Artiva Biotherapeutics

Corporate Deck
March 10, 2026

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This presentation contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Statements in this presentation that are not statements of historical fact are forward-looking statements. Such forward-looking statements include, without limitation, statements regarding: expectations of Artiva Biotherapeutics, Inc. (the "Company") regarding: AlloNK and its potential benefits, mechanism of action, activity, potency, differentiation, safety, tolerability, effectiveness, depth and duration of response, comparability to other products/candidates or modalities, scalability, outpatient administrability, potential for adoption in a community setting, potential to be administered in an extension cycle, potential to help patients get off immunomodulatory drugs and/or steroids, market opportunity, ability to address an unmet need, potential timing and outcome of regulatory interactions, potential and timing to advance into a pivotal trial, potential and timing of additional clinical data, and potential to move into follow-on indications; the Company's plans and expectations regarding its research and development programs, including the design, timing, and results of preclinical and clinical study designs and results, and the timing or likelihood of regulatory filings and approvals; and the Company's business strategy, IP protection, ability to deliver value creation, future results of operations, and financial position, including cash runway. Words such as "potential," "emerging," "near-term," "next," "focus," "can," "design," "TBD," "target," "initial," "opportunity," "estimate," "future," "path," "runway," references to specific future dates or periods, and similar expressions are intended to identify forward-looking statements, though not all forward-looking statements necessarily contain these identifying words. These forward-looking statements are based on the beliefs of the management of the Company as well as assumptions made by and information currently available to the Company. Such statements reflect the current views of the Company with respect to future events and are subject to known and unknown risks and uncertainties, including business, regulatory, economic and competitive risks and uncertainties about the Company, including, without limitation, risks inherent in developing product candidates, future results from the Company's ongoing and planned clinical trials, the Company's ability to obtain adequate financing to fund its planned clinical trials and other expenses, risks that future clinical trial results may not be consistent with interim, initial, preliminary, or topline results or results from prior preclinical studies or clinical trials, trends in the industry, the Company's relationships with its existing and future collaboration partners, the legal and regulatory framework for the industry, and future expenditures. In light of these risks and uncertainties, the events or circumstances referred to in the forward-looking statements may not occur. The actual results may vary from the anticipated results, and the variations may be material. Other factors that may cause the Company's actual results to differ from current expectations are discussed in the Company's filings with the U.S. Securities and Exchange Commission, including the section titled "Risk Factors" in the Company's Annual Report on Form 10-K for the year ended December 31, 2025. You are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date this presentation is given. Except as required by law, the Company undertakes no obligation to publicly update any forward-looking statements, whether as a result of new information, future events or otherwise.

This presentation discusses product candidates that are under clinical study and have not yet been approved for marketing by the U.S. Food and Drug Administration. No representation is made as to the safety or effectiveness of these product candidates for the use for which such product candidates are being studied.

No head-to-head trial has been conducted evaluating AlloNK against other data included herein. Differences exist between clinical trial design, patient populations, and the product candidates themselves, and caution should be exercised when comparing data across trials.

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Artiva: Developing allogeneic, off-the-shelf, NK cell-based therapies for patients suffering from devastating autoimmune diseases and cancers

Deep B-Cell Depletion Approach Addresses Significant Unmet Need in Autoimmune Disease

- Deep B-cell depletion mechanism of action represents potential to address limitations of existing therapies by providing durable clinical improvement
- Addressing significant unmet need in large market ($65B 2023 Global Sales)[1]
- Clinical proof of concept data from deep B-cell depleting therapies across indications supports mechanism

AlloNK: Leading NK Cell Therapy for Autoimmune Disease

- Allogeneic, non-genetically modified, cryopreserved NK cell therapy in combination with mAbs for targeting
- Emerging safety and translational data in autoimmune showing complete and consistent B-cell depletion and outpatient friendly administration
- Scalability and COGS of manufacturing process similar to biologics: Estimated $6,000 COGS assuming 6 billion AlloNK cells per treatment; Potential to treat 1,000 patients per year at scale from current facility in the U.S.[2]

Lead Indication: AlloNK in Refractory RA

- FDA Fast Track Designation received for AlloNK + RTX in refractory RA
- Significant unmet need with over 150,000[3] patients in the U.S. mostly treated in the community setting
- AlloNK's potential target product profile suitable to address unmet need with tolerability and scalability conducive to the outpatient setting

Well-capitalized Through Near-term Milestones

- $108MM cash* as of December 31, 2025, with cash runway into Q2 2027
- 1H 2026: Clinical response data & FDA regulatory interactions planned on potential pivotal trial design in refractory RA

Note: RTX: rituximab; NK: natural killer; mAb: monoclonal antibody; RA: rheumatoid arthritis; COGS: cost of good sold
[1]2023 Sales for top 10 I&I Drugs focused on Rheumatology
[2]Assumes 6B cells per patient; Up to 2,000 DP vials per suite per year
[3]Represents ~10-15% of all RA patients; multiple publications based on real-world registry data, including: Paudel et al 2024 Rheumatology; Watanabe et al 2024 Rheumatology; Roodenrijs et al 2021 Rheumatology; Jung et al 2023 Arthritis Res Ther.
*cash, cash equivalents and investments

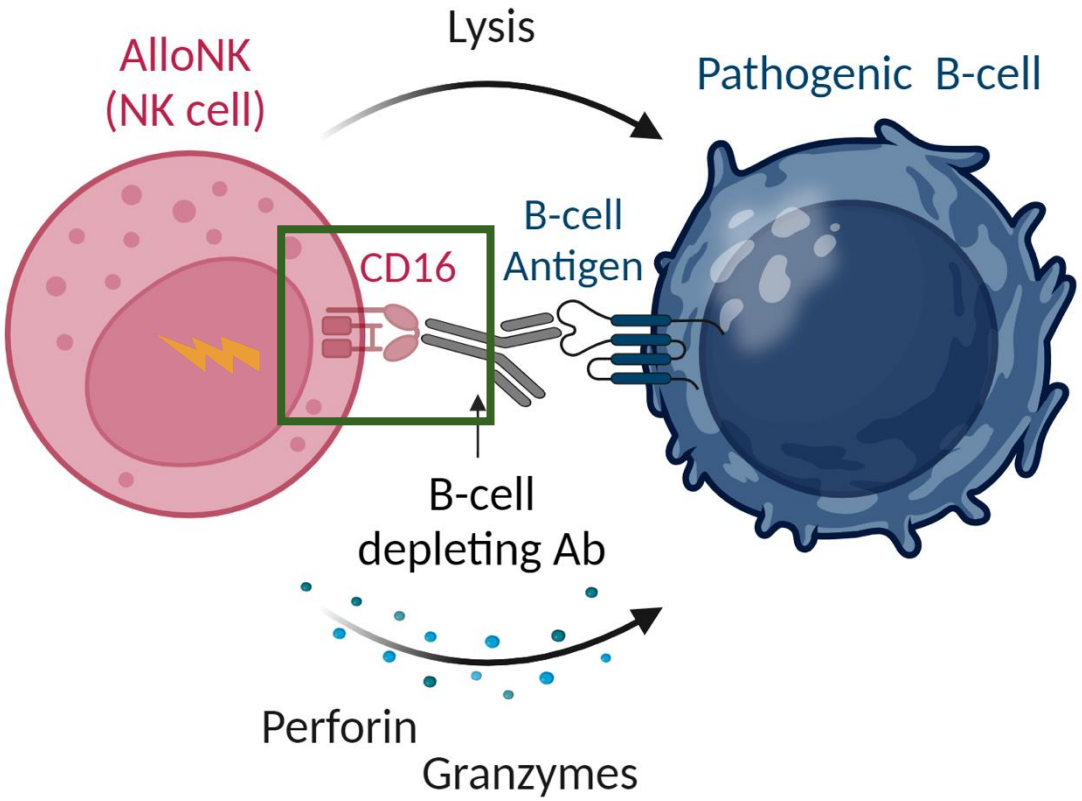
“Deep B-Cell Depletion” Approaches Represent Next Wave in Autoimmune Diseases

AlloNK’s Lead Indication: Refractory RA

AlloNK's Differentiated Mechanism of Action and Scalability

NK cell + mAb: ADCC via CD16 receptor

CD16 (Fc receptor) is a strong NK cell activating receptor bypassing inhibitory signaling

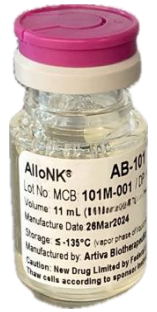


"Manufacturing-first"

Scalable manufacturing process producing over 4000 vials from 1 cord blood unit

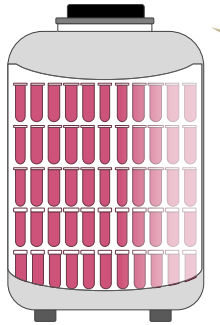
NK Selection

Selected for high affinity CD16 variant and KIR-B haplotype



AlloNK® - 1B cell vial

Allogeneic, off-the-shelf non-genetically modified NK cell therapy + mAb for targeting



Cryopreserved Drug

Expanded and activated using proprietary feeder cell process

Note: 1B: 1 billion; NK: natural killer; mAb: monoclonal antibody; Ab: antibody

Focusing on Autoimmunity from a Position of Strength in B-NHL

Trials in B-NHL

Comparator	n	Median prior lines	CAR-T naïve	Aggressive B-NHL	Complete Response Rate (%)	Median DoR (mo)
Artiva AlloNK + Rituximab[1]	14	**3**	100%	93%	64	Not reached/>19.4m median
Breyanzi (auto-CAR-T)[2]	257	**3**	100%	100%	53	23.1
Epkinly (TCE)[3]	157	**3**	61%	100%	39	12.0

Other clinical trials with allogeneic NK cells + B-cell targeting biologic

- Fresh NK cells + RTX IIT (N=19): 65% complete responses (CRs), 62% ongoing at 12 months[4]
- Fresh NK cells + CD30 NK cell engager IIT (N=32): 78% CRs; 92% of CRs ongoing at 6 months[5]
- AlloNK + CD30 NK cell engager: 58% CRs; 77% of CRs ongoing at 6 months[6]

Note: No head-to-head trial has been conducted evaluating AlloNK against other data included herein. Differences exist between clinical trial design, patient populations and the product candidates themselves, and caution should be exercised when comparing data across trials.

