Predictors of Outcomes at Year 1 in Patients Treated With Faricimab in TENAYA/LUCERNE

Dilsher S. Dhoot, MD¹

Judy E. Kim, MD, FARVO, FASRS²; Ivaylo Stoilov, MD³; Ming Yang, PhD³; and Lauren Hill, MS³

¹ California Retina Consultants, Santa Barbara, CA, USA
 ² University of Texas Southwestern Medical Center, Dallas, TX, USA
 ³ Genentech, Inc., South San Francisco, CA, USA

Presented at the American Society of Retina Specialists Annual Meeting Stockholm, Sweden | July 17–20, 2024



Disclosures

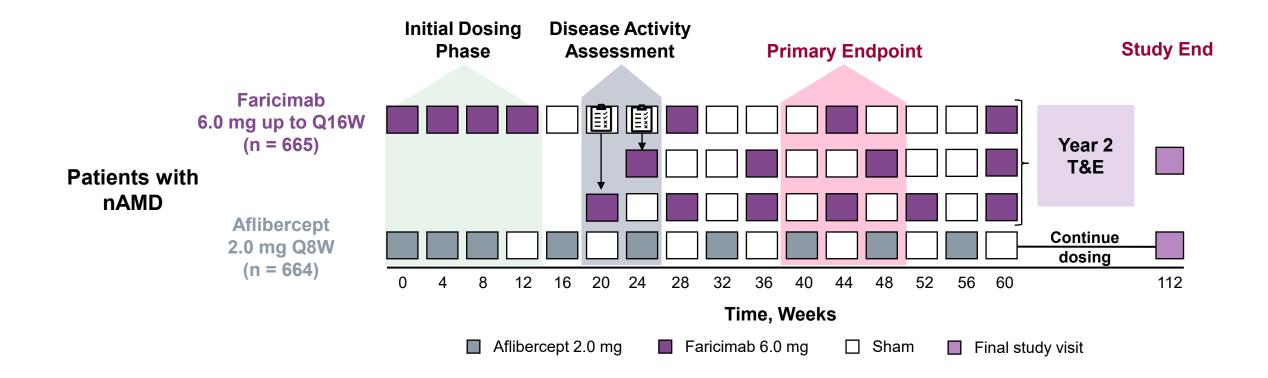
Financial Disclosures

- DSD: Consultant: Alimera Science, Allergan, Apellis, Bayer, Biocryst, Coherus, Eyepoint, Genentech, Inc, Iveric Bio, Neurotech, Ocular Therapeutix, Outlook Therapeutics, Oxular, Regeneron, RegenXBio, Roche, Novartis; Stockholder: Outlook Therapeutics, Vortex Surgical
- JEK: Advisory Board: Alimera Science, Allergan, Apellis, Astellas, Bausch + Lomb, Clearside, DORC, Genentech/Roche, Notal Vision, Novartis, Outlook Therapeutics, Regeneron
- ▶ IS, MY: Employee: Genentech, Inc.
- ▶ LH: Consultant: Alimera, Genentech, Inc., PolyPhotonix, Recens Medical

Study and Product Disclosures

- Faricimab is approved for the treatment of neovascular age-related macular degeneration, diabetic macular edema, and retinal vein occlusion in multiple countries worldwide. Faricimab is not currently approved for use outside these indications
- This study includes research conducted on human subjects
- Institutional Review Board approval was obtained prior to study initiation
- Funding was provided by F. Hoffmann-La Roche Ltd. for the study and third-party writing assistance, which was provided by Trishan Gajanand, PhD, of Envision Pharma Group

