

ALX  
ONCOLOGY

July 2020

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This presentation contains forward-looking statements that involve substantial risks and uncertainties. All statements other than statements of historical facts contained in this presentation, including statements regarding our future results of operations and financial position, business strategy, product candidates, planned preclinical studies and clinical trials, results of clinical trials, research and development costs, regulatory approvals, timing and likelihood of success, plans and objects of management for future operations, as well as statements regarding industry trends, are forward-looking statements. In some cases, you can identify forward-looking statements by terms such as “may,” “will,” “should,” “would,” “expect,” “plan,” “anticipate,” “could,” “intend,” “target,” “project,” “believe,” “estimate,” “predict,” “potential,” or “continue” or the negative of these terms or other similar expressions.

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# TEAM



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# OVERVIEW

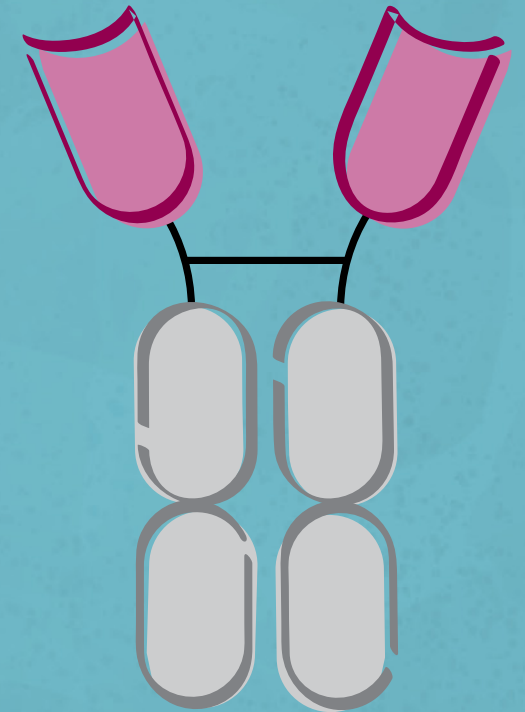
## ALX148

### CD47 blocker

- Designed for use in combination
- Tolerability profile enables higher dosing
- Higher dosing may enable greater efficacy

Clinical proof-of-principle in both hematologic and solid tumors

Initial focus on MDS, AML and solid tumors

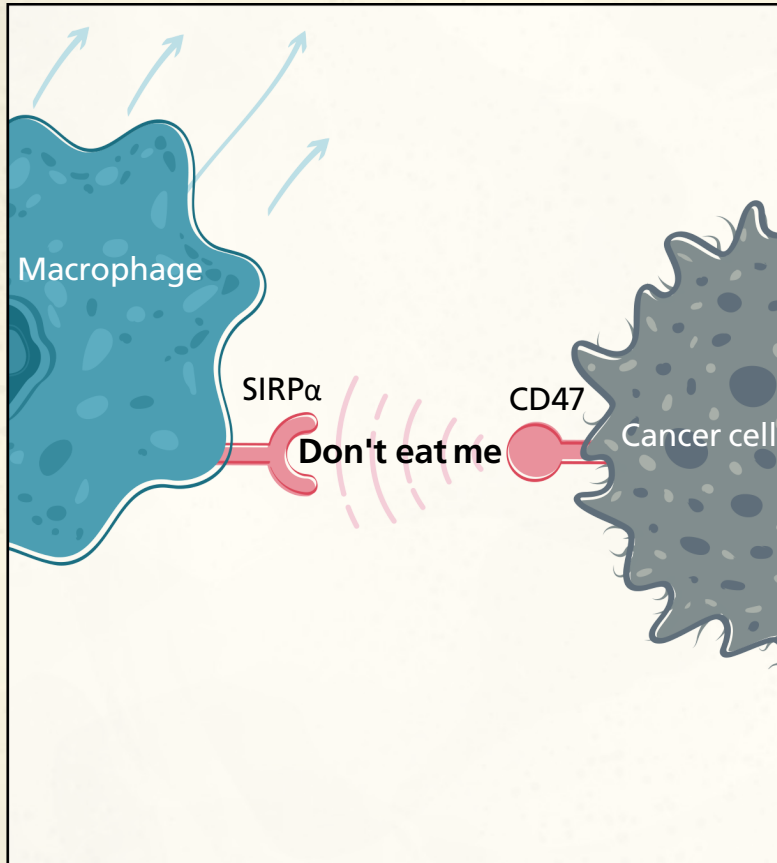


**ALX148**

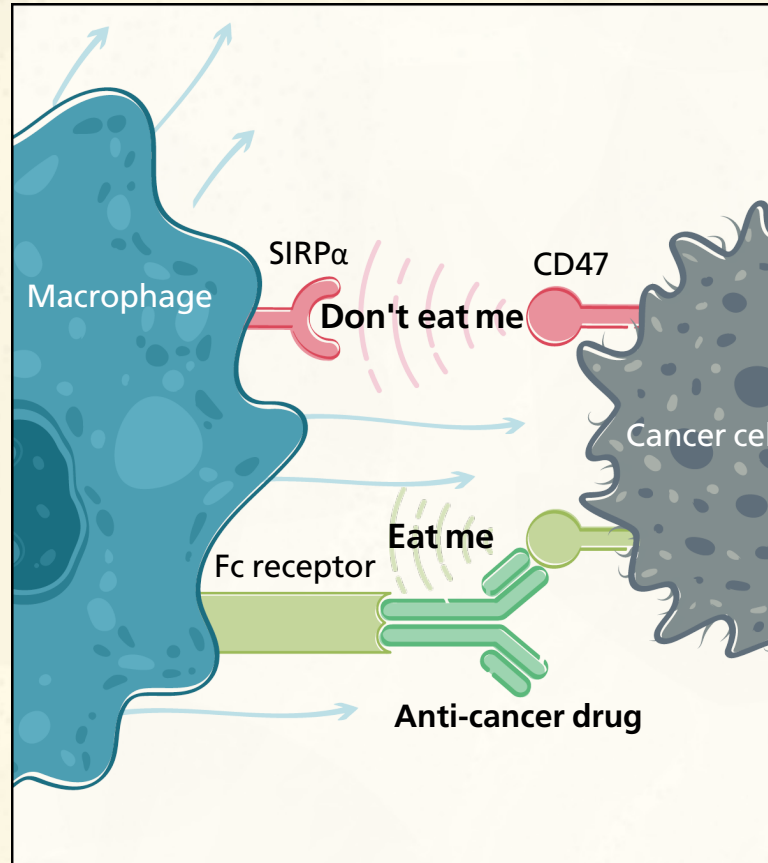


# ALX148: MECHANISM OF ACTION

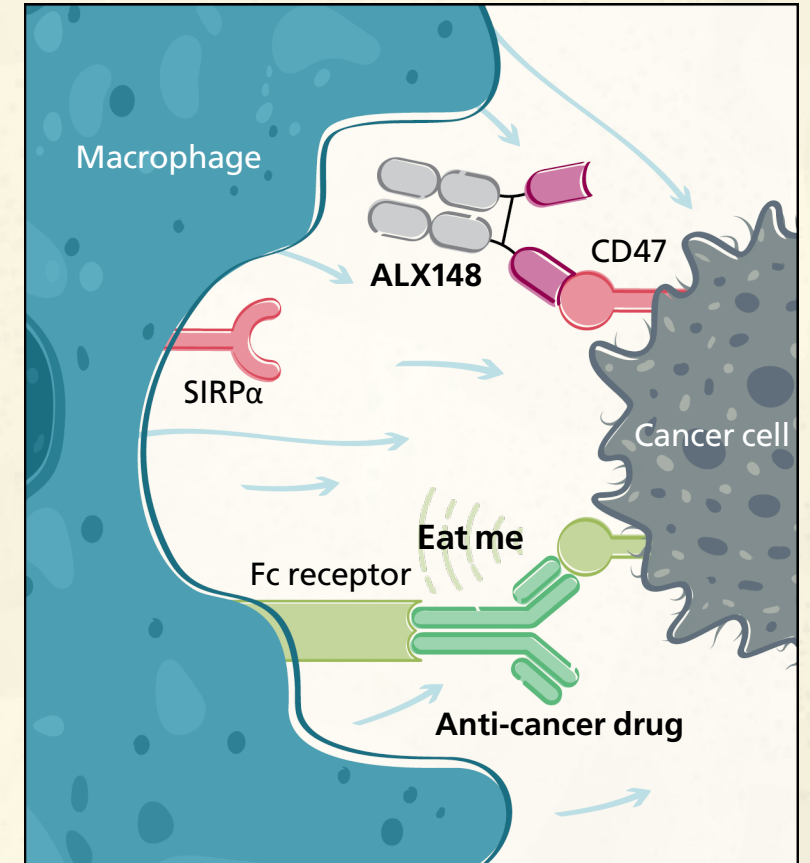
Basal state:



Anti-cancer drug alone:



ALX148 combined with anti-cancer drug:



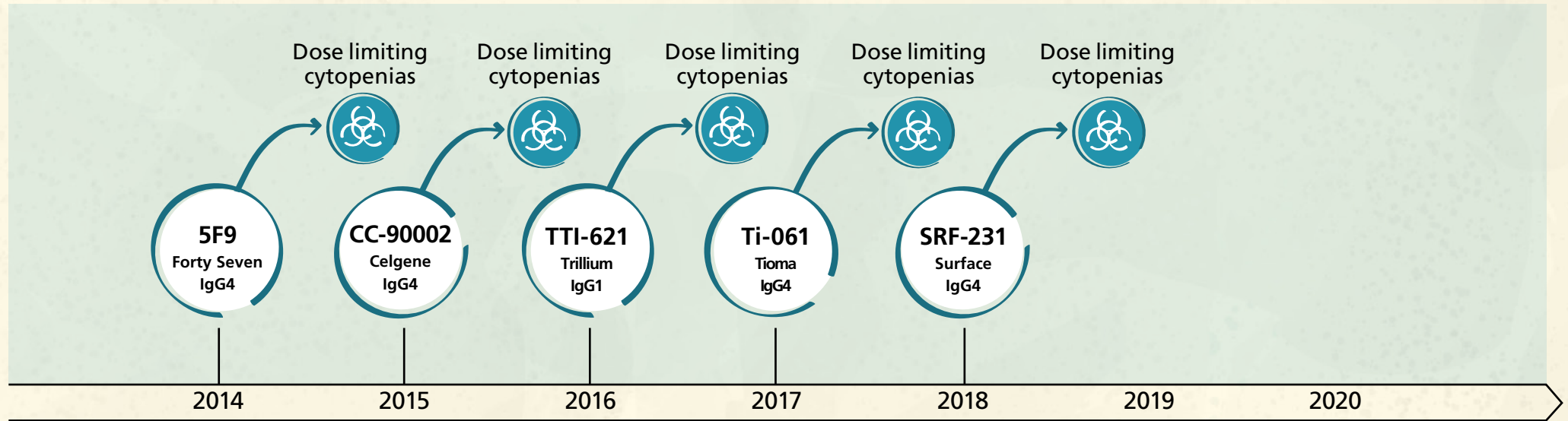
ALX148 designed to work with partner anti-cancer drugs to maximize phagocytosis of cancer cells