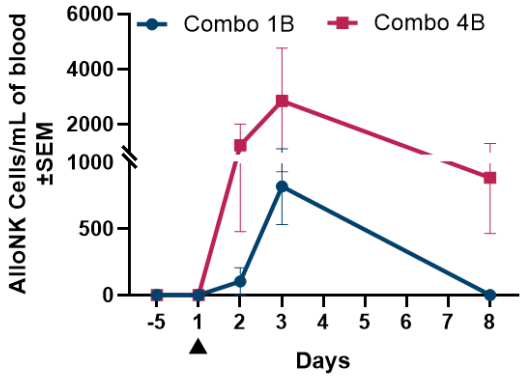
(1) AlloNK data as of March 7, 2025, data cutoff. Reflects preliminary data from the Phase 1/2 B-NHL clinical trial from patients not exposed to prior CAR-T.
(2) Abramson et al Blood 2024; 143(5): 404-16.
(3) Thieblemont et al J Clin Oncol. 2023;41(12):2238-2247.
(4) ASH 2021, Bachanova, abstract #3854
(5) Nieto et al. Nature Med 2025. Reflects December 31, 2023 data cutoff. Reflects RP2D; Excludes four T-NHL patients at RP2D
(6) Maakaron et. al. 2025 J Clin. Oncol. 43 (16 suppl); Reflects April 17, 2025 data cutoff

Role of Conditioning with Cy / Flu in Treatment with AlloNK

Cy	Dose used: 0.9-1g/m^2	Euro-Lupus protocol (3g total); **minimal infection risk** or impact on fertility[1,2,3]
Flu	Dose used: 90mg/m^2	6 monthly doses (540mg/m^2 total) found to be **well tolerated** with only minor infections noted[4]

NK cell persistence

AlloNK PK is dose-dependent[5]



Reduction of B-cells and T-cells

\+ Potential contribution towards efficacy

\- Can be managed with prophylactic anti-infectives

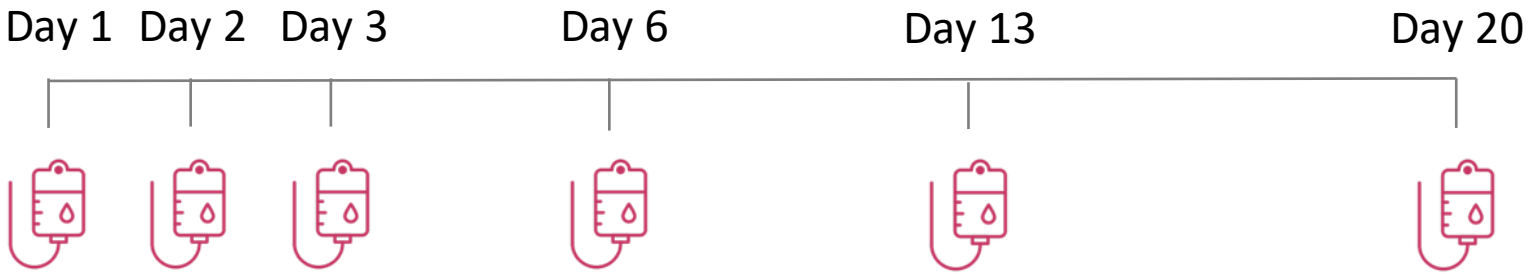
AlloNK Treatment: Potentially similar patient management to IV biologics

Note: Cy: cyclophosphamide; Flu: fludarabine

(1) Houssiau 2002 Arthritis & Rheumatology 46(8): 2121-31
(2) Tamirou 2017 Arthritis & Rheumatology 69(6): 1267-71
(3) Ioannidis 2002 J Rheumatol 29:2129–35)
(4) Tassiulas 1997 Fludarabine in non-malignant disorders
(5) NCT04673617, Data as of April 8, 2025. Subjects from combination cohort (Cy+Flu+AlloNK+Rituximab) @ 1 billion AlloNK / dose (n=3) and 4 billion AlloNK / dose (n=8)

Treatment Regimen Designed for Outpatient Administration

Outpatient Administration
Potential for adoption in a community setting

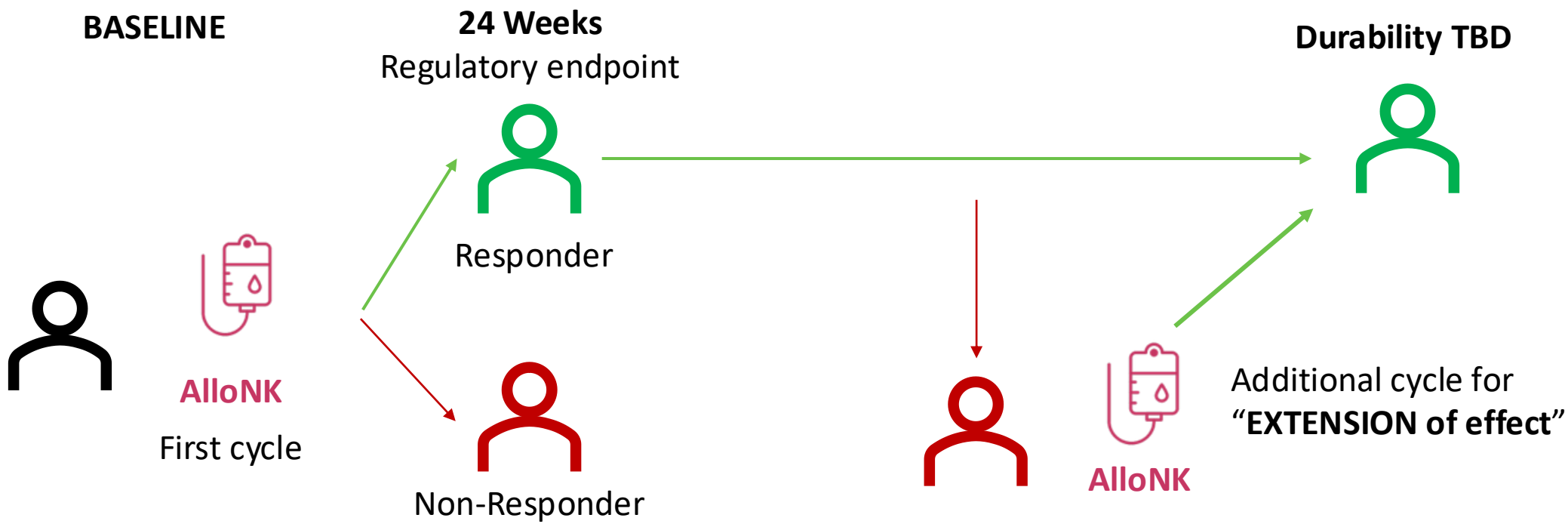


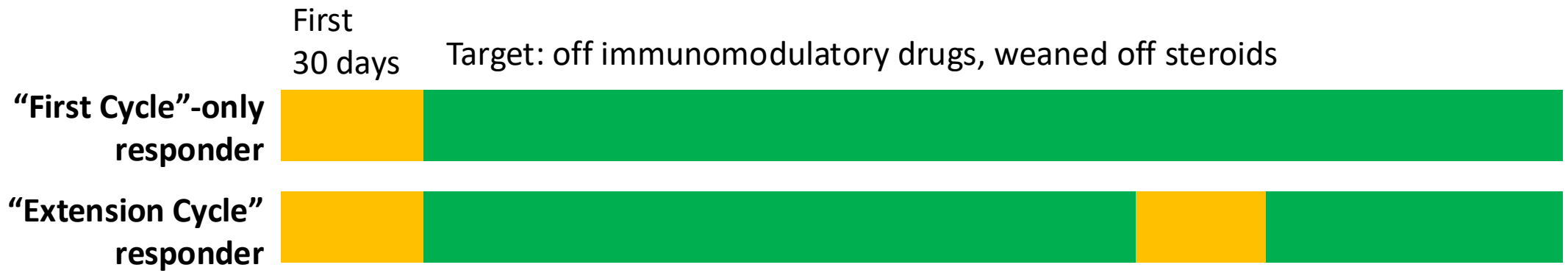
AlloNK Regimen

- **AlloNK Dose: 1B or 4B**
- **Cy / Flu conditioning**
- **Monoclonal Antibody**

