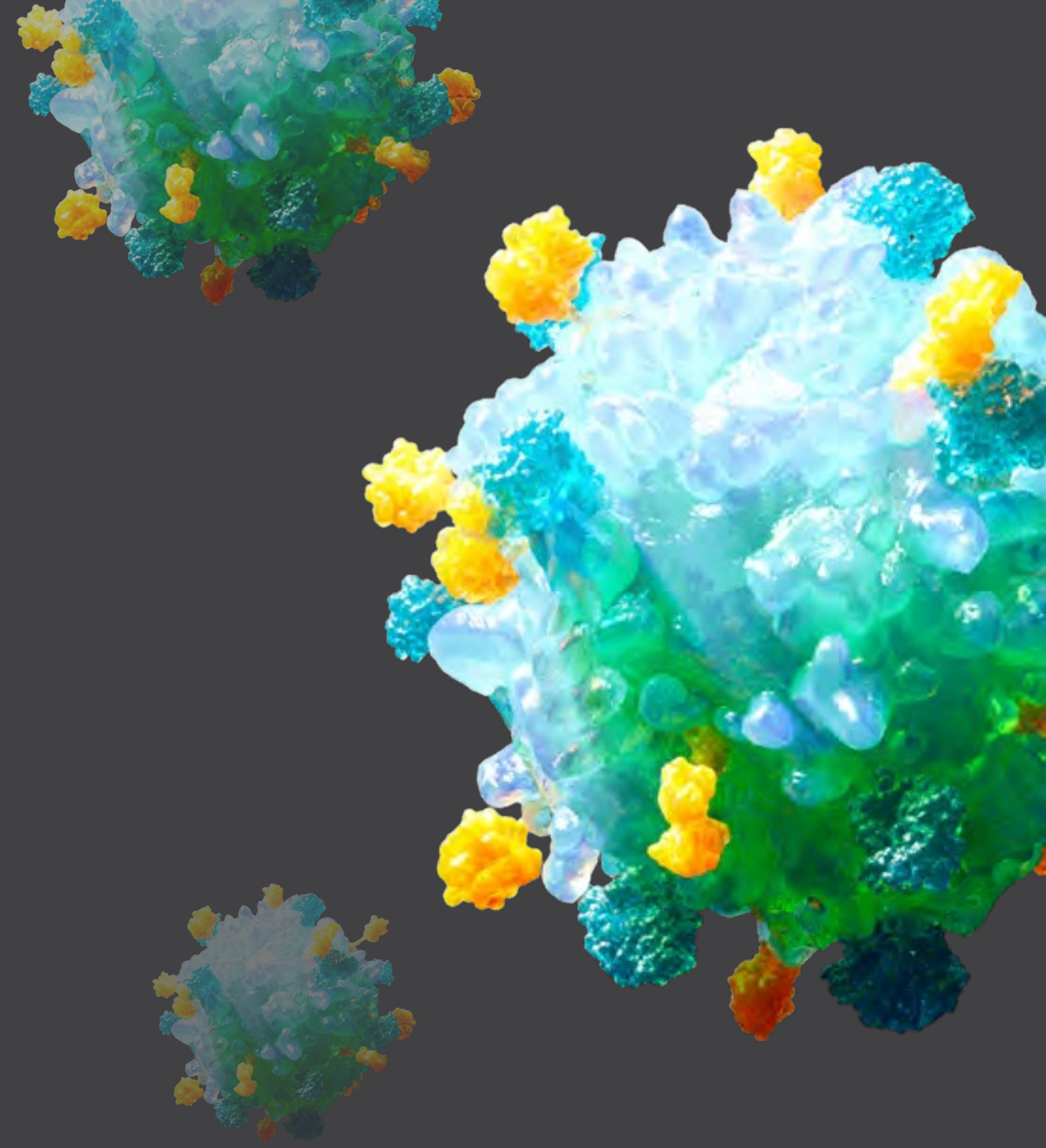
ATARA BIO®

INVESTOR PRESENTATION
42ND ANNUAL J.P. MORGAN HEALTHCARE CONFERENCE

MONDAY, JANUARY 8, 2024

Nasdaq: ATRA



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ATARA IS THE FIRST TO DELIVER ON THE TRANSFORMATIVE POTENTIAL OF ALLOGENEIC T-CELL THERAPY

First Company to Obtain Regulatory Approval for an Allogeneic T-cell Immunotherapy

Ebvallo™ Approved by EMA in December 2022; BLA submission expected in Q2 2024
Expanded global tab-cel® partnership with Pierre Fabre closed in December 2023

Near-Term Milestones with ATA3219, Allogeneic CD19 CAR T Cell Incorporating Clinically-Validated Technologies

Lupus nephritis IND filing anticipated Q1 2024
IND cleared in relapsed/refractory B-cell NHL with initial clinical data anticipated H2 2024

Focused Operational Activities and Associated Strategic Restructuring Extends Cash Runway into 2027

