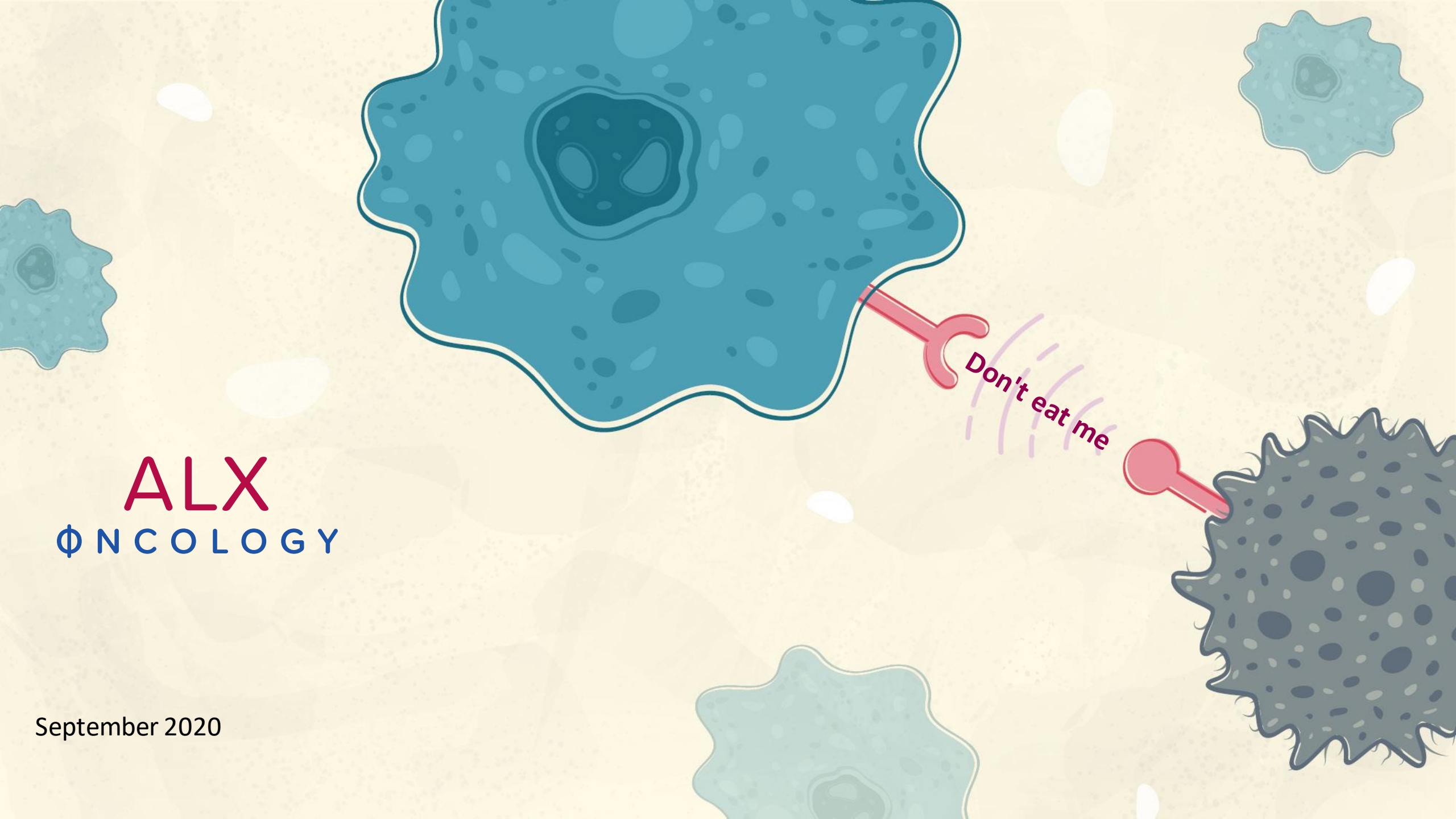

ALX ONCOLOGY

September 2020

DISCLAIMER

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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Because forward-looking statements are inherently subject to risks and uncertainties, some of which cannot be predicted or quantified, you should not rely upon forward-looking statements as predictions of future events. The events and circumstances reflected in our forward-looking statements may not be achieved or occur and actual results could differ materially from those projected in the forward-looking statements. Except as required by law, we undertake no obligation to update publicly any forward-looking statements for any reason after the date of this presentation.

In addition, statements that "we believe" and similar statements reflect our beliefs and opinions on the relevant subject. These statements are based upon information available to us as of the date of this presentation, and while we believe such information forms a reasonable basis for such statements, such information may be limited or incomplete, and our statements should not be read to indicate that we have conducted an exhaustive inquiry into, or review of, all potentially available relevant information. These statements are inherently uncertain and investors are cautioned not to unduly rely upon these statements.

This presentation concerns drugs that are under clinical investigation and which have not yet been approved for marketing by the FDA. It is currently limited by Federal law to investigational use, and no representation is made as to its safety or effectiveness for the purposes for which it is being investigated.

This presentation also contains estimates and other statistical data made by independent parties and by us relating to market size and growth and other data about our industry. This data involves a number of assumptions and limitations, and you are cautioned not to give undue weight to such estimates. In addition, projections, assumptions, and estimates of our future performance and the future performance of the markets in which we operate are necessarily subject to a high degree of uncertainty and risk.

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OVERVIEW

ALX Oncology (Nasdaq: ALXO) is a clinical-stage immuno-oncology company focused on helping patients fight cancer by developing therapies that block the CD47 checkpoint pathway and bridge the innate and adaptive immune system

Lead product candidate, 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

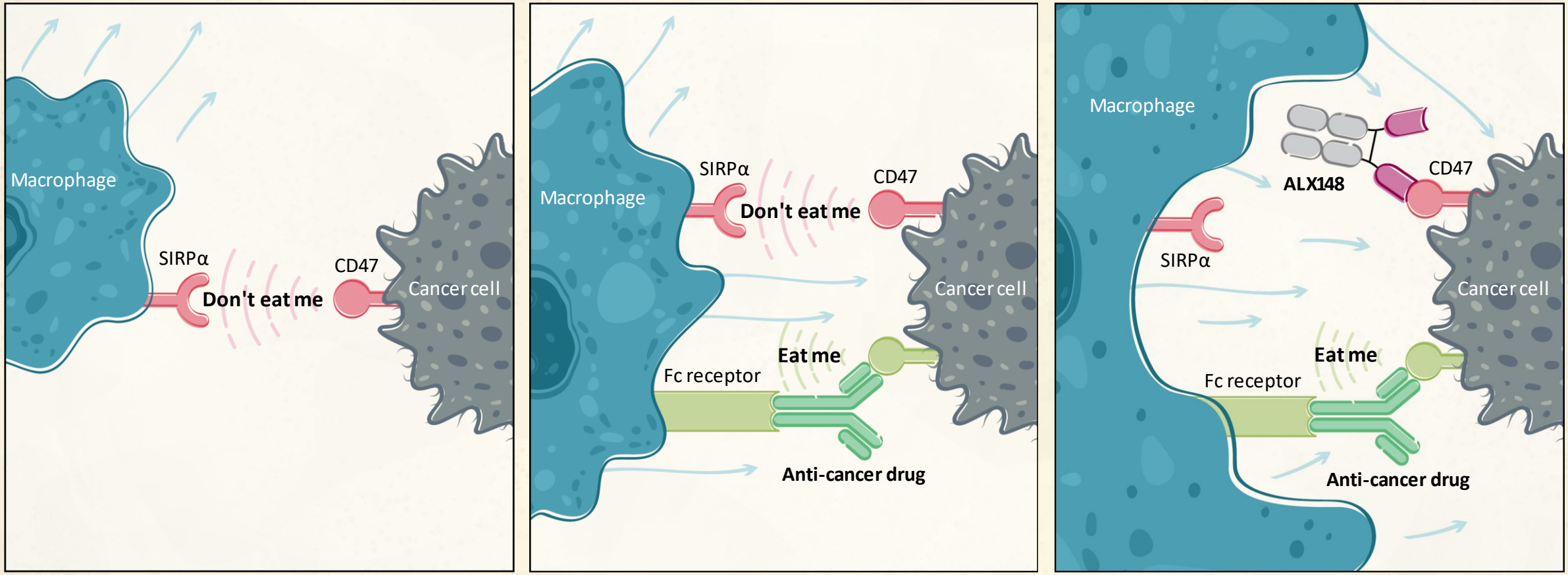
Initial focus on MDS, AML and solid tumors

ALX148: MECHANISM OF ACTION

Basal state:

Anti-cancer drug alone:

ALX148 combined with anti-cancer drug:



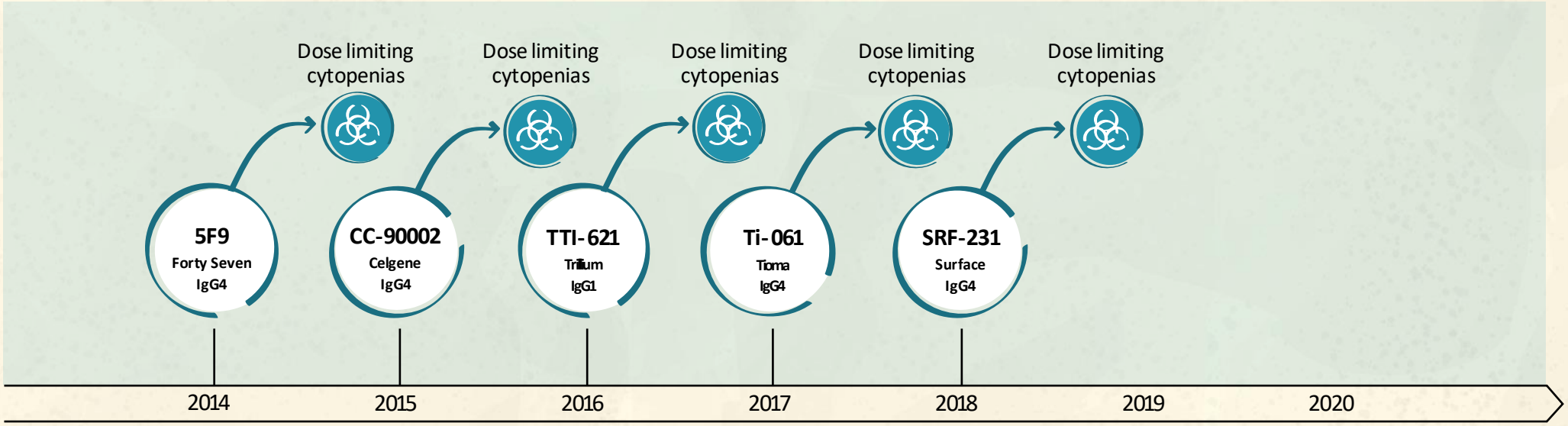
ALX148 designed to work with partner anti-cancer drugs to maximize phagocytosis of cancer cells

