American Society of Hematology 2023 Investor Event

December 14, 2023

REGENERON®

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These statements concern, and these risks and uncertainties include, among others, the nature, timing, and possible success and therapeutic applications of products marketed or otherwise commercialized by Regeneron and/or its collaborators or licensees (collectively, "Regeneron's Products") and product candidates being developed by Regeneron and/or its collaborators or licensees (collectively, "Regeneron's Product Candidates") and research and clinical programs now underway or planned, including without limitation linvoseltamab (a BCMAxCD3 bispecific antibody), odronextamab (a CD20xCD3 bispecific antibody), and other of Regeneron's Product Candidates discussed or referenced in this presentation (such as pozelimab (C5 antibody) in combination with Alnylam Pharmaceuticals, Inc.'s cemdisiran (RNAi therapeutic targeting C5)); uncertainty of the utilization, market acceptance, and commercial success of Regeneron's Products and Regeneron's Product Candidates and the impact of studies (whether conducted by Regeneron or others and whether mandated or voluntary), including the studies discussed or referenced in this presentation, on any of the foregoing or any potential regulatory approval of Regeneron's Products and Regeneron's Product Candidates (such as linvoseltamab or odronextamab); the likelihood, timing, and scope of possible regulatory approval and commercial launch of Regeneron's Product Candidates and new indications for Regeneron's Products, such as linvoseltamab for the treatment of relapsed/refractory ("R/R") multiple myeloma and odronextamab for the treatment of patients with R/R follicular lymphoma or R/R diffuse large B-cell lymphoma; the possible success of Regeneron's strategy with respect to oncology and/or hematology and the likelihood and timing of achieving any of the anticipated milestones described in this presentation; safety issues resulting from the administration of Regeneron's Products and Regeneron's Product Candidates (such as linvoseltamab or odronextamab) in patients, including serious complications or side effects in connection with the use of Regeneron's Products and Regeneron's Product Candidates in clinical trials; determinations by regulatory and administrative governmental authorities which may delay or restrict Regeneron's ability to continue to develop or commercialize Regeneron's Products and Regeneron's Product Candidates; ongoing regulatory obligations and oversight impacting Regeneron's Products, research and clinical programs, and business, including those relating to patient privacy; the availability and extent of reimbursement of Regeneron's Products from third-party payers, including private payer healthcare and insurance programs, health maintenance organizations, pharmacy benefit management companies, and government programs such as Medicare and Medicaid; coverage and reimbursement determinations by such payers and new policies and procedures adopted by such payers; competing drugs and product candidates that may be superior to, or more cost effective than, Regeneron's Products and Regeneron's Product Candidates; the extent to which the results from the research and development programs conducted by Regeneron and/or its collaborators or licensees (including those discussed or referenced in this presentation) may be replicated in other studies and/or lead to advancement of product candidates to clinical trials or therapeutic applications; the ability of Regeneron to manufacture and manage supply chains for multiple products and product candidates; the ability of Regeneron's collaborators, licensees, suppliers, or other third parties (as applicable) to perform manufacturing, filling, finishing, packaging, labeling, distribution, and other steps related to Regeneron's Products and Regeneron's Product Candidates; unanticipated expenses; the costs of developing, producing, and selling products; the ability of Regeneron to meet any of its financial projections or guidance and changes to the assumptions underlying those projections or guidance; the potential for any license or collaboration agreement, including Regeneron's agreements with Sanofi and Bayer (or their respective affiliated companies, as applicable), to be cancelled or terminated; the impact of public health outbreaks, epidemics, or pandemics (such as the COVID-19 pandemic) on Regeneron's business; and risks associated with intellectual property of other parties and pending or future litigation relating thereto, other litigation and other proceedings and government investigations relating to the Company and/or its operations, the ultimate outcome of any such proceedings and investigations, and the impact any of the foregoing may have on Regeneron's business, prospects, operating results, and financial condition. 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Speakers

George D. Yancopoulos, MD, PhD
Board Co-Chair, Co-Founder, President and Chief Scientific Officer

Andres Sirulnik, MD, PhD
SVP Clinical Development – Hematology

Agenda

- **Oncology & Hematology Overview**
- **Hematology Oncology**
  - Linvoseltamab – BCMAxCD3 in Myeloma
  - Odronextamab – CD20xCD3 in Lymphomas
- **Classical Hematology**
  - Pozelimab and cemdisiran – anti-C5 in PNH, MG, GA
  - Factor XI antibodies – Thrombosis
  - TMPRSS6 antibody – Iron overload
  - CRISPR efforts – Hemophilia B and ATTR
- **Closing Remarks and Q&A**

ASH 2023 IR EVENT

Oncology & Hematology Overview

George D. Yancopoulos, MD, PhD
Board Co-Chair, Co-Founder, President
and Chief Scientific Officer

REGENERON

Committed to becoming a leader in oncology and hematology

Accomplishments: Initial approvals, novel platform validation and signals of activity

Potential upcoming regulatory submissions, approvals and data readouts

Leader in immuno-oncology and hematology by investigating the power of informed combinations

Our blood cancer research is focused on bispecific antibodies that are being investigated both as monotherapies and in combination with each other and emerging therapeutic modalities

Together, they provide us with unique combinatorial flexibility to develop customized and potentially synergistic cancer treatments

Hematology becoming a larger part of Regeneron's robust, differentiated pipeline

Phase 1	Phase 2	Phase 3	Approved
REGN5459 (BCMAxCD3) **REGN5837** (CD22xCD28) **REGN7257** (IL-2Rg) **REGN7508** (Factor XI) **REGN7999** (TMPRSS6)	**REGN9933** (Factor XI)	**pozelimab + cemdisiran**‡ (anti-C5 + C5 siRNA) **odronextamab** (CD20xCD3) **linvoseltamab** (BCMAxCD3) **NTLA-2001**# (TTR)	Arcalyst® (rilonacept) Injection for Subcutaneous Use † EYLEA® (aflibercept) Injection For Intravitreal Injection ZALTRAP® (ziv-aflibercept) Injection for Intravenous Infusion § EYLEA® HD (aflibercept) Injection 8 mg DUPIXENT® (dupilumab) Praluent® (alirocumab) Injection 75mg/mL 150mg/mL LIBTAYO® (cemiplimab-rwlc) Injection 350 mg KEVZARA® (sarilumab) Evkeeza® (evinacumab-dgnb) Injection Inmazeb® (atoltivimab, maftivimab, and odesivimab - ebgn) Injection Veopoz® (pozelimab-bbfg) Injection
REGN4336 (PSMAxCD3) **REGN5093** (METxMET) **REGN5093-M114** (METxMET ADC) **REGN5668** (MUC16xCD28) **REGN5678** (PSMAxCD28) **REGN6569** (GITR) **REGN7075** (EGFRxCD28)	**vidutolimod** (TLR9) **ubamatamab** (MUC16xCD3)	**cemiplimab** (PD-1) **fianlimab** (LAG-3)	
ALN-APP‡ (APP) **ALN-PNP**‡ (PNPLA3) **DB-OTO** (AAV Gene Therapy) **REGN7544** (NPR1 antagonist)	**mibavademab** (LEPR) **REGN5381/REGN9035** (NPR1) **HSD siRNA** (HSD17B13)	**alirocumab** (PCSK9) **garetosmab** (Activin A)	
	sarilumab* (IL-6R)	**dupilumab*** (IL-4R) **itepekimab*** (IL-33) **REGN5713-5714-5715** (Bet v 1)	
		aflibercept 8 mg° (VEGF)	

Collaboration with: *Sanofi; ‡Alnylam; #Intellia; °Bayer
†Kiniksa is solely responsible for development and commercialization of ARCALYST
§Sanofi is solely responsible for development and commercialization of ZALTRAP

Over 30 product candidates

HEMATOLOGY | SOLID ORGAN ONCOLOGY | INTERNAL/GENETIC MEDICINES | OPHTHALMOLOGY | I&I

As of December 2023.

This slide contains investigational drug candidates that have not been approved by any regulatory authority.

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Novel Treatment Approach for Severe Allergy: Linvoseltamab plus Dupixent

SCIENCE TRANSLATIONAL MEDICINE | RESEARCH ARTICLE

ALLERGY

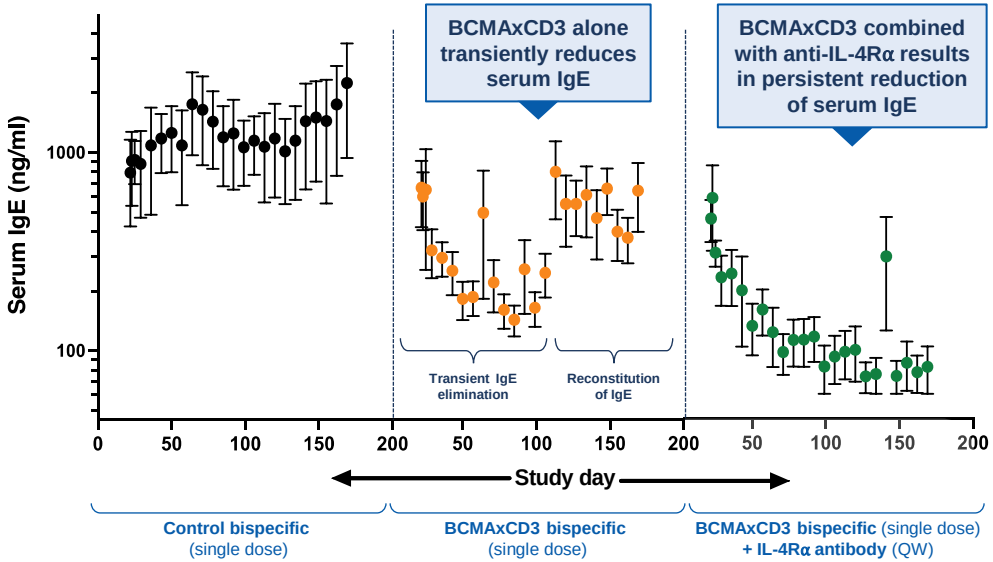
A therapeutic strategy to target distinct sources of IgE and durably reverse allergy

