

AB-101, an Outpatient-Administered Allogeneic NK Cell Therapy, Combined with Rituximab, Generates Robust Clinical Efficacy Responses Comparable with Autologous CAR T in 31 Patients with Rheumatologic Diseases

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Disclosures

- **Norman Gaylis:** Primary Investigator, AbbVie, Alumis, Artiva, Boehringer, BMS, GSK, Hoffman LaRoche, Sanofi, SetPoint, Spyre, Takeda; Head of Rheumatology Division Cencora; Scientific Advisory Board Inmedix

Targeting Significant Unmet Need Across Three Rheumatological Conditions

Refractory Rheumatoid Arthritis (RA)

- Poor responses (ACR50 <20%) in pts with failures to 2+ b/tsDMARDs ('Difficult-to-Treat').
- Represents 10-20% of RA population.
- Need to prevent further joint destruction from uncontrolled inflammation.

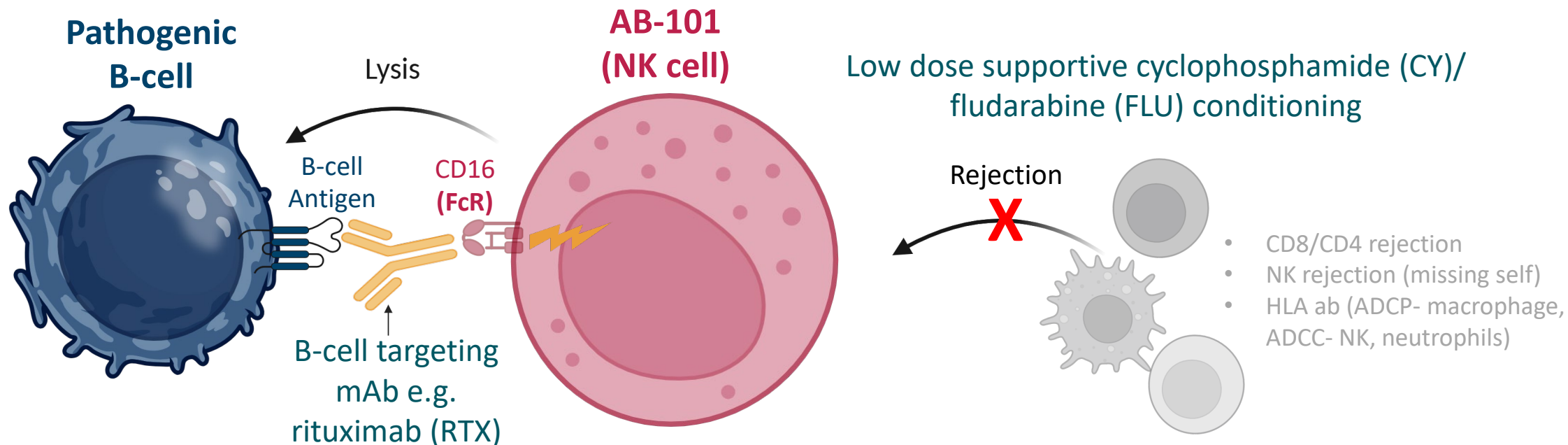
Sjogren Disease (SjD)

- Significant systemic manifestations may accompany sicca symptoms.
- No approved therapies.
- Symptomatic treatments do not address the underlying disease.

Systemic Sclerosis (SSc)

- Highest mortality rate among autoimmune diseases from organ damage, e.g. lungs.
- Available Rx are organ specific (e.g., SSc-ILD) or broadly immunosuppressive.
- Lack of safe and effective therapies for management of all manifestations.

