Autolus

Q1 2025 Financial Results and Business Updates

May 8, 2025

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Agenda

- Welcome and Introduction: Amanda Cray, ED, Investor Relations & External Communications
- Operational Highlights: Dr. Christian Itin, CEO
- Financial Results: Rob Dolski, CFO
- Upcoming Milestones and Conclusion: Dr. Christian Itin, CEO
- Q&A: Dr. Christian Itin and Rob Dolski

Strong momentum in first quarter of the U.S. AUCATZYL® launch

Q1 2025 AUCATZYL Net Product Sales

$9.0 million

Physician interest based upon product profile and unmet patient need is driving encouraging uptake

39 Treatment Centers Authorized as of 05/07/25

- ~90% of total U.S. medical lives covered
- CMS published HCPCS coding determinations and OPPS payment rates, making AUCATZYL eligible for reimbursement for patients on government programs

AUCATZYL growth opportunities in ALL

Expansion

Near-Term New Markets

- ✓ Conditional marketing authorization in the UK received April 25, 2025
- EMA decision expected in 2H 2025
- Country-by-country launches planned based on pricing and reimbursement decisions

ALL Potential Indication Expansion

Strong data from the FELIX study, and experience in the market to-date, support indication expansion opportunities:

- **Adult ALL in frontline:**
  - Explore by investigator sponsored trials
- **Pediatric ALL:**
  - Ongoing P1 study with plans to report data in 2H 2025 and review regulatory path with FDA

Expanding the obe-cel opportunity

Deep value program with potentially broad applicability

Obe-cel drives deep reset of the B cell compartment

Combined with a favorable tolerability profile with low levels of high-grade CRS and ICANS

Results we have observed in clinical trials in B cell malignancies

- High MRD-negative complete remission rate in relapsed or refractory (r/r) adult and pediatric acute B cell lymphoblastic leukemia (ALL) patients (94%)[1]
- Long term outcomes indicate complete removal of all malignant B cells in r/r ALL[1,2,3]
- Experience in non-Hodgkin lymphoma indicate high metabolic complete remission rate (88% in r/r LBCL and 95% in r/r FL)[4]
- Long term outcomes in patients with LBCL[4]

Targeted positioning of obe-cel in:

- Frontline consolidation in aggressive B cell malignancies
  - Aim for long term outcomes, while avoiding over-treatment
- B cell mediated autoimmunity with an aim to reset the B cell compartment, and remove autoreactive antibodies and B cells
  - Aim for sustained effect with a one-time therapy

1. Roddie C, et al "Obecabtagene autoleucel in B-cell acute lymphoblastic leukemia" N Engl J Med 2024; DOI: 10.1056/NEJMoa2406526
2. Ghorashian, S., Kramer, A.M., Onuoha, S. *et al.* Enhanced CAR T cell expansion and prolonged persistence in pediatric patients with ALL treated with a low-affinity CD19 CAR. *Nat Med* **25**, 1408–1414 (2019). https://doi.org/10.1038/s41591-019-0549-5
3. Roddie C, et al. J Clin Oncol 2023;41:16_suppl, 7000
4. Roddie et al, ASH 2023, Poster 2114

Inflammation and structural organ damage in autoimmunity

- Autoimmune disease is driven by auto-reactive antibodies redirecting the immune system onto various organs and tissues.
- With continued inflammatory process organs and tissues become damaged, fibrotic and over time can lose function.
- An anti-inflammatory approach targeting B cells and auto-antibody producing plasmablasts or plasma cells will - if successful - remove the inflammatory auto-reactive process.
- Reversibility and full recovery of a patient will largely depend on the level of tissue and organ damage and the respective organ's ability to regenerate.

CD19 CAR T therapy will be focused on severe/refractory patients.