Andre Limnander, Navneet Kaur, Seblewongel Asrat, Carley Tasker, Anita Boyapati, Li-Hong Ben, John Janczy, Paulina Pedraza, Pablo Abreu, Wen-Chi Chen, Stephen Godin, Benjamin J. Daniel, Harvey Chin, Michelle DeVeaux, Karen Rodriguez Lorenc, Andres Sirulnik, Olivier Harari, Neil Stahl, Matthew A. Sleeman, Andrew J. Murphy, George D. Yancopoulos, Jamie M. Orengo*

Combination of linvoseltamab and Dupixent could eliminate IgE: potential groundbreaking approach for controlling severe allergy

- **Immunoglobulin E (IgE)** is the key driver of allergic reactions, such as food allergies:
  - Source: Long-lived plasma cells that produce IgE[2]
- **Linvoseltamab** (investigational BCMAxCD3 bispecific) effectively eliminates long-lived plasma cells, transiently eliminating IgE[1]
  - Unfortunately, these IgE-producing plasma cells are reconstituted from IgG memory B-cells that rapidly "switch" to IgE due to high levels of IL-4
- **Dupixent** blocks all IL-4Rα signaling, thus preventing reconstitution of IgE plasma cells, and resulting in permanent reduction of IgE[1,3]
- In atopic patients, **transient linvoseltamab** treatment with **Dupixent maintenance** has the potential of permanently eliminating IgE and durably reversing severe allergies, while allowing the restoration of other immunoglobulins

Transient plasma cell depletion with BCMAxCD3 plus sustained IL-4Rα blockade durably eliminates IgE production in cynomolgus monkeys[1]



Clinical program to explore combination in patients with severe food allergies to commence in 2024

[1]Limnander et al, Sci. Transl. Med. 2023.[2]Asrat et al, Sci. Immunol. 2020. [3]Le Floc'h et al, Allergy, 2020.

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Hematology Pipeline Update

Andres Sirulnik, MD, PhD
SVP Clinical Development – Hematology

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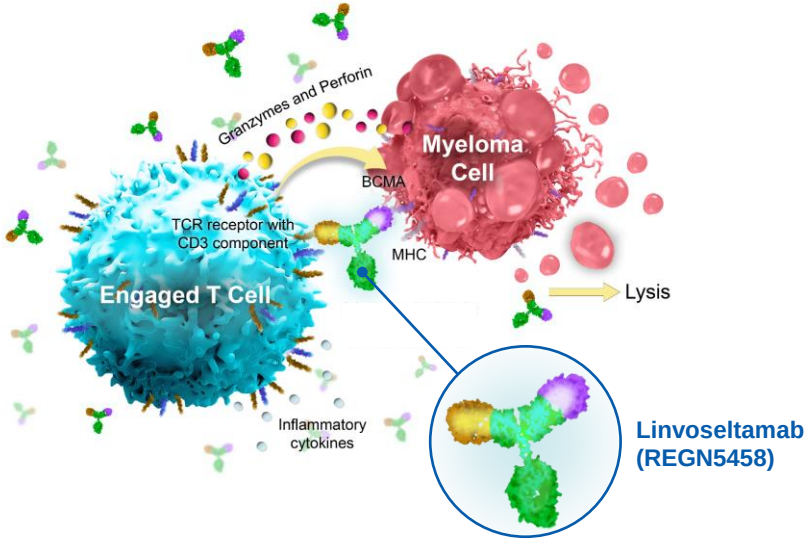
Linvoseltamab (BCMAxCD3) in Relapsed/Refractory Multiple Myeloma

Linvoseltamab (BCMAxCD3)



Linvoseltamab is an investigational B-cell maturation antigen (BCMA) × CD3 bispecific antibody that links a "killer T-cell" to a myeloma tumor cell, resulting in tumor cell death

Linvoseltamab IV dosing schedule for Phase 2 expansion cohorts

Weeks 1–2 Step-up doses	Weeks 3–14 200 mg	Weeks 15–23 200 mg	Week 24 onward 200 mg
5 mg ⬇ Day 1; 25 mg ⬇ Day 8; 24-hour hospitalization	Once a week	Every 2 weeks	≥VGPR → every 4 weeks; <VGPR → every 2 weeks

- At **ASH 2023,** we presented data for linvoseltamab in patients with relapsed / refractory (R/R) multiple myeloma (MM) from the pivotal Phase 1/2 LINKER-MM1 trial (median follow-up: 8 months)
- In a press release on December 7th, we announced the updated **registration-enabling data** from the same trial (with longer-term follow-up – median: 11 months)
- Linvoseltamab has the potential to be the **best-in-class BCMAxCD3 bispecific** with its clinical profile, dosing, and administration

On track to submit BLA for R/R multiple myeloma this month

MAA submission planned 1H24

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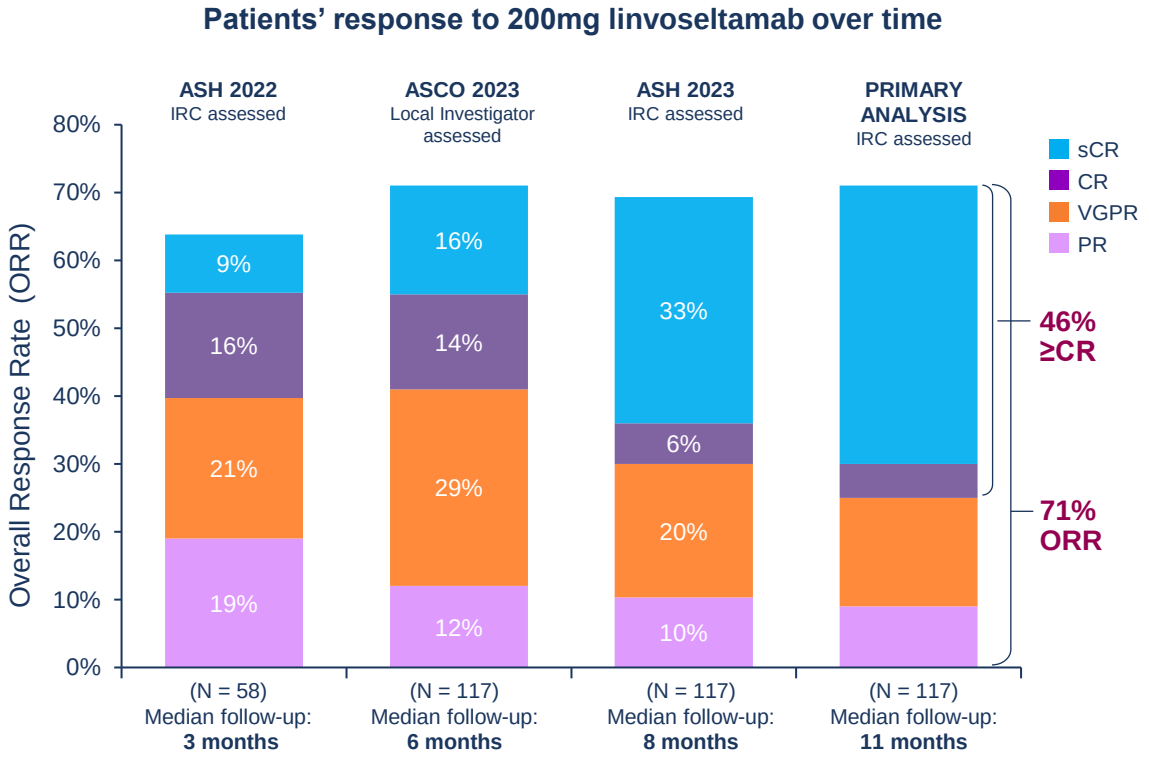
Overall response rates continue to deepen over time



*Median duration of follow-up: 11 months; data source: Regeneron press release from Dec 7, 2023

KEY TAKEAWAYS

At the primary endpoint analysis with median follow-up of 11 months, Linvoseltamab demonstrated deep and durable response rates in patients with relapsed / refractory multiple myeloma:

71% Objective Response Rate

46% Complete Response or better

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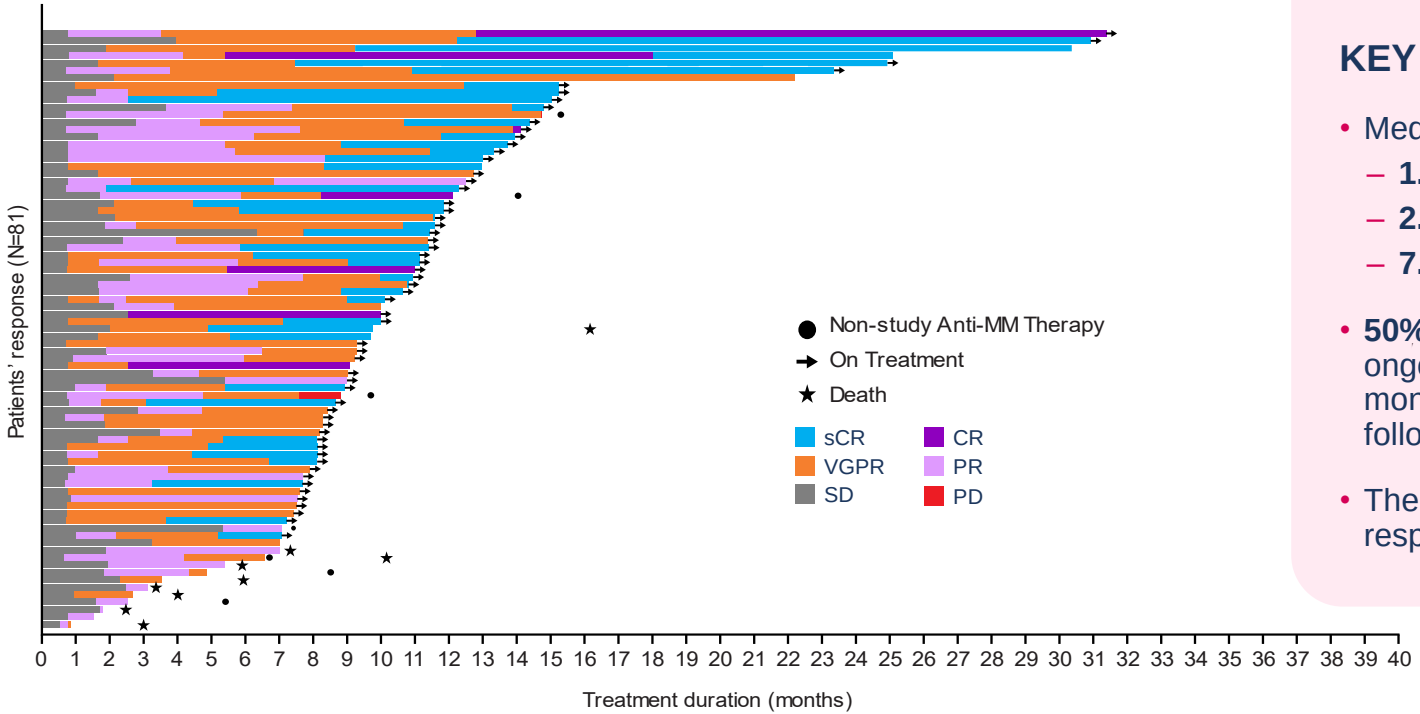
Early, durable, and deep responses observed with median follow-up of 8 months