AB-101 + Rituximab (RTX) in Rheumatological Diseases



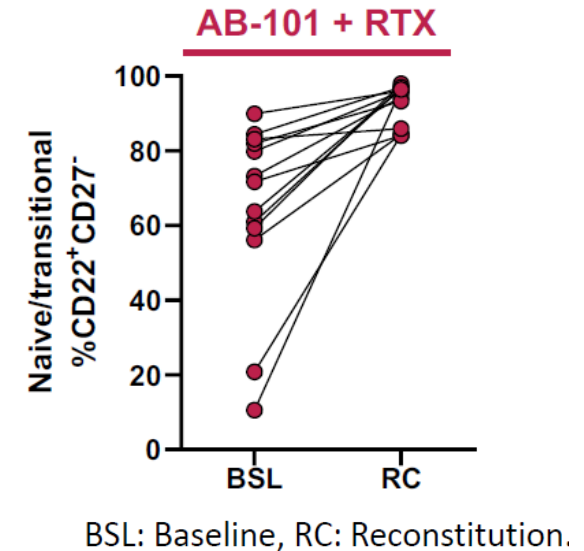
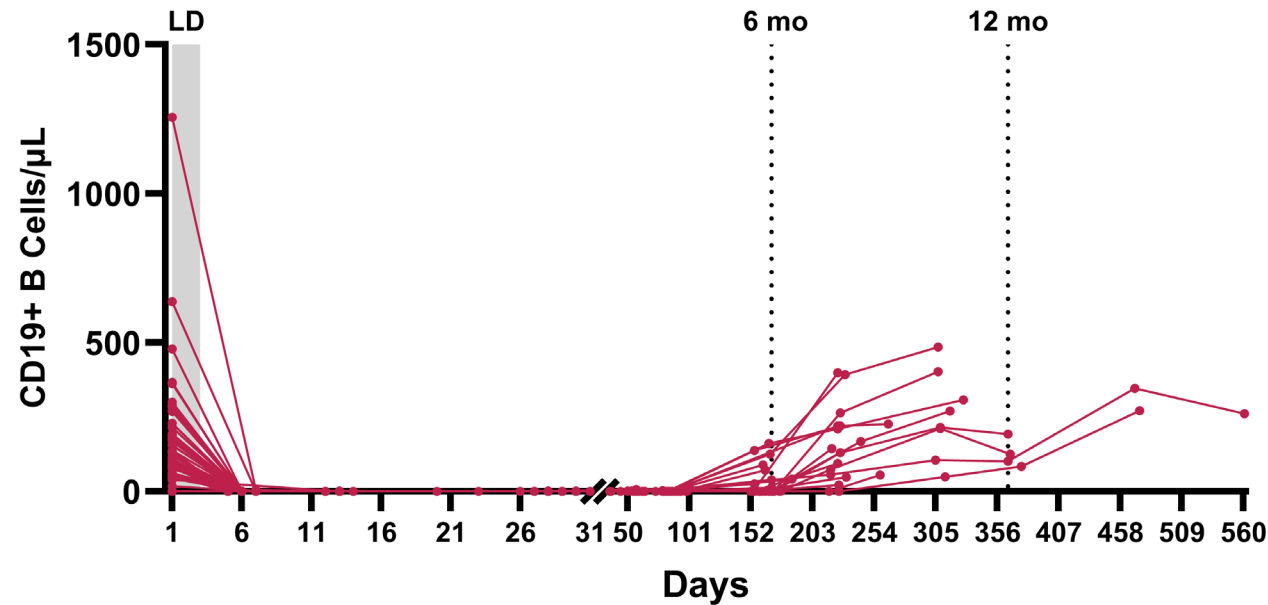
- Allogeneic, **non-genetically modified NK cells** from cord blood selected for **high affinity CD16 variant**
- Cryopreserved, **off-the-shelf**, investigational therapy
- **Outpatient-administered** with most patients treated in non-academic, community sites

Complete B-Cell Depletion with AB-101 + RTX Across Autoimmune Diseases

Demonstrates Resetting of the Immune System

Uniform and consistent B-cell depletion
seen by D13 in all patients with autoimmune diseases (N=51)