- Key elements of patient selection:
  - Active inflammatory disease
  - Limited chronicity of disease
  - Evidence of organ involvement
  - Limited extent of organ damage
- Desired outcome:
  - Remove autoimmunity memory and antibodies
  - Stabilize impacted organ
  - Upside is improved organ function

Initial data from CARSLYLE SLE P1 trial in patients with severe disease

Baseline SLEDAI-2K score ranges from 16 to 28

Severe patient population

- Patients aged 19 to 50 years had 3 to 23 years of disease history and exhausted prior therapy options
- All patients had prior B-cell depleting agent exposure, 2 also BAFF inhibitors, 3/6 also calcineurin inhibitors
- Lupus nephritis: 5/6 patients had a class IV disease, 4/6 had also a class V component
- Kidney function was significantly impaired in 4 of 6 patients (<60 ml/min/SA)

No high-grade CRS, No ICANS observed
No DLTs observed

Transient hypertension, including G3, due to abnormal kidney function prior to start of therapy according to PI's judgement nor pre-existing hypertension (3/6)

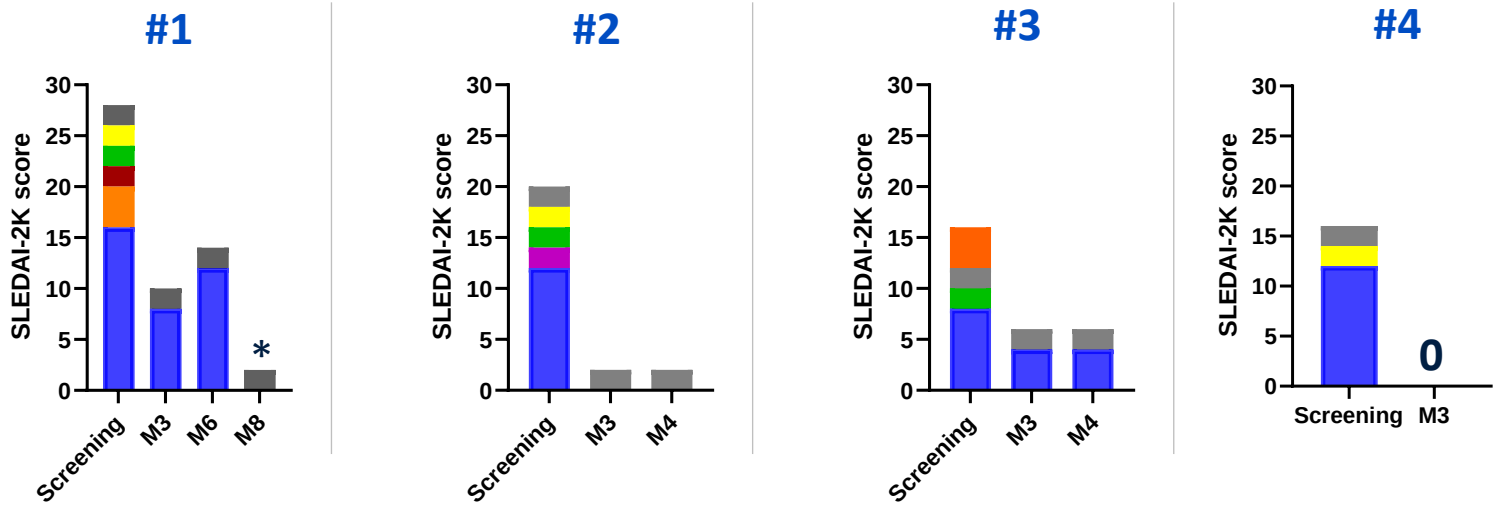
Highest grade of treatment-emergent adverse event observed by patient:

TEAE, Grade	#1	#2	#3	#4	#5	#6	Patients, n (%)
CRS	-	-	1	-	1	1	3 (50%)
ICANS	-	-	-	-	-	-	0 (0%)

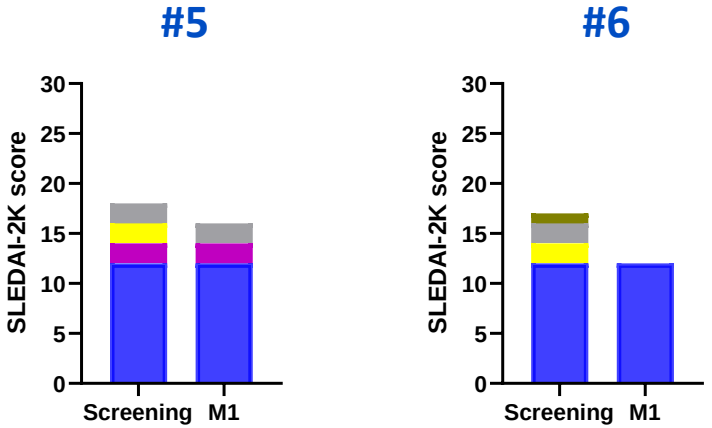
Preliminary CARLYSLE results; additional follow up planned for H2 2025