FLU: fludarabine 30mg/m²; CY: cyclophosphamide 1g/m²; RTX: rituximab 1000mg; OBI: obinutuzumab 1000mg

Illustrative AlloNK Treatment Paradigm





AlloNK Clinical Development: Ongoing Trials in Autoimmune Diseases

Phase 2 Basket Trial:
RA, SjD, IIMs, SSc

- AlloNK + RTX
- 1B or 4B cells per AlloNK dose
- No required hospitalization or stagger

IIT: RA, SLE, PV, AAV in Community Setting

- AlloNK + RTX
- 1B cells per AlloNK dose

Phase 1 / 1b:
LN + SLE without kidney involvement

- AlloNK + OBI
- 1B or 4B cells per AlloNK dose

Patients receiving treatment regimen at rheumatology sites with no specialized oncology oversight

32 patients treated with AlloNK + mAb across RA, LN, SjD, SLE and SSc in ongoing trials at dose levels of 1B and 4B cells per AlloNK dose as of October 1, 2025 data cutoff

Note: RA: Rheumatoid Arthritis; SjD: Sjögren's Disease; SLE: Systemic Lupus Erythematosus;SSc: Systemic Sclerosis; LN: Lupus Nephritis; IIMs: Idiopathic Inflammatory Myopathies or Myositis; AAV: Anti-neutrophil cytoplasmic antibody (ANCA) associated vasculitis (AAV); PV: Pemphigus Vulgaris; IIT: investigator initiated trial;; RTX: rituximab; OBI: obinutuzumab

Initial Safety Data for AlloNK + mAb Shows Favorable Tolerability Profile for Community Setting

- As of data cutoff of October 1 2025, **32 patients** treated with AlloNK + mAb across autoimmune trials dosed at either **1B cells or 4B cells per dose**
- **No Cell Therapy Related Toxicities:** No CRS, ICANS, GvHD or hypogammaglobulinemia[1]
- **No Grade 3+ AlloNK-related** treatment emergent adverse events (TEAEs)
- **No AlloNK-related** serious adverse events reported
- **No discontinuations** reported
- Tolerability profile **consistent** with RTX, OBI and/or Cy / Flu conditioning regimen
- Infections of any Grade (n=5), only 1 Grade 3+, **none** related to AlloNK
- One dose-limiting toxicity reported due to persistent neutropenia from Cy / Flu conditioning, patient was asymptomatic, and neutropenia **resolved by ~5 weeks spontaneously** without requiring G-CSF

Grade 3+ TEAEs (none related to AlloNK)

Reported Term for the Adverse Event	Total (N=32)
Any TEAE – n (%)	**5 (15.6)**
Anaemia	2 (6.3)
Neutropenia	2 (6.3)
Actinomycotic skin infection	1 (3.1)
Febrile neutropenia	1 (3.1)
Infusion related reaction	1 (3.1)
Intervertebral disc protrusion	1 (3.1)
Leukopenia	1 (3.1)
Pancytopenia	1 (3.1)
Pneumonia	1 (3.1)

Note: Preliminary data as of October 1, 2025 data cutoff. Preliminary data for Cy /Flu + AlloNK + mAb from ongoing autoimmune clinical trials: Phase 2a basket trial, Phase 1/1b trial in SLE/LN, investigator-initiated basket trial
Note: CRS: cytokine release syndrome; ICANS: immune effector cell-associated neurotoxicity syndrome; GvHD: graft-versus-host-disease; Cy: cyclophosphamide; Flu: fludarabine; mAbs: monoclonal antibodies; RTX: rituximab; OBI: obinutuzumab; G-CSF: granulocyte colony-stimulating factor
(1) One patient had mild transient hypogammaglobulinemia, was asymptomatic, no intravenous immunoglobulin (IVIG) intervention

AlloNK's Tolerability Profile Observed to Date Compares Favorably to Autologous CAR-T and BCMA Targeted T-Cell Engagers

Deep B-cell Depletion Datasets

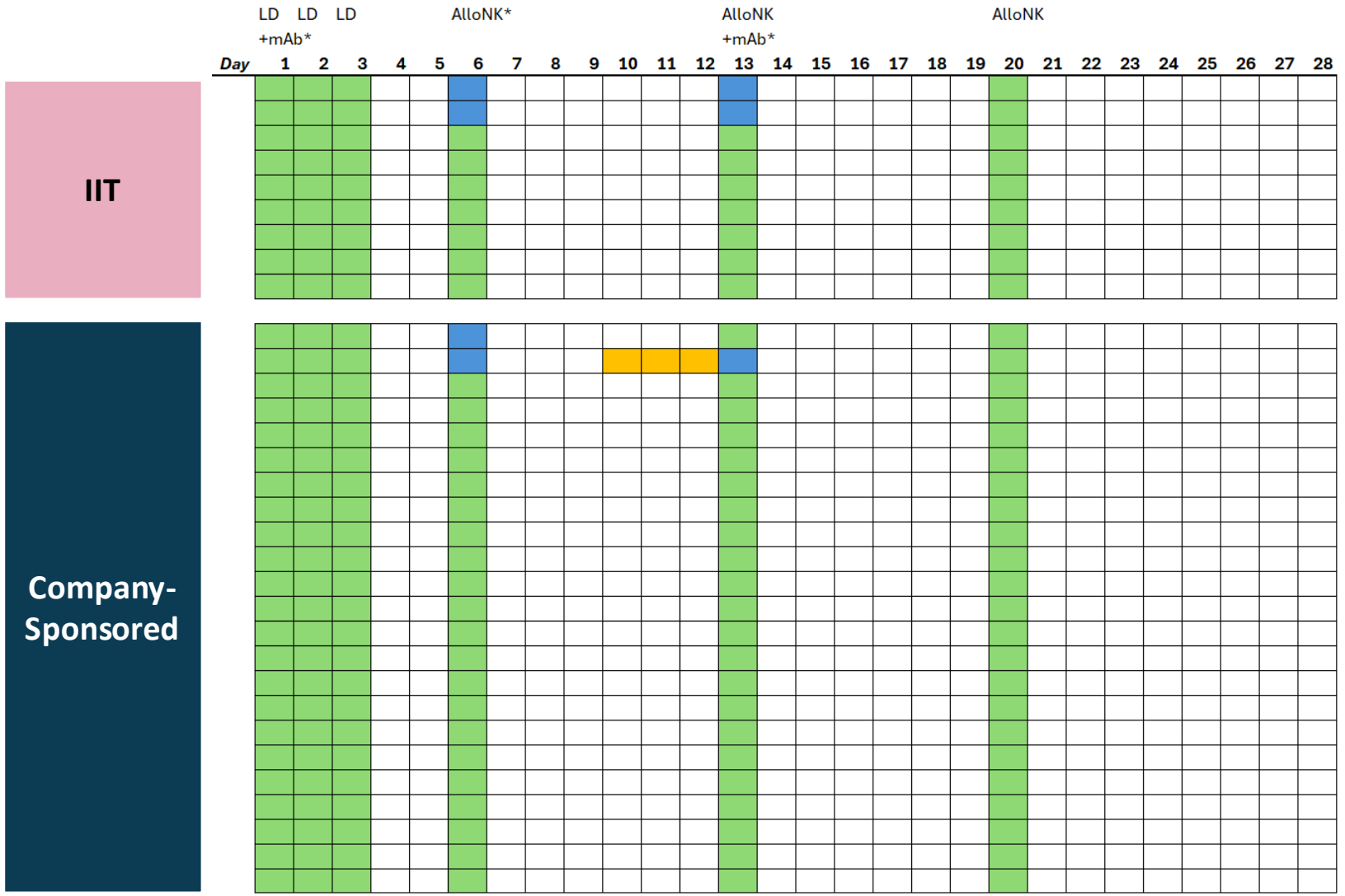
	AlloNK	*Auto CAR-T* **Schett / CASTLE[1]**	*T-Cell Engager* **teclistamab[2]**
No. of Patients	32	24	10
CRS (any Gr / Gr 3+)	- / -	75% / -	80% / -
ICANS (any Gr / Gr 3+)	- / -	- / -	- / -
Tocilizumab Usage Related to CRS	-	58%	80%
Infections (any Gr / Gr 3+)	15.6% / 3.1%	N.R. / 13%	70% / 30%
IVIG Usage related to hypogammaglobulinemia	-	N.R.	100%

Infection Rates for Approved mAbs in RA[3]:

Active Arm: ~**27% – 54%**
Placebo: ~**21% – 48%**

Note: No head-to-head trial has been conducted evaluating AlloNK against other data included herein. Differences exist between clinical trial design, patient populations and the product candidates/products themselves, and caution should be exercised when comparing data across trials
Note: Preliminary data as of October 1, 2025 data cutoff. for Cy / Flu + AlloNK + mAb from ongoing autoimmune clinical trials: Phase 2a basket trial, Phase 1/1b trial in SLE/LN, investigator-initiated basket trial
N.R.: Not Reported
Note: CRS: cytokine release syndrome; ICANS: immune effector cell-associated neurotoxicity syndrome; mAbs: monoclonal antibodies; RA: rheumatoid arthritis; IVIG: intravenous immunoglobulin
(1) Hagen et al ACR 2025. Abstract #0641 (2) Bucci et al ACR 2025. Abstract #0236 (3) Infection rates in USPI for Humira, Rinvoq, Orencia and Rituxan

Experience from first 32 Patients Treated with AlloNK + mAb: Hospitalization Rates Consistent with mAb Alone Showing Ability to Manage Patients as Outpatient



(Each row represents one patient)

- At home / no infusions or hospitalization**
- Infusion center (outpatient)
- Pre-planned hospitalization for observation; no AEs
- Hospital admission for AE

- No hospitalizations for AE related to AlloNK treatment
- Only 1 patient hospitalized for an AE during first 28 days for IV antibiotic treatment for Grade 3 actinomycotic skin infection unrelated to AlloNK

Note: Preliminary data as of October 1, 2025 data cutoff, patients completed day 28 visit following first cycle with Cy / Flu + AlloNK + mAb; Data not cleaned and subject to change
Note: Cy: cyclophosphamide; Flu: fludarabine; mAb: monoclonal antibody; AE: adverse event; IV: intravenous; IIT: investigator initiated trial
* Protocol variances: AlloNK on d5 vs d6; first mAb dose on d1 vs d2; second mAb dose on d13 in company sponsored trial vs d15 in IIT, second dose of AlloNK in both at D13
** Protocol and practice variations: some patients had >6 infusion days due to separation of AlloNK and mAb dosing

Similarities and Differences to Managing Patients Treated with Cy / Flu + AlloNK + mAb vs. RTX Alone

RTX – Approved 1997
Used in Over 200,000 Patients[1]

- **Premedication to Minimize Infusion Related Reactions**
- **Patients Go Home After Receiving Treatment in Infusion Center**
- **No Escalating CRS: No need to Carry Specialized Medication in Clinic**
- **ER or Hospital Visit Only if Infections Post Treatment or AEs that Require More Intervention**

AlloNK Treatment Regimen:
Cy / Flu + AlloNK + mAb

- Premedication to Minimize Infusion Related Reactions
- Patients Go Home After Receiving Treatment in Infusion Center
- No Escalating CRS: No need to Carry Specialized Medication in Clinic
- ER or Hospital Visit Only if Infections Post Treatment or AEs that Require More Intervention

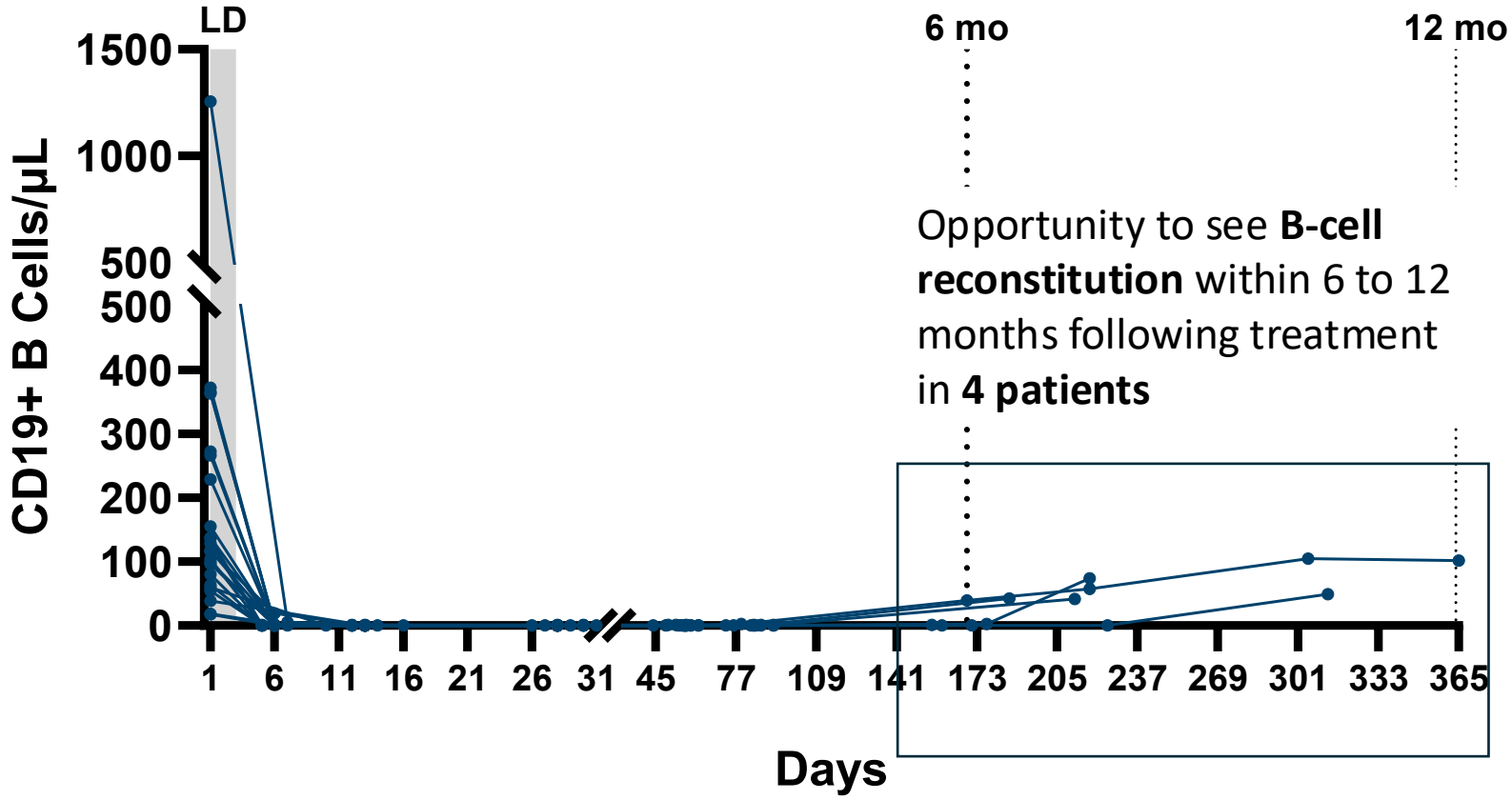
Cy / Flu Lymphodepletion: Low Lymphocytes -> Prophylactic Antibiotics; Low Neutrophils -> G-CSF

Note: Cy: cyclophosphamide; Flu: fludarabine; mAb: monoclonal antibody; RTX: rituximab; AE: adverse event; CRS: cytokine release syndrome; ER: emergency room; G-CSF: granulocyte colony-stimulating factor

(1) J Neurovirol. 2018 Mar 5;24(3):323–331. doi: 10.1007/s13365-018-0615-7

AlloNK + Anti-CD20 mAbs Shows Consistent Complete B-Cell Depletion in Autoimmune Diseases

Uniform and consistent B-cell depletion observed by Day 13 in all 23 patients with autoimmune diseases treated with Cy / Flu + AlloNK + anti-CD20 mAb (RTX or OBI) with samples analyzed as of data cutoff

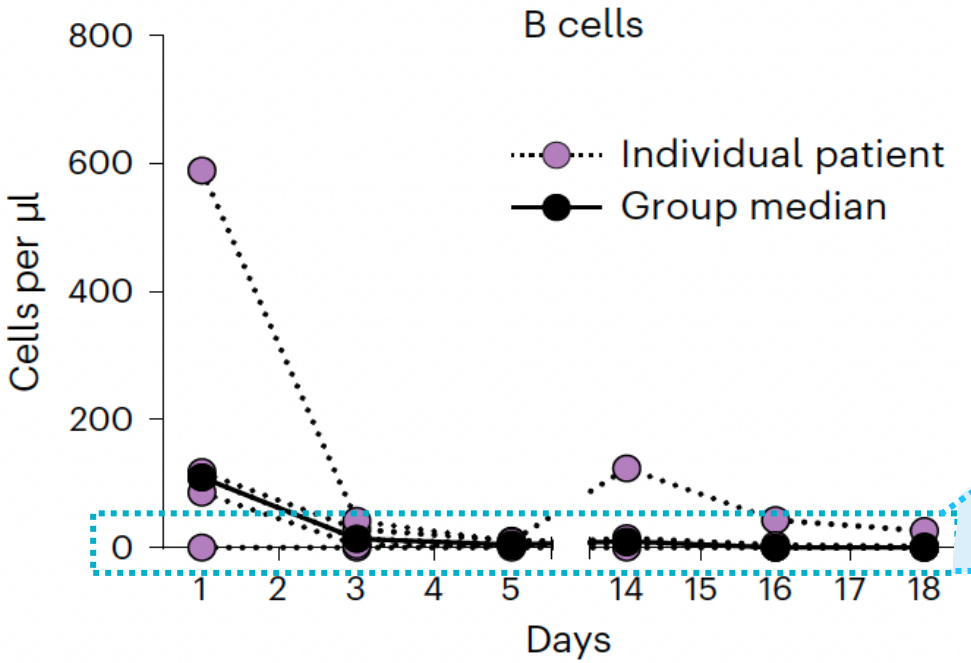


Note: Preliminary data as of October 1, 2025 data cutoff; Preliminary data from ongoing autoimmune clinical trials: Phase 2a basket trial, Phase 1/1b trial in SLE/LN, investigator-initiated basket trial; Data not cleaned and subject to change
Note: Cy: cyclophosphamide; Flu: fludarabine; mAbs: monoclonal antibodies; RTX: rituximab; OBI: obinutuzumab