**B-cell reconstitution with increase in
naïve/transitional B cells (N=13)**



- B-cell reconstitution after AB-101 + RTX demonstrated an increase in naïve B cells
- Studies with RTX showed correlation between higher proportion of naïve/transitional cells with a good response in RA patients^{1,2}

Phase 2a Basket Study in Refractory Rheumatological Diseases

Indications: Rheumatoid Arthritis (RA); Sjogren Disease (SjD); Systemic Sclerosis (SSc); Idiopathic Inflammatory Myopathies (IIM)

Dosing (All IV):

- **Cyclophosphamide** (1000 mg/m² x 1) + **Fludarabine** (30 mg/m² x 3)
- **RTX:** 1000 mg x 2, 2 weeks apart
- **AB-101:** 1 billion or 4 billion cells x 3, weekly

Primary objective: Safety and tolerability

Secondary objectives: Preliminary efficacy

Key Inclusion Criteria

RA (2010 ACR/EULAR criteria)

- **ACPA/RF positive**
- **hs-CRP ≥3 mg/L**
- **≥6/66 Swollen Joints and 6/68 Tender Joints**
- **DAS28-ESR >3.2**
- **Inadequate response to ≥1 bDMARD (bDMARD-IR)**

SjD (2016 ACR/EULAR criteria)

- **Total ClinESSDAI ≥ 6**
- **Extra-glandular involvement**
- **Refractory to standard of care**

SSc (2013 ACR/EULAR criteria)

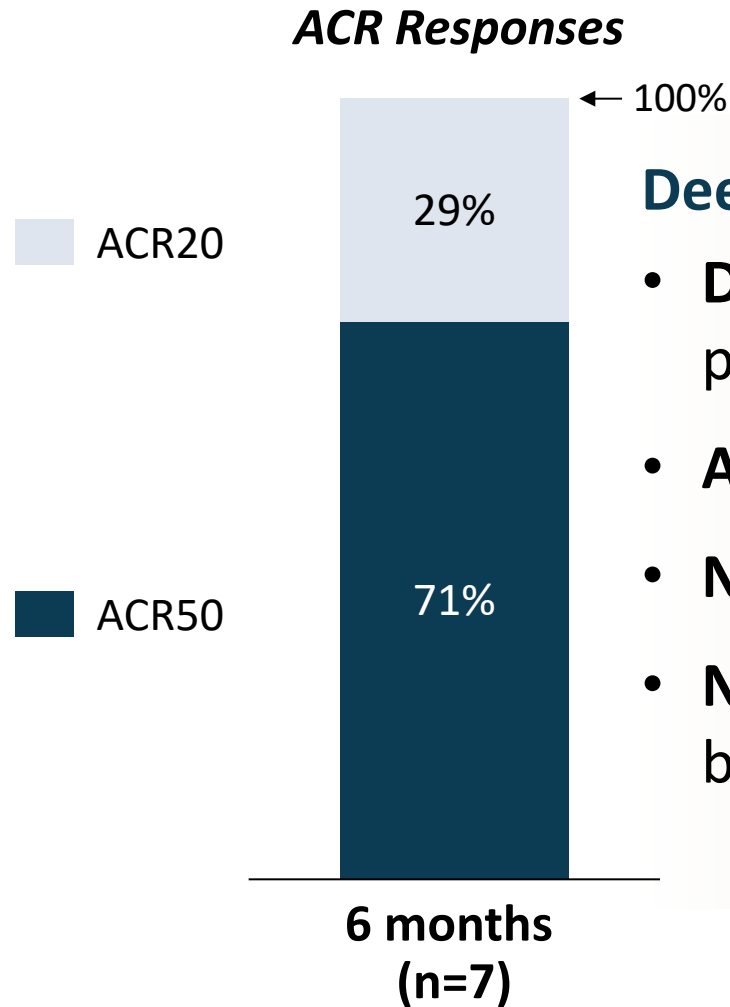
- **Modified Rodnan Score (mRSS) >10**
- **Refractory to immunosuppressive agents**

