



Pioneering CAR T in Autoimmune Diseases

June 2026

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Poised to Deliver the Curative Potential of CAR T for a Range of Neuroimmunology Diseases



CAR T Leadership

Potentially first approved autoimmune CAR T with most patients treated to date

Best-in-Class Profile

Demonstrated durable drug-free, disease-free remission with single dose

Focused Strategy

Neuroimmunology-led franchise

Valuable Commercial Opportunity in SPS

Immediately addressable market and premium pricing potential

Pipeline-in-a-Product

Clinical data supports expansion into broader indications (e.g., gMG, PMS)

Strong Financial Position

Supporting anticipated SPS commercial launch and gMG Phase 3 trial

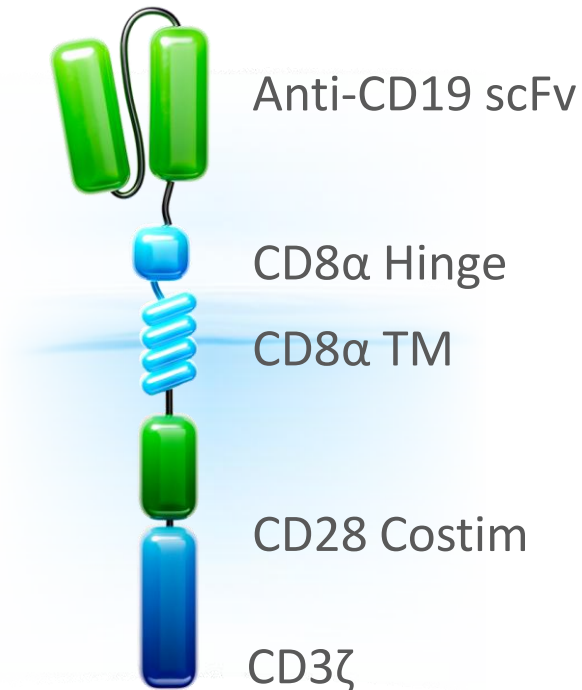
Focused Neuroimmunology Strategy Drives Significant Growth Trajectory for Long-Term Value Creation



Miv-cel: Potential First-in-Class and Best-in-Class CAR T Designed for Potency & Tolerability

Mivocabtagene Autoleucel (miv-cel)^{1,2}

Only Fully Human Autologous CD19
CAR T With CD28 Costim



- **More than 100** patients dosed with miv-cel across multiple indications³
- **Deep and broad depletion of peripheral- and tissue-resident B cells to support broad immune reset and durable remission^{4,5}**
- **No high-grade CRS or ICANS³**
- First SPS and gMG patients treated with a single dose of miv-cel achieved **durable efficacy beyond 24 months without the need for chronic immunotherapies⁶**

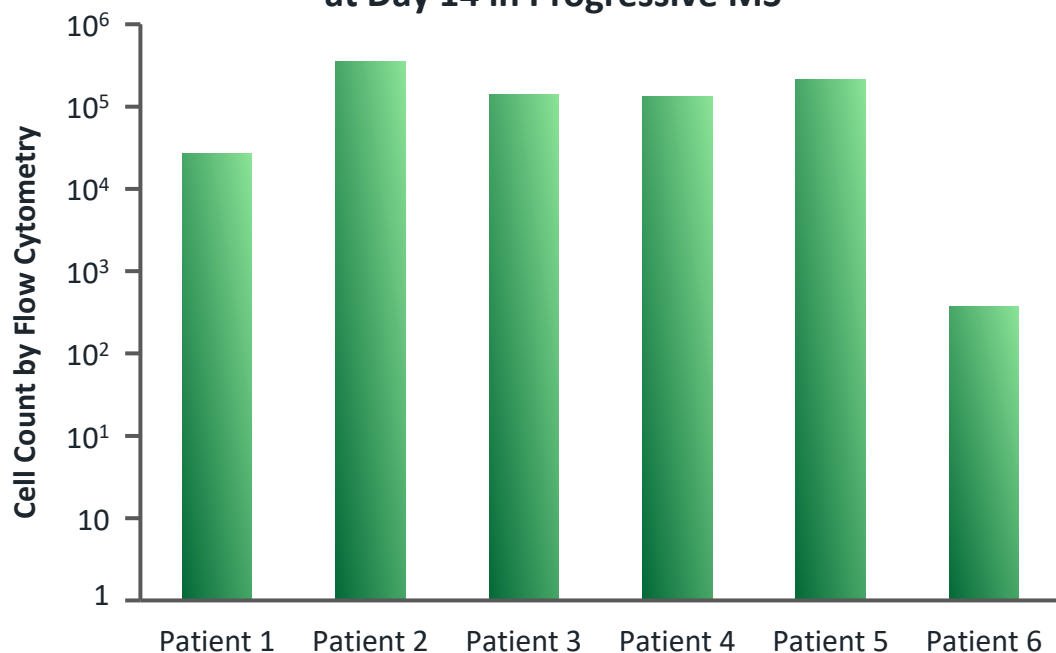
CRS, cytokine release syndrome; Costim, co-stimulation; gMG, generalized myasthenia gravis; ICANS, immune effector cell-associated neurotoxicity syndrome; scFv, single-chain fragment variable; TM, transmembrane.

1. Brudno JN, et al. *Nat Med.* 2020;26:270-280. 2. Alabanza L, et al. *Mol Ther.* 2017;25:2452-2465. 3. Data on file, Kyverna Therapeutics. 4. Minopoulou I, et al. *Ann Rheum Dis.* 2025;84(3):e4-e7. 5. Albach FN, et al. *Rheumatology.* 2025;64(6):4075-4077. 6. Named patient access data, Kyverna Therapeutics.

