rate; OS, overall survival.

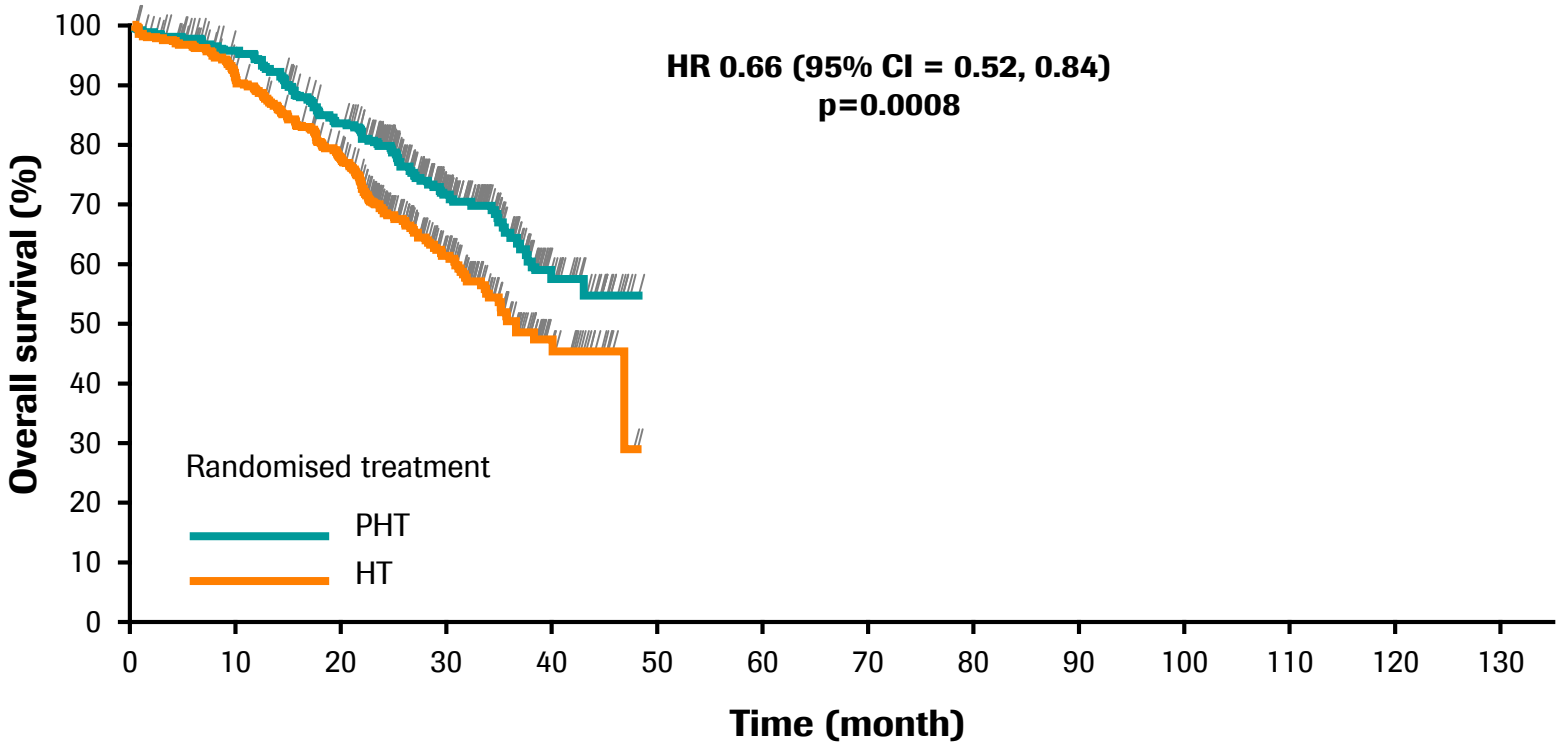
Baselga J, *et al. N Engl J Med* 2012; **366:**109–119.

CLEOPATRA: Overall survival 1st interim analysis May 2011



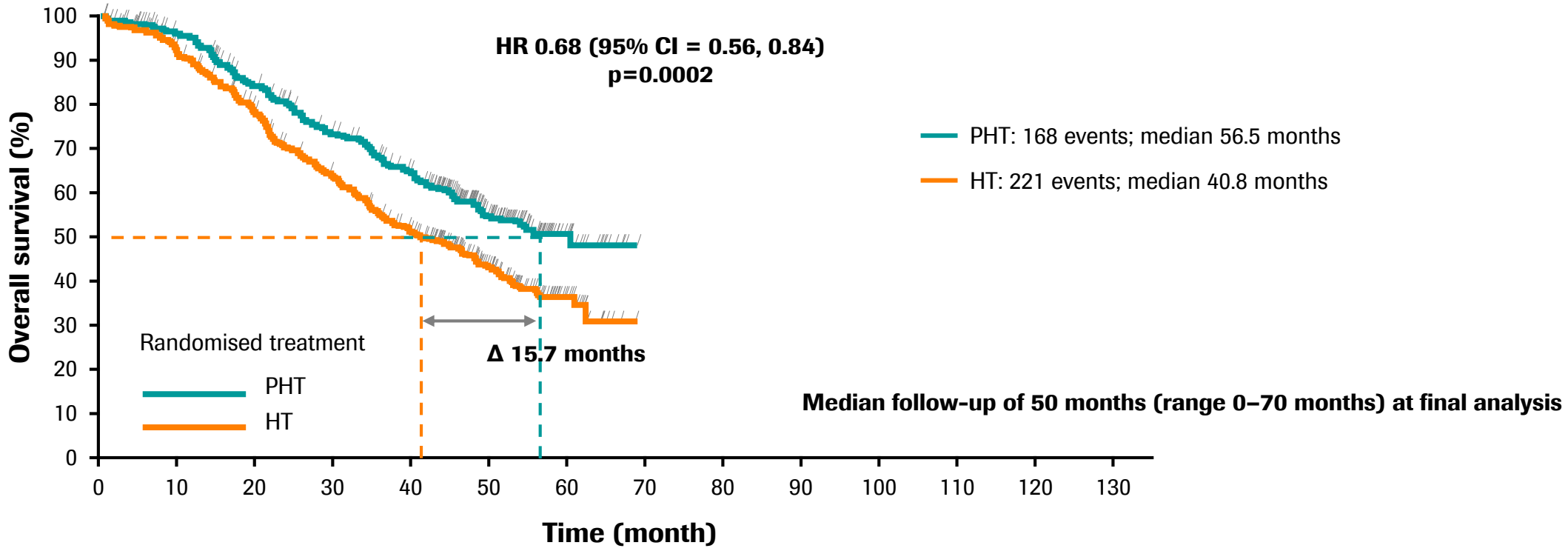
* Crossover pts were analyzed in the Placebo (HT) arm. OS was compared between arms using the log-rank test, stratified by prior treatment status and geographic region. The Kaplan–Meier approach was used to estimate median OS, and a stratified Cox proportional hazards model was used to estimate the HR and 95% Cis; CI, confidence interval; H, Herceptin; HR, hazard ratio; P, PERJETA; OS, overall survival; PFS, progression-free survival; T, docetaxel.

CLEOPATRA: Overall survival 2nd interim analysis May 2012



* Crossover pts were analyzed in the Placebo (HT) arm. OS was compared between arms using the log-rank test, stratified by prior treatment status and geographic region. The Kaplan–Meier approach was used to estimate median OS, and a stratified Cox proportional hazards model was used to estimate the HR and 95% Cis; CI, confidence interval; H, Herceptin; HR, hazard ratio; P, PERJETA; OS, overall survival; PFS, progression-free survival; T, docetaxel.

