

A PHASE 1/2, FIRST-IN-HUMAN, MULTICENTER,  
OPEN-LABEL, DOSE ESCALATION AND DOSE-  
EXPANSION STUDY OF SINGLE-AGENT ISB 1442 IN  
PATIENTS WITH RELAPSED/REFRACTORY  
MULTIPLE MYELOMA

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# High Unmet Medical Need Remains in Patients with Relapsed / Refractory Multiple Myeloma, Despite Recent Advances in Treatment

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- Incorporation of daratumumab into the treatment for multiple myeloma has improved outcomes, however relapse still occurs with development of resistance<sup>1</sup>
- BCMA targeted therapy, including CAR-T and T cell engagers, have demonstrated high overall response rates, however relapse continues to be observed<sup>2</sup>
- Several primary and acquired known tumor resistance mechanisms are implicated in relapse following treatment with CD38-targeted antibodies<sup>3</sup>
  - + Decreased CD38 cell surface density
  - + Resistance to Complement Dependent Cytotoxicity (increased complement regulatory protein expression)
  - + Resistance to phagocytosis (CD47 “do not eat me” signal overexpression)
- New multispecific antibodies designed to overcome daratumumab resistance and activate other innate immune cells may offer additional benefits to patients with multiple myeloma

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<sup>1</sup>. Gandhi UH et al. *Leukemia* 2019; 33: 2266–75

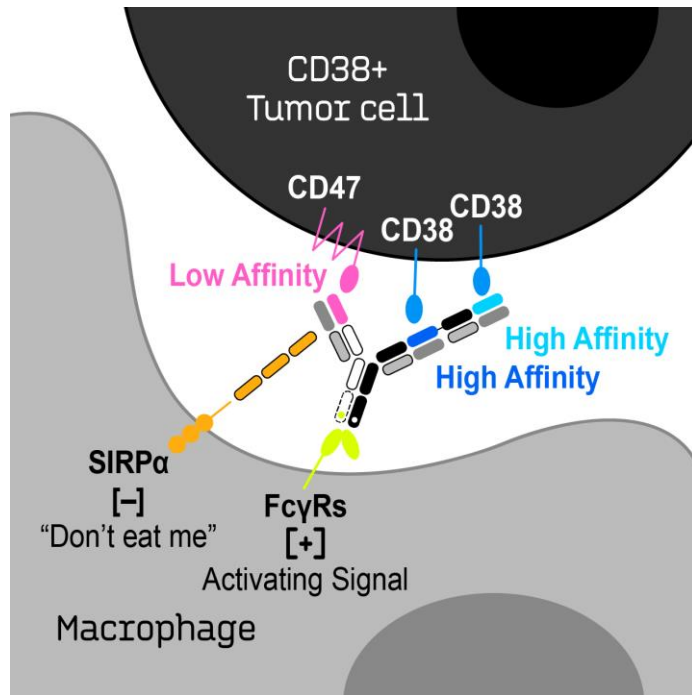
<sup>2</sup>. Watson, et al. *Expert Rev Hematol.* 2022 Jun;15(6):503-517

