ProQR®

THE ROLE OF RNA THERAPIES IN INHERITED RETINAL DISEASES

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Forward looking statements

This presentation contains forward-looking statements that involve substantial risks and uncertainties. All statements, other than statements of historical facts, contained in this presentation, including but not limited to, statements regarding our strategy, future operations, future preclinical and clinical trial plans and related timing of trials and results, regulatory pathway and design of preclinical and clinical trials, research and development, the potential of our technologies and platforms, including Axiomer® and Trident®, statements about our intellectual property rights, future financial position and cash runway, future revenues, projected costs, prospects, therapeutic potential of our product candidates, plans and objectives of management, are forward-looking statements. The words "aim," "anticipate," "believe," "estimate," "expect," "intend," "may," "plan," "predict," "project," "target," "potential," "will," "would," "could," "should," "continue," and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words.

Forward-looking statements are based on management's beliefs and assumptions and on information available to management only as of the date of this presentation. Our actual results could differ materially from those anticipated in these forward-looking statements for many reasons, including, without limitation, the risks, uncertainties and other factors in our filings made with the Securities and Exchange Commission, including certain sections of our annual report filed on Form 20-F. These risks and uncertainties include, among others, the cost, timing and results of preclinical studies and clinical trials and other development activities by us and our collaborative partners whose operations and activities may be slowed or halted by the COVID-19 pandemic; the likelihood of our clinical programs being executed on timelines provided and reliance on our contract research organizations and predictability of timely enrollment of subjects and patients to advance our clinical trials and maintain their own operations; our reliance on contract manufacturers to supply materials for research and development and the risk of supply interruption from a contract manufacturer; the potential for future data to alter initial and preliminary results of early-stage clinical trials; the unpredictability of the duration and results of the regulatory review of applications or clearances that are necessary to initiate and continue to advance and progress our clinical programs; feedback and interactions with regulatory authorities with respect to the design of our planned preclinical and clinical activities; the ability to secure, maintain and realize the intended benefits of collaborations with partners; the possible impairment of, inability to obtain, and costs to obtain intellectual property rights; possible safety or efficacy concerns that could emerge as new data are generated in research and development; and general business, operational, financial and accounting risks, and risks related to litigation and disputes with third parties. Given these risks, uncertainties and other factors, you should not place undue reliance on these forward-looking statements, and we assume no obligation to update these forward-looking statements, even if new information becomes available in the future, except as required by law.

ProQR Therapeutics

Patient-centric **RNA THERAPEUTICS** platform company, developing drugs for **EYE DISEASES** with well understood genetic causality

The ProQR Journey for patients with Inherited Retinal Dystrophies (IRDs)

2012	2013 - 2016	2017 - 2021	2022
Founding of ProQR **Initial Focus** on rare lung disease (**Cystic fibrosis**)	**Shift to Focus on Eye Diseases Development Partnerships** with Academia on rare genetic eye disease (LCA, RP) **Extensive Preclinical** Development	**Start of First Clinical Trial: Sepofarsen in LCA10** Expansion of Clinical Programs to RP with Ush2a mutations and RP due to Rho mutations	**Clinical programs advancing with lead program in registration trial** **Molecules** in pre-clinical phase **for >25 additional mutations** causing IRDs