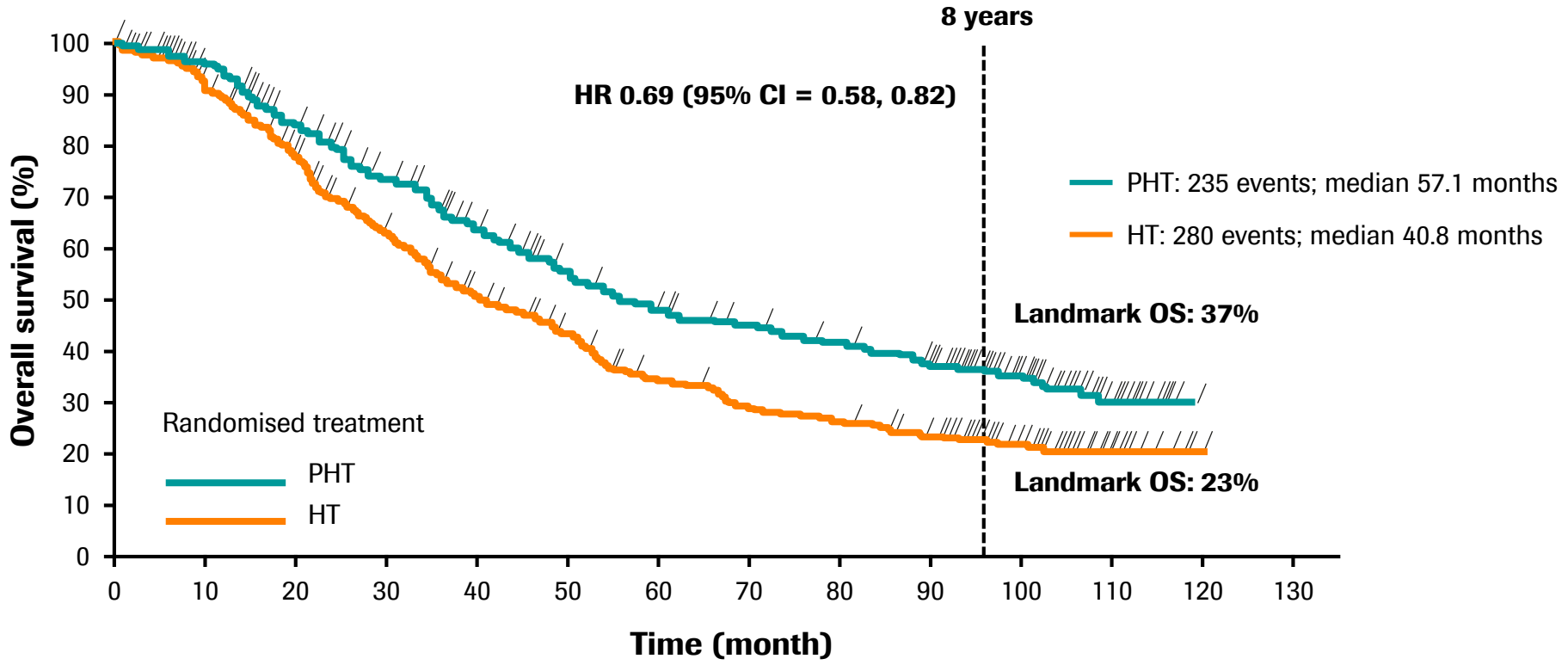
CLEOPATRA: Overall survival final analysis Feb 2014



Patients lived 15.7 months longer, OS almost 5 years, with Perjeta+Herceptin and docetaxel for 1L HER2-positive mBC

* Crossover pts were analyzed in the Placebo (HT) arm. OS was compared between arms using the log-rank test, stratified by prior treatment status and geographic region. The Kaplan–Meier approach was used to estimate median OS, and a stratified Cox proportional hazards model was used to estimate the HR and 95% Cis; CI, confidence interval; H, Herceptin; HR, hazard ratio; P, PERJETA; OS, overall survival; PFS, progression-free survival; T, docetaxel.

CLEOPATRA: Overall survival end-of-study analysis Nov 2018



Unprecedented median OS of >57 months confirms the Perjeta+Herceptin regimen as first-line SoC for patients with HER2-positive mBC

* Crossover pts were analyzed in the Placebo (HT) arm. OS was compared between arms using the log-rank test, stratified by prior treatment status and geographic region. The Kaplan–Meier approach was used to estimate median OS, and a stratified Cox proportional hazards model was used to estimate the HR and 95% Cis; CI, confidence interval; H, Herceptin; HR, hazard ratio; P, PERJETA; OS, overall survival; PFS, progression-free survival; T, docetaxel.

CLEOPATRA conclusions

- The OS and investigator-assessed PFS improvements with Perjeta + Herceptin + chemo vs. placebo + Herceptin + chemo observed in previous analyses were maintained after approximately 8 years of median follow-up.
- This is the longest follow-up of pts for 1L treatment of HER2-positive MBC (max. 120 mo).
- The long-term safety and cardiac safety profiles of Perjeta + Herceptin + chemo in the overall safety population, and within crossover pts, were maintained.
- HER2-targeted therapy has changed the natural history of HER2-positive MBC, with the dual blockade of Perjeta + Herceptin with chemo demonstrating an 8-year landmark OS rate of 37%.

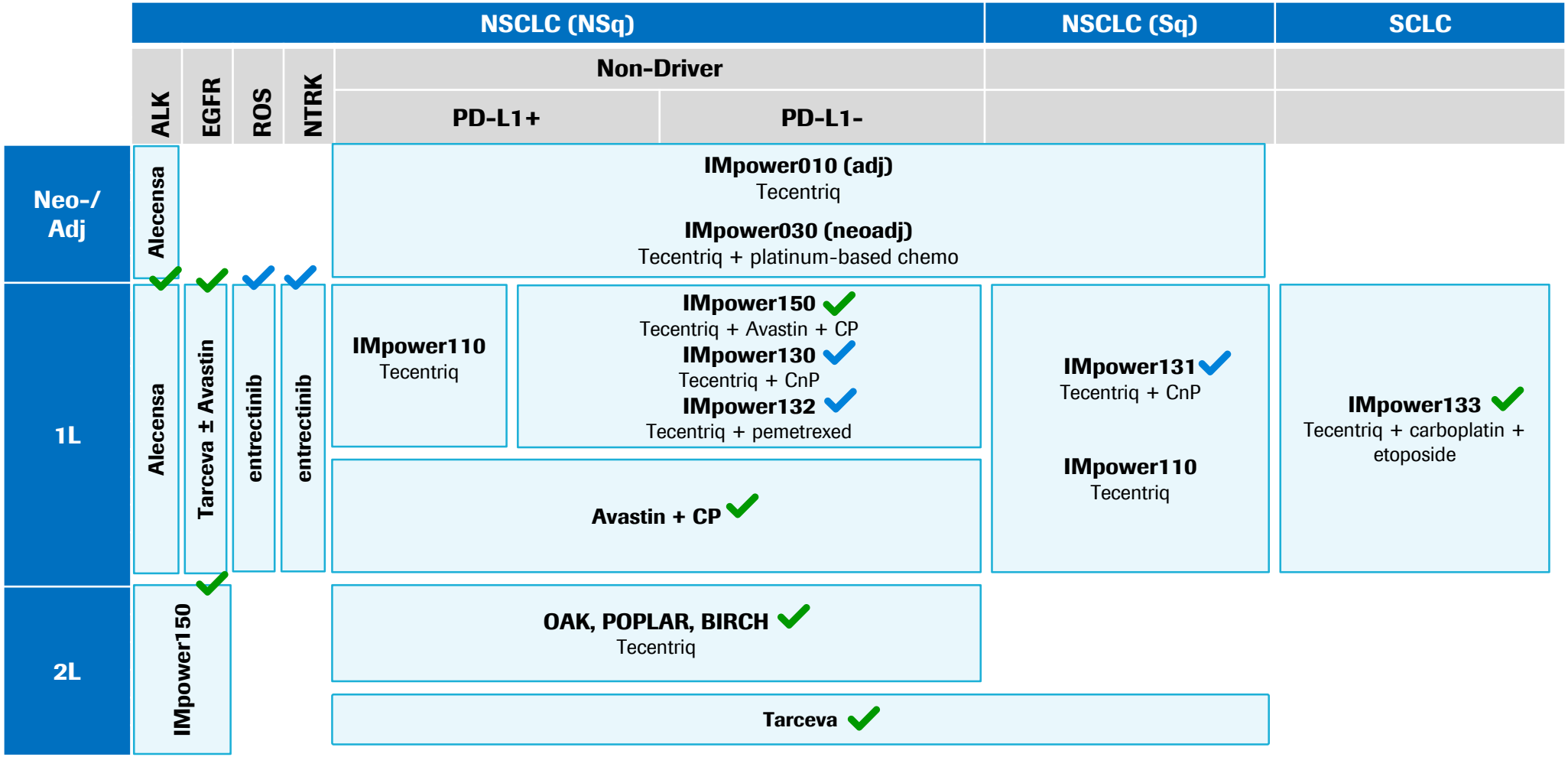
Breast cancer

Lung cancer

- IMpower150: Tecentriq + chemo ± Avastin in 1L non-sq NSCLC; analysis of efficacy in patients with liver metastases
- LCMC3: Neoadjuvant Tecentriq in resectable NSCLC interim analysis