# CD47 BLOCKER DEVELOPMENT



## CD47 as a therapeutic target

Weissman / van den Berg  
2009-2011

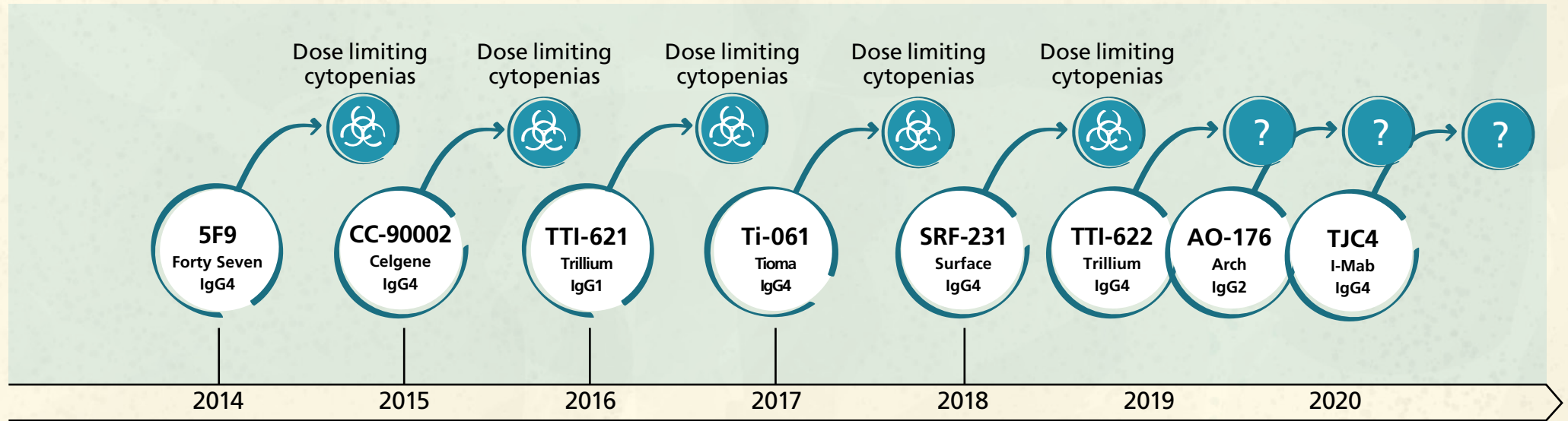


# CD47 BLOCKER DEVELOPMENT



## CD47 as a therapeutic target

Weissman / van den Berg  
2009-2011





# CD47 BLOCKER DEVELOPMENT



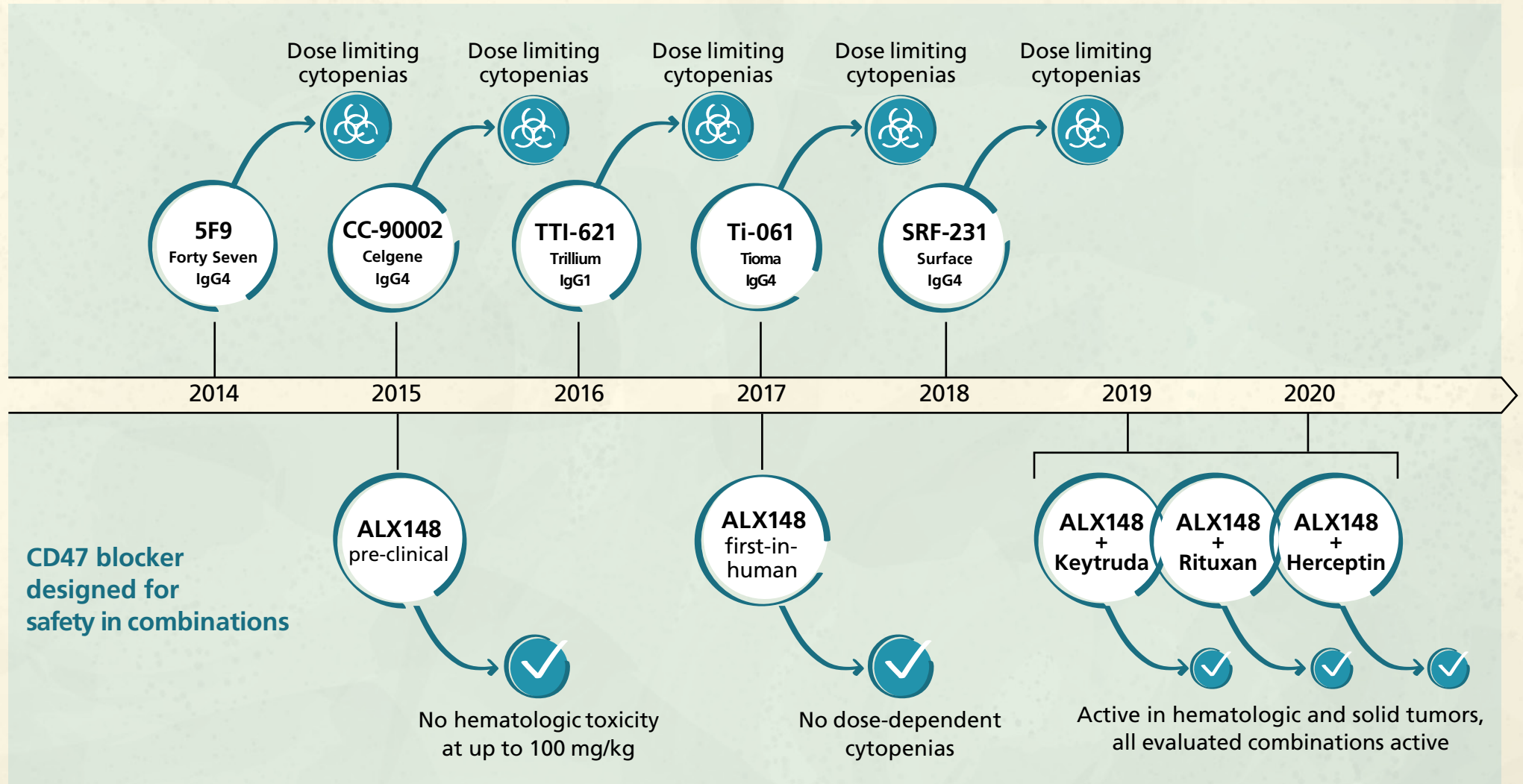
## CD47 as a therapeutic target

Weissman / van den Berg  
2009-2011



## Blocking without Fc avoids cytopenias

Garcia  
2013



# CD47 BLOCKER DEVELOPMENT



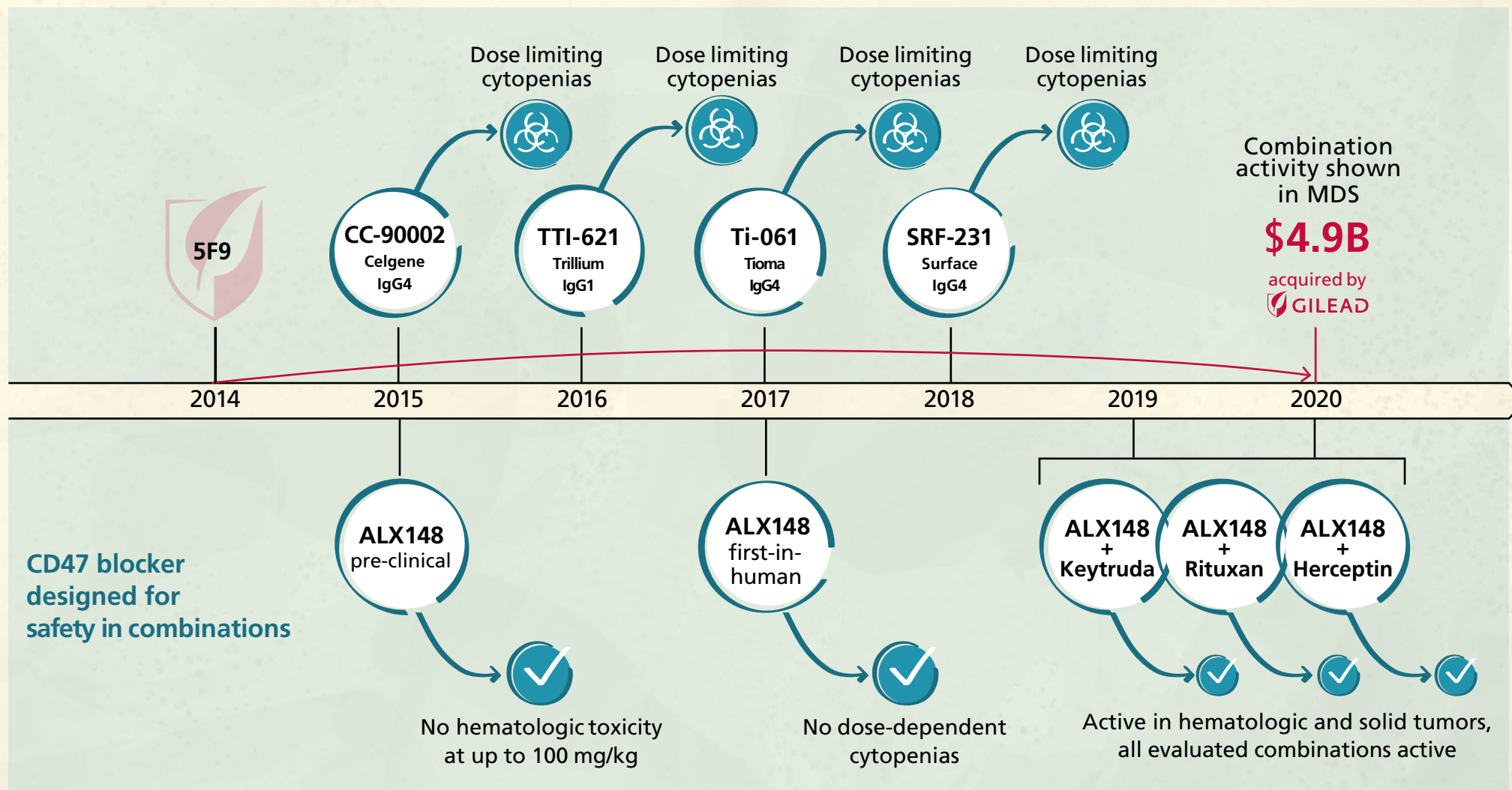
## CD47 as a therapeutic target

Weissman / van den Berg  
2009-2011



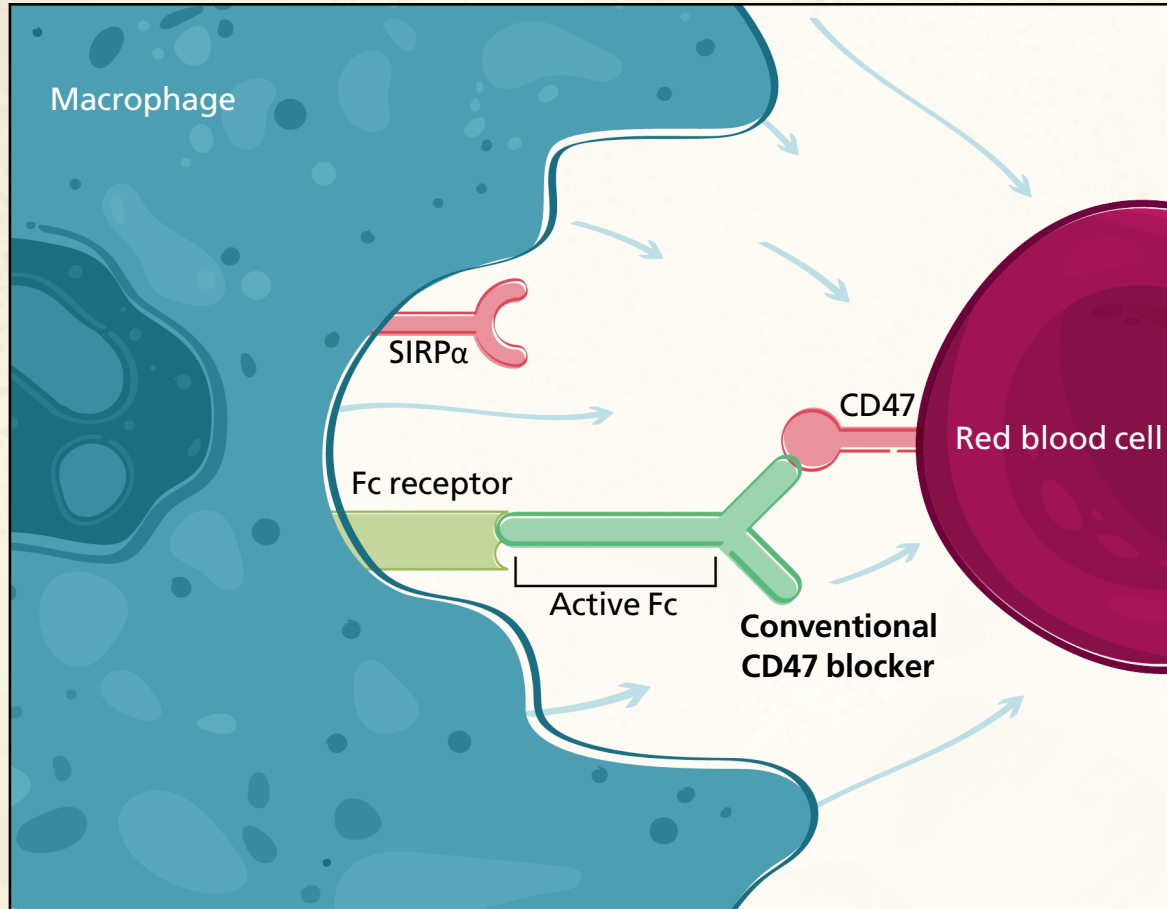
## Blocking without Fc avoids cytopenias