10+ point drop in SLEDAI-2K scores and 3 of 6 patients with renal CRs by month 3

M3+ follow up



M1 follow up

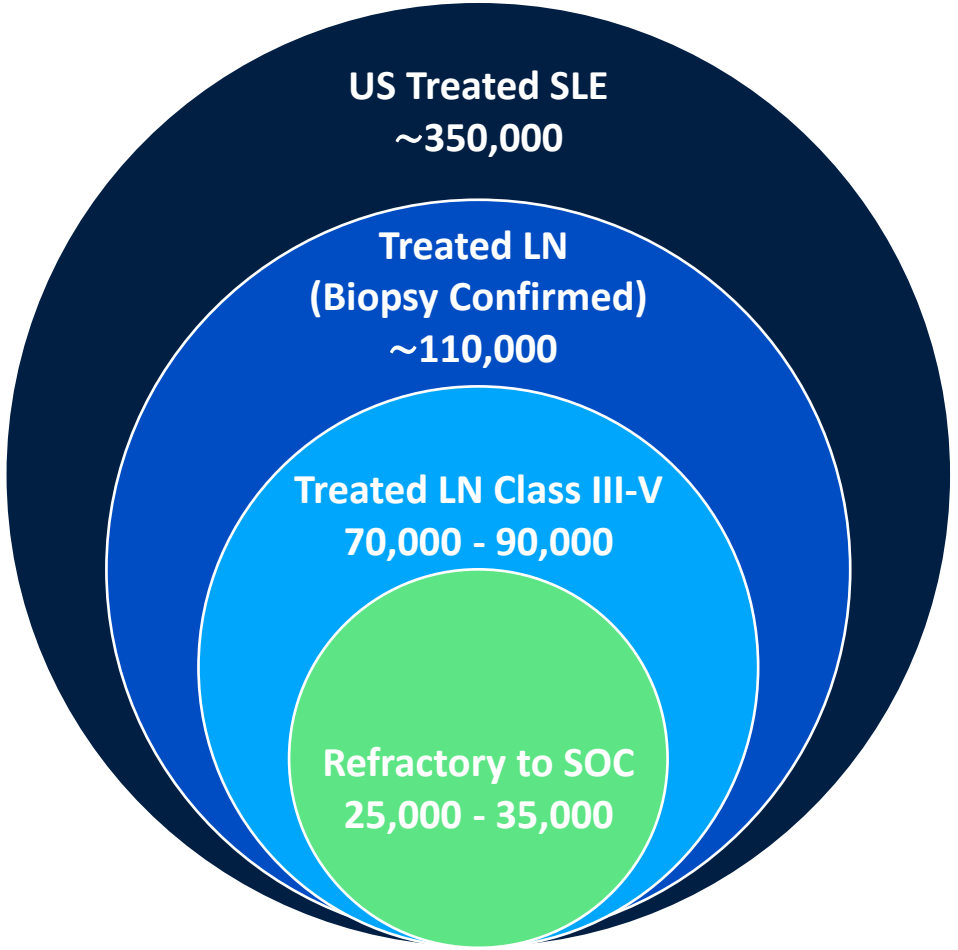


- All patients benefited significantly from obe-cel
- Skin: rash, alopecia and mucosal ulcers resolved by M3
- Musculoskeletal: Arthritis resolved by M1
- Complement normalized in all patients by M1
- 3 of 6 patients with complete renal response by M3
- Two patients had only one month follow up

*Kidney biopsy on month 7 showed no disease activity

Refractory lupus nephritis is a high unmet medical need

- Kidneys are one of the most common organs involved in SLE - 30% – 40% are lupus nephritis patients
- High disease activity is associated with inflammatory processes
- Uncontrolled inflammation leads to high chronicity due to accumulated kidney damage
- Despite treatment advances including regulatory approvals of belimumab and voclosporin the goal to sufficiently improve short and long-term outcomes in patients with LN remains unmet
- There are no treatment options for refractory patients



