

# Disease Modifying Treatments for Diabetic Eye Disorders

*Ophthalmology Innovation Summit - July 2019*

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# Forward-looking statement

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# 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 readouts in Q3/Q4 2019 including THR-317
- **End-to-end proven ability to discover and develop innovative ophthalmology therapies**
- **Solid financial position**
  - €76.2 million in cash on hand at March 31<sup>st</sup> 2019
- **Listed on Euronext: OXUR**
- **80 employees, HQ in Belgium, US office in New Jersey**
- **Partners and investors :**



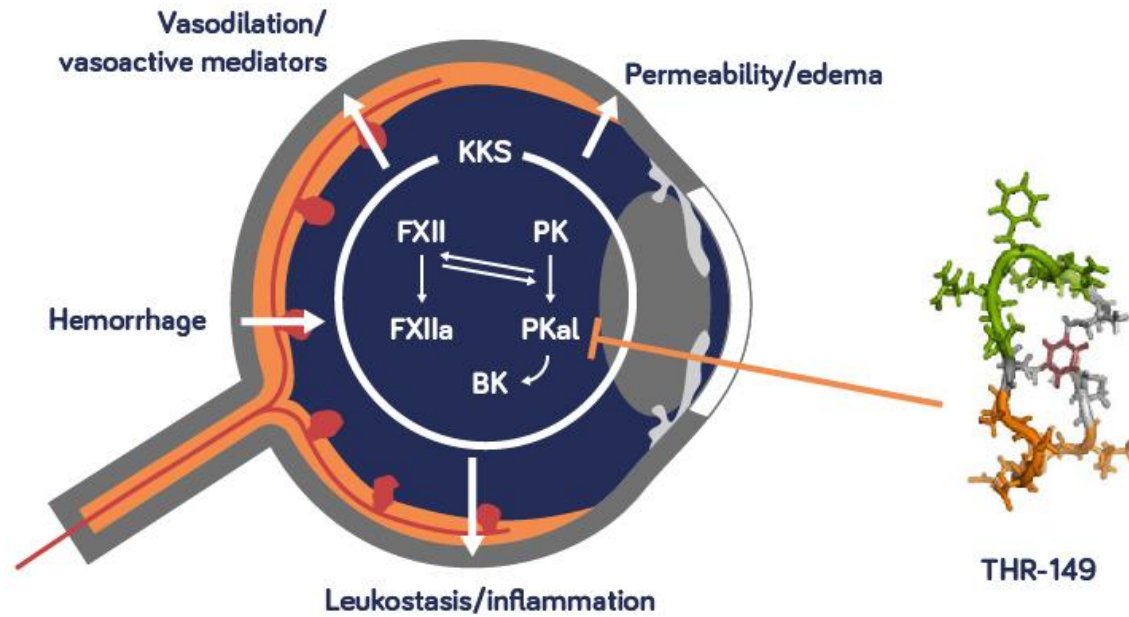
# Our Pipeline Addresses Limitations of Standard of Care

Oxurion is addressing unresolved SoC challenges by developing next-generation treatments for diabetic eye disorders