Garcia  
2013

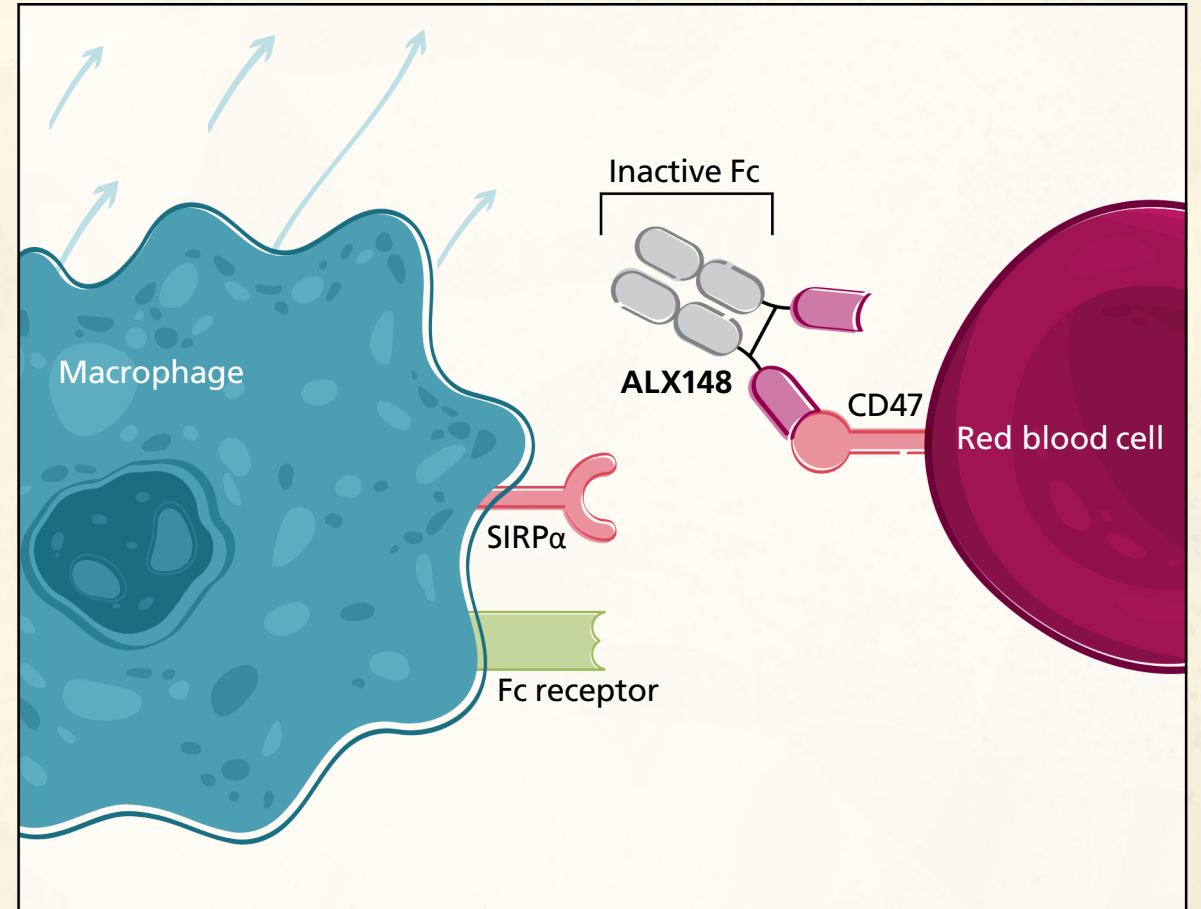


# ALX148 IS DESIGNED TO AVOID HEMATOLOGIC TOXICITY

CD47 blockers with an active Fc result in cytopenias:



ALX148 with an inactive Fc mitigates cytopenias:





# ALX148: METICULOUSLY DESIGNED CD47 BLOCKER

High affinity CD47 binding domain of SIRP $\alpha$



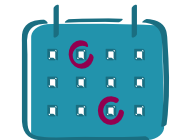
Potently blocks CD47 signal on cancer cells

Inactive Fc domain eliminates binding activity



No dose dependent cytopenia

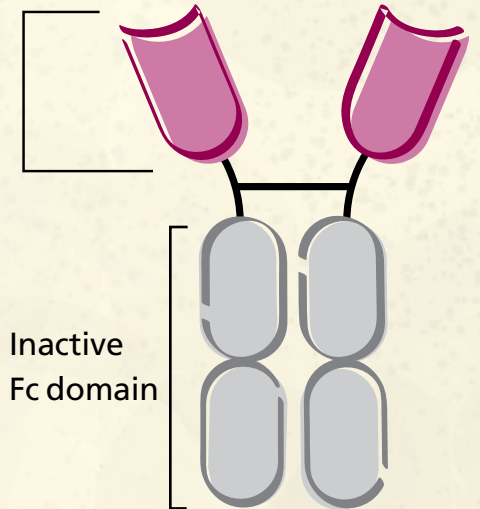
Presence of Fc domain ensures slow clearance and long half-life



Less frequent dosing

## Designed for safety and efficacy

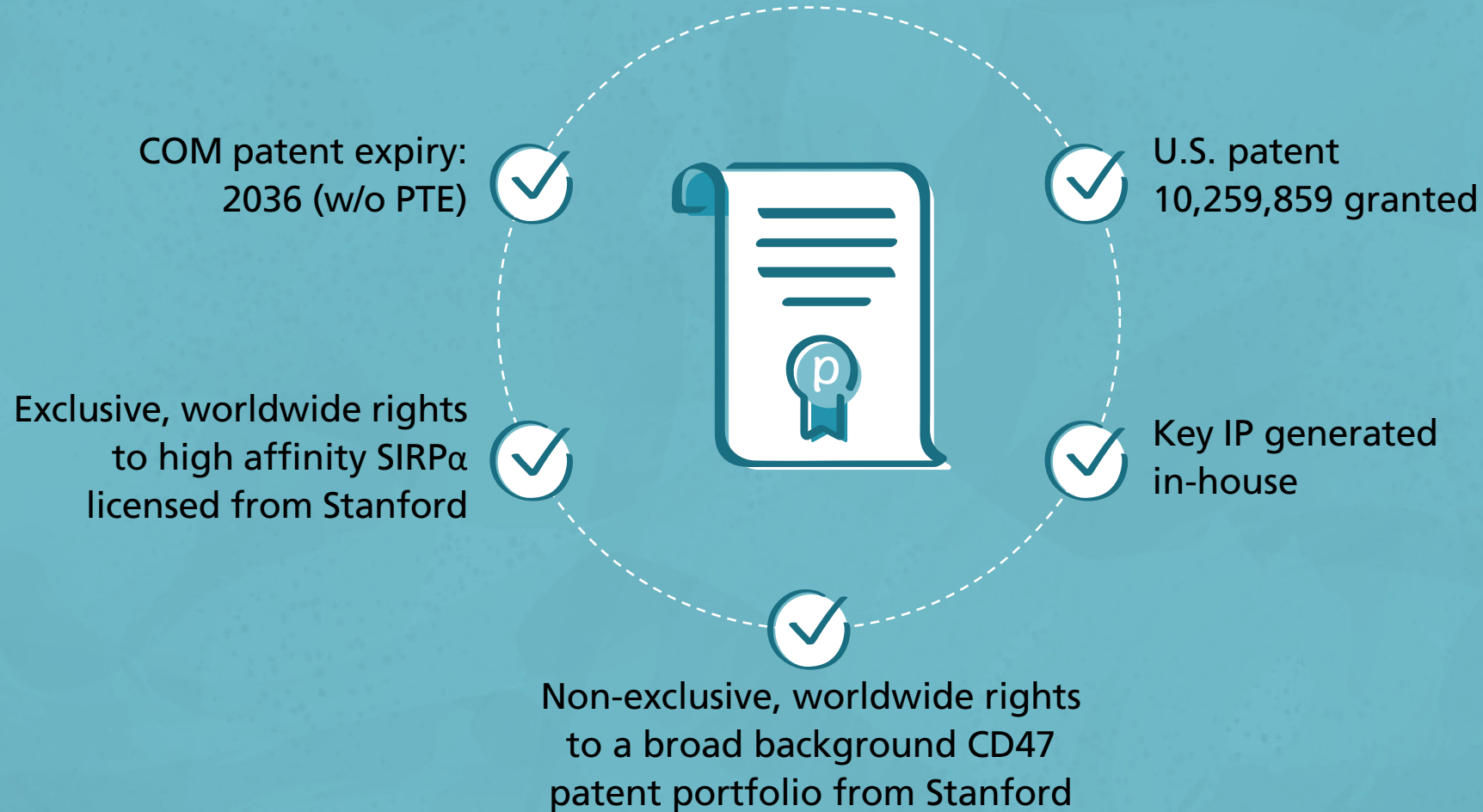
High affinity CD47 binding domains of SIRP $\alpha$



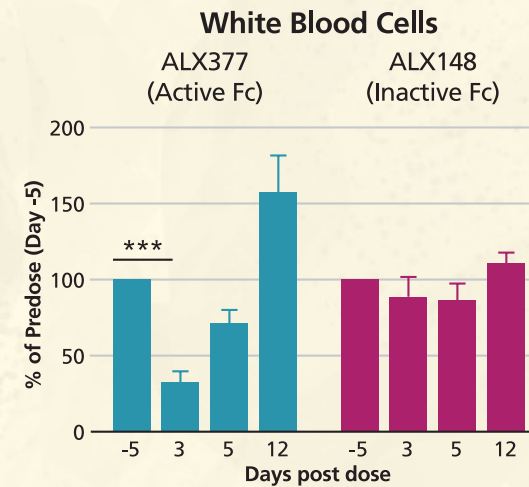
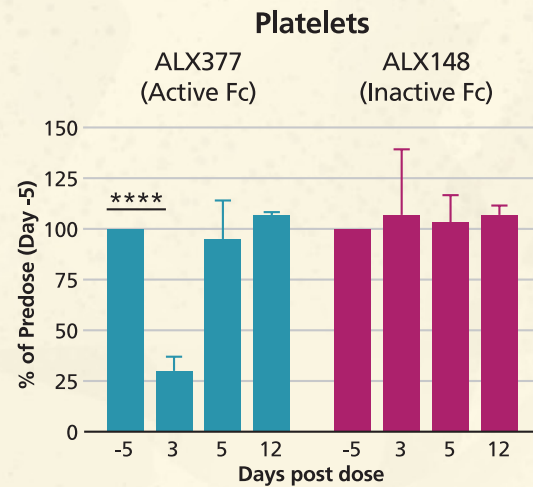
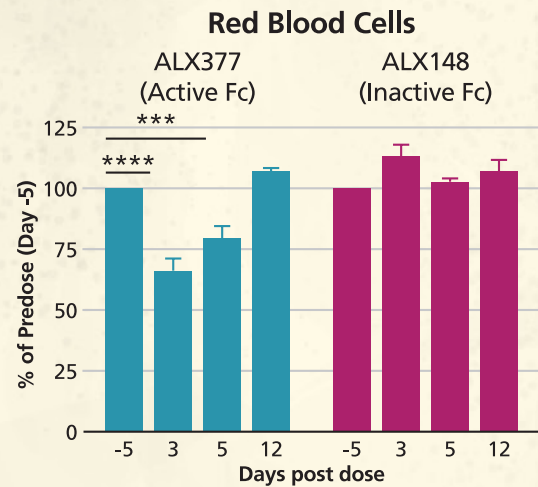
- ~Half the molecular weight of an antibody
- Increases solid tumor penetration
- Standard antibody manufacturing process