LCA = Leber congenital amaurosis, RP = Retinitis pigmentosa

Very few have a treatment

ProQR inherited blindness platform

UNIQUE PLATFORM FOR PRECISION MEDICINE

Targeted RNA oligo-nucleotide therapies

Intravitreal delivery is routine procedure in ophthalmology

Broad distribution allows for targeting of central and peripheral diseases

Predictive optic cup model

RNA

RIBONUCLEIC ACID

DNA

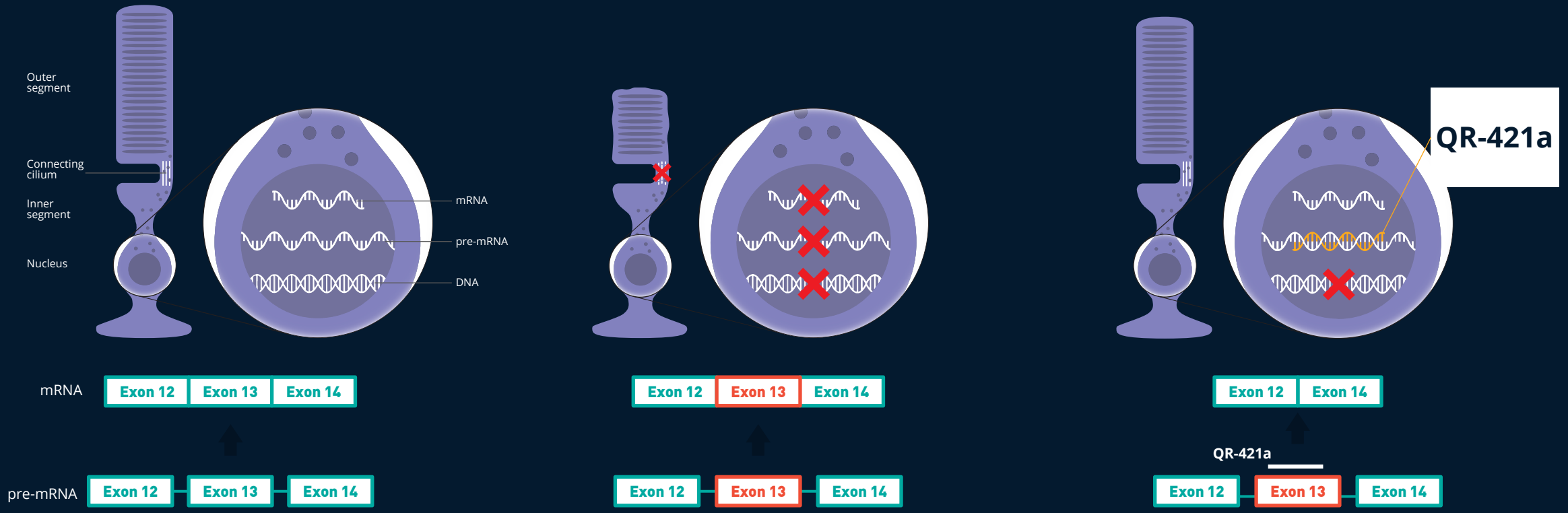
DEOXYRIBONUCLEIC ACID

QR-421a: First-in-class RNA therapy

- QR-421a targets Exon 13 mutations in Ush2a (>16,000 patients)
- QR-421a aims to prevent participants from going blind
- $7.5M co-funding from Foundation Fighting Blindness