Initial dataset includes subjects in study with 3+ months follow-up as of 03 Apr 2026

RA: Refractory With High Disease Activity and Long Disease Duration

Parameter	Values (n=15)
<i>Demographics</i>	
Age (y)	53.9
Female, %	100%
Disease Duration (y)	13.3
Region	US only
<i>Disease Activity</i>	
CDAI	50.7
DAS28-ESR	7.4
<i>Concomitant Medications</i>	
csDMARDs	0
Glucocorticoid use, %; median dose	60%; 7.5 mg/day
<i>Prior Distinct Classes of b/tsDMARD Therapies*</i>	
≥ 2 (TNFi, IL-6i, CTLA4-Ig, RTX, JAKi)	73% (20% RTX-IR)

RA: 71% ACR50 Response Observed in Patients Reaching 6 Months



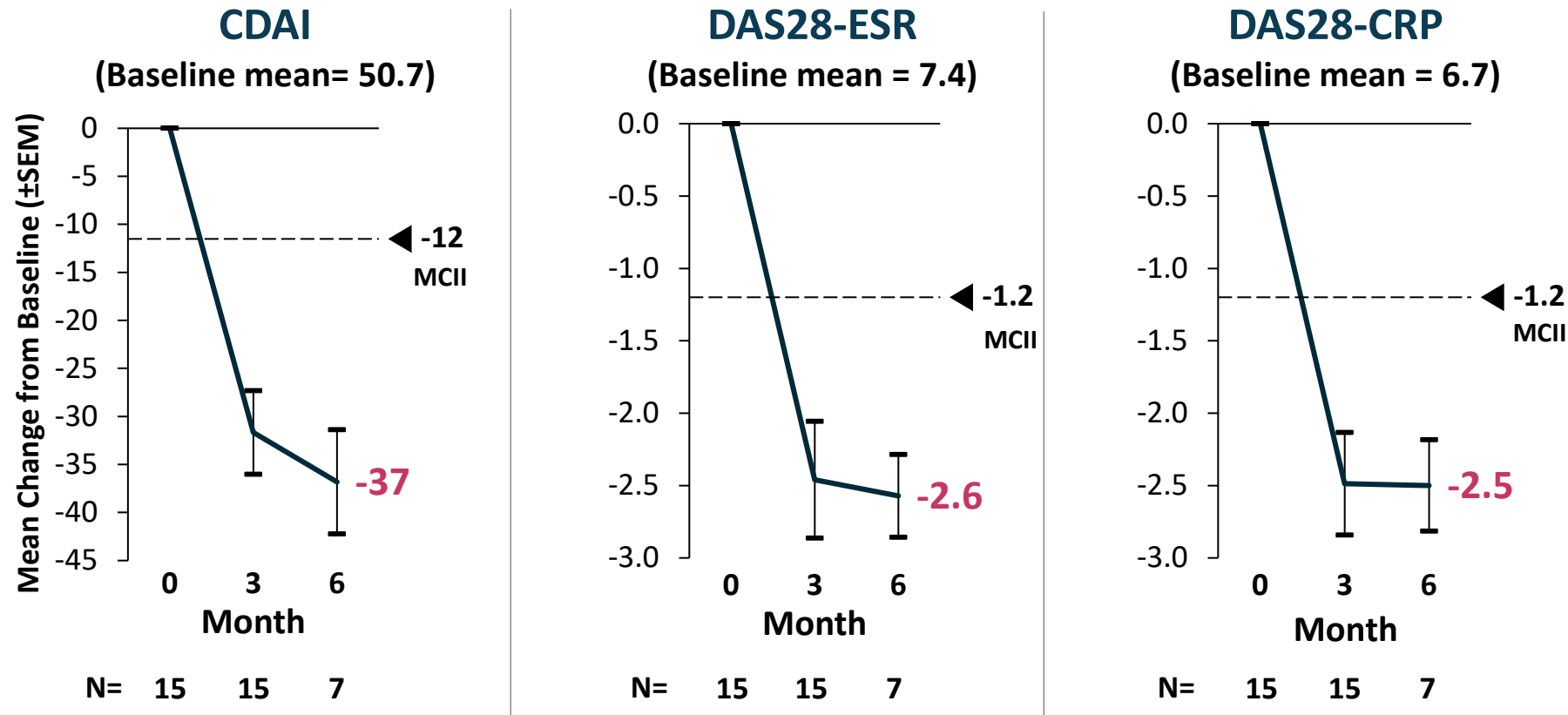
Deep responses support target profile of $\geq 50\%$ ACR50 at 6 months