Neuroimmunology Franchise Strategy Driven by Miv-cel's Profound MOA and Ability to Penetrate the CNS

CNS Penetration and Expansion

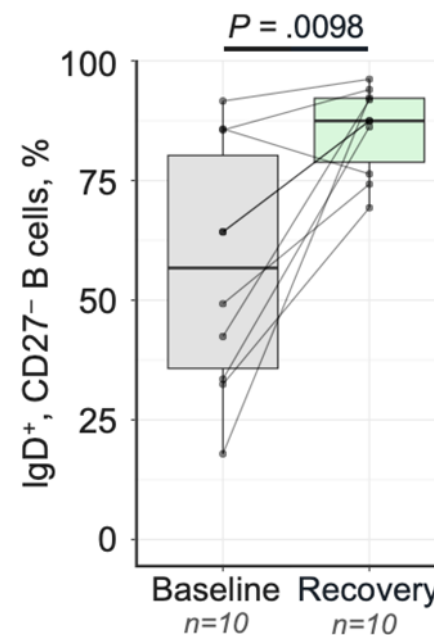
CAR⁺ Miv-cel Expansion Detected in CSF at Day 14 in Progressive MS^a



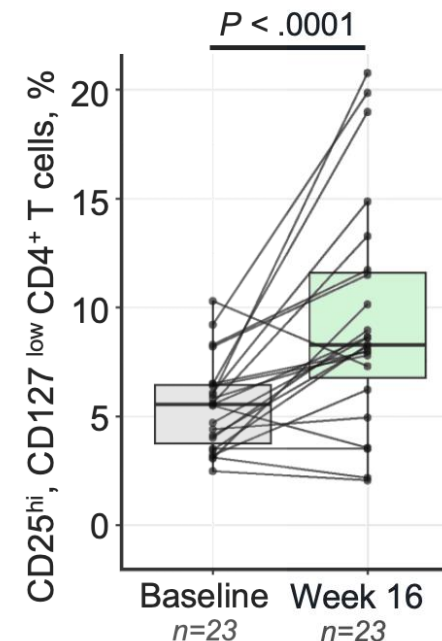
Acts directly on cells in the CNS at the site of disease¹

Broad Immune Reset

Naïve B Cells in SPS



Regulatory T Cells in SPS



Resets B cells and upregulates regulatory T cells, important suppressors of CNS disease inflammation²⁻⁴

^aAbsolute numbers of CAR T cells in CSF assumed a volume of 140 mL and 150 mL for female and male, respectively.

CAR, chimeric antigen receptor; CNS, central nervous system; CSF, cerebrospinal fluid; miv-cel, mivocabtagene autoleucel; SPS, stiff person syndrome.

1. Dunn J, et al. Presented at the ACTRIMS Forum 2026; February 5-7, 2026; San Diego, CA. Poster 112. 2. Piquet A, et al. Presented at the AAN Annual Meeting 2026; April 18-22, 2026; Chicago, IL. LBA Poster 8. 3. Goverman JM. *N Engl J*

Med. 2021;384:578-580. 4. Harkins AL, et al. *Crit Rev Immunol.* 2022;42:1-27.

Significant Market Opportunity for Miv-cel in SPS and gMG



Stiff Person Syndrome

- **First-to-market** opportunity with highly efficient infrastructure
- **~6K U.S. diagnosed patients**¹
- **Severe, rare disease with no approved therapies**
- **High-cost burden** (~\$0.7 to \$1.5M 3-yr cost per patient)²
- **Immediately addressable** patients
- **Highly concentrated** treatment network



Generalized Myasthenia Gravis

- **~80K U.S. diagnosed patients**^{3,4}; growing market
- **Significant unmet need** with current SOC
- **High-cost burden** (~\$2M 3-yr cost per patient)^{5,6}
- Opportunity to **change the treatment paradigm**
- **Strong commercial synergies** with SPS enables efficient scaling

Miv-cel: Potential for Significant Premium to Oncology CAR T Pricing; Biologics-like Margins

SOC, standard of care.

1. Crane PD, et al. *Neurology*. 2024;103(12):e210078. 2. Merative 2025 HCRU Analysis of Commercial Chronic Immunotherapy SPS patients.

3. Rodriguez E, et al. *Muscle. Nerve*. 2024;69(2):166-171. 4. Hendricks TM, et al. *Am J Ophthalmol*. 2019; 205:99-105. 5. ICER Report on MG 2021. 6. Global Data Pricing database.

Well Positioned to Deliver on our 2026 Catalysts

Program	Anticipated Milestones
<p>Stiff Person Syndrome RMAT, ODD</p>	<ul style="list-style-type: none"> ✓ Report primary analysis at AAN 2026 + Initiated rolling BLA submission with completion expected in Q4 2026 + Report one-year follow-up data in 2H 2026
<p>Generalized Myasthenia Gravis RMAT, ODD*, FTD[†]</p>	<ul style="list-style-type: none"> ✓ Report updated data on Phase 2 portion of KYSA-6 trial at AAN 2026 + Report longer-term follow-up Phase 2 data in 2H 2026
<p>Additional Pipeline Opportunities</p>	<ul style="list-style-type: none"> + Progressive Multiple Sclerosis: Share development update and report additional data from Phase 1 IIT in 2H 2026 + Rheumatoid Arthritis: Report Phase 2 IIT data in 2H 2026 + Lupus Nephritis: Report Phase 1 data in 2H 2026 ✓ KYV-102: IND filed and accepted

SPS Rolling BLA Submission Initiated; On Track to Deliver Potential First Approved CAR T Therapy for Autoimmune Disease in Valuable SPS Market

- Positive pre-BLA meeting with FDA alignment achieved on all core components of BLA submission package:
 - KYSA-8 single-arm pivotal Phase 2 trial is sufficient to support the BLA submission
 - Primary endpoint measurement is the Timed 25-foot Walk (T25FW) test at 16 weeks
 - Clinical safety package
 - Preclinical package
 - CMC package
- Additional analysis of the Company's completed **natural history study and planned one-year follow-up data** from KYSA-8 to be included in BLA submission, further strengthening the package
- Kyverna to seek **priority review under RMAT designation**