CD47 BLOCKER DEVELOPMENT

CD47 as a therapeutic target

Weissman / van den Berg

2009-2011



Source: K. Weiskopf, European Journal of Cancer 76 (2017) 100-109

CD47 BLOCKER DEVELOPMENT

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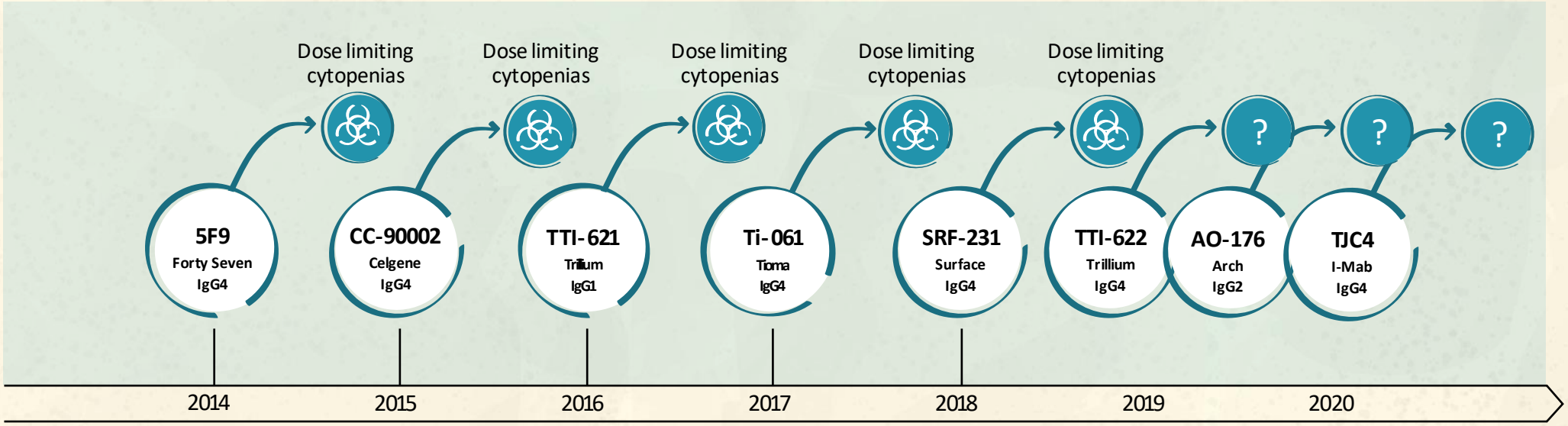

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CD47 BLOCKER DEVELOPMENT

CD47 as a therapeutic target

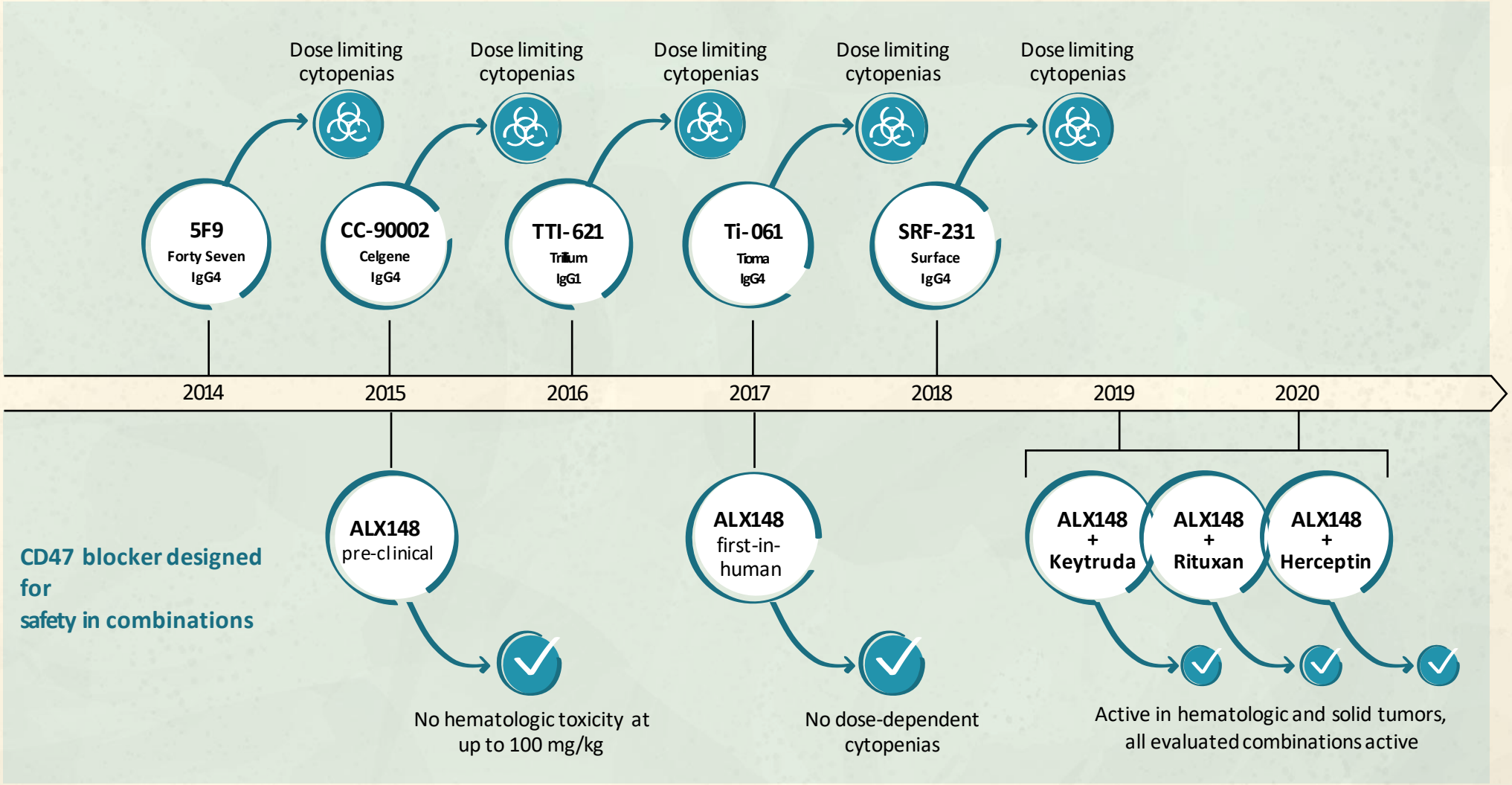
Weissman / van den Berg

2009-2011

Blocking without Fc avoids cytopenias

Garcia

2013



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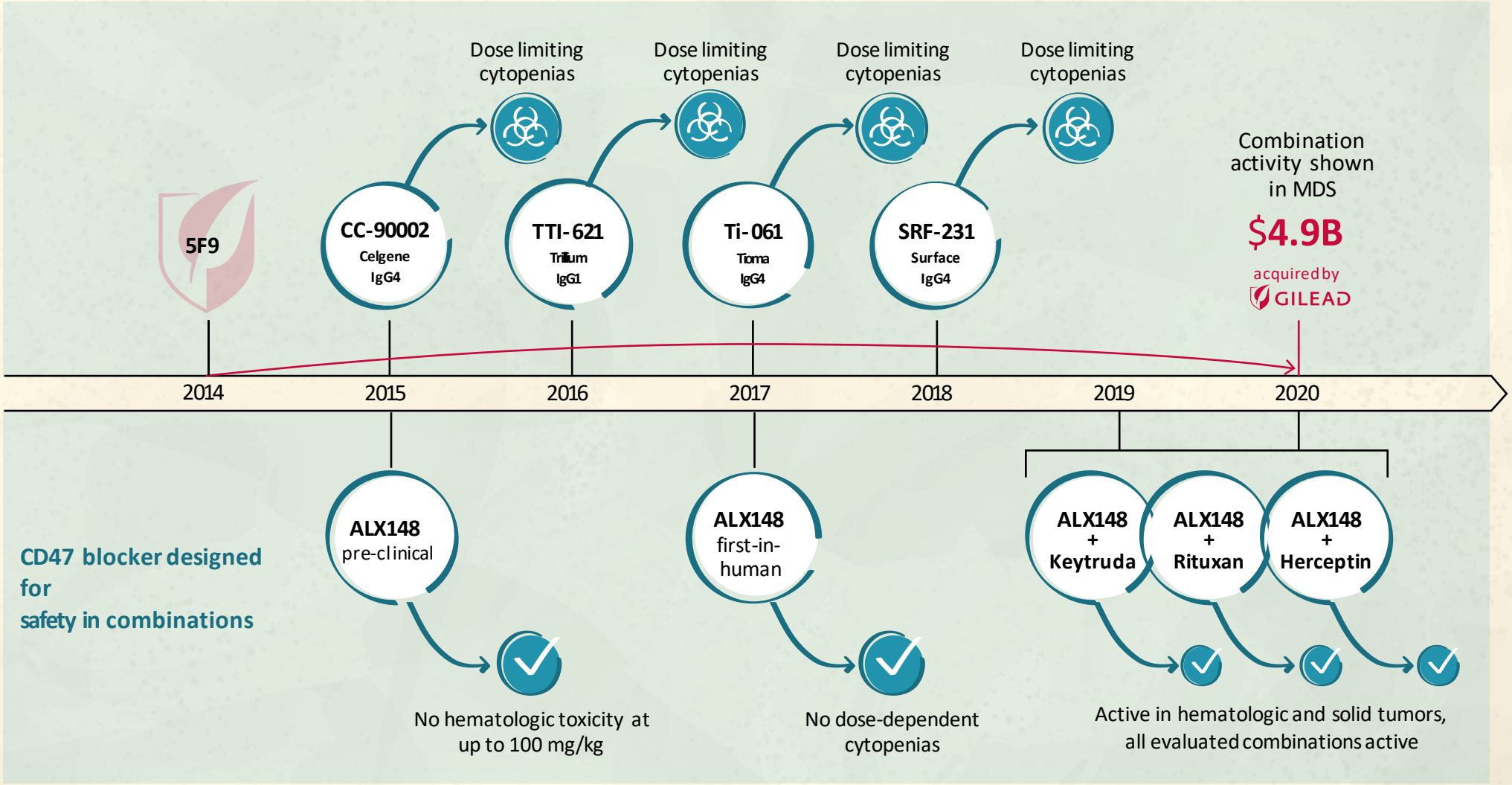
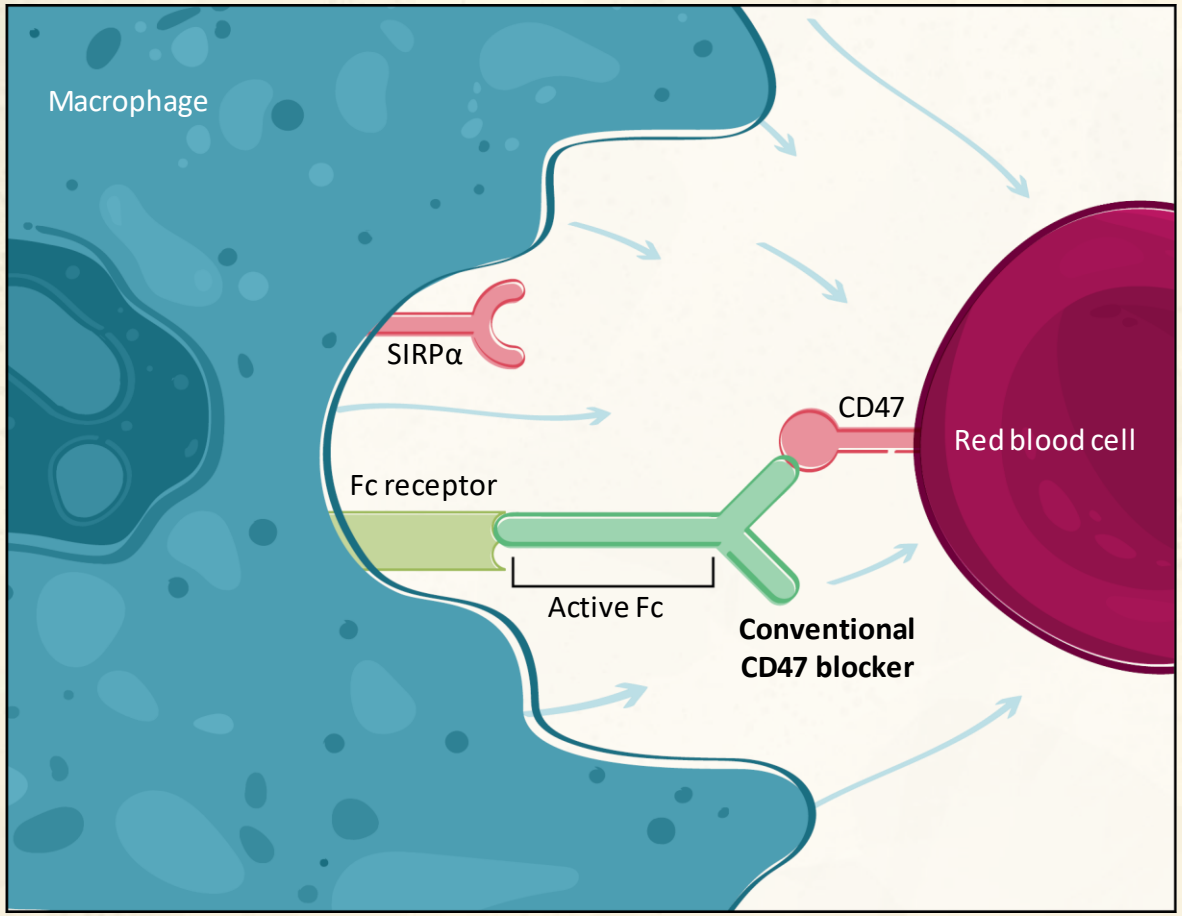


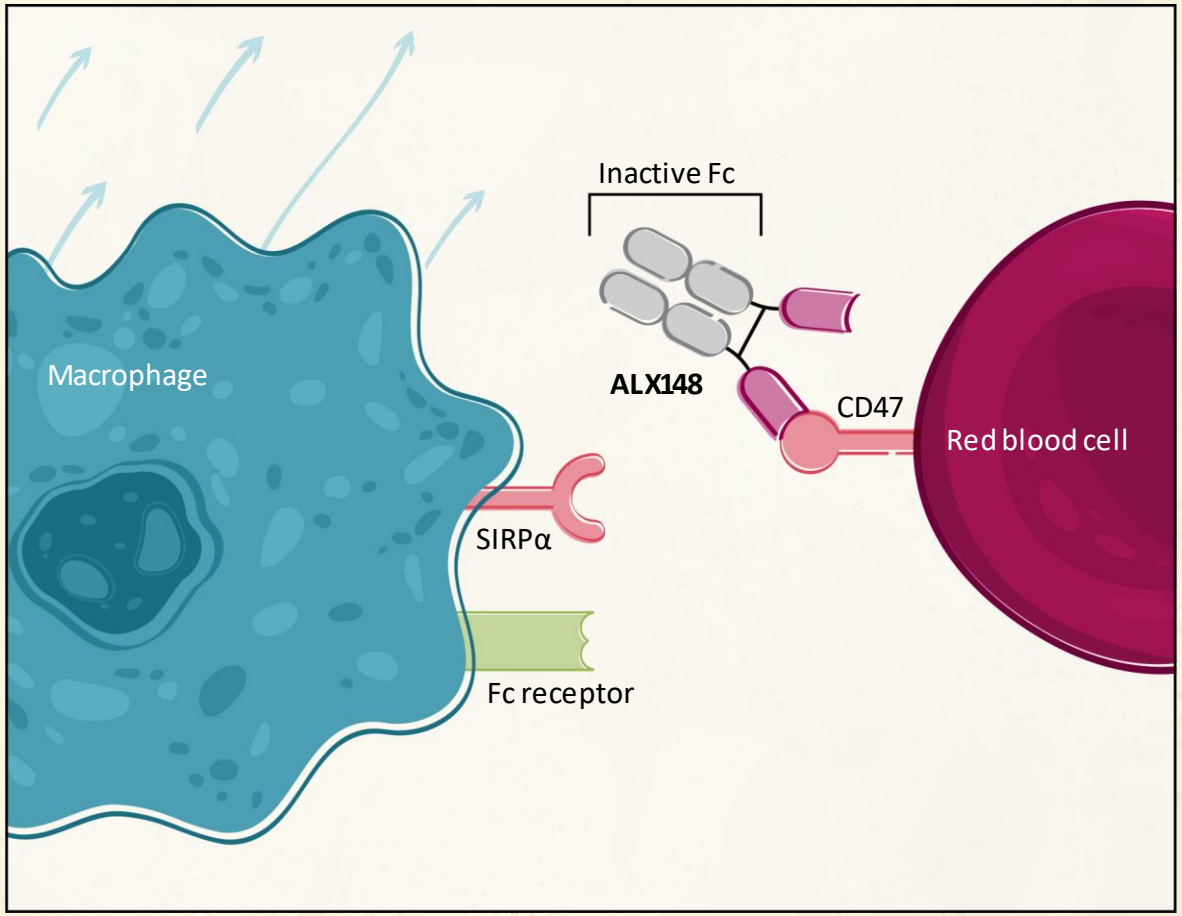
Source: K. Weiskopf, European Journal of Cancer 76 (2017) 100-109

ALX148 IS DESIGNED TO AVOID HEMATOLOGIC TOXICITY

CD47 blockers with an active Fc result incytopenias:



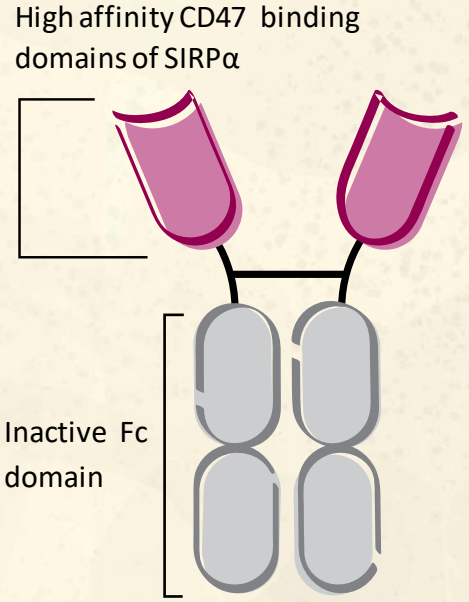
ALX148 with an inactive Fc mitigates cytopenias:



ALX148: METICULOUSLY DESIGNED CD47 BLOCKER

High affinity CD47 binding domain of SIRPα	→	**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



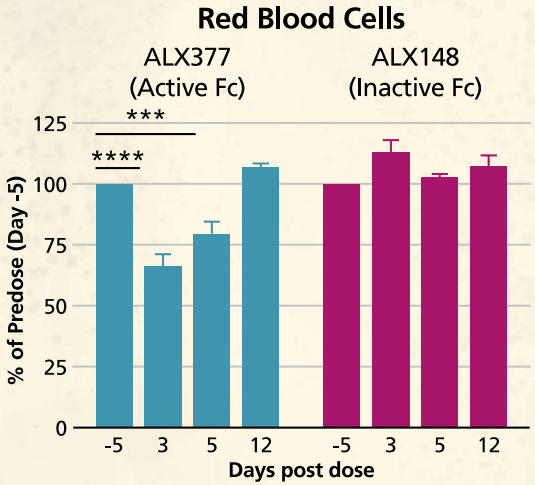
- ~Half the molecular weight of an antibody
- Increases solid tumor penetration
- Standard antibody manufacturing process

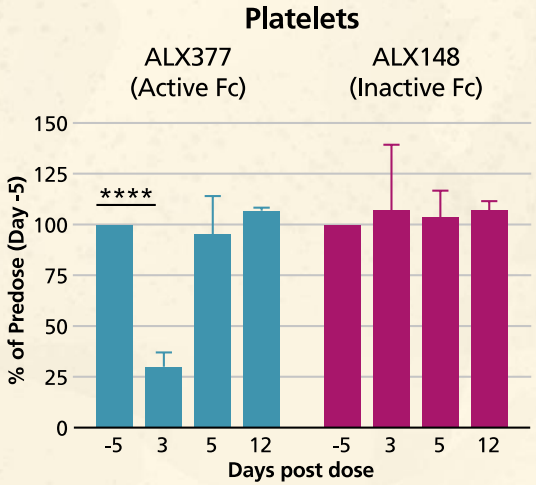
STRONG INTELLECTUAL PROPERTY

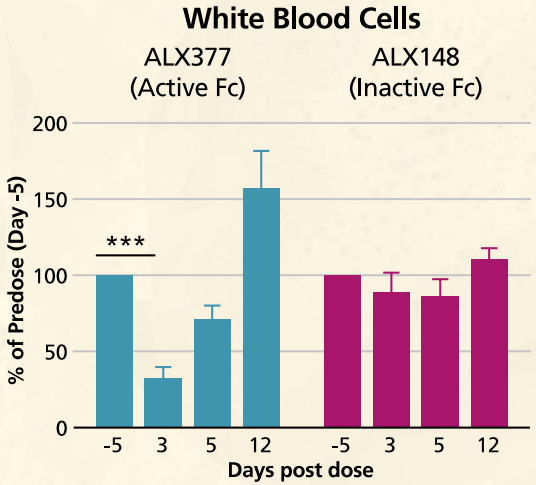
Robust patent position

- COM patent expiry: 2036 (w/o PTE)
- U.S. patent 10,259,859 granted
- Exclusive, worldwide rights to high affinity SIRPα licensed from Stanford
- Key IP generated in-house
- Non-exclusive, worldwide rights to a broad background CD47 patent portfolio from Stanford

INACTIVE FC SHOWS REDUCED CYTOPENIA IN MICE





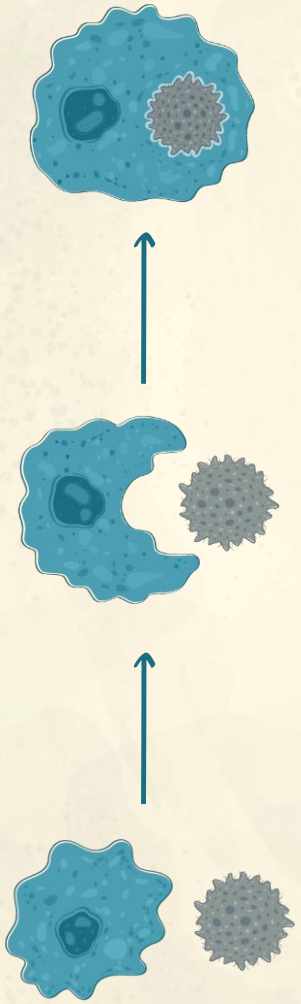


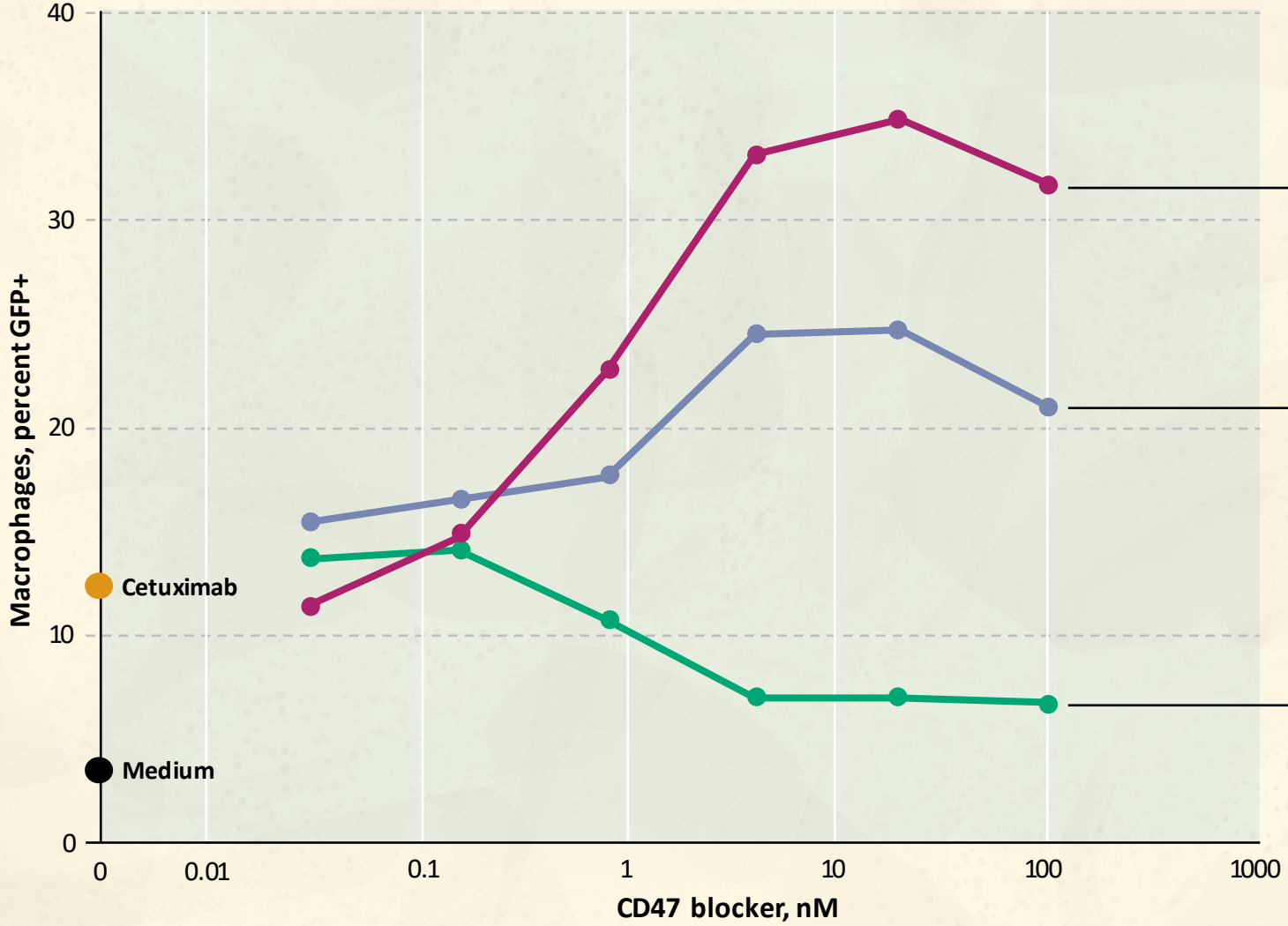
CD-1 mice received 30 mg/kg IV single dose

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

Inactive Fc is the core determinant of safety profile

ALX148 DEMONSTRATES SUPERIOR PHAGOCYTOSIS





ALX148 inactive Fc + Cetuximab

ADCP by cetuximab is enhanced by inactive Fc and high affinity

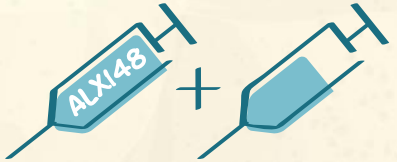
5F9 (Magrolimab) IgG4 + Cetuximab

Enhances ADCP with cetuximab but at lower levels

TTI-621 IgG1 + Cetuximab

Does not enhance ADCP in combination with cetuximab

ALX148 DEMONSTRATES FAVORABLE TOLERABILITY PROFILE

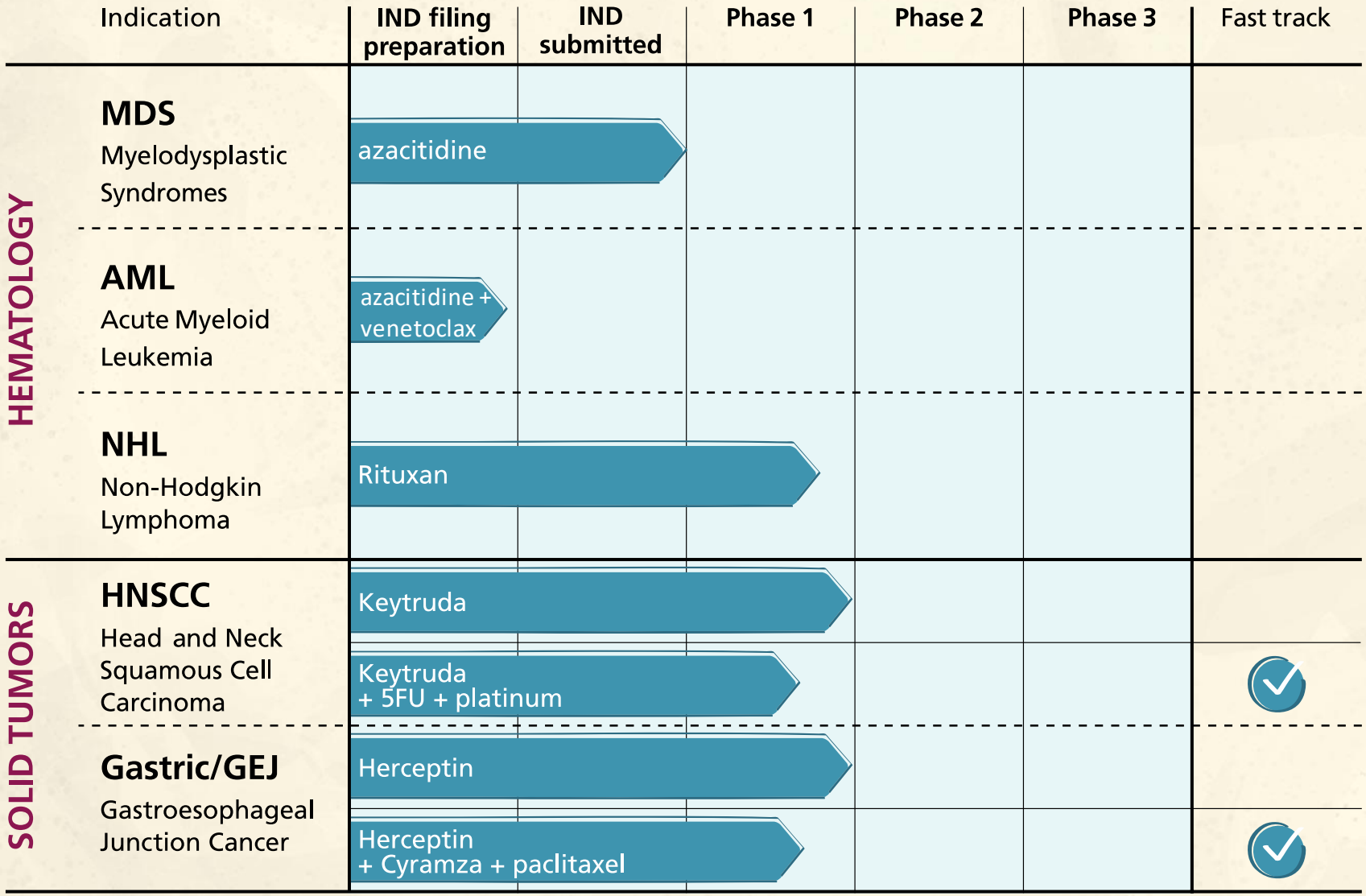


	Preclinical	Single agent	Combinations
Highest administered dose	**100 mg/kg** [1] with no observable adverse events	**30 mg/kg Q2W** No evidence of dose-dependent cytopenias	**15 mg/kg QW** currently dosed **60 mg/kg Q4W** planned

[1] 100 mg/kg of ALX148 ≅ 200 mg/kg of a typical antibody

ALX148 has not yet reached a maximum tolerated dose

PIPELINE



>150

patients dosed with ALX148 since 2017

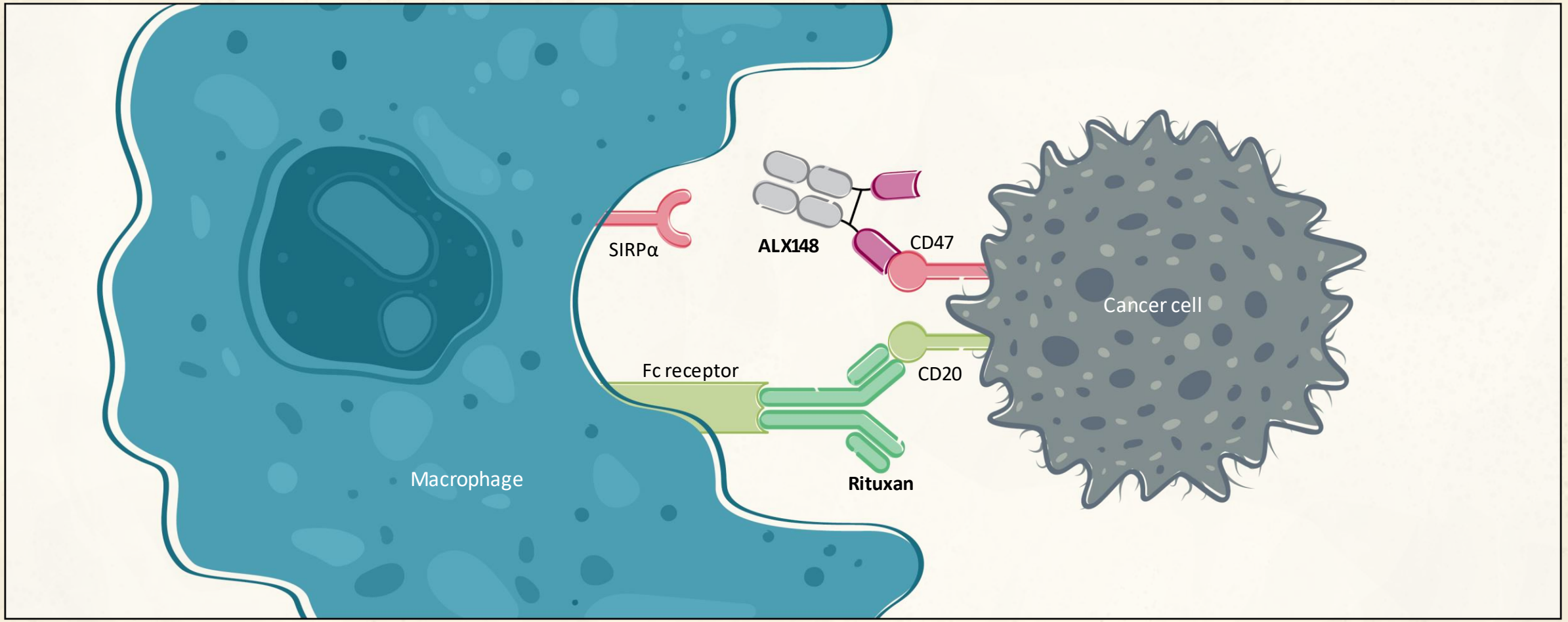
ALX148 DEMONSTRATES CONSISTENT TOLERABILITY PROFILE

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%)	-	-	-

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

Tolerability profile may enable broad combination potential

NHL TRIAL: ALX148 + RITUXAN MECHANISM OF ACTION



ALX148 increases phagocytosis in combination with Rituxan

NHL TOLERABILITY

Selected Hematologic, Treatment Related Adverse Events	ALX148 + Rituxan (N=33)[1]		CC-90002 + Rituxan (n=26)[2]		5F9 (magrolimab) + Rituxan (n=115)[3]	
	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%

[1]As of 1 April 2020
[2]Abstract 4089 ASH 2019
[3]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 **Weekly**	30 and 45 **Every Other Week**
ORR	48%	29%
CR	33%	5%
PR	14%	24%

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

Abstract S867 EHA 2019

Reduced dosing led to reduced overall response rate in NHL

NHL PROOF-OF-PRINCIPLE TRIAL

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^2 once a week
for 4 weeks,
once monthly for 8 months

	10 mg/kg QW		15 mg/kg QW	
Population	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

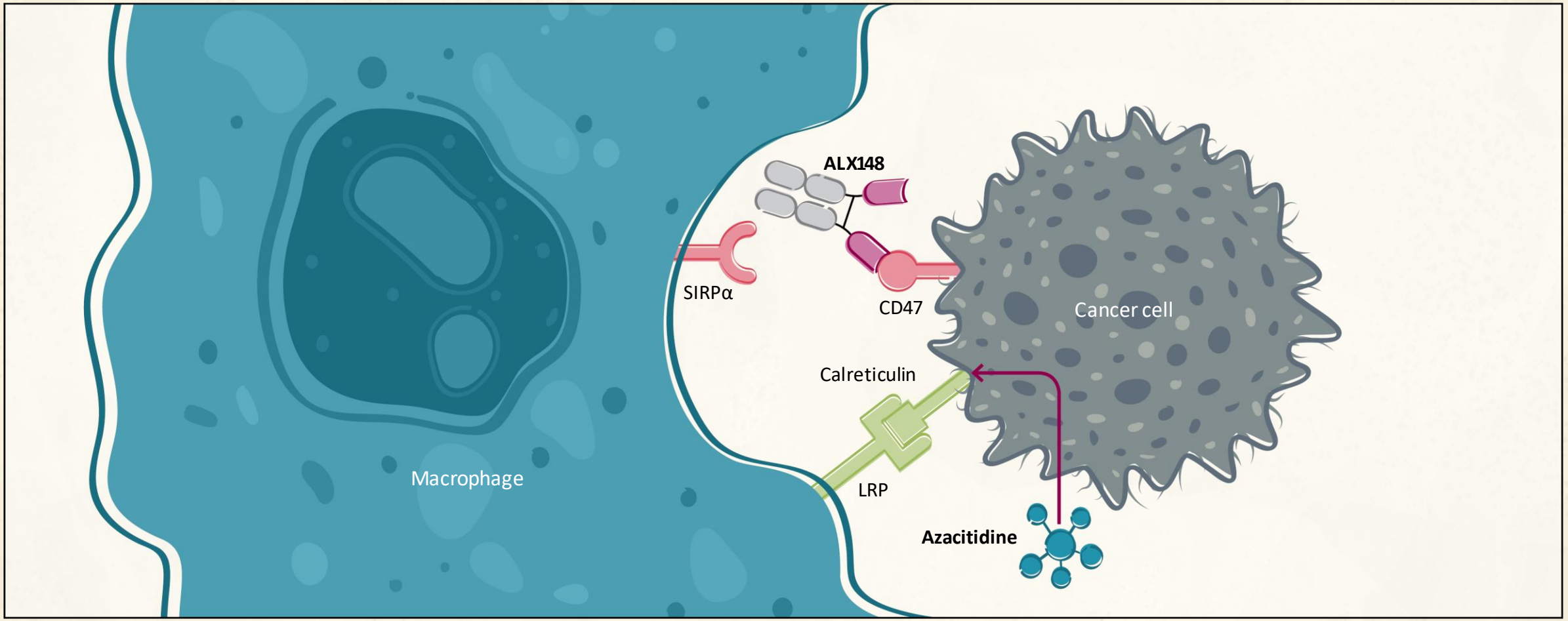
NON-HODGKIN LYMPHOMA PROOF-OF-PRINCIPLE SUMMARY

Other agents in CD47 class reduced dosing leading to reduced responses

Higher dosing enabled by ALX148 tolerability profile

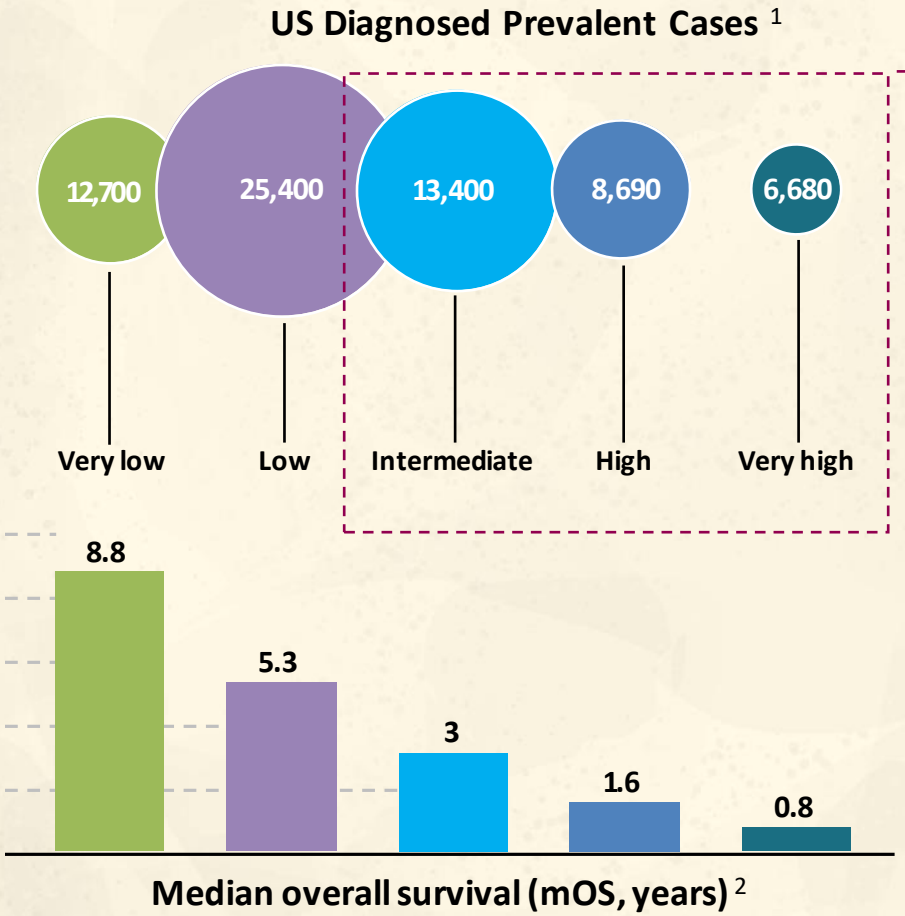
Higher dosing of ALX148 led to higher responses

MDS TRIAL: ALX148 + AZACITIDINE MECHANISM OF ACTION



ALX148 increases pro-phagocytic signal provided by azacitidine

MDS OPPORTUNITY



Higher Risk (HR) MDS

Bone marrow transplant

<10%
Receive allogeneic transplant [3]

Azacitidine, Decitabine

17%
Treated with azacitidine achieve a CR [4]

Overall MDS

Nearly all pts transfused due to cytopenias

41 of 100
Will die from cytopenia-related causes [5]

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

Revised international prognostic scoring system (IPSS-R).
[1]Estimated: Decision Resource Group 2019 MDS Report
[2]Greenberg, *Blood,* 2012
[3]Zeidan, *Leukemia & Lymphoma*, 2018
[4]Fenaux, *Lancet Oncology,* 2009
[5]Steensma, *Leukemia & Lymphoma,* 2015

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

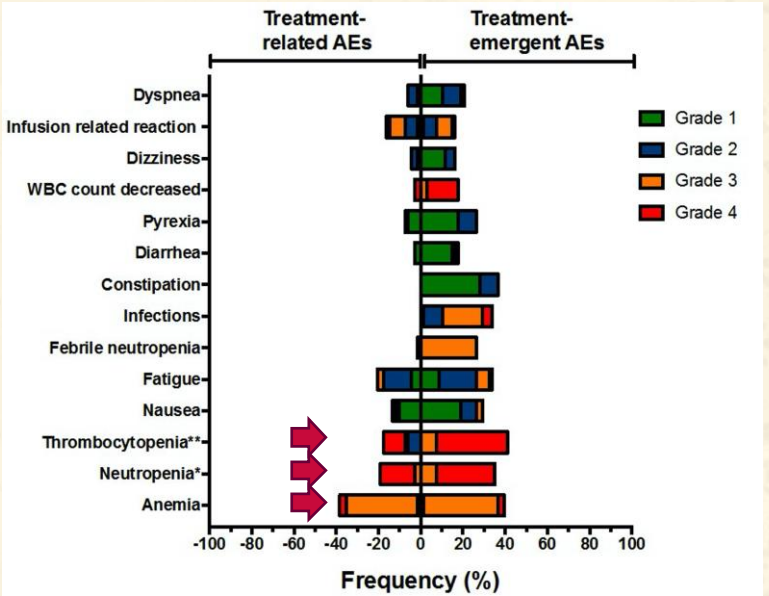
Magrolimab with azacitidine

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

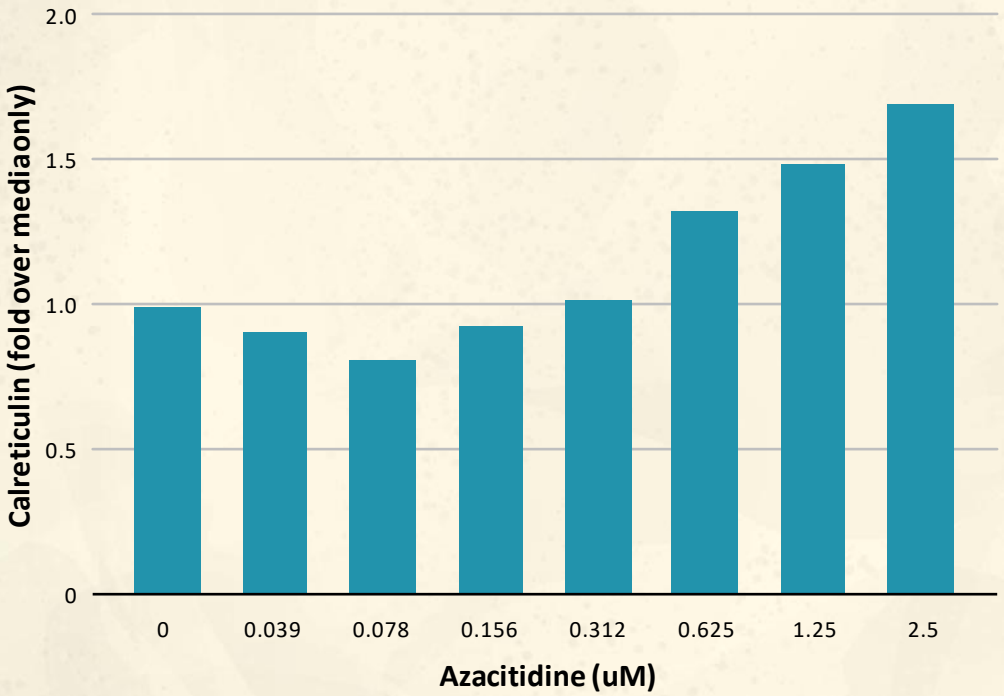
Sallman, ASCO 2020

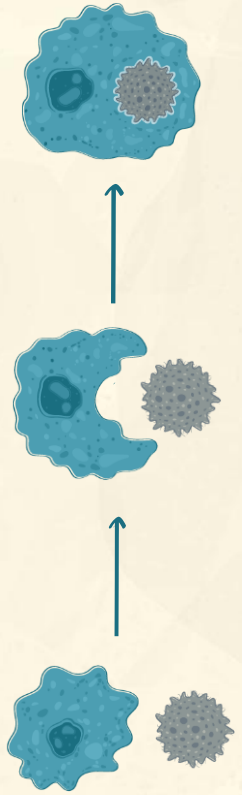
CD47 blocker 5F9 (magrolimab) shows complete responses only when paired with azacitidine, and causes frequent incidence of treatment-related, high-grade cytopenia

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

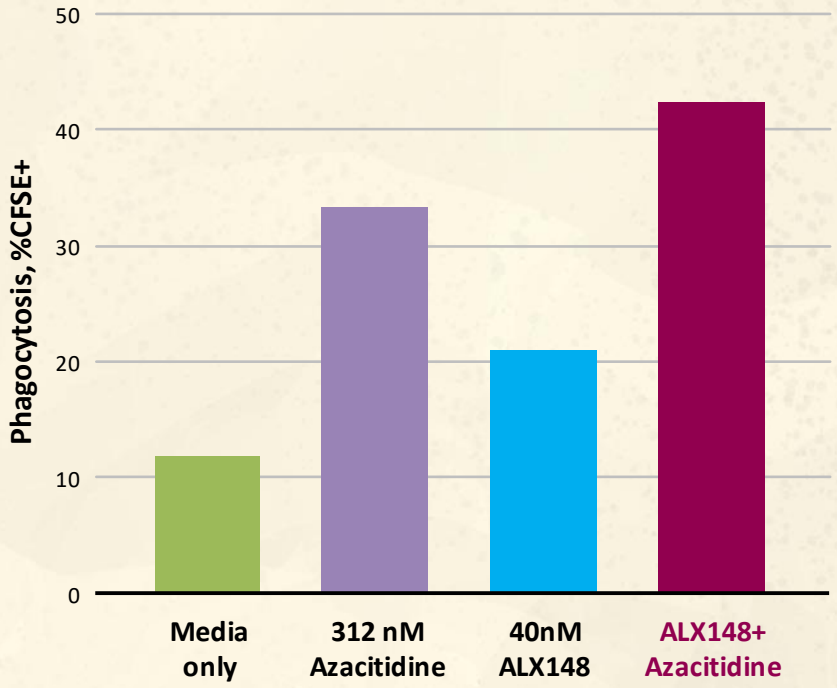
PRECLINICAL: ALX148 INCREASES PHAGOCYTOSIS OF BACKBONE MDS DRUG, AZACITIDINE

Calreticulin levels on HL60 Cells



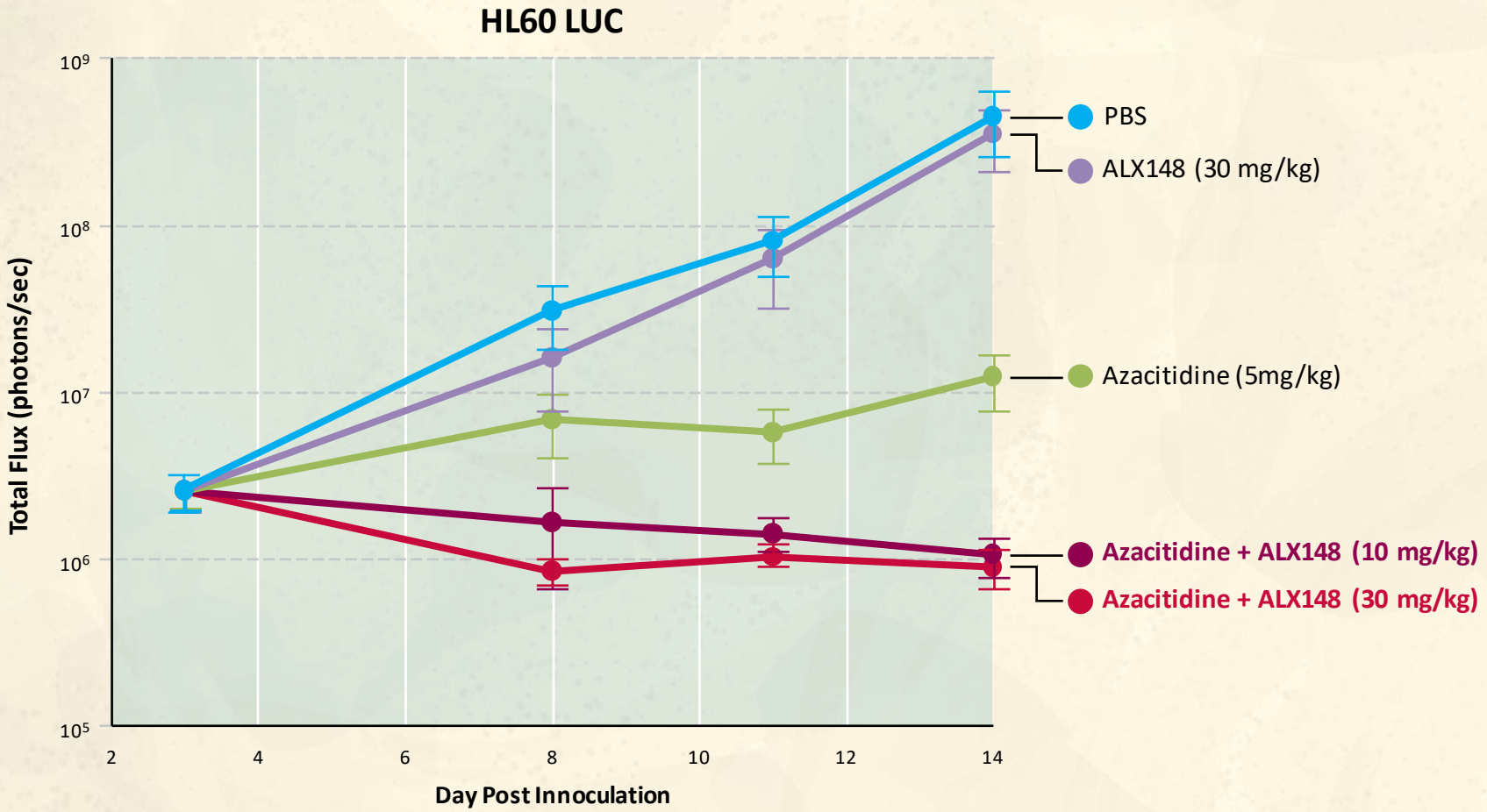


Phagocytosis of HL60 Cells



Azacitidine induces calreticulin display.
ALX148 increases phagocytosis in combination with azacitidine.

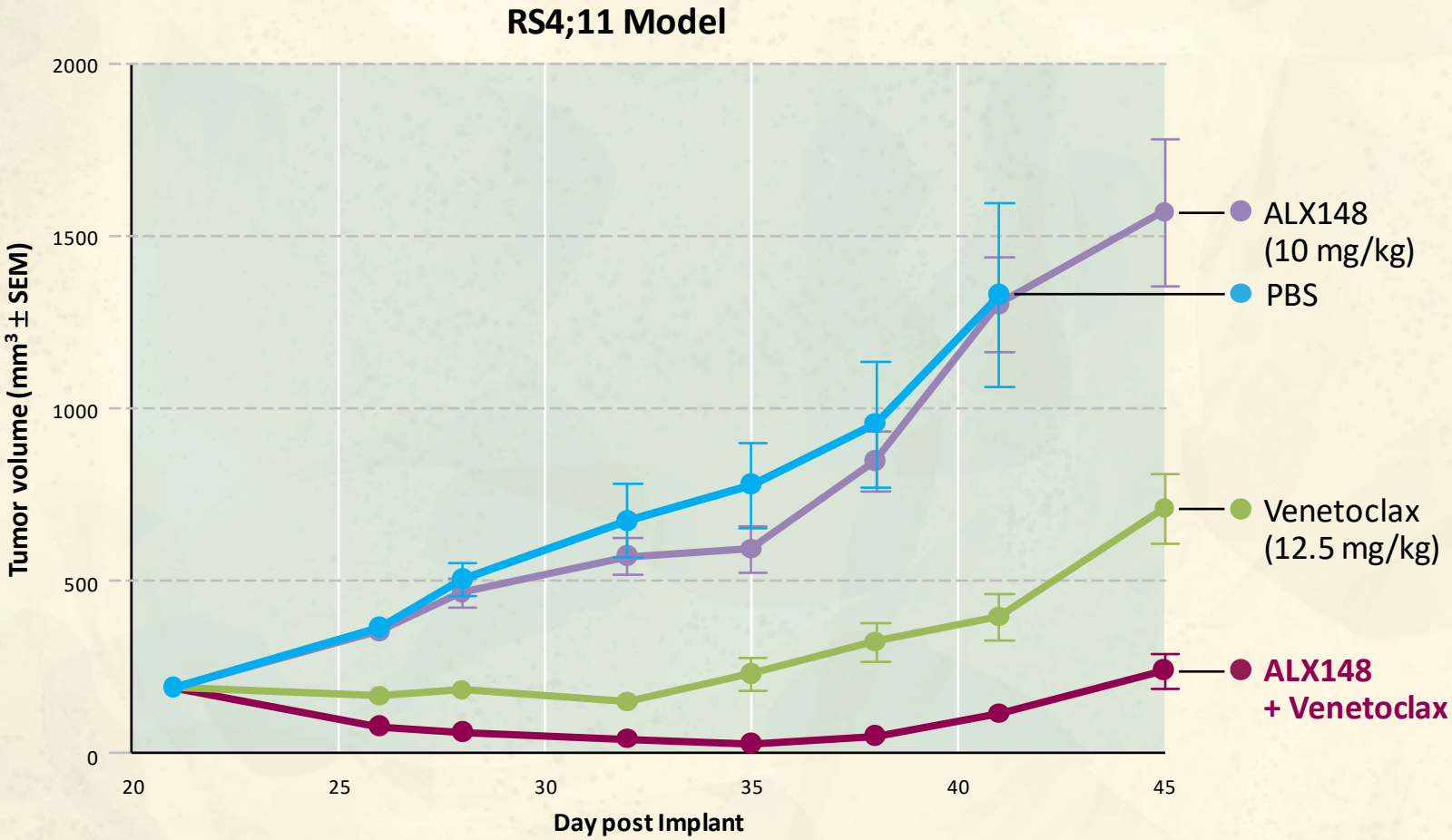
ALX148 INCREASES TUMOR INHIBITION OF AZACITIDINE



Disseminated AML mouse model

Combination opportunity in MDS and AML

ALX148 INCREASES TUMOR INHIBITION OF VENETOCLAX



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^2 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

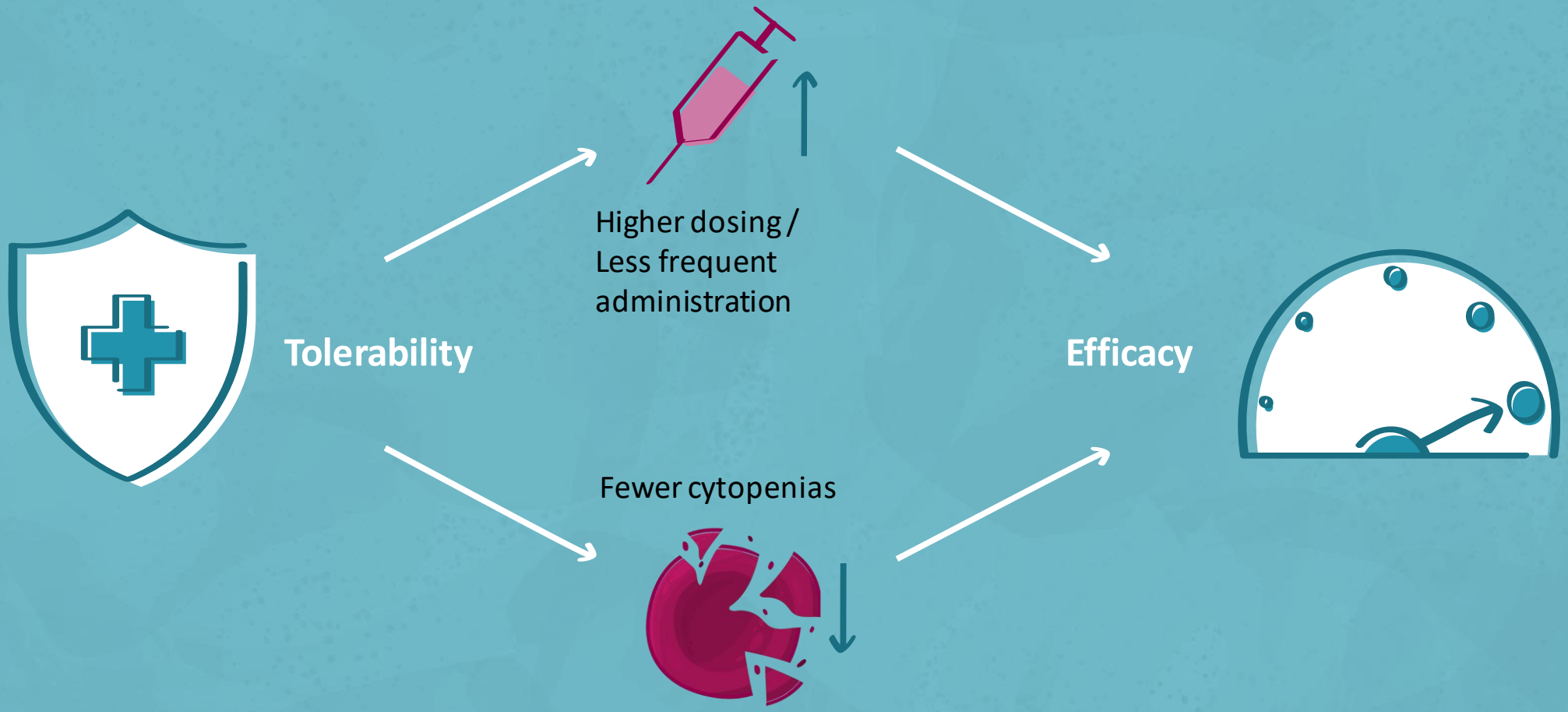
+

Azacitidine

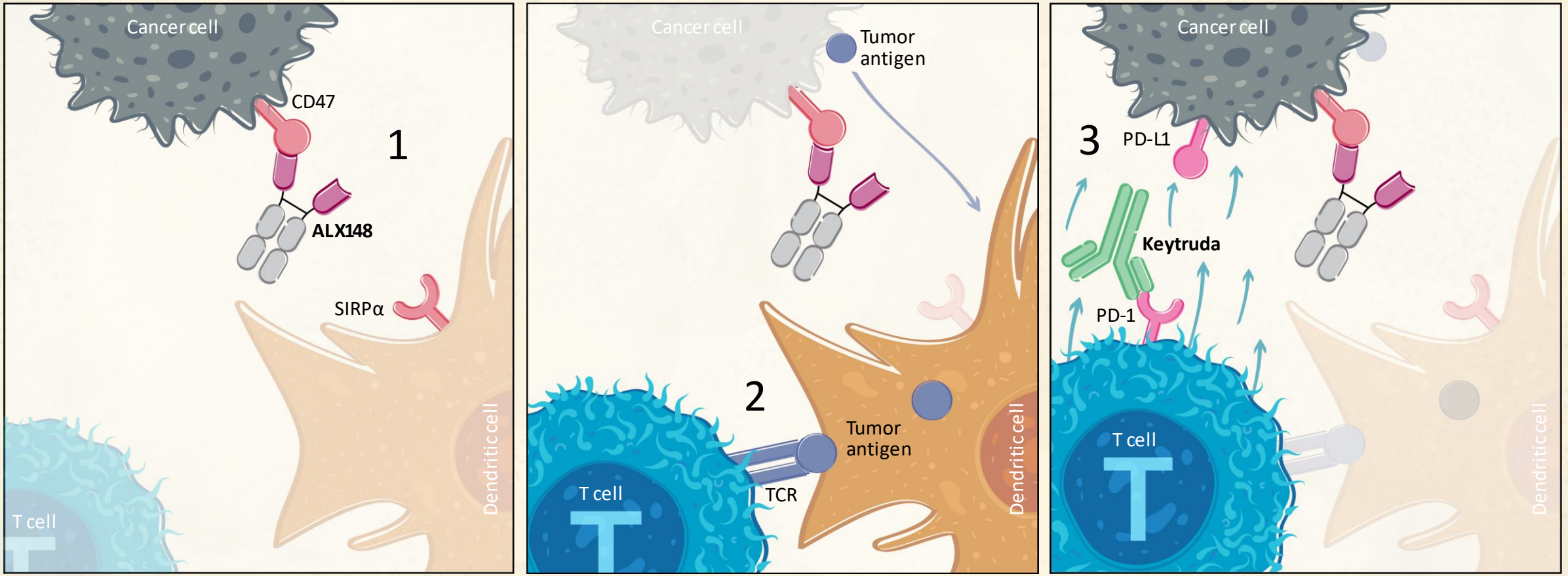
Endpoint:

- objective response rate (CR+PR)

ALX148 DIFFERENTIATION POTENTIAL ENABLED BY TOLERABILITY



HNSCC TRIAL: ALX148 + KEYTRUDA MECHANISM OF ACTION



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

HNSCC STANDARD OF CARE & OPPORTUNITY

		ORR	mPFS (months)	mOS (months)	≥Gr3 TRAEs
1L	**Keytruda** + chemo[1] (KEYNOTE 048)	**36%**	**4.9**	**13.0**	**72%[2]**
	Keytruda monotherapy (KEYNOTE 048)	**17%**	**2.3**	**11.5**	**17%**
2L	**Keytruda monotherapy** (KEYNOTE 040)	**15%**	**2.1**	**8.4**	**13%**

- Keytruda monotherapy ORR of 15% in 2L
- Significant unmet need
- Increasing use of Keytruda monotherapy [3]
- Keytruda 2019 WW Sales $11.1B [4]

[1]5FU + cisplatin or carboplatin.
[2]83% occurrence in chemo control arm.
[3]Wiley 2019, Real-world treatment patterns for patients with metastatic head and neck squamous cell carcinoma treated with immuno-oncology therapy.
[4]Merck 10-K 26Feb2020

HNSCC TRIAL

Phase 1b HNSCC trial:

Response evaluable patients

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

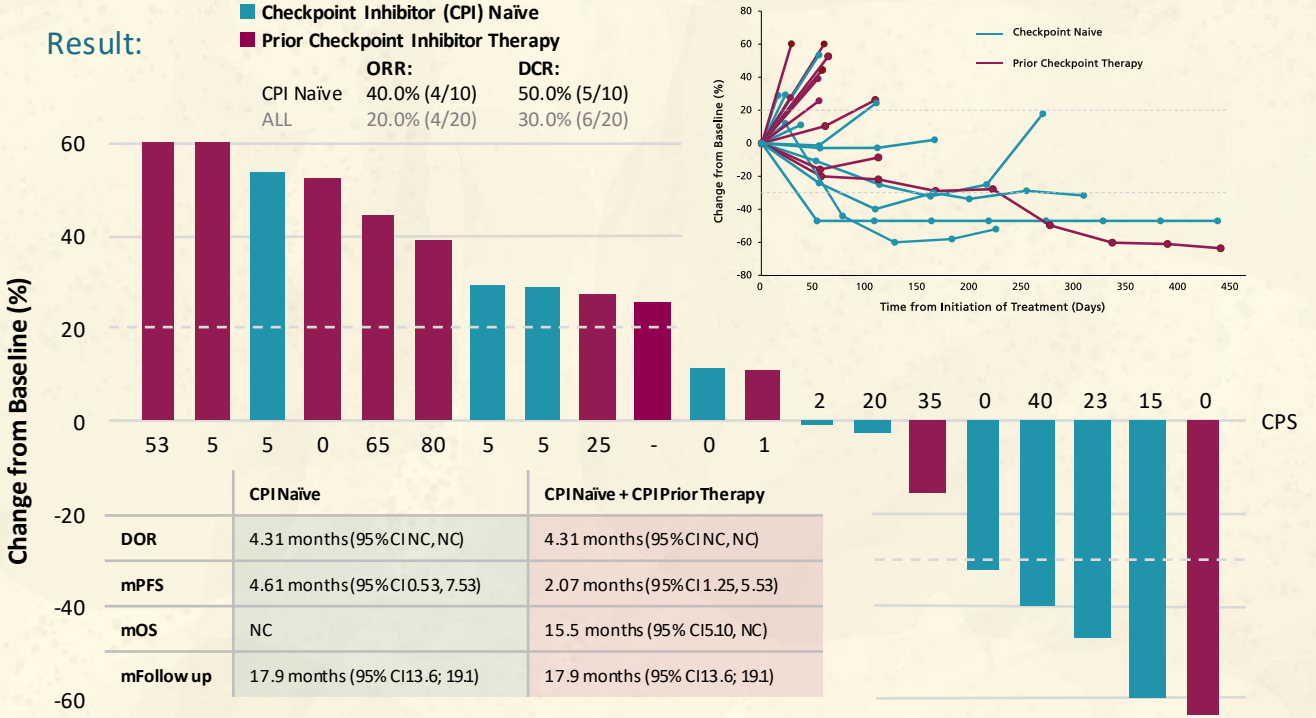
Treatment:

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

Endpoints:

- maximum tolerated dose
- anti-cancer activity

Result:



	CPI Naïve	CPI Naïve + CPI Prior Therapy
DOR	4.31 months (95% CI NC, NC)	4.31 months (95% CI NC, NC)
mPFS	4.61 months (95% CI 0.53, 7.53)	2.07 months (95% CI 1.25, 5.53)
mOS	NC	15.5 months (95% CI 5.10, NC)
mFollow up	17.9 months (95% CI 13.6; 19.1)	17.9 months (95% CI 13.6; 19.1)

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:

2:1

N=70 — **ALX148** 45 mg/kg (Q3W)
+ Keytruda

N=35 — **Keytruda**

(Safety lead-in prior to randomization)

Endpoint:
- ORR (from 20% to 33%)

ALX148
+
Keytruda
+
Chemo

Phase 1b dose confirmation:

Treatment:

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

Phase 2 trial:

2:1

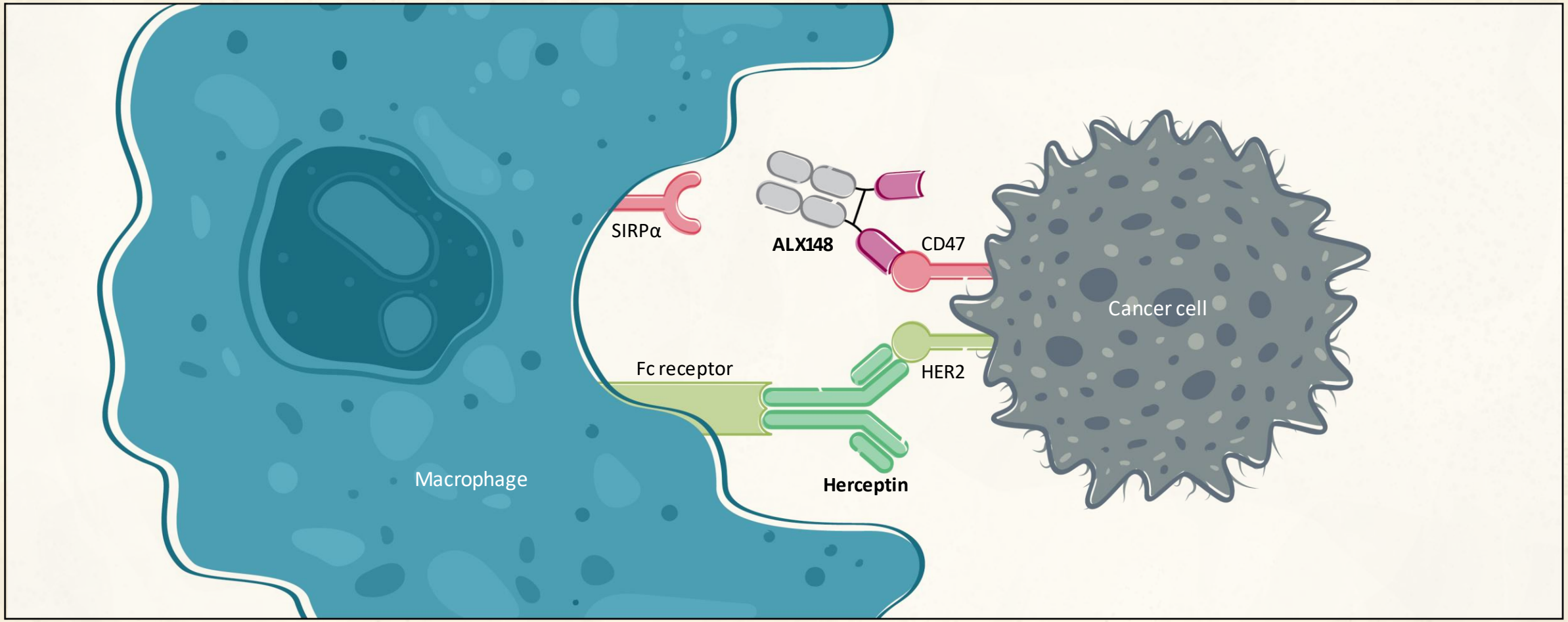
N=71 — **ALX148** 45 mg/kg (Q3W)
+ Keytruda
+ 5FU
+ Cisplatin or carboplatin

N=35 — **+ Keytruda**
+ 5FU
+ Cisplatin or carboplatin

(Safety lead-in prior to randomization)

Endpoint:
- ORR (from 36% to 54%)

GASTRIC TRIAL: ALX148 + HERCEPTIN MECHANISM OF ACTION



ALX148 increases phagocytosis in combination with Herceptin

GASTRIC/GEJ CLINICAL TRIAL

Phase 1b Gastric/GEJ trial:

Response evaluable patients

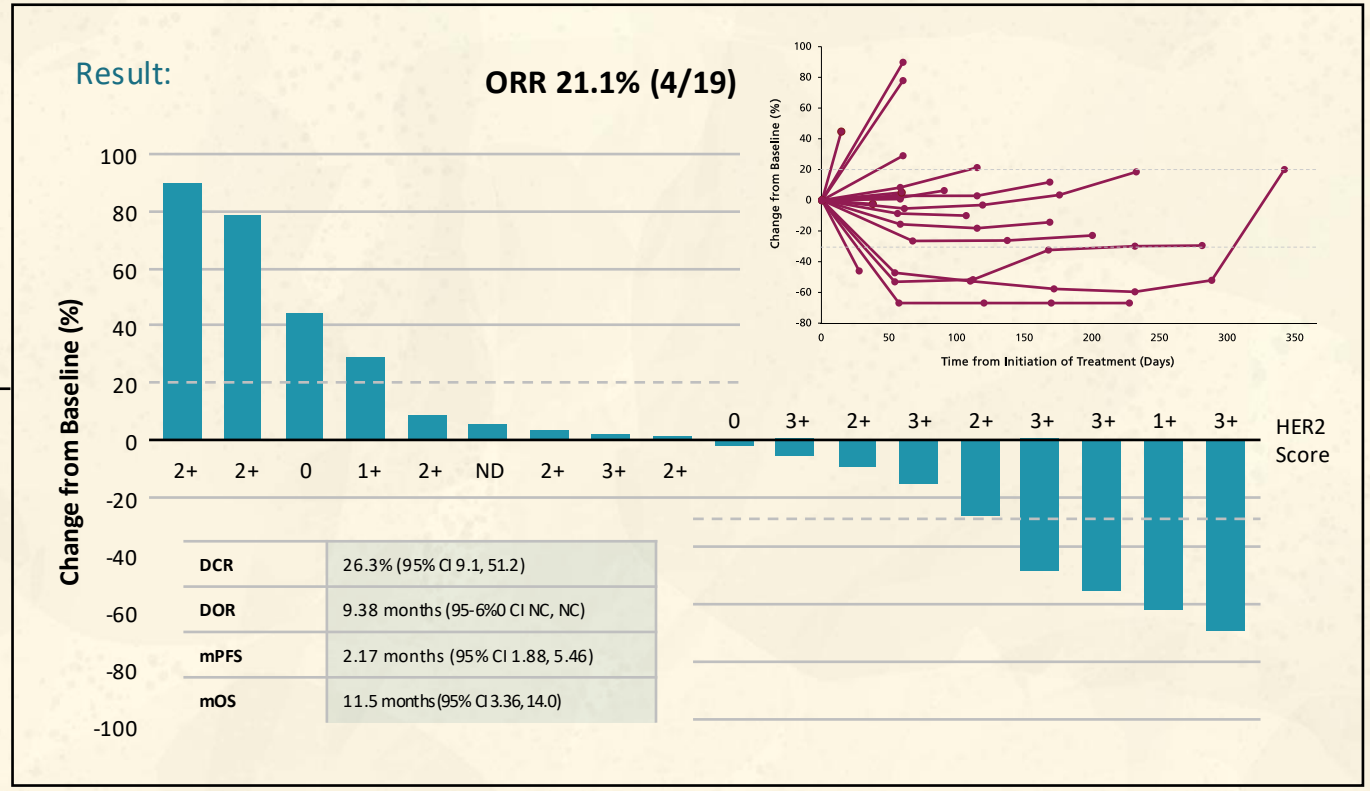
N=19 R/R HER2 positive gastric/GEJ

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



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.

DEVELOPMENT

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:

Patients: 2L or greater HER2 positive gastric/GEJ with prior Herceptin treatment

Treatment: (N~50)

ALX148 45 mg/kg (Q3W)

+ Herceptin

+ Cyramza

+ Paclitaxel

Endpoint:

- ORR (from 30% to 50%)

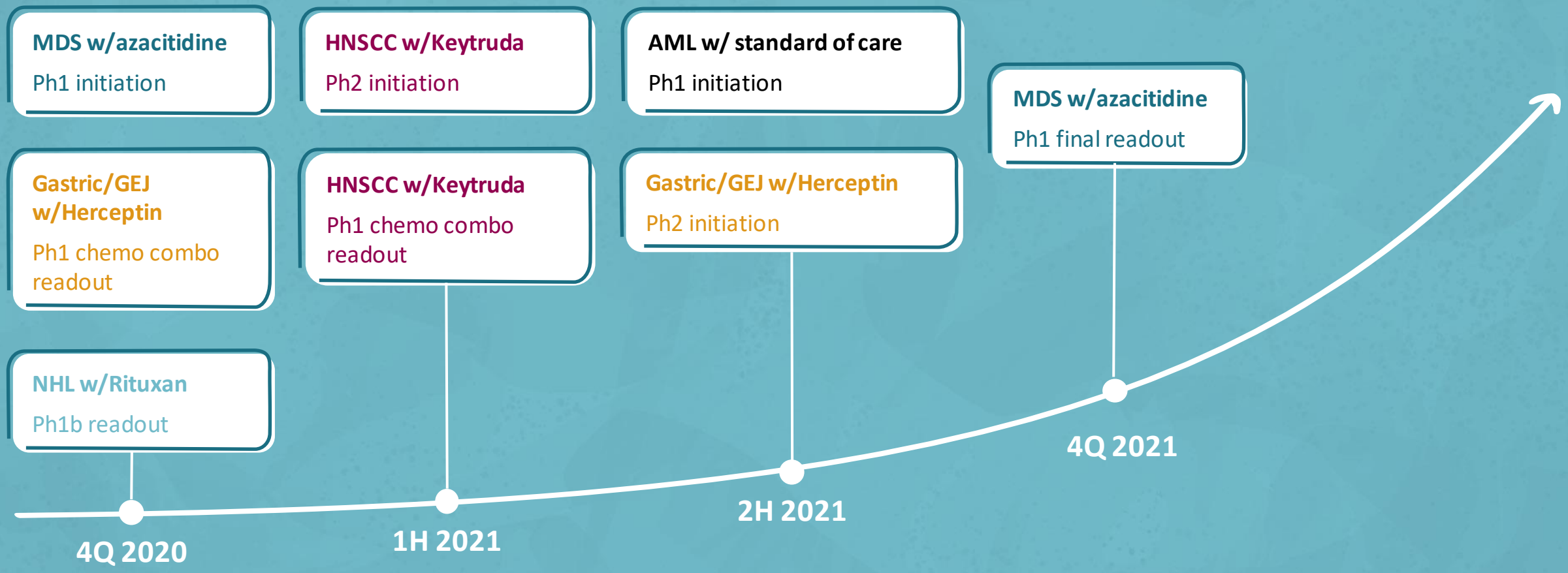
CLINICAL SUMMARY

ALX148 tolerability profile enables combination with range of agents

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

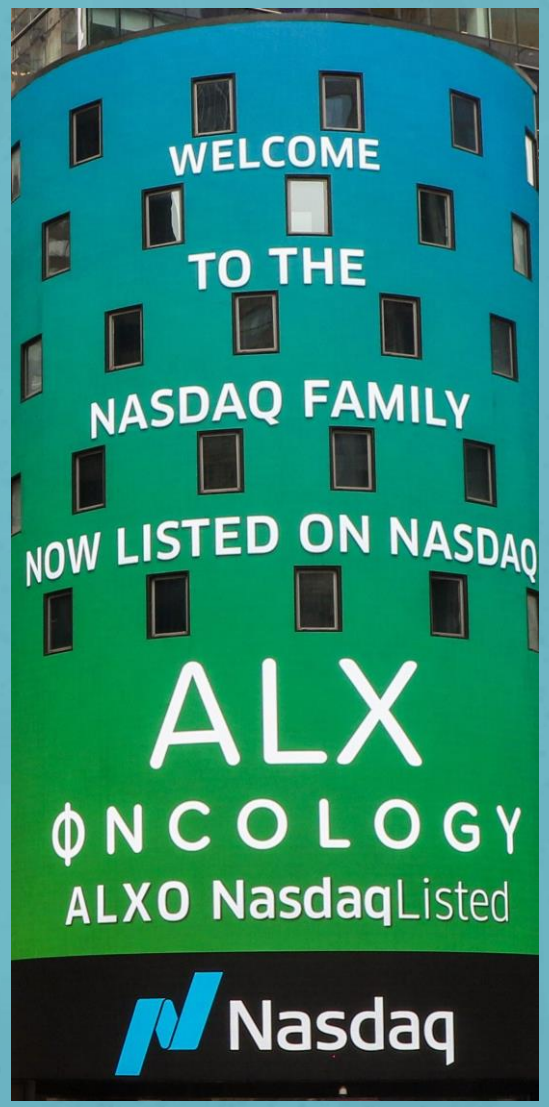
ALX148 is the only CD47 blocker to show encouraging response data in solid tumor indications

DEVELOPMENT PROGRESS AND FUTURE PLANS



FINANCIAL INFORMATION

- Cash and cash equivalents as of June 30, 2020:
  - $98.1 million
- Consummated IPO on July 21, 2020
  - Gross proceeds of $185.7 million
  - 9.775 million shares at $19 per share
  - Estimated net proceeds of $169.0 million, which is after deducting underwriting discounts and commissions, and offering-related expenses
  - Expected cash runway through 2023



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