KEY TAKEAWAYS

- Median time:
  - **1.0 month** to ≥PR
  - **2.6 months** to ≥VGPR
  - **7.6 months** to ≥CR
- **50%** of patients were still ongoing treatment (~8.1 months median duration of follow-up)
- The median duration of response was not reached

Estimated Kaplan–Meier method. Data cut-off date of June 7, 2023. Median duration of follow-up: 8.1 months (range 0.2–31.5)
MR, minimal response; NE, not evaluable; PD, progressive disease; PR, partial response; SD, stable disease.

Generally manageable safety and tolerability profile

	Primary Analysis* (N=117)
Cytokine release syndrome (CRS)	
Any grade, (%)	**46%**
Grade 1	35%
Grade 2	10%
Grade 3	1%
Immune effector cell-associated neurotoxicity syndrome events (ICANS)	
Any grade, (%)	**8%**
Grade 3	3%
Infections	
Any grade, (%)	**73%**
Grade 3 or Grade 4	34%

KEY TAKEAWAYS

- Linvoseltamab showed a generally manageable safety profile with longer follow-up
- All patients experienced an AE, including 85% who experienced Grade ≥3 AE
- Most CRS occurred in the step-up dosing period (most commonly after the first dose) and before the first full dose on week 3
  - No Grade 3 or higher CRS occurred after the step-up dosing period
  - CRS onset and resolution usually occurred within 24 hours
- Deaths due to treatment-emergent AEs on-treatment or within 30 days post last dose occurred in 14 patients (12%), of which 11 (9%) were due to infections

*Median duration of follow-up: 11 months; data source: Regeneron press release from Dec 7, 2023

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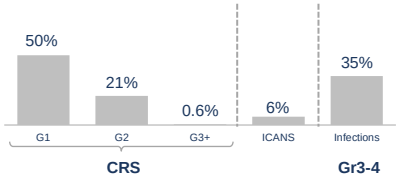
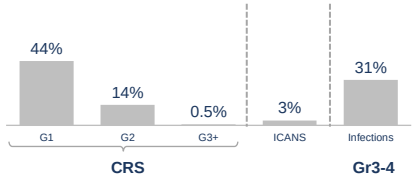
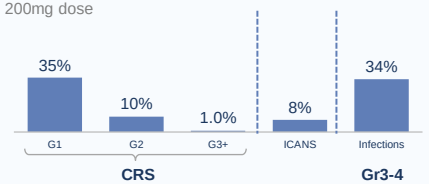
Within the BCMA bispecific class, Linvoseltamab has differentiated and compelling clinical profile

No head-to-head trials between these products. Caution is advised when comparing results of different clinical studies. For descriptive purposes only.

	Teclistamab - *FDA Approved* (per U.S. FDA Prescribing Information*)	Elranatamab - *FDA approved* (per U.S. FDA Prescribing Information*)	Linvoseltamab* (per LINKER-MM1 primary analysis*)
Efficacy	 Follow-up 7.4-months among responders	 Follow-up 11.1-months among responders	200mg dose  Follow-up 11.0-months all patients
Safety	 CRS median time to onset: 2 days median duration: 2 days	 CRS median time to onset: 2 days median duration: 2 days	200mg dose  CRS median time to onset: 1 day median duration: within 1 day
	Not full safety profile. Please refer to U.S. FDA prescriber information and Regeneron's disclosures for further details		
Hospitalization, Administration & Dosing schedule	**x 6** 3 X 48-hr hospitalization requirements during step-up dosing (initial **~9 days)** **Subcutaneous** (by HCP only) **QW** →	**x 3** 1 X 48-hr + 1 X 24-hr hospitalization requirements during step-up dosing (initial **~5 days)** **Subcutaneous** (by HCP only) **QW** (Weeks 1-24) → **Q2W** (Week 25+ for responders)	**x 2** 1 X 24-hrs in W1 + 1 x 24-hrs in W2; Hospitalized for 1 day during step-up dosing on **Day 1 & Day 8†** **Intravenous (**Week 3+ = 30-min‡**)** **QW** (Weeks 1-14) → **Q2W** (Weeks 15-23) → **Q4W** (Week 24+ if VGPR+)

* Data source: Regeneron press release from Dec 7, 2023
† Per Protocol
‡ 30-min as long as patient tolerability allows; discretion at Day 8

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Broad clinical development program advancing and expanding into early stages of disease

BLA submission in r/r multiple myeloma shortly, confirmatory phase 3 trial (LINKER-MM1) ongoing

Earlier stage of disease

Multiple Myeloma

Incidence (new cases diagnosed annually): U.S. ~35,000; Globally >176,000

	THIRD LINE+	SECOND LINE	FIRST LINE	SMM / MGUS MM PRECURSOR
U.S. Treated Population	~4,000 in 4L+/~8,000 in 3L	~16,000	~30,000	
Status	• Ph2 *(BLA in Dec 2023)* **LINKER-MM1** (Linvoseltamab mono) • Ph3 *(ongoing)* **LINKER-MM3**[§] (Confirmatory Linvo vs EPd) • Ph1/2 *(planned)* **Costim Combos** (Linvoseltamab + TAA*xCD28)	• Ph1/2 *(ongoing)* **LINKER-MM2** (Linvoseltamab + various SOC and novel therapies)	• Ph1/2 *(ongoing)* **LINKER-MM4** (Newly Diagnosed Multiple Myeloma) • Ph3 *(planned)* **Various studies** (1L maintenance, 1L transplant ineligible / 1L transplant eligible)	• Ph1/2 *(ongoing)* **Study 2256** (High Risk Smoldering MM) • Ph1/2 *(planned)* **Study 2257** (High Risk MGUS / Low Risk Smoldering MM)

- ***BLA and MAA filings in R/R MM (3L+) planned for Dec 2023 and 1H 2024, respectively***

AL Amyloidosis

Incidence (new cases diagnosed annually): U.S. ~4,500

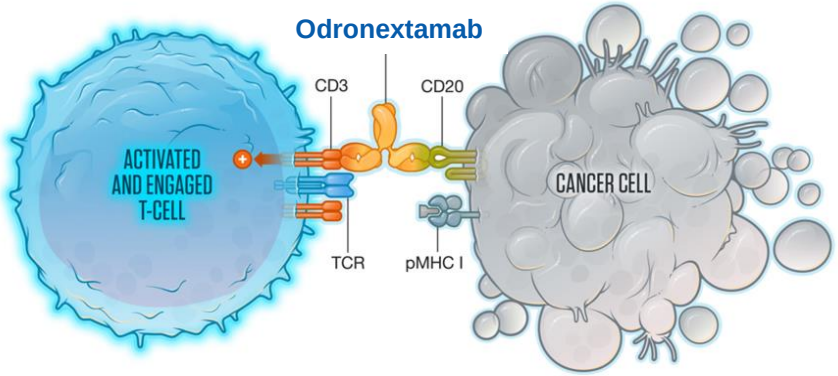
	THIRD LINE+	SECOND LINE	FIRST LINE
Status		Ph1/2 *(planned)* **Study 2274** (R/R ALA)	

[§]Linvoseltamab mono vs. EPd (Elotuzumab + Pomalidomide + dexamethasone); 3L+ in the U.S.; earlier line of therapy eligible in some geographies based on regional SOC

*TAA: Tumor Associated Antigen

Odronextamab (CD20xCD3) in Relapsed / Refractory FL & DLBCL

Odronextamab (CD20xCD3): Regeneron's most advanced bispecific



Odronextamab binds CD20 on malignant B-cells and CD3 on T cells to elicit T-cell-mediated cytotoxicity

Odronextamab is an investigational **off-the-shelf bispecific**, to potentially treat both indolent and aggressive lymphomas, including patients who failed CAR-Ts

- At **ASH 2023**, we shared additional data from the ELM-2 trial: the final analysis for DLBCL and a prespecified interim analysis for FL
- The most recent data continue to demonstrate deep and durable responses and a tolerable safety profile, with potential best-in-class efficacy in FL

BLA accepted by FDA for R/R FL & DLBCL **(PDUFA March 31, 2024)**

Submitted in Europe with EC regulatory decision expected **2H24**

Confirmatory Phase 3 OLYMPIA program underway and enrolling patients in earlier lines of therapy