Rolling BLA Submission Expected to be Completed in Q4 2026



Stiff Person Syndrome (SPS)

Patient Perspective from KYSA-8: Before and After Treatment with Miv-cel - Case Study 1

[View Video](#)



SPS is a Debilitating, Progressive Autoimmune Disease with No FDA-Approved Therapies



SPS impacts the inhibitory signaling pathways, which are the body's braking system and the **target of autoantibodies** produced by B cells in SPS^{1,2}



Symptoms characterized by **muscle stiffness** and **painful muscle spasms**, impacting mobility¹⁻³



Inadequate response with off-label symptomatic and immunomodulatory therapies^{1,2,5}

Devastating Impact on Patients

80% of patients lose mobility, needing walking aid assistance or wheelchair¹⁻³

Only ~19% of patients remained able to work after 4 years⁴

“Freezing attacks” and sudden falls requiring ER care^{1,2}

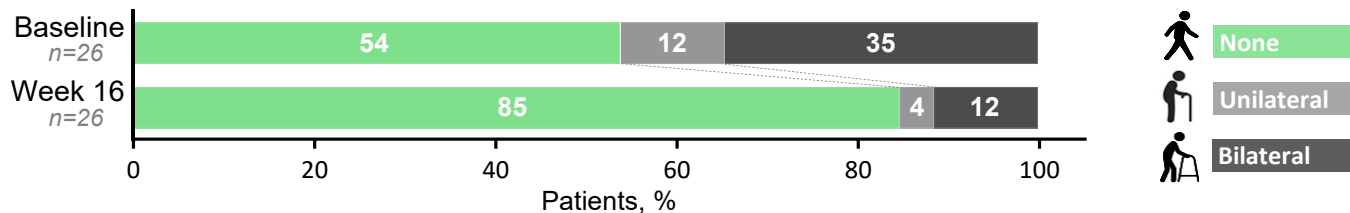
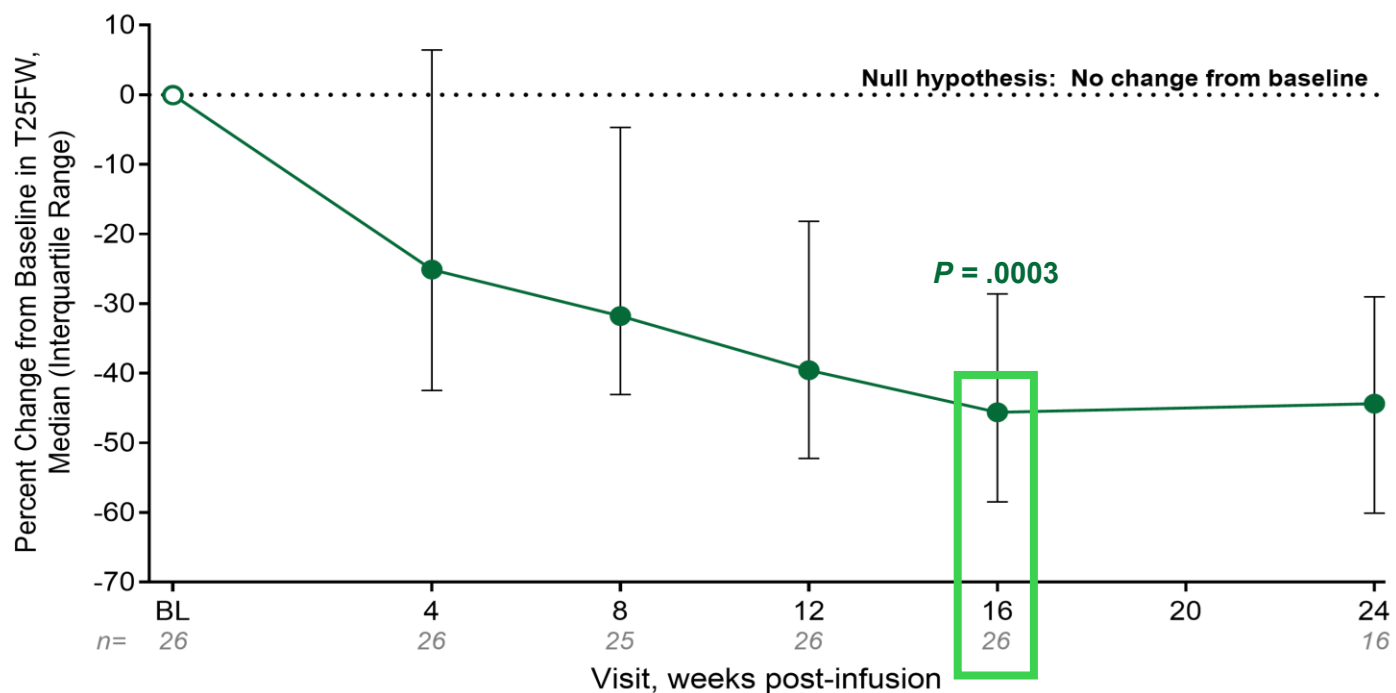
Risk of **permanent disability** and **increased mortality**³