- **DMARD-free during study:** All patients discontinued DMARDs prior to enrollment and remained DMARD-free
- **ACR50 higher than rituximab (27%)** in less refractory patients¹.
- **No patients have discontinued**
- **None have received an immunosuppressive agent**, including b/tsDMARDs

Month 6 = 22 wks; Last Visit Carried Forward for missing data

¹ Rituximab: REFLEX. (Cohen et al 2006) DAS28 of -1.9 and ACR50 of 27% at 6 months in TNF-IR RA patients

RA: Robust CDAI & DAS28 responses at 3 months that Deepened at 6 months

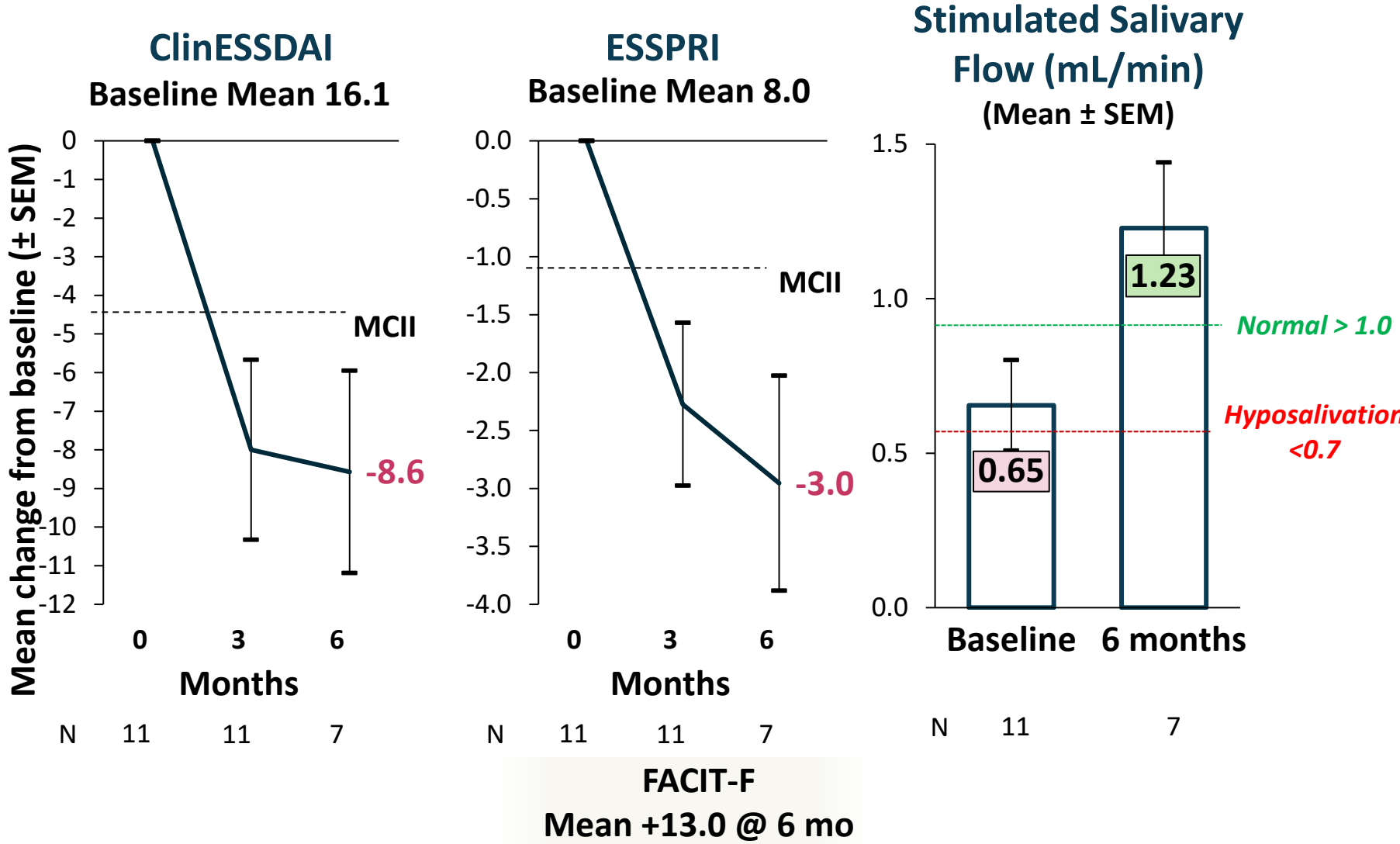