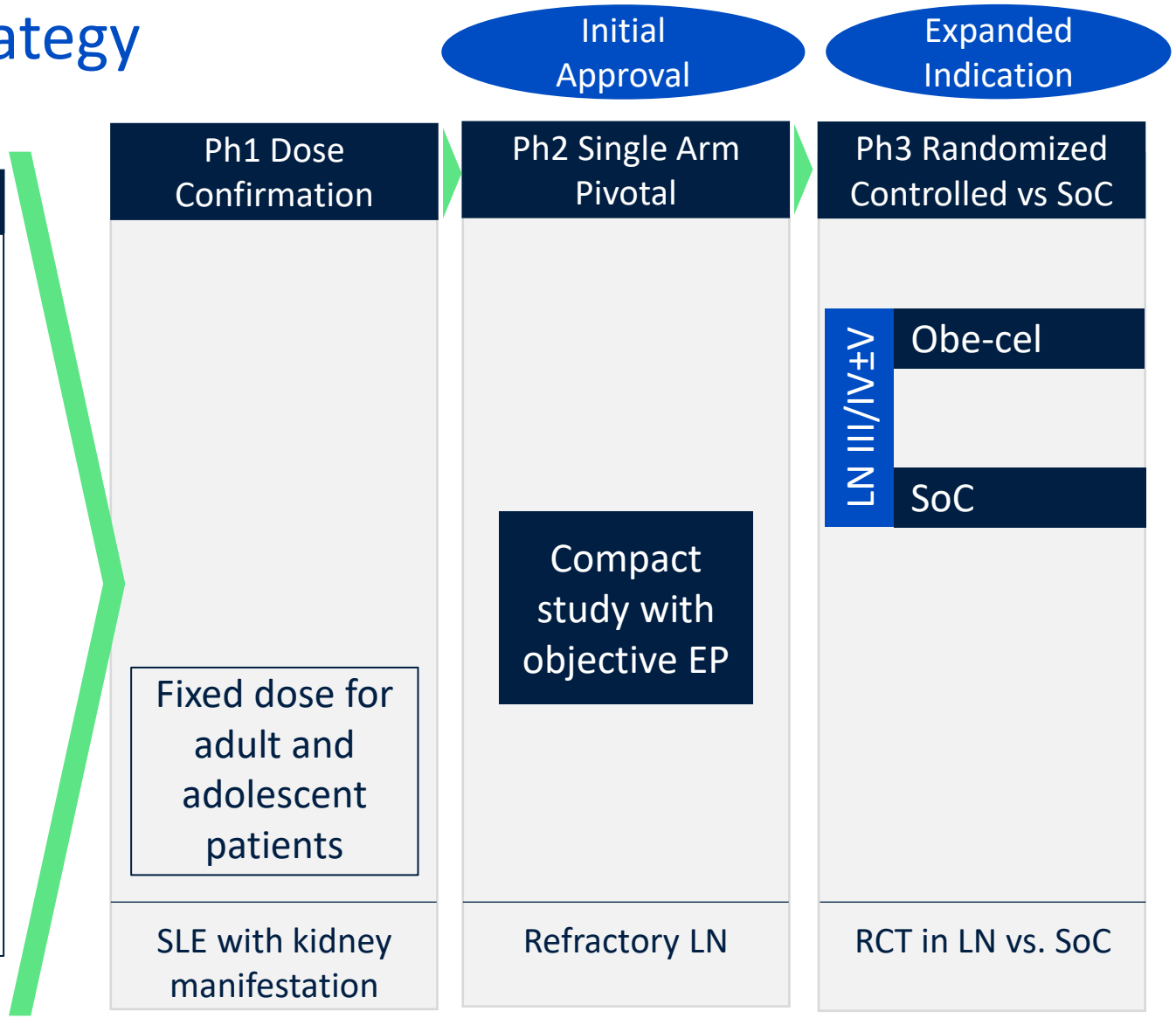
Clarivate/DRG Epidemiology, Arthritis Rheumatol. 2023 Apr;75(4):567-573, Arthritis & Rheumatology. 2017;69(10):2006-2017