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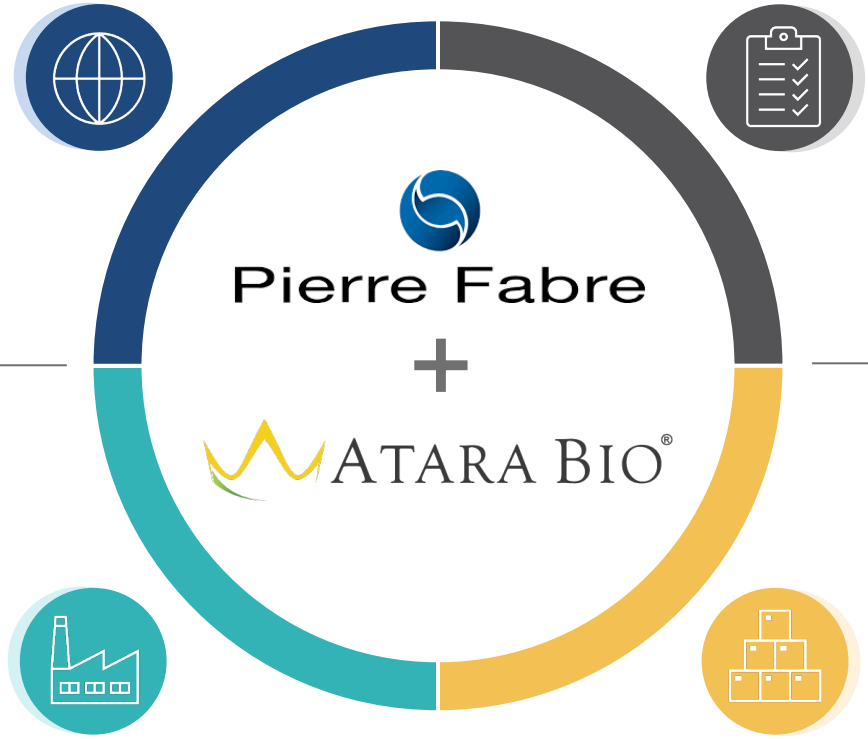
Expanded Global Tab-cel® Partnership with Pierre Fabre Laboratories Closed in December 2023

Pierre Fabre Laboratories license for tab-cel global development, manufacturing and commercialization, with **up to $640 million** in potential consideration and **significant double-digit tiered royalties**

Atara received **~$27 million** in upfront cash and initial inventory purchases at closing (Dec 2023), and will receive additional **$100 million** in potential regulatory milestones through BLA approval



Substantially all tab-cel® **clinical, regulatory and manufacturing activities planned to transfer to Pierre Fabre Laboratories** at time of BLA transfer

Pierre Fabre Laboratories to **reimburse Atara for tab-cel global development costs** through BLA approval, and **purchase current and future tab-cel inventory** through BLA transfer

Partnership will expand reach of tab-cel's life-saving potential to patients worldwide and provide future revenues for Atara

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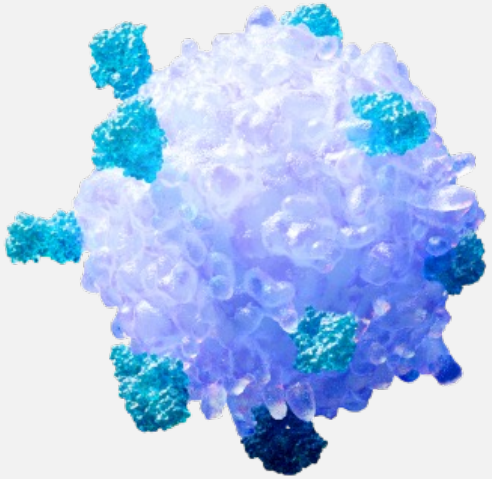
Tab-cel BLA Submission on Track for Q2 2024 Based on Strong Clinical File

Latest Phase 3 ALLELE data cut analysis reinforces confidence in tab-cel BLA filing package

- 49% ORR ($p<0.0001$) in patient population aligned with intended U.S. label
- Favorable and consistent safety profile
- Other findings consistent with previous results, including DOR and estimated OS



Separate pooled analysis including patients from ongoing tab-cel multicohort EBVision trial presented at ESMO-IO[1]

- 77.8% ORR in 18 EBV+ CNS PTLD patients, including first line PTLD setting
- Long-term survival, and favorable and consistent safety profile

[1]Annals of Oncology (2023) 20 (suppl_1): 100520-100520. 10.1016/iotech/iotech100520

ORR – Objective Response Rate; DOR – Durability of Response; OS – Overall Survival

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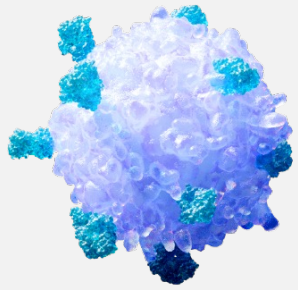
The Only Allogeneic T-cell Platform With an Approved Product

Allogeneic EBV T-Cell

Healthy Donor Cells

Manufacturing

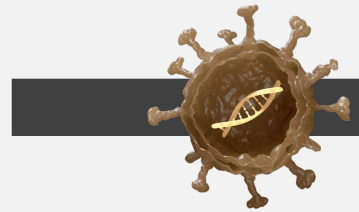


EBV T Cell

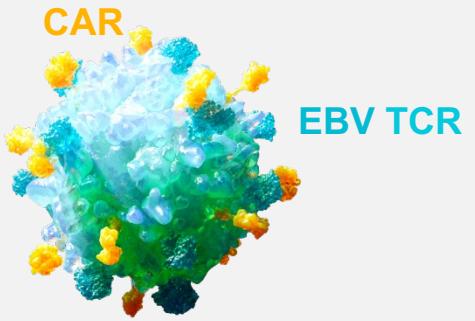
- ✓ Designed to target root cause of EBV-driven diseases
- ✓ No gene editing of the TCR
- ✓ Minimal HLA matching required
- ✓ Favorable safety profile
- ✓ Robust manufacturing process

Next-gen Allogeneic CAR T

Chimeric Antigen Receptor



Viral Vector



CAR T

- ✓ Retains beneficial features of EBV T-cell with no gene editing of TCR
- ✓ CAR-targeted activity and can be modified to express dual targets and/or engineered to armor CAR T
- ✓ Leverages novel CD3ζ signaling domain (1XX) with more physiologic levels of T-cell signaling