# STRONG INTELLECTUAL PROPERTY

## Robust patent position



# INACTIVE FC SHOWS REDUCED CYTOPENIA IN MICE



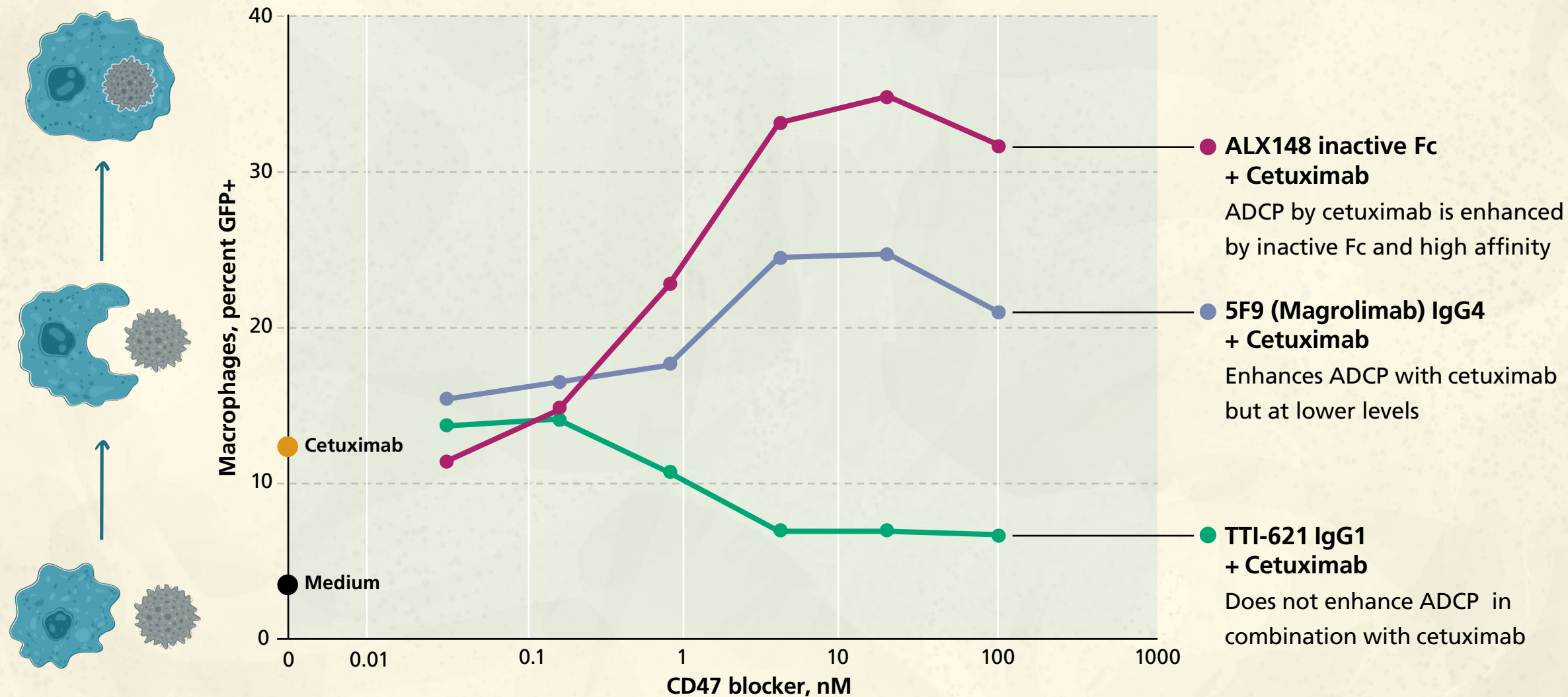
CD-1 mice received 30 mg/kg IV single dose

\*\*\*\*p<0.0001, \*\*\*p<0.001



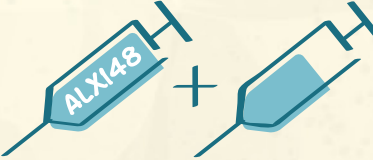
Inactive Fc is the  
core determinant of  
safety profile



# ALX148 DEMONSTRATES SUPERIOR PHAGOCYTOSIS



# ALX148 DEMONSTRATES FAVORABLE TOLERABILITY PROFILE

	 Preclinical	 Single agent	 Combinations
Highest administered dose	<b>100 mg/kg<sup>1</sup></b> with no observable adverse events	<b>30 mg/kg Q2W</b> No evidence of dose-dependent cytopenias	<b>15 mg/kg QW</b> currently dosed <b>60 mg/kg Q4W</b> planned

<sup>1</sup>100 mg/kg of ALX148  $\cong$  200 mg/kg of a typical antibody

ALX148  
has not yet reached  
a maximum  
tolerated dose

# PIPELINE

	Indication	IND filing preparation	IND submitted	Phase 1	Phase 2	Phase 3	Fast track
HEMATOLOGY	<b>MDS</b> Myelodysplastic Syndromes	azacitidine					
	<b>AML</b> Acute Myeloid Leukemia	Standard of care					
	<b>NHL</b> Non-Hodgkin Lymphoma	Rituxan					
SOLID TUMORS	<b>HNSCC</b> Head and Neck Squamous Cell Carcinoma	Keytruda					
		Keytruda + 5FU + platinum					✓
	<b>Gastric/GEJ</b> Gastroesophageal Junction Cancer	Herceptin					
		Herceptin + Cyramza + paclitaxel					✓

>150  
patients dosed  
with ALX148  
since 2017



# ALX148 DEMONSTRATES CONSISTENT TOLERABILITY PROFILE

## Treatment related adverse events

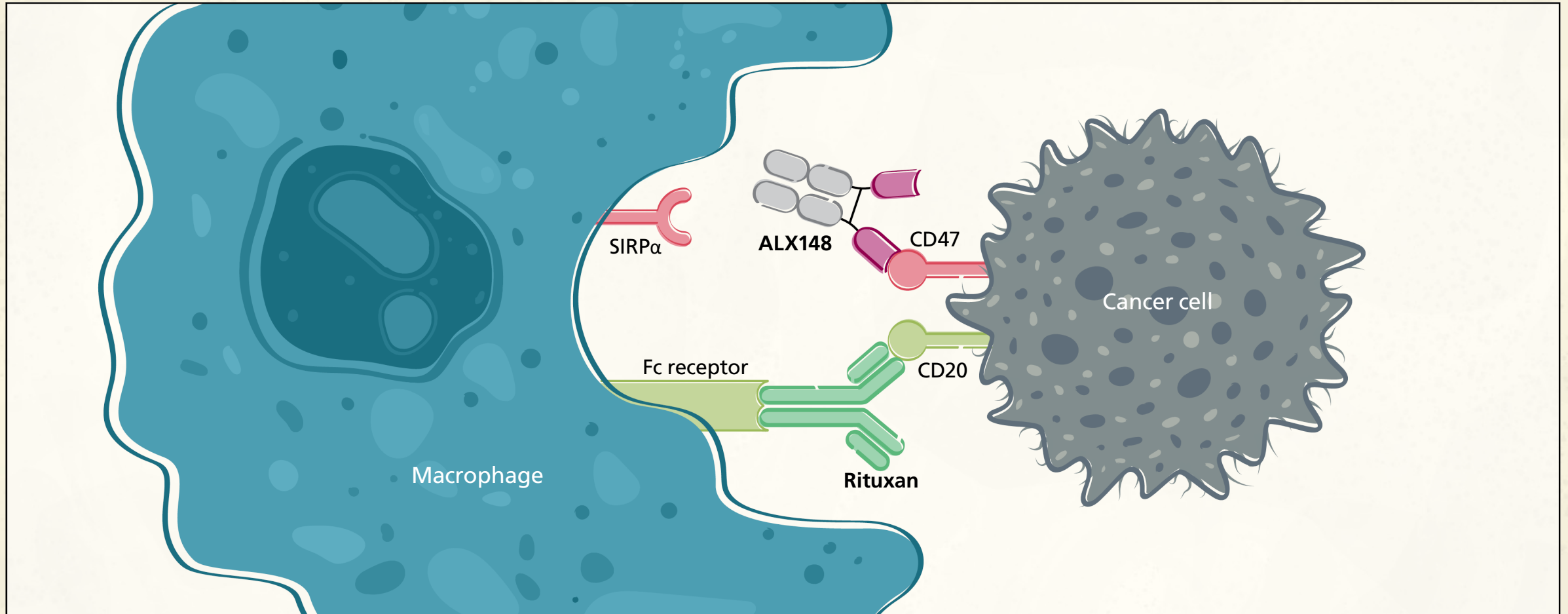
	ALX148 + Rituxan (N=33)		ALX148 + Keytruda (N=52)		ALX148 + Herceptin (N=30)	
	Total n (%)	≥Grade 3	Total n (%)	≥Grade 3	Total n (%)	≥Grade 3
Fatigue	3 (9.1%)	-	6 (11.5%)	-	9 (30.0%)	-
Rash	6 (18.2%)	-	5 (9.6%)	-	-	-
AST increased	-	-	9 (17.3%)	-	-	-
Platelets decreased	-	-	4 (7.7%)	2 (3.8%)	5 (16.7%)	2 (6.7%)
ALT increased	-	-	7 (13.5%)	1 (1.9%)	-	-
Pruritus	-	-	5 (9.6%)	-	3 (10.0%)	-
Pyrexia	-	-	3 (5.8%)	-	3 (10.0%)	-
Decreased appetite	-	-	2 (3.8%)	-	3 (10.0%)	-
Anemia	2 (6.1%)	1 (3.0%)	5 (9.6%)	1 (1.9%)	2 (6.7%)	-
Infusion reaction	-	-	4 (7.7%)	-	-	-
Neutropenia / Neutrophil count decr	2 (6.1%)	2 (6.1%)	2 (3.8%)	1 (1.9%)	2 (6.7%)	2 (6.7%)
Nausea	2 (6.1%)	-	2 (3.8%)	-	2 (6.7%)	-
Alkaline phosphatase incr	-	-	3 (5.8%)	-	-	-
Arthralgia	-	-	3 (5.8%)	-	-	-
WBC decreased	-	-	3 (5.8%)	-	-	-
Myalgia	-	-	2 (3.8%)	-	-	-

Tolerability profile  
may enable broad  
combination  
potential

Treatment related adverse events occurring in ≥2 subjects in all histologies at 10 & 15 mg/kg QW.  
Data Cutoff 1 April 2020.

# NHL TRIAL: ALX148 + RITUXAN MECHANISM OF ACTION

ALX148  
in  
NHL



**ALX148 increases phagocytosis in combination with Rituxan**

# NHL TOLERABILITY

ALX148  
in  
NHL

Selected Hematologic, Treatment Related Adverse Events	ALX148 + Rituxan (N=33) <sup>1</sup>		CC-90002 + Rituxan (n=26) <sup>2</sup>		5F9 (magrolimab) + Rituxan (n=115) <sup>3</sup>	
	Total % (n)	≥Grade 3	Total % (n)	≥Grade 3	Total %	≥Grade 3
Neutropenia	6% (2)	6% (2)	50% (13)	39% (10)	~13%	~7%
Thrombocytopenia/ Decreased Platelets	-	-	35% (9)	23% (6)	~20%	~13%
Anemia	6% (2)	3% (1)	12% (3)	4% (1)	~30%	~15%

<sup>1</sup>As of 1 April 2020

<sup>2</sup>Abstract 4089 ASH 2019

<sup>3</sup>Abstract S867 EHA 2019

ALX148's  
Tolerability profile  
compares favorably  
to other CD47  
blockers

# MAGROLIMAB NHL RESPONSE RATES AND DOSING



DLBCL w/ Rituxan	Ph1	Ph2
N	21	38
Dosing (mg/kg)	up to 30 <b>Weekly</b>	30 and 45 <b>Every Other Week</b>
ORR	48%	29%
CR	33%	5%
PR	14%	24%

Reduced dosing led  
to reduced overall  
response rate in  
NHL

ORR = overall response rate.  
CR = complete response rate.