- All subjects exceeded MCII* in CDAI (≥ 12) AND DAS28 (≥ 1.2) at 6 months.
- DAS28-ESR responses higher than reported with RTX alone.¹

SjD: Robust Clinical Responses at 3 months that Deepened at 6 months

Baseline Characteristics (n=11)

- Age (y), mean: 53.6
- Sex: 100% female
- Disease duration (y), mean: 12.2
- High baseline disease activity (ClinESSDAI, ESSPRI, SSF*)
- Refractory to multiple prior immunomodulators
- Prior RTX use (IR): 27%



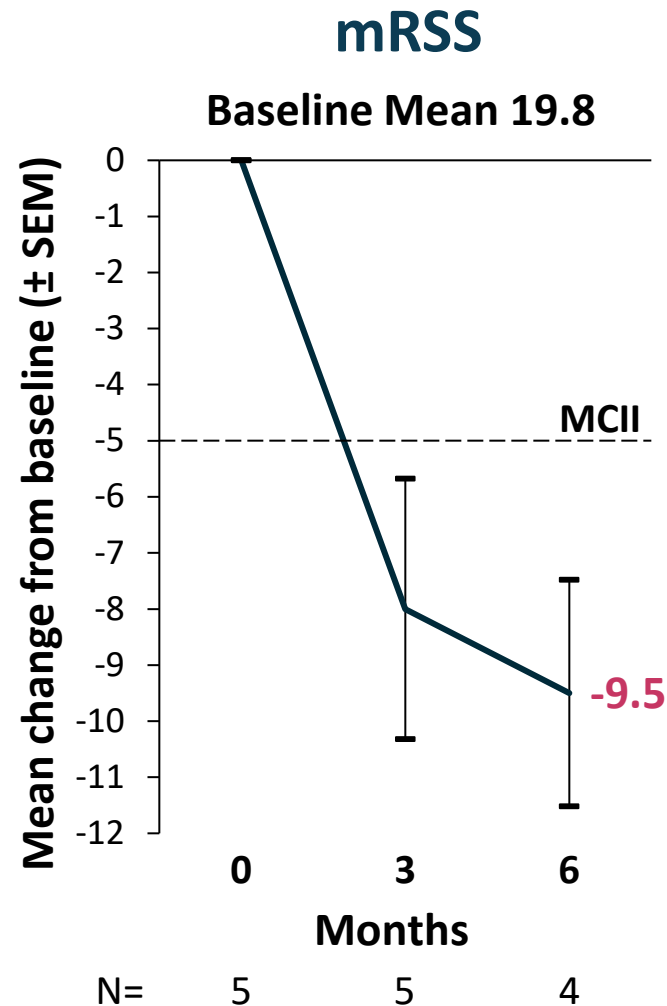
* MCII: Minimal Clinically Important Improvement; Month 3 = 12 wks; Month 6 = 22 wks
* SSF: Stimulated Salivary Flow