EBV = Epstein-Barr Virus; HLA = Human Leukocyte Antigen; CAR = Chimeric Antigen Receptor; TCR = T-cell Receptor

Tab-cel® (Ebvallo™) is only approved in the European Union

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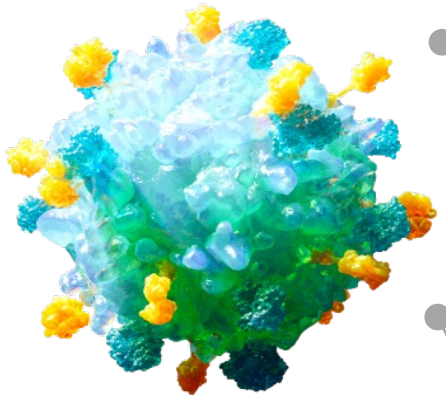
Strategic Focus on Allogeneic CAR T Programs for Heme Malignancies and Various Autoimmune Conditions



ATA3219

CD19 CAR – IND Cleared in NHL and IND for Lupus in Q1'24

ATA3431

CD19 / 20 CAR – IND-enabling studies

Hematological Malignancies

Develop best-in-class allogeneic programs for NHL and B-cell malignancies

B-cell Driven Autoimmune Diseases

Establish promise of allogeneic CAR T across autoimmune diseases, starting in Lupus Nephritis

Atara's Allogeneic CAR T Platform is Differentiated and has Potential to be Best-in-Class

Atara's Allogeneic CAR T Platform

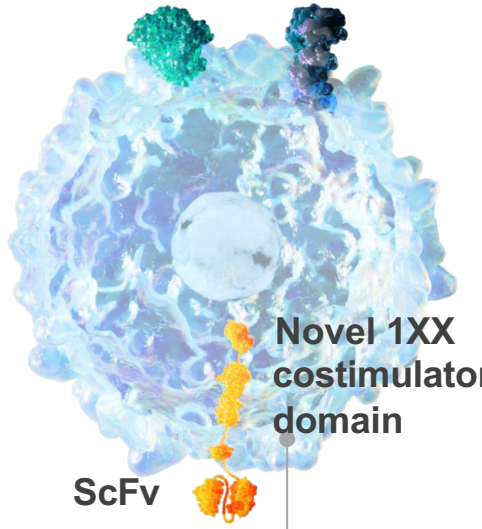
Persistence: Endogenous TCR

EBV TCR

MHC

Safety: Minimal HLA matching

Durability: Less differentiated phenotype of unedited T cells



Expansion and persistence: 1XX, no genetic editing or stealth approaches

Objective is to deliver deep and durable clinical responses with a well-tolerated product profile

Other Allogeneic CAR T Platforms

	CAR Aβ T (gene-edited)	CAR-NK	CAR γδ
Safety	Safer than auto CAR T Some require high and prolonged lymphodepletion		
Expansion	Moderate	Minimal; high dose needed	Minimal
Persistence	~3-4 weeks	< 3 weeks	Suboptimal
Durability	Moderate	Suboptimal	Suboptimal

Aβ – alpha beta; NK = natural killer; γδ – gamma delta

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Clinical Validation From Industry Leaders Substantiates Key Attributes of Our Allogeneic CAR T Platform

1 **1XX signaling domain**

Expansion and persistence

2 **Endogenous TCR & minimal HLA matching**

Persistence and safety

3 **Less differentiated T Cells**

Durability

TAK-940

CD19 auto CAR T with 1XX

Dose level 1 (25M) resulted in ORR 89%, CR 78% (n=9)[1]

Memorial Sloan Kettering

Allogeneic EBV CD19 CAR T

Overall survival up to 3 years in post-transplant patients[2]

YTB323

Stem-enriched auto CD19 CAR T

69% durable CRs at 6 months (DL2 – 12.5M, n=30)[3]