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

# THR-149: Plasma Kallikrein Inhibitor for Diabetic Macular Edema

Highly Potent Selective and Stable Peptide targeting Plasma Kallikrein



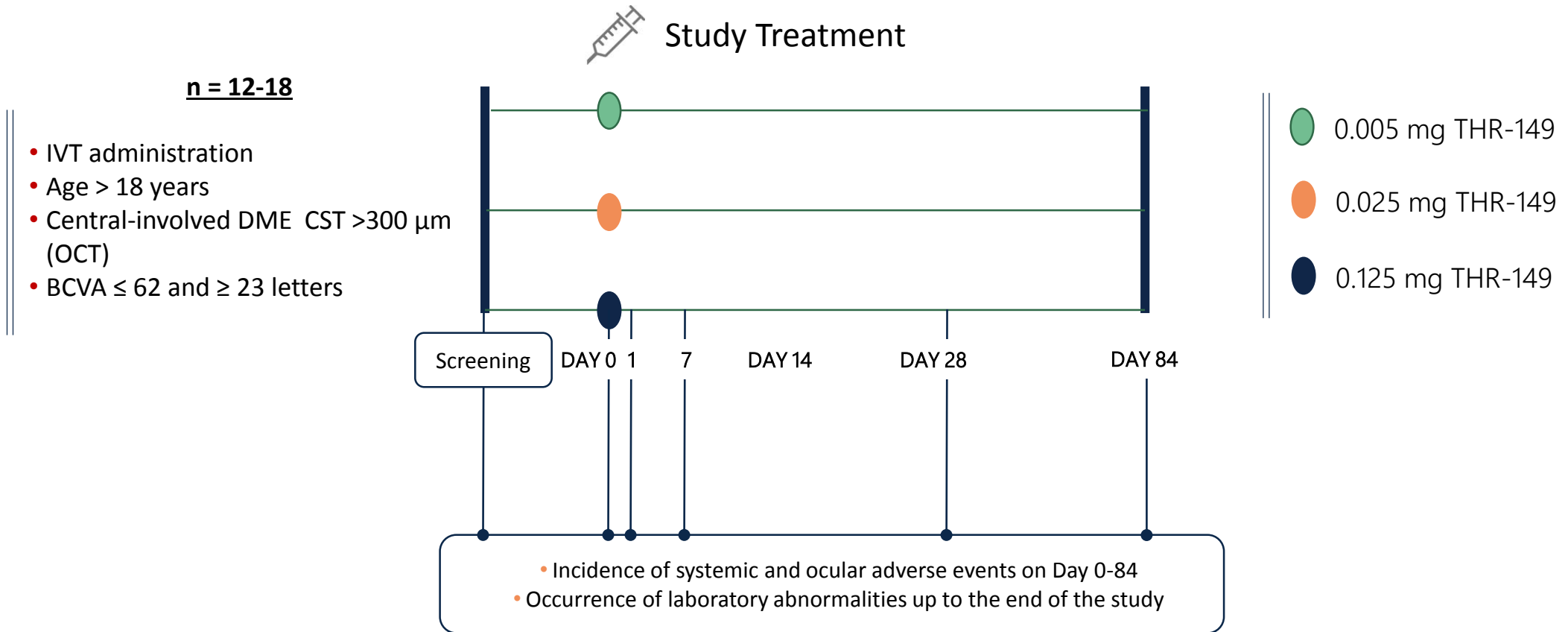
( $K_i$  PKal = 0.4 nM)