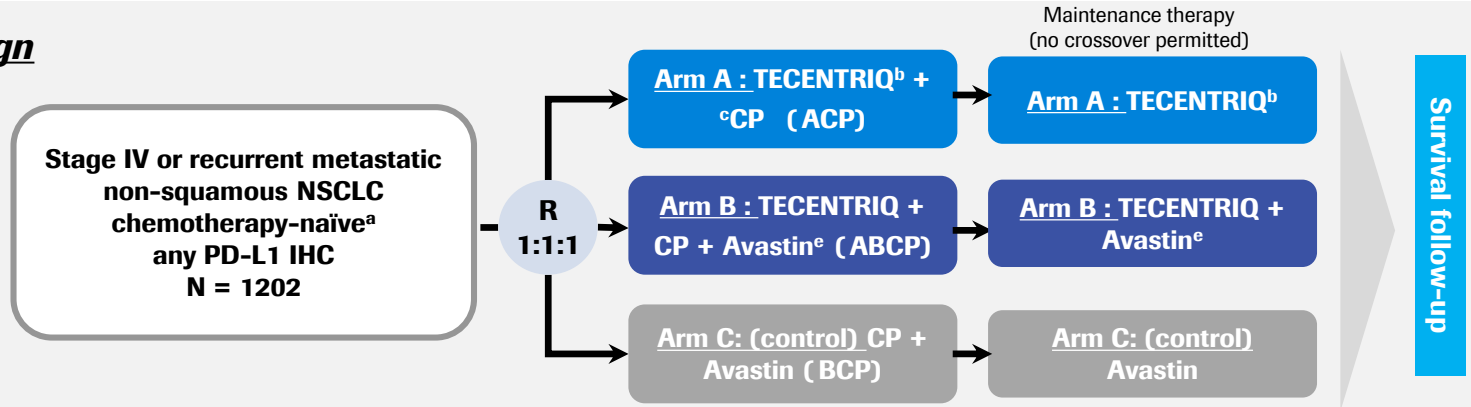
Tumor agnostic indications

Broadest NSCLC portfolio with the ability to cover all key segments



IMpower150 study design

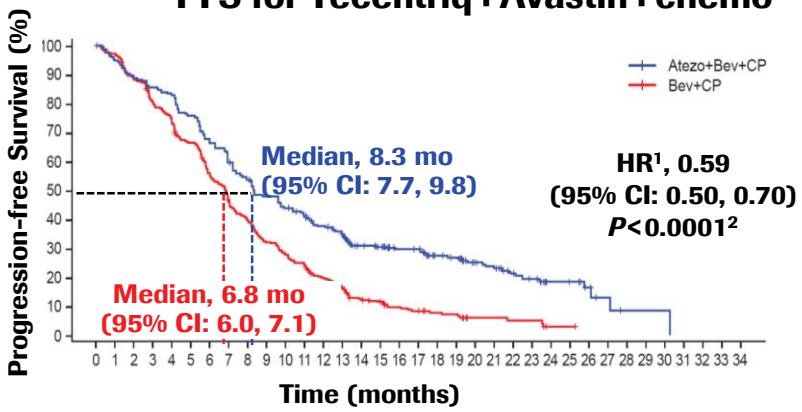
Study design



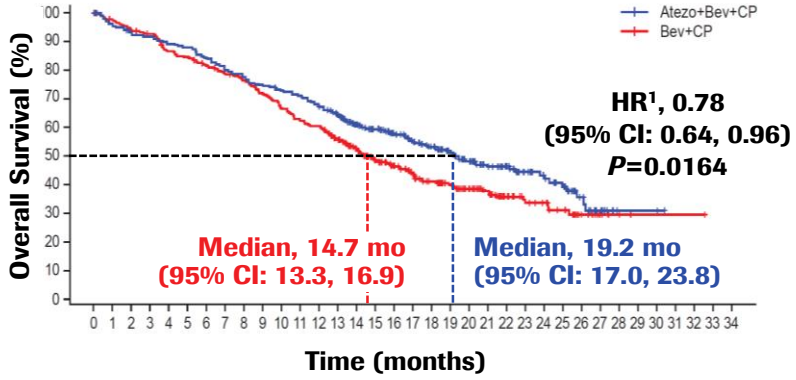
Co-primary endpoints Arm B vs C

- Investigator-assessed PFS,OS (ITT)
- INV-assessed PFS in Teff-high WT

PFS for Tecentriq+Avastin+chemo



OS for Tecentriq+Avastin+chemo

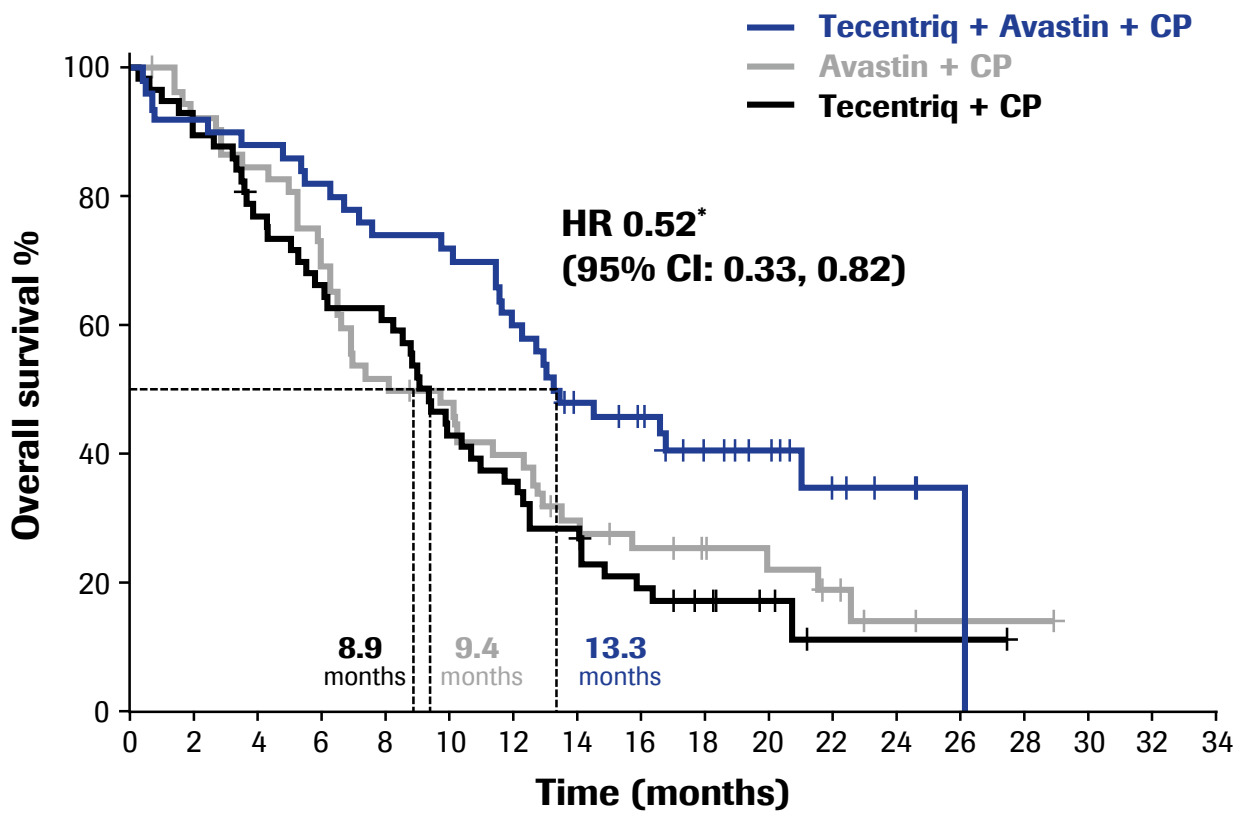


Statistically significant and clinically meaningful PFS and OS benefit; approved in US and EU