RTX Incomplete Depletion Becomes Evident with High Sensitivity Assay

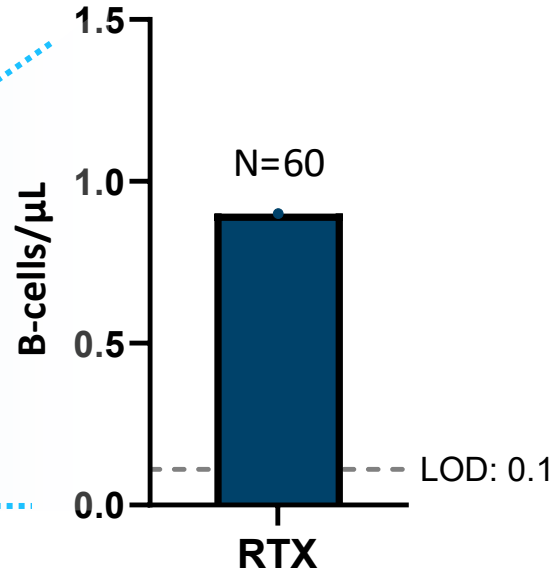
B-cell Depleting Studies Typically Only Show Results using Lower Sensitivity TBNK Assays (~10 cells/µl)

Blinatumomab (CD19 TCE) B-cell depletion in 6 patients with RA[1]



RTX Shows Incomplete Depletion using High Sensitivity Assay

Median level of B-cells at 2 weeks using high sensitivity assay[2]

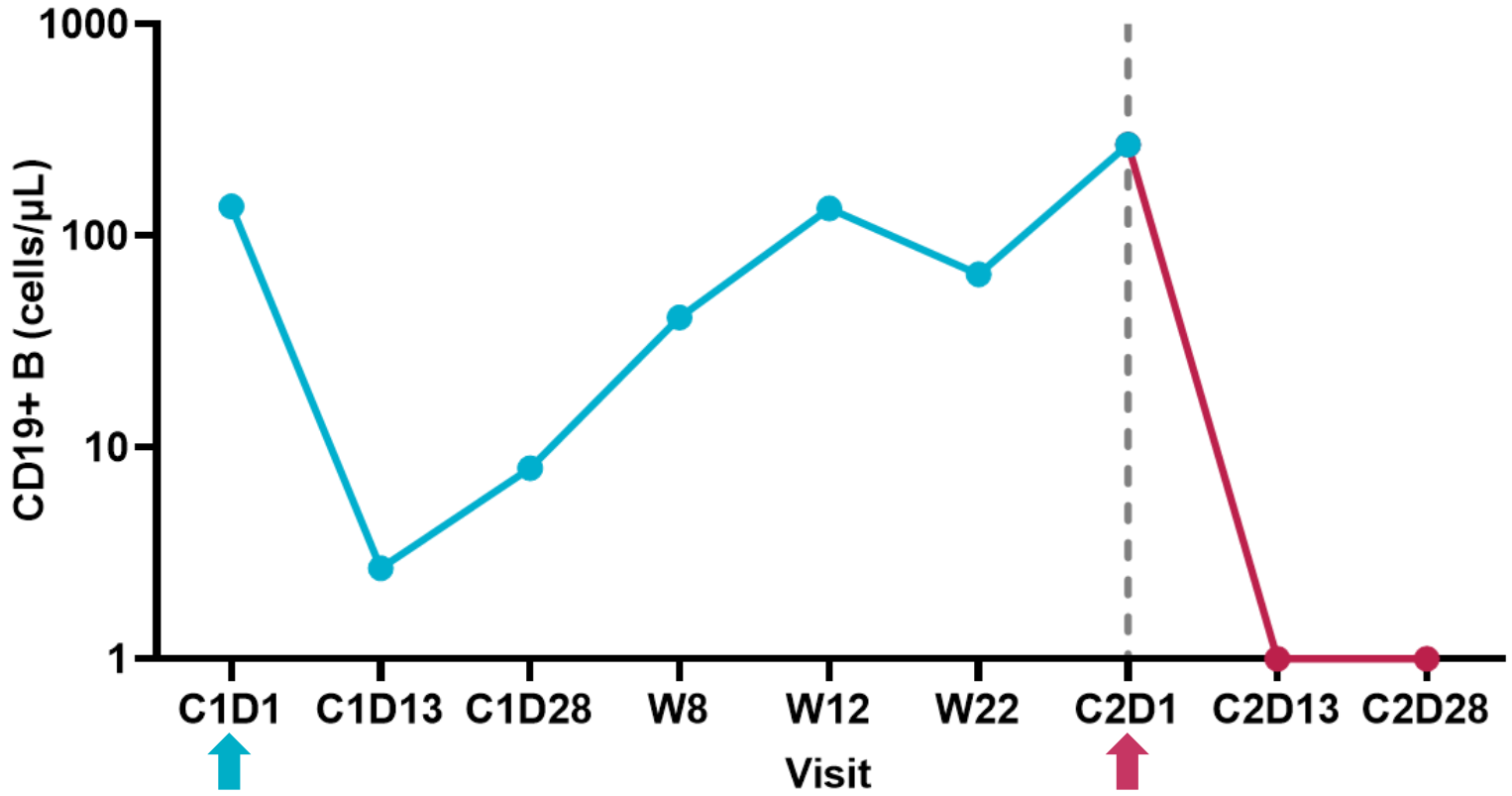


Note: Preliminary data as of October 1, 2025 data cutoff; Preliminary data for from ongoing autoimmune clinical trials: Phase 2a basket trial, Phase 1/1b trial in SLE/LN, investigator-initiated basket trial Reported numbers subject to change; Limit of detection (LOD)= 0.1 cells / µl
Note: RTX: rituximab

(1) Bucci et al 2024
(2) Dass et. al. 2008 Arthritis & Rheumatology 58(10): 2993-99. DOI 10.1002/art.23902. Adapted from Figure 3A.

Complete and Deep B-Cell Depletion Seen As Measured by High Sensitivity Assay for AlloNK + mAb

Represents B-cell depletion in one patient with autoimmune disease who received Cy / Flu + AlloNK as their first cycle and the full treatment regimen as their second cycle



First cycle: Cy / Flu + AlloNK (no mAb)

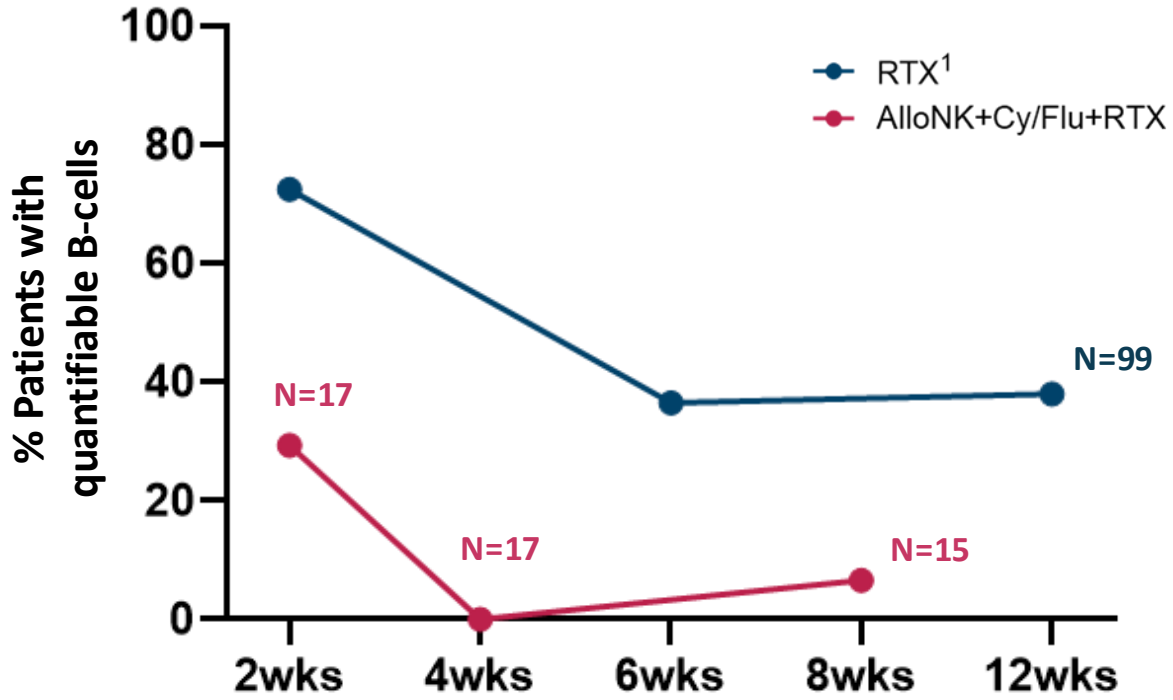
Second cycle Cy / Flu + AlloNK + mAb

- Cy / Flu + AlloNK (no mAb): B-cells quantifiable at all follow up time points illustrating transient nature of depletion for Cy / Flu alone
- Complete and uniform B-cell depletion seen starting at week 2 through week 4 after patient received full regimen of Cy / Flu + AlloNK + mAb