QR-421a for RP and Usher syndrome

Skipping of exon 13 in USH2A RNA

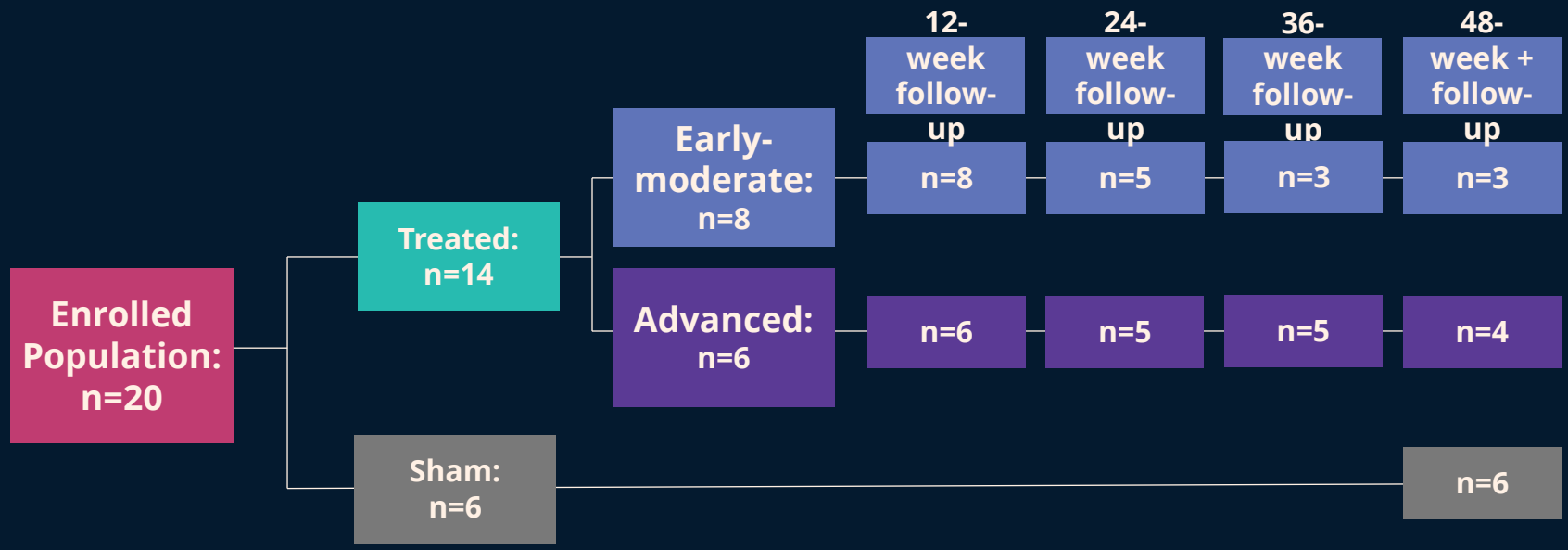


In wild-type cells Ush2A protein enables protein transport through the connecting cilium

In cells with the mutation Ush2A protein is not active hampering protein transport through the cilium

Exclusion of mutated exon leads to restoration of functionality of Ush2a

Demographics and disposition



	n	Mean age	Mean VA (TE)	Gender		Genotype		Disease stage		Disease type	
				Male	*Female*	*Homo-zygous*	*Hetero-zygous*	*Early-moderate*	*advanced*	*nsRP*	*Usher syndrome*
QR-421a treated	**14**	**48**	**66**	**4**	**10**	**64%**	**36%**	**57%**	**43%**	**50%**	**50%**
Sham	6	43	68	4	2	17%	83%	67%	33%	67%	33%

Early-moderate disease: baseline VA ≥ 70 letters (20/40)

Summary of Phase 1/2 results

- ✓ **QR-421a was observed to be safe and well tolerated**
- ✓ **Clinical proof of concept established, consistent with baseline disease, after single dose**
  - ✓ Advanced disease: 100% of patients had a BCVA benefit, 0% in sham group
  - ✓ Early-moderate population: Improvement on Static Perimetry
  - ✓ Supported by key secondary endpoints:
    - ✓ Stabilization of EZ area on OCT imaging (objective measurement)
    - ✓ Stabilization of Microperimetry-based retinal sensitivity
  - ✓ Dose range and dose interval established

- **All information acquired in *Stellar* to design Phase 2/3 studies:**
  - *Sirius* clinical study: a Phase 2/3 study in *advanced patients*
  - *Celeste* clinical study: a Phase 2/3 study in *early-moderate patients*