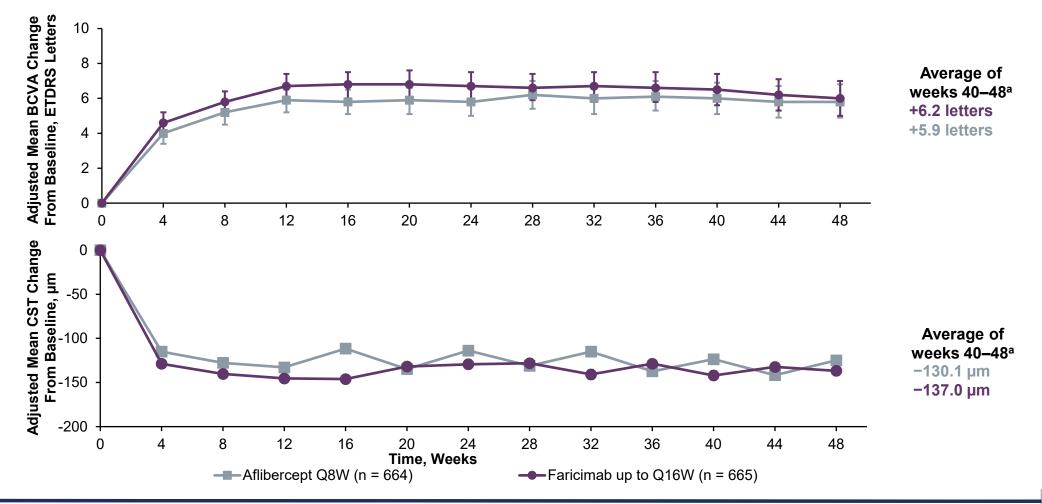
TENAYA and LUCERNE Trial Design



3

TENAYA/LUCERNE Year 1 Faricimab Outcomes: Improved BCVA, CST Reduction

TENAYA/LUCERNE Pooled (ITT Population)



^a Adjusted mean change from baseline at 1 year, averaged over weeks 40, 44, and 48. Results are based on a mixed model for repeated measures analysis in the ITT population. 95% Cls are shown. CST is measured as ILM-RPE, as graded by central reading center. ^b Percentages are based on number of patients randomized to the faricimab arm who have not discontinued the study at week 48. Treatment interval at week 48 is defined as the treatment interval decision followed at that visit. BCVA, best-corrected visual acuity; CST, central subfield thickness; ETDRS, Early Treatment Diabetic Retinopathy Study; ILM, internal limiting membrane; 1

ITT, intent to treat; Q8W, every 8 weeks; Q16W, every 16 weeks; RPE, retinal pigment epithelium.

Aim: To determine if baseline characteristics and/or early treatment response predict year 1 treatment interval, visual acuity, and anatomic outcomes among patients in the faricimab arm



Variables Included in Analyses

Predictors

Baseline Characteristics

Anatomic

- CST (ILM-BM)
- PED^a (presence)
- SRF^b (thickness, presence)
- IRF^b (presence)
- CNV lesion type
- CNV lesion size

