Disease Modifying Treatments for Diabetic Eye Disorders

VFB 'Dag van de Tips' – 28 September 2019

Patrik De Haes, MD, CEO

OXURION®

ADVANCING SCIENCE.®
ENHANCING VISION.

Forward-looking statement

This document has been prepared by Oxurion NV (the "Company") and is being supplied to you solely for your information and use by you at the Company presentation. This document and its contents are confidential and may not be further distributed or passed on to any other person or published or reproduced, in whole or in part, by any medium or in any form for any purpose. All the numerical data provided in this document are derived from Oxurion consolidated financial statements.

No representation or warranty expressed or implied is or will be made as to, and no reliance should be placed on, the fairness, accuracy, completeness, or correctness of the information or opinions contained herein. The information set out herein may be subject to updating, completion, revision, verification, and amendment, and such information may change materially. The Company is under no obligation to update or keep current the information contained in this document or the presentation to which it relates, and any opinions expressed in it are subject to change without notice. None of the Company or any of its affiliates, its advisors, or representatives shall have any liability whatsoever (in negligence or otherwise) for any loss whatsoever arising from any use of this document or its contents or otherwise arising in connection with this document.

The following information does not constitute investment advice, and shall not constitute an offer or invitation for the sale or purchase of securities or assets of Oxurion in any jurisdiction. No securities of Oxurion may be offered or sold within the United States without registration under the U.S. Securities Act of 1933, as amended, or in compliance with an exemption therefrom, and in accordance with any applicable U.S. state securities laws.

Oxurion Highlights

- **Forging new directions in diabetic eye disease therapies**
  - Targeting multiple disease-modifying pathways
  - Enhancing & going beyond vascular endothelial growth factor (VEGF) inhibition
- **Near-term value drivers: robust pipeline and strong R&D engine**
  - 3 distinct proprietary clinical programs
  - Strong momentum in 2019 – Recent positive top line data readout for THR-149
  - Further important data read out – Phase 1 THR-687 in Q4
- **End-to-end proven ability to discover and develop innovative ophthalmology therapies**
- **Solid financial position**
  - €67.6 million in cash on hand at June 30, 2019
- **Listed on Euronext: OXUR**
- **80 employees, HQ in Belgium, US office in New Jersey**
- **Partners and investors :**

VIB science meets life · bicycle therapeutics · Galápagos · NOVARTIS

Management team with extensive experience across all stages of drug development and commercialization

Patrik De Haes, MD, CEO

- +25 years of successful international management experience in the Life Science industry
- Led the global development and commercialization of the first biotech product at Sandoz (now Novartis)
- Former head of Roche's Global Insulin Infusion division and CEO of Disetronic Medical Systems Inc (US).
- Transformed the Company from a cardiovascular startup to a global player in the retina space

Dominique Vanfleteren, CFO

- +25 years of experience in senior finance, operational, control and reporting roles in pharma
- Former CFO of UCB's Asia Pacific Operations and Finance Director of GSK's Diversified Healthcare Services

Jean Feyen, PhD, CSO

- +25 years of successful pharmaceutical research and development experience
- Former head of Galapagos ' biology and translational team.
- Held senior research positions at Bristol-Myers Squibb (US) and Sandoz (Switzerland)

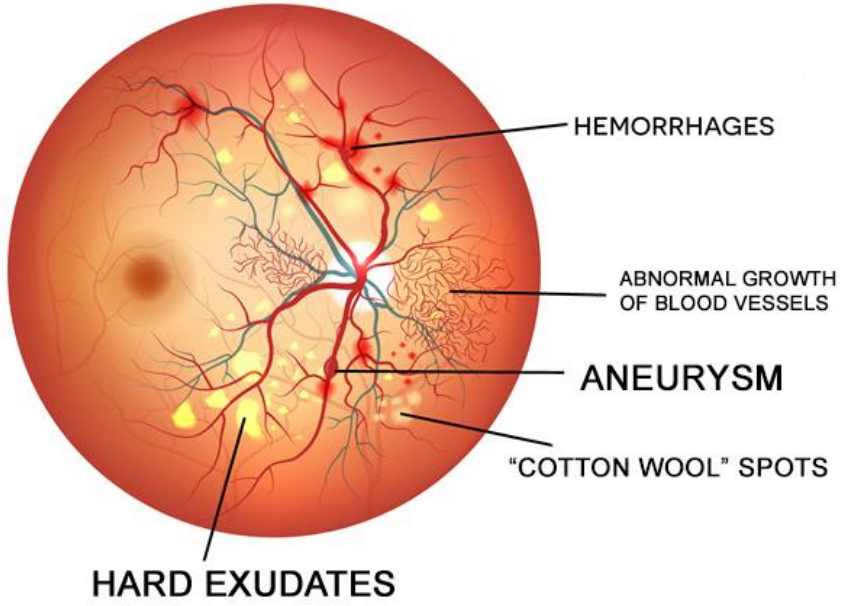
Andy De Deene, MD, MBA, Global Head of Development

- +20 years of experience in drug development at small and large pharma companies
- Previously held senior R&D positions at Innogenetics & Jansen Pharmaceuticals (Johnson & Johnson)
- Led the development of Jetrea (ocriplasmin) from research to approval

Diabetic Retinopathy is a Serious Sight-Threatening Disease

Diabetic retinopathy (DR) is a chronic, progressive, sight-threatening, and life-altering disease which has become a major public health concern globally

450 Mio people with diabetes
150 Mio people with any diabetic retinopathy *
incl. **50 Mio** people with vision-threatening disease, including **DME** **



Normal vision

Impact diabetic retinopathy

BLURRING & SCOTOMATA

* Any diabetic retinopathy is defined as the presence of non-proliferative diabetic retinopathy, proliferative diabetic retinopathy, diabetic macular edema, or any combination thereof

** Vision-threatening diabetic retinopathy is defined as the presence of proliferative diabetic retinopathy and/or diabetic macular edema

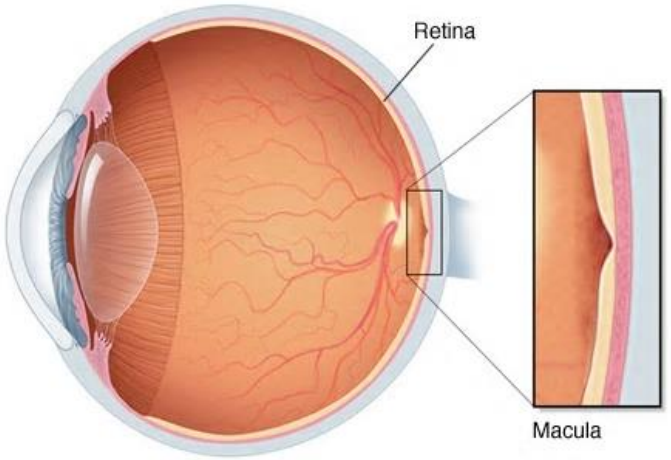
Abbreviation(s): DR, diabetic retinopathy; NPDR, non-proliferative diabetic retinopathy; PDR, proliferative diabetic retinopathy; DME, diabetic macular edema

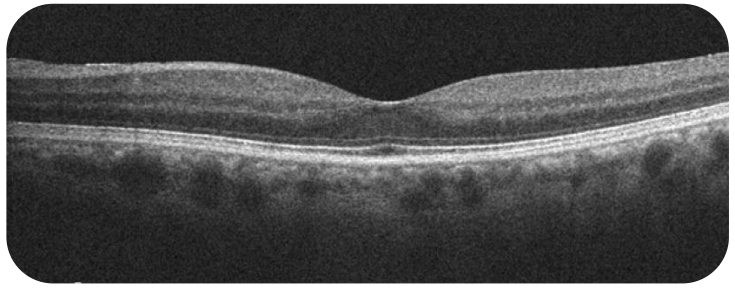
OXURION®

Diabetic Macular Edema is a Severe Complication of DR

Diabetic macular edema (DME) is an accumulation of fluid in the macula - part of the retina that controls our most detailed vision abilities - due to leaking blood vessels. DME can occur at any stage of DR.