Lupus nephritis development strategy

Leveraging a fast to market strategy

Development Rationale

- LN is assessed by quantitative lab- parameter based endpoints (CRR) vs. SLE with a composite endpoint depending on clinical assessments
- Current guidelines require for Class III/IV LN triple therapy including B-cell modifier or CNI, without any treatment options for those being refractory to both
- Lack of SOC for refractory LN opens the possibility to single arm trial path for initial approval
- Outcome of refractory LN single arm trial serves as good predictor for RCT in earlier LN vs. SOC



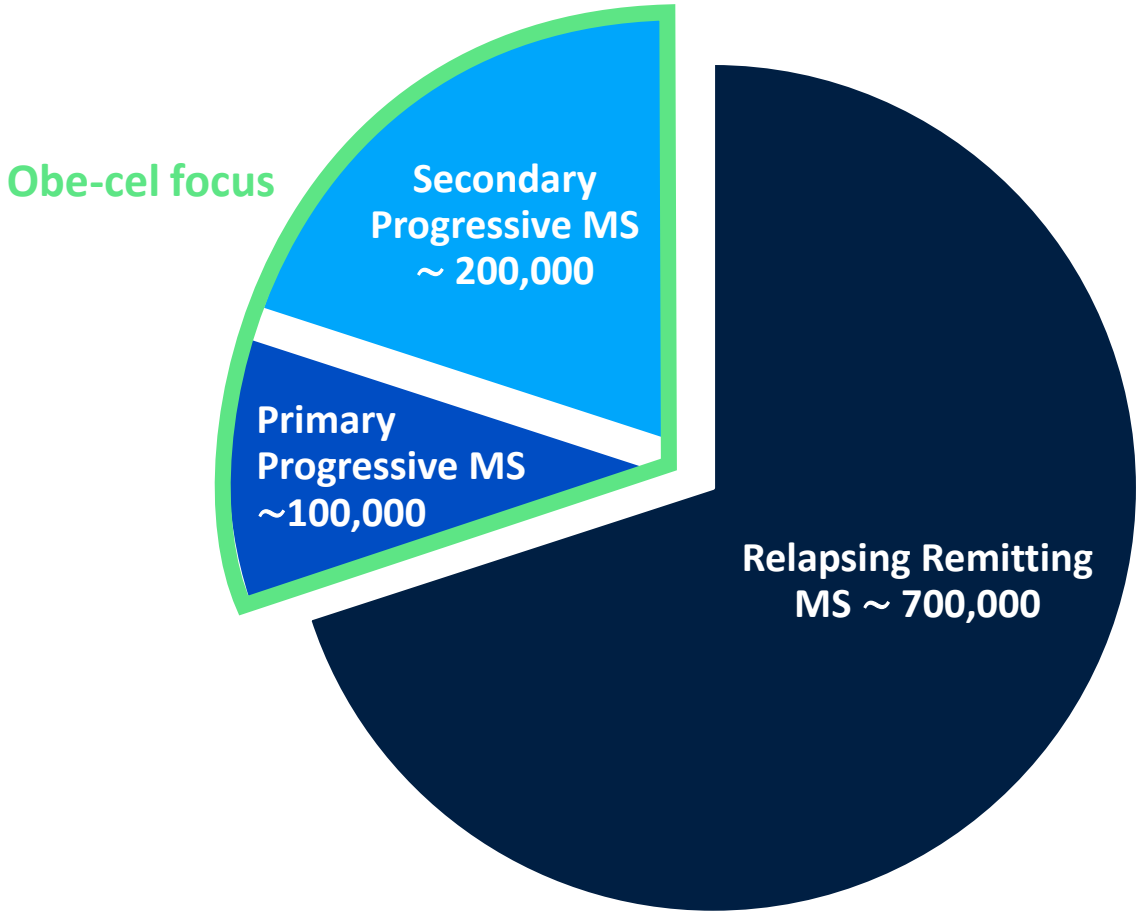
Anticipate dosing first patient in Phase 2 pivotal trial by year end 2025

Progressive multiple sclerosis is a high unmet medical need

- MS impacts approximately 1,000,000 individuals in the US[1] and there is currently no known cure