Primary Endpoint Met: Significant Improvement in T25FW

46% Median Improvement at Week 16



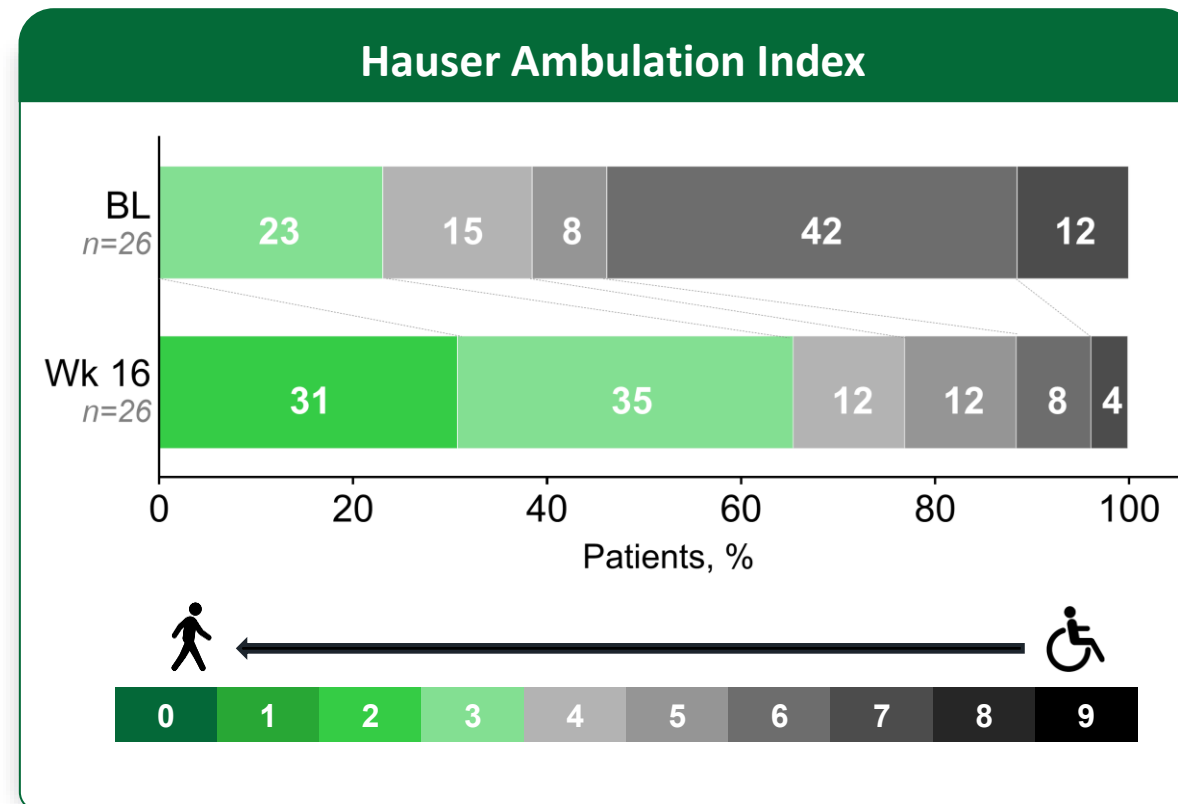
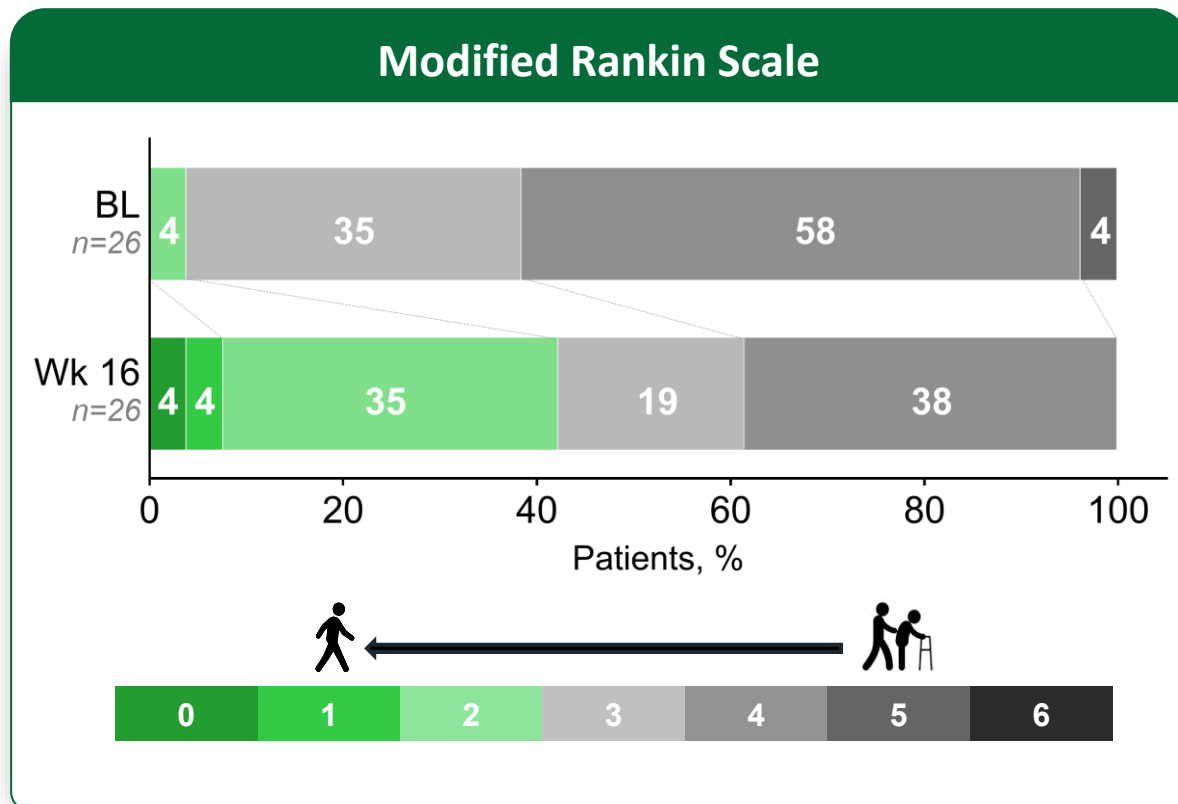
Significant T25FW Improvement and Reduced Walking Aid Use