1. Park, JH et al. Poster 163A. ASH 2022. 2. Curran KJ, et al. ASH 2023. 3. Barba, P et al. Poster 439. ASH 2022.

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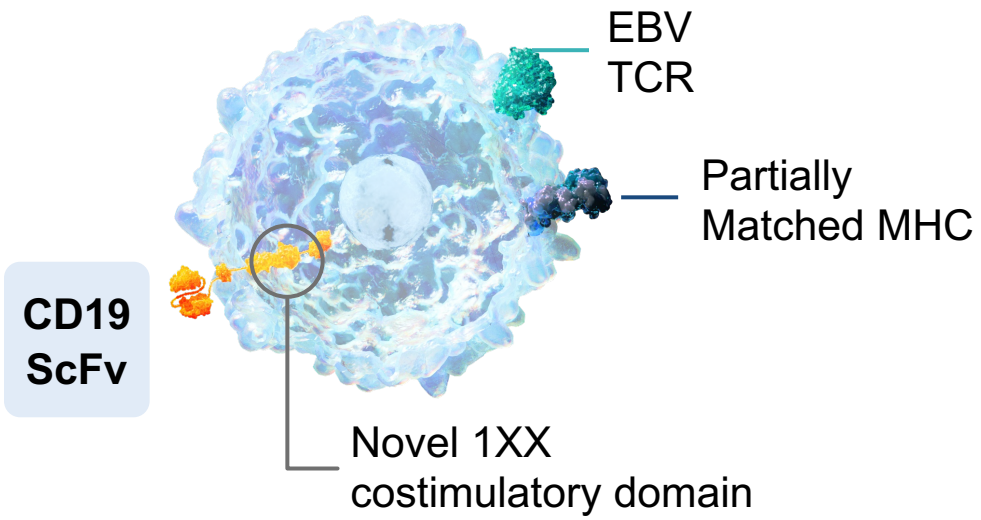
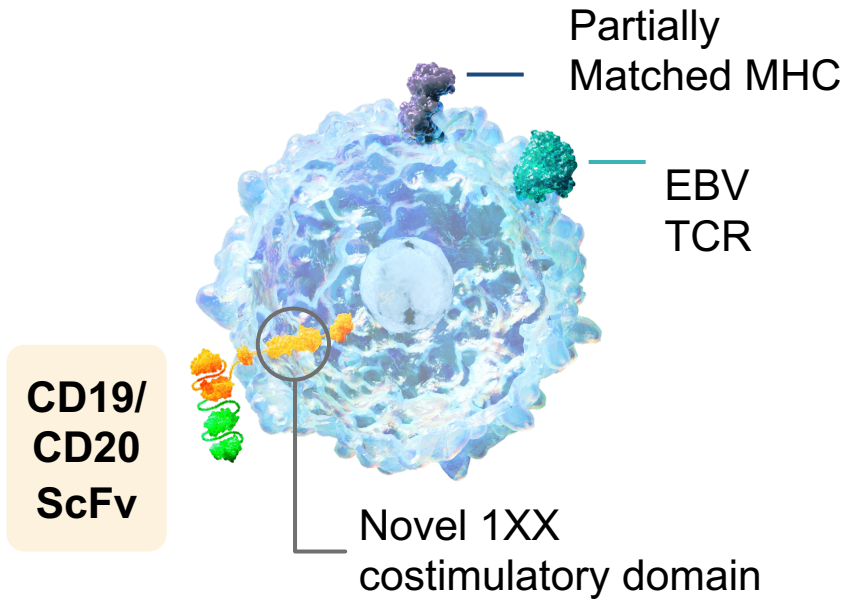
Our Allogeneic CAR T Cell Programs Incorporates Clinically Validated Technologies

ATA3219 (CD19 CAR)



Target:
CD19+ B-cell malignancies, Autoimmune

ATA3431 (CD19 / 20 CAR)



Target:
CD19/CD20+ B-cell malignancies, Autoimmune

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ATA3219 in NHL: Opportunity To Compete With a Differentiated Profile Given Limitations With Other CD19-Targeted Therapies

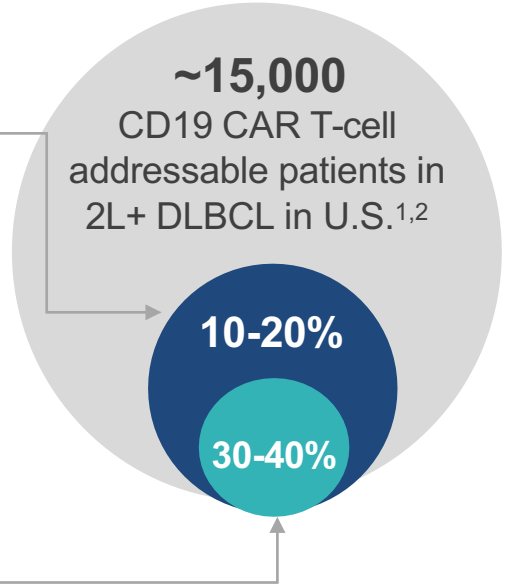
Unmet Need Despite Approved Auto CAR T

Access challenges for auto CAR T

Only ~10-20% of DLBCL patients receive autologous CD19 CAR T today, despite being eligible[1,2]

Durability challenges for auto CAR T

Only ~30-40% of those who receive autologous CD19 CAR T therapy have durable response at 6 months[3†]



Bispecifics & Allo CAR T Yet to Deliver

Efficacy and safety challenges for bispecifics

Products entering the market, however questions on level of adoption given risk/benefit profile

Durability and persistence challenges for allogeneic CD19 CAR cell therapy

Limited durability of remission with no clinically superior platform

[1]2023 Clarivate™, [2]GlobalData, [3]Atallah-Yunes, SA, et al. (2022).
Note: Estimates for 2022 do not include full impact of ongoing 2nd Line CAR T utilization. †Estimate derived from PIs of approved auto CART; includes reported and extrapolated information. RHS – press searches

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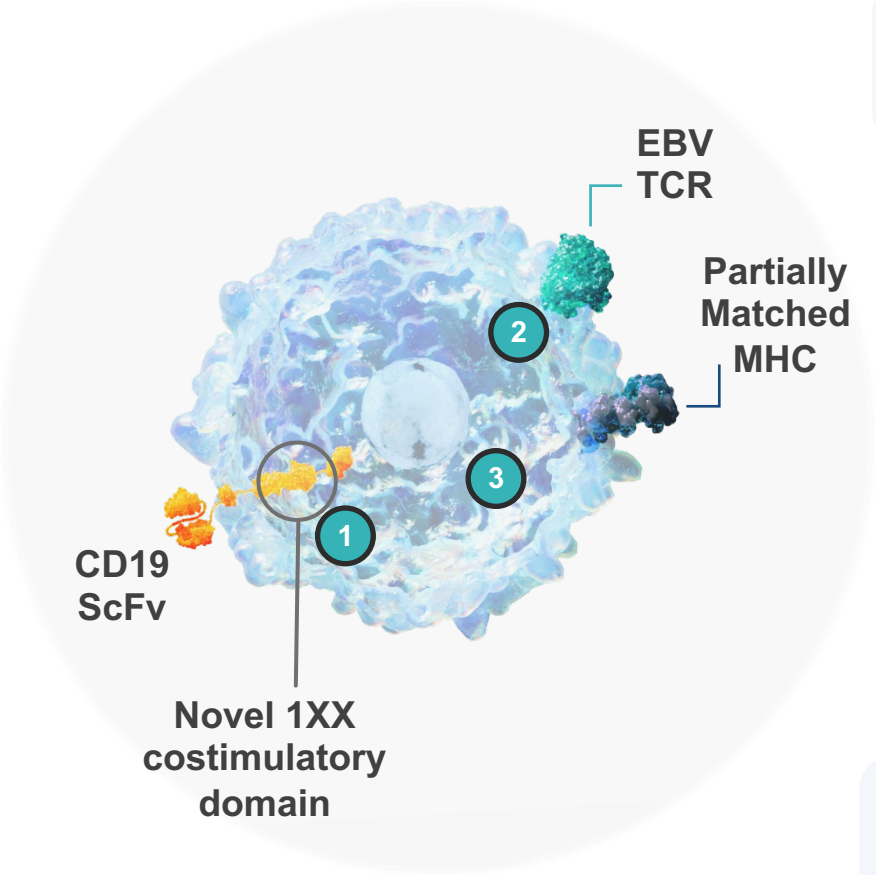
ATA3219 in NHL: IND Cleared and Phase 1 Study Commencing for Atara's First Allogeneic CAR T