Vision

- BCVA
- LLD

Demographics

- Ethnicity
- Race
- Sex
- Age
- BMI
- Smoking status

Disease Risk Factors

- Cardiac disease
- Vascular disease

Year 1 Outcomes

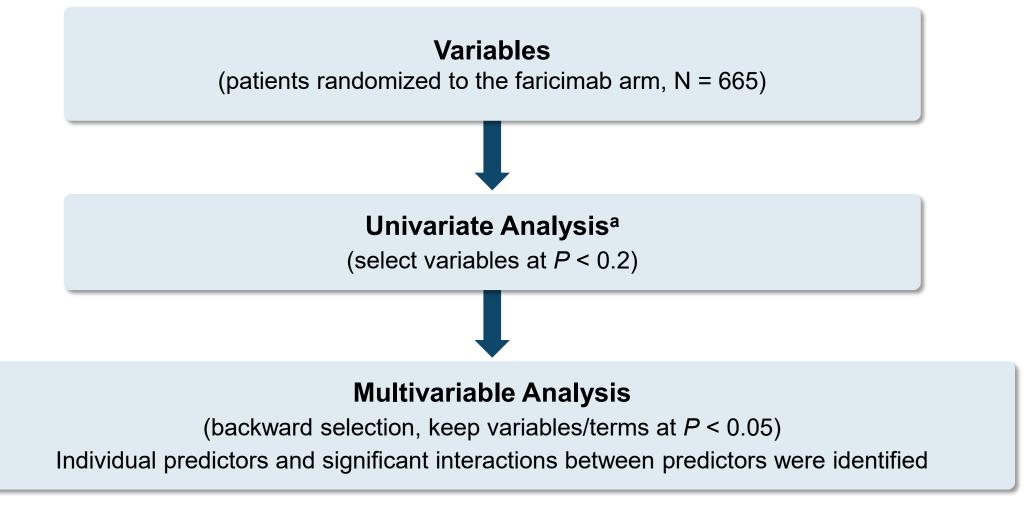
- Faricimab treatment interval
 Q8W, Q12W, or Q16W
- Change from baseline in BCVA^c
- Change from baseline in CST^c

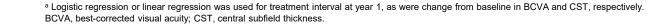
Early Response

BCVA ≥ 76 and CST ≤ 350 µm at week 4

a Defined as RPE elevation at the foveal center with width ≥ 350 μm. ^b Measured in the central subfield (center 1 mm). ^c Average of observed values at weeks 40, 44, and 48 at the subject level; treatment policy strategy and hypothetical strategy were applied to non–COVID-19–related and COVID-19–related intercurrent events, respectively. BCVA, best-corrected visual acuity; BM, Bruch's membrane; BMI, body mass index; CNV, choroidal neovascularization; CST, central subfield thickness; ILM, internal limiting membrane; IRF, intraretinal fluid; LLD, low luminance deficit; PED, pigment epithelial detachment; Q8W, every 8 weeks; Q12W, every 12 weeks; Q16W, every 16 weeks; RPE, retinal pigment epithelium; SRF, subretinal fluid.

Predictor Analysis Flow Chart



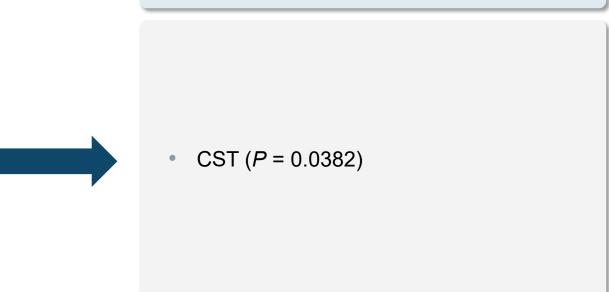


7

Univariate Analysis (variables significant at *P* < 0.2)

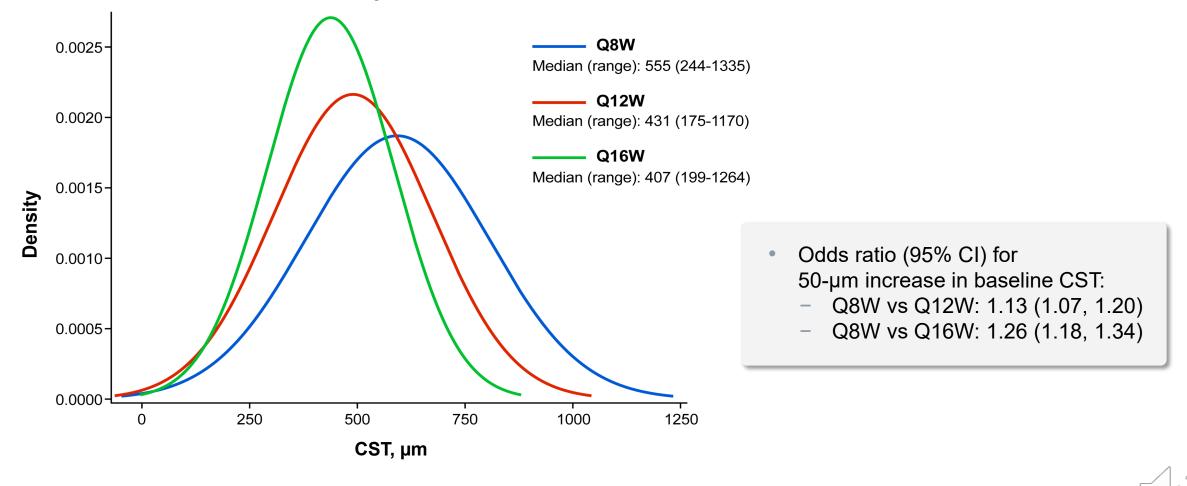
- Early response (P = 0.04)
- BCVA (*P* = 0.005)
- CNV lesion size (*P* = 0.0004)
- CST (*P* < 0.0001)
- SRF full form (*P* = 0.10)
- SRF thick foveal center full form (*P* = 0.01)
- LLD (*P* = 0.08)