QR-421a observed to be safe and well tolerated

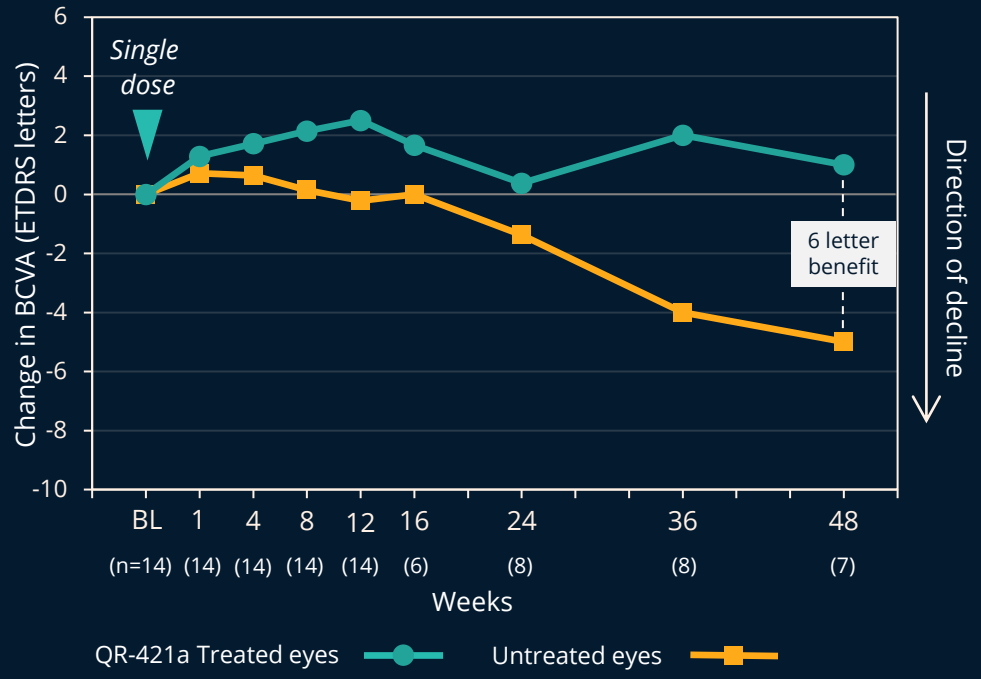
- **QR-421a was observed to be safe and well tolerated in >3,700 subject follow up days**
- **No SAEs, no inflammation**
- Cataracts occur in >30% patients in natural history of disease
  - 1 patient had worsening of pre-existing cataracts in both the treated and untreated eye with cataract extractions in both eyes
  - Deemed not treatment related by Investigator
- Cystoid Macular Edema (CME) known to occur as part of natural history of disease in >30% of the patients
  - No new occurring cases of CME during study
  - 1 patient with CME at baseline progressed during study, classified as mild, managed with standard of care