*NCT03888105

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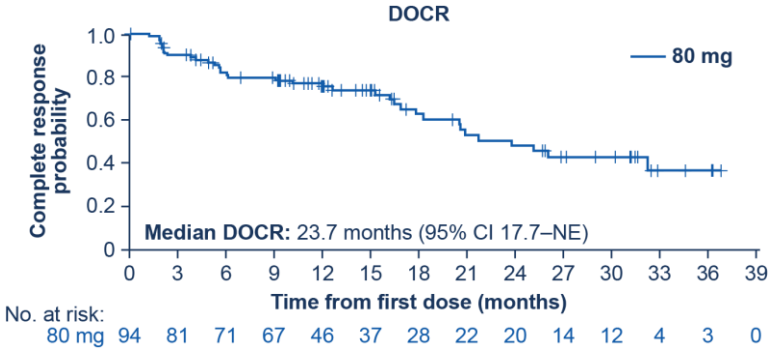
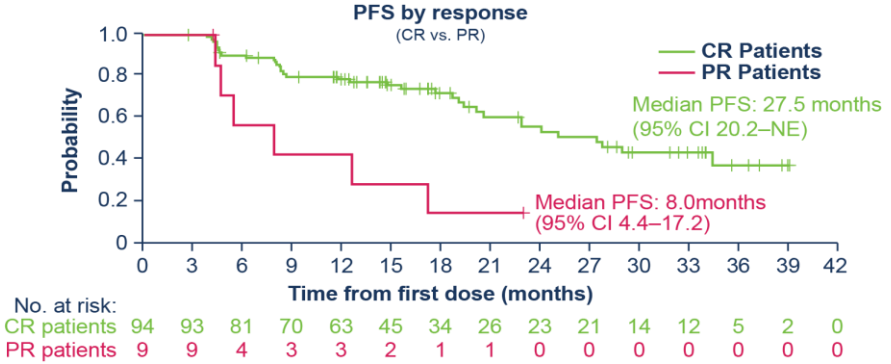
Follicular Lymphoma: Potential best-in-class efficacy

- Best overall response in ELM-2 study by IRC (N=128):
  - **ORR* was 80.5%**
    - **91.3%** responders achieved a CR
  - **CR of 73.4%** is **highest ever observed** in this late-line population among the CD20 bispecific class
- Odronextamab continues to demonstrate durable responses in highly refractory FL patients
  - Median DOR was **22.6 months**
    - Median duration of complete response was **23.7 months**
  - Median PFS was **20.7 months**
    - In complete responders median PFS was **27.5 months**, demonstrating a promising outlook for the patients with CR

Highly competitive profile demonstrates best-in-class potential with high rates of deep and durable complete responses, leading to maintenance of patient-reported quality of life outcomes





Data cut-off date: August 18, 2023. Median follow-up of 17.7 months.
All data per Independent Central Review. *CRs + partial responses;

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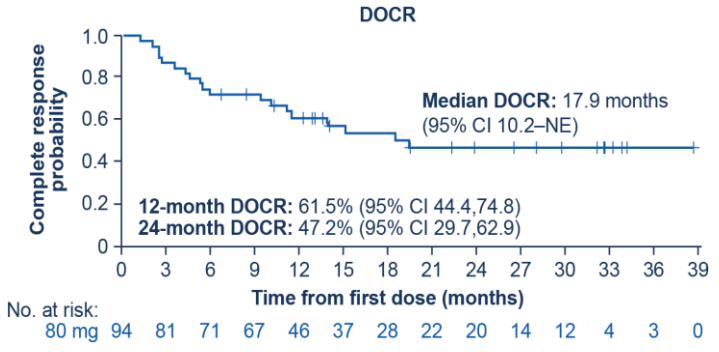
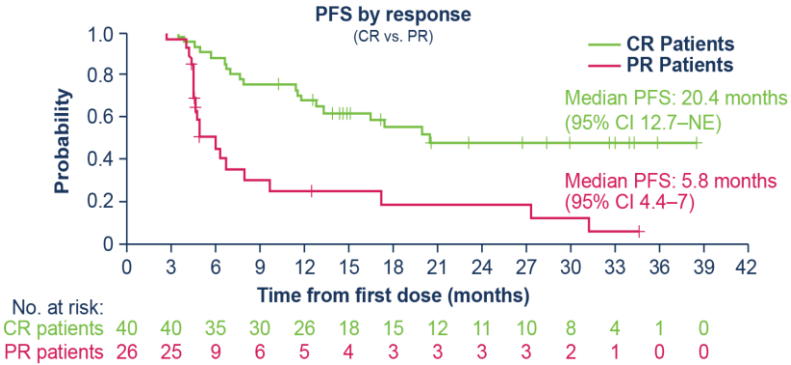
DLBCL: Consistent and competitive efficacy profile

- Best overall response in ELM-2 study by IRC (N=127):
  - **ORR* was 52.0%**
    - **60.6%** responders achieved a CR
  - **CR was 31.5%**
- Odronextamab continues to demonstrate durable responses in highly refractory DLBCL patients
  - Median DOR was **10.2 months**
    - Median duration of complete response was **17.9 months**
  - Median PFS was **4.4 months**
    - In complete responders, median PFS was **20.4 months**, demonstrating a promising outlook for patients who achieve a CR
- **Post CAR-T** patients from the ELM-1 study experienced responses consistent with those observed in ELM-2:
  - ORR of **47.7%** and CR of **29.5%** in post CAR-T patients

Competitive profile demonstrates deep and durable responses particularly in complete responders, with consistent results observed in patients previously treated with CAR-T therapy





Data cut-off date: August 18, 2023. Median follow up of 29.9 months.
All data per Independent Central Review. *CRs + partial responses;

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Odronextamab shows a generally manageable safety and tolerability profile in FL and DLBCL

CRS

- Recommended step-up dosing regimen significantly improved CRS rates with **no Grade 4 or 5 CRS**

CRS (at recommended step-up dosing)	**FL** (n=60)	**DLBCL** (n=60)
Any grade, n (%)	**34 (56.7%)**	**32 (53.3%)**
Grade 1 / 2	27 (45%) / 6 (10%)	24 (40.0) / 7 (11.7%)
Grade 3 / 4	1 (1.7%) / 0	1 (1.7%) / 0

Neurotoxicity

- There was **one low grade ICANS event** reported in an FL patient, which was not associated with CRS

Deaths

- Most deaths were **not considered treatment related**

TEAE leading to death, n (%)	**FL** (n=128)	**DLBCL** (n=127)
Any Event	19 (14.8%)	20 (15.7%)
Treatment Related	4 (3.1%)	5 (3.9%)

Infections

- Infections were common and expected given heavily pre-treated lymphoma patients and the mechanism of action of odronextamab

Infections	**FL** (n=128)	**DLBCL** (n=127)
Any grade, n (%)	**102 (79.7%)**	**82 (64.6%)**
Grade 1 / 2	8 (6.3%) / 42 (32.8%)	4 (3.1%) / 29 (22.8%)
Grade 3 / 4	34 (26.6%) / 4 (3.1%)	33 (26.0%) / 1 (0.8%)
Grade 5	14 (10.9%)	15 (11.8%)
COVID-19 Infection (Any Grade)	46 (35.9%)	23 (18.1%)

- Rates of COVID-19 infections reflect a study conducted during a pandemic in a patients with increased underlying risk for infections

Overall Tolerability

- High rate of completion of initial dosing cycles and consistent patient-reported quality-of-life outcomes highlight the **tolerability profile** of odronextamab
  - **FL**: 95% patients completed cycle 1, 85% completed ≥4 cycles
  - **DLBCL**: 91% patients completed cycle 1, 56% completed ≥4 cycles

Less frequent maintenance dosing:
FL and DLBCL patients with a durable CR (≥ 9 months) are eligible to transition from **Q2W dosing to Q4W** dosing

Odronextamab's safety profile provides additional differentiation and supports less frequent maintenance dosing for complete responders

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Broad odronextamab Phase 3 program currently enrolling patients, including in earlier lines of FL and DLBCL

NEAR-TERM → LONG-TERM

Follicular Lymphoma

Incidence (new cases diagnosed annually): U.S. ~13,100; Globally ~120,000

	THIRD LINE+	SECOND LINE	FIRST LINE
U.S. Treated Population	~1,900	~4,100	~11,300
Status *(study completion estimate)*	• Ph2 **ELM-2** FDA and EMA accepted *(PDUFA Mar 31, 2024)*	• Ph3 **OLYMPIA-5** *(May 2029)* (odro+lenalidomide)	• Ph3 **OLYMPIA-1** *(Apr 2029)* (odro mono) • Ph3 **OLYMPIA-2** *(Jan 2030)* (odro+chemo)

DLBCL

Incidence (new cases diagnosed annually): U.S. ~31,000; Globally ~163,000

	THIRD LINE+	SECOND LINE	FIRST LINE
U.S. Treated Population	~3,600	~8,600	~27,000
Status *(study completion estimate)*	• Ph2 **ELM-2** FDA and EMA accepted *(PDUFA Mar 31, 2024)* • Ph1 **ATHENA-1** *(ongoing)* (odro + CD22xCD28) • Ph1 **CLIO-1** *(ongoing)* (odro + cemiplimab)	• Ph3 **OLYMPIA-4** (odro mono)	• Ph3 **OLYMPIA-3** *(Aug 2028)* (odro+chemo)

Preparing for commercial launch and planning for long-term success in hematology-oncology