[a] Patients with a sensitizing *EGFR* mutation or *ALK* translocation must have disease progression or intolerance of treatment with one or more approved targeted therapies.
[b] Tecentriq: 1200 mg IV q3w. [C] CP carboplatin: AUC 6 IV q3w; paclitaxel: 200 mg/m^2 IV q3w. [e] Bevacizumab: 15 mg/kg IV q3w. ITT-WT refers to patients without EGFR or ALK genetic alterations. [1]Stratified HR. [2]For descriptive purposes only. Data cutoff: January 22, 2018. Minimum follow-up: 13.5 months; median follow-up: ~20 months

IMpower150 clinical benefit for patients with liver metastases

Overall survival



Tecentriq + Avastin + CP reduced the risk of death by 48% in patients with baseline liver metastases compared to Avastin + CP

Well tolerated regardless of baseline liver metastases status

An important new treatment option for patients with baseline liver metastases

*HR for ABCP vs BCP; CP carboplatin; paclitaxel

IMpower150 clinical benefit for patients with liver metastases

Increased ORR and DoR

	With liver metastases[a]		
	ABCP	ACP	BCP
ORR			
n	51	52	56
ORR, n (%)	31 (60.8)	14 (26.9)	23 (41.1)
DoR			
Median, months	10.7	5.6	4.6
HR (95% CI), ABCP vs BCP	0.39 (0.21, 0.73)		
HR (95% CI), ACP vs BCP	0.68 (0.33, 1.40)		

[a] Patients with measurable disease at baseline. ABCP-atezolizumab+bevacicumab+carboplatin+paclitaxel, ACP-atezolizumab+carboplatin+paclitaxel, BCP-bevacicumab+carboplatin+paclitaxel
DoR: Duration of Response

IMpower150 conclusions

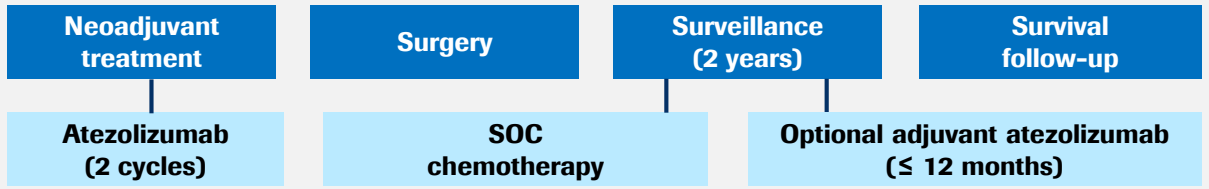
- Improved clinical outcomes with Tecentriq+Avastin and chemo (ABCP) vs Avastin and chemo (BCP) were observed in patients with chemotherapy-naïve, metastatic NSCLC with and without liver metastases
  - Presence of liver metastases represents a poor prognostic factor
- In patients with liver metastases ABCP vs BCP reduced the risk of death by 48% (OS HR 0.52 vs 0.82)
- ABCP was well tolerated regardless of baseline liver metastases status and there were no new safety signals seen in this patient subgroup
- ABCP is an important new treatment option for patients with liver metastases

Encouraging PhII interim data from LCMC3 study in neoadj. NSCLC

Phase III program for early lung cancer ongoing

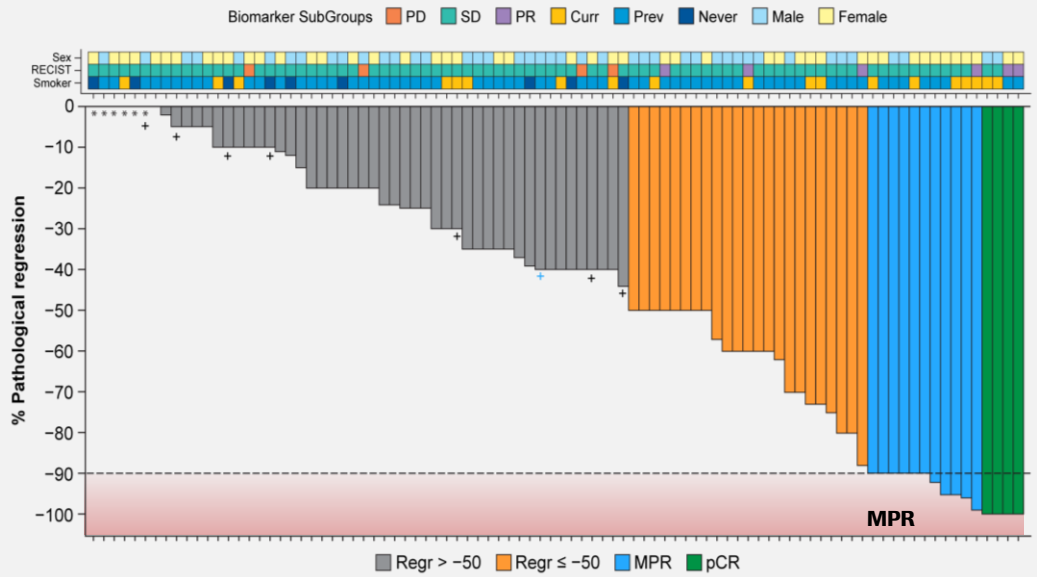
Study design

Primary endpoint: Major pathologic response (MPR)*



Clinical stage at initial diagnosis, n (%)	
IB	11 (11%)
IIA / IIB	44 (44%)
IIIA / IIIB	46 (46%)

Pathological regression in intended surgery population (n=90)



Patients in intended surgery population (n=90)

- PR: 6 (7%), SD: 80 (89%), PD: 4 (4%) by RECIST

Primary efficacy population (n=77; excl. 7 EGFR/ALK+ pts)

- MPR: 19% (15/77), pCR: 5% (4/77)
- 49% (38/77) had a ≥50% pathological regression

Roche Ph III program in early lung cancer ongoing

- Adjuvant Tecentriq + chemotherapy – IMpower010
- Neoadjuvant Tecentriq + chemotherapy – IMpower030
- Adjuvant Alecensa – ALINA

*MPR at surgical resection, defined as ≤ 10% viable tumor cells; pCR = pathologic complete response; data cutoff Sep 5, 2018. 1 EGFR+ patient had aborted surgery; EGFR+, 7 patients; ALK+, 1 patient; no MPR and no RECIST PD pre-surgery observed. The regression line is shown with shaded region indicating the confidence band for mean.

Kwiatkowski et al, ASCO 2019

Breast cancer

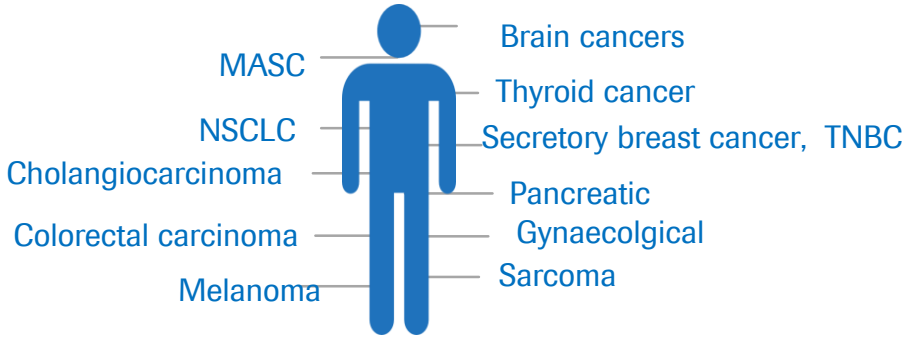
Lung cancer

Tumor agnostic indications

- **STARTRK-NG: Entrectinib in pediatric/adolescent solid tumors/CNS**

Entrectinib is a CNS active ROS1/NTRK/ALK inhibitor

Ph1/2 ALKA-372-001, STARTRK-1 & 2 efficacy in adults:



ROS1+ NSCLC (n=53)