BCVA stabilization in all treated eyes

Mean change from baseline in BCVA after single injection

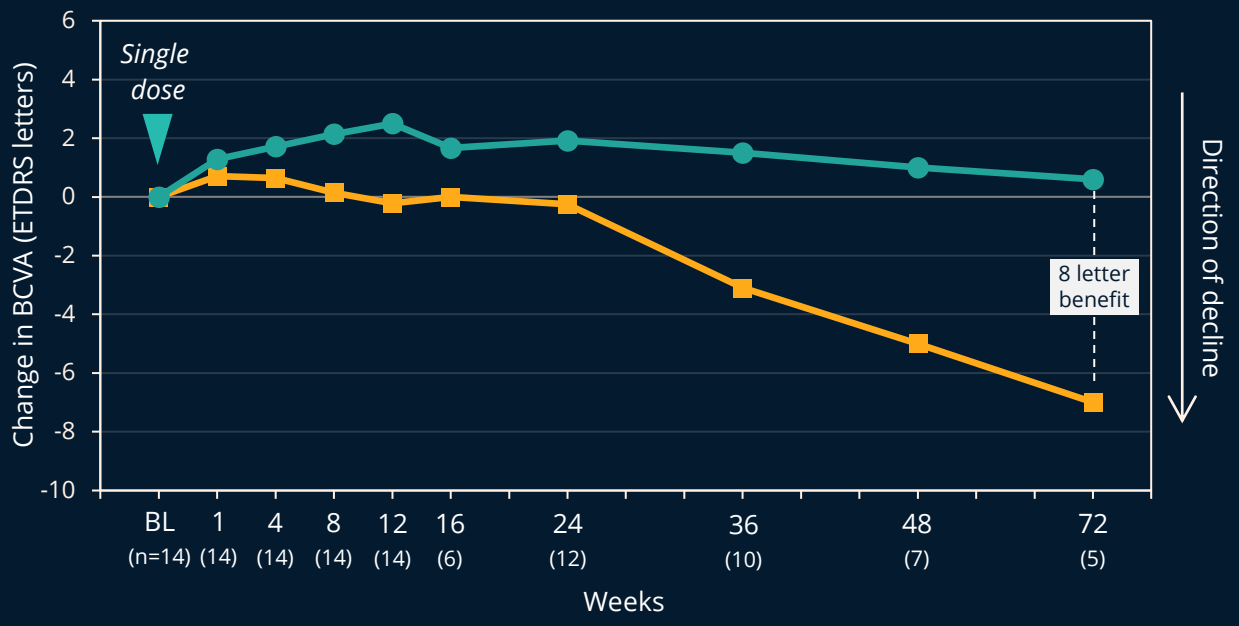
Mean 6 letter benefit at week 48

All QR-421a treated patients (n=14)



Mean 8 letter benefit at week 72

All QR-421a treated patients (n=14)



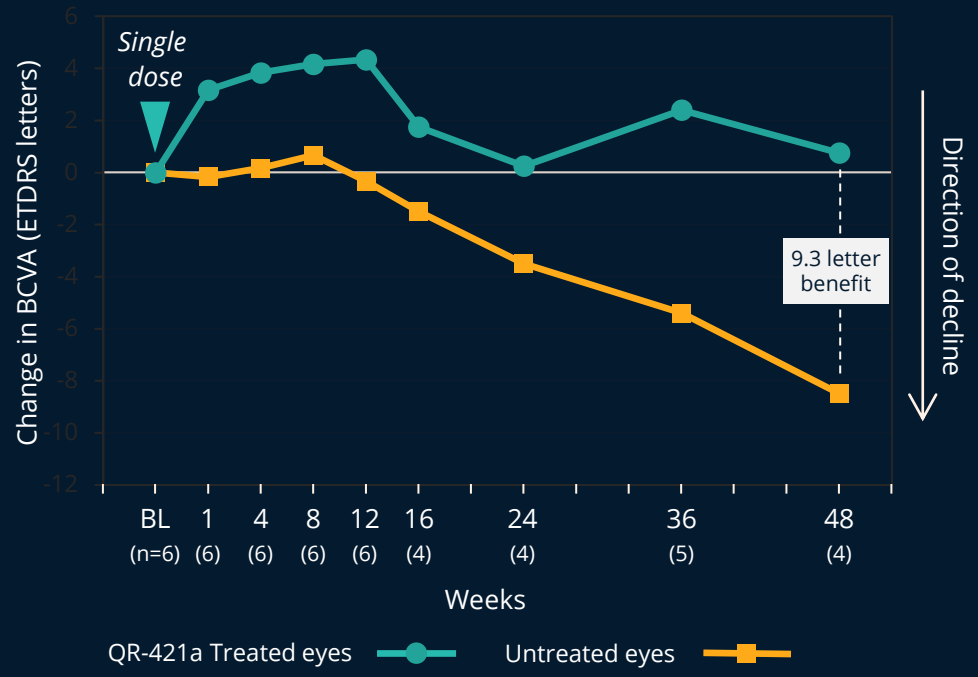
- Stabilization of vision observed in treated eye vs decline in untreated eye in all patients
- Deterioration of untreated eye in line with natural history

- 6 letter benefit at week 48, after single dose
- 8 letter benefit at week 72
- Sustained effect consistent with long half-life of QR-421a