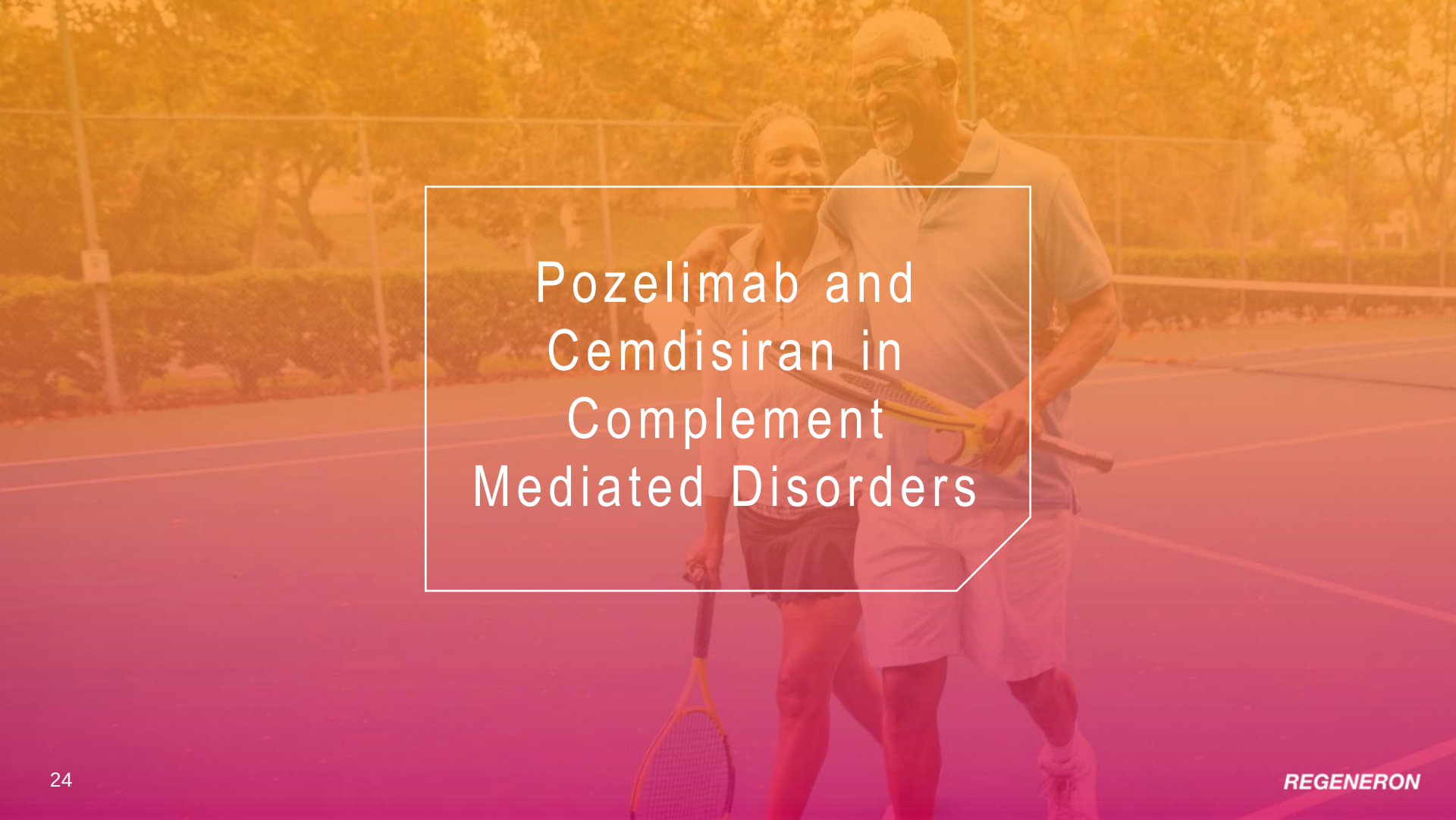
- 1Q24 – FDA decision in 3L+ FL and DLBCL
  - PDUFA March 31, 2024
- Mid-2024 – planned U.S. launch
- EC decision expected 2H24

- Competitive profile enables unique commercial positioning
- Confirmatory Phase 3 studies underway – support expansion into earlier lines of therapy
- Phase 1 study with CD28 costim to provide long term differentiation

- Establish foothold in market with initial commercial launch with differentiated data
- Prepare for additional near-term commercial launches in the hematology space (multiple myeloma)

Potential launch of odronextamab in 2024 is the first of several steps forward for the globally-expanding Regeneron Oncology commercial organization

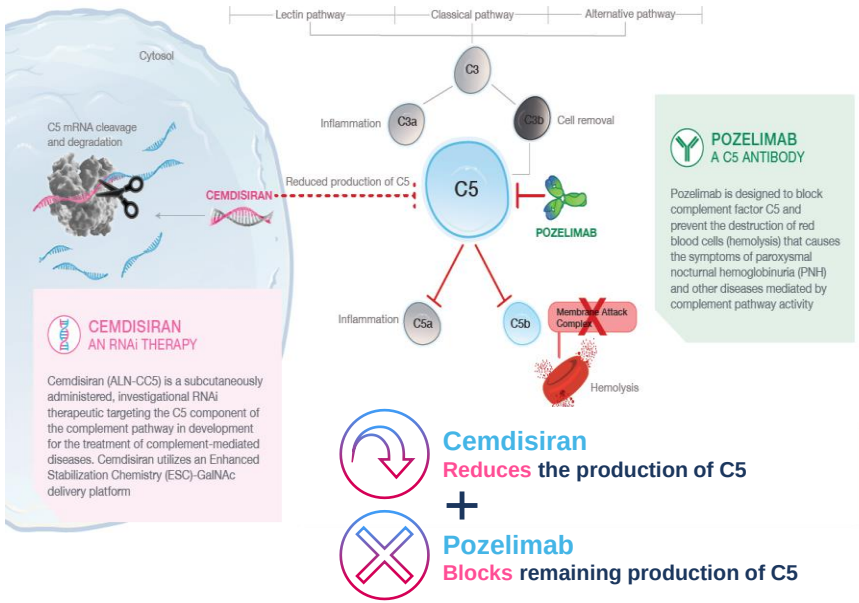
Classical Hematology



Pozelimab and Cemdisiran in Complement Mediated Disorders

Regeneron pioneers Antibody + siRNA combination

Phase 3 Paroxysmal Nocturnal Hemoglobinuria (PNH) and Myasthenia Gravis (MG) programs advancing; Geographic Atrophy (GA) initiating shortly



	Overview	Status
PNH	**Phase 3 ACCESS-1** Complement inhibitor-naïve patients	• Cohort A: ***New Data Presented Today*** • Cohort B: enrolling, data expected in 2026+
MG	**Phase 3 NIMBLE** Patients with symptomatic generalized myasthenia gravis	• Study enrolling • Data expected in 2025
GA	Patients with geographic atrophy secondary to age-related macular degeneration Systemic administration - *Single subcutaneous injection to treat both eyes*	• Phase 3 pivotal program initiating in 1H24

Regeneron is solely responsible for the development and commercialization of the c5 siRNA + monoclonal antibody combination. The C5 siRNA License Agreement contains a flat low double-digit royalty payable to Alnylam on our potential future net sales of the combination product and commercial milestones.

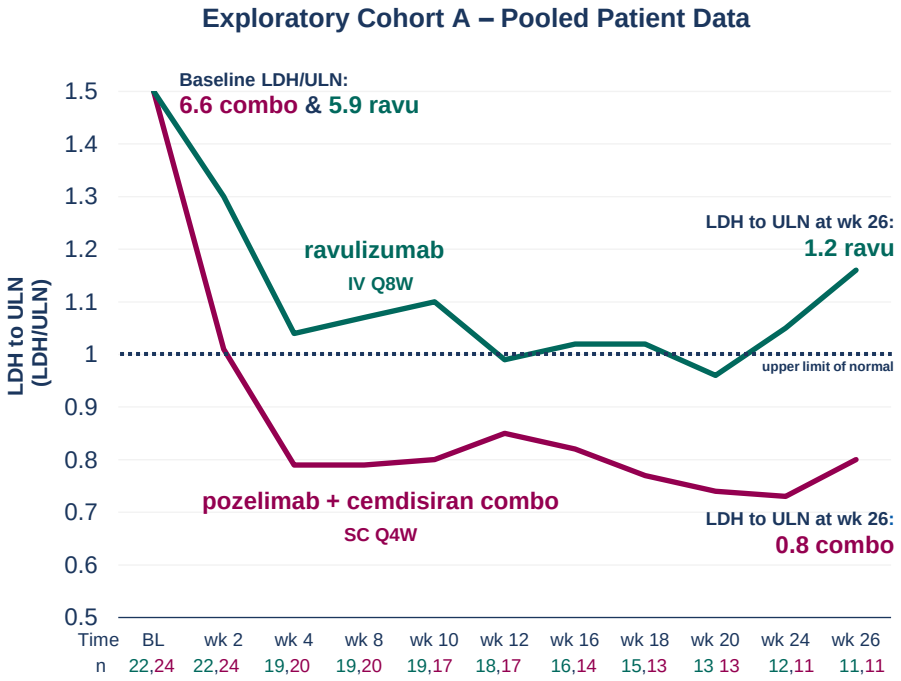
Our antibody + siRNA combination has the potential to improve on current standards of care across many diseases including complement mediated disorders:

- Complete and sustained C5 inhibition at a lower dose
- Reduced dosing frequency
- Convenient subcutaneous formulation

REGENERON

Interim Phase 3 results from ongoing pivotal study in naïve PNH patients show unprecedented LDH reduction

New 26-week data from an exploratory cohort validates antibody + siRNA approach; rapidly enrolling Phase 3 cohort



Pozelimab + cemdisiran – reduces LDH levels in almost all patients

- Prior to this combination, no treatment has reduced and sustained average LDH to normal levels

Primary endpoint:

Pozelimab + cemdisiran – LDH levels reduction to 0.8 times the ULN (normalization) vs. **ravulizumab** – LDH reduction to 1.2 x ULN*

- 91% of patients who received the combination maintained adequate control of LDH from week 8 through week 26, vs. 73% who received ravulizumab

Secondary endpoint:

Sustained control of complement activity (assessed by CH50 in blood samples) observed in all patients treated with the combination through week 26

Primary Endpoint: the percent change in lactate dehydrogenase (LDH) from baseline to week 26. LDH is a well-accepted biomarker of hemolysis – with adequate control and normalization defined as ≤1.5 and ≤1.0 times the upper limit of normal (ULN), respectively