- 81% of patients achieved **clinically meaningful improvement** ($\geq 20\%$ reduction from baseline)¹
- 31% completed T25FW in < 5 seconds; **typical time for healthy adults**²
- Of the 12 patients requiring a walking aid for T25FW at baseline, **67% (8/12) no longer needed assistance** at week 16
- As of week 16 and through last follow-up, all 26 (100%) patients remained **free of immunomodulatory or immunosuppressant therapies for SPS***

*Includes Includes IVIg/SCIG, PLEX, rituximab and/or prednisone (≥ 20 mg/day) for SPS symptoms.
 Data cutoff: 26Nov2025. Percentages may total more than 100% due to rounding. BL, baseline; T25FW, timed 25-foot walk.
 1. Hobart J, et al. *Neurology*. 2013;80(16):1509-17. 2. Motl RW, et al. *Mult Scler*. 2017;23(5):704-710.

Secondary Endpoints Met: Miv-cel Achieved Significant ($P < .0001$) Improvements in Disability, Mobility, Stiffness, and Hypersensitivity



- Significant ($P < .0001$) mean improvements in mRS and HAI of -0.8 (SD, 0.86) and -1.6 (1.13) and SPS-specific measures, DSI and HSS, of -1.5 (1.75) and -3.2 (2.01), respectively
- 96% of patients (25/26) had improvement in ≥ 1 primary or secondary efficacy endpoint

Miv-cel Demonstrated a Well-Tolerated Safety Profile Supporting Potential for Outpatient Administration



Treatment-Related Adverse Events, n (%)	N=26
CRS (any Grade)	24 (92)
Grade 1	10 (38)
Grade 2	14 (54)
ICANS (any Grade)	3 (12)
Grade 1	3 (12)
Grade 3/4 neutropenia	4 (15)
Any treatment-related serious AE	3 (12)

- No high-grade CRS or ICANS observed
- 4 patients had Grade 3/4 neutropenia, an expected AE with lymphodepletion and CAR T-cell therapies; all events were manageable
- Treatment-related serious AEs occurred in 3 patients; all fully resolved

Natural History Study Contextualizes Transformative Miv-cel Data and its Opportunity to Change the Treatment Paradigm



Natural History Study

Large, multicenter, retrospective study assessing T25FW in patients with SPS (n=153) over 10-year period

Patient Population

Earlier in disease course
(mRS mean 2.6; 55% immunotherapy at index date*)

T25FW

✗ No or minimal improvement[†]

Walking Aid Use

↗ 73% increase over average 5 years

mRS score

✗ No improvement

Immunotherapy Use

↗ 81% had immunotherapy by last datapoint
(47% increased usage)

KYSA-8 SPS Registrational Trial

More severe
(mRS mean 3.6; all have failed immunotherapy)

✓ 46% improvement at 16 weeks, sustained at 24 weeks

↘ 67% decrease at 16 weeks

✓ Improvement in disability

↘ No immunotherapy after single dose of miv-cel

Potential for Miv-cel to Quickly Set a New Treatment Standard in SPS with ~2.0 to 2.5k Immediately Addressable Patients at Launch



~6k

**U.S. Diagnosed
SPS Patients^{1,2}**



**Miv-cel
Addressable Market^{2,3}**

**Immediately Addressable
Market at Launch**

~2.0 to 2.5k Patients

*30-40% of total diagnosed
Patients treated with
off-label immunotherapy*

**Total Miv-cel
Addressable Market**

~5.5k Patients

*90% of total diagnosed
Patients treated with
symptomatic therapies*

Focused Launch Strategy Targets ~10 High-Value SPS Centers



SPS Leadership

- Thought leaders / high-volume treaters
- Institutional support for miv-cel



Addressable Patients

- Existing patients ready at center
- Strong referral network



CAR T Expertise

- Commercial CAR T experience
- Accreditation



Economic Potential

- Robust inpatient and outpatient models
- Commercial payer and Medicare dynamics

Meaningful Portion of Immediately Addressable Patients at ~10 Centers

SPS Treaters Show Strong Enthusiasm for Early Adoption of Miv-cel



Survey of 20 high volume SPS treaters in U.S.



Product profile based on miv-cel topline data

80% view efficacy data and one-time treatment as key attributes

90% view profile as compelling versus current treatment options

85% would use miv-cel for moderate-to-severe patients at launch

Flexible Manufacturing Model to Support Scalable Commercial Growth



- ✓ **Dual-source** U.S. manufacturing strategy for miv-cel
- ✓ Current capacity **fully supports clinical demand and SPS commercial launch**
- ✓ **Additional expansion capacity** available to support MG launch
- ✓ **>98% manufacturing success rate** driven by robust process, quality systems, and technical expertise
- ✓ Miv-cel cost of goods supports potential for **biologics-like margins**



elevatebio®



 **Minaris**
Advanced Therapies



Generalized Myasthenia Gravis (gMG)

Despite Available Treatment Options, High Disease Burden Remains in Generalized Myasthenia Gravis



- gMG is a B-cell and antibody-mediated neuromuscular autoimmune disease that causes fluctuating muscle weakness and fatigue^{1,2}

Novel therapies are needed that minimize or eliminate symptoms of disease while reducing risks associated with chronic immunosuppression