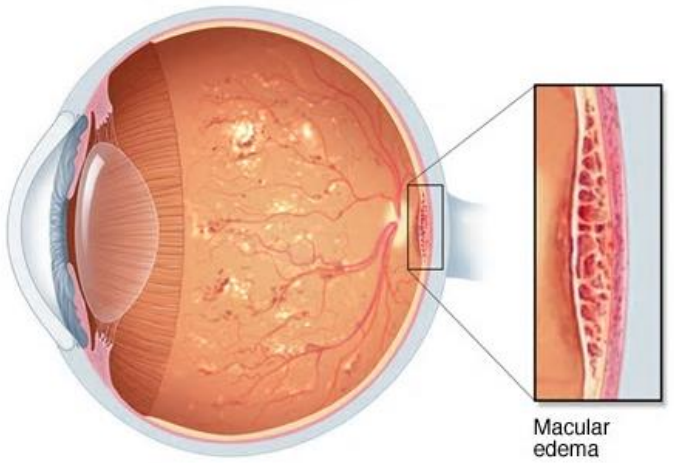
Normal eye

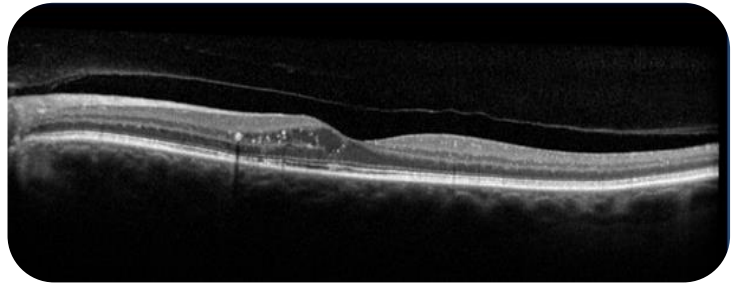




Courtesy of Heidelberg Engineering

Eye with DME





Courtesy of Heidelberg Engineering

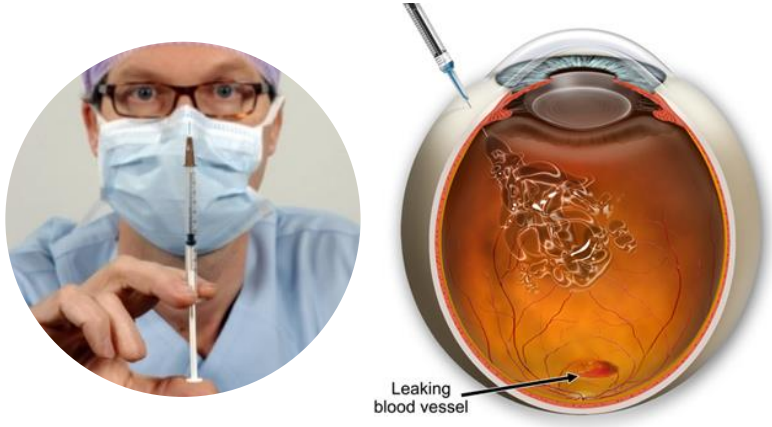
OXURION®

Limited treatment options for DR & DME

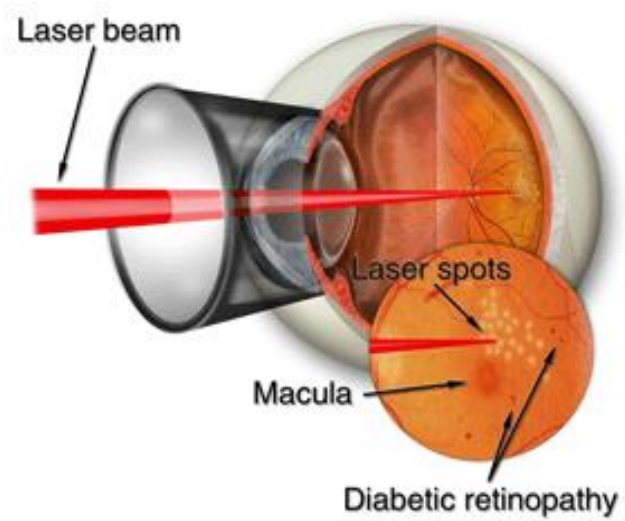
Diabetic eye disorder is expected to remain one of the fastest-growing segments of the retina disorder drugs market due to the diabetes epidemy

- Patients with DME are treated with pharmacological treatment alone in 60% of cases, up to 80% when combined with non-pharmacological treatment (e.g. laser)
- 80% of pharmacological treatments are based on anti-VEGF therapies, i.e. aflibercept (EYLEA®, Regeneron), ranibizumab (LUCENTIS®, Roche), or off-label use of bevacizumab (AVASTIN®, Roche)