<sup>3</sup>. Saltarella I. et al. *CELLS* 2020

# ISB 1442 Redirects Myeloid Cells To CD38+ Tumors Using Ichnos' Proprietary BEAT® Platform

ISB 1442 (CD38 X CD47)  
BISPECIFIC ANTIBODY

BEAT® 2.0

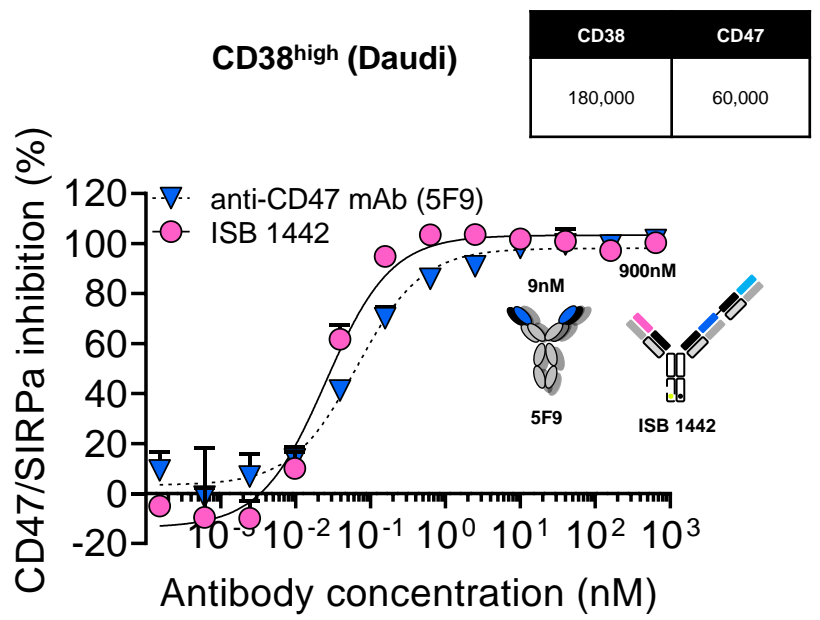


## FIRST-IN-CLASS KEY ATTRIBUTES

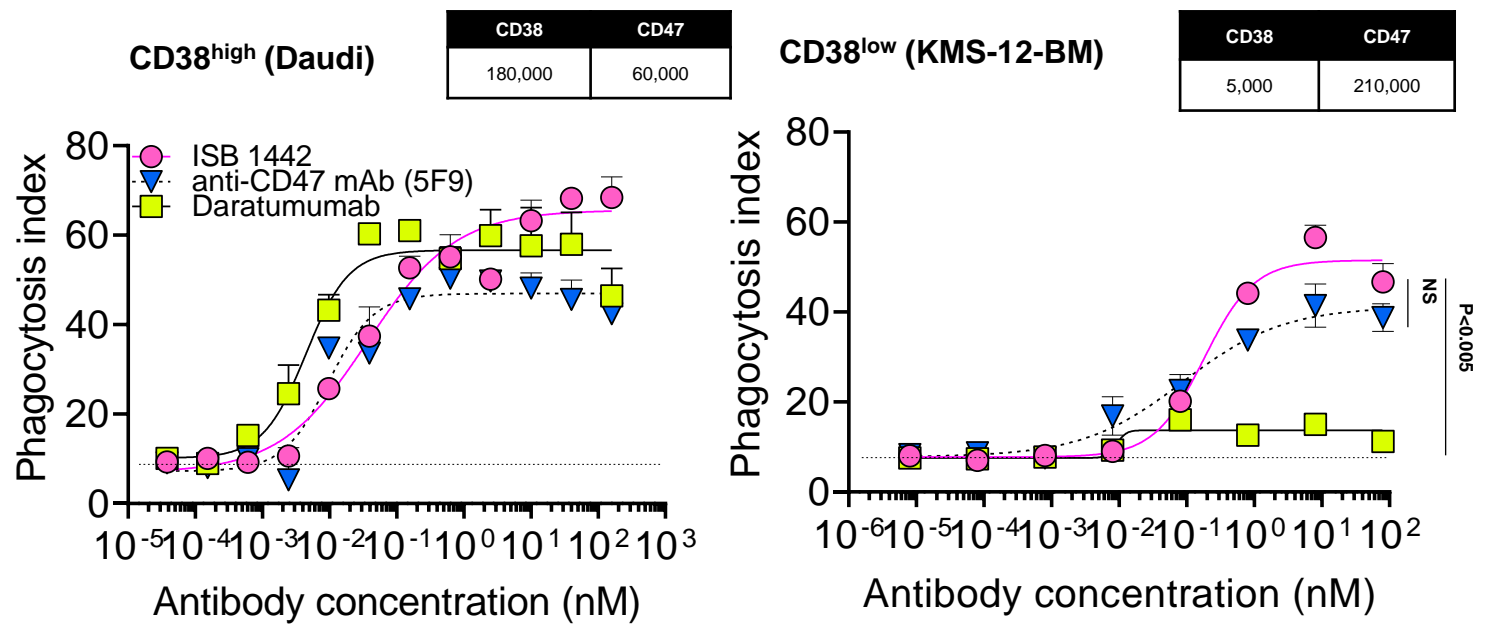
- Two high-affinity Fab arms drive binding to distinct CD38 epitopes on tumor cells
  - + Neither epitope shows functional competition with daratumumab
- One Fab arm blocking CD47-SIRPα binding in cis on tumor cells to enhance ADCP
  - + Increased tumor phagocytosis
  - + Reduced potential for antigen sink with lower-affinity Fab binding to ubiquitously expressed CD47
- Potent ADCC and CDC based on
  - + Optimized affinity, epitope, architecture/avidity and Fc engineering
- Optimized tolerability
  - + Low potential for hemagglutination, platelet aggregation

# ISB 1442 Blocks CD47/SIRPα Interactions & Induces Enhanced Phagocytosis of CD38 Low-Expressing Tumor Cells vs. Daratumumab