Current State of Treatment for Patients With gMG



Inadequate symptom control^{3,4}



Few reach minimal symptom expression (MSE)^{1,5-6}



Majority require ongoing immunosuppressant therapy¹⁻⁴

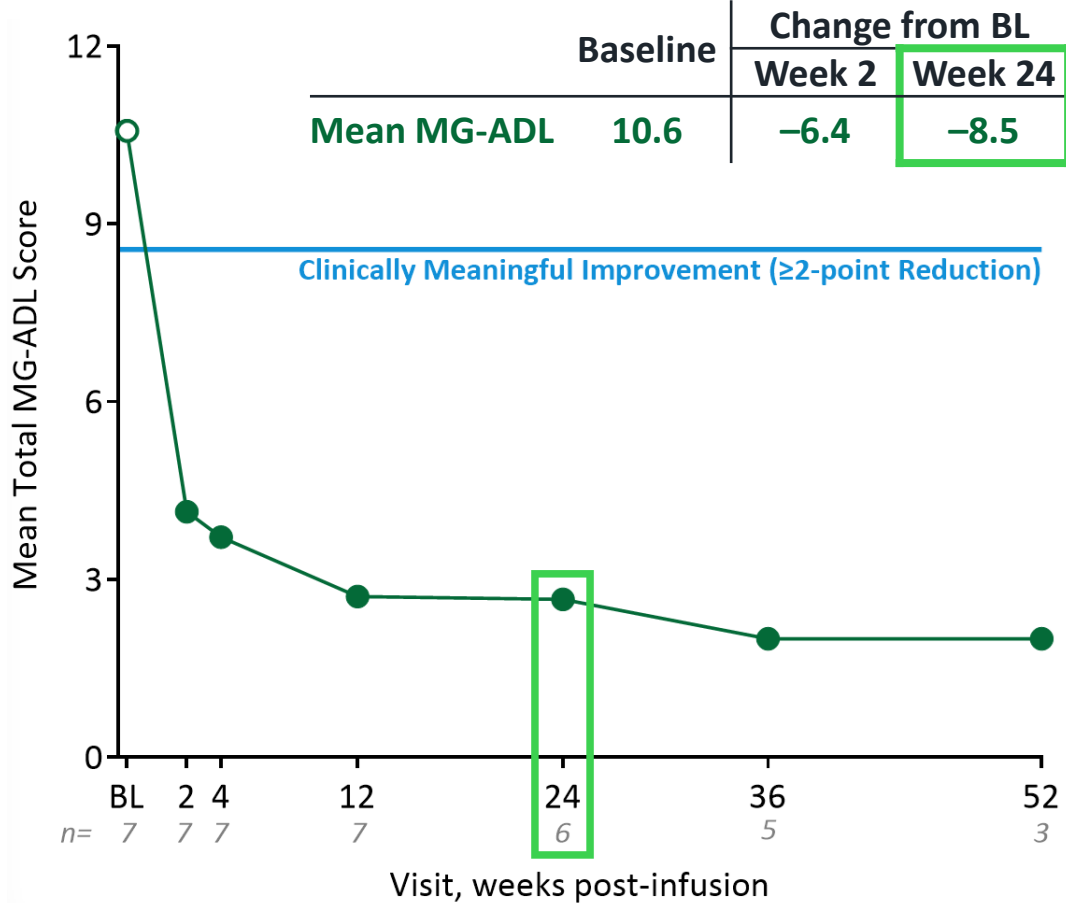


Costly and chronic treatment options^{1,7}

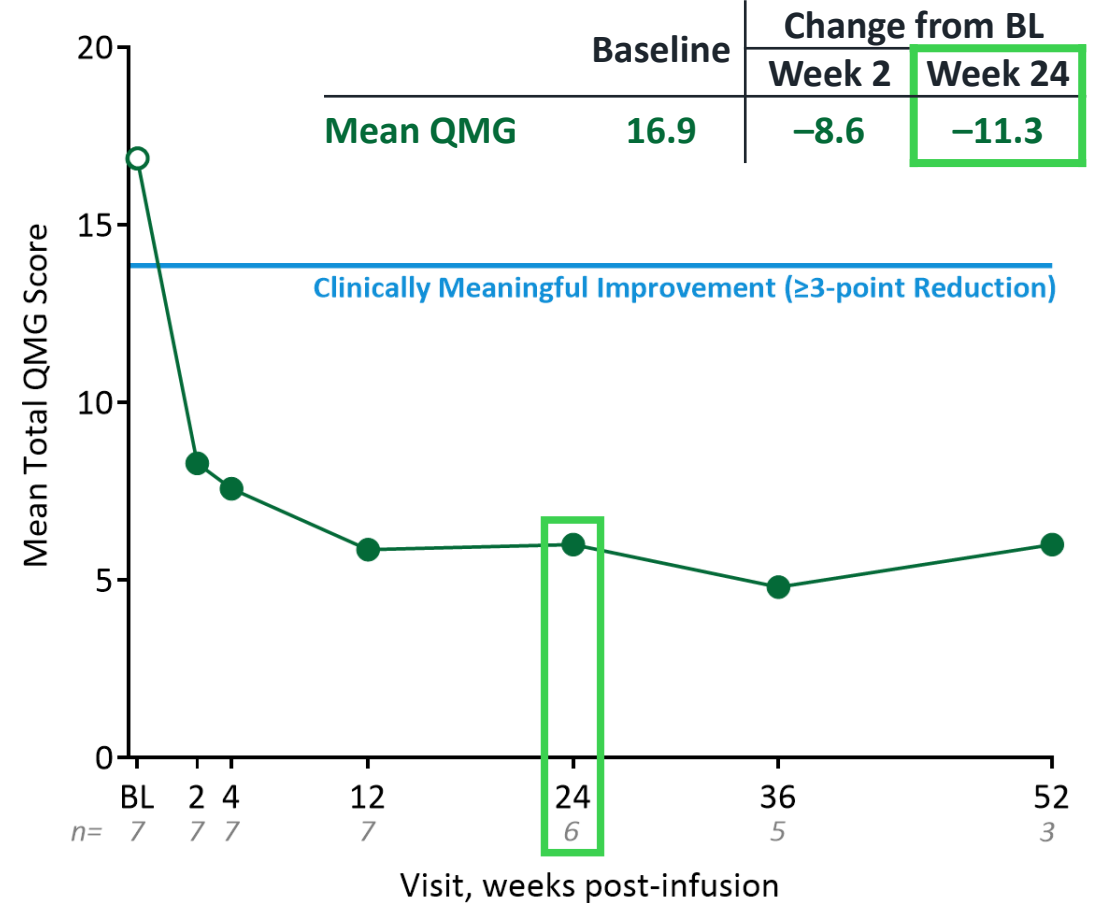
Miv-cel Demonstrated Rapid and Robust Reductions in MG-ADL and QMG Sustained Out to 52 Weeks