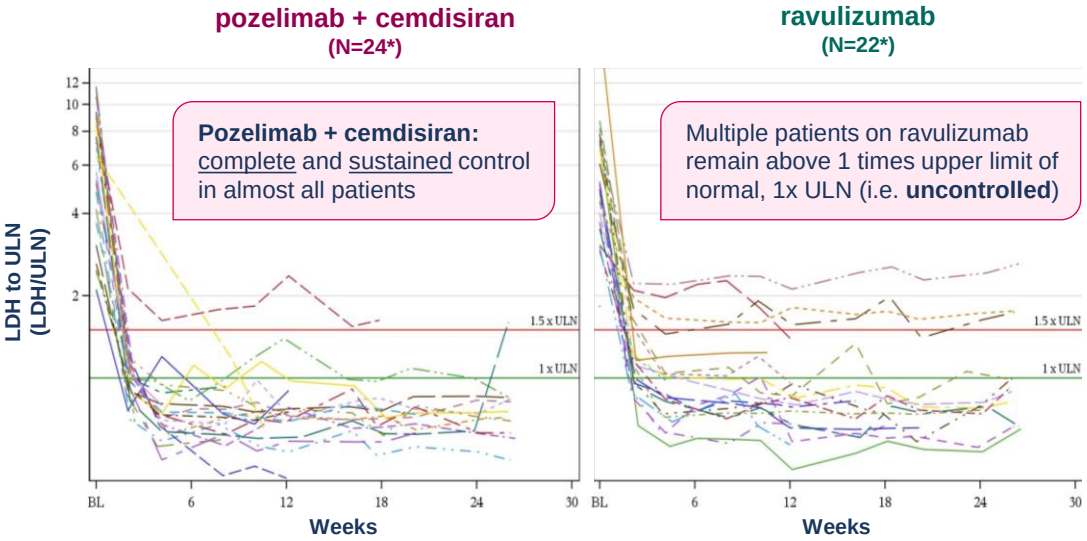
*Only patients that completed 26 weeks of the study were evaluated for efficacy at the time of the data cut

REGENERON

Promising PNH data supports accelerated development across other complement mediated disorders

Enrolled over 180+ patients across PNH and MG clinical programs; over 100 patients treated by the combination treatment

Exploratory Cohort A – Individual Patient Data



Individual patient data highlight almost all patients achieved complete and sustained control of LDH in the pozelimab + cemdisiran arm compared with the ravulizumab arm

As of data cut-off, 46 patients were evaluated for safety

- 67% of patients treated with the combination experienced AEs of any grade, compared to 64% of those treated with ravulizumab.
- Two patients in the Cohort A combination arm had serious AEs, with one experiencing cellulitis following trauma and the second experiencing fever, seizure and hemolytic crisis within one week of the first dose and prior to achieving adequate LDH control. There were no serious AEs in the ravulizumab arm.

Patient enrollment and follow-up continues

- After the data cut-off, two patients who received the combination treatment (patient from Cohort A who experienced hemolytic crisis, and a patient from Cohort B) had fatal treatment-related adverse events.
- No other fatal adverse events nor suspected meningococcal infections have been reported in over 100 patients who received combination treatment across our PNH and MG trials so far

*Only patients that completed 26 weeks of the study were evaluated for efficacy at the time of the data cut

REGENERON

Geographic atrophy – combining our scientific capabilities in hematology with our leadership in ophthalmology

Pivotal Phase 3 program: plan to initiate in 1H 2024[1]

Program Overview

(Trials to initiate in 1H24)*

Two Phase 3 pivotal trials (multi-center, randomized, double-masked) in geographic atrophy secondary to age-related macular degeneration

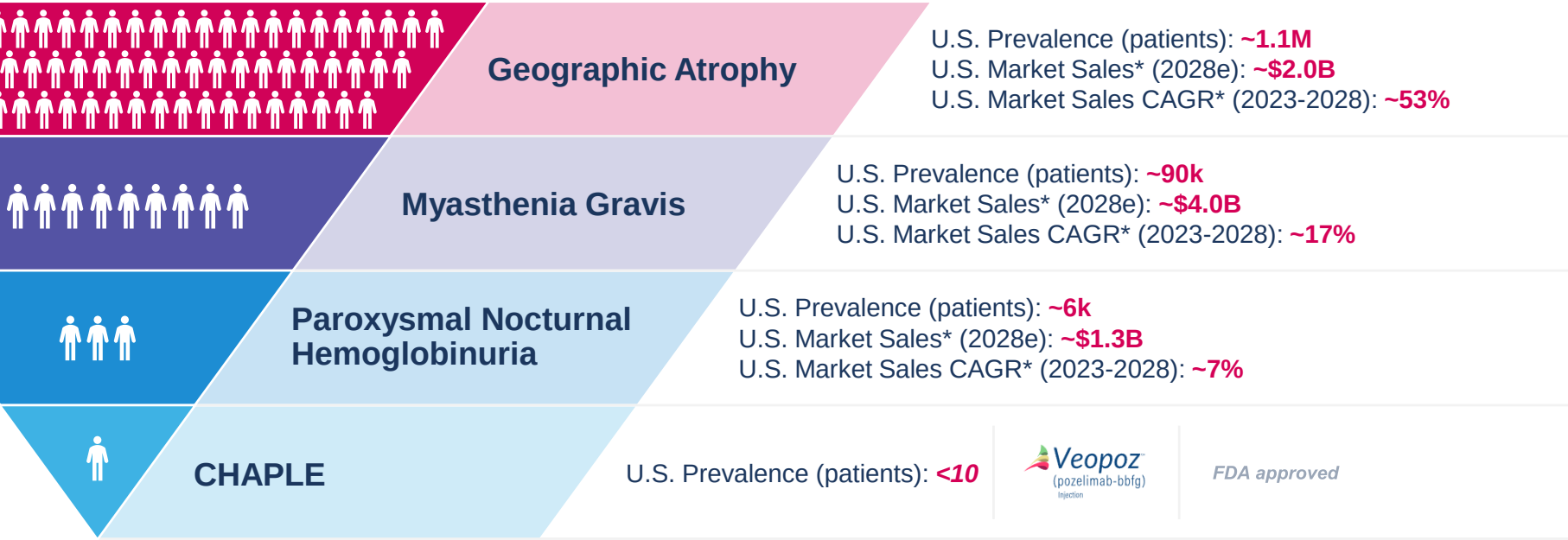
- *Trial details coming soon*

	Current Geographic Atrophy Landscape	Regeneron Opportunity (Pozelimab + Cemdisiran Combo)
Market Opportunity	• ~1M diagnosed in U.S. • Increasing diagnosis and drug-treatment rates • 2 approved agents, many more in development	• Leadership in ophthalmology • Differentiated MOA
Route of Administration	• Q4W/Q8W intravitreal injections (IVT) • Bilateral disease requires injections in each eye	• Less invasive treatment option • Systemic administration enables treatment of bilateral disease • Q4W systemic treatment
Ocular Safety	• Reported cases of occlusive retinal vasculitis along with other ocular safety events	• Systemic administration potentially reduces risk of ocular safety events
Efficacy	• Approved agents lack evidence of maintenance of visual function	• Opportunity to demonstrate greater reduction in lesion growth rate along with preservation of visual function
Office Visits	• Administered in office by retinal specialist	• Potential for self-administration (subcutaneous coformulation)

* Pending regulatory feedback

Our differentiated siRNA + antibody approach has the potential to compete across the complement space

Despite competitive markets, there is opportunity to improve upon the current standard of care with prolonged and complete inhibition of C5



Source: Evaluate Pharma

Targeting Factor XI for blood coagulation disorders

Next generation approach to anticoagulation via Factor XI inhibition offers potential for blood clot prevention with minimal bleeding

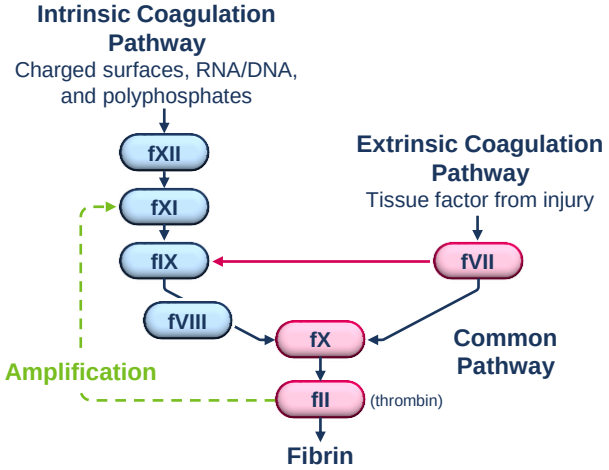
REGN9933 and REGN7508: REGN factor XI antibodies rapidly advancing to pivotal trials starting in late 2024/early 2025

Current standard of care: targeting Factor Xa

- $20Bn atrial fibrillation market is dominated by Direct Oral Anticoagulants (DOACs), which target factor Xa
  - Effective at reducing thrombotic events, but carry elevated risk of bleeding
  - Utilization rate is only ~50%, mainly due to bleeding risk

Future vision: inhibiting Factor XI

- More specific inhibition of the intrinsic coagulation pathway
- Our FXI antibodies could address unmet need in thrombosis prevention
  - higher specificity and efficacy vs. small molecule inhibitors
  - more complete inhibition of FXI vs. competitor FXI antibodies[1]



Emerging evidence supports targeting FXI for anticoagulation:

Human FXI deficiency: protection against thrombosis, low bleeding risk

- Genetic data from patients with FXI deficiency suggest reduced risk of myocardial infarction, stroke and venous thromboembolism (VTE), with only mild bleeding phenotype (data from *RGC*[2]*, others*)

Preclinical FXI data: antithrombotic efficacy without bleeding

External clinical FXI validation: antithrombotic efficacy, reduced bleeding compared to SOC

REGN9933 and REGN7508: rapid path to pivotal trials in 2024/2025

- Based on preclinical, NHP, healthy volunteer data (*in house*) and POC Phase 2 data (*expected in 2024*)
- Phase 3 indications to be announced

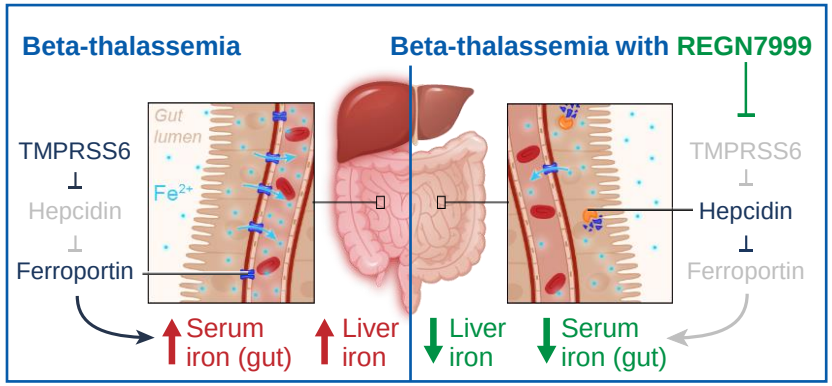
1. Unpublished Regeneron data; based on higher maximal aPTT prolongation in human plasma; aPTT - activated Partial Thromboplastin Time – an assay measuring activity of the coagulation pathway
2. Sharman Moser S, et al., The Association between Factor XI Deficiency and the Risk of Bleeding, Cardiovascular, and Venous Thromboembolic Events. Thromb Haemost. 2022. doi: 10.1055/s-0041-1735971