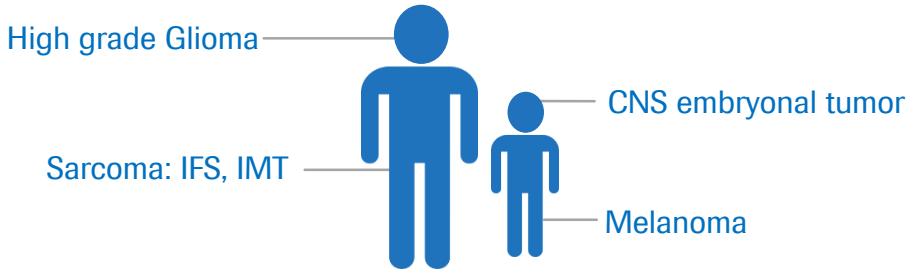
- ORR 77.4%; median DoR 24.6 months
- Intracranial ORR in baseline CNS disease: 55%, mDoR 12.9 mo's

NTRK + solid tumors (n=54)

- ORR 57.4%; median DoR 10.4 months
- Intracranial ORR in baseline CNS disease: 54.5%, mDoR NE (5.0-NE)

Clinically meaningful and durable response in adult patients with and without CNS malignancy

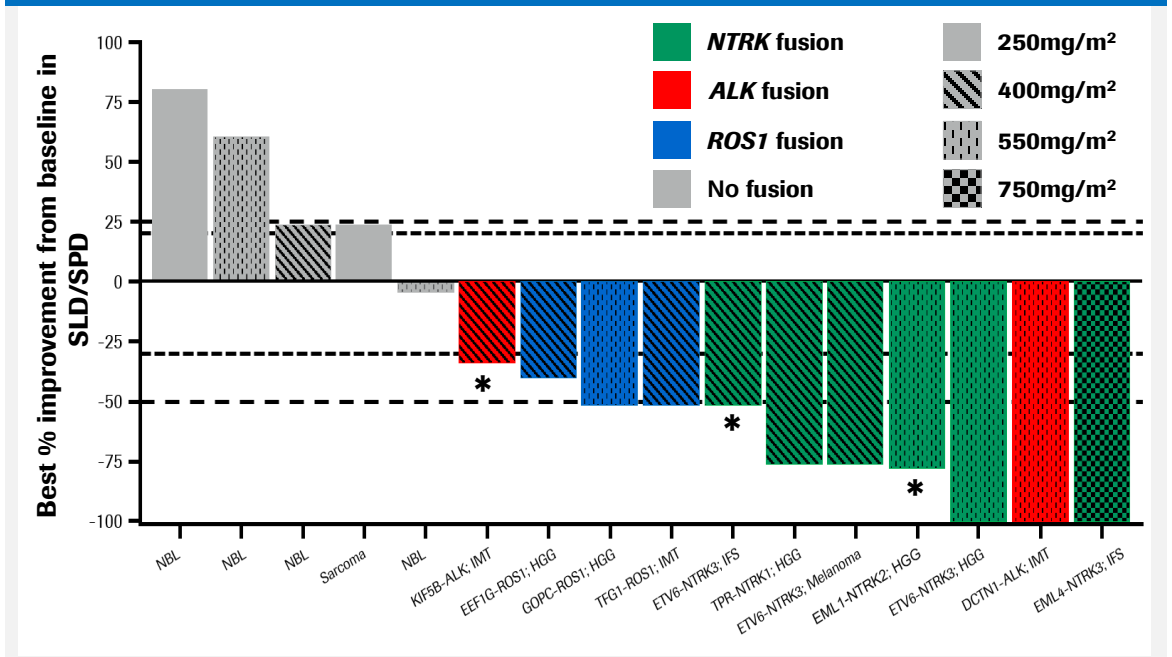
Ph1/1b STARTRK-NG : Efficacy analysis of 12 children/adolescents with NTRK1/2/3, ROS1 or ALK fusions:



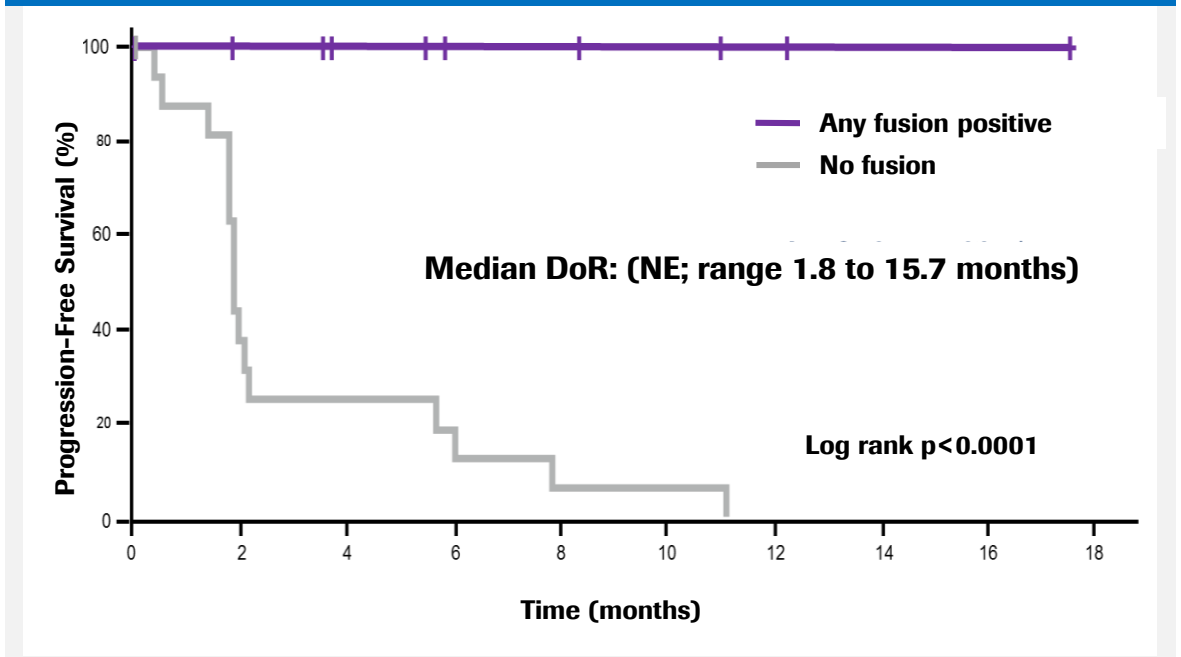
- A variety of pediatric cancers harbor mutations and fusions including high grade glioma, sarcoma and melanoma
- STARTRK-NG conducted in children with recurrent refractory solid tumors including primary CNS tumors

STARTRK-NG: Entrectinib activity in children and adolescents in tumors with and without NTRK1/2/3, ROS1 or ALK fusions

Response rate in pediatric solid tumors
ORR 100% in patients with fusions (11/11)[1]



PFS for all patients with and without gene fusion-positive tumors (n=29)



All patients with NTRK1/2/3, ROS1 or ALK fusions showed rapid durable responses without relapse (ORR 100%) including 5 patients with primary high-grade CNS tumors

2 patients showed complete responses (CRs in high-grade glioma, sarcoma)

Data cut-off October 31, 2018; MTD, maximum tolerated dose; ORR, overall response rate; PFS, progression-free survival; PK, pharmacokinetics; RP2D, recommended phase II dose; [1]Investigator-assessed: includes only patients with measureable disease at baseline and tumor assessment; *unconfirmed response at time of data cut-off; Median duration of therapy was 85 days (6–592 days) for all patients; 56 days (6–338 days) for non-responders; and 281 days (56–592 days) for responders

STARTRK-NG conclusions

- Entrectinib produced striking, rapid and durable objective responses in all 11 children with refractory CNS and solid tumors harboring NTRK1/2/3, ROS1 or ALK fusions
- Entrectinib was well tolerated; dose-limiting toxicities were elevated creatinine, dysgeusia, fatigue and pulmonary edema; other adverse events included weight gain and sensory impairments (ataxia)
- Entrectinib was submitted to health authorities globally and recently granted Priority Review by the FDA with an expected decision on approval by 18 August, 2019
- Roche is partnering with FMI using the F1CDx platform to develop companion diagnostic to effectively and accurately identify these patients

Roche Oncology strategy update

Bill Anderson | CEO Roche Pharmaceuticals

Roche Oncology: Industry leading portfolio

Through continuously improving standard of care

BREAST

- AVASTIN bevacizumab
- Herceptin trastuzumab
- Herceptin SC trastuzumab subcutaneous
- PERJETA pertuzumab for injection
- Kadcyla ado-trastuzumab emtansine for injection
- TECENTRIQ atezolizumab
- ipatasertib