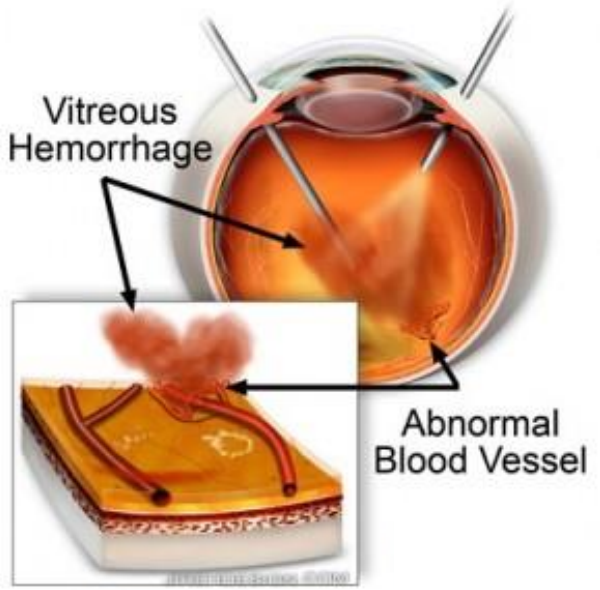
Intravitreal anti-VEGF therapy



Laser photocoagulation



Vitrectomy

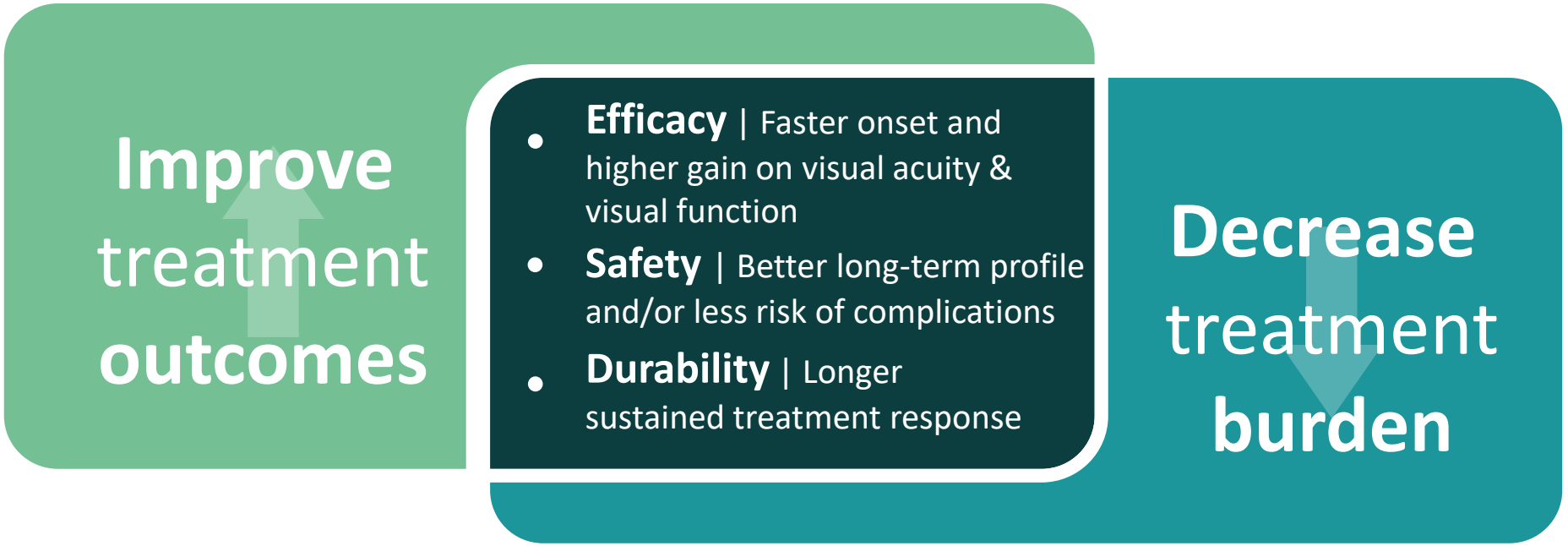


Abbreviation(s): DR, diabetic retinopathy; DME, diabetic macular edema; VEGF, vascular endothelial growth factor

Source(s): adapted from Datamonitor Healthcare, 2018

Major Unresolved Challenges of anti-VEGFs in DME

VEGF-independent therapies offer chance to improve treatment outcomes in DME



Abbreviation(s): VEGF, vascular endothelial growth factor

Source(s): adapted from Datamonitor Healthcare 2018

Our Pipeline Addresses Limitations of Standard of Care

VEGF-independent therapies offer chance to improve treatment outcomes in DME

OXUR program	Unresolved Challenges / Our Ambition	
	↑ Improve treatment outcomes	↓ Decrease treatment burden
THR-149 Plasma kallikrein inhibitor	Offering a solution for suboptimal responders to anti-VEGFs in DME	
THR-317 anti-PlGF mAb	Complementing anti-VEGF therapy for the treatment of DME	
THR-687 RGD Integrin antagonist	Providing a broad therapeutic alternative for retinal vascular disorders	

OXURION®

Abbreviation(s): VEGF, vascular endothelial growth factor

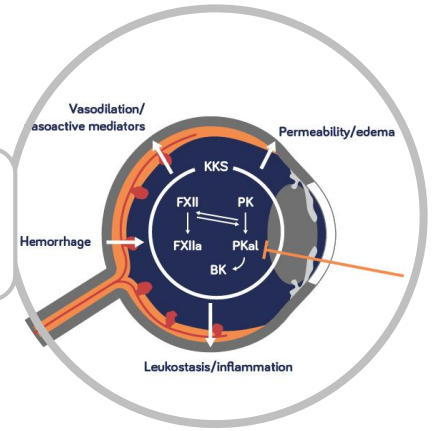
Clinical data read out in H2 2019 – Phase 2 studies starting in 2020

Clinical-stage programs are based on distinct mechanisms of action for better treatment outcomes

2019		2020/2021
H1	H2	
THR-149 Phase 1 (DME)	Planning Phase 2	THR-149 Phase 2 (DME sub-resp)
THR-317 Phase 2a (DME)	Analysis / Under Review	THR-317 Phase 2b (DME)
THR-317 003 Phase 2 (MacTel 1)		THR-317 Phase 2 (MacTel1)
THR-687 Phase 1 (DME)		THR-687 Phase 2 (DME)

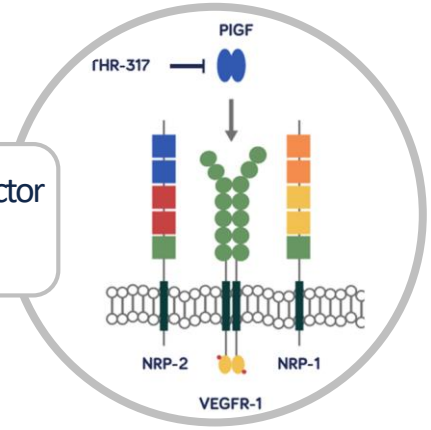
Plasma kallikrein

THR-149



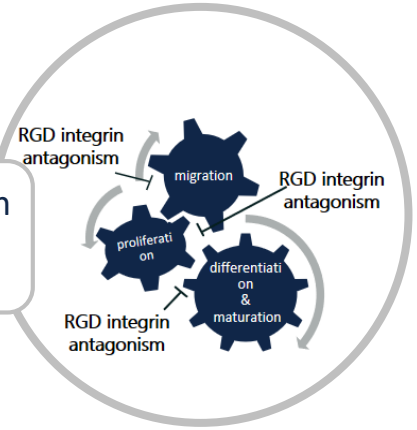
Placental Growth Factor

THR-317



Pan-RGD integrin

THR-687



OXURION®

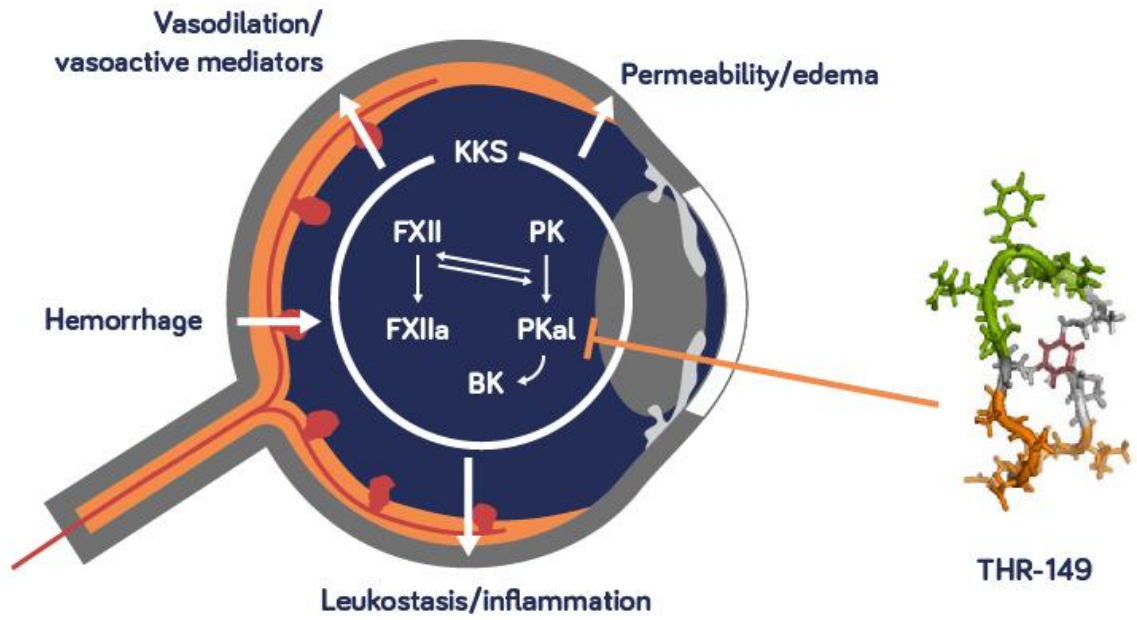
Abbreviation(s): DME, diabetic macular edema; MacTel, macular telangiectasia

