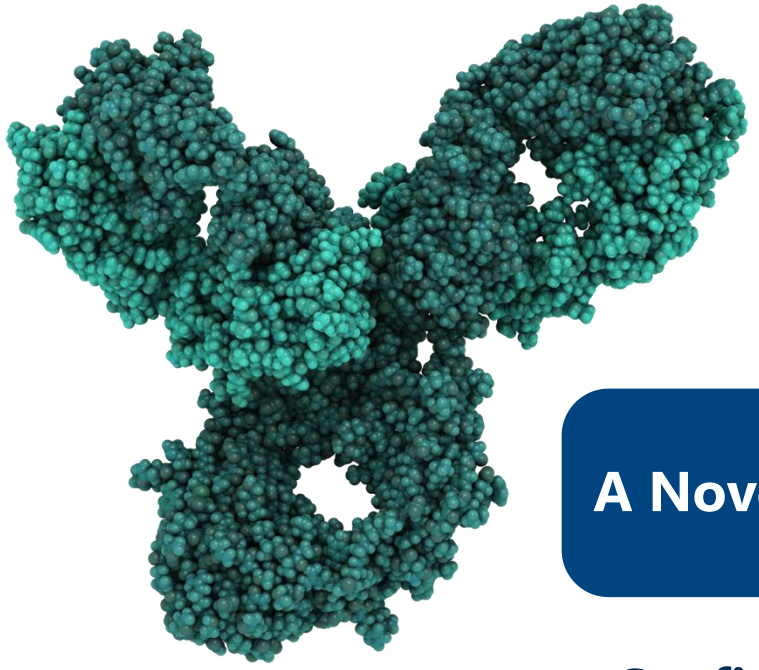
Solu Therapeutics



A Novel Class of Targeted Medicines to Transform Patient Lives

Confidential Overview

July 2024

Solu is leveraging CyTAC™ platform to pioneer novel targeted medicines

Novel Modality

- **CyTAC™ platform** offers new approach and **unlocks difficult and intractable targets**
- Incorporates **small molecule** binders to high-value targets **with proprietary linkers to mAbs carrying powerful effector function** (e.g., ADCC activity, ADC payloads, RNAi delivery)
- Leverages existing high-quality chemical matter, **greatly reducing discovery timelines**

Advanced 1st-in-Class Therapeutic

- Lead **CCR2-targeting CyTAC monocyte depletor** has the potential to **transform the treatment heme malignancies**
- **Near term opportunity for value creation –** Ph1 FPI in 1Q25 with 4Q26 POC data
- **High probability of success** in CMML with potential for **de-risked expansion into additional high-value indications**, including additional heme malignancies and IBD

Deep & Broad Pipeline Potential

- **1st-in-class** potential with **TRPM8-PSMA bispecific CyTAC for prostate cancer** and **MRGX2-targeting CyTAC mast cell depletor for immunology** indications
- Modular platform facilitates **rapid pipeline expansion** and **multitude of partnership opportunities**

Seeking $60m Series A financing to achieve clinical proof-of-concept in the first two clinical indications and build deep pipeline of development candidate stage assets

Company launched in 2023 with $31m seed financing and an experienced leadership team and board

Platform exclusively licensed from GSK at launch following 5 years of intense development

Leadership Team

Phil Vickers, PhD
CEO, President

Shire · Northern Biologics · Pfizer · Boehringer Ingelheim · Merck

Brandon Turunen, PhD
CTO, Co-Founder

GSK · Stanford University

Ewelina Morawa, MD
CMO

CRISPR Therapeutics · Novartis · abbvie · Memorial Sloan Kettering Cancer Center

Mike Boretti, PhD
CBO

celsius · Epizyme · AVEO Oncology · L.E.K.

Kelly Honohan, JD
GC

Northern Biologics · Bristol Myers Squibb · Shire · Ropes & Gray

Board of Directors

Phil Vickers, PhD
CEO, President
Solu Therapeutics

Christoph Westphal, MD, PhD
Co-founder, Chair, Solu Tx
Founding Partner, Longwood Fund

Omar Khalil, MSE
Partner,
Santé Ventures

John Hamer, PhD
Managing Partner,
DCVC Bio

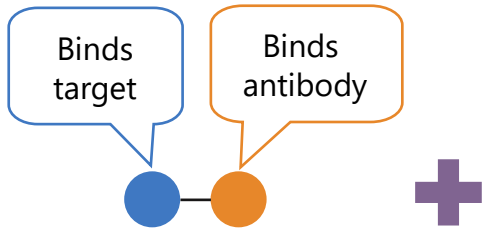
Satoshi Konagai, MS, MBA
Sr. Investment Manager,
Astellas Venture Management

Peter Hutt, JD
Senior Counsel,
Covington & Burling LLP

Investors

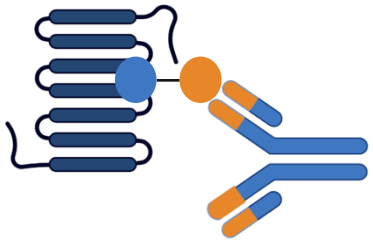
Longwood Fund · Santé · DCVC · astellas (Astellas Venture Management LLC) · Alexandria Venture Investments

Our Cytotoxicity Targeting Chimera (CyTAC™) platform uniquely pairs small molecules with Abs to create novel targeted medicines



CyTAC (heterobifunctional small molecule)

Platform Antibodies

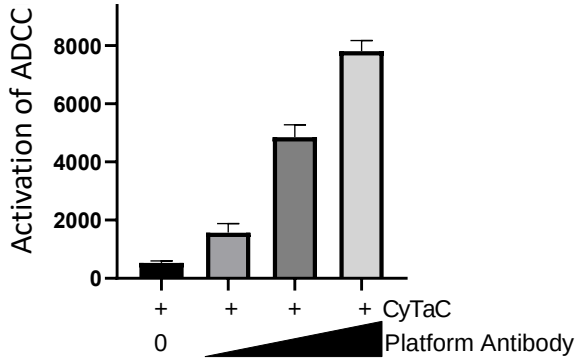


Flexible platform Ab formats include:

- Fc-engineered mAbs
- ADCs
- CD3 bispecifics
- Fc-disabled antibodies

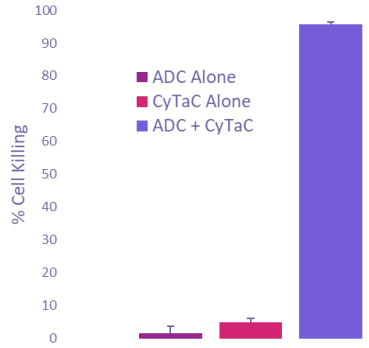
Fc-engineered Antibody

ADCC-enhanced killing of tumor cells



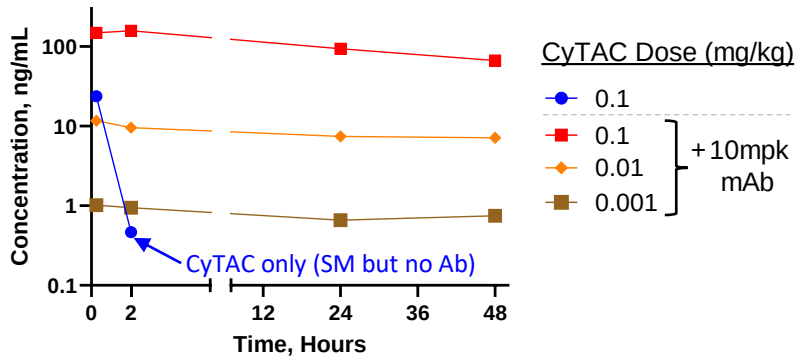
Antibody Drug Conjugate

Cytotoxic payload delivery

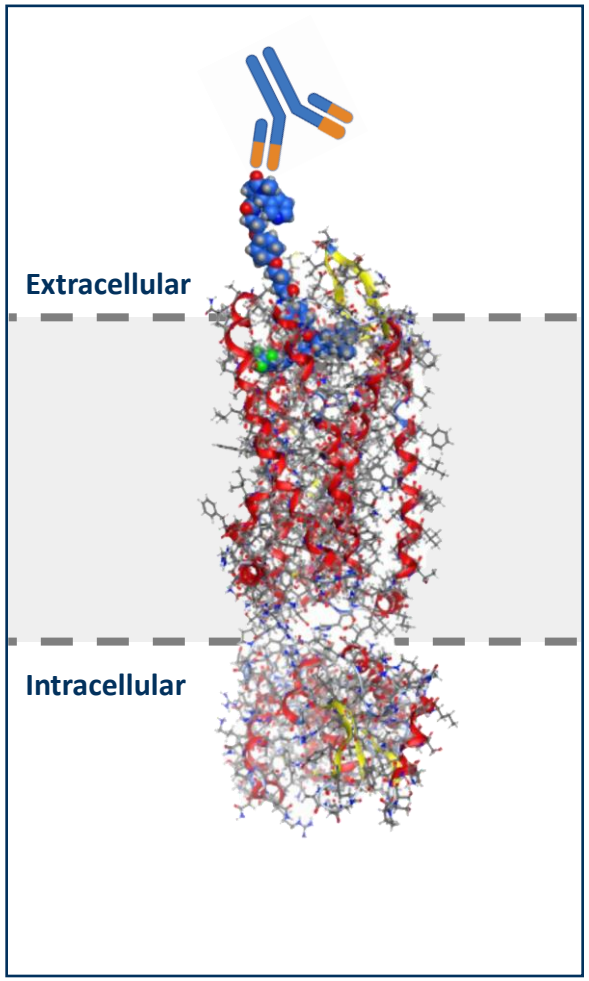


Fc-disabled Antibody

Small Molecule Half Life Extension



Our CyTAC™ platform unlocks key advantages compared to traditional small molecule and antibody approaches



Unlock Targets

- Access targets that are difficult or impossible for other modalities
- Bind deep epitopes in GPCRs and ion channels that are intractable for Abs

Rapid Development

- ~1-year to development candidate
- Start with DC quality molecules that take on the PK profile of the effector Ab
- Modular platform allows reuse of effector Ab's across programs

Enhance Specificity and Efficacy

- Very low small molecule doses and ternary complex formation enhances specificity of CyTACs
- Membrane proximal epitopes enhance ADC efficacy

Solu Therapeutics pipeline

	PROGRAM	PLATFORM mAB	INDICATION	DISCOVERY	PRECLINICAL	IND-ENABLING	Ph1	Ph2
Oncology	**STX-0712** **CCR2-CyTAC** *monocyte depletor*	ADCC-enhanced	CMML, AML, other heme malignancies			***IND projected 4Q24***		
Oncology	**STX-0301** **TRPM8 x PSMA CyTAC** *bispecific ADC*	ADC	Prostate cancer					
Immunology	**STX-0812** **CCR2-CyTAC** *monocyte depletor*	ADCC-enhanced	IBD, RA, other immunology indications					
Immunology	**STX-0640** **MRGX2-CyTAC** *mast cell depletor*	ADCC-enhanced	Inflammation, urticaria, atopic dermatitis, IBD					
Pain	**STX-1001** **Na_V TicTACs** *long-acting antagonists*	Fc-disabled	Chronic pain			***Na_V1.8*** ***Na_V1.7*** ***Na_V1.8/1.7 dual antagonist***		

plan to partner prior to IND-enabling studies

Additional undisclosed undruggable target candidates from our proprietary CyTAC™ platform are under active investigation in multiple TAs
TicTAC™ = Therapeutic Index Control Targeting Chimera

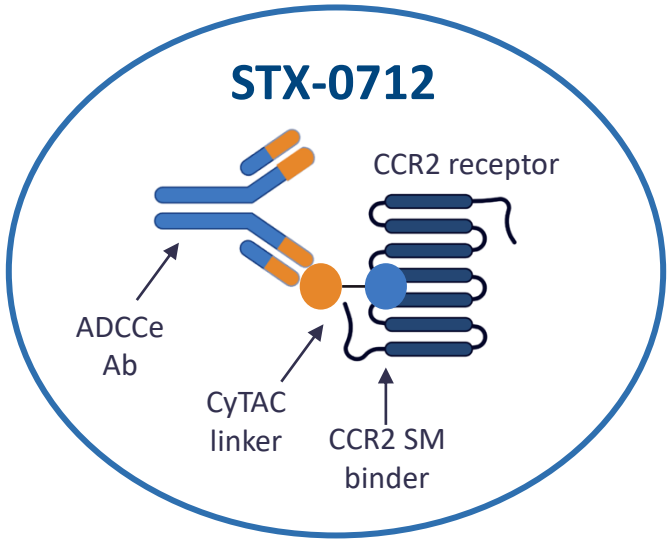
STX-0712 (CCR2-CyTAC + ADCCe Ab)

Depletor of pathogenic monocytes for heme malignancies and immunology indications

STX-0712: a potential first-in-class depletor of disease-driving monocytes in cancer and immunology indications

Strong scientific rationale & high POS

- CCR2 is highly expressed in pathogenic monocytes in CMML patients
- NHP tox studies suggest clean safety
- Cell depletion approach is well validated in hematological tumors



Near-term potential for clinical POC

- IND on track for Q4-24 following positive pre-IND feedback
- POC from Ph1b dose expansion cohort
- Opportunities to accelerate development with ODD and BTD approvals

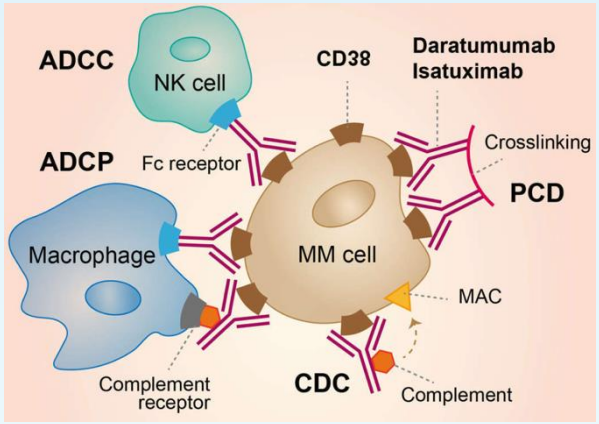
Multi-billion dollar market potential

- $800m-$1.5b peak revenue projection in CMML[1]
- Opportunities for de-risked expansion to other high value monocyte-driven diseases (e.g., AMoL, AMML, MF, MDS, PV, and IBD)

[1] CMML commercial assessment available upon request

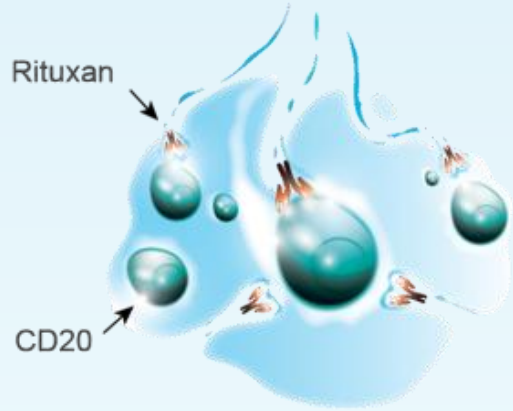
ADCC-based therapeutic antibodies are clinically validated and valuable in oncology and immunology

CD38 - Daratumumab



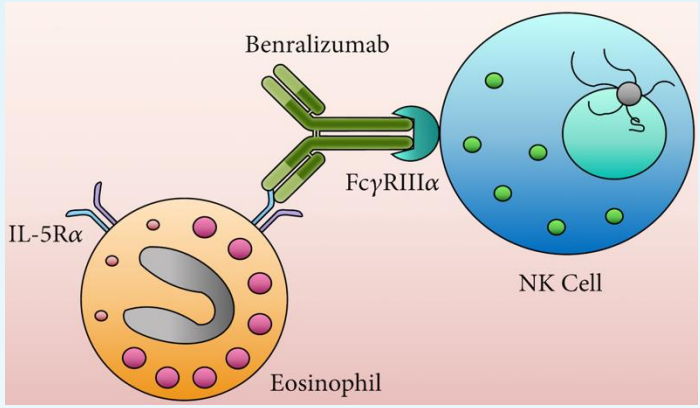
- Anti-CD38 mAb with ADCC activity
- MOA: NK and macrophage cell-mediated depletion of multiple myeloma cells
- FDA approved for the treatment of multiple myeloma
- **~$10 billion in sales (2023)**