Abstract S867 EHA 2019



# NHL PROOF-OF-PRINCIPLE TRIAL

ALX148  
in  
NHL

## Phase 1b NHL cohorts



Relapsed/Refractory NHL,  
prior regimen with Rituxan



### Treatment:

**ALX148** 10 or 15 mg/kg  
once a week (QW)  
+  
**Rituxan** 375 mg/m<sup>2</sup> once a  
week for 4 weeks,  
once monthly for 8 months

Population	10 mg/kg QW		15 mg/kg QW	
	N	ORR	N	ORR
All	22	40.9%	11	54.6%
Aggressive	15	33.3%	7	42.9%
Indolent	7	57.1%	4	75.0%

As of 1 April 2020

**N=Response evaluable patients**

**Indolent** = Follicular Lymphoma and Marginal Zone Lymphoma.

**Aggressive** = Diffuse Large B-cell Lymphoma and Mantle Cell Lymphoma.

**ORR** = Objective Response Rate.

**ALX148**  
demonstrated  
higher  
response rate  
at higher dosing

# NON-HODGKIN LYMPHOMA PROOF-OF-PRINCIPLE SUMMARY



**Other agents in CD47 class  
reduced dosing leading to  
reduced responses**



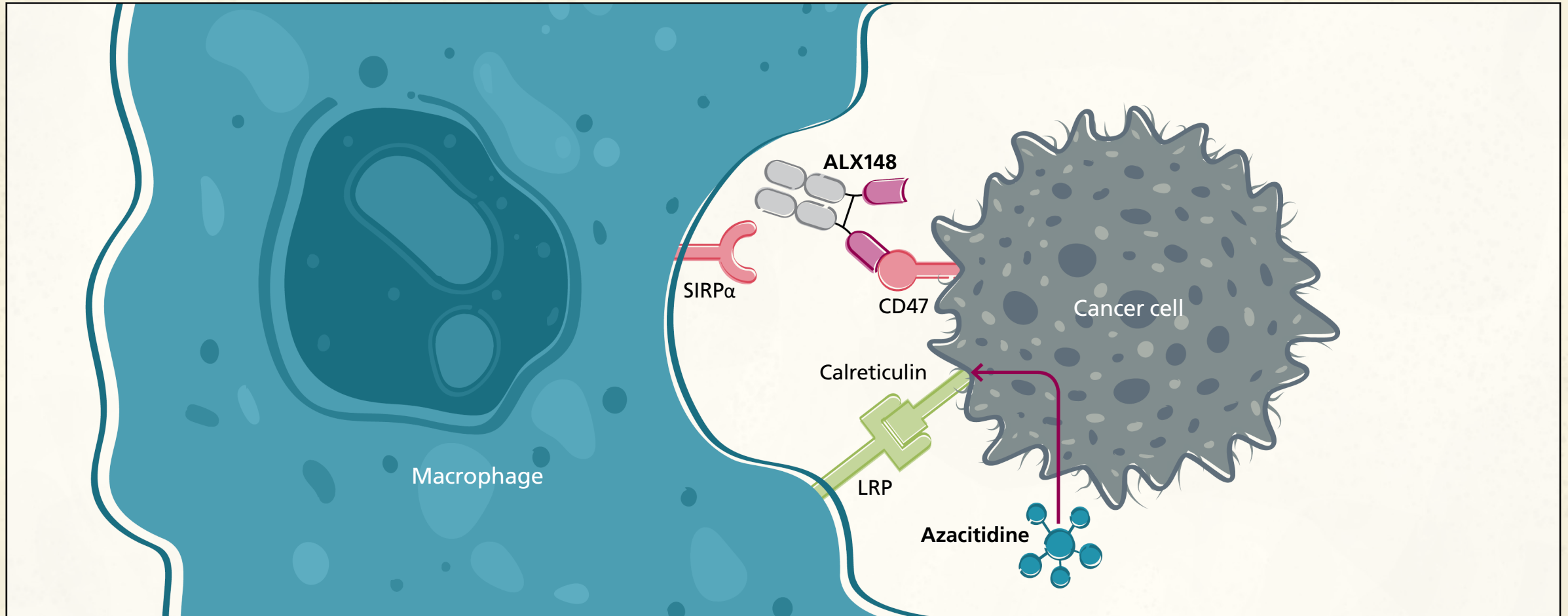
**Higher dosing enabled by  
ALX148 tolerability profile**



**Higher dosing of ALX148  
led to higher responses**

# MDS TRIAL: ALX148 + AZACITIDINE MECHANISM OF ACTION

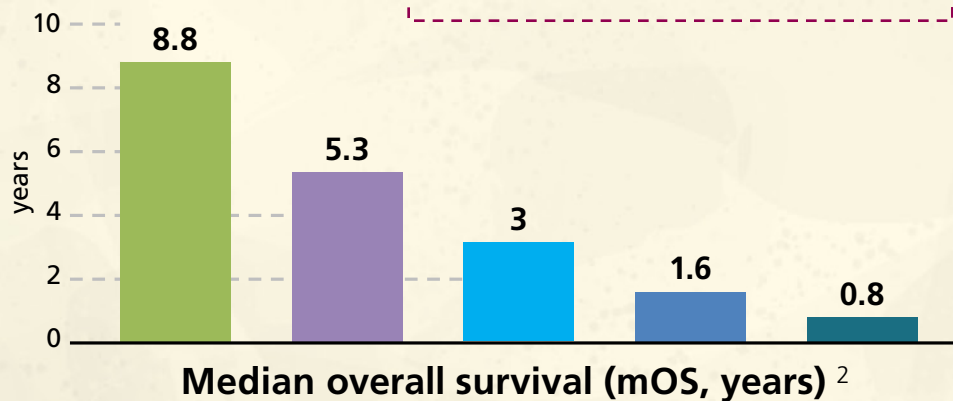
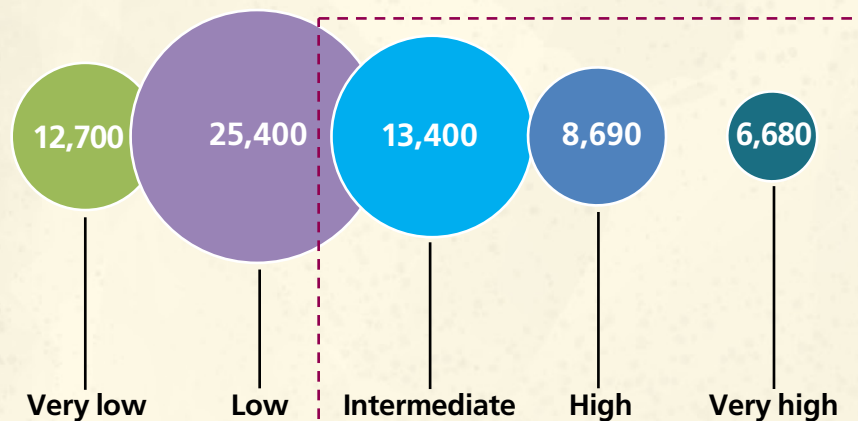
ALX148  
in  
MDS



ALX148 increases pro-phagocytic signal provided by azacitidine

# MDS OPPORTUNITY

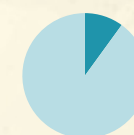
US Diagnosed Prevalent Cases <sup>1</sup>



## Higher Risk (HR) MDS



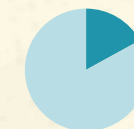
Bone marrow transplant



**<10%**  
Receive  
allogeneic transplant <sup>3</sup>



Azacitidine,  
Decitabine



**17%**  
Treated with azacitidine  
achieve a CR <sup>4</sup>

## Overall MDS



Nearly all pts  
transfused due  
to cytopenias



**41 of 100**  
Will die  
from cytopenia-related causes <sup>5</sup>

**Higher risk MDS patients are an area of high unmet need.**



# CD47 BLOCKADE IS CLINICALLY VALIDATED WITH SIGNIFICANT OPPORTUNITY TO IMPROVE ON MAGROLIMAB

Best Overall Response	1L MDS N=33
ORR	30 (91%)
CR	➔ 14 (42%)
CRi	NA
PR	1 (3%)
MLFS/marrow CR	8 (24%) 4 with marrow CR + HI
Hematologic improvement (HI)	7 (21%)
SD	3 (9%)
PD	0

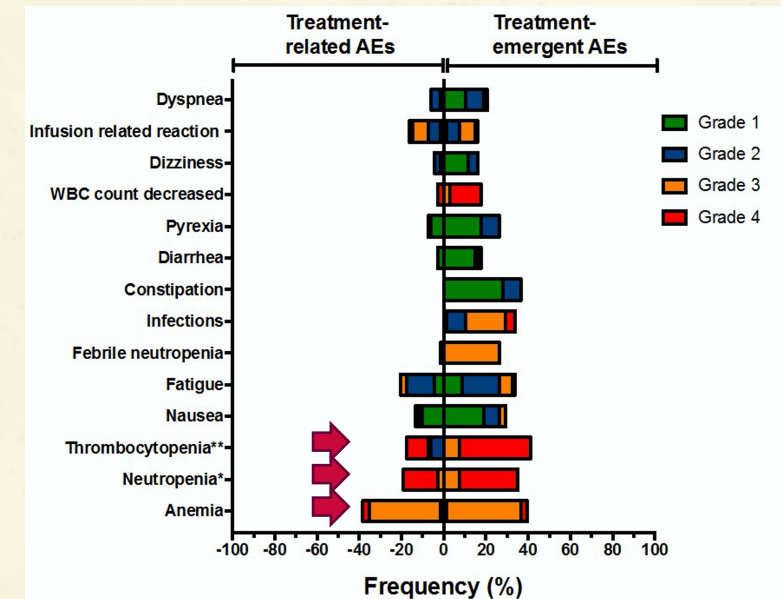
## Magrolimab with azacitidine

Sallman, ASCO 2020

Best Overall Response	R/R AML/MDS 5F9 mono N=10
ORR	1 (10%)
CR	➔ 0
CRi	0
PR	0
MLFS/ marrow CR	1 (10%)
HI	-
SD	7(70%)
PD	2 (20%)

## Magrolimab monotherapy

Sallman, ASCO 2019



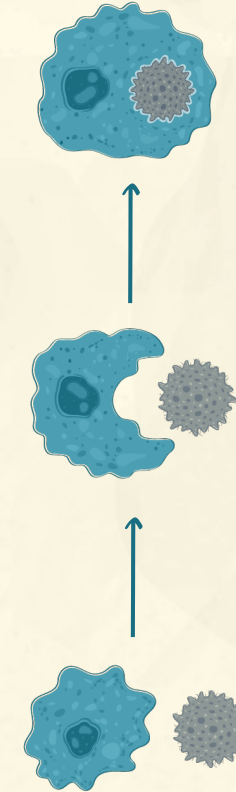
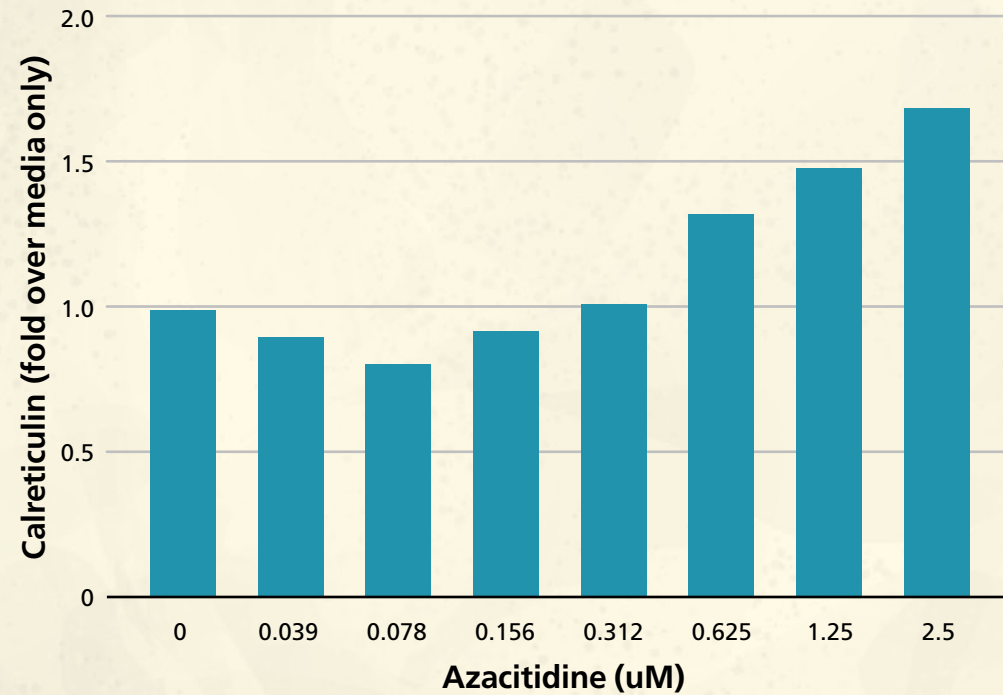
All grade TRAEs: 38% Anemia  
19% Neutropenia  
18% Thrombocytopenia