THR-149 :
Plasma Kallikrein Inhibitor

OXURION®

THR-149: Plasma Kallikrein Inhibitor for Diabetic Macular Edema

Highly Potent Selective and Stable Peptide targeting Plasma Kallikrein



(K_i PKal = 0.4 nM)

- Plasma Kallikrein (PKal) is a clinically well validated target for edema, inflammation and the prevention of microhemorrhages
- THR-149 was developed in partnership with Bicycle Therapeutics *

* Teufel *et al*. 2018 J.Med.Chem. **61**: 2823-36

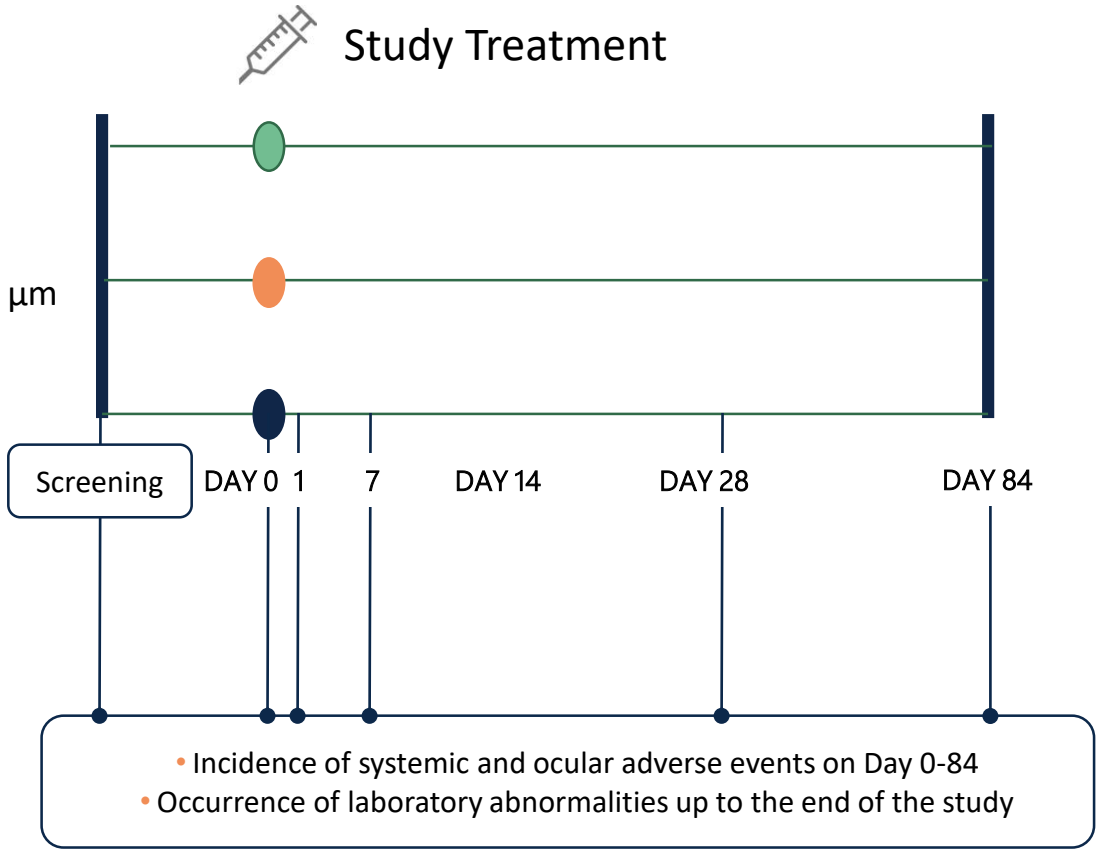
OXURION®

THR-149-001: Phase 1 study design in DME patients

Open-label, Multicenter, Dose Escalation Study ClinicalTrials.gov Identifier: NCT03511898

n = 12-18

- IVT administration
- Age > 18 years
- Central-involved DME CST >300 µm (OCT)
- BCVA ≤ 62 and ≥ 23 letters

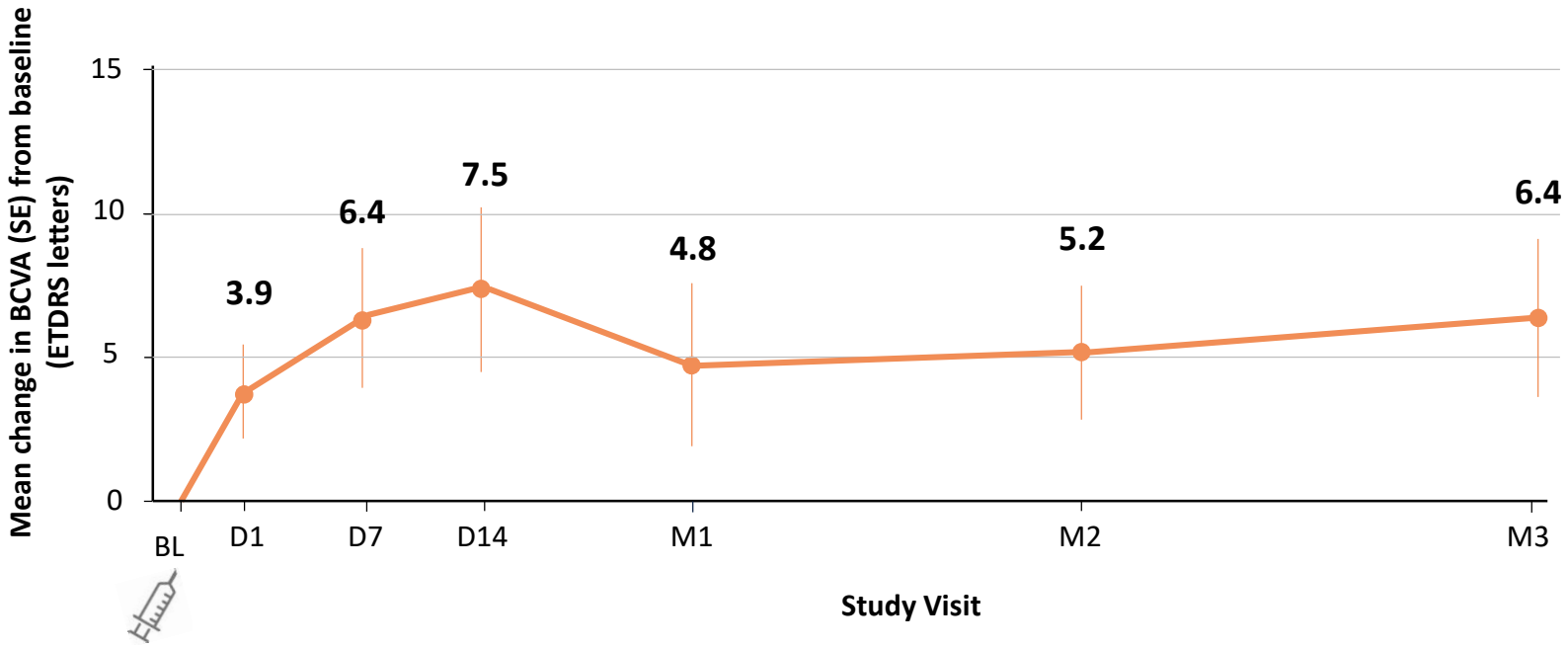


- 0.005 mg THR-149
- 0.025 mg THR-149
- 0.125 mg THR-149

THR-149-001: BCVA increased rapidly and was maintained for 3 months after 1 injection