ATA3219: Next-generation off-the-shelf, allogeneic CD19-1XX CAR+ EBV T cell incorporates multiple clinically-validated technologies

1. 1XX signaling domain **associated** with **favorable** response rates, **durability**, and **safety**[1]
2. **Retention** of the well-defined, **endogenous** TCR, essential for the **longevity of the response**[2]
3. **Less differentiated** T-cell phenotype clinically correlated to **improved and durable** clinical responses[3]

Proof-of-principle: An academic clinical study of an earlier-generation allogeneic CD19 targeted CAR EBV T-cell construct showed overall survival of up to three years in 12 patients with relapsed/refractory B-cell malignancies after hematopoietic cell transplant[4]

ATA3219 pre-clinical data demonstrated long-term *in vivo* expansion, polyfunctional phenotype, and efficient targeting of CD19 expressing tumor cells with low alloreactivity[5]

1. Park, JH et al. Poster 163A. ASH 2022. 2. Stenger D, et al. Blood 2020. 3. Barba, P et al. Poster 439. ASH 2022. 4. Shahid, S et al. Poster presented at ASH; 2023. 5. Pham, C, et all. Abstract presented at Transplantation & Cellular Therapy (TCT) Meetings; 2023.

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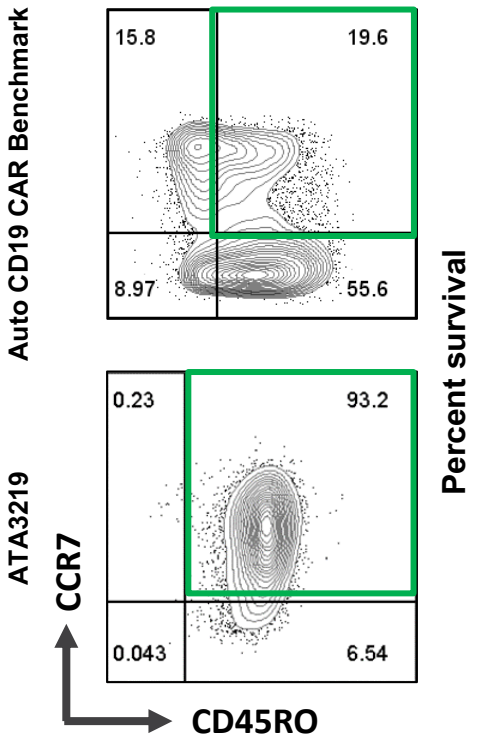
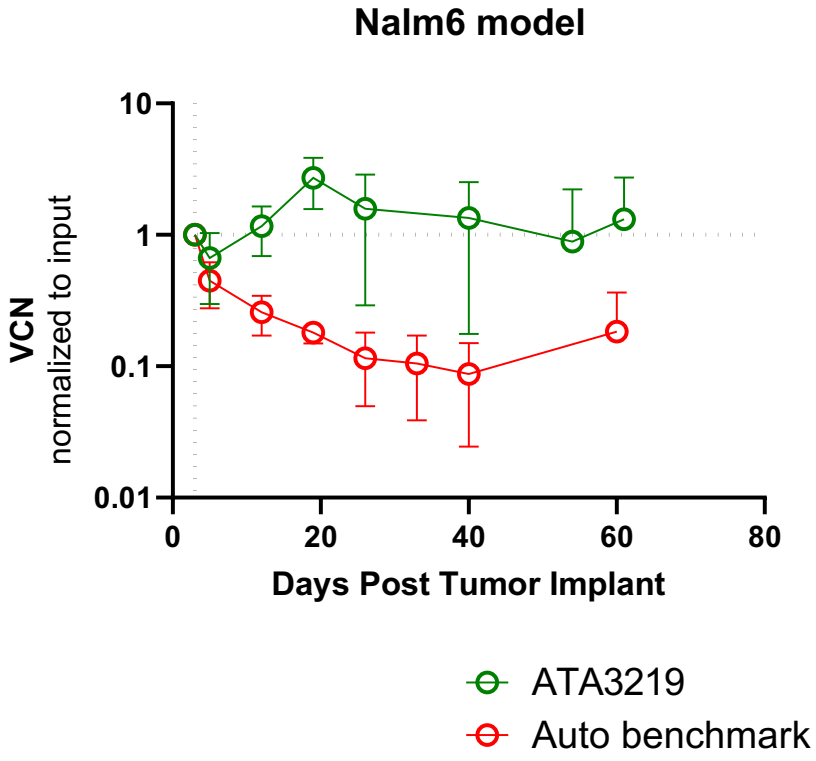
ATA3219 in NHL: Potential "Best-in-Class" Profile as Pre-Clinical Data Supports Superior Persistence and Anti-Tumor Efficacy