MG-ADL score



QMG score



After a Single Dose of Miv-cel, Patients Achieved Substantial, Clinically Meaningful Reductions in MG Outcome Scores and Treatment Burden



Substantially improved clinical outcomes

MG-ADL

100% had clinically meaningful response
(≥2-point reduction vs baseline)

100% were responders
(≥3-point reduction vs baseline)

57% reached MSE at last follow-up
(MG-ADL score of 0-1)

QMG

100% had clinically meaningful response
(≥3-point reduction vs baseline)

MGC

100% had clinically meaningful response
(≥3-point reduction vs baseline)
-16.0 mean reduction at 24 weeks

Substantially reduced MG treatment burden

**100% free of immunotherapies, including NSISTs, high-dose steroids (>10 mg),
and FcRn and complement inhibitors up to 24 weeks**
6 of 7 patients remained free of these agents at last follow-up

Miv-cel Demonstrated a Well-Tolerated Safety Profile Supporting Potential for Outpatient Administration



Treatment-related AEs, n (%)	Patients (n=7)
CRS (any grade)	7 (100)
Grade 1	5 (71)
Grade 2	2 (29)
ICANS (any grade)	0 (0)
Grade 3/4 events	3 (43)
Neutropenia	2 (29)
Lymphopenia	1 (14)
Lymphocyte count decreased	1 (14)
SAE (any grade) ^a	0 (0)

- No high-grade CRS and no ICANS observed
- CRS was low-grade and manageable in all patients
 - 5 of 7 patients only experienced fever (grade 1 CRS)
- 2 patients with Grade 3/4 treatment-related AEs of neutropenia, an expected AE with lymphodepletion and CAR T-cell therapies; neither was associated with infections; all events were manageable and fully resolved

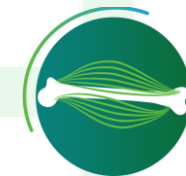
Data cutoff: February 25, 2026.

^aAfter the prior data cut (October 3, 2025), a previously reported treatment-related SAE was reclassified by the Investigator as 'not serious', reflecting his clinical assessment of the AE per protocol-defined seriousness criteria.

CRS and ICANS graded using ASTCT criteria; other AEs graded using CTCAE criteria.

AE, adverse event; ASTCT, American Society for Transplantation and Cellular Therapy; CTCAE, Common Terminology Criteria for Adverse Events; CRS, cytokine release syndrome; ICANS, immune effector cell-associated neurotoxicity syndrome; SAE, serious adverse event.

Single Dose Miv-cel Achieved Unprecedented gMG Clinical Outcomes



All other therapies require chronic background immunotherapies

		Approved			Investigational*	
		FcRn Inhibitor ¹ VYVGART [®]	Complement Inhibitor ^{2,3} ULTOMIRIS [®]	CD19 mAb ⁴ UPLIZNA [®]	BCMA mRNA CAR T ⁵ Descartes-08	Miv-cel CD19 CAR T (KYSA-6, n=6)
Primary Endpoint		4 weeks	6 months	6 months	3 months	6 months
Depth of Response <i>Mean reduction from baseline to primary endpoint (non-placebo adjusted)</i>	MG-ADL Reduction	~4.6	3.1	4.2	4.1	8.5
	QMG Reduction	~6.2	2.8	4.8	3.9	11.3
% Responders <i>Patients with ≥3-point MG-ADL improvement from baseline to primary endpoint (non-placebo adjusted)</i>		~73%	~57%	69%	64%	100%
Achieve Minimal Symptom Expression (MSE) <i>% of patients achieving MG-ADL of 0 or 1</i>		40% <i>At any point before primary endpoint</i>	43%	Not reported	33% <i>6 months to 1 year</i>	57% <i>At any point before primary endpoint</i>

Note: These observations are derived from separate clinical settings; comparisons across trials are not based on head-to-head studies.

BCMA, b-cell maturation antigen; FcRn, neonatal fragment crystallizable receptor; mAb, monoclonal antibody; MG-ADL, myasthenia gravis activities of daily living; mRNA, messenger RNA; QMG, quantitative myasthenia gravis score.

*Under investigation in gMG.

1. Howard Jr JF, et al. *Lancet Neurol.* 2021;20(7):526-536. 2. Vu T, et al. *NEJM Evid.* 2022;1(5):EVID0a2100066. 3. AstraZeneca. ULTOMIRIS[®] efficacy data from CHAMPION-MG. <https://ultomirishcp.com/gmg/efficacy>. Accessed 20 Aug 2025.