Multivariable Analysis (variables significant at *P* < 0.05)



On Average, Eyes on Q8W Dosing at Year 1 Had Higher Baseline CST vs Eyes on Q12W or Q16W

Baseline CST Distribution by Treatment Interval at Year 1



Predictors of BCVA Change From Baseline at Year 1

Univariate Analysis (variables significant at *P* < 0.2)

- Pigment epithelial detachment
- Cardiac disease risk factor
- Early response
- BCVA
- CNV lesion type
- CNV lesion size
- LLD
- CST

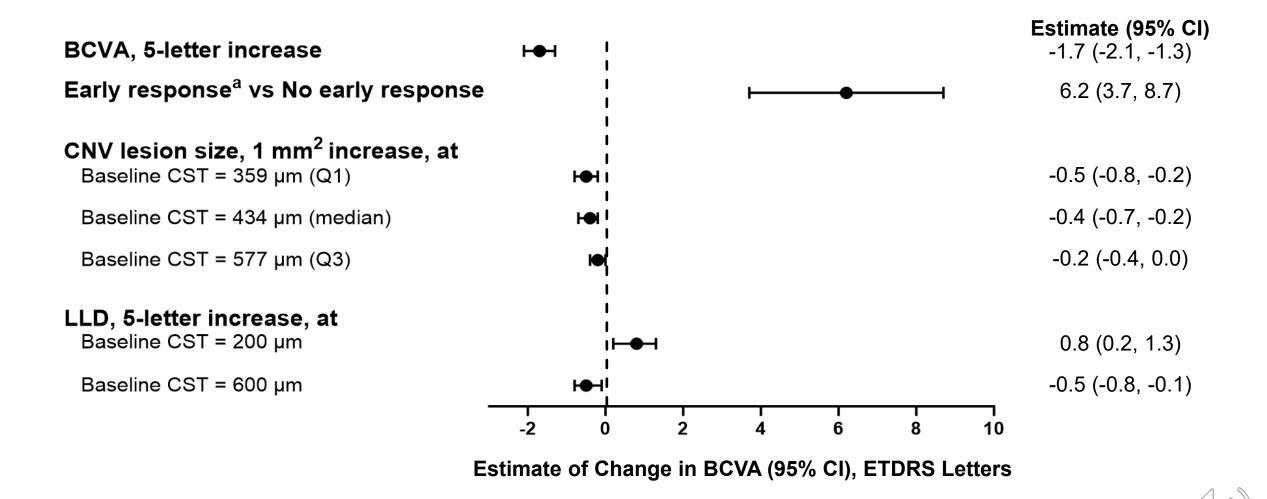


Stepwise backward selection

Multivariable Analysis (variables significant at *P* < 0.05)

- Early response
- BCVA
- CNV lesion size
- LLD
- Interaction between CST and:
 - LLD
 - CNV lesion size

Predictors of BCVA Change From Baseline at Year 1



^a Defined as BCVA ≥ 76 and CST ≤ 350 µm at week 4 (ie, after 1 injection).