CD20 – Rituximab



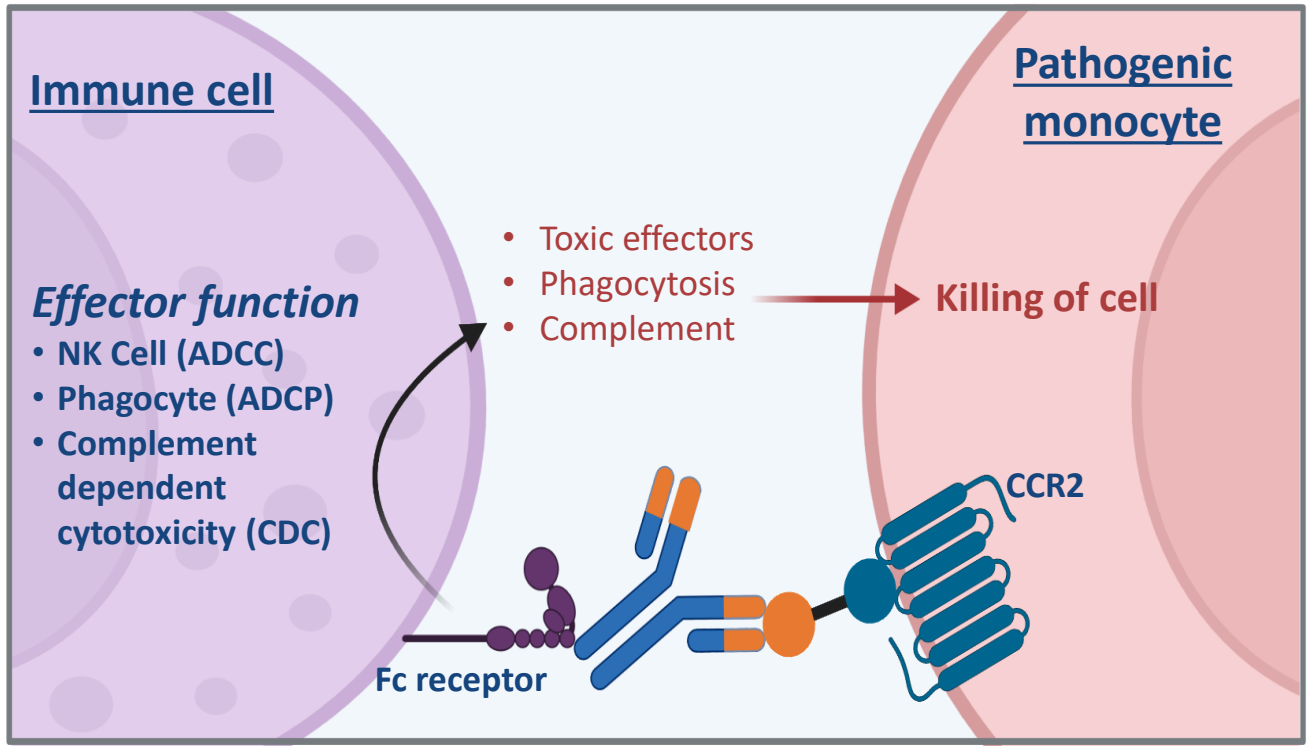
- Anti-CD20 mAb with ADCC activity
- MOA: NK cell and macrophage mediated depletion of B cells
- FDA approved for the treatment multiple heme malignancy indications
- **$2.9 billion in sales (2022)**

Fasenra - Benralizumab depleting eosinophils



- ADCC enhanced anti-IL5Rα mAb
- MOA: NK cell-mediated depletion of eosinophils
- FDA approved for the treatment of severe eosinophilic asthma
- **$1.25 billion in sales (2021)**

STX-0712: a potent, CCR2-targeted CyTAC with broad therapeutic utility



Internal and published data validate expression of CCR2 on cancer cells in CMML, JMML, AML. Solu has also generated *in vivo* efficacy in inflammatory disease.

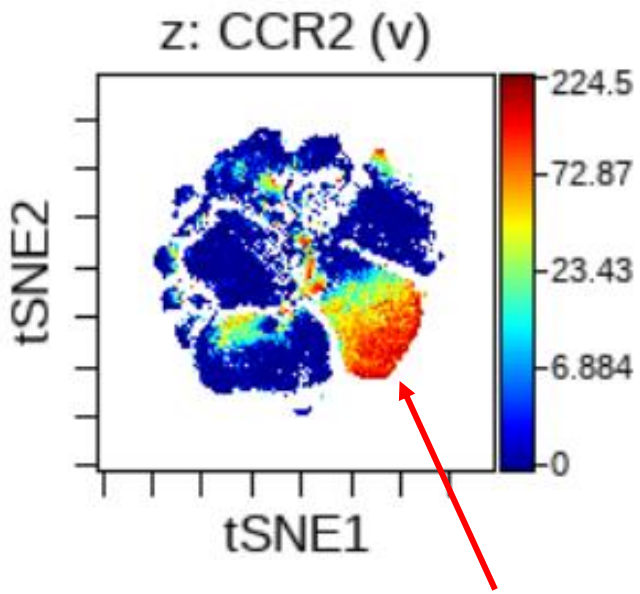
STX-0712 profile

- ☑ *In vitro* cell killing
- ☑ *Ex vivo* killing activity in human blood
- ☑ *In vivo* mouse model efficacy
- ☑ NHP PK/PD and exploratory tox
- ☑ Development Candidate (DC) nominated

STX-0712 selectively and efficiently kills CCR2+ inflammatory monocytes

CCR2 is a very selective marker for inflammatory monocytes in humans

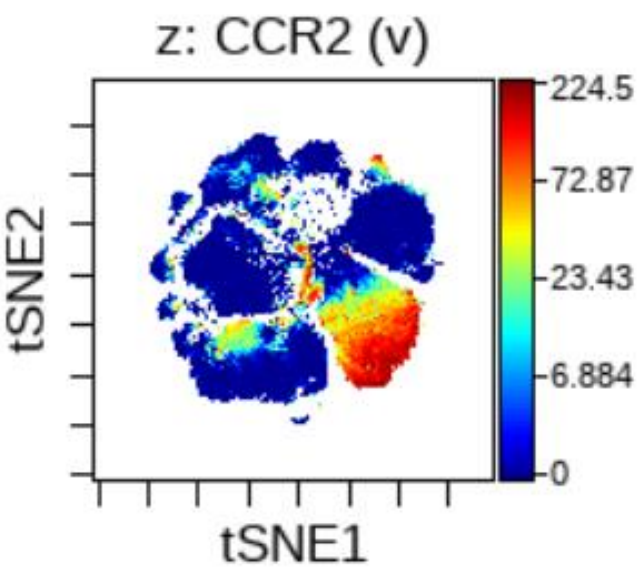
Healthy Blood Donor



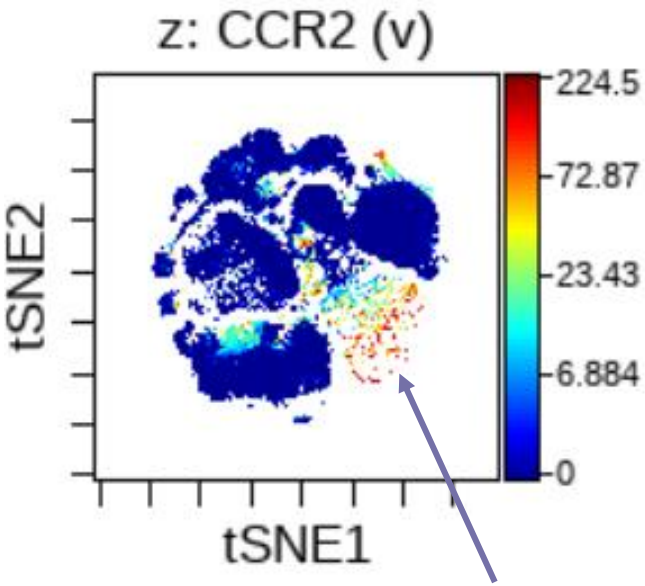
Inflammatory monocytes present

Ex vivo treatment of human PBMCs

CyTAC only



STX-0712 (CyTAC + ADCCe Ab)

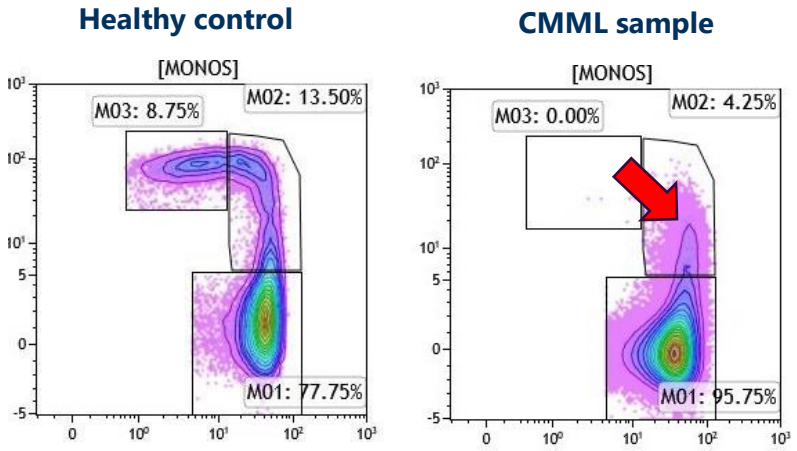


Inflammatory monocytes depleted

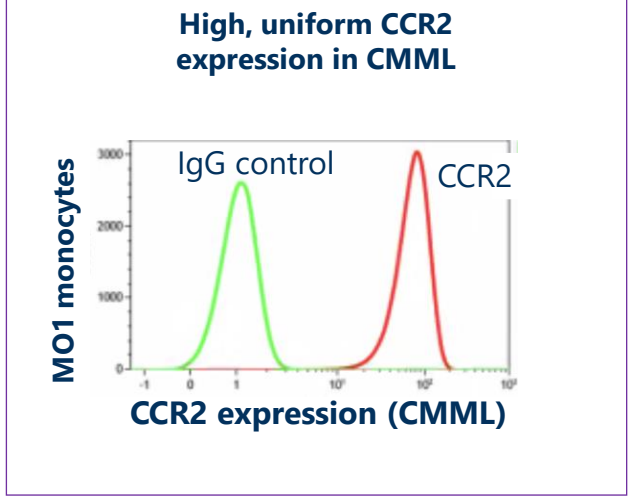
Mass Cytometry Data collected from ex vivo PBMCs from healthy human blood donor

In CMML, malignant monocytes uniformly express high levels of CCR2

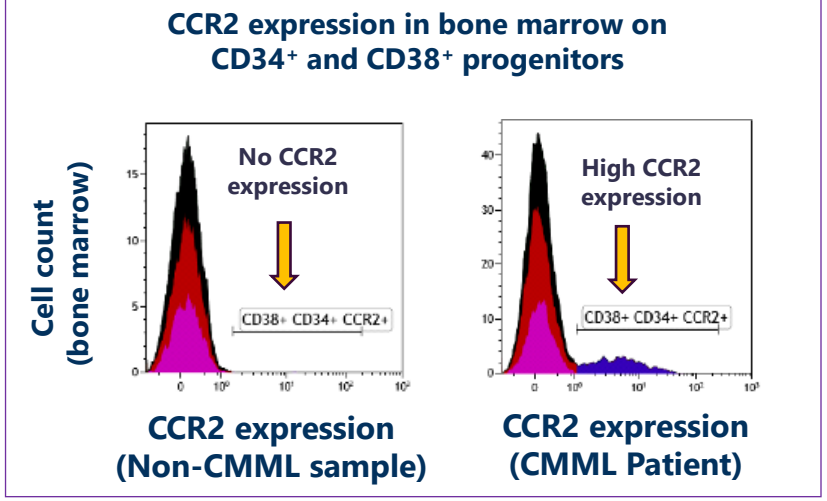
CMML is a disease where MO1 monocytes takeover the monocyte compartment



Monocytes in CMML are marked by high CCR2 expression



CD34⁺ progenitors in the bone marrow of CMML patients express CCR2



- MO1 monocytes make up ~80% of monocytes in healthy patients and >95% of monocytes in CMML
- ~100,000 copies of CCR2 per CMML cell, similar to CD20 levels in B cells (targeted by Rituximab)
- CCR2 is expressed on disease driving CD34+ progenitors in the bone marrow of CMML patients, but not on CD34+ cells in healthy individuals, providing disease modifying potential

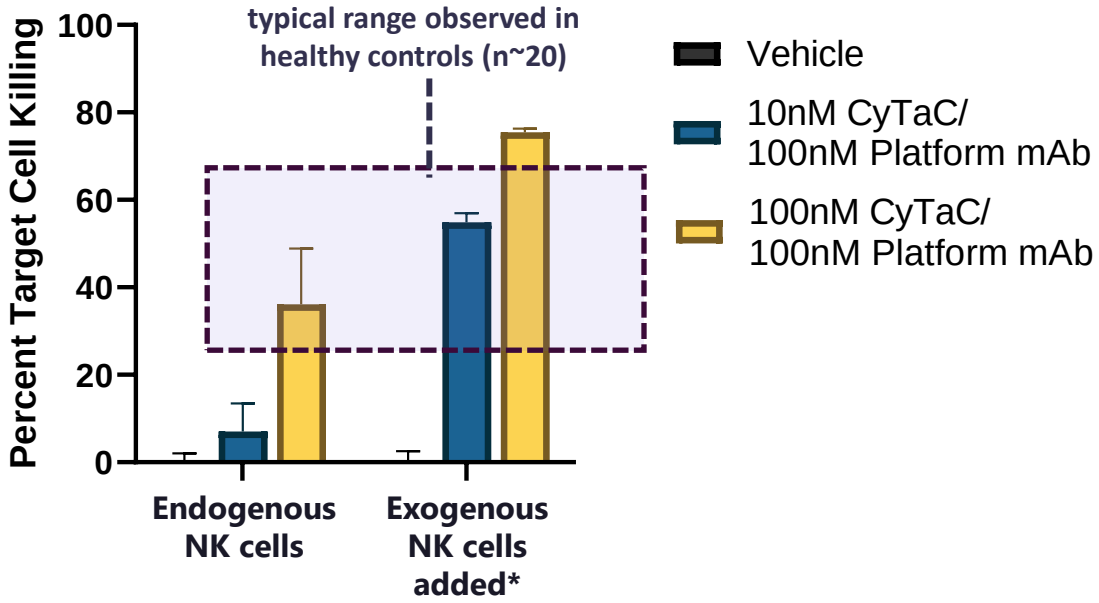
Blood, 2021 Jun 17;137(24):3390-34020

STX-0712 kills CMML patient cells *ex vivo*

CMML Patient PBMC

Target Cells: CD45+/CD14+/CCR2+

Outcome Measured by Flow Cytometry

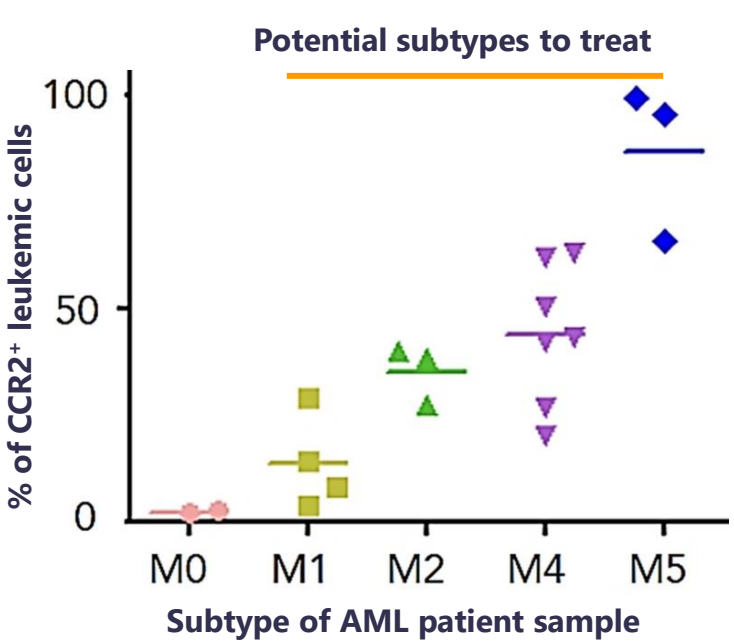


- STX-0712 binds CCR2 on malignant monocytes in CMML patients, resulting in cell killing
- The addition of exogenous NK cells enhances the depletion of CMML tumor cells, supporting the STX-0712 MoA

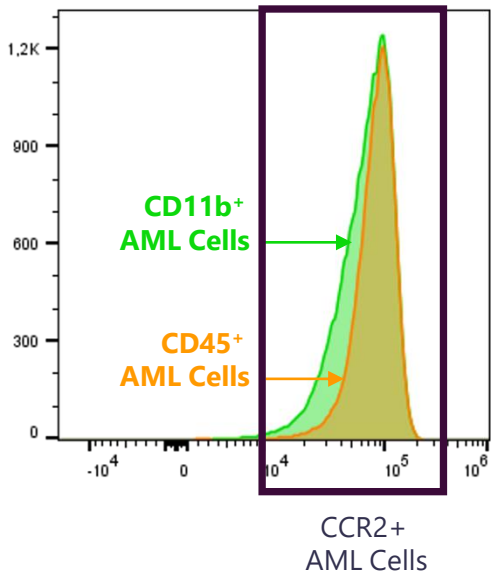
* 3:1 exogenous : endogenous NK cell ratio

CCR2 is expressed at uniformly high levels on AML blasts and progenitor cells

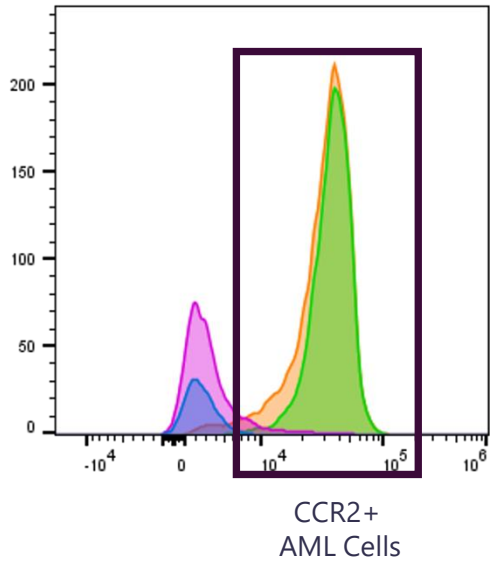
CCR2 is highly expressed on AML blasts and progenitors, with highest expression on monocyte predominant AML



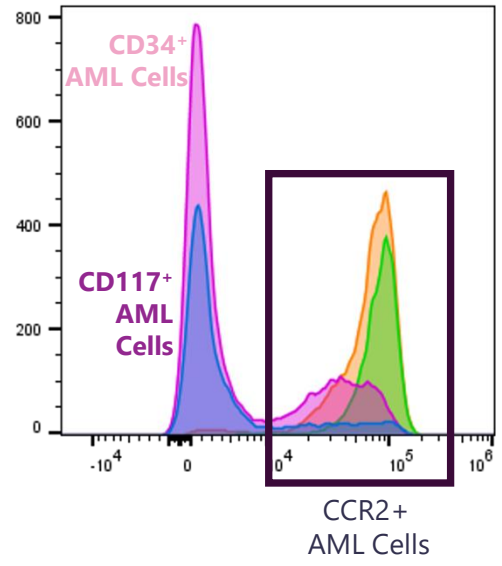
R/R M5 (AMoL*)



De novo M4 (AMML*)



De novo M4 (AMML*)

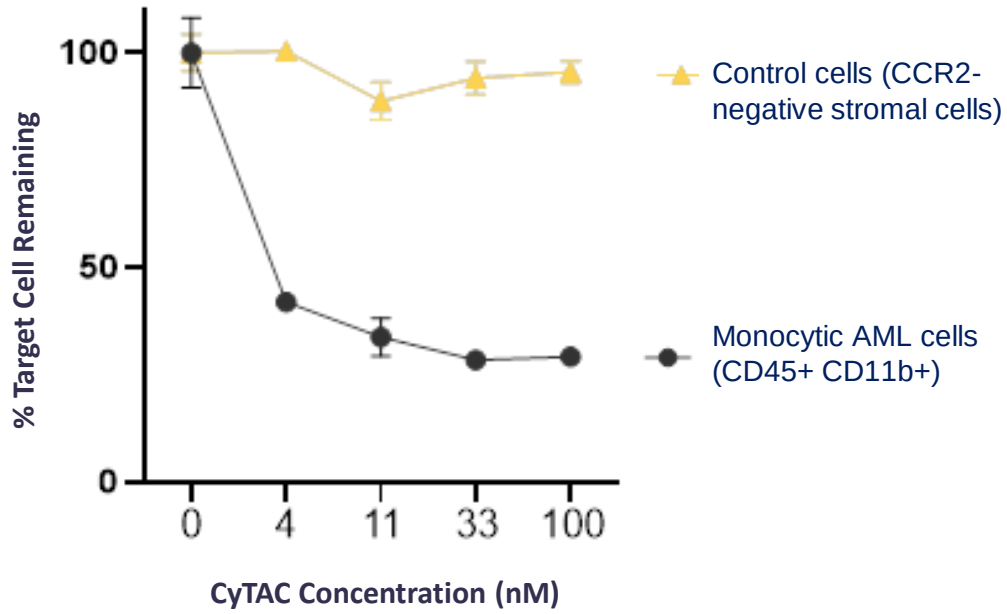


- Human monocytes have ~100,000 copies of CCR2 on the cell surface, and the AML/CMML cells we have screened resemble monocyte-level cell surface expression of CCR2
- *In vitro* killing of target cells has been observed with as little as ~5,000 copies of receptor on the cell surface

* Acute monocytic leukemia (AMoL), Acute myelomonocytic leukemia (AMML)

STX-0712 effectively depletes CCR2+ AML patient blasts

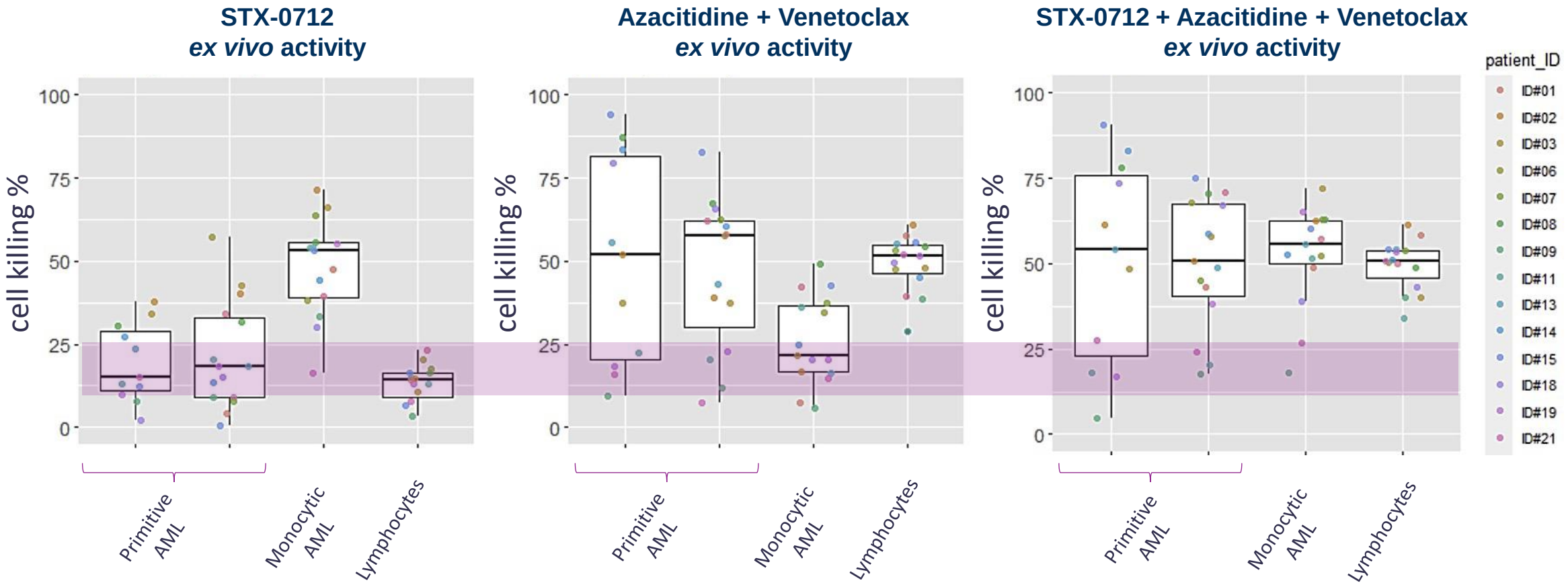
Treatment of M4 AML patient sample with STX-0712 potently kills AMML cells[1]



- STX-0712 killed ~70% of CD45+/CD11b+/CCR2+ monocytes, representing ~40% of AML tumor cells in this particular AMML (M4) patient sample
- *ex vivo* combination experiments of STX-0712 with venetoclax + azacitadine are ongoing to demonstrate enhanced efficacy in AMML (M4) patient samples

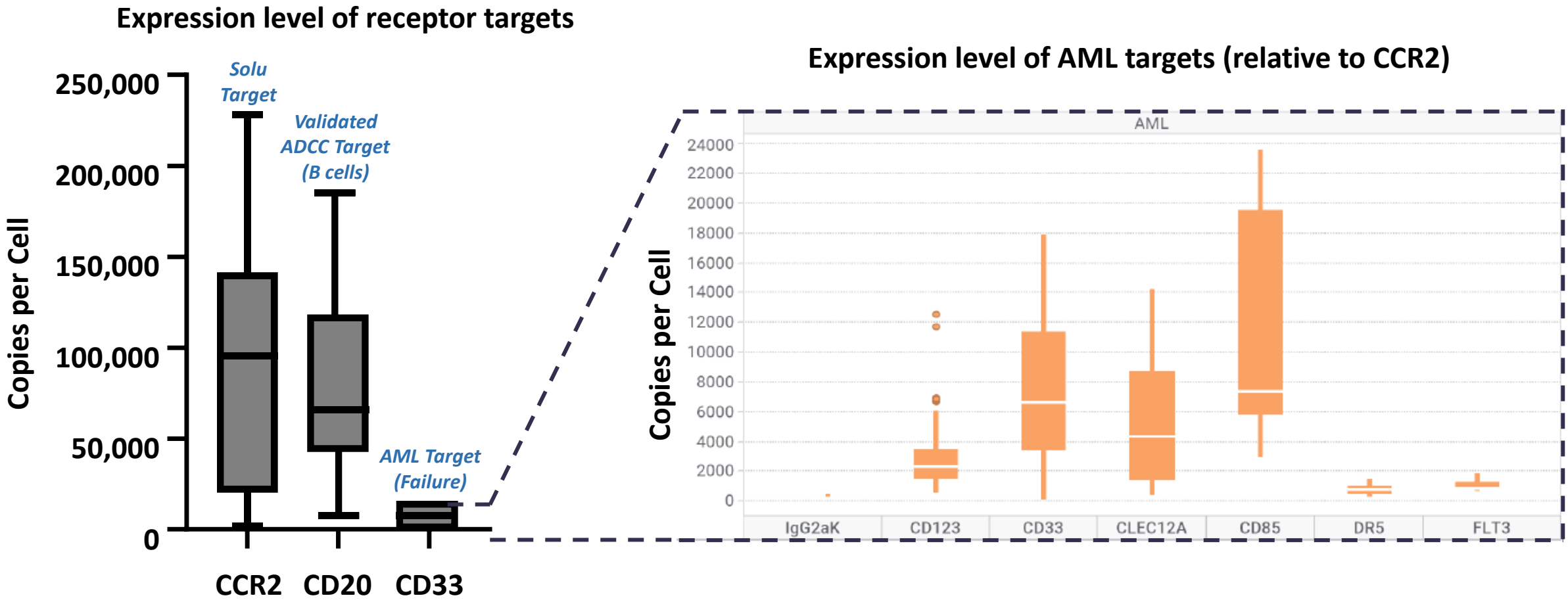
[1] Addition of autologous NK cells in a ratio of 1:1 to total leukemic cells

STX-0712 complements the limited activity of Azacitidine + Venetoclax against differentiated cells from monocytic lineages



STX-0712 + Azacitidine + Venetoclax combination improves response by targeting all AML tumor cells

CCR2 is highly expressed relative to other AML targets



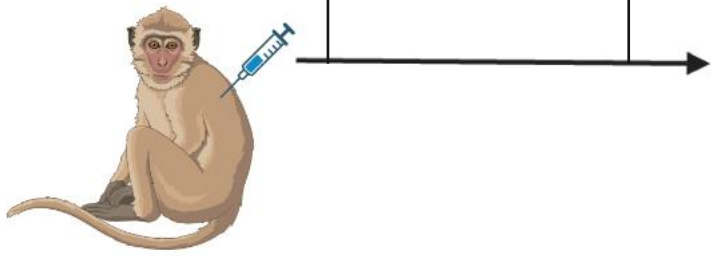
CCR2 expression levels are comparable to that of validated ADCC cancer targets such as CD20 and at significantly higher levels than other AML targets

NHP data demonstrate robust efficacy and predictable, dose-controlled antibody pharmacology

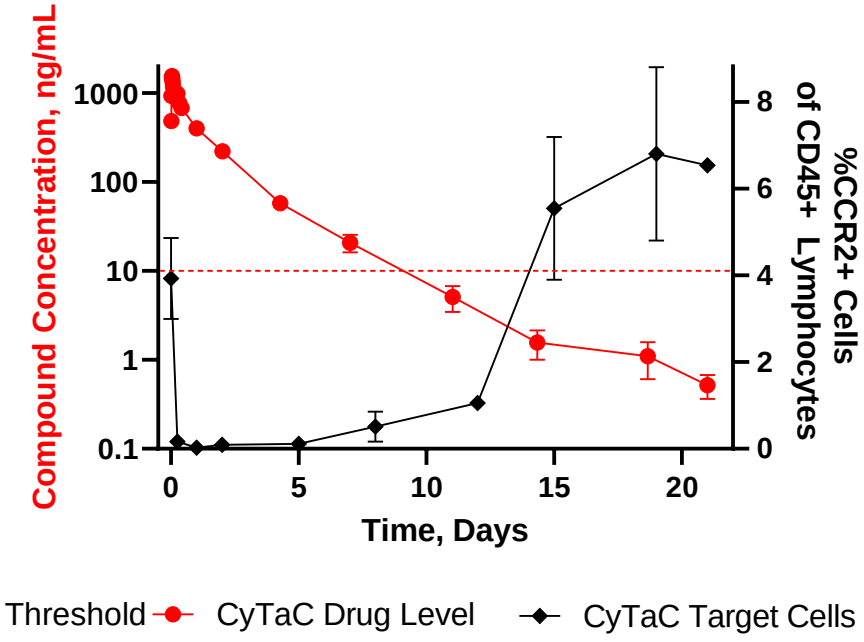
Cynomolgus PK/PD experiments show that STX-0712 is capable of long duration cell depletion*

10 mg/kg platform Ab +
0.2mg/kg CCR2-CyTAC

Assess CCR2⁺ cells and compound concentration in blood

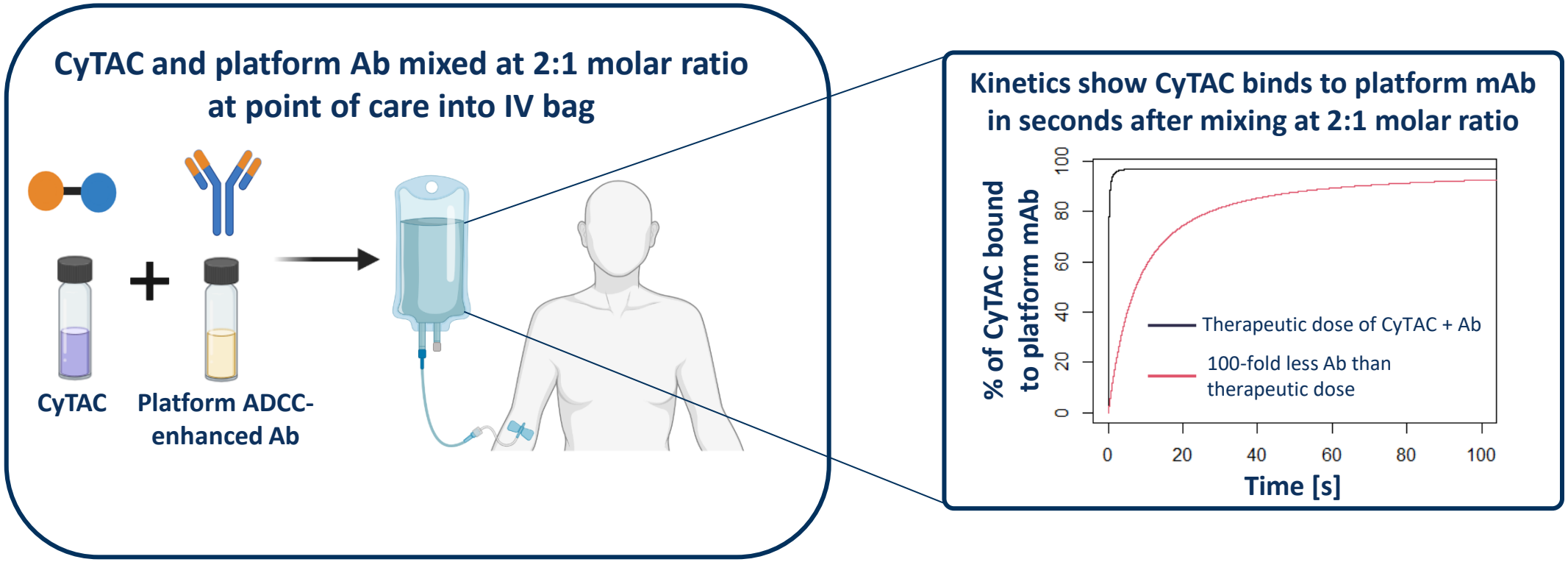


Fixed dose combination (serial administration) – IV Infusion
(2:1 molar ratio of CyTAC small molecule:Ab)



*Additional PK/PD and exploratory tox data from cyno studies available. No tox signals detected at doses up to 10-fold above therapeutic dose

On track for Q4-24 IND with patient dosing via IV infusion



Preclinical PK/PD data in rodents and NHPs support once every 3-4 week dosing of CyTAC + Ab

The FDA's positive feedback on our pre-IND documents signal alignment with key components of our development plans

Summary of key FDA responses to our pre-IND documents*

- The FDA agreed that the two components (CyTAC and mAb) of STX-0712 can be dosed together in our proposed clinical trial
- No need to explore individual components in healthy volunteers

- The FDA agreed with our GLP toxicology study design and did not require us to investigate the CyTAC or mAb alone

- The FDA agreed with the overarching CMC and pre-clinical approach and provided few additional recommendations/requirements beyond that which the team plans to implement

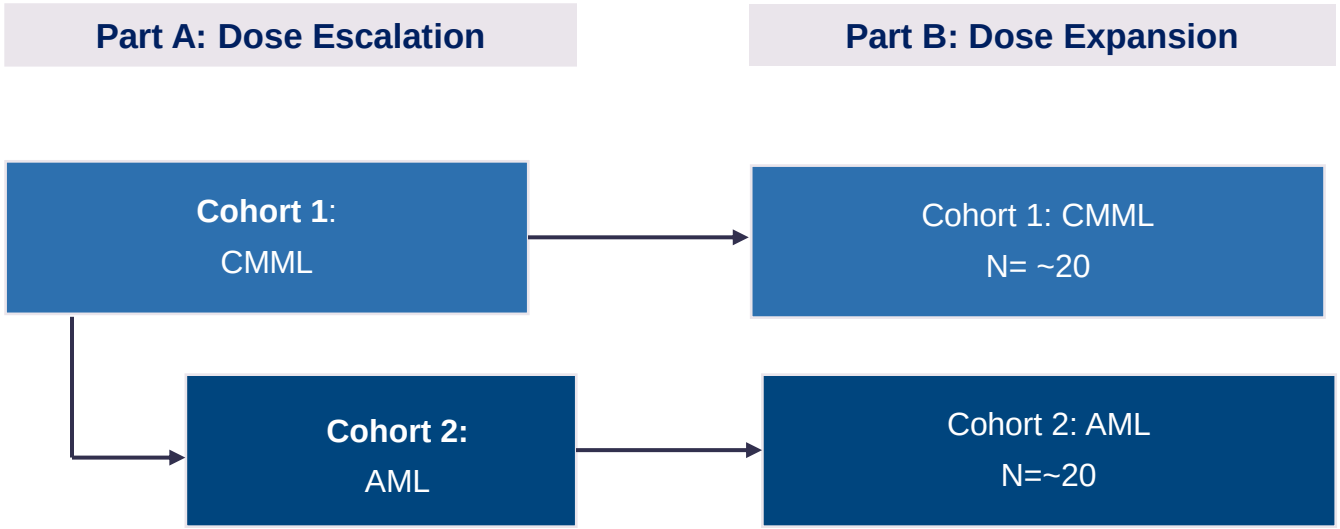
* Additional information available in confidential data room

Our clinical strategy for STX-0712 allows us to quickly demonstrate early efficacy and validate the platform

- **Dose escalation will begin in patients with Chronic Myelomonocytic Leukemia (CMML)**
  - High unmet medical need and allows us to validate our novel platform in humans
  - Recent unpublished Solu data in patients supports high probability of success
  - If CMML data is very strong we will explore expansion into AML. Recent unpublished Solu data shows uniformly high CCR2 expression in monocytic subtypes of AML
  - If we clear high efficacy bar in CMML, we have determined Early Go-No-Go's in AML that would allow us to efficiently use capital resources based on efficacy

- **Compelling evidence suggests potential for an expansion into IBD. We are performing risk mitigation, regulatory assessments, and preclinical models to assess probability of success**

Phase 1 Trial Design with STX-0712 in Hematologic Malignancies

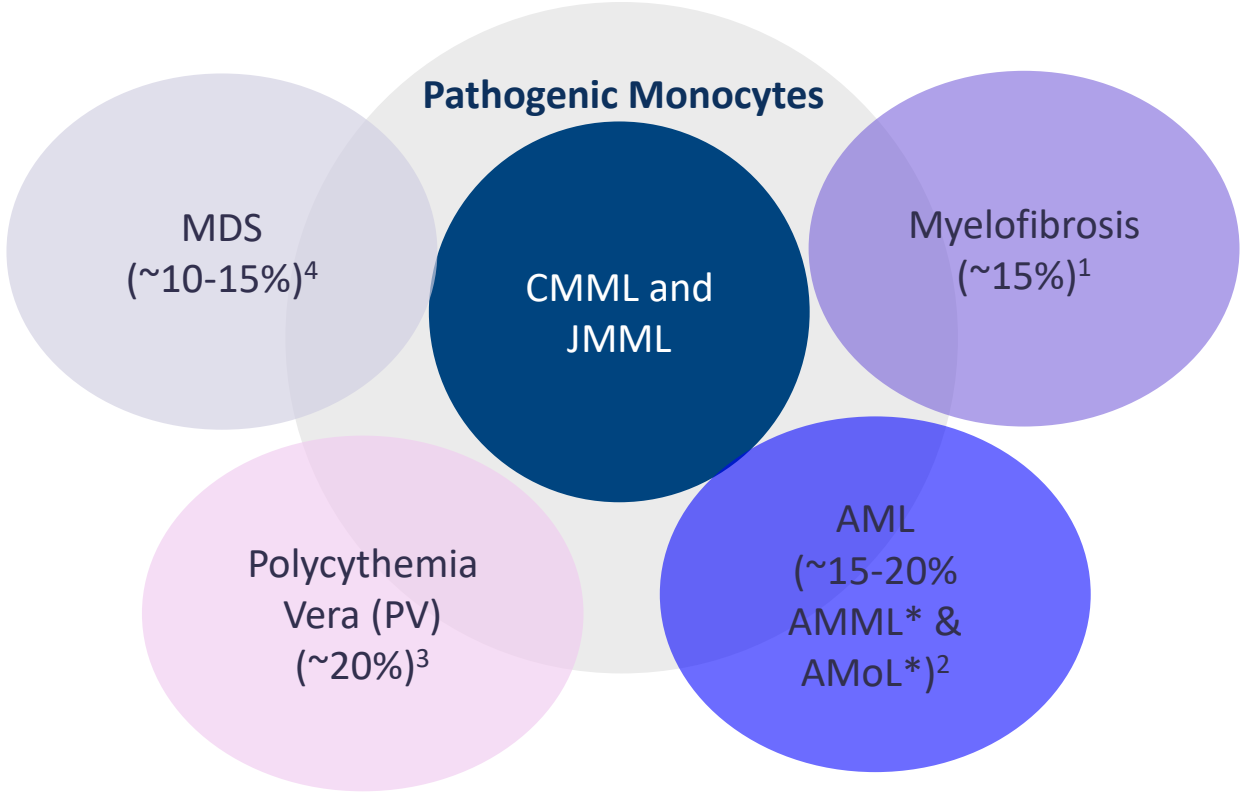


- Initiate dose escalation in CMML cohort
  - 3 pts per dose level (DL)
  - 7 dose levels (DL5 predicted therapeutic)
  - AML cohort may open after at least 2 dose levels cleared in CMML and supportive clinical data
- DLT period – 28 days (will propose 21 days to FDA)
- Dose expansion with approximately 20 patients
- Allow for backfill patients (up to 8 at one to two dose levels)
- Objectives: Part A: safety and early efficacy
  Part B: efficacy and RP2D
- Plan for addition of Phase 2 portion depending on emerging safety/efficacy profile

* Data from 3 pts will be taken from dose escalation for each indication for total of 20 pts in each expansion cohort

We expect CMML 'adjacent' heme malignancies to drive additional value creation for STX-0712

Pathogenic CCR2^{+} monocytes contribute to disease progression and are adverse prognostic factors in CMML 'adjacent' malignancies#



1 – PMID: 17397921, 34067466
2 – SEER.Cancer.gov and KOL discussions
3 – PMID: 28370365, 37233774
4 – PMID: 33985456, 36409328, 29564138. Note: some studies performed before updated 2023 CMML guidelines

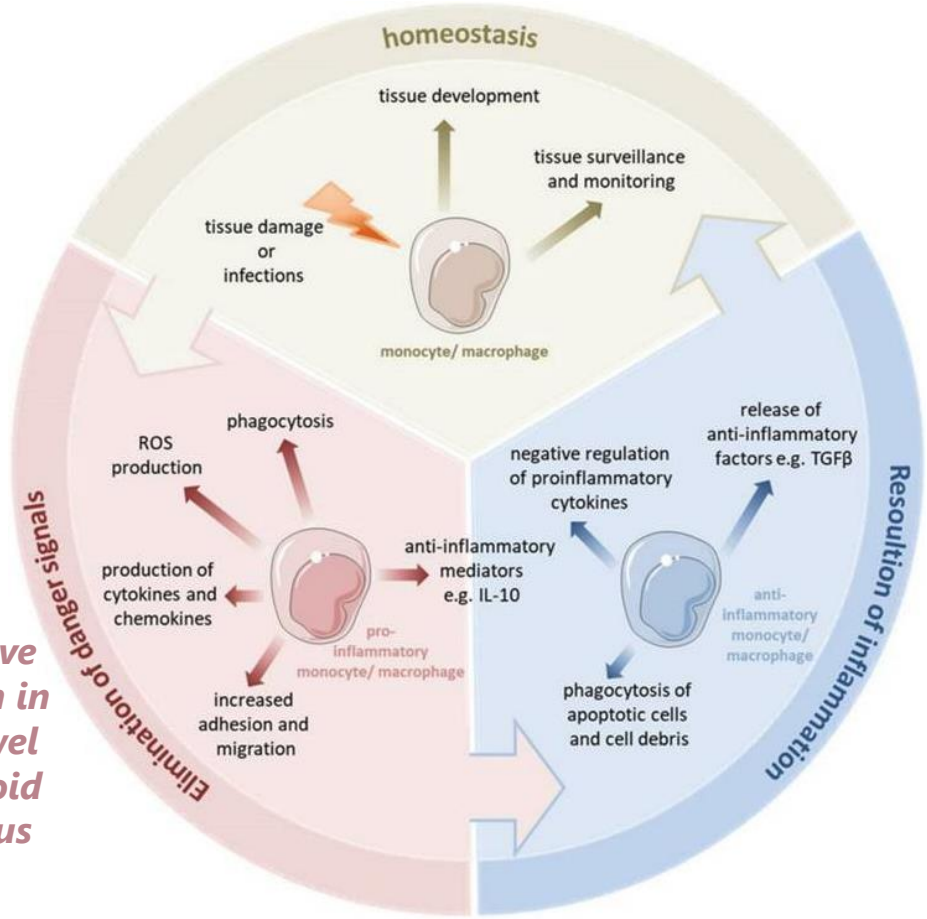
*Acute myelomonocytic leukemia (AMML)
*Acute monocytic leukemia (AMoL)

#Additional data available in data room

STX-0712 – Immunology / IBD Expansion Opportunity

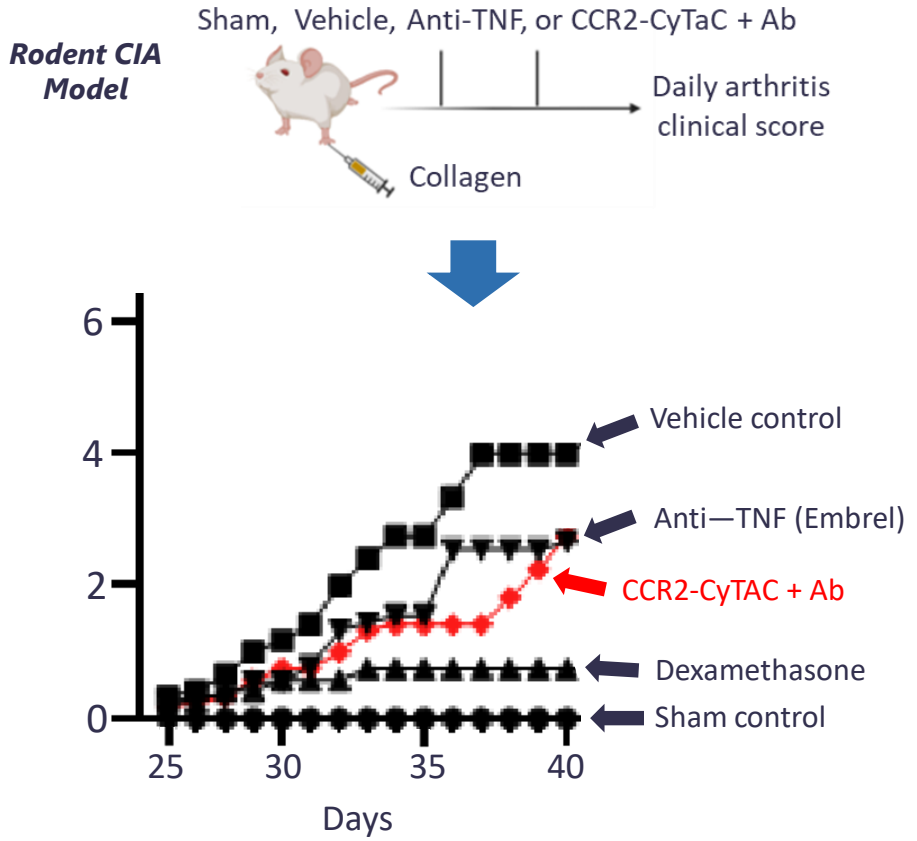
Inflammatory monocytes have been linked to a number of immunological and inflammatory diseases

Pathogenic monocytes are known drivers of many I&I (Immunology & Inflammation) diseases



Imbalance of inflammatory monocytes can drive disease progression in Inflammatory Bowel Disease, Rheumatoid Arthritis, and Lupus

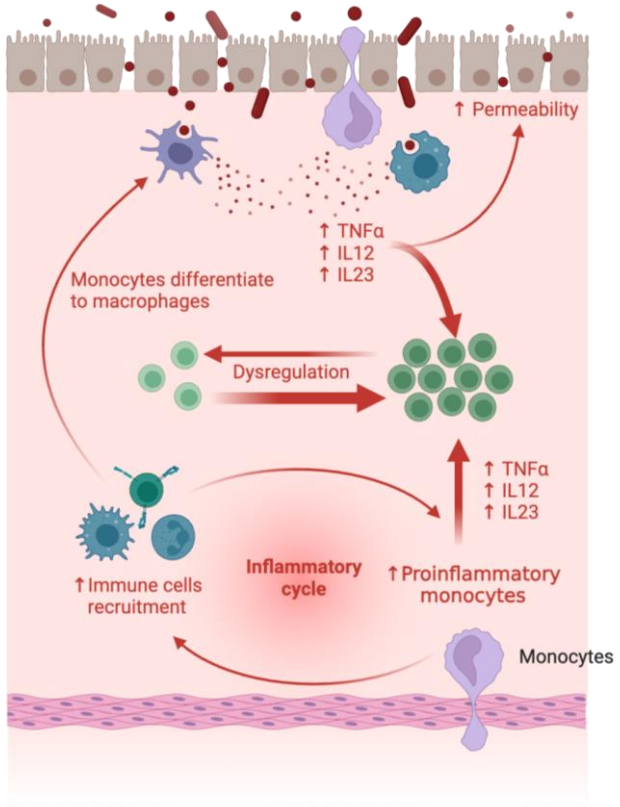
CCR2-CyTAC has similar efficacy to anti-TNF Ab in rodent inflammatory model



Nat Immunol. 2017 Jun 20;18(7):716-724. doi: 10.1038/ni.3731.

Pathogenic monocytes are strongly implicated in IBD pathology

Inflammatory monocytes in the gut amplify the expression of cytokines, driving IBD pathology



Cells. 2022 Jun; 11(12): 1979.
N Engl J Med. 2008 Feb 28;358(9):900-9. doi: 10.1056/NEJMoa0707865. Epub 2008 Jan 20.
Front. Immunol., 09 July 2020 Sec. Inflammation Volume 11 - 2020 | https://doi.org/10.3389/fimmu.2020.01426

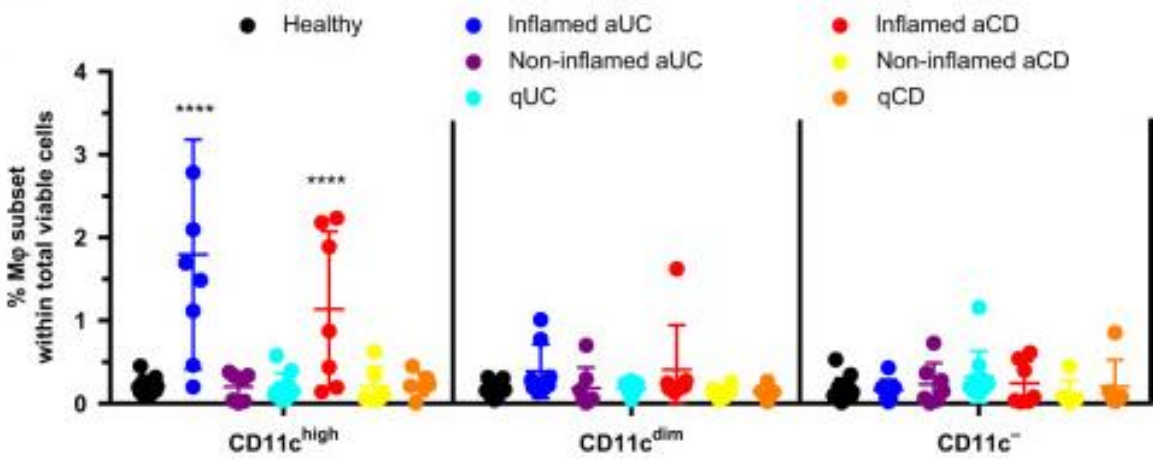
Role of Inflammatory Monocytes in IBD

- ☑ Inflammatory monocytes are enriched in inflamed mucosal biopsies from IBD patients
- ☑ Inflammatory monocytes secrete disease driving cytokines, including IL-23, IL-6, and TNFα
- ☑ Monocytosis is a biomarker for relapse and severity in IBD patients
- ☑ Transcriptional signature of IL-23 producing inflammatory monocytes predicts disease and resistance to anti-TNF therapies

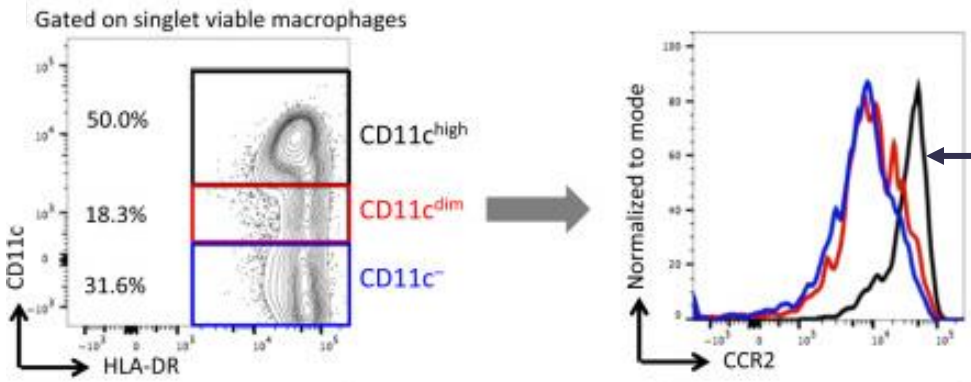
World J Gastrointest Pathophysiol. 2020 May 12;11(3):43-56. doi: 10.4291/wjgp.v11.i3.43.
Gut. 2021 Jun;70(6):1023-1036. doi: 10.1136/gutjnl-2020-321731. Epub 2020 Oct 9.
Sci Rep. 2015 Dec 18:5:18584. doi: 10.1038/srep18584.
Front Immunol. 2022; 13: 996875.
Inflamm Bowel Dis. 2015 Jun;21(6):1297-305. doi: 10.1097/MIB.0000000000000384.
Inflammatory Bowel Diseases, 2022, 28, 70–78 https://10.1093/ibd/izab031

Inflammatory monocytes in the gut express high levels of CCR2, consistent STX-0712's MOA

Inflammatory monocytes are highly enriched in ulcerative colitis (UC) and Crohn's disease (CD) inflamed biopsies



Inflammatory monocytes from IBD patients (UC & CD) express high levels of CCR2



CD11c^high monocytes co-express high levels of CCR2

Potential Advantages of STX-0712 in IBD

- Combination-like efficacy and fast onset of action in a single agent given the impact on multiple inflammatory cytokines
  - ➢ Potential to break through efficacy ceiling of current therapies
- Improved safety profile given the targeted elimination of enriched monocytes in the inflamed tissue
- Opportunity to drive towards a precision approach to IBD (via blood or fecal biomarkers)

Solu Therapeutics pipeline

	PROGRAM	PLATFORM mAB	INDICATION	DISCOVERY	PRECLINICAL	IND-ENABLING	Ph1	Ph2
Oncology	**STX-0712** **CCR2-CyTAC** *monocyte depletor*	ADCC-enhanced	CMML, AML, other heme malignancies			***IND projected 4Q24***		
Oncology	**STX-0301** **TRPM8 x PSMA CyTAC** *bispecific ADC*	ADC	Prostate cancer					
Immunology	**STX-0812** **CCR2-CyTAC** *monocyte depletor*	ADCC-enhanced	IBD, RA, other immunology indications					
Immunology	**STX-0640** **MRGX2-CyTAC** *mast cell depletor*	ADCC-enhanced	Inflammation, urticaria, atopic dermatitis, IBD					
Pain	**STX-1001** **Na_V TicTACs** *long-acting antagonists*	Fc-disabled	Chronic pain			***Na_V1.8*** ***Na_V1.7*** ***Na_V1.8/1.7 dual antagonist***		

plan to partner prior to IND-enabling studies

Additional undisclosed undruggable target candidates from our proprietary CyTAC™ platform are under active investigation in multiple TAs
TicTAC™ = Therapeutic Index Control Targeting Chimera

STX-0640

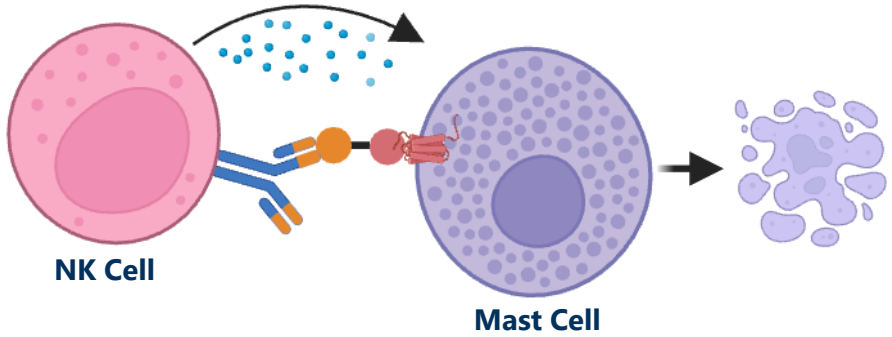
Targeting Mast Cells in Immunological Disease, MRGX2

This program uses the same ADCCe Ab in our lead program that will be in the clinic in early 2025, saving Solu significant time and costs associated with new cell line and CMC development

Targeting mast cells is clinically validated, but current strategies lack durability and specificity

Most Therapeutic Approaches Aim to Slow Degranulation or Inactivate Downstream Mediators

Solu Tx's Approach will Selectively Kill Mast Cells



Summary of Current Mast Cell Therapeutics

- Antihistamines (approved)
- Glucocorticoids (approved)
- Anti-IgE (approved)
- Anti-IL4/13 (approved)
- Avapritinib (mutant Kit/PDGFRA, approved)
- Anti c-kit/CD117 (Ph1/2)

A Need for New Therapies that Selectively Eliminate Mast Cells

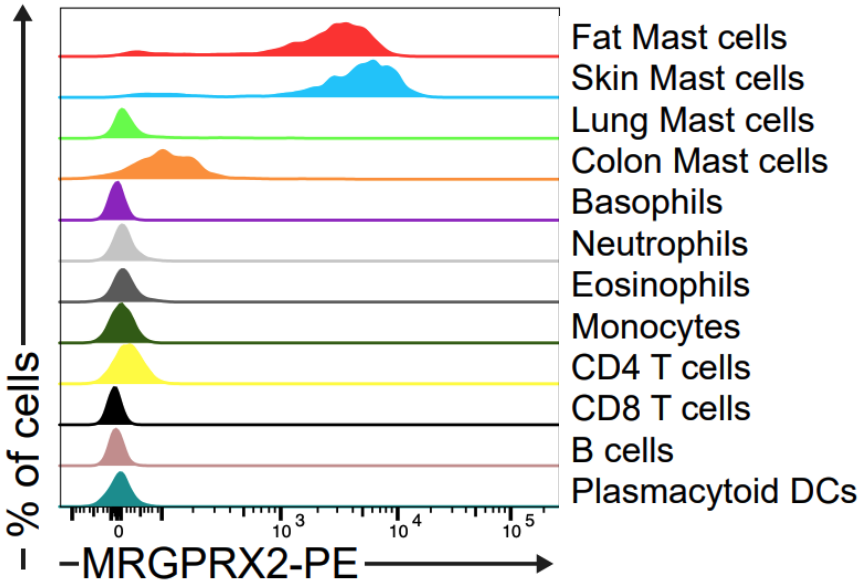
- Current strategies target mediators or degranulation, leading to therapeutic resistance
- Current therapeutics do not eliminate mast cells
- Current therapies lack specificity leading to Tox, e.g., anti-c-Kit, glucocorticoids

STX-0640 is a novel, MRGX2-targeting mast cell depleting CyTAC with broad immunology potential, advancing to development candidate selection within the next year

Nature Reviews Immunology volume 22, pages 294–308 (2022)

MRGX2 is a selective mast cell target undruggable to antibodies and is linked to a range of immune diseases

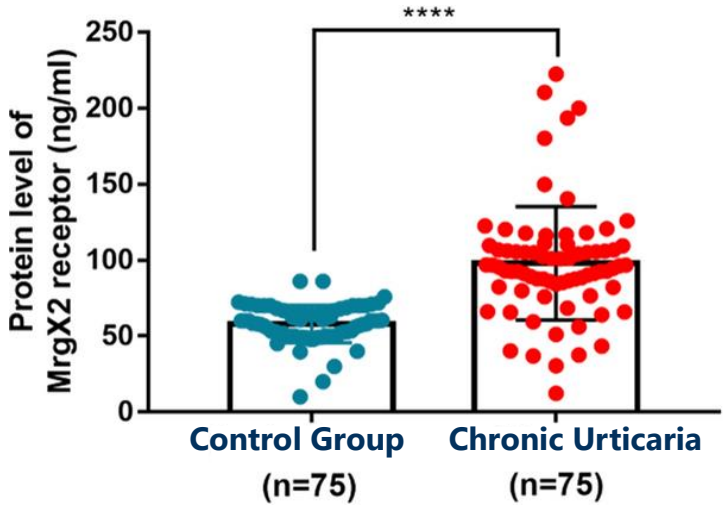
MRGX2 is Selective for Mast Cells



- Analysis of primary human Mast Cells shows MRGX2 is not expressed on other immune cells

Immunity. 2020 Feb 18;52(2):404-416.e5. doi: 10.1016/j.immuni.2020.01.012. Epub 2020 Feb 11.
Curr Allergy Asthma Rep. 2021 Jan 4;21(1):3. doi: 10.1007/s11882-020-00979-5.

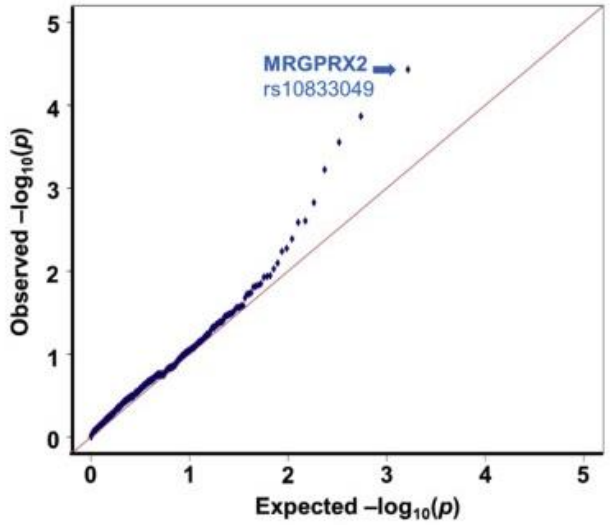
MRGX2 is Overexpressed in Human Inflammatory Diseases



- Psoriasis with severe itch
- Atopic Dermatitis
- Additional inflammatory diseases

Clin Transl Allergy. 2020 Dec 9;10(1):61. doi: 10.1186/s13601-020-00361-8.

A Loss of Function MRGX2 Variant is Protective Against UC

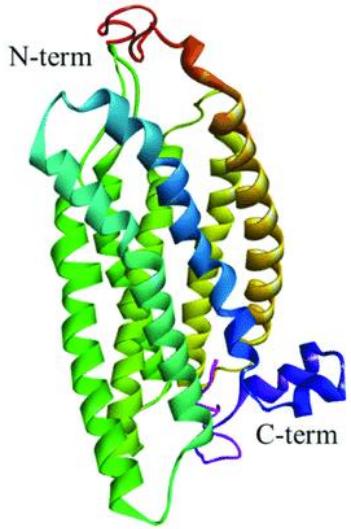


- Endogenous agonists of MRGX2 are overexpressed in UC and other inflammatory diseases

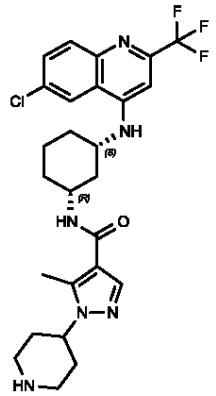
Gastroenterology. 2021 Apr;160(5):1709-1724. doi: 10.1053/j.gastro.2020.12.076. Epub 2021 Jan 6.

MRGX2 CyTAC inhibitors have been generated with *ex vivo* and *in vivo* proof-of-concept expected later this year

Limited extracellular domains



High quality small molecules



- Minimal exposure of the receptor extracellularly makes it undruggable to classical antibody approaches
- Multiple MRGX2 antagonists with high potency, established SAR, and demonstrated external binding exist, making the CyTAC approach feasible

Summary of progress:

SAR design of MRGX2 CyTACs	☑
Chemical synthesis of CyTACs	☑
In vitro target engagement	☑
Robust *in vivo* antibody-like PK	☑
Ex vivo efficacy	☑ *Collecting Data Now*
In vivo efficacy	🕒

Ex vivo and In vivo PoC in 2024

☑ Work complete 🕒 Work in progress

STX-0640 represents a pipeline-in-a-product commercial opportunity in inflammatory diseases

Possible Clinical Indications for Mast Cell Depletion

	Disease#	Estimated US Prevalence*
Potential Initial Indications	Inflammatory Bowel Disease	2,390,000
	Chronic Urticaria	700,000
	Prurigo Nodularis	145,000
	Systemic Mastocytosis	32,000
Potential follow-on Indications	Food Allergy	33,000,000
	Atopic Dermatitis (Mod-to-Severe)	6,600,000
	Psoriasis (with severe itch)	2,720,000
	Rheumatoid Arthritis	1,300,000
	Systemic Lupus Erythematosus	322,000
	Eosinophilic Esophagitis	188,000

#Engaging clinical immunologists and additional KoLs to finalize clinical focus
*Sources provided upon request

Blockbuster Potential for Biologics with Multiple Inflammatory Disease Indications

HUMIRA® adalimumab

$21B

Peak Sales (2021)

DUPIXENT® (dupilumab) Injection 200mg · 300mg

$14B

Forecasted Peak Sales

Stelara® (ustekinumab)

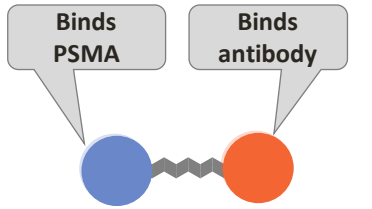
$10.5B

Forecasted 2024 Sales

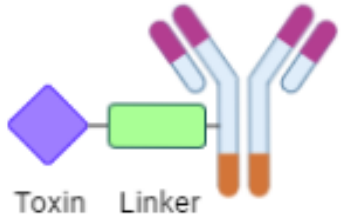
STX-0301 – A Differentiated Antibody Drug Conjugate (ADC) and Dual Antigen Targeting Approach in Prostate Cancer

Our antibody drug conjugate (ADC) platform biologic rapidly kills prostate cancer cells using our PSMA-targeted CyTAC

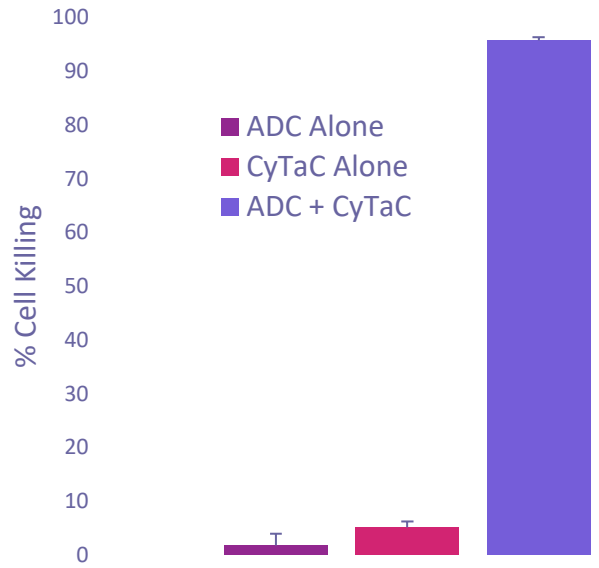
Platform ADC + PSMA-CyTAC Rapidly Kills Prostate Cancer Cells



CyTAC



Platform ADC



- Cells incubated 48 hours with -5 log(M) ADC, N=3

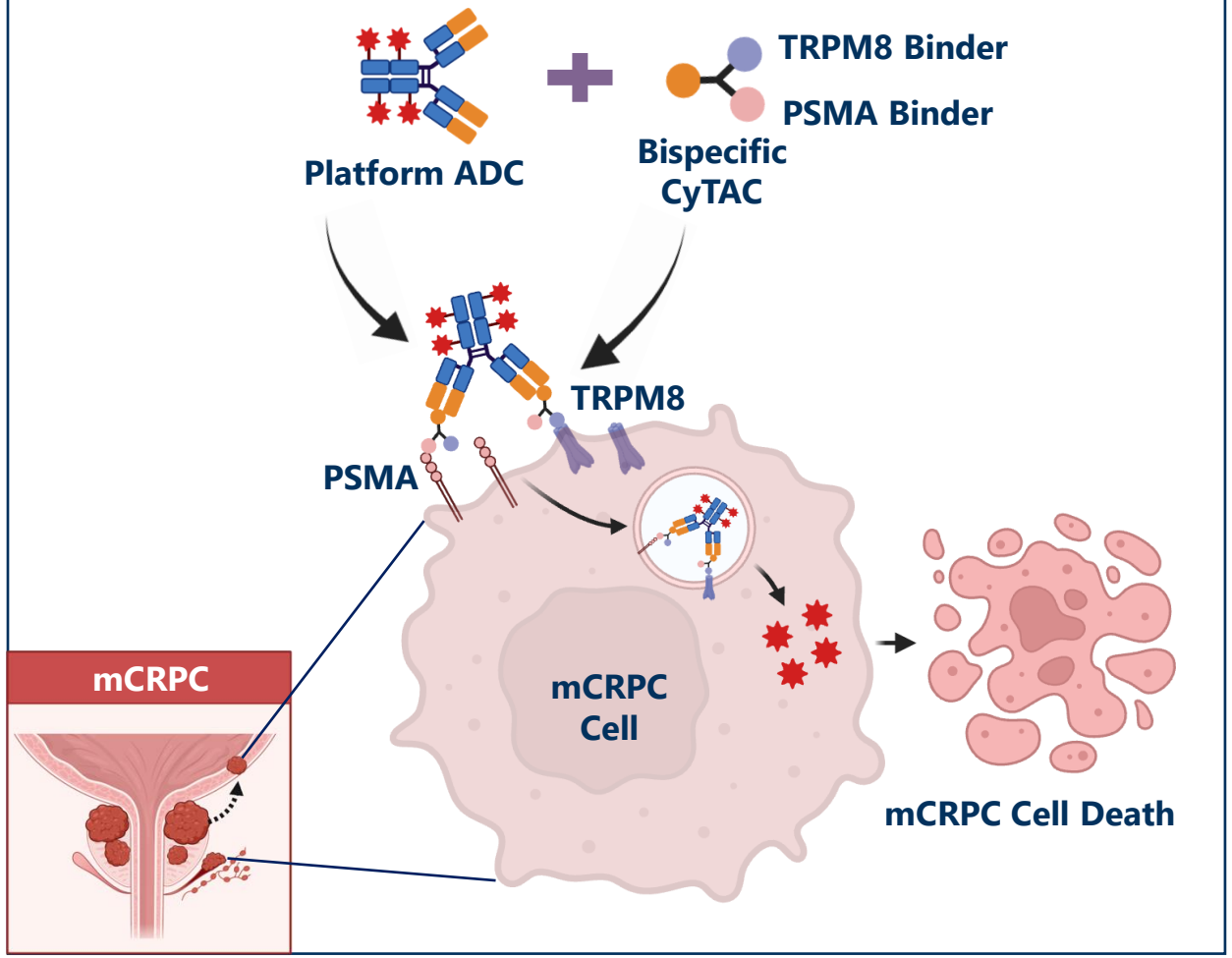
- CyTAC platform antibody is readily converted to an antibody drug conjugate via bioconjugation
- Drug antibody ratio controlled by bioconjugation and linker technology
- Combination of CyTAC + ADC elicits rapid and potent cell killing
- In addition to new targets, platform unlocks rapid small molecule internalization mechanisms

Traditional PSMA ADC Takes 7 Days for Similar Killing Levels

CyTAC small molecule based internalization of ADC is much faster than traditional ADCs

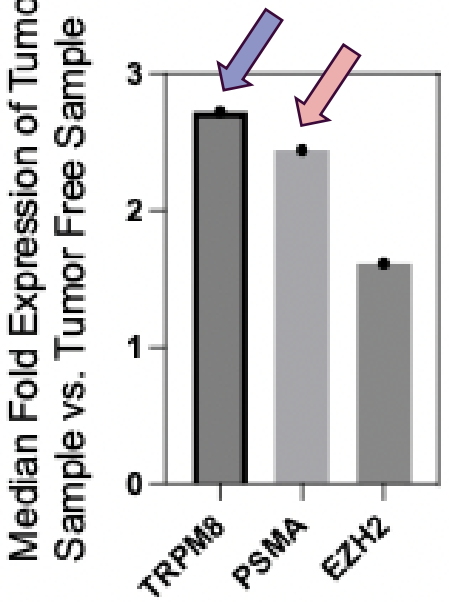
TRPM8 x PSMA ADC program: targeting two of the highest tumor enriched cell surface targets in prostate cancer

A Novel CyTAC-Based Dual Antigen Targeted Medicine

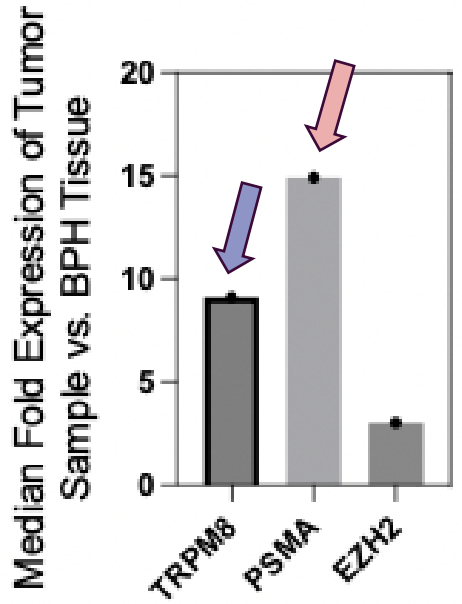


qPCR Data Shows High PSMA/TRPM8 Differential Expression in Prostate Cancer Patient Samples

Tumor vs. Tumor Free Tissue



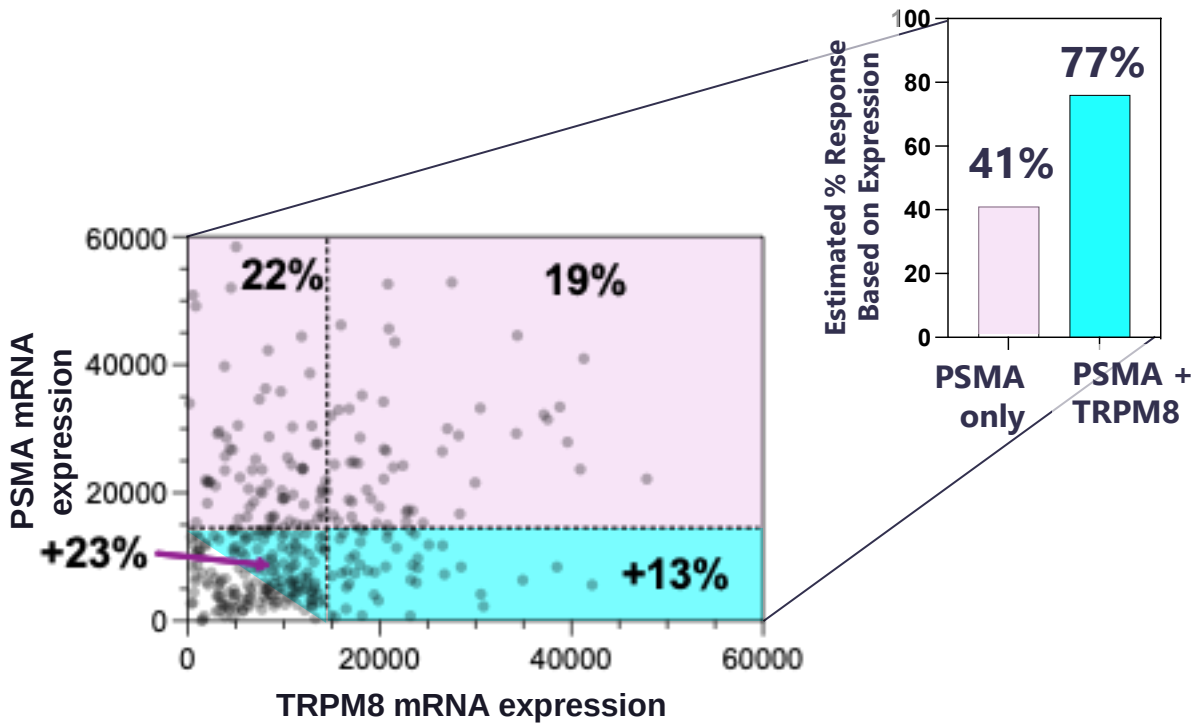
Tumor vs. BPH Tissue



BMC Cancer volume 14, Article number: 82 (2014)

Our PSMAxTRPM8 ADC may Address Significantly More mCRPC* Patients than Pluvicto and has Potential in mHSPC*

Bispecific Targeting PSMAxTRPM8 has the Potential for Responses in ~1.9-fold More mCRPC Patients vs. Pluvicto



Data from TCGA. Purple shading represents an estimation of the PSMA-high expressing patients that have a partial response to Pluvicto. Blue Shading represents an estimation of the additional patients with potential to respond to TRPM8xPSMA bispecific.

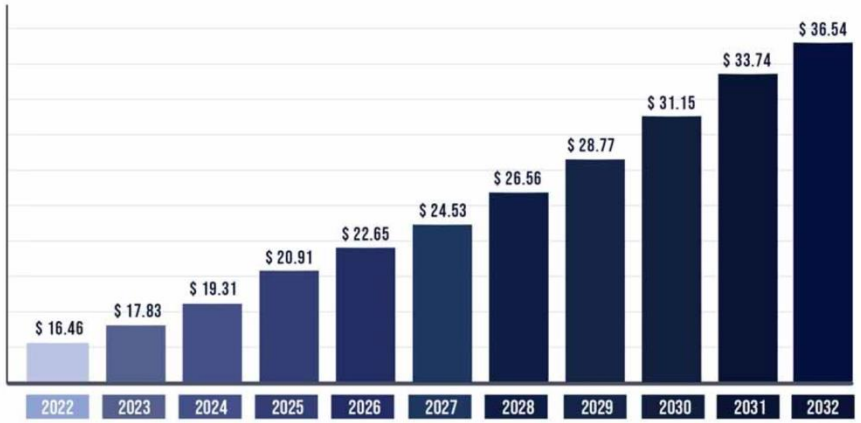
PSMAxTRPM8 Bispecific

- Dual targeting enhances avidity to increase efficacy when PSMA/TRPM8 single expression is too low to see killing
- Potential for 1.9x more responses in mCRPC*
- Potential to expand into mHSPC*/NEPC* due to expression profiles of TRPM8 and PSMA
- Multiple antigens decreases likelihood of therapeutic resistance

*Metastatic Castration Resistant Prostate Cancer (mCRPC), Metastatic Hormone Sensitive Prostate Cancer (mHSPC), Neuroendocrine Prostate Cancer (NEPC)

STX-0301 has Multi-Billion Dollar Commercial Potential in Prostate Cancer

Global Prostate Cancer Therapeutics Market Forecast[§]



The global prostate cancer therapeutics market was $16.46B in 2022 and is projected to hit $36.54B by 2032, growing at a CAGR of 8.3%

[§] Prostate Cancer Therapeutics Market – Global Industry Size, Share, Analysis & Trends 2023 – 2032, NovaOne Advisor, https://www.novaoneadvisor.com/report/prostate-cancer-therapeutics-market

PLUVICTO®
lutetium Lu 177 vipivotide tetraxetan
INJECTION FOR INTRAVENOUS USE

$980M
2023 Sales[1,2]

>$3B
Projected Peak Sales[3,4]

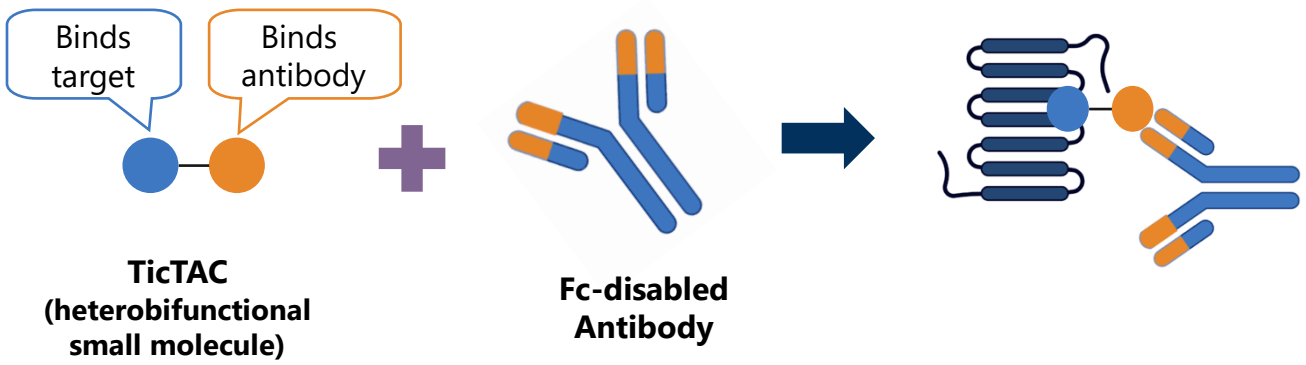
[1] Novartis Q4 2023 Results, January 2024, novartis.com
[2] mCRPC PSMA-positive post-taxane setting
[3] Novartis JPM Strategy & Growth Update, January 2024, novartis.com
[4] mCRPC post-taxane, mCRPC pre-taxane, mHSPC, oligometastatic PC

STX-1001

*Long-acting Antagonism of Sodium Ion Channels in Pain, $Na_V1.7/8$**

*** Solu Tx is developing Na ion channel pain programs for pharma partnering. We will push forward to key milestones and are already in discussions and seeking pharma partnerships.**

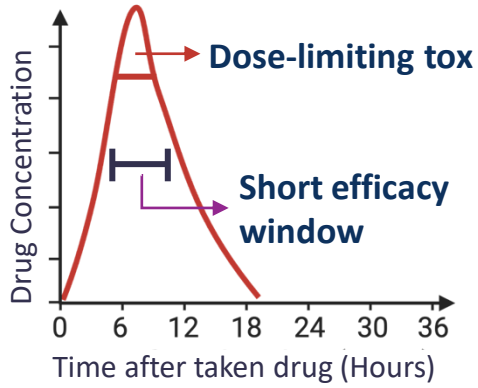
Our Therapeutic Index Control Targeting Chimera ("TicTAC™") unlocks long-acting inhibitors targeting sodium ion channels for pain



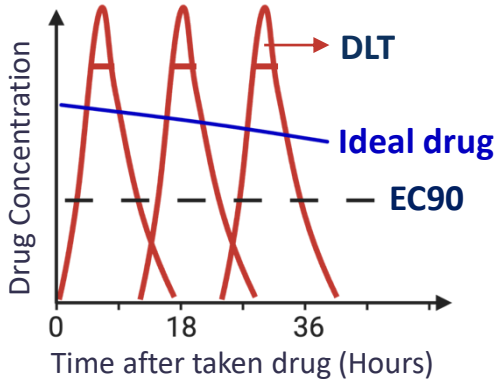
Solu platform approach used for discovery of long-acting $Na_V1.7$ & 1.8 antagonists

- Program Goal: Potent small molecules with the PK characteristics and extended half-life of an Ab

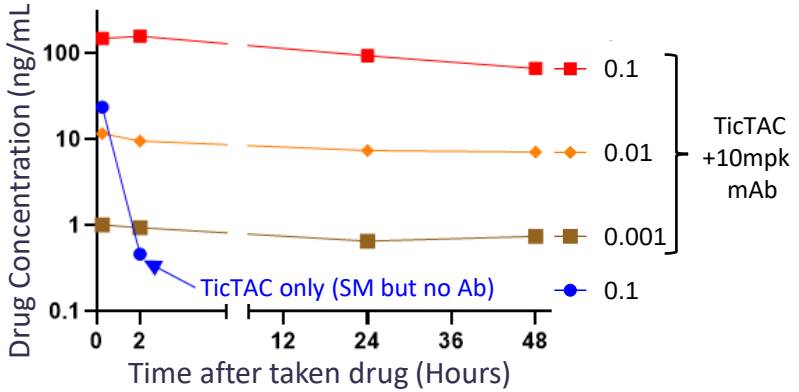
Typical PK of small molecule drug drives dose-limiting tox (DLT)



The ideal drug would stay in efficacy window with no DLT

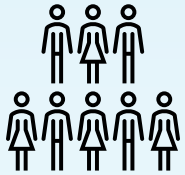


TicTAC half-life extension greatly prolongs efficacy window



There is large unmet need in pain, and human genetics has revealed the ion channels responsible for pain signaling

Acute and neuropathic pain represent huge opportunities for innovative medicines



- **Millions of patients per year in the US**
- **Pain is often poorly managed**

Current pain treatments:

NSAIDS and Acetaminophen

- Mildly effective, non-addictive, but GI/liver tox

Opioids

- Highly addictive, many side effects, patients unable to tolerate, but effective at pain relief

Inactivating mutations in Na_V ion channels eliminate or blunt pain sensation


The New York Times

Gene That Governs Pain Perception Is Found

$Na_V1.7$ – no pain[1]

$Na_V1.8$ – blunted pain[2]

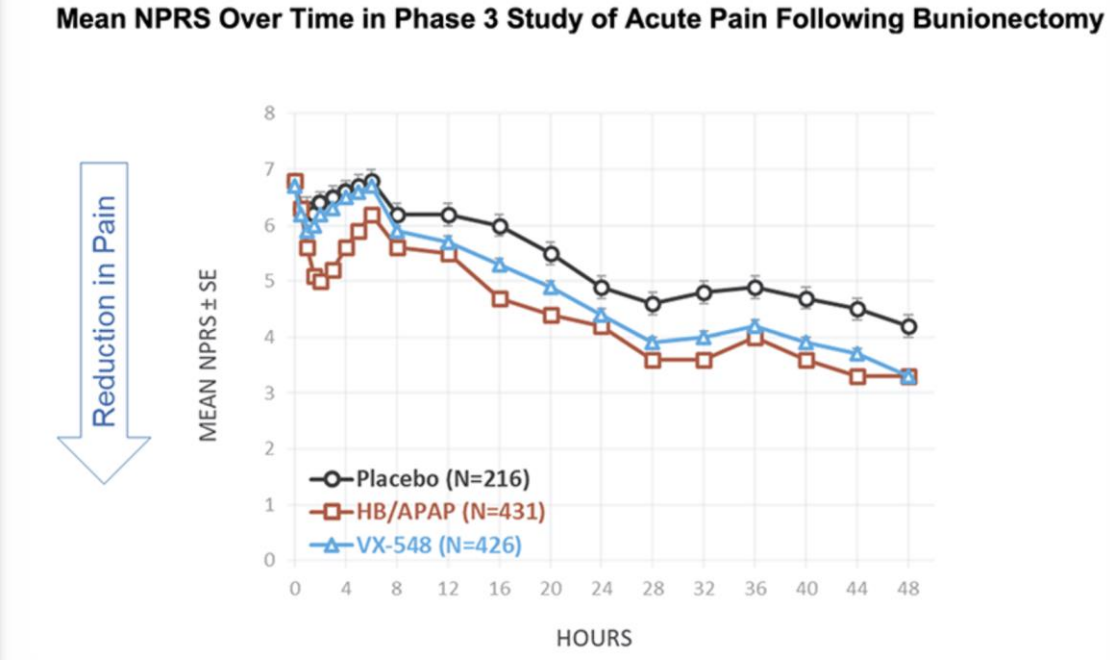
Subsequent work on Na_V inhibitors have shown:

- Potential for effective pain relief without abuse
- Targets are undruggable to Ab approaches

[1]PMIDs: 24006052, 33775738, 36092147, 30672368; [2]PMIDs: 24006052, 26747884, 33775738, 30672368, 10448219

Vertex validates $Na_V1.8$ but misses secondary endpoint in recent Phase 3 trial

In Vertex's phase 3 study, VX-548 did not perform better than opioids



- Solu's discussions with KOLs highlight that this is likely due to balancing efficacy with Cmax-driven tox
- We are performing experiments to test VX-548 PK vs. our platform approach

THE WALL STREET JOURNAL.

New Drug Shown to Relieve Pain Without Getting Patients Addicted

Non-opioid drug from Vertex lowered pain of study subjects bu didn't work better than popular painkiller Vicodin

The New York Times

Experimental Drug Cuts Off Pain at the Source, Company Says

Vertex Pharmaceuticals said its medicine could address moderate to severe acute pain, and might be able to avoid the risk of addiction.

ENDPOINTS NEWS

Exclusive: Vertex CSO David Altshuler talks non-opioid pain pills, AI and the myth of breakthroughs

In VX-548 phase 2 study, Vertex excluded patients with cardiac dysrhythmias

COMPLETED

A Study Evaluating Efficacy and Safety of VX-548 for Acute Pain After a Bunionectomy

ClinicalTrials.gov ID NCT04977336

Sponsor Vertex Pharmaceuticals Incorporated

Key Exclusion Criteria:

- Before Surgery:
  - Prior history of bunionectomy or other foot surgery on the index foot
  - History of cardiac dysrhythmias requiring anti-arrhythmia treatment(s)
  - Any prior surgery within 1 month before the first study drug

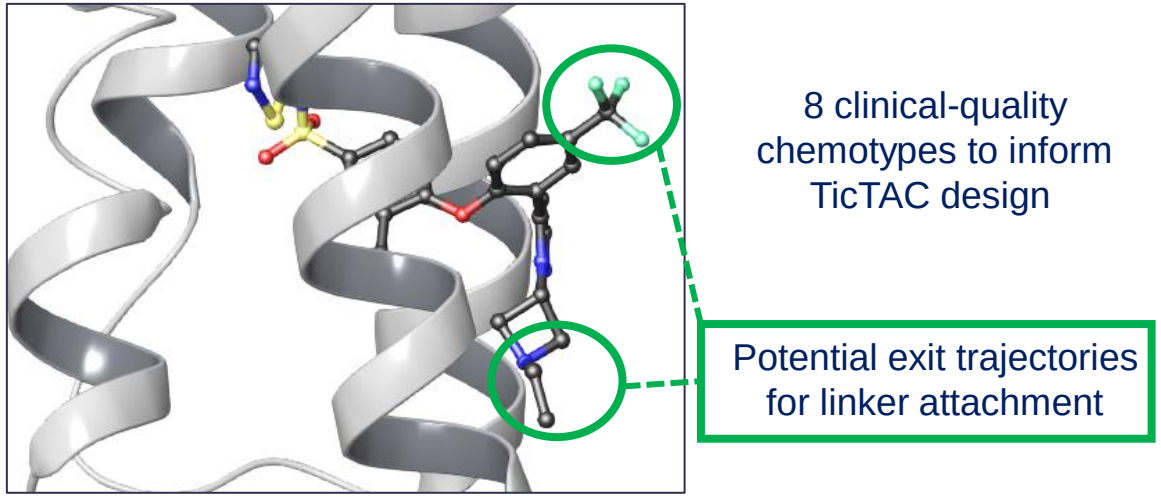
https://clinicaltrials.gov/study/NCT04977336

Solu Therapeutics

Solu has rapidly developed high quality TicTAC antagonists of $Na_V1.7$ and $Na_V1.8$ that are being advanced

Solu leverages high quality chemical starting points and highly optimized linkers to generate DC quality TicTACs

Sodium Ion Channel Co-crystal Structure



8 clinical-quality chemotypes to inform TicTAC design

Potential exit trajectories for linker attachment

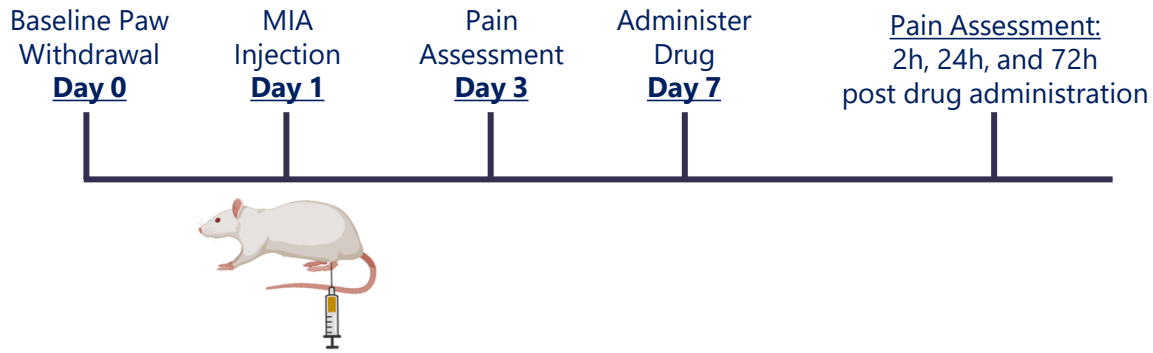
- $Na_V1.7$ and 1.8 targeting TicTACs were designed using structure guided and SAR design principles
- Matching molecular properties of targeting small molecules with proprietary linkers delivers DC quality molecules

We have developed potent, long-acting, TicTACs with drug-like properties

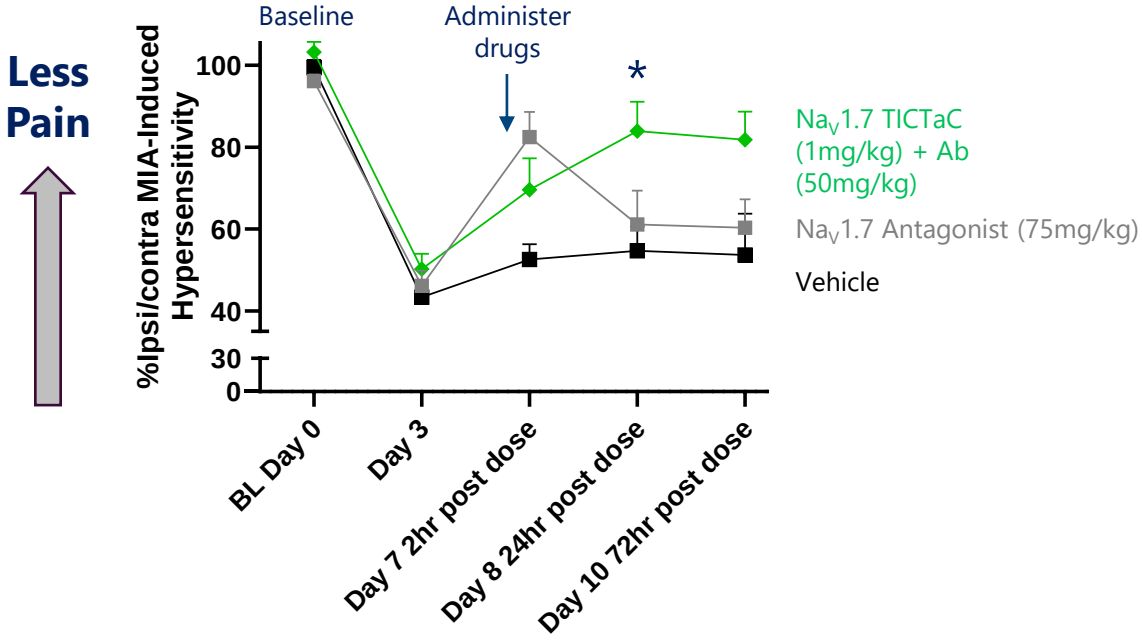
Criteria		Program	
		$Na_V1.7$	$Na_V1.8$
Potency EC_{50}	<30nM	✓	✓
Mouse PK @ 24 h (ng/mL)	>10	✓	✓
ChromLogD	<4	✓	✓
CAD Solubility Indicator (µg/mL)	>100	✓	✓

Our $Na_V1.7$ TicTAC significantly reduces osteoarthritis-induced pain in rat monosodium iodoacetate model

$Na_V1.7$ TicTAC delivers potent and differentiated pain relief vs. $Na_V1.7$ antagonist alone



Osteoarthritic pain assessment analyzed as the hypersensitivity of weightbearing response on MIA injected limb



Rat MIA model confirms long-acting antagonism of the $Na_V1.7$ pathway and efficacy

*Data collected at Transpharmation

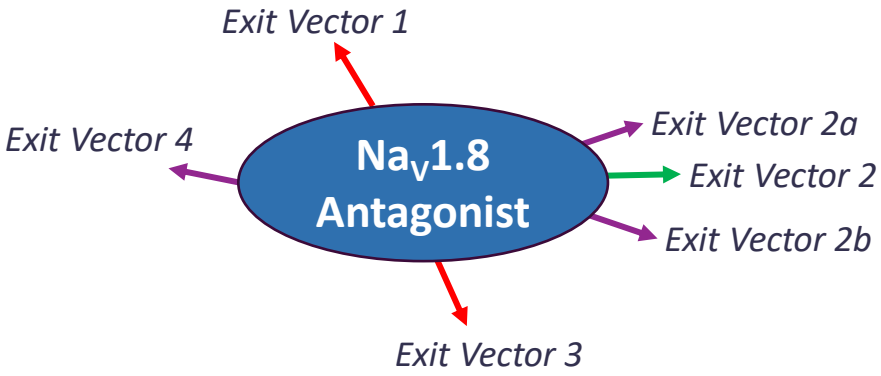
Our TicTAC platform facilitates rapid discovery, enabling Solu to achieve *in vivo* POC for our $Na_V1.8$ program within ~4 months of initiation

	Parent			TicTAC		
	Preclinical or Clinical	Potency	Rodent or Human Active	# of Exit Vectors	Improved Exposure	Demonstrated Activity
$Na_V1.8$ Series 1	Preclinical	<100 nM		Single	☑	☑
$Na_V1.8$ Series 2	Preclinical	<100 nM		Deprioritized	-	-
$Na_V1.8$ Series 3	Clinical	<100 nM		Multiple	☑	☑
$Na_V1.8$ Series 4	Clinical	<100 nM		Multiple	🕒	🕒
$Na_V1.8$ Series 5	Clinical	<500 nM		Evaluating	🕒	🕒

Multiple, chemically distinct $Na_V1.8$ TicTACs identified for lead optimization, with additional chemical series under evaluation

☑ Work complete 🕒 Work in progress

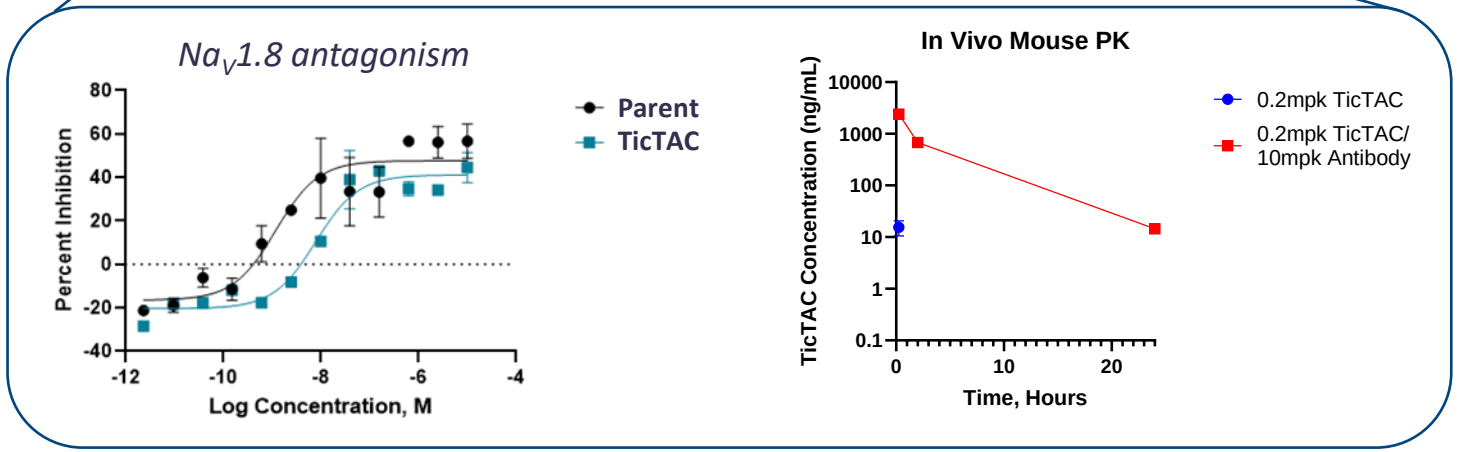
Our industrialized platform allows us to design DC quality TicTACs from only a handful of linker iterations



- Modular platform and know-how allows rapid identification of advanced lead molecules
- Reliable and predictable PK profile controlled by high affinity binding to antibody
- Target concept to *in vivo* PoC achieved in <4 months

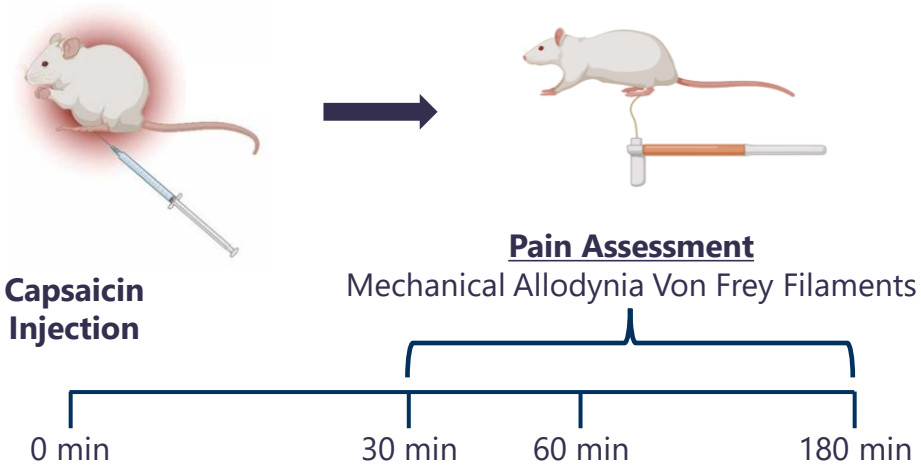
***In vitro* antagonism activity (EC_{50})**

	$Na_V1.8$ TicTACs					
Parent	Exit Vector 1	Exit Vector 2	Exit Vector 2a	Exit Vector 2b	Exit Vector 3	Exit Vector 4
1.2 nM	>10,000 nM	7.8 nM	TBD	TBD	>10,000 nM	TBD



Our $Na_V1.8$ TicTAC provides substantial pain relief in rat capsaicin model

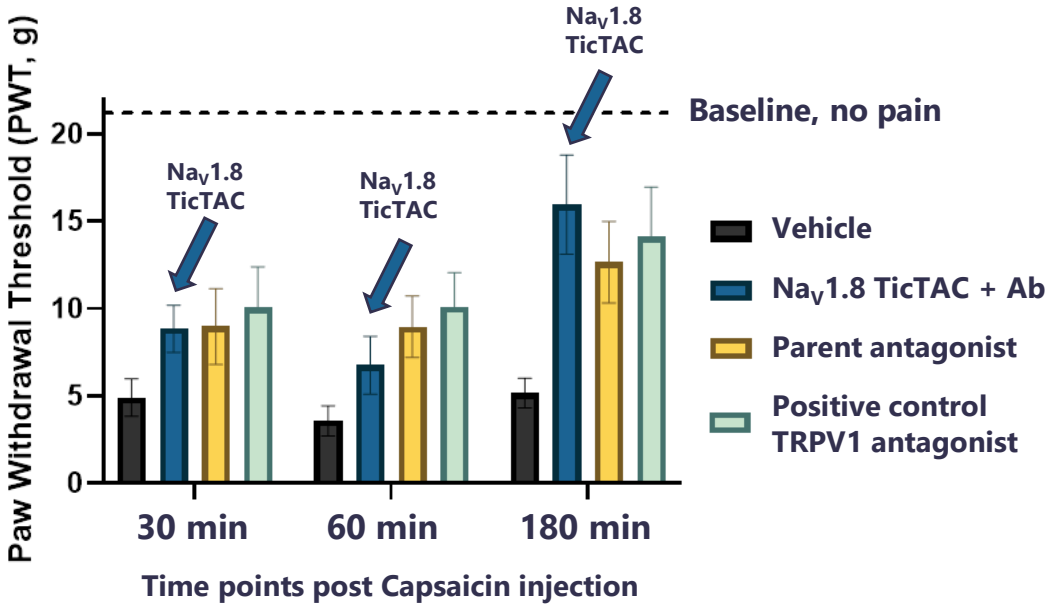
Intraplantar capsaicin rat pain model



- TicTAC/Ab dosing (IV) – 24 hours prior to Capsaicin injection to allow Ab biodistribution
- All other test agents injected 30 minutes prior to Capsaicin injection

$Na_V1.8$ TicTAC pain relief is equivalent to parent and TRPV1 small molecule antagonists

More Pain



Solu's $Na_V1.8$ TicTAC shows comparable efficacy to both the parent antagonist and independent positive control, confirming the our SM/antibody complex crosses the blood/nerve barrier and is effective in an acute pain model

We are rapidly advancing our $Na_V1.7$, $Na_V1.8$, and $Na_V1.7/1.8$ inhibitors towards development candidates

Summary of progress:	$Na_V1.7$	$Na_V1.8$	$Na_V1.7$ / 1.8
SAR design of $Na_V1.8$ and $Na_V1.7$ TicTACs	✓	✓	✓
Chemical synthesis of new TicTACs	✓	✓	✓
In vitro target engagement • IC_{50}: Single digit nanomolar or better	✓	✓	🕒
Robust *in vivo* antibody-like PK	✓	✓	🕒
In vivo efficacy – potent pain reduction	✓	✓	🕒
Exploratory tox and dose-finding studies	🕒	🕒	🕒
DC Nomination	*H1-25*	*H1-25*	*H2-25*

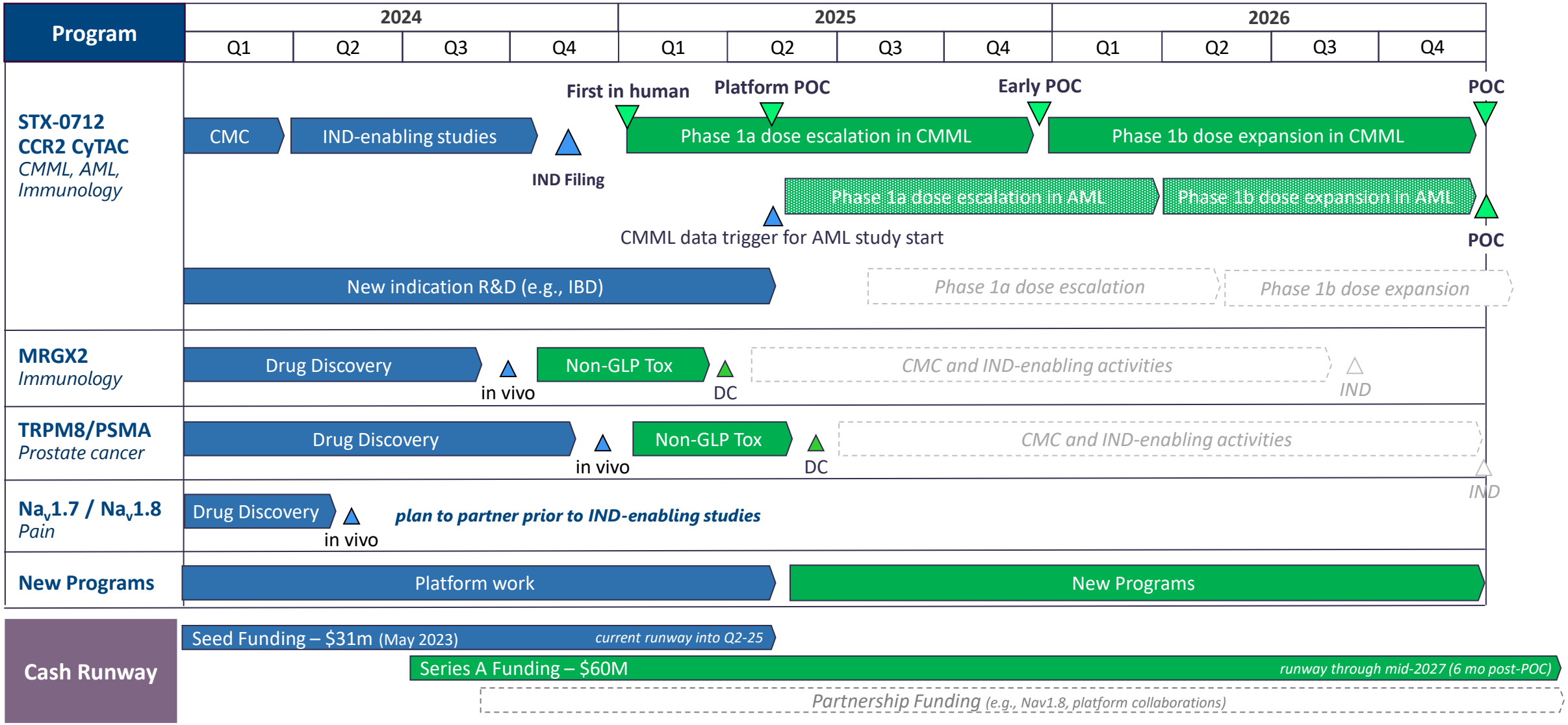
Actively engaged in discussions with potential partners with expertise in pain space

* IP filings made covering the $Na_V1.8$ and $Na_V1.7$ CyTAC space

✓ Work complete 🕒 Work in progress

Financing Overview

Series A financing provides opportunities for value creation across multiple indications and programs



A Novel Class of Targeted Medicines to Transform Patients Lives

Solu Therapeutics

$31M oversubscribed financing round in May 2023

Key Milestones: IND, dosing first patient in 1Q25, *in vivo* POC for additional programs

Series A financing, targeting $60M

Key Milestones: Clinical POC in 4Q26 in CMML and potentially AML, advance follow-on program(s) to DC, establish team for future growth; existing investors will co-lead