Sallman, ASCO 2020

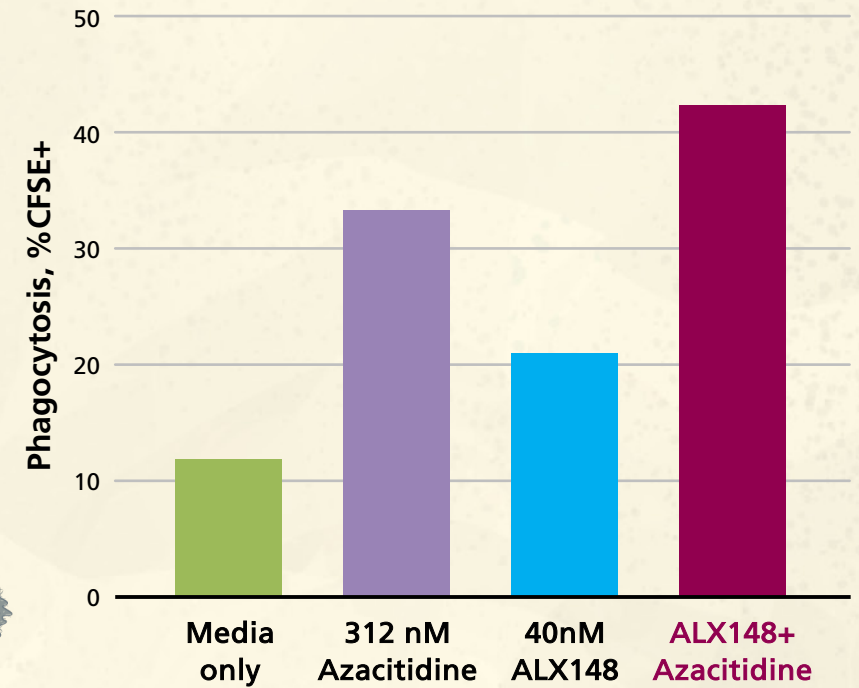
CD47 blocker 5F9 (magrolimab) shows complete responses only when paired with azacitidine, and causes frequent incidence of treatment-related, high-grade cytopenia

# PRECLINICAL: ALX148 INCREASES PHAGOCYTOSIS OF BACKBONE MDS DRUG, AZACITIDINE

Calreticulin levels on HL60 Cells



Phagocytosis of HL60 Cells

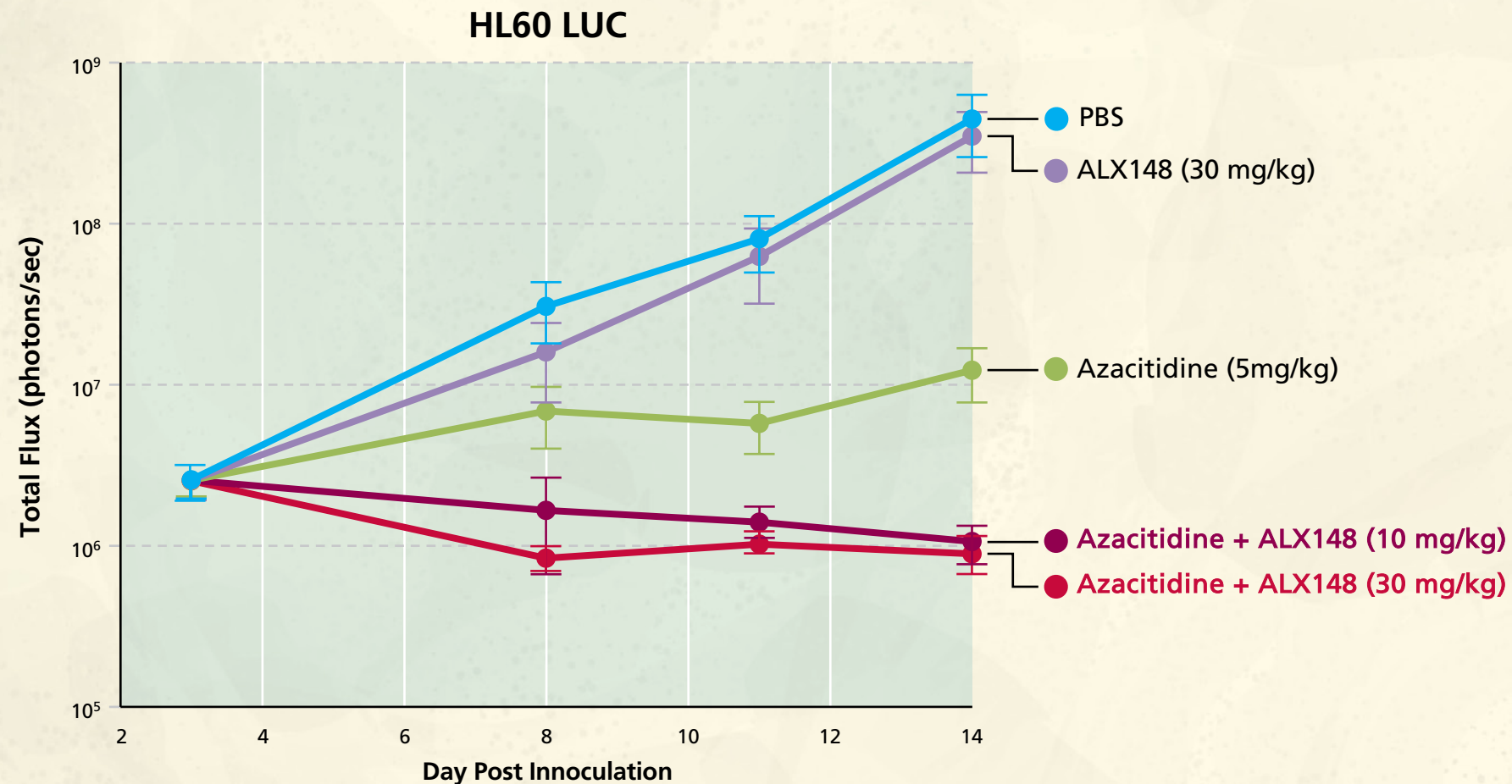


Azacitidine induces calreticulin display.

ALX148 increases phagocytosis in combination with azacitidine.

# ALX148 INCREASES TUMOR INHIBITION OF AZACITIDINE

ALX148  
in  
MDS

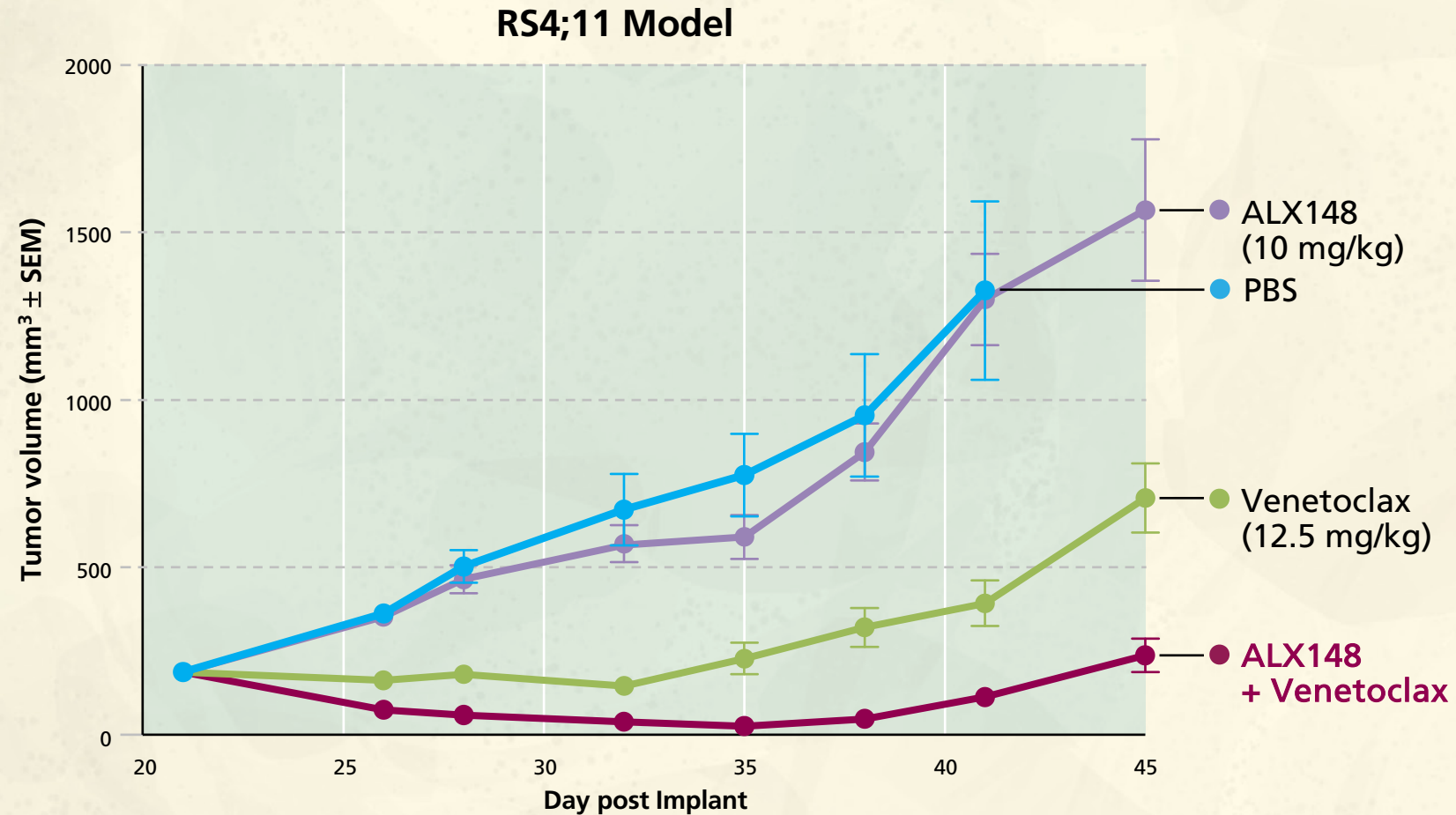


Combination  
opportunity in MDS  
and AML

Disseminated AML mouse model

# ALX148 INCREASES TUMOR INHIBITION OF VENETOCLAX

ALX148  
in  
MDS



Combination  
opportunity  
in AML



# MDS TRIAL PLANS

## Phase 1 trial



Patients:

**N=~24**

R/R and treatment naïve  
IPSS-R intermediate,  
high, very high risk MDS



Treatment:

**ALX148**

20 mg/kg (Q2W)  
30 mg/kg (Q2W)  
or 60 mg/kg (Q4W)

+

**Azacitidine**

75 mg/m<sup>2</sup> daily for 7 days  
of 28 day cycle



Endpoint:

- safety of combination

## Phase 2 trial



Patients:

Treatment naïve  
IPSS-R intermediate, high,  
very high risk MDS



Treatment:

**ALX148**

Recommended phase 2 dose  
+  
**Azacitidine**

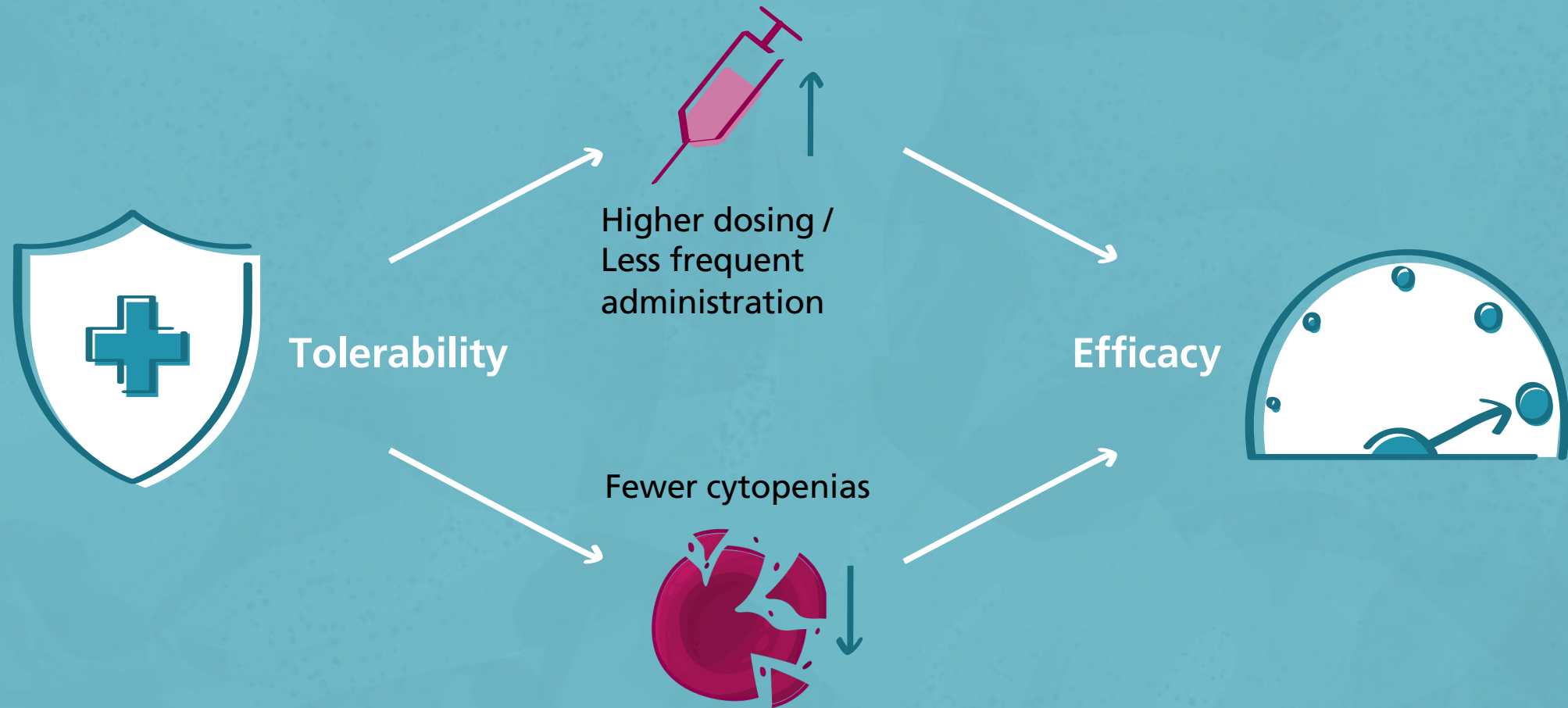


Endpoint:

- objective response rate (CR+PR)

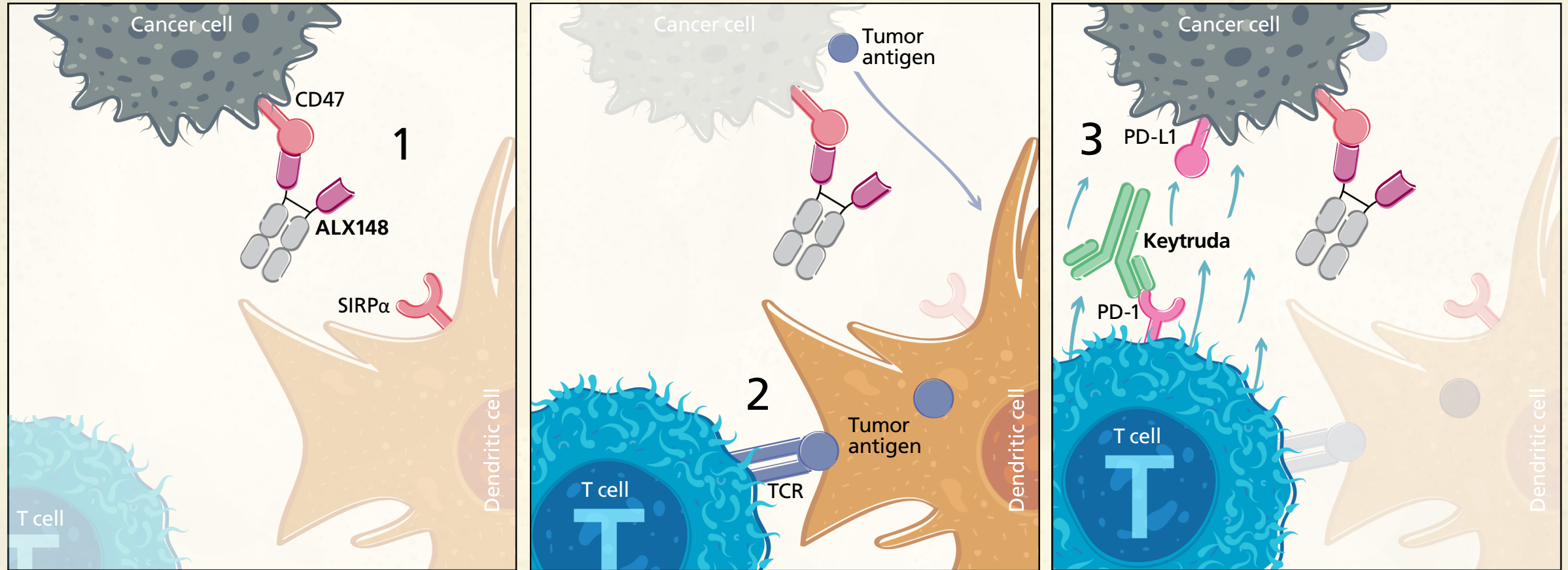
# ALX148 DIFFERENTIATION POTENTIAL ENABLED BY TOLERABILITY

ALX148  
in  
MDS



# HNSCC TRIAL: ALX148 + KEYTRUDA MECHANISM OF ACTION

ALX148  
in  
HNSCC



**ALX148 activates dendritic cells and enhances cross-priming of T cells**

# HNSCC STANDARD OF CARE & OPPORTUNITY

	ORR	mPFS (months)	mOS (months)	≥Gr3 TRAEs
<b>1L</b> <b>Keytruda + chemo<sup>1</sup></b> (KEYNOTE 048)	<b>36%</b>	<b>4.9</b>	<b>13.0</b>	<b>72%<sup>2</sup></b>
<b>Keytruda monotherapy</b> (KEYNOTE 048)	<b>17%</b>	<b>2.3</b>	<b>11.5</b>	<b>17%</b>
<b>2L</b> <b>Keytruda monotherapy</b> (KEYNOTE 040)	<b>15%</b>	<b>2.1</b>	<b>8.4</b>	<b>13%</b>

- Keytruda monotherapy ORR of 15% in 2L
- Significant unmet need
- Increasing use of Keytruda monotherapy <sup>3</sup>
- Keytruda 2019 WW Sales \$11.1B <sup>4</sup>

<sup>1</sup>5FU + cisplatin or carboplatin.

<sup>2</sup>83% occurrence in chemo control arm.

<sup>3</sup>Wiley 2019, Real-world treatment patterns for patients with metastatic head and neck squamous cell carcinoma treated with immuno-oncology therapy.

<sup>4</sup>Merck 10-K 26Feb2020



# HNSCC TRIAL

## Phase 1b HNSCC trial:

 **Response  
evaluable patients**

**N=20:** recurrent/metastatic HNSCC,  
at least one prior systemic therapy

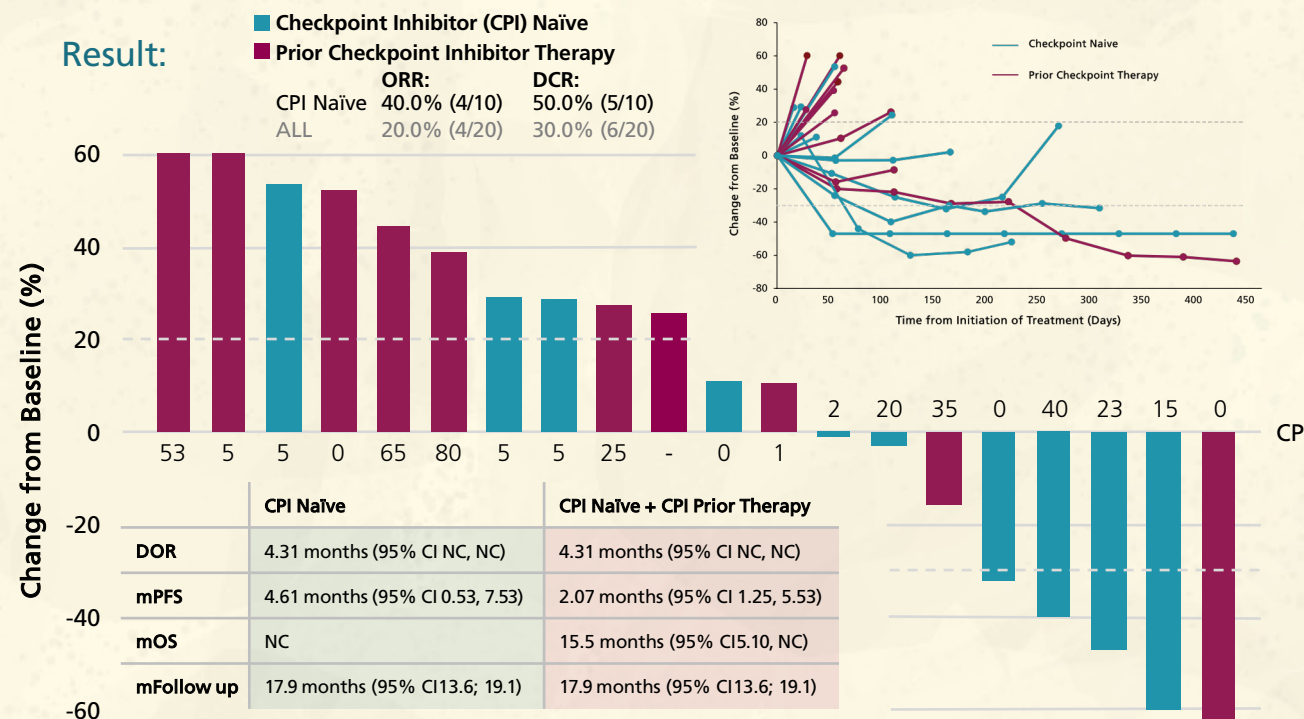
 **Treatment:**

**ALX148** 10 mg/kg once a week (QW)  
+  
**Keytruda**  
200 mg every three weeks (Q3W)

 **Endpoints:**

- maximum tolerated dose
- anti-cancer activity

**Result:**



**FDA granted ALX148 Fast Track designation for first-line treatment of patients with HNSCC**

**Notes:** Data Cutoff 1 April 2020. Patients who received at least one dose of ALX148 in the expansion phase, had a baseline assessment, and at least one post-baseline disease assessment.

**ORR** = Overall Response Rate. **DCR** = Disease Control Rate. **CPS** = Combined Positive Score.

# DEVELOPMENT PLAN – FIRST LINE HEAD & NECK CANCER

ALX148  
+  
Keytruda

## Phase 2 trial:



N=53



ALX148 45 mg/kg (Q3W)  
+ Keytruda



N=27



Keytruda

(Safety lead-in, if necessary)

ALX148  
+  
Keytruda  
+  
Chemo

## Phase 1b dose confirmation:



Treatment:

ALX148 10 & 15 mg/kg (QW)  
+ Keytruda  
+ 5FU  
+ Cisplatin or carboplatin

## Phase 2 trial:

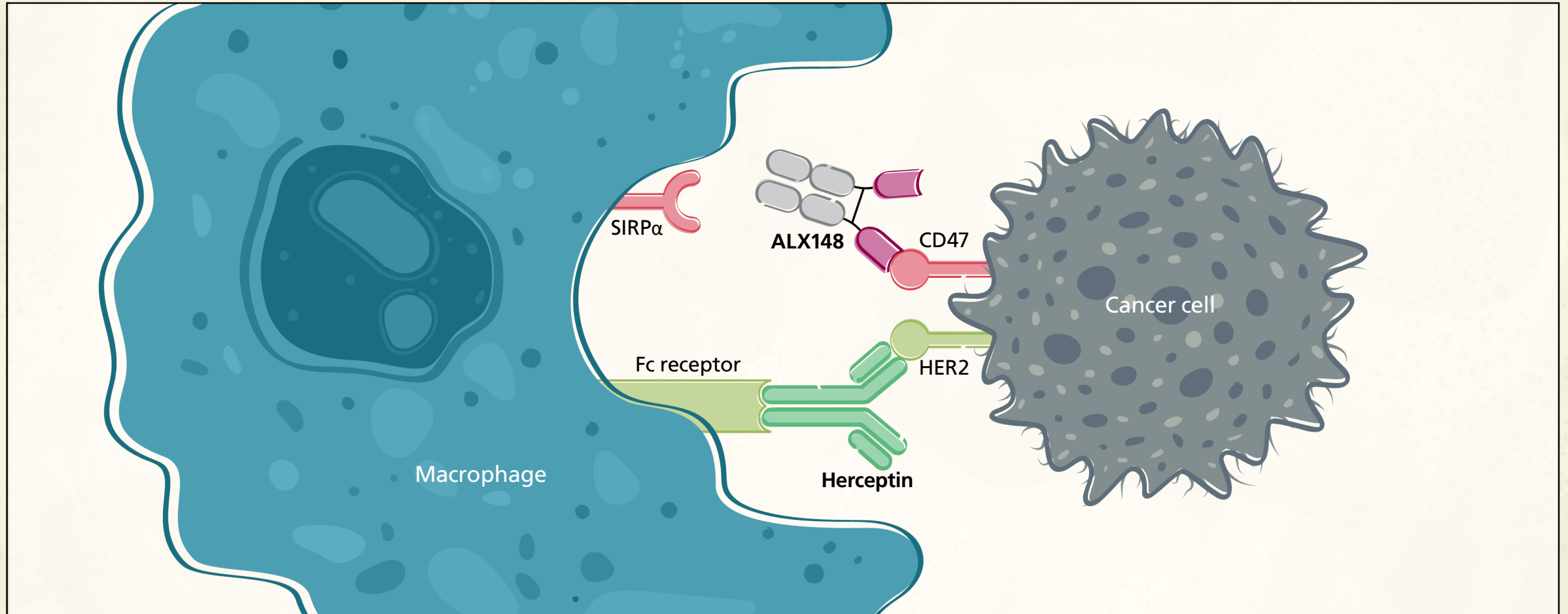


ALX148 45 mg/kg (Q3W)  
+ Keytruda  
+ 5FU  
+ Cisplatin or carboplatin



+ Keytruda  
+ 5FU  
+ Cisplatin or carboplatin

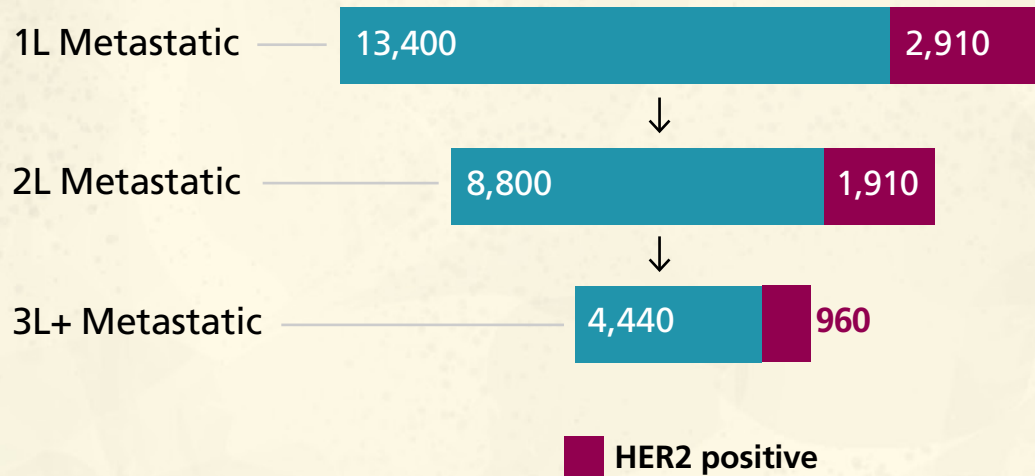
# GASTRIC TRIAL: ALX148 + HERCEPTIN MECHANISM OF ACTION



ALX148 increases phagocytosis in combination with Herceptin

# HER2 POSITIVE GASTRIC CANCER UNMET NEED

2020 US patient population  
by line of systemic therapy<sup>1</sup>



- Herceptin is an anti-HER2 antibody that has multiple FDA approvals in patients with HER2 positive cancers.
- Clinical trials show that re-treatment with Herceptin has no activity in 2L HER2 positive gastric cancer.<sup>3</sup>

5-year OS in metastatic gastric cancer is only 6%<sup>2</sup>



# GASTRIC/GEJ CLINICAL TRIAL

## Phase 1b Gastric/GEJ trial:

 Response  
evaluable patients

**N=19** R/R HER2 positive gastric/GEJ

 Treatment:

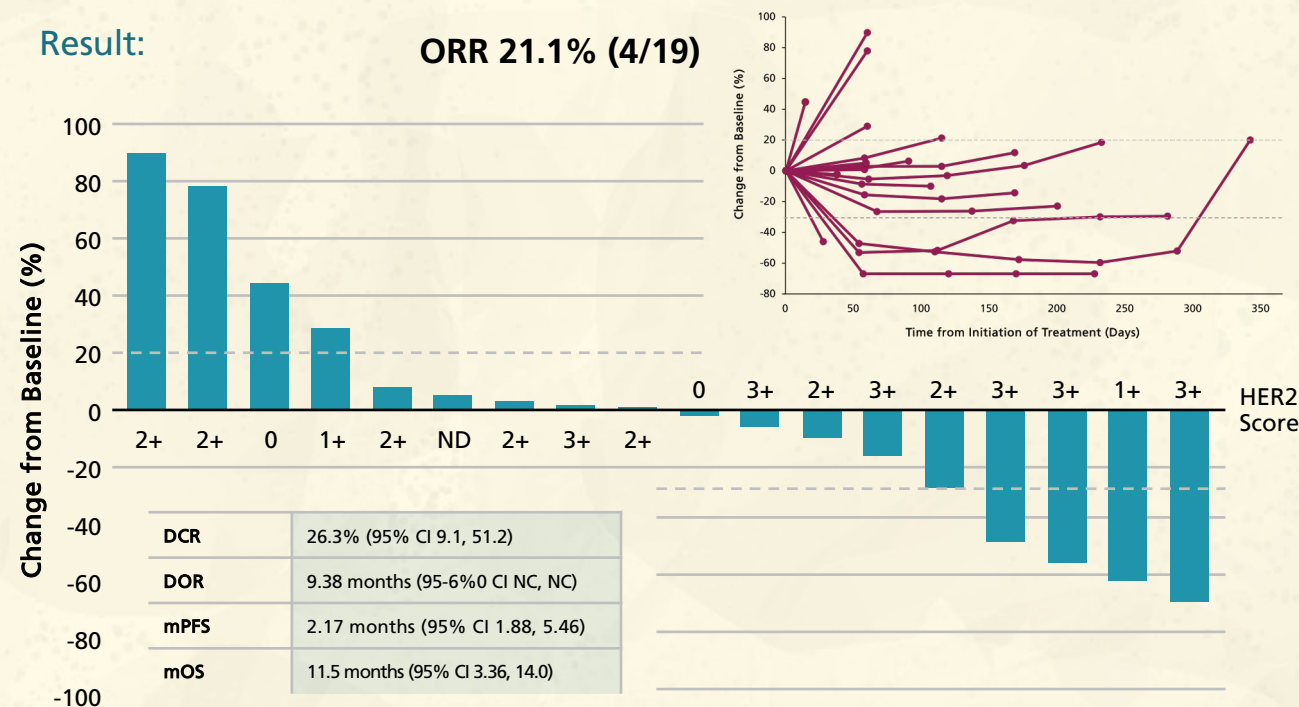
**ALX148** 10 mg/kg once a week (QW)  
+ **Herceptin**  
8 mg/kg once, then  
6 mg/kg every three weeks (Q3W)

 Endpoints:

- maximum tolerated dose
- anti-cancer activity

Result:

**ORR 21.1% (4/19)**



**FDA granted ALX148 fast track designation for second-line treatment of HER2-positive gastric/GEJ carcinoma**

**Notes:** Data Cutoff 1 April 2020. Patients who received at least one dose of ALX148 in the expansion phase, had a baseline assessment, and at least one post-baseline disease assessment; One patient with clinical progression not included in plots.

**ORR** = Overall Response Rate. **ND** = Not Done. **HER2** Score retrospectively assessed using archival tissue by a central IHC lab.

## Ongoing Phase 1b higher dose + chemo trial:



**Patients:**

R/R HER2 positive gastric/GEJ,  
2L or greater with prior  
Herceptin treatment



**Treatment:**

**ALX148** 10 and 15 mg/kg (QW)  
+ **Herceptin**  
+ **Cyramza**  
+ **Paclitaxel**



**Endpoint:**

- safety of combination

## Planned Phase 2 higher dose trial (randomized, non-comparative):



**Patients:** Treatment naive HER2 positive gastric/GEJ



**Treatment:**

**Arm 1 (N=69):**

**ALX148** 45 mg/kg (Q3W)

+ **Herceptin**

+ **platin**

+ **5FU**

or **capecitabine**

**Control (N=35):**

–

+ **Herceptin**

+ **platin**

+ **5FU**

or **capecitabine**



**Endpoint:**

- progression free survival at 7 months

# CLINICAL SUMMARY



**ALX148 tolerability profile  
enables combination with  
range of agents**

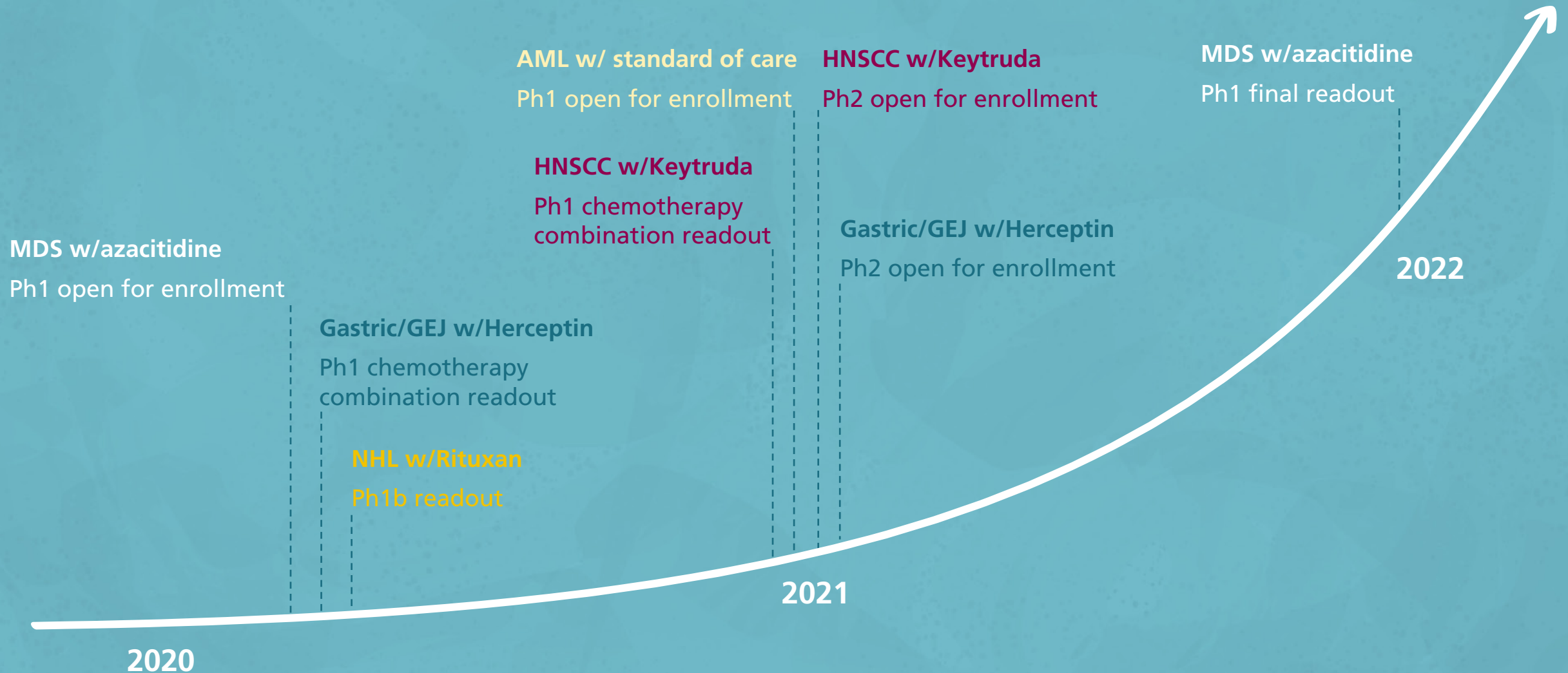


**Higher dosing and  
smaller molecular weight  
facilitate tumor penetration  
for greater efficacy**



**ALX148 is the  
only CD47 blocker to show  
encouraging response data in  
solid tumor indications**

# DEVELOPMENT PROGRESS AND FUTURE PLANS





# WHY INVEST IN ALX ONCOLOGY



**CD47 is a novel immune checkpoint pathway with clinical proof-of-concept**



**World class team and investor syndicate**



**Clinical proof-of-principle in hematologic and solid tumors**



**ALX148 is a CD47 blocker with potential for greater efficacy and tolerability due to unique mechanism of action**