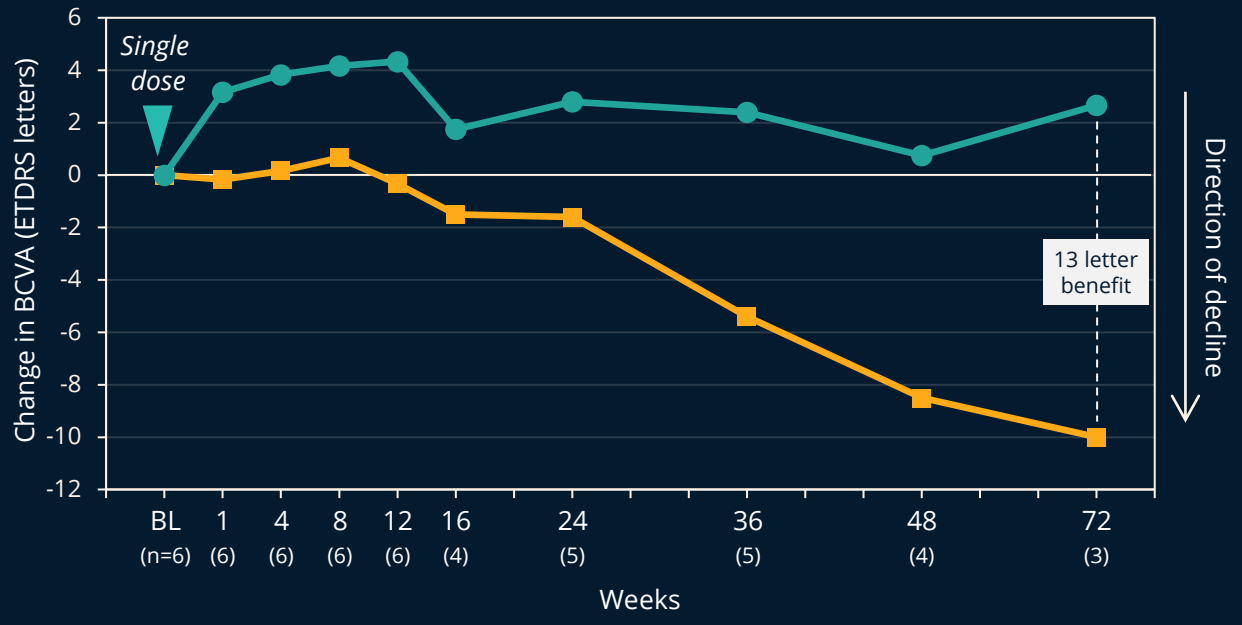
BCVA stabilization driven by advanced population

Mean change from baseline in BCVA after single injection

Mean 9.3 letter benefit at week 48
Advanced population (n=6)



Mean 13 letter benefit at week 72
Advanced population (n=6)