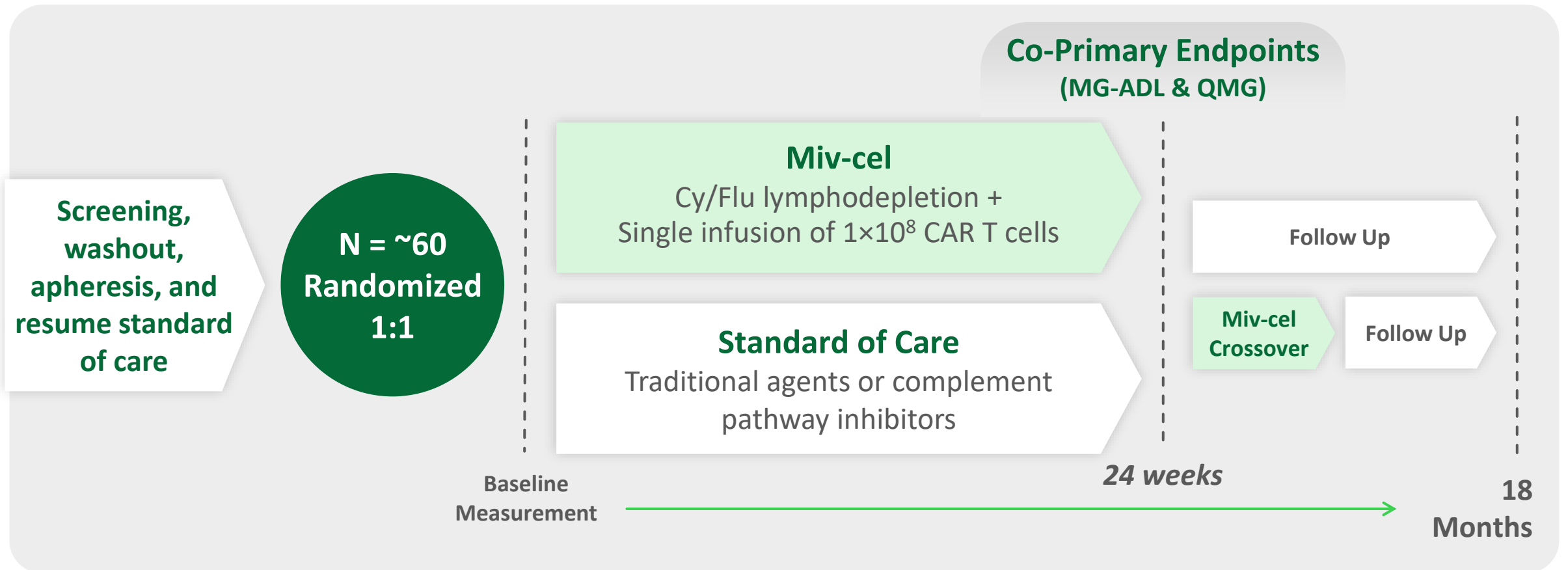
4. Nowak RJ, et al. *N Engl J Med.* 2025;392(23):2309-2320. 5. Vu T, et al. *Nat Med.* 2026;32:1131-1141.

Phase 2 Trial Results Further Derisk Ongoing Phase 3 Registrational Trial

First Patient Enrolled in 2025; 15 Sites Activated Globally



~60-patient, global, open-label, randomized controlled Phase 2/3 trial with crossover design



Standard of care may consist of traditional agents (e.g., prednisone, azathioprine, mycophenolate, methotrexate, chronic IVIg/PLEX) or complement pathway inhibitors (e.g., eculizumab, ravulizumab). Anti-CD20 or -CD19 monoclonal antibodies or FcRn inhibitors not allowed as defined in inclusion criteria.

Miv-cel Potential to Change the Treatment Paradigm in gMG by Delivering Durable, Drug-free, Disease-free Remission with Single Dose



~80k

**U.S. Diagnosed
gMG Patients^{1,2}**



**Miv-cel
Addressable Market^{1,3}**



**Initial
Priority**

~12k Patients

*15% of total diagnosed
Patients with inadequate
response to ≥ 1 biologic**

**Total Miv-cel
Addressable Market**

~40k Patients

*50% of total diagnosed
Patients with inadequate
response to immunosuppressants*

gMG, generalized myasthenia gravis.

*Biologics defined as immunomodulatory therapies including FcRN blockers, complement inhibitors, rituximab or chronic IVIg use.

1. Rodriguez E, et al. *Muscle. Nerve.* 2024;69(2):166-171. 2. Hendricks TM, et al. *Am J Ophthalmol.* 2019; 205:99-105. 3. Clarivate DRG Report (2024).



Additional Opportunities

Progressive Multiple Sclerosis (PMS): Encouraging IIT Data Highlight Broad Opportunity with Miv-cel in Neuroimmunology Diseases



Phase 1 IIT Studies at Stanford (N=6) and UCSF (N=2)

Stanford uses alternative bendamustine lymphodepletion regimen

Biological Activity

- **Robust CAR T cell expansion** in blood and penetration into CNS
- Reconstitution of naïve B cells supportive of **immune reset**

Efficacy

- All patients with available data **showed improved or stable EDSS**
- All patients remained **off other immunotherapies**
- **Improvement in fatigue scores** from baseline in all patients with available data

Safety

- Reinforces **established tolerability profile**
- **No high-grade CRS/ICANS**

Unprecedented data may set a new standard in the treatment of progressive MS, as current therapies aim to only slow or halt disease progression

Data from 8 patients treated at dose levels 33M (n=3) and 100M (n=5) CAR+ T cells

EDSS, expanded disability status scale scores; UCSF, University of California, San Francisco, Weill Institute for Neurosciences; CNS, central nervous system; CRS, cytokine release syndrome; ICANS, immune effector cell associated neurotoxicity syndrome. Dunn J, et al. Poster Presentation at ACTRIMS 2026. ID# P112. Dunn, J, et al. Presentation at Stanford Blood and Marrow Transplantation and Cellular Therapy Symposium May 2026. Galletta K, et al. Poster Presentation at ACTRIMS 2026. ID#121.0027.

Kyverna Is Poised to Deliver on the Curative Potential of CAR T for Autoimmune Patients



**Unique
CAR Construct
Optimal for
Autoimmune**



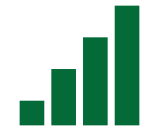
**>100 patients
treated
with Miv-cel**



**Derisked
Opportunity with
Positive Data and
Near-Term
Catalysts**



**Potential to be
First-in-Class
with SPS BLA
Underway**



**Experienced Cell
Therapy
Leadership &
Strong Financial
Position**