Mean change in BCVA from baseline *

All Treated Subjects, Overall



- Mean BCVA gain occurred at every visit
- Mean change in BCVA from baseline was the highest at Day 14 and was maintained at Month 3

OXURION®

* Value before rescue carried forward

THR-149-001: Key Take Away Messages

- THR-149 is **safe** and **well tolerated**:
  - No DLTs
  - No ocular SAEs
  - 1 treatment-related ocular AE - considered related to the injection procedure

- Mean BCVA gain was **fast** and **maintained** until end of study:
  - Day 1: 3.9 letters
  - Max at Day 14: 7.5 letters
  - Month 3: 6.4 letters

- **Macular volume** at BL seems to be indicative for BCVA response, and amongst the BCVA responders macular volume was maintained over time

Overall gains noted in BCVA, and improvement in CST in some subjects are encouraging and warrant further clinical research with multiple injections of THR-149

Phase 2 study THR 149 in DME expected to start in H1 2020

THR-317 :
anti-PlGF (Placental growth factor)

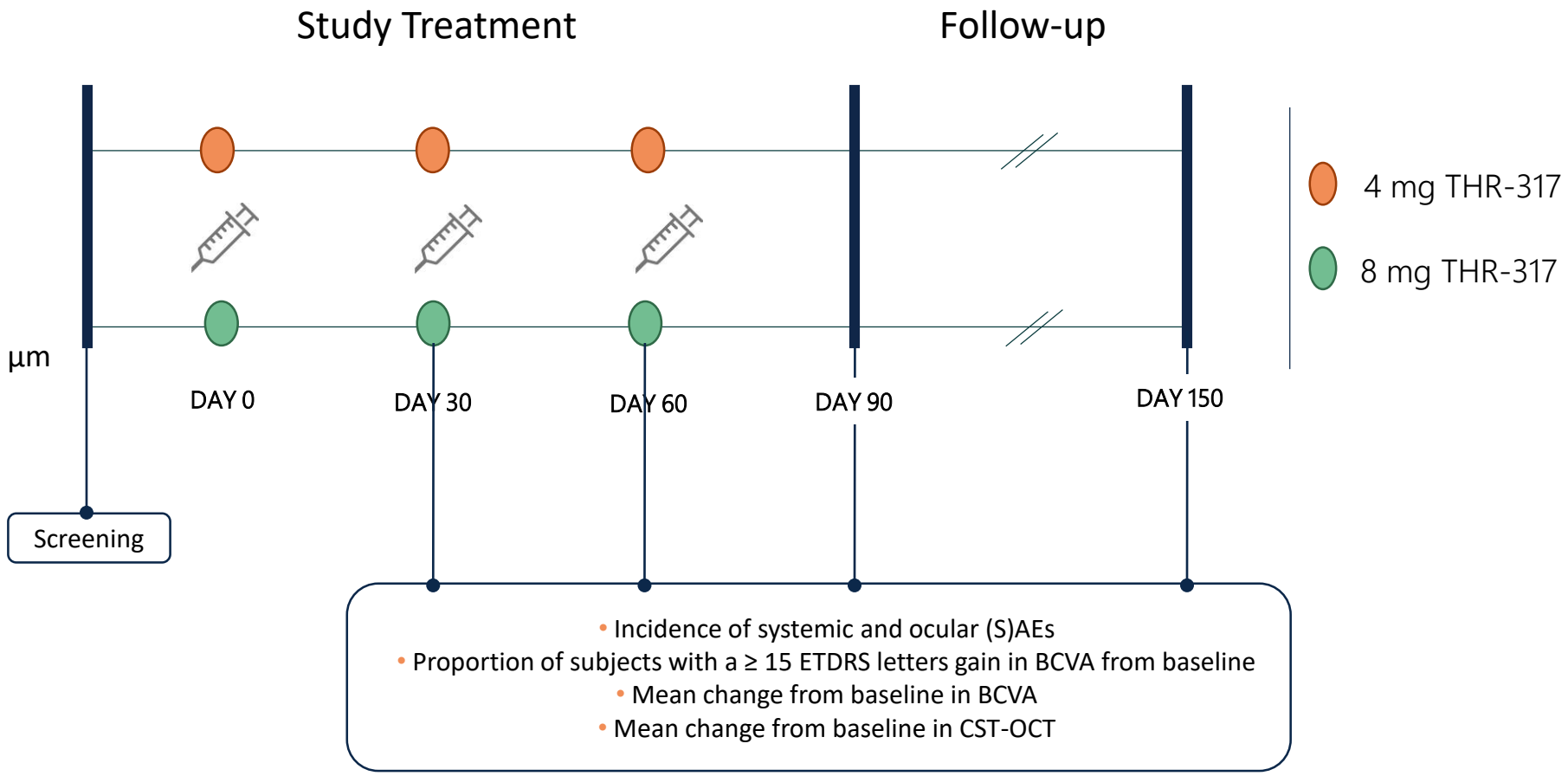
OXURION®

THR-317-001: DME Phase I/II

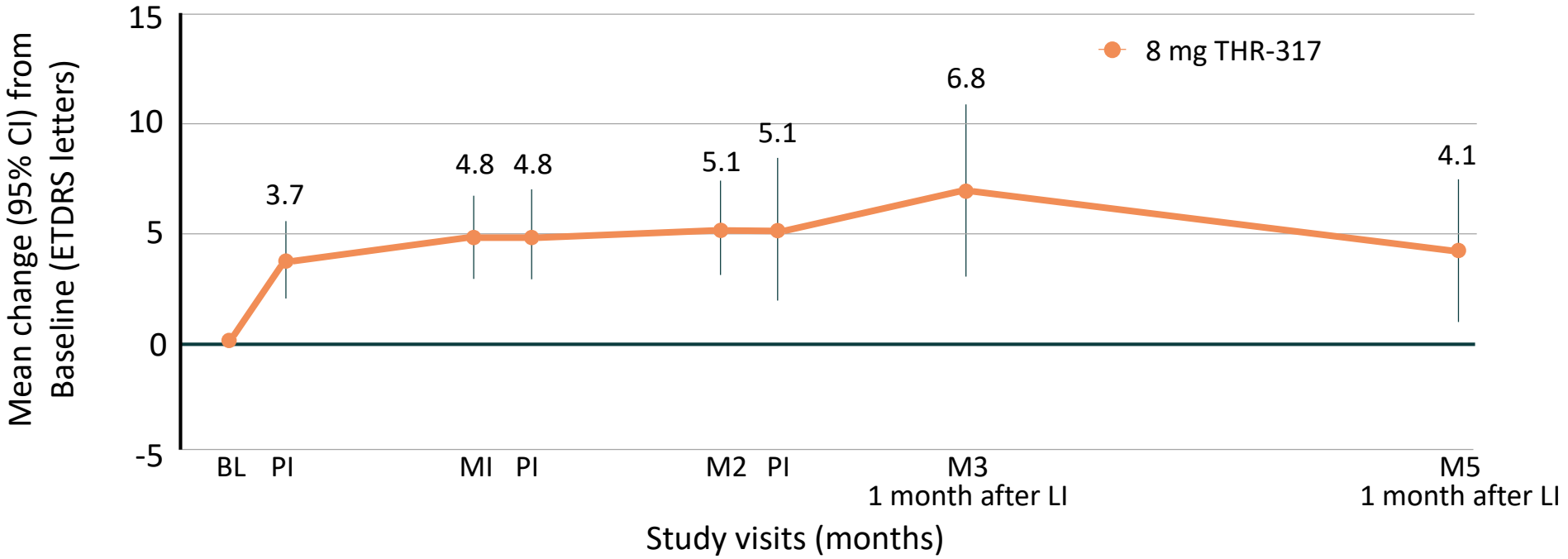
Single-masked, multicenter study to evaluate the safety and efficacy ClinicalTrials.gov Identifier: NCT03071068