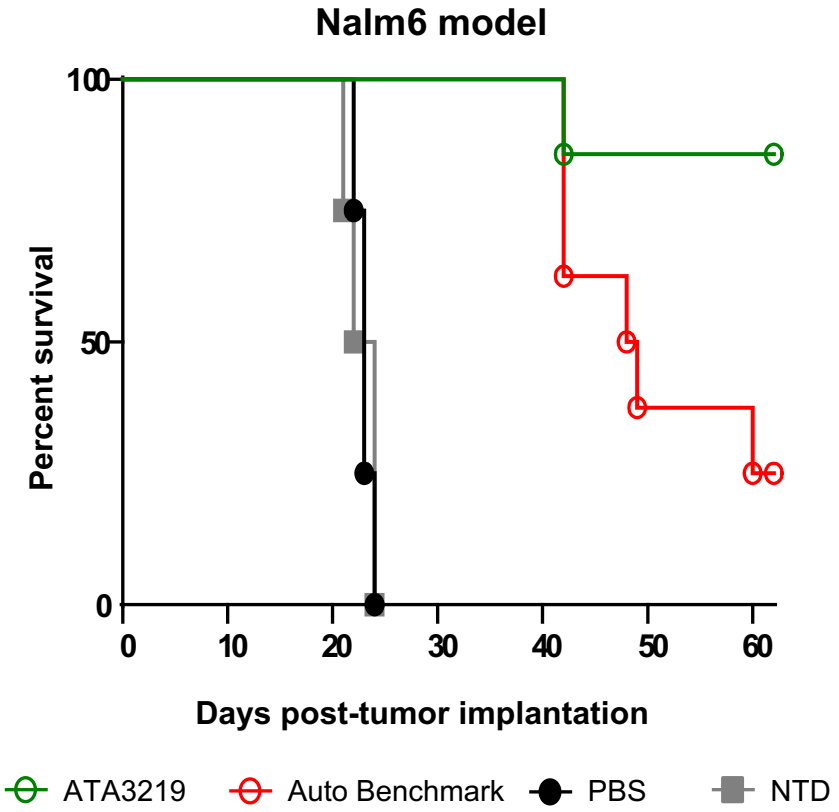
Less differentiated T Cells for ATA3219



Longer persistence in tumor model versus auto CD19 CAR benchmark[1]



Superior anti-tumor **efficacy** versus auto CD19 CAR benchmark[1]



1. Pham, C, et al. Abstract presented at Transplantation & Cellular Therapy (TCT) Meetings; 2023
Note: T-cell infusion on day 3 day after tumor implantation (day 0); infusion timepoint represented as a vertical line on the center graph.

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ATA3219 in Autoimmune: In a Field With Growing Momentum, Atara is Rapidly Advancing in Lupus Nephritis

Rationale for CD19 CAR T in Lupus Nephritis

Unmet Need

- High unmet medical need in Lupus Nephritis; standard of care and approved products have limited efficacy

Proof of Concept

- Compelling validation from autologous CAR T academic study (8/8 patients with >1 year post CAR T cell infusion attaining remission in Lupus[1]) and emerging industry data

Novel Approach

- No B-cell targeted allogeneic product clinical data in Lupus or autoimmune disease yet

ATA3219 is Well Positioned

Safety

- Limited non-specific activity in Lupus model
- No gene editing required – significant safety experience in more than 500 patients across diseases with allogeneic EBV T cells
- 1XX designed to be less inflammatory

Efficacy

- Robust and specific B cell depletion in Lupus model, with associated cytokine response
- Less differentiated phenotype and 1XX drive cellular fitness
- Potential to enable rapid & deep B-cell depletion