Perjeta/Herceptin FDC SC

GYNECOLOGY

- AVASTIN bevacizumab
- TECENTRIQ atezolizumab

LUNG / DISEASE AGNOSTIC

- AVASTIN bevacizumab
- Tarceva erlotinib
- ALECENSA
- TECENTRIQ atezolizumab
- ENTRECTINIB

SKIN

- COTELLIC (cobimetinib) tablets
- ZELBORAF (vemurafenib) tablets
- Erivedge vismodegib
- TECENTRIQ atezolizumab

GASTRO-INTESTINAL

- Herceptin trastuzumab
- AVASTIN bevacizumab
- Tarceva erlotinib
- TECENTRIQ atezolizumab

GENITO-URINARY

- TECENTRIQ atezolizumab
- ipatasertib

HEMATOLOGY

- MabThera Rituximab
- MabThera SC Rituximab Subcutaneous
- GAZYVA obinutuzumab injection
- VENCLEXTA venetoclax tablets
- HEMLIBRA
- Idasanutlin

polatuzumab vedotin

CD20xCD3 mosunetuzumab

Replace and extend the business

Through continuously improving standard of care

Replace/extend existing businesses

MabThera/Rituxan	Gazyva, Venclexta, polatuzumab vedotin, mosunetuzumab, CD20 x CD3
Herceptin	Perjeta, Kadcyla, Herceptin + Perjeta SC
Avastin	Tecentriq, Alecensa, entrectinib, ipatasertib
Lucentis	faricimab Port delivery system (PDS)
Tamiflu	Xofluza

Entering new franchises

MS:
Ocrevus

Hemophilia A:
Hemlibra

CNS:
SMA, Autism, Huntington's, Alzheimer's, NMOSD

ASCO 2019 Highlights

Lung:

- NSCLC: IMpower150, benefit in patients with liver metastasis with Tecentriq
- Neoadjuvant lung cancer: Encouraging early data with Tecentriq
- Entrectinib: Efficacy benefit

Heme:

- CLL: Venclexta + Gazyva strong benefit in 1L treatment
- R/R FL: Polatuzumab +Gazyva +lenalidomide encouraging efficacy in PhI-IIb

Breast:

- TNBC: Tecentriq confirmed OS benefit in PD-L1+
- HER2+ mBC: CLEOPATRA long term survival benefit

Tumour Agnostic:

- Pediatric CNS tumors: Entrectinib strong response data

SMA=spinal muscular atrophy; NMOSD=neuromyelitis optica spectrum disorder; RMS=relapsing MS; PPMS=primary progressive MS; R/R CLL=relapsed/refractory chronic lymphocytic leukemia; AML=acute myeloid leukemia; BC=breast cancer; NSCLC=non-small cell lung cancer; SCLC=small cell lung cancer; TNBC=triple-negative BC; nAMD=neovascular age-related macular degeneration; DME=diabetic macular edema, PDS=Port Delivery Systemc

Extend current franchise in lung cancer

Ongoing trial program with differentiated growth opportunities

NSCLC NTRK+ / ROS1+

ENTRECTINIB Ph2 (STARTRK-NG)

SCLC

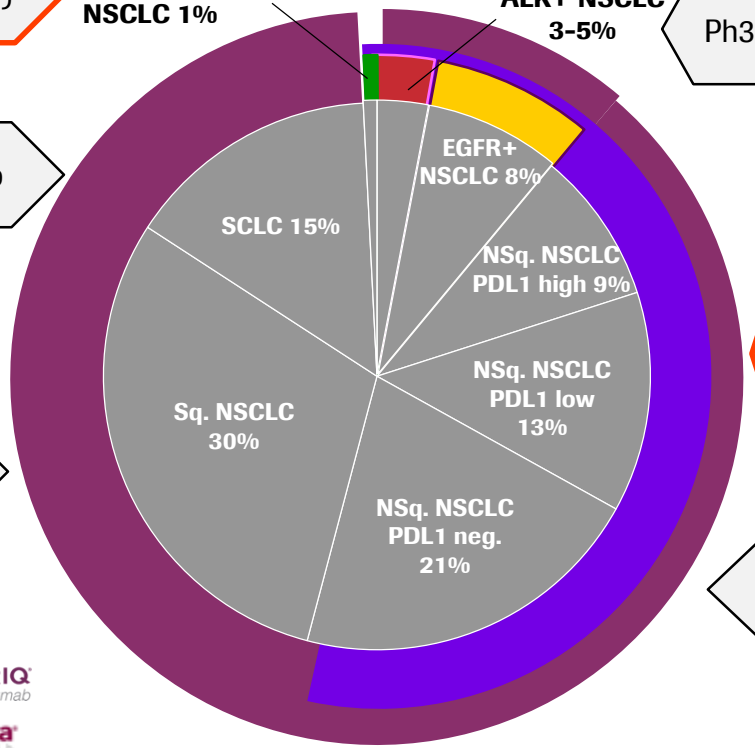
TECENTRIQ atezolizumab Ph3 1L (IMpower133) + chemo

NSCLC Sq.

TECENTRIQ atezolizumab

Ph3 1L (IMpower131) + carbo-pac/nab-pac
(IMpower110) + carbo/cis +gem

Incidence rates (980'000 pts[1])



NSCLC ALK+

Ph3 Adjuvant (ALINA) ALECENSA

Nsq. NSCLC

TECENTRIQ atezolizumab

Ph3 1L (IMpower110) + carbo/cis +gem
(IMpower150) + carbo-pac±Avastin
(IMpower130) + carbo/nab-pac
(IMpower132) + carbo/cis+pem

NSCLC

TECENTRIQ atezolizumab

Ph3 Adjuvant (IMpower010)
Ph3 NeoAdjuvant (IMpower030) + chemo

ENTRECTINIB ALECENSA TECENTRIQ atezolizumab AVASTIN Tarceva

ASCO 2019

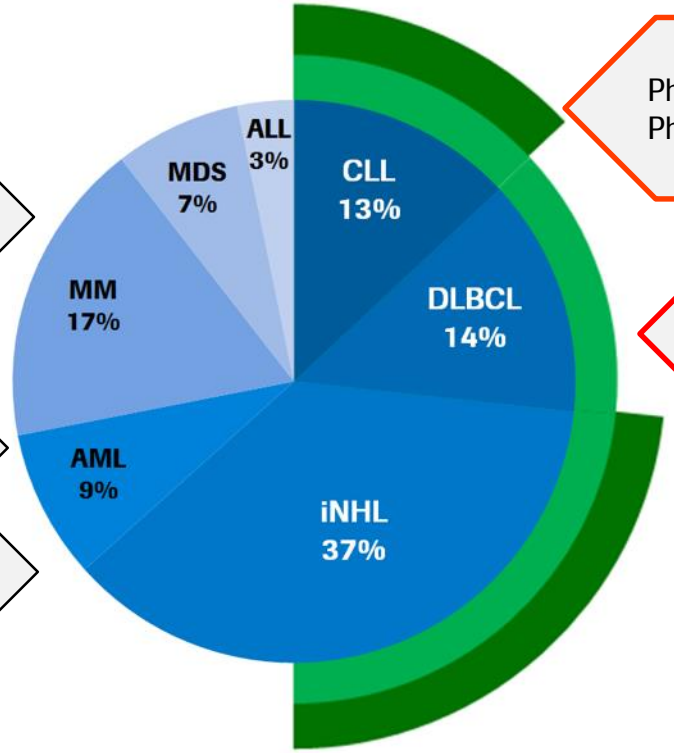
1. Decision Resources, Evaluate pharma

NTRK=neurotrophic-tropomyosin receptor kinase; SCLC=small cell lung cancer; NSCLC=non-small cell lung cancer; Sq=squamous; Nsq=non-squamous

Extend current franchise in hematology

Ongoing trial program with differentiated growth opportunities

Incidence rates (330'000 patients[1])