Note: Preliminary data as of October 1, 2025 data cutoff; Preliminary data from ongoing autoimmune clinical trials: Phase 2a basket trial, Phase 1/1b trial in SLE/LN, investigator-initiated basket trial Reported numbers subject to change; Data plotted on log scale; values for C2D13 and C2D28 are zero
Note: Cy: cyclophosphamide; Flu: fludarabine; mAb: monoclonal antibody

First 17 Patients Treated with AlloNK + RTX All Show Complete B-Cell Depletion Using High Sensitivity Assay

Percent of Patients with Quantifiable B-cells at Various Follow Up Time Points



- RTX alone has shown incomplete depletion utilizing the high sensitivity assay in RA and SLE patients, with B-cells quantifiable at all follow up time points
- All patients treated with AlloNK + RTX evaluated as of data cutoff show complete B-cell depletion using a high sensitivity assay
  - The median level of B-cells at 2, 4 and 8 weeks is zero

Note: No head-to-head trial has been conducted evaluating AlloNK against other data included herein. Differences exist between clinical trial design, patient populations and the product candidates/products themselves, and caution should be exercised when comparing data across trials

Preliminary data as of October 1, 2025 data cutoff; Reflects patients with respective follow up as noted on chart for whom samples were analyzed as of the data cutoff.

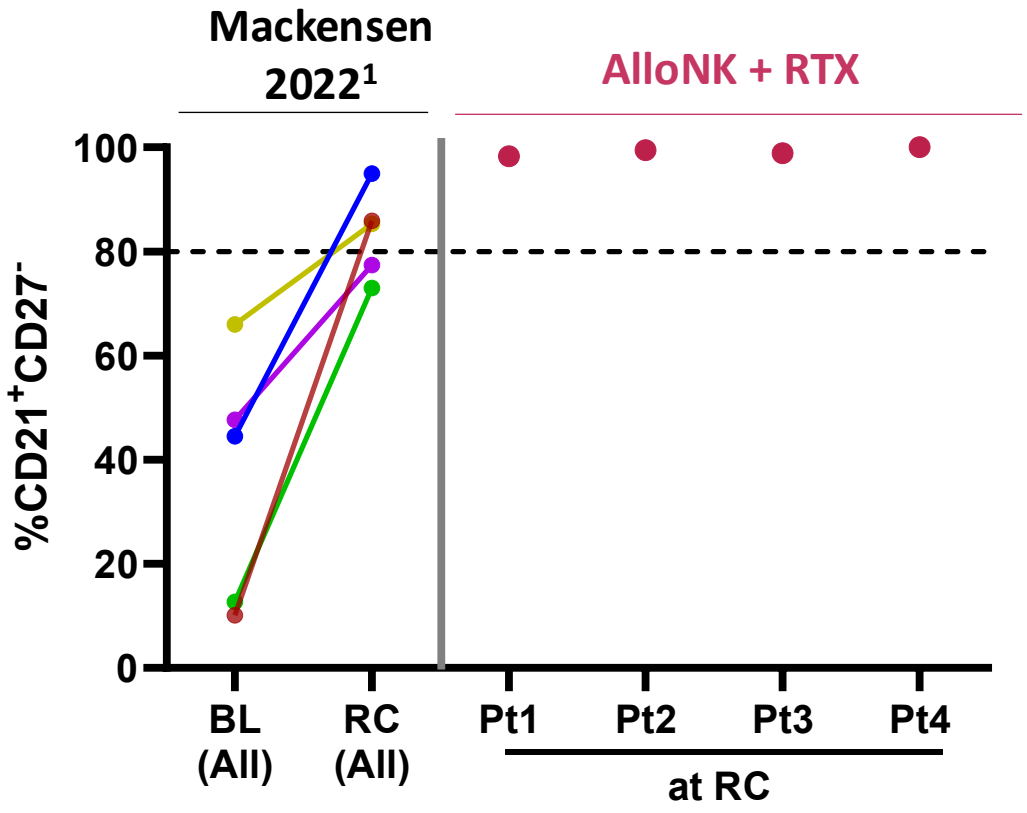
Preliminary AlloNK data from ongoing autoimmune clinical trials: Phase 2a basket trial, investigator-initiated basket trial Reported numbers subject to change; Lower limit of quantitation (LLOQ)= 0.22 cells /µl.

Note: Cy: cyclophosphamide; Flu: fludarabine; RTX: Rituximab, RA: Rheumatoid Arthritis; SLE: Systemic Lupus Erythematosus

(1) Adapted from Dass et al., Arthritis & Rheumatology (2008) 58(10):2993–99, DOI:10.1002/art.23902, Fig. 3A; and Vital et al., Arthritis & Rheumatology (2011) 63(10):3038–47, DOI:10.1002/art.30466. Data represent the mean across 99 RTX-treated patients; derived from referenced publications (percent of patients with quantifiable B cells at indicated timepoints).

Increase in Naïve / Transitional B-Cells Following B-Cell Depletion with AlloNK + mAb Consistent with CD19 auto-CAR T Experience

Percent of Naïve B-cells in Patients Treated with AlloNK + RTX Consistent with Auto-CAR T Experience

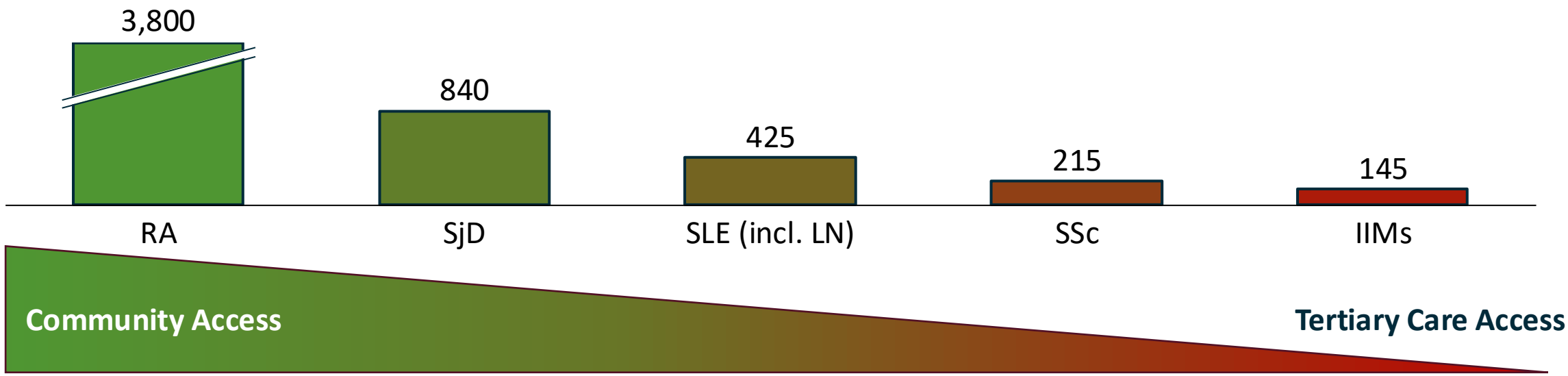


- B-cell subsets in patients with B-cell reconstitution after AlloNK + RTX demonstrate a preponderance of naïve / transitional cells
- Results consistent with Schett publication with auto-CAR T

Note: No head-to-head trial has been conducted evaluating AlloNK against other data included herein. Differences exist between clinical trial design, patient populations and the product candidates/products themselves, and caution should be exercised when comparing data across trials
Note: Preliminary data as of October 1, 2025 data cutoff for patients treated withAlloNK + RTX in ongoing autoimmune trials. Reflects patients who have seen Bcell reconstitution since treatment. (n=4)
Note: BL: baseline; RC: reconstitution; RTX: rituximab
(1) Adapted from Mackensen et al 2022. Nature Medicine volume 28, 2124–2132

Playing to our Strengths: Focusing on Indications with Largest Unmet Need in the Community Setting

Prevalence, US and Europe* (Thousands)