Total n = 49 patients

- IVT administration
- Age > 18 years
- Treatment naïve n= 40
- Anti-VEGF poor responders n=9
- Randomized 1:1
- Centre-involved DME; CST ≥ 320 µm
- BCVA ≤ 20/40 and ≥ 20/320



THR-317-001: Mean Change in BCVA From Baseline – All Subjects



- Increase in mean BCVA shortly after first injection
- Increases in mean BCVA maintained to M5
- Trend for higher BCVA increases in the 8 mg arm
- Continued BCVA gain in the 8 mg arm, with highest increase at M3

OXURION®

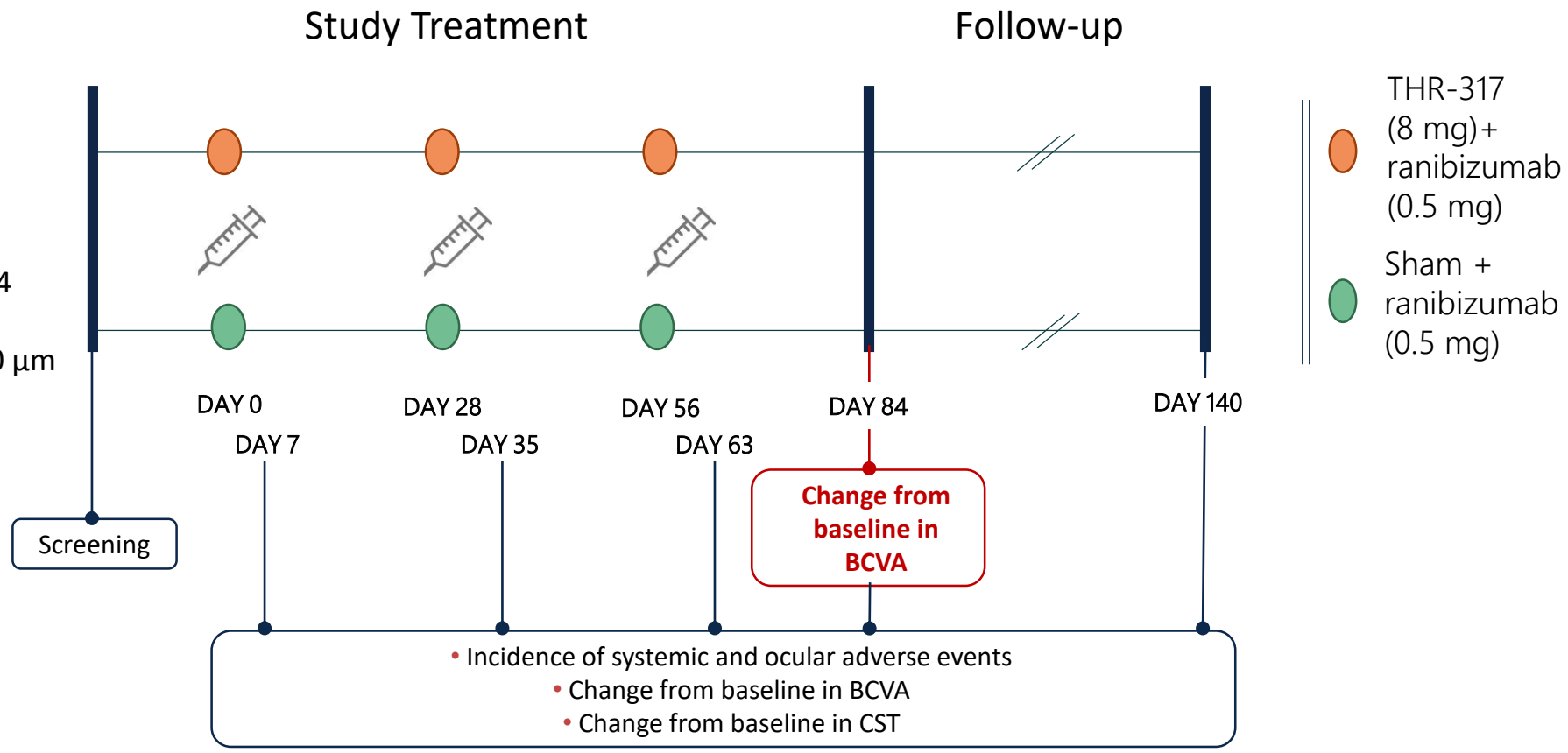
BL, Baseline; PI, post-injection visit (7 days after each injection); LI, last injection

THR-317-002: Phase 2 Study in THR-317 + ranibizumab for DME

Randomized, single-masked, active-controlled, multicenter study ClinicalTrials.gov Identifier: NCT03499223

Total n = 72 patients

- IVT administration
- Age > 18 years
- Treatment naïve n= 48
- Anti-VEGF poor responders n=24
- Randomized 2:1
- Centre-involved DME; CST ≥ 320 µm
- BCVA ≤ 20/40 and ≥ 20/320