MM

VENCLEXTA venetoclax tablets

Ph3 R/R (BELLINI): Ven + bortezomib/dex
Ph3 R/R CANOVA): t(11:14) Ven + dex

AML FDA BTD

VENCLEXTA venetoclax tablets

Ph3 1L (Viale-A & Viale-C): Ven + azacitidine/LDAC

Idasanutlin

Ph3 R/R (MIRROS): Idasa + cytarabine

CLL FDA BTD

Ph3 1L (CLL14): Ven + G
Ph3 R/R (MURANO): Ven + R

VENCLEXTA venetoclax tablets
GAZYVA obinutuzumab injection

DLBCL EMA PRIME FDA BTD

Ph2 R/R (GO29365): Pola + BR
Ph3 1L (POLARIX): Pola + R-CHP

polatuzumab vedotin

MabThera Rituximab
GAZYVA obinutuzumab injection
ASCO 2019

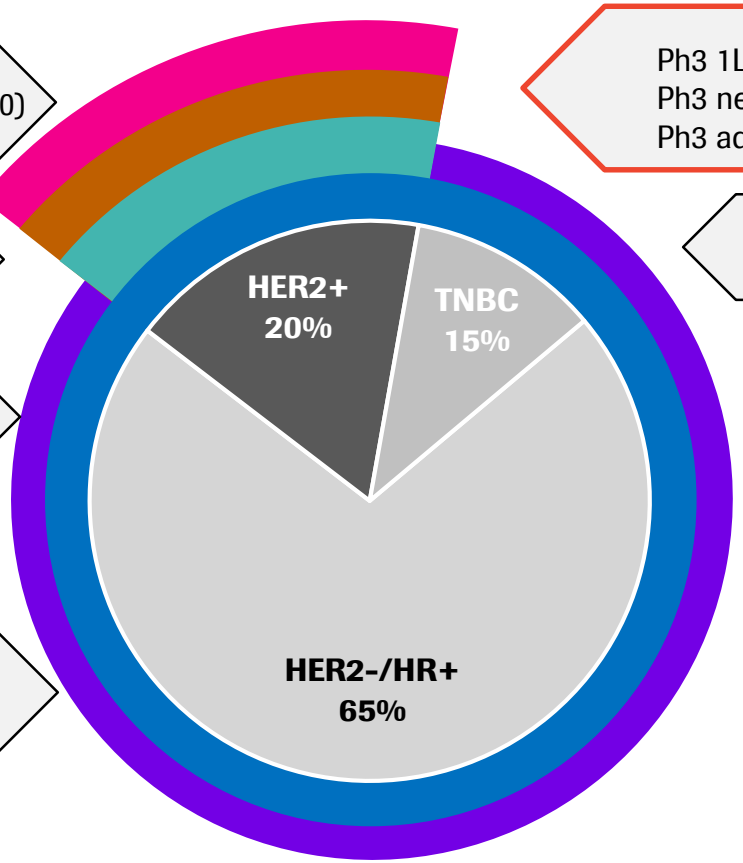
1. Decision Resources, Evaluate pharma

CLL=chronic lymphoid leukemia; DLBCL (aNHL)=diffuse large B-cell lymphoma; iNHL=indolent non-hodgkin`s lymphoma; AML=acute myeloid leukemia; MM=multiple myeloma; MDS=myelodysplastic syndrome; ALL=acute lymphoblastic leukemia. Venclexta in collaboration with AbbVie; Gazyva in collaboration with Biogen; Polatuzumab vedotin in collaboration with Seattle Genetics

Extend current franchise in breast cancer

Ongoing trial program with differentiated growth opportunities

Incidence rates (600'000 patients[1])



HER2+

TECENTRIQ atezolizumab + Herceptin trastuzumab + PERJETA pertuzumab
Ph3 neoadjuvant (IMpassion050)

Kadcyla ado-trastuzumab emtansine for injection
Ph3 Adj (KATHERINE)
Ph3 Adj (KATLIN)

Herceptin trastuzumab + PERJETA pertuzumab
FDC SC
Ph3 eBC (FeDeriCa)
Ph2 eBC (FDC SC cross-over)

HER2-/HR+

ipatasertib
Ph3 1L Dx+ (IPATunity130)
Ph3 1/2L (IPATunity150)

TNBC

Ph3 1L (IMpassion130/131/132)
Ph3 neoadjuvant (IMpassion031)
Ph3 adjuvant (IMpassion030)
TECENTRIQ atezolizumab

Ph3 1L Dx+ (IPATunity130)
ipatasertib

PERJETA pertuzumab + Herceptin trastuzumab — DUAL HER2 BLOCKADE. PROVEN SYNERGY.
Herceptin trastuzumab
Kadcyla ado-trastuzumab emtansine for injection
AVASTIN bevacizumab
Xeloda capecitabine

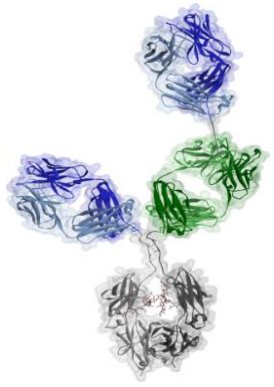
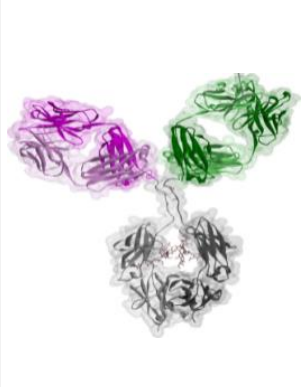
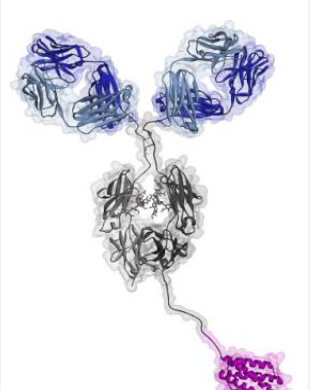
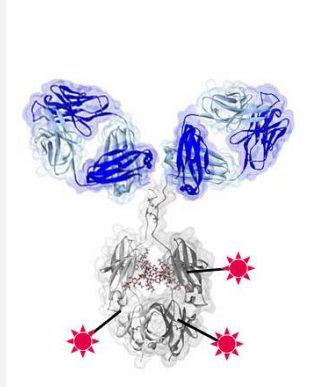
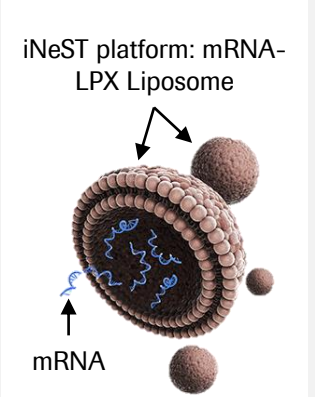
ASCO 2019

1. Decision Resources, Evaluate pharma

FDC=Fixed dose combination; TNBC=triple negative breast cancer

Our technology platforms in cancer

Roche pipeline includes differentiated therapeutic platforms

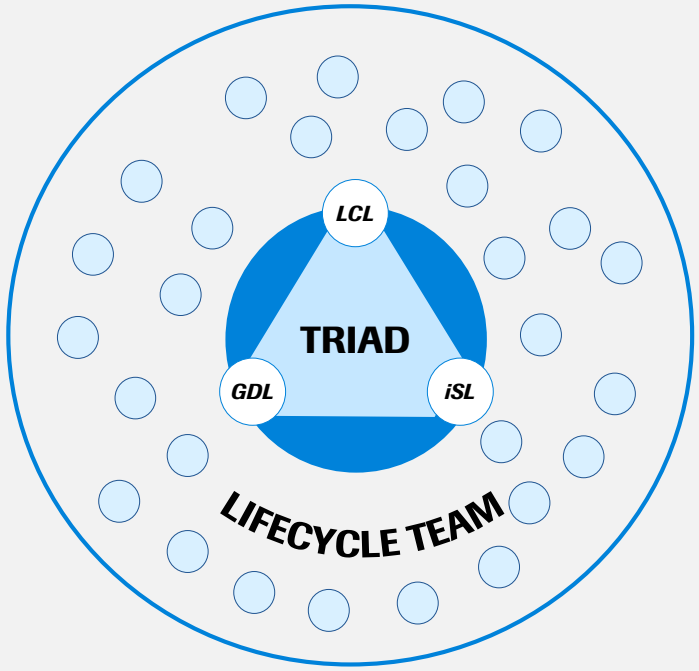
Bi-specifics		Fusion Protein	Monoclonal antibody	ADC	Vaccines
 2:1 format	 1:1 format				
CD20 x CD3 CEA x CD3	Her2 x CD3 mosunetuzumab glypican-3 x CD3	FAP x IL2v	TIGIT (tiragolumab)	polatuzumab vedotin HER2	iNeST
Engage and activate T cells to kill tumour cells		Amplify immune response	Amplify immune response	Targeted tox load	Patient's neo-antigens for anti-tumour immune response