Stimulated salivary flow, mean inpatient change was +0.76 mL/min at 6 months

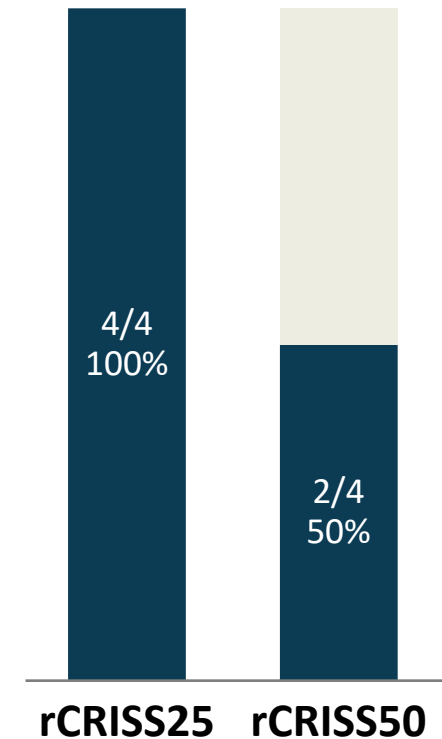
SSc: Robust Clinical Responses at 3 months that Deepened at 6 months

Baseline Characteristics (n=5)

- Age (y), mean: 54.2
- Females: 40%
- Disease duration (y), mean: 4.1
- Mod. Rodnan score (mRSS): high activity
- No concomitant immunosuppressives
- Prior immunosuppressives: 100%
- Prior RTX use (IR): 60%