Timeline

- Planned IND in Lupus Nephritis in Q1’ 24

Numerous other autoimmune conditions could potentially benefit from ATA3219

1. Blood (2023) 142 (Supplement 1): 220.

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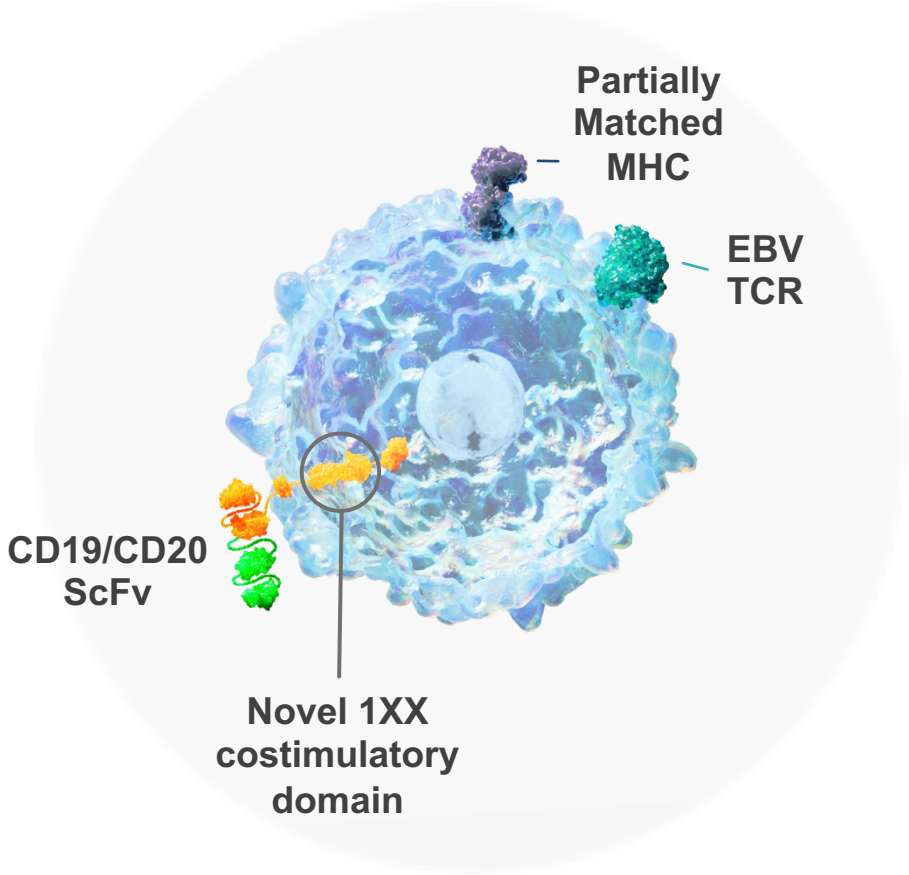
ATA3431: Off-the-Shelf Allogeneic CD19/CD20 CAR T Program Progressing With IND-Enabling Studies



- Targeting CD19 and CD20 **reduces probability of relapse** due to CD19 antigen loss, hypothesized to be a major cause of treatment resistance or disease relapse after CD19 CAR T treatment
- Targeting CD19 and CD20 provides **potential incremental efficacy benefit** and 1XX co-stimulation for **enhanced persistence**
- Autologous CD19/CD20 dual CAR T has shown **promising efficacy** and **safety** in clinical trials (IMPT-314)
- ATA3431 preclinical data demonstrates a competitive profile based on **potent** antitumor activity, **long-term** persistence, and **superior** tumor growth inhibition

Positive preclinical data presented at American Society of Hematology meeting in December 2023[1]

1. Cha, S et al. Poster 4800. ATA3431: Allogeneic CD19/CD20 Bispecific CAR EBV T Cells for the Treatment of B-Cell Malignancies. ASH 2023.

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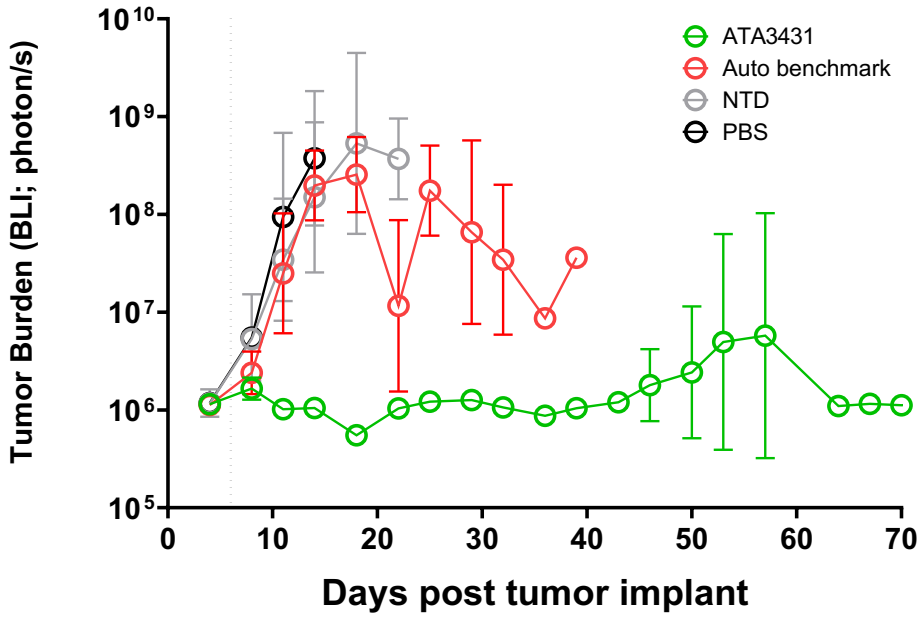
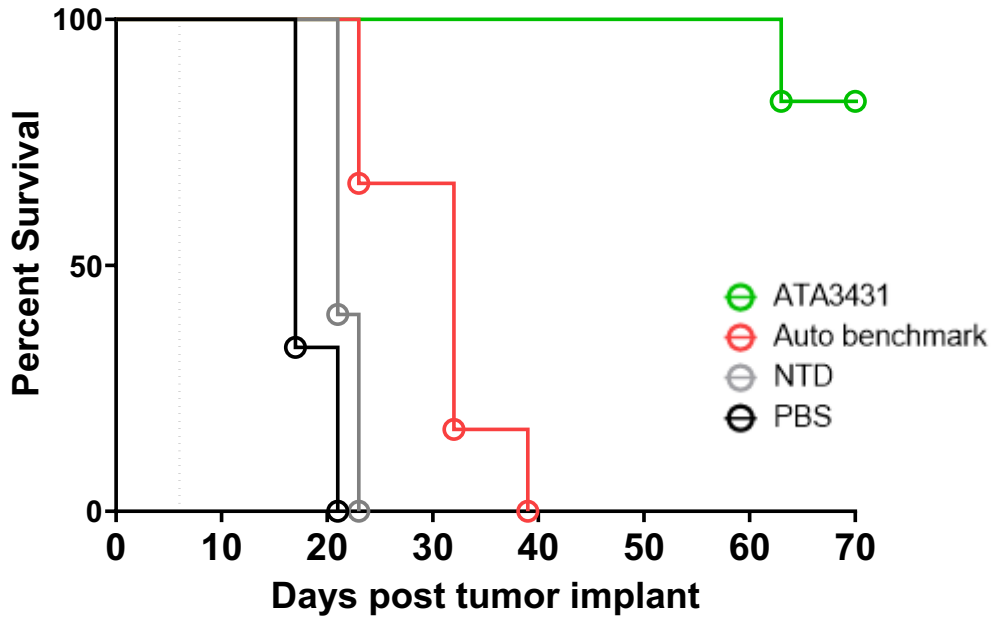
ATA3431: Compelling Proof-of-Concept and Competitive Profile