ADC=antibody–drug conjugate; iNeST=Individualized Neoantigen-Specific Therapy

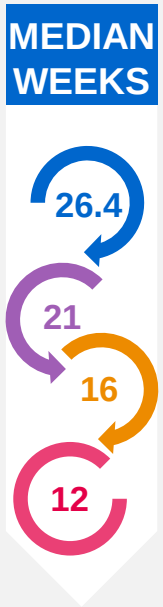
Transforming the way we work

Empowered and agile teams to deliver more and faster for patients

The Lifecycle Triad – Fit for purpose working group



Faster-Filing – Portfolio wide efficiency



2018: 21w/filing (-5.4w vs. '17)
Total 25 filings x -5.4w/filing=-2.6y

↓ 2.6 y

Target 2019: 16w/filing (-10.4w vs. '17)
Total 20 filings x -10.4w/filing=-4.0y

↓ 4.0 y

80% of decisions delegated to Life Cycle Teams

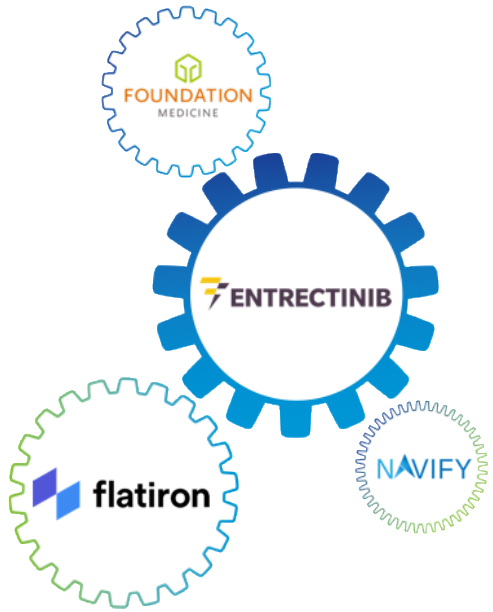
Filing time down from 21 weeks in '18 to 16 weeks in '19

LCL=Life Cycle Leader; GDL=Global Development Leader; iSL=integrated Strategy Leader

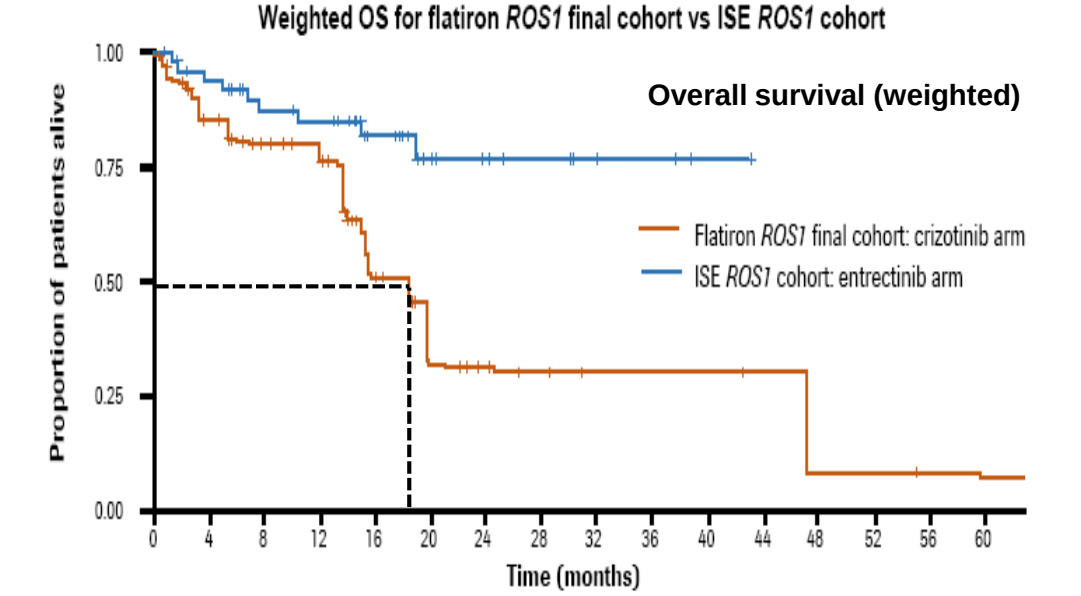
Leveraging Real World Data to accelerate development

Targeting rare tumor agnostic ROS-1 & NTRK fusions in STARTRK-2

Uncovering new biologic insights and developing pan-tumor strategies



External control from Flatiron to generate comparative evidence



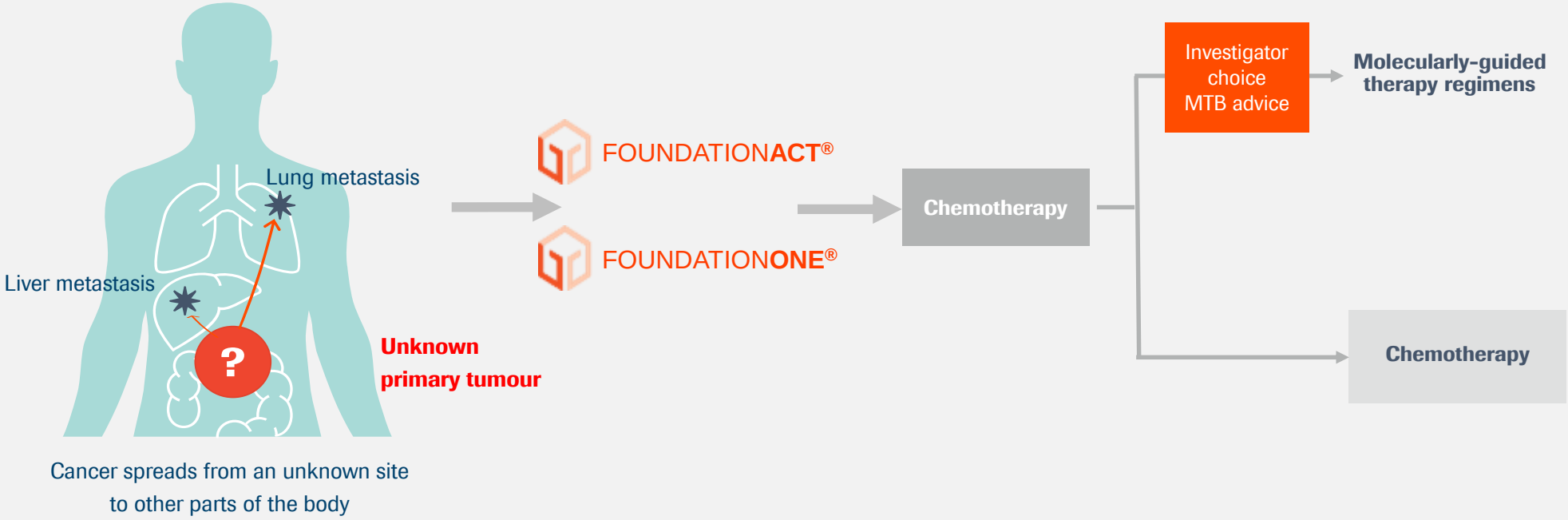
Building an integrated development and commercial model to lead in precision oncology

Doebele et al, ASCO 2019
NTRK=neurotrophic-tropomyosin receptor kinase

Using genomic profiling to address poorly understood cancers

Matching patients to best known treatment option or clinical trial

CUPISCO[1] phase II trial: Cancer of Unknown Primary (CUP) patients receive treatment based on genomic profiling



Leveraging Foundation Medicine to address high unmet opportunities

1. Clinicaltrials.gov NCT03498521

MTB=Multidisciplinary Tumor Board; CUP=Cancer of Unknown Primary

Doing now what patients need next