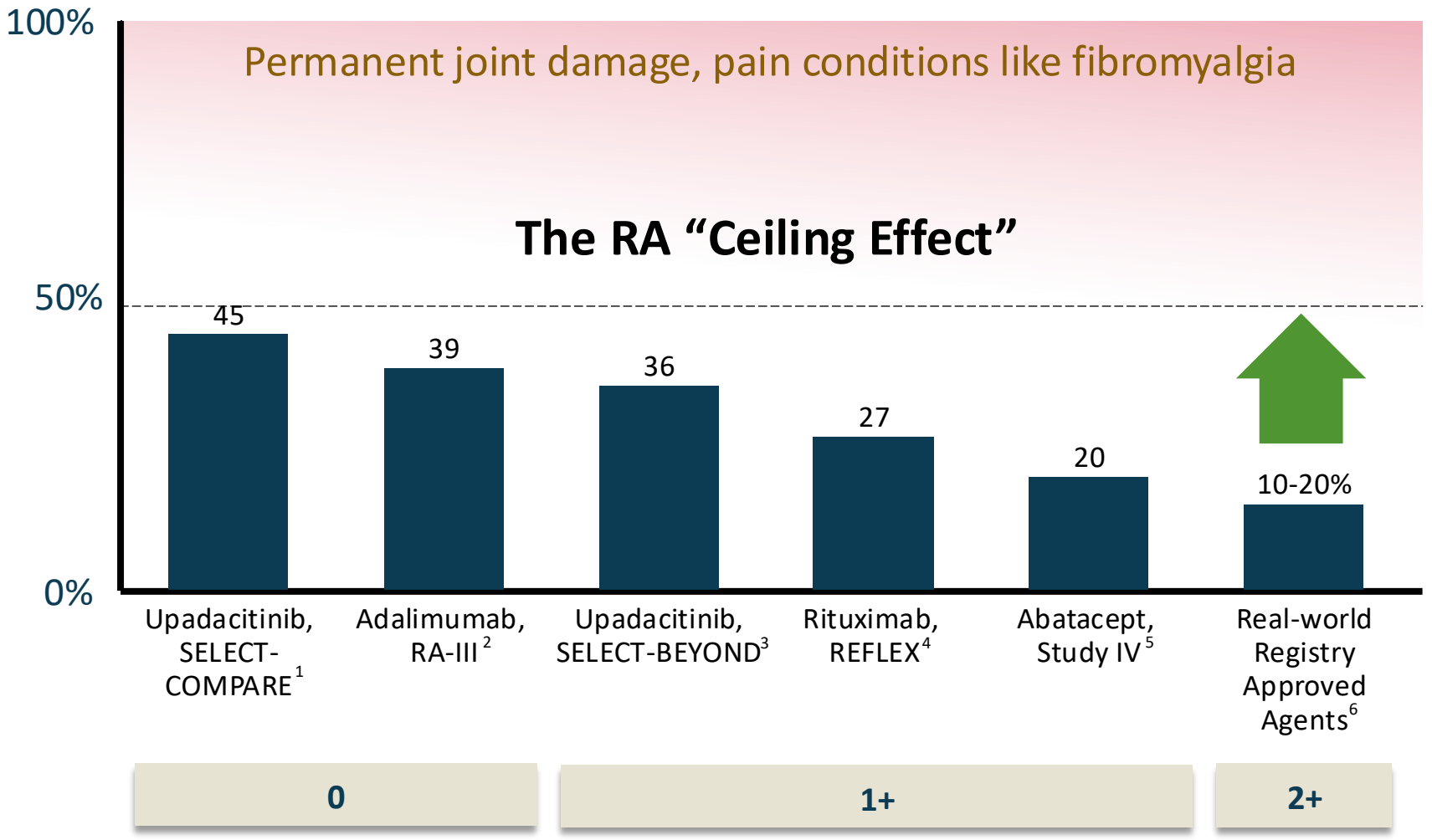
Importance of Community Setting Access (Highest to Lowest)

- Leading with Refractory RA:
  - Estimated **150-200k** U.S. patients failed 2+ targeted agents[1]
- FDA interactions on potential pivotal trial design planned in 1H 2026
- Data-driven decision on follow-on indications

RA: Rheumatoid Arthritis; SjD: Sjögren's Disease; SLE: Systemic Lupus Erythematosus; LN: Lupus Nephritis; SSc: Systemic Sclerosis; IIMs: Idiopathic Inflammatory Myopathies or Myositis
* All figures for Europe are for geographic Europe, except SLE, which is for the European Union.
(1) Represents ~10-15% of all RA patients; multiple publications based on real-world registry data, including: Paudel et al 2024 Rheumatology; Watanabe et al 2024 Rheumatology; Roodenrijs et al 2021 Rheumatology; Jung et al 2023 Arthritis Res Ther.

Framing Unmet Need in Refractory RA Through Lens of ACR50

% of RA patients achieving ACR50 Response



 # failed targeted mechanisms

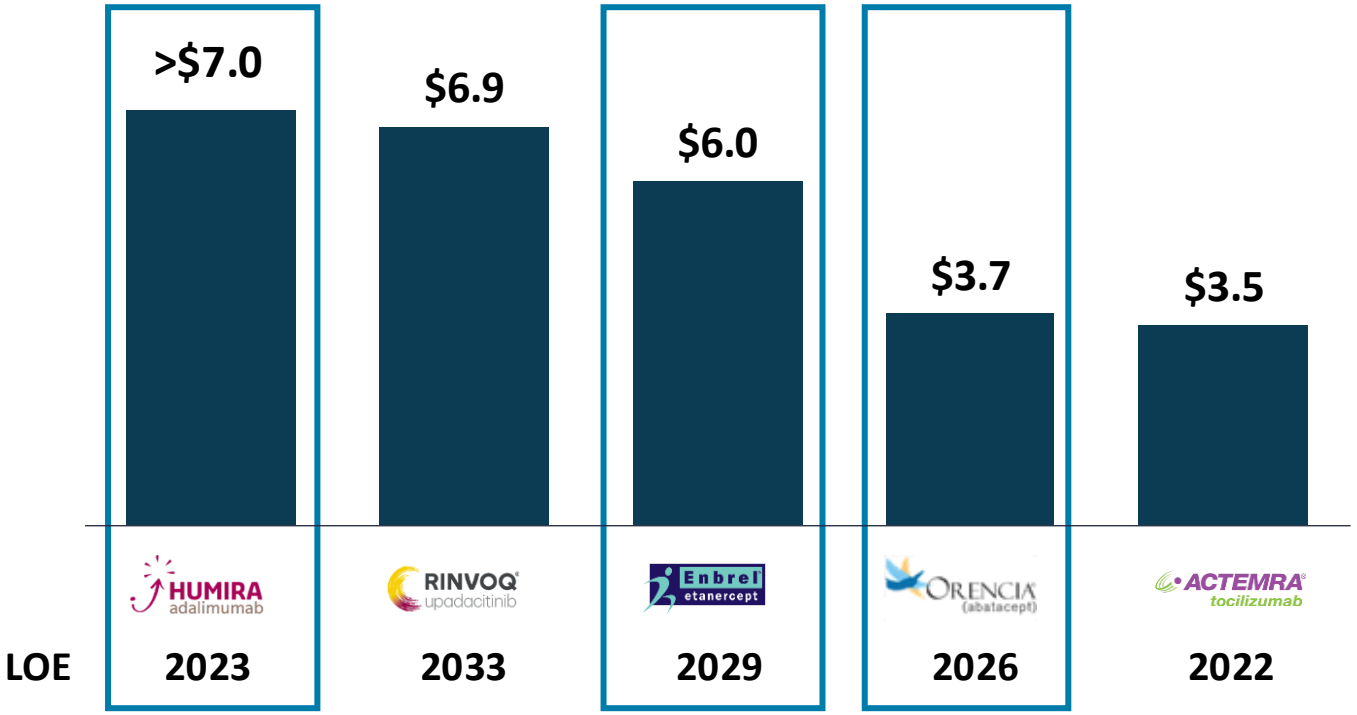
AlloNK's opportunity: ACR50 in ≥50% of refractory RA patients

Note: RA: Rheumatoid Arthritis
(1) Fleischmann et al 2019 DOI 10.1002/art.41032; wk12
(2) Humira USPI, Study RA-III, 6mo
(3) Genovese et al 2018 DOI: 10.1016/S0140-6736(18)31116-4; 12wk
(4) Cohen et al 2006 DOI: 10.1002/art.22025
(5) Orencia USPI, Study IV, 6mo
(6) Unpublished internal analysis; 6mo response; CorEvitas registry, patients trt Aug 2015 - Aug 2025

Significant Market Opportunity and Limited Therapies for RA in Late-Stage Development Create Opportunity for AlloNK + RTX in Refractory RA

>$25bn in Peak Sales in RA for the Top 5 Approved Products Alone[1]…

Peak Sales in RA ($ bn)



With Several Post or Nearing Loss of Exclusivity…

…And Limited Therapies Targeting Novel Mechanisms in Late-Stage Development in the US

Phase 2b/3 Active clinical trials in the US[2]

Drug	Target	Phase
Rosnilimab	PD-1 agonist	2b
ABBV-9832	IL-1a/1b+ CD40	2b
Resomelagon	MC1R / MC3R	2b
IMVT-1402	FcRn	2b

Note: RA: Rheumatoid Arthritis; LOE: Loss of exclusivity

[1] Evaluate Pharma as of October 2025. Sales figures represent the company's booked revenue from the sale of the asset(s) in rheumatoid arthritis. Humira LOE was in 2023. Actemra LOE was in 2022; Represents sales from Orencia IV and SC