REGENERON

Targeting TMPRSS6 for iron overload disorders

REGN7999 (anti-TMPRSS6) has potential as a first-in-class therapy for treatment of iron overload disorders

REGN7999 improved red blood cell health and reduced hepatic iron loading in a mouse model of beta-thalassemia; safely reduces serum iron levels in healthy human subjects

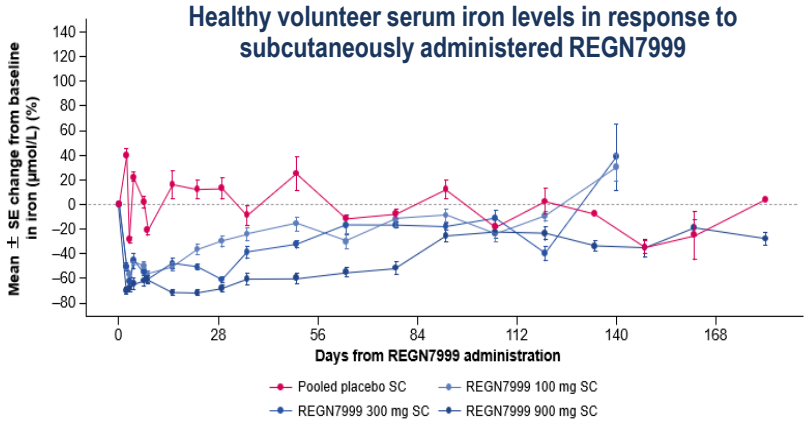


Mechanism of action

- **Iron overload** is toxic at a cellular level, and can damage many parts of the body, including the heart, liver, bone marrow, pancreas and endocrine organs
- **TMPRSS6** (transmembrane serine protease 6) is a transmembrane enzyme expressed in the liver
- TMPRSS6 is a negative regulator of **hepcidin**, a hormone which regulates iron homeostasis
- **Blocking TMPRSS6** leads to higher expression of hepcidin, resulting in lowering iron levels in the liver and the bloodstream

Single ascending doses of REGN7999: rapid, deep, and durable reductions in serum iron levels in healthy volunteers

- REGN7999 was generally well tolerated with no SAEs reported



Development plan: POC in **non-transfusion dependent beta-thalassemia** to start in 2H24

REGENERON

Iron overload disorders: unmet need for therapies that are more effective and/or less toxic than SOC chelators

Goal: develop first-in-class antibody to reduce excess circulating iron contributing to end-organ damage in patients with iron overload that is less toxic than iron chelators

Target indications: disorders of hematopoiesis characterized by ineffective production of red blood cells and iron overload, e.g., **beta-thalassemia**, **myelodysplastic syndrome (MDS)**

Current SOC: chelators have **black box warnings** related to toxicities including acute kidney disease, hepatic impairment, gastrointestinal hemorrhage, neutropenia, agranulocytosis; many patients are inadequately treated due to toxicities and tolerability issues (e.g., nausea, diarrhea)

Potential differentiation for REGN7999: best-in-class potency; competitive dosing interval

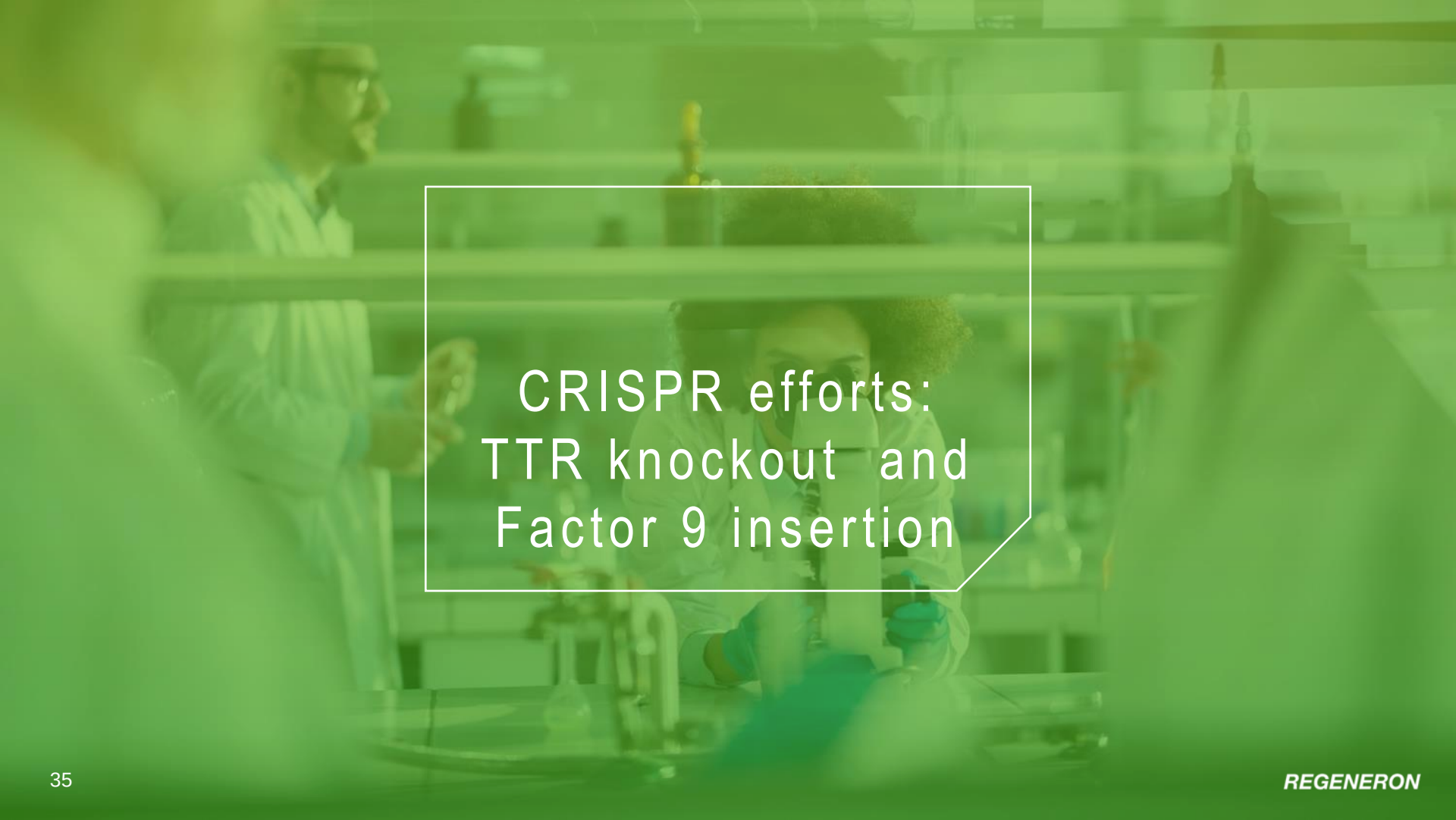
Development plan: POC in **non-transfusion dependent beta-thalassemia** to start in 2H24

Beta thalassemia in the US

	Non-transfusion dependent (NTD) Patients with <12 infusions/year	**Transfusion-dependent (TD)** Patients with ≥12 infusions/year
Prevalence	~5,000	~1,500
% of patients on iron chelators	~5-20%	~75%

In house analysis and pharmacy claims data; prevalence is higher in other countries such as Italy and Greece

REGENERON



CRISPR efforts: TTR knockout and Factor 9 insertion

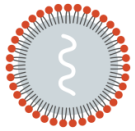
Regeneron and Intellia are developing CRISPR-based approaches for the treatment of genetic diseases

CRISPR/Cas9-based gene knockout to treat Transthyretin Amyloidosis

Proof-of-concept clinical results
Initiating a Phase 3 study

KNOCKOUT

Knockout deleterious or compensatory genes



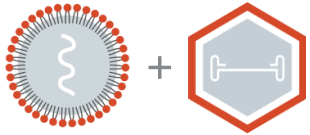
LNP

CRISPR/Cas9-based gene insertion to treat Hemophilia B

IND-enabling studies

INSERT

Inserting a functional DNA sequence into a specific genomic locus



LNP AAV

LNP, lipid nanoparticle; AAV, adeno-associated virus

CRISPR-based gene knockout to treat ATTR amyloidosis demonstrated promising proof-of-concept clinical data

Recently obtained FDA clearance for a Phase 3 ATTR-CM study; MAGNITUDE study recently initiated

ATTR amyloidosis is a rare disorder caused by accumulation of misfolded TTR protein, which primarily affects nerves (PN) and heart (CM)

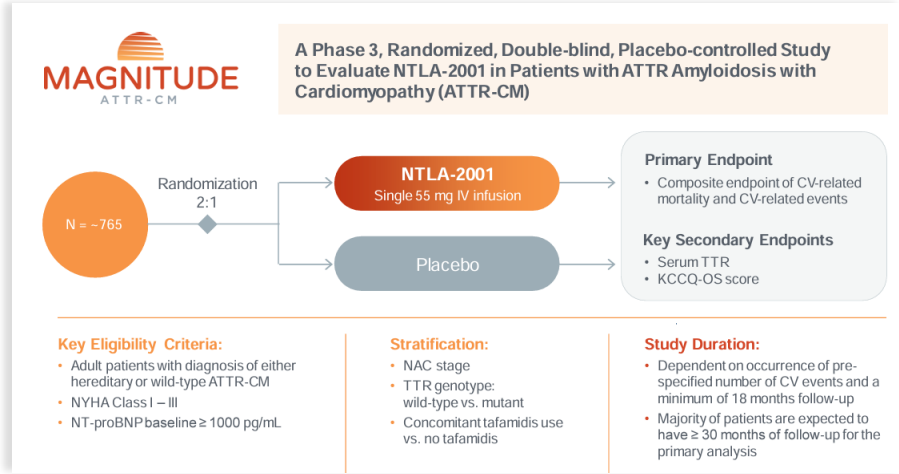
- Reducing circulating amyloid-forming TTR protein with either siRNA or ASO is a clinically validated approach to treatment of TTR amyloidosis
- Intellia/Regeneron collaboration is the first to use a one-time gene editing approach to durably reduce TTR protein by knocking out the gene