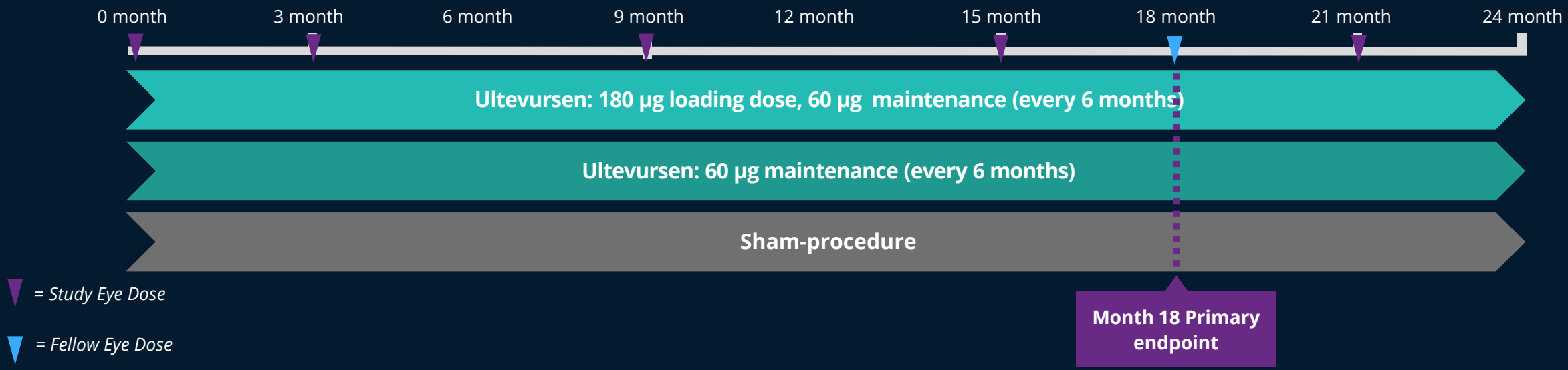


- BCVA response is driven by advanced disease population
- Stabilization of vision in treated eye after single dose
- Mean 9.3 letter benefit at week 48

- Mean 13 letter benefit at week 72
- Sustained effect is consistent with long half-life of QR-421a
- Week 72 is Primary Endpoint timepoint in *Sirius* (Ph 2/3) Study

Sirius

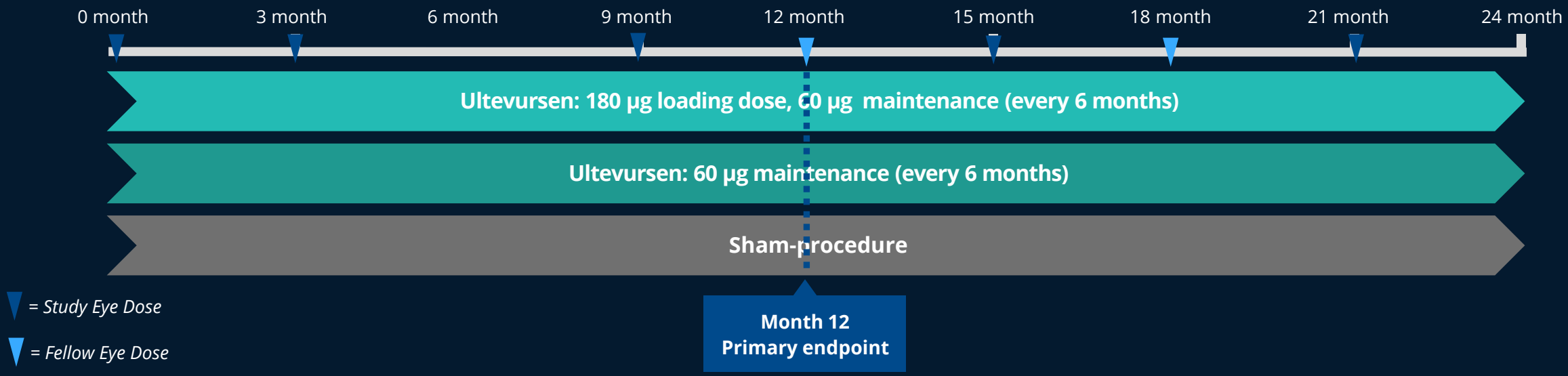
Phase 2/3 trial for Advanced Patients



- Double-masked, randomized, Sham controlled, 24-month, multiple dose study
- Population:
  - 81 patients (age 12+ yrs)
  - Baseline BCVA 30 - 68 ETDRS letters in TE
- Primary endpoint: Change from baseline in BCVA at month 18, versus sham

Celeste

Phase 2/3 trial for Early-Moderate patients



- Double-masked, randomized, Sham controlled, 24-month, multiple dose study
- Population:
  - 120 patients (age 12+)
  - Baseline BCVA ≥ 69 ETDRS letters in TE
- Primary endpoint: Change from baseline in mean sensitivity using static perimetry at month 12, versus sham

New name for QR-421a

- ultevursen -

Pronounce “ull-tuh-VURR-sen”

Three candidates were submitted for the International Nonproprietary Name (INN) for QR-421a

-> The WHO selected **ultevursen**

ProQR®

IT'S IN OUR RNA