[2] Based on public information, trial trove and clinicaltrials.gov

Artiva's "Manufacturing-First" Approach

GC Cell established track record in cell therapy with over two decades of cell therapy research and pioneering manufacturing process

- High yielding, reliable process platform
- Over 50 clinical AlloNK batches have been produced

Artiva's purpose-built facility in San Diego

- 9,000sf multi-suite, cGMP compliant production up and running
- Tech transfer complete, clinical manufacturing underway
- End-to-end clinical supply cold chain established:
  - From starting materials to the bedside
  - Cryopreserved in an infusion-ready media
  - Thawed at bedside, 5-10 min IV infusion

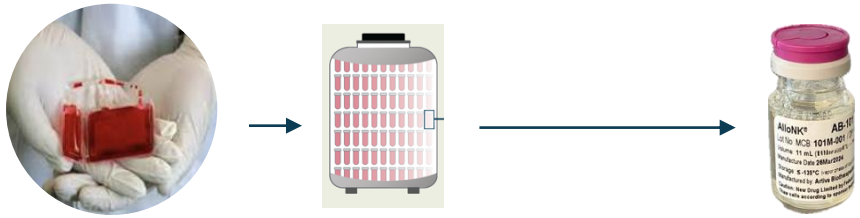
AlloNK's "3 Cs" in TechOps

CMC

- Extensive experience with AlloNK **> 50 clinical batches**
- Release testing performed on DP from **8 donor MCBs**
- Demonstrated both **batch-to-batch** and **donor-to-donor consistency**
- **IP protected** process

Simplicity and robustness

CAPACITY



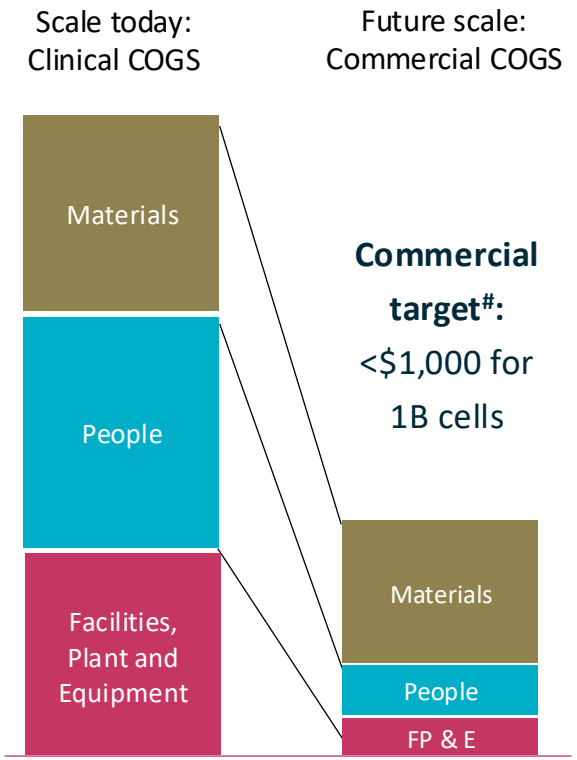
1 UC unit = 50+ MCB units x 80-100+ DP vials/batch

Today: 1 UC unit = 4,000+ DP vials Ψ = 600+ pts*

1 suite using 50L reactor
x 2 runs/ mo
x 100 DP vials/ batch
= up to 2,000 DP vials/ yr

Current facility at capacity (3 suites) = 1,000 pts/yr*

COGS



End-to-end cold chain logistics in place

Artiva Biotherapeutics

Ψ 1 DP vial = 1 billion AlloNK cells.
* Assumes 6B cells per patient; Up to 2,000 DP vials per suite per year
# Assumes 600 DP vials / run driven by larger bioreactor and other process improvements.
IP: Intellectual Property; MCB: Master Cell Bank; DP: Drug Product; CMC: Chemistry, Manufacturing and Control. COGS: Cost of Goods Sold

Management Team with Deep Expertise in Cell & Gene Therapy and Autoimmune Disease

Fred Aslan
CEO

Subhashis Banerjee
CMO

Chris Horan
CTO

Thad Huston
CFO

Jennifer Bush
COO

Heather Raymon
SVP Research & Early Development

Ben Dewees
SVP Regulatory Affairs

David Moriarty
SVP Clinical Operations

Feng Xu
SVP Biometrics

abbvie · BIOMARIN · Bristol Myers Squibb · Celgene · Dermira
Galápagos · Genentech · HORIZON · igm biosciences · Kite A GILEAD Company
kyverna · Lilly · organovo · venrock · vividion THERAPEUTICS

Development Experience Across Multiple Notable Blockbuster Approvals

ALDURAZYME® (LARONIDASE) · KUVAN® (sapropterin dihydrochloride) Tablets · Naglazyme® (GALSULFASE) · ORENCIA® (abatacept) · SOTYKTU™ (deucravacitinib) 6 mg tablets · taltz® (ixekizumab) · uplizna™ inebilizumab-cdon · XELJANZ® [tofacitinib]

Note: Chief Executive Officer (CEO); Chief Medical Officer (CMO); Chief Technical Operations Officer (CTOO); Chief Operating Officer (COO); Chief Financial Officer (CFO)

Opportunity to “Break Away”: Potential to be First Deep B-Cell Depleting Agent in a Pivotal Trial in Refractory RA

Lead Indication in Refractory RA with Significant Unmet Need

- Significant unmet need with limited ACR50 response in patients who have failed ≥2 b/ts DMARDs
- Represents 150,000 – 200,000 patients in the U.S.[1]
- Limited late-stage pipeline

Potential to be First B-Cell Depleting Agent in Refractory RA

- **1H 2026:** Clinical response data in 15+ refractory RA patients
- **1H 2026:** FDA regulatory interactions planned on potential pivotal trial design in refractory RA
- Potential to be first deep B-cell depleting agent in a pivotal trial in refractory RA

Data-Driven Approach in other Indications

- Strong enrollment with over 32 patients treated across RA, SiD, SLE/LN, SSc
- Data driven decision on development path for follow-on indications

Execution and Financial Strength to Deliver Value Creation

- Experienced team with deep expertise in cell therapy and autoimmune diseases
- Cash balance of $108MM* as of December 31, 2025, with runway into Q2 2027

Note: b/ts DMARDs: biologic or targeted disease-modifying antirheumatic drugs; RA: Rheumatoid Arthritis; SjD: Sjögren’s Disease; SLE: Systemic Lupus Erythematosus; LN: Lupus Nephritis; SSc: Systemic Sclerosis

(1) Represents ~10-15% of all RA patients; multiple publications based on real-world registry data, including: Paudel et al 2024 Rheumatology; Watanabe et al 2024 Rheumatology; Roodenrijs et al 2021 Rheumatology; Jung et al 2023 Arthritis Res Ther.

* cash, cash equivalents and investments

Additional Information

Artiva's Pipeline: Focus on AlloNK in Autoimmune Diseases and Cancer

	Product Candidate	Indication	Preclinical	Phase 1	Phase 2	Phase 3	Partnerships
Artiva-funded Trials	**AlloNK** *(AB-101)* *ADCC- Enhancer*	Refractory RA, Sjögren's disease, IIMs, SSc	**+ Rituximab**				
		RA, PV, AAV, SLE(1)	**+ Rituximab (1)**				
		SLE, LN	**+ Obinutuzumab**				
		NHL(2)	**+ Rituximab(2)**		**Trial Complete**		
	CAR-NK *(AB-205)*	Hematological malignancies	**CD5-CAR-NK**				GC Cell
	CAR-NK *(AB-201)*	Solid tumors	**HER2-CAR-NK**				GC Cell

Note: Artiva holds ex-APAC rights to all programs.
Note: RA: Rheumatoid Arthritis; SjD: Sjögren's Disease; SLE: Systemic Lupus Erythematosus; SScl Systemic Sclerosis; LN: Lupus Nephritis; IIMs: Idiopathic Inflammatory Myopathies; AAV: Anti-neutrophil cytoplasmic antibody (ANCA) associated vasculitis (AAV); PV: Pemphigus Vulgaris; NHL: Non-Hodgkin lymphoma

(1) Investigator-Initiated Basket Trial
(2) Trial completed; Trial in close-out after decision to discontinue the remaining long-term follow-up period

Estimated Prevalence for Select B-cell Driven Autoimmune Diseases

	United States	Europe	Combined
Rheumatoid Arthritis	1.5M	2.3M	3.8M
Multiple Sclerosis	750K	1.2M$^{\delta}$	2.0M
Sjögren's Disease	260K	580K	840K
Systemic Lupus Erythematosus *(Non-Lupus Nephritis)*	100K	115K$^{\delta}$	215K
Lupus Nephritis	100K	110K	210K
ANCA Vasculitis	100K	205K	305K
Systemic Sclerosis *(Scleroderma)*	85K	130K	215K
Myasthenia Gravis	60K	90K	150K
Myositis	45K	100K	145K
Pemphigus Vulgaris	16K	35K	51K
Total			**~7.9M**

All figures for Europe are for geographic Europe, except δ, which are for the European Union.

Thank you

https://www.artivabio.com | NASDAQ: ARTV