Primary outcome measures

Secondary outcome measures

OXURION®

Topline data THR-317-002 THR-317 + ranibizumab for DME

Data Analysis ongoing – THR 317 for DME Program Under Review

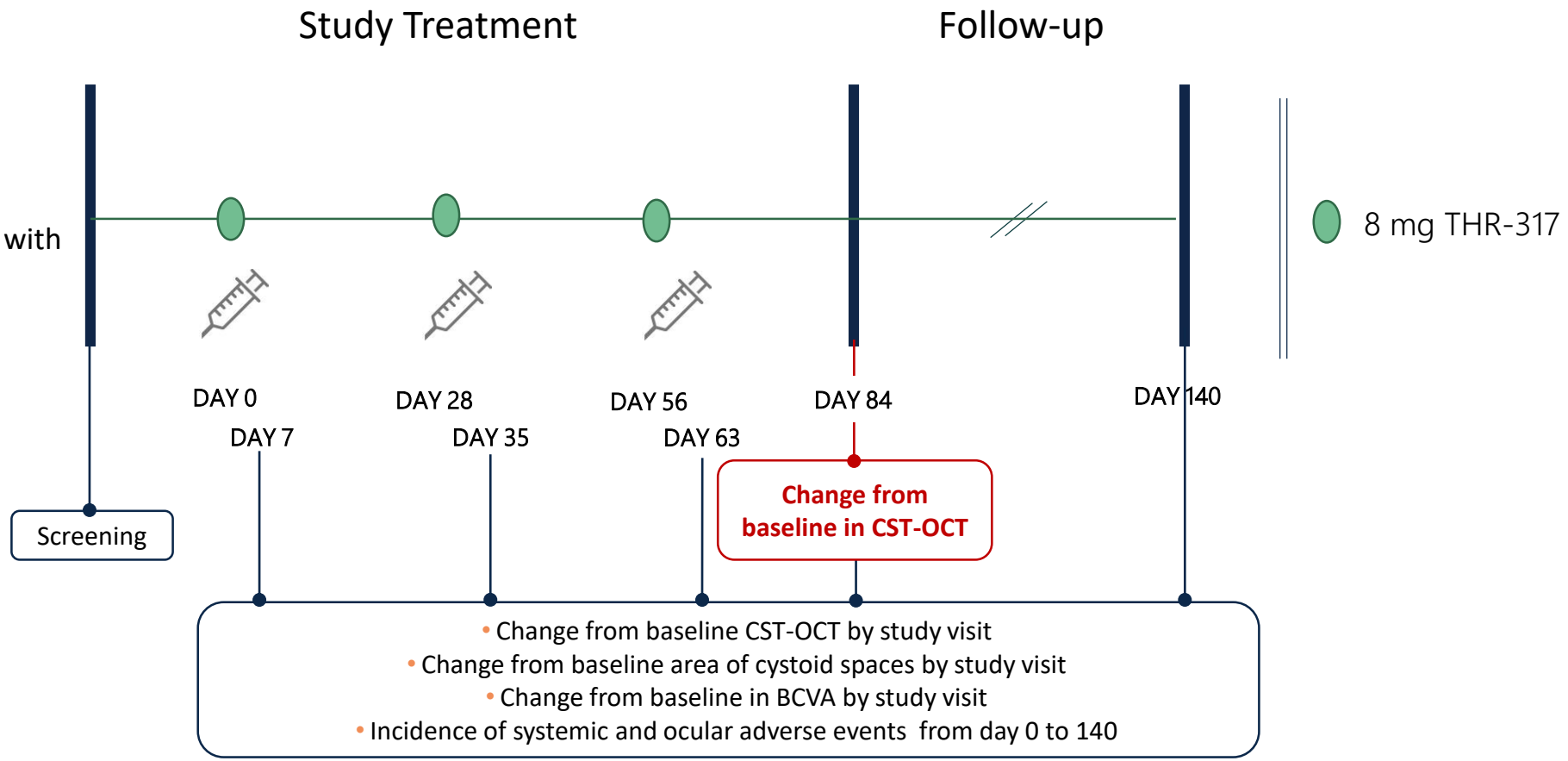
- Combination therapy did not show increase in BCVA in the overall population at Month 3.
- Certain improvement in mean BCVA at Month 3 observed with the combination therapy in 2 pre-specified subgroups:
  - poor (or non) responders to prior anti-VEGF
  - patients with poor vision - baseline BCVA ≤65 letters
- Topline data confirm THR-317 in combination with ranibizumab is safe and well-tolerated

THR-317-003: Phase 2 THR-317 for MacTel1 Study Design

Investigator Initiated – Is MacTel1 PlGF drive disease? – Data Read out by end of 2019

Total n = 10 patients

- IVT administration
- Age > 18 year
- Macular edema due to MacTel1 with CST >300 µm (OCT)



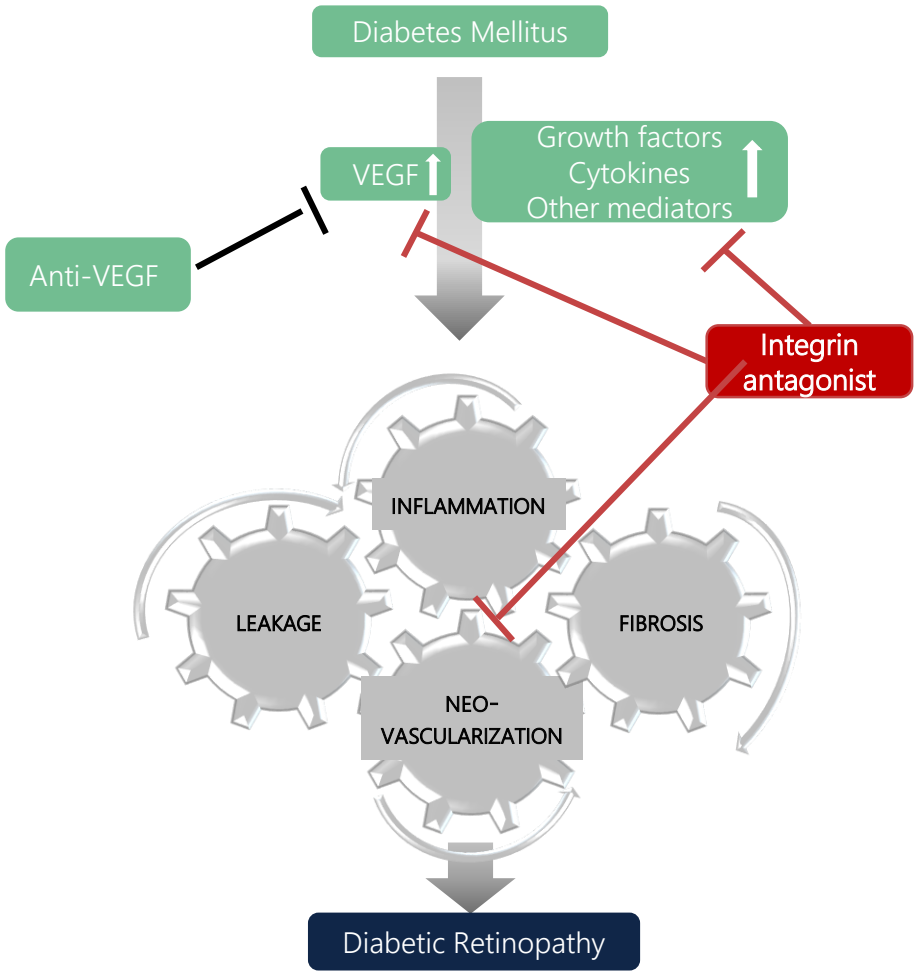
OXURION®

THR-687 :
Pan-RGD Integrin Antagonist

OXURION®

THR-687: a Pan RGD Integrin Antagonist

Integrin Antagonists work both upstream and downstream of VEGF, hence they have a broad efficacy



- THR-687 is a novel, potent RGD integrin antagonist licensed from Galapagos *
- Inhibition of integrins targets multiple processes involved in pathological angiogenesis and vascular leakage
- THR-687 has a broad therapeutic potential:
  - Diabetic retinopathy (DR) with and without DME
  - Wet (Neovascular) AMD