- 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

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

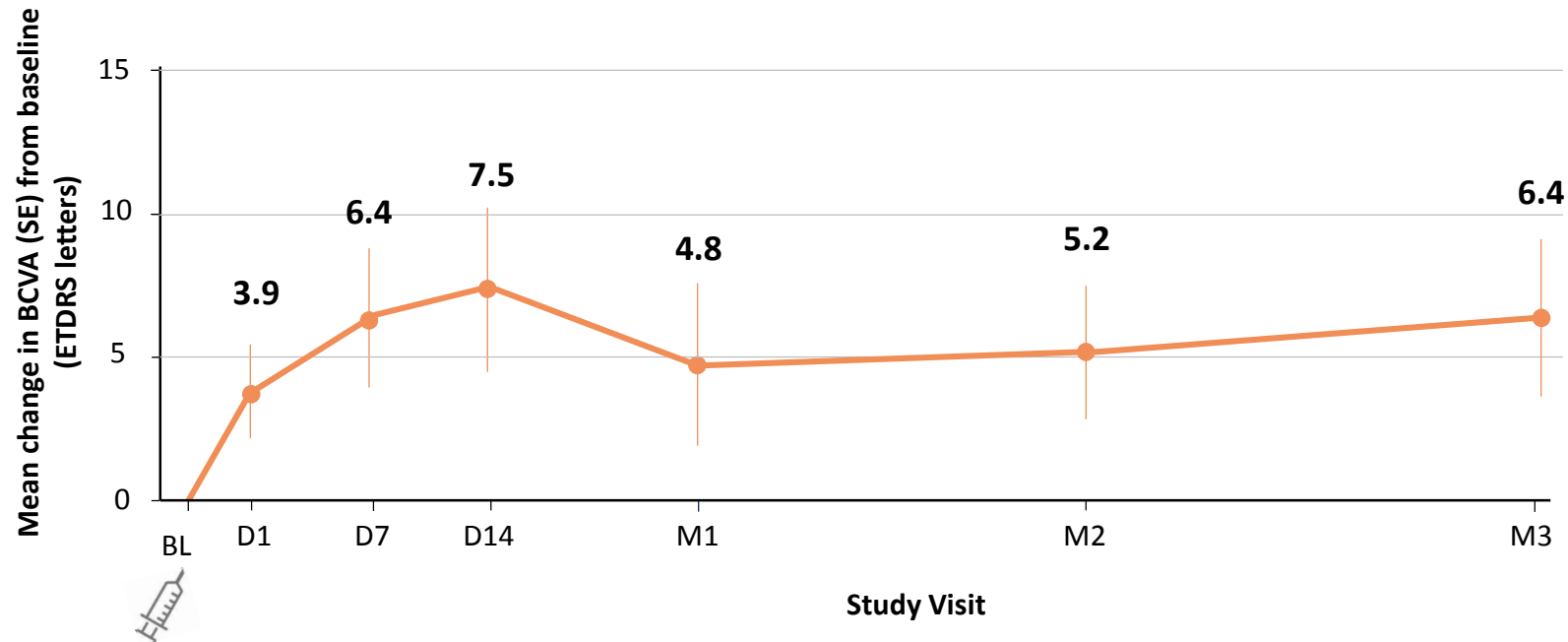
Ongoing Open-label, Multicenter, Dose Escalation Study [ClinicalTrials.gov Identifier: NCT03511898](https://clinicaltrials.gov/ct2/show/study/NCT03511898)



# 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

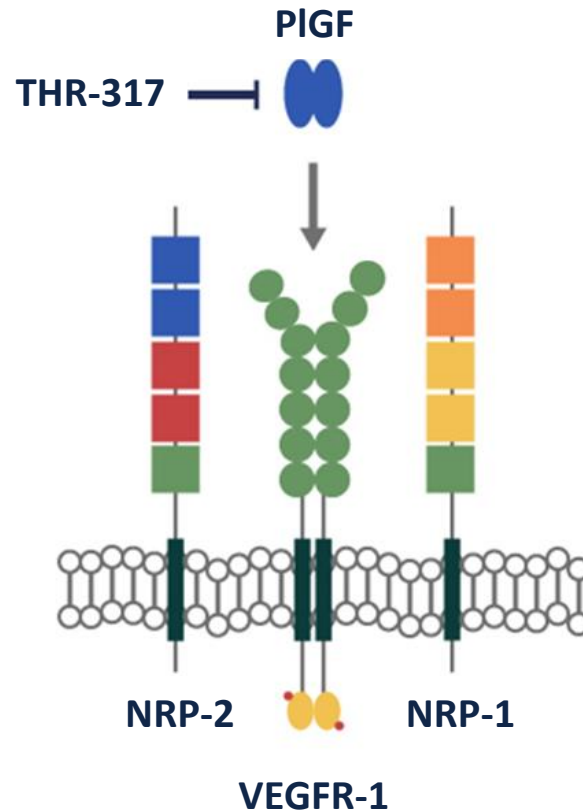


- Mean BCVA gain occurred at every visit
- Mean change in BCVA from baseline was the highest at Day 14 and was maintained at Month 3

# THR-317 : mAb Against Human Placental Growth Factor

Selectively inhibits pathological angiogenesis

## PIGF signaling cascade



## Placental growth factor (PIGF)\*