Phase 1 ascending doses and expansion cohorts in ATTR-CM and ATTR-PN **completed**

- Deep and sustained reductions in TTR protein >90% achieved in CM and PN after single dose

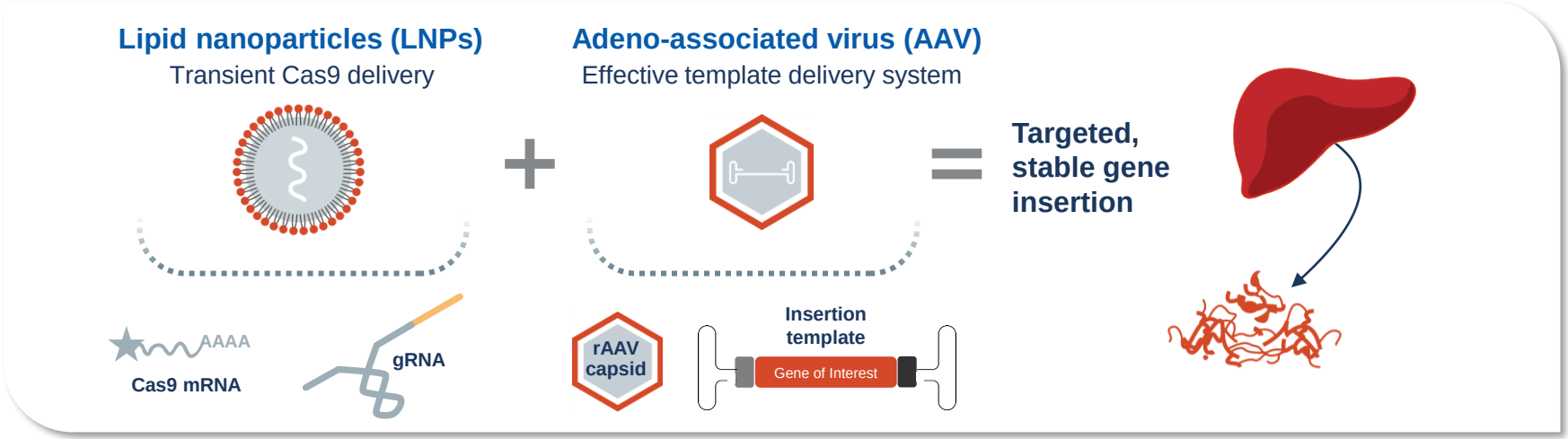
ATTR-CM – primary indication – Phase 3 initiated

- ATTR-PN Phase 3 plans in preparation



CRISPR-mediated gene insertion of Factor 9 is a potential durable treatment for Hemophilia B

A one-time genome editing treatment in childhood that could durably restore Factor 9 expression would represent a major advance for Hemophilia B patients



Potential advantages over currently approved AAV-mediated episome-based gene therapy approaches for Hemophilia A[1] and B[2]:

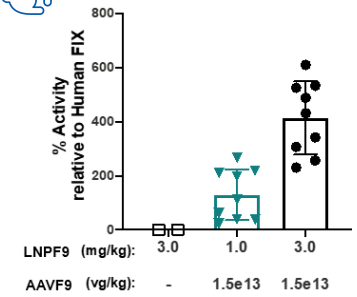
- Potential for differentiated durability of AAV-based therapies
- Only genetic medicine with potential to treat children

1. https://d34r3hkxgxjdtw.cloudfront.net/6f836309-d95f-42af-b717-2efa058ad82d/78bf2bcb-7068-4774-b962-a35c53704fc1/78bf2bcb-7068-4774-b962-a35c53704fc1_source__v.pdf
2. https://labeling.cslbehring.com/PI/US/Hemgenix/EN/Hemgenix-Prescribing-Information.pdf

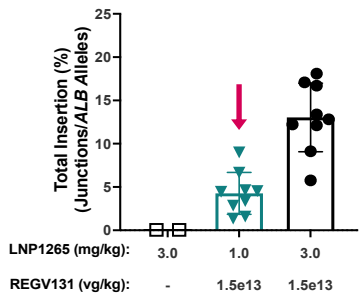
Advanced preclinical *Factor 9* insertion results support initiation of first-in-human studies

Targeted gene insertion mediates robust expression in NHPs and mice and durable expression in rapidly dividing livers

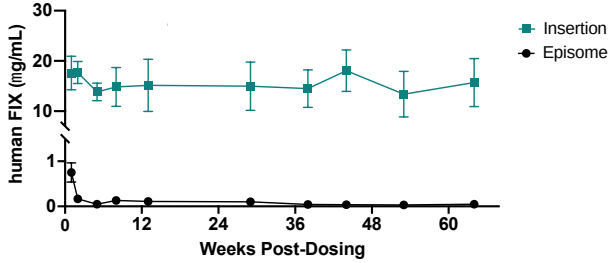
Robust FIX activity



Low % insertion required



Durable and stable FIX expression while episomal expression is lost



IND and CTA clinical trial submissions on track for end of 2023

- **Hemophilia B** is a rare genetic disorder caused by deficient Factor IX activity, resulting in bleeding
  - **~2,200** moderate and severe Hemophilia B patients **in the U.S. today** require routine FIX prophylaxis
- **Unmet need** is most acute in **pediatrics**
  - *Factor 9* gene insertion may offer advantage vs. conventional liver AAV episome-based gene therapy
- Lead-in human clinical study HONEY-B is currently opening in US, Canada, UK and Germany

HONEY-B

A Prospective Study to Evaluate Disease Characteristics in Hemophilia B Participants Receiving Prophylaxis with Standard of Care FIX Replacement Therapy

NCT05568459

HONEY-B Lead-in study is opening in US, Canada, UK, and Germany

Conclusion and Q&A

2023 key takeaways

- **Linvoseltamab** demonstrated potential best-in-class efficacy in the primary analysis and is highly differentiated from competition, with U.S. filing planned by year-end 2023
- **Odronextamab** continues to show durable responses and a competitive profile ahead of a March 31, 2024 PDUFA date for FL & DLBCL, with studies ongoing in earlier lines of therapy
- **Pozelimab + cemdisiran** showed robust knockdown and clearing of C5 in an investigational cohort of patients from a pivotal study in PNH; this proof-of-concept paves the way for a potentially pivotal study in geographic atrophy to begin in Q1 2024
- Two **Factor XI** antibodies present opportunity to improve on current standard of care, with initial data to be shared in 2024 and plans for rapid advancement to pivotal studies
- **TMPRSS6** has the potential to be a first-in-class antibody treatment for iron overload disorders
- Leveraging next-generation CRISPR platform with Intellia: **NTLA-2001** pivotal Phase 3 study in ATTR-CM recently initiated; IND / CTA submission for **Factor 9** in Hemophilia B expected by year-end 2023

Making significant progress in hematology, with near-term approvals in heme-onc, multiple ongoing or near-term pivotal studies, and an emerging early-stage pipeline

This slide contains investigational drug candidates that have not been approved by any regulatory authority.

Q&A

George D. Yancopoulos, MD, PhD
Board Co-Chair, Co-Founder, President and Chief Scientific Officer

Andres Sirulnik, MD, PhD
SVP Clinical Development – Hematology

Abbreviations & definitions

Abbreviation	Definition
1L	Front line
2L+	Second line and beyond
3L+	Third line and beyond
AAV	Adeno-associated virus
AE	Adverse Event
ALA	Aamyloid light chain amyloidosis
ASH	American Scoiety of Hematology
ATTR	Transythretin Amyloidosis
BCMA	B-cell maturation antigen
BLA	Biologics license application
C5	Complement component 5
CAGR	Cumulative average growth rate
CAR-T	Chimeric antigen receptor t-cell
CH50	50% haemolytic complement
CM	Cardiomyopathy
CR	Complete Response
CRS	Cytokine release syndrome
CTA	Clinical trial application
DLBCL	Diffuse large B-cell lymphoma
DOCR	Duration of complete response
DOR	Duration of response
EC	European Commission

Abbreviation	Definition
EMA	European Medicines Agency
EPd	Elotuzumab, pomalidomide, dexamethosone
FL	Follicular lymphoma
GA	Geographic Atrophy
HCP	Healthcare Provider
ICANS	Immune effector cell-associated neurotoxicity syndrome events
IgE	Immunoglobulin E
IND	Investigational New Drug Application
IRC	Independent Review Committee
LDH	Lactate Dehydrogenase
LNP	Lipid nano-particle
MAA	Marketing authorization application
MDS	myelodysplastic syndrome
MG	Myesthenia Gravis
MGUS	Monoclonal gammopathy of unknown significance
MM	Multiple myeloma
MOA	Mechanism of action
MR	Minimal response
NE	Not estimable
NHP	Non-human primate
NTD	Non-transfusion dependent
ORR	Overall Response Rate

Abbreviation	Definition
PD	Progressive disease
PDUFA	Prescription Drug User Fee Act
PFS	Progression-free survival
PN	Polyneuropathy
PNH	Paroxysmal Nocturnal Hemoglobinuria
POC	Proof-of-concept
PR	Partial response
R/R	Relapse / refractory
SAE	Serious adverse event
SC	Subcutaneous
sCR	Stringent complete response
SD	Stable disease
siRNA	Small interfering RNA
SMM	Smoldering multiple myeloma
SOC	Standard of care
TAA	Tumor-associated antigen
TD	Transfusion-dependent
TEAE	Treatment emergent adverse event
TMPRSS6	transmembrane serine protease 6
ULN	Upper limit of normal
VGPR	Very good partial response
VTE	Venous thromboembolism

REGENERON