- Around 30% of patients have progressive disease and more than half of Progressive MS patients experience disability progression despite receiving disease modifying agents[2]

- Highest unmet need for patients who continue to progress despite being treated with highly effective agents for at least 6 months



1: GlobalData MS Market Forecast 2020-2030 April 2023
2:Watson, C., Thirumalai, D., Barlev, A. et al. Treatment Patterns and Unmet Need for Patients with Progressive Multiple Sclerosis in the United States: Survey Results from 2016 to 2021. Neurol Ther 12, 1961–1979 (2023). https://doi.org/10.1007/s40120-023-00532-2

Multiple sclerosis development strategy

Establish Phase 1 Clinical Proof of Concept in MS

- 3 x 6 dose escalation design - a higher dose may be required for CNS effect
- Biomarker readouts to provide nearer term evidence of biological effect at 6 months +
- Definitive clinical outcomes based on clinical disability progression at 12 months +

Initiate Phase 2/3 study in progressive MS patients exhibiting PIRA

- Anticipate a randomised phase 2/3 study design as path to approval
- Phase 1 clinical PoC is derisking for initiation of development in other neurology indications

Anticipate dosing first patient in Phase 1 trial by year end 2025

Financial Results

Financial summary – key metrics*

USD ($' 000)	Q1 2025	Q1 2024	Variance
Product revenue, net	8,982	-	8,982
License revenue, net	-	10,091	(10,091)
Cost and operating expenses:			
Cost of sales	(17,951)	-	(17,951)
Research and development expenses, net	(26,734)	(30,671)	3,937
Selling, general and administrative expenses	(29,534)	(18,177)	(11,357)
Loss from operations	**(65,240)**	**(38,757)**	**(26,483)**
Total comprehensive loss	**(59,093)**	**(52,632)**	**(6,461)**

*Select metrics only; for full financials please refer to the Company's 10-Q filing

$516.6M* **as of Q1 2025**

The Company is well capitalized to drive the launch and commercialization of obe-cel in r/r B-ALL and to obtain data in the LN pivotal trial and MS Phase 1 trial

*Cash, cash equivalents and marketable securities

Upcoming news flow

Upcoming milestones

Anticipated Milestone or Catalyst	Anticipated Timing
Longer-term follow up from FELIX clinical trial	Mid-Year
Notification from EU regarding MAA decision in adult r/r ALL	H2 2025
Initial data from PY01 trial in pediatric ALL	H2 2025
SLE Phase 1 trial presentation at medical conference	Q4 2025
First patient dosed in Phase 2 trial in lupus nephritis	YE 2025
First patient dosed in progressive MS Phase 1 trial	YE 2025
First patient dosed in AL amyloidosis Phase 1 trial (UCL collaboration)	YE 2025

obe-cel Oncology | obe-cel Autoimmune/B cell mediated disease

Autolus is positioned for value creation

Building on a strong foundation with obe-cel

- AUCATZYL US launch: strong first quarter, building to 60 centers in H2 2025
  - Established infrastructure for manufacturing and commercialisation to support execution
  - UK MHRA authorisation received; launch in preparation
  - EMA approval decision expected H2 2025

- Obe-cel is a highly active, fast off-rate CD19 CAR T therapy with a well managed tolerability profile
  - First US FDA-approved CAR T therapy without a REMS obligation
  - H1 2025: Long term follow-up from FELIX trial
  - H2 2025: Results from pediatric ALL PY1 trial
  - H2 2025: Results from SLE P1 trial

- Q1 2025 cash position of $516.6M*

*Cash, cash equivalents and marketable securities

AUCATZYL®
obecabtagene autoleucel
suspension for IV infusion

A CD19-directed genetically modified autologous T cell immunotherapy indicated for the treatment of adults with relapsed or refractory B-cell precursor acute lymphoblastic leukemia
See full Prescribing Information, including **BOXED WARNING** at http://www.autolus.com/AUCATZYL-USPI/

The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

Obecabtagene Autoleucel in Adults with B-Cell Acute Lymphoblastic Leukemia

Roddie C, et al N Engl J Med 2024; DOI: 10.1056/NEJMoa2406526

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Thank you