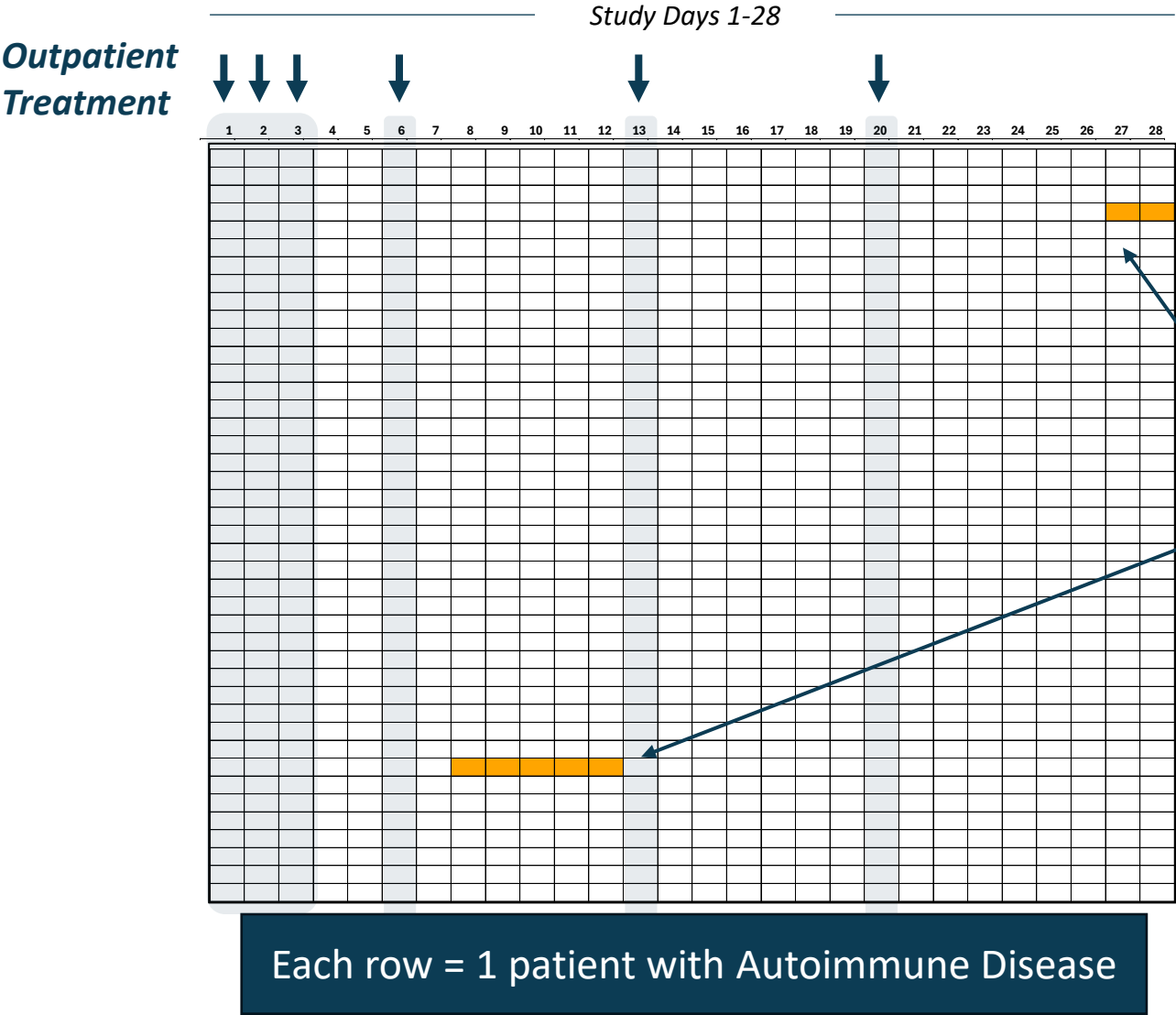
rCRISS at 6 months (n=4)



Safety Profile as Expected With CY/FLU or RTX (N=46)

- **No CRS, ICANS, GvHD, or Hypogammaglobulinemia**
- **SAEs: 13%, none related to AB-101**
- **AEs >10%**
 - Nausea (44%)
 - Headache (28%)
 - Leukopenia (26%)
 - Neutropenia (26%)
 - Lymphopenia (24%)
 - Alopecia (22%)
 - Vomiting (15%)
 - Diarrhoea (11%)
 - Fatigue (11%)
 - URI (11%)
- **Grade 3+ AEs ≥ 5%: lymphopenia (6.5%), neutropenia (6.5%), none AB-101-related**
- **Infections: URI (11%); UTI (2%); wound infection (2%); gastroenteritis (2%); none AB-101-related**
 - **No opportunistic infections**
- **No patient started new therapies**
- **All patients remain in study**

Hospitalizations in Pts with Autoimmune Diseases after AB-101 + RTX (N=46)



- No hospitalizations for conditioning or AB-101 Rx
- 2 hospitalizations (■) for AEs during the first 28 days; neither AB-101 related
 - SjD: Dehydration from diarrhea (D27-D29)
 - RA: Diabetic ketoacidosis in insulin-dependent diabetic (D8-D12)

Summary

- AB-101: novel, off the shelf, **non-genetically modified**, investigational, **allogeneic NK cell Rx**.
- Administered in an **outpatient setting** with a targeting antibody.
- **Rapid and robust responses** across 3 severe refractory autoimmune diseases.
- **Safety profile as expected with CY/FLU & RTX** and without toxicities seen with CAR T.^{1,2}

AB-101 offers a potential deep B-cell depletion modality suitable for outpatient administration

Thank you to our patients and their families