Greater Anti-Tumor Efficacy vs CD19/CD20 Autologous Benchmark

Challenging CD19^{low} / CD20^{+} Raji model





ATA3431 advancing into IND-enabling studies

Cha, S et al. Poster 4800. ATA3431: Allogeneic CD19/CD20 Bispecific CAR EBV T Cells for the Treatment of B-Cell Malignancies. ASH 2023.

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Differentiated Allogeneic T-Cell Immunotherapy Pipeline

Program	Indication	Target	Preclinical	Phase 1	Phase 2	Phase 3	Registration	Next Milestone
Tab-cel® or Ebvallo™ (tabelecleucel)	RR EBV+ PTLD following HCT and SOT	EBV	ALLELE Study				EU Approved	**Q2 2024:** BLA submission expected
	Multi-Cohort (Label-Expansion): EBV+ cancers(1)	EBV	EBVision Study					Ongoing enrollment
ATA3219 (Allogeneic)	B-cell malignancies, including NHL	CD19						**H2 2024:** Preliminary NHL Phase 1 clinical data expected
	Autoimmune disease, including Lupus Nephritis							**Q1 2024:** planned IND submission
ATA3431 (Allogeneic)	B-cell malignancies	CD19/CD20						Advancing into IND-enabling studies
	Autoimmune disease							
ATA188	Progressive MS	EBV(2)	EMBOLD Study					Evaluating strategic options

Excluding Ebvallo™ in EU, these investigational agents are not approved by any regulatory agencies and efficacy and safety have not been established.
EBV+ PTLD: EBV-Associated Post-Transplant Lymphoproliferative Disease; RR: rituximab relapsed/refractory; HCT: allogeneic hematopoietic cell transplant; SOT: solid organ transplant; NHL: non-Hodgkin's lymphoma
Atara has entered into an agreement with Pierre Fabre to commercialize Tab-cel® for EBV+ cancers worldwide
Other programs: EBV vaccine and other solid tumor programs
(1) Phase 2 multi-cohort initiated in Q3 2020, with possible indications including EBV+ PTLD with CNS involvement, EBV+ PID/AID LPD, and other potential EBV-associated diseases
(2) Targeted antigen recognition technology; Phase 2 Randomized Controlled Trial

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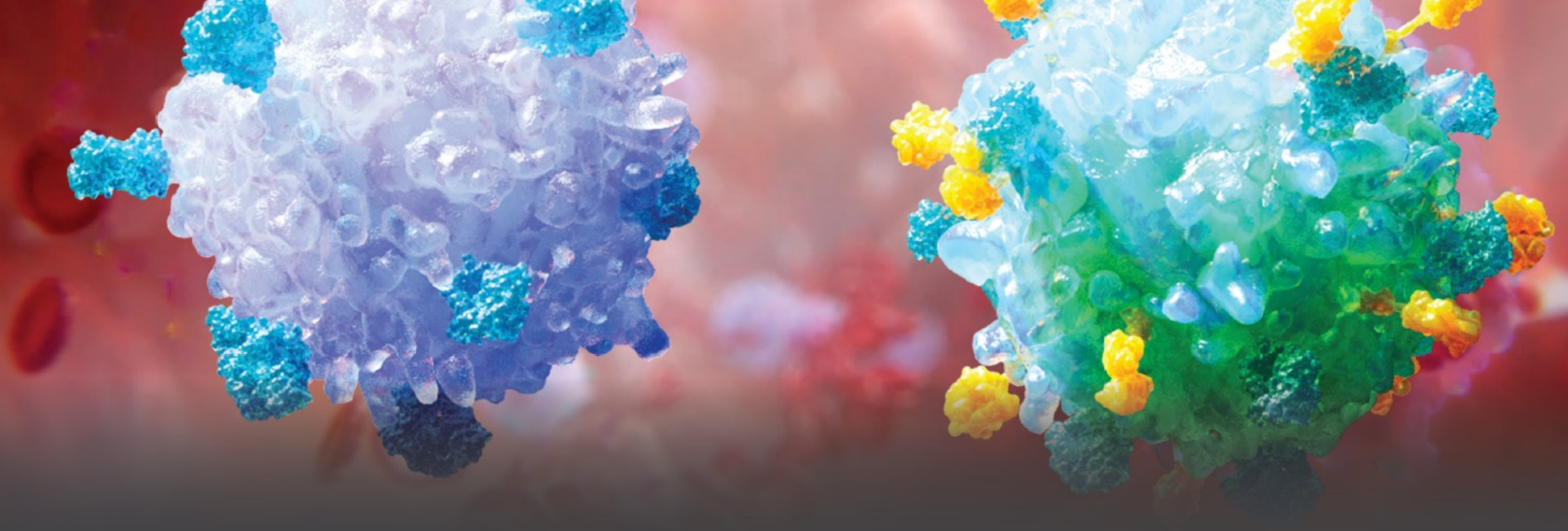

THANK YOU

Nasdaq: ATRA

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