## Blocks CD47/Sirpa Interactions

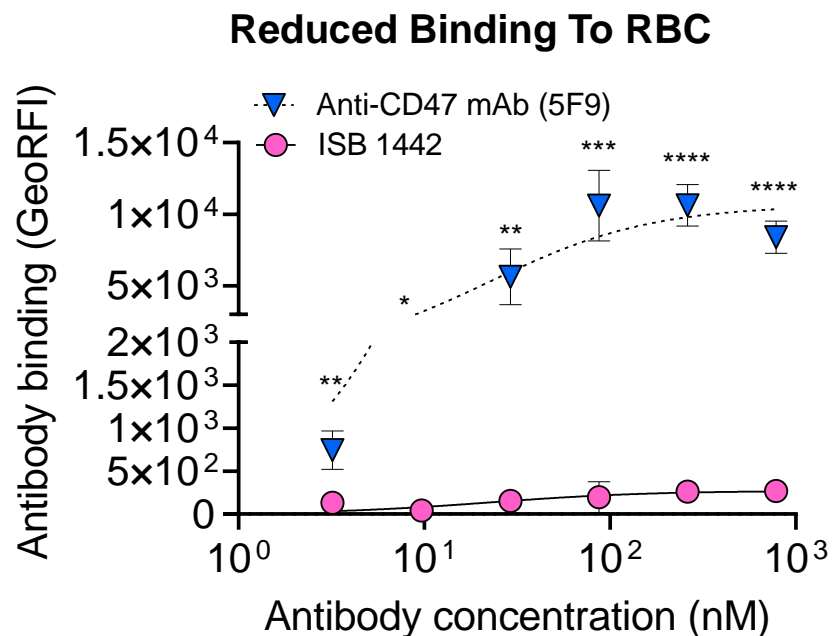


## Higher Phagocytosis Relative to Daratumumab in CD38<sup>low</sup>

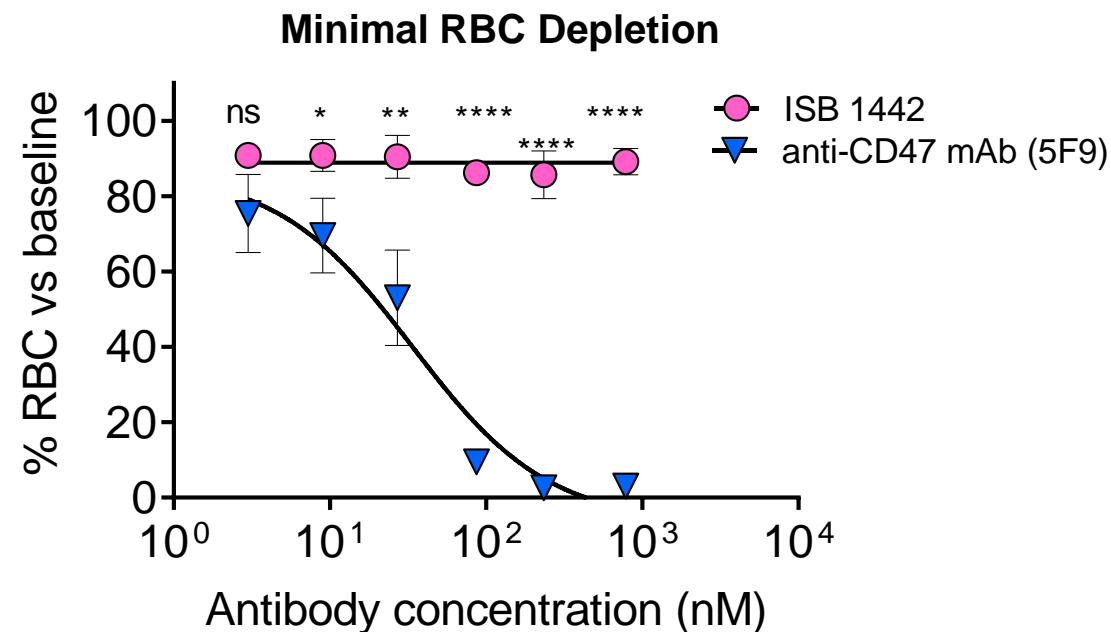


Statistics: Tukey's Multiple Comparison Test  
Data Presented At American Society Of Hematology 2021 Annual Meeting. Author, Stefano Sammiceli, et. al.

# ISB 1442 Only Binds to CD47 After Engaging CD38, Reducing Potential For On-Target, Off-Tumor Depletion of Red Blood Cells



Statistics: 2-way ANOVA with multiple comparisons.