BCVA, best-corrected visual acuity; CI, confidence interval; CNV, choroidal neovascularization; CST, central subfield thickness; Early Treatment Diabetic Retinopathy Study; LLD, low luminance deficit; Q, quartile.

Predictors of CST Reduction From Baseline at Year 1

Univariate Analysis (variables significant at *P* < 0.2)

- Sex
- Age
- Ethnicity
- Pigment epithelial detachment absence
- Vascular disease risk factor
- Early response
- BCVA
- CNV lesion type
- CNV lesion size
- CST
- IRF presence
- IRF absence
- SRF absence
- LLD

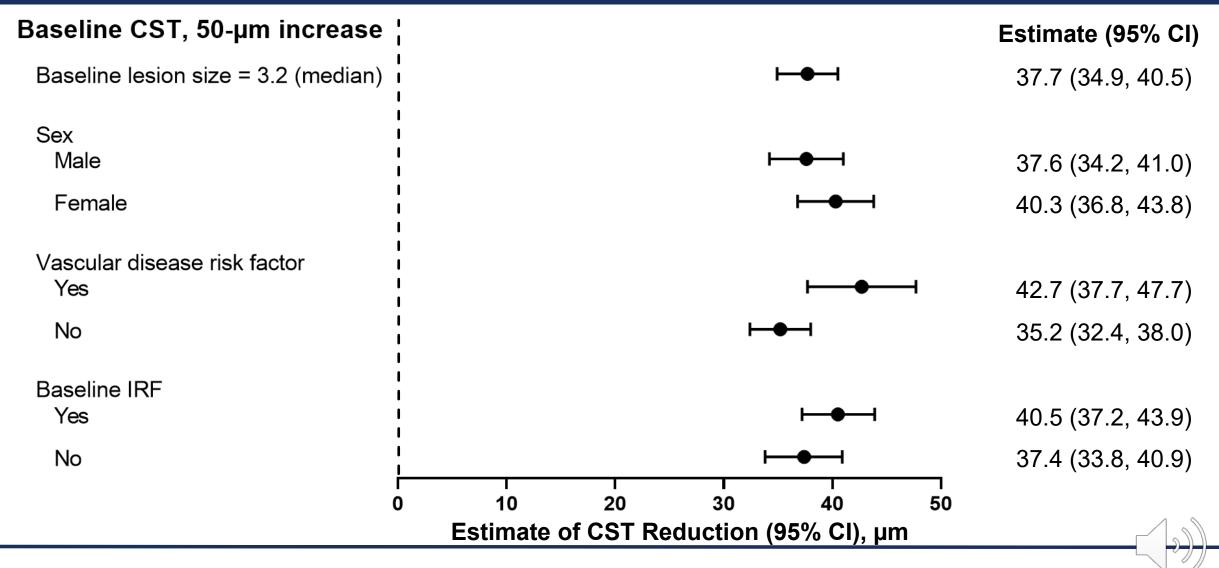
Multivariable Analysis (variables significant at *P* < 0.05)

- CST
- CNV lesion size
- Interaction between CST and:
 - Sex
 - CNV lesion size
 - Vascular disease risk factor
 - IRF absence
- Interaction between BCVA and vascular disease risk factor



Stepwise backward selection

Predictors of CST Reduction From Baseline at Year 1



Select Baseline Characteristics and Early Treatment Response Predicted Year 1 Outcomes in nAMD Faricimab Patients

Treatment Interval



 Baseline CST was the only identified predictor

14



- Baseline BCVA
- Lesion size and LLD (dependent on CST)
- Good early response to treatment^a predicted better vision



 Baseline CST (dependent on sex, vascular disease risk, IRF)

Patients with thicker retinas at baseline or those who respond early may have better outcomes