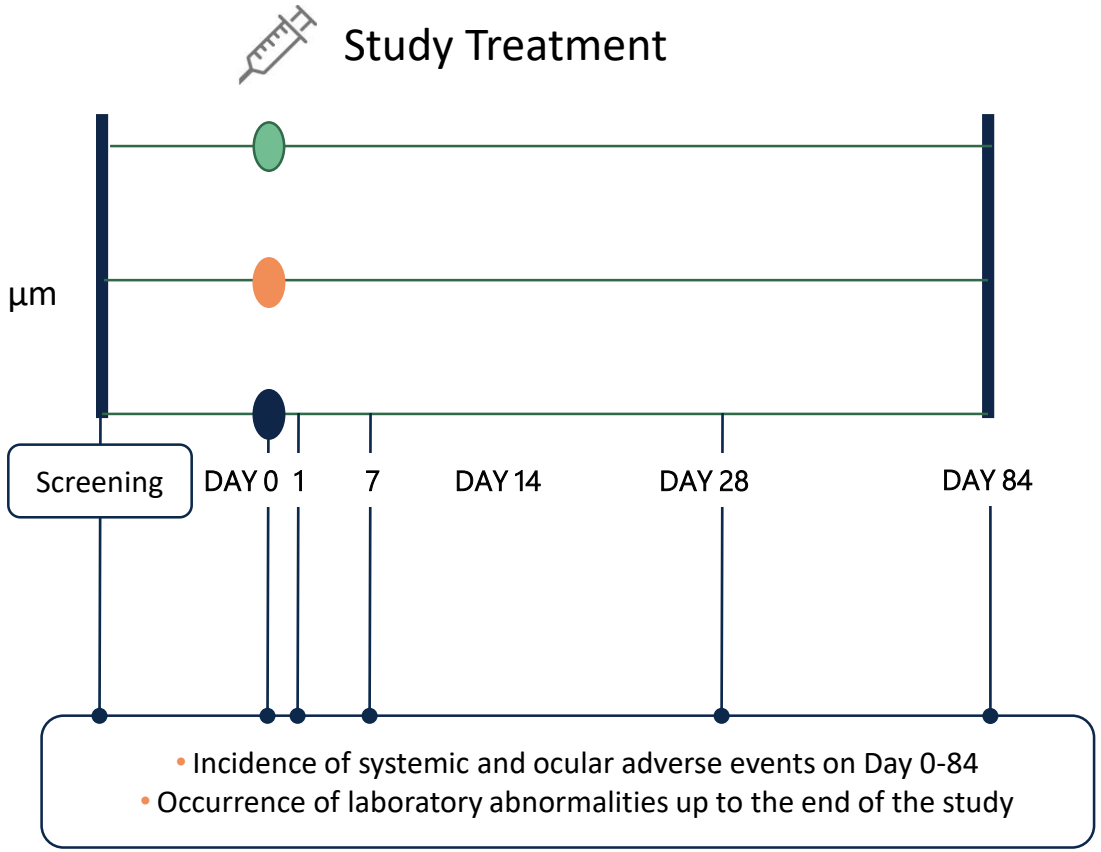
* Hu *et al*. 2018 Experimental Eye Research **22**: 43-52

THR-687-001: Phase 1 study design in DME patients

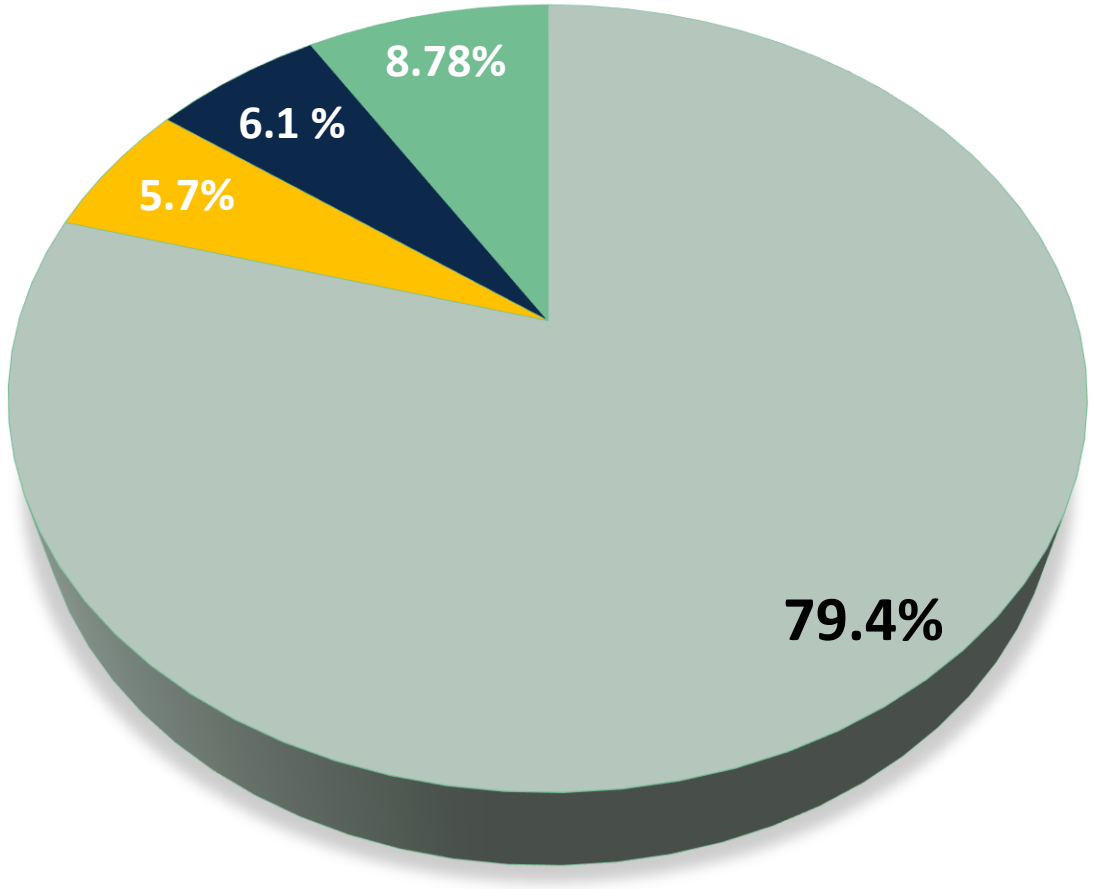
Open-label, Multicenter, Dose Escalation Study ClinicalTrials.gov Identifier: NCT03666923

Total n = 12-18 patients

- IVT administration
- Age > 18 years
- Central-involved DME CST >300 µm (OCT)
- BCVA ≤ 62 and ≥ 23 letters



Oxurion (OXUR) Shareholder Structure Overview



- Mr. Thomas M. Clay and entities controlled by him
- Baron Philippe Vlerick and entities controlled by him
- Novartis Pharma AG
- Free float

Oxurion NV has (*as of 31 March 2019*) :

- 38,291,950 outstanding shares
- 1,139,750 accepted unexercised warrants
- 675,000 warrants to be assigned

Oxurion NV Cash position (end of June 2019): €67,6 million

OXURION key take-away messages

- THR-149 program (novel VEGF independent pathway!) reported positive Phase 1 data : safe, immediate and sustained effect.
- THR-687 program (novel VEGF independent pathway!) on track for Phase 1 data read out before YE 2019
- THR-317 program (member of VEGF family) under review: final decision post read out of MacTel1 study (Q1 2020)
- Start of Phase 2 studies with THR-149 and THR-687 (subject to data) from H1 2020 onwards – final study designs under consideration (subject to data/ expert review)
- Cash allowing implementation of all current development plans through 2021

ADVANCING SCIENCE.®
ENHANCING VISION.