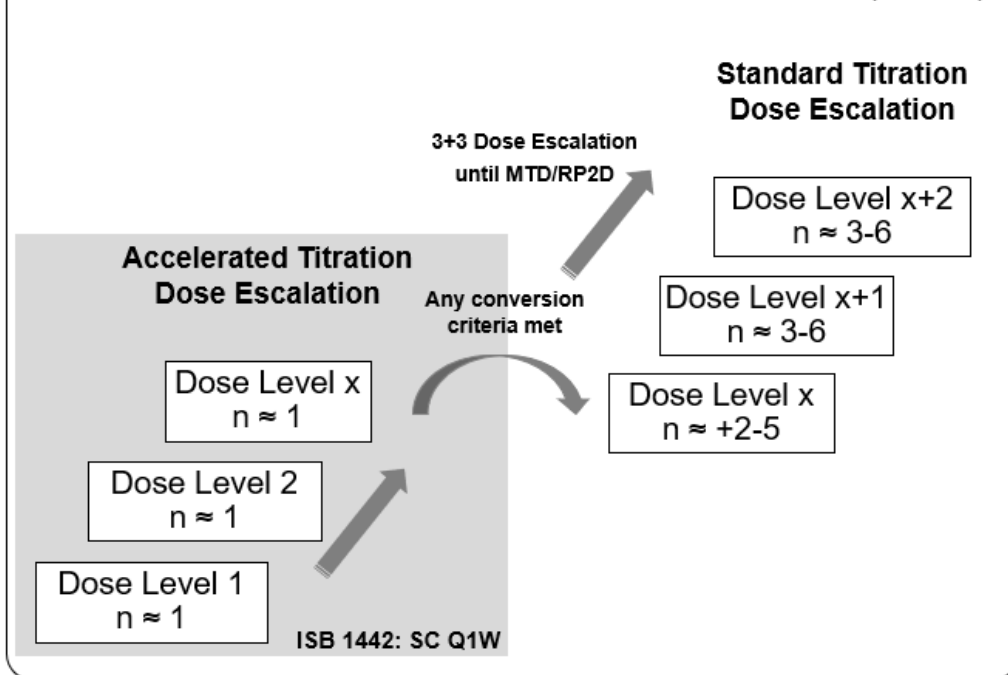


Statistics: 2-way ANOVA with multiple comparisons.

NS P ≥ 0.05  
 P < 0.05  
 \* P < 0.01  
 \*\* P < 0.001  
 \*\*\* P < 0.0001  
 \*\*\*\* P < 0.0001

# ISB 1442-101 Study Design

## Phase 1: Dose Escalation in Patients with R/R MM (n ≈ 46)



## Phase 2: Expansion in patients with R/R MM (n up to ≈ 75)

**Cohort A: R/R MM**  
(n ≈ 17 up to 44)

**Cohort B: R/R MM Post T-cell Directed Therapy**  
(n ≈ 9 up to 34)

## Key Eligibility

- R/R MM patients with measurable disease after therapy with a CD38 antibody, IMiDs, PIs, and who must not be candidates for regimens known to provide clinical benefit
- Failed 3 or more prior lines of therapies (study requirements in US)

## Primary Objectives

- Phase 1: Assess safety, tolerability and Determine MTD/RP2D
- Phase 2: Evaluate efficacy

## Secondary Objectives

- PK, immunogenicity

## Exploratory Objectives

- Biomarker, MRD

# ISB 1442-101 Study: Site Selection and Activation Status

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- HREC accepted on 27-May-2022
- Pindara Private Hospital, Benowa, QLD, Australia
- One Clinical Research Pty Ltd, Nedlands, Western Australia, Australia
- 4 Additional sites to be opened



- FDA IND accepted on 29-Apr-2022
- Site activation in process

# Conclusions

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- ISB 1442 represents a novel approach for the treatment of CD38+ tumors by co-targeting CD38 and CD47 with a 2+1 biparatopic bispecific antibody
- ISB 1442 shows higher potency *in vitro* relative to daratumumab in CD38<sup>high/low</sup> tumor models as measured by multiple antibody-dependent mechanisms of action
- ISB 1442 shows low on-target off-tumor binding compared to anti-CD47 mAb (5F9), with a potential for a better therapeutic index than anti-CD47 bivalent mAbs
- Enrollment in the First-in-Human ISB 1442 trial is ongoing (ClinicalTrials.gov identifier: NCT05427812. ACTRN: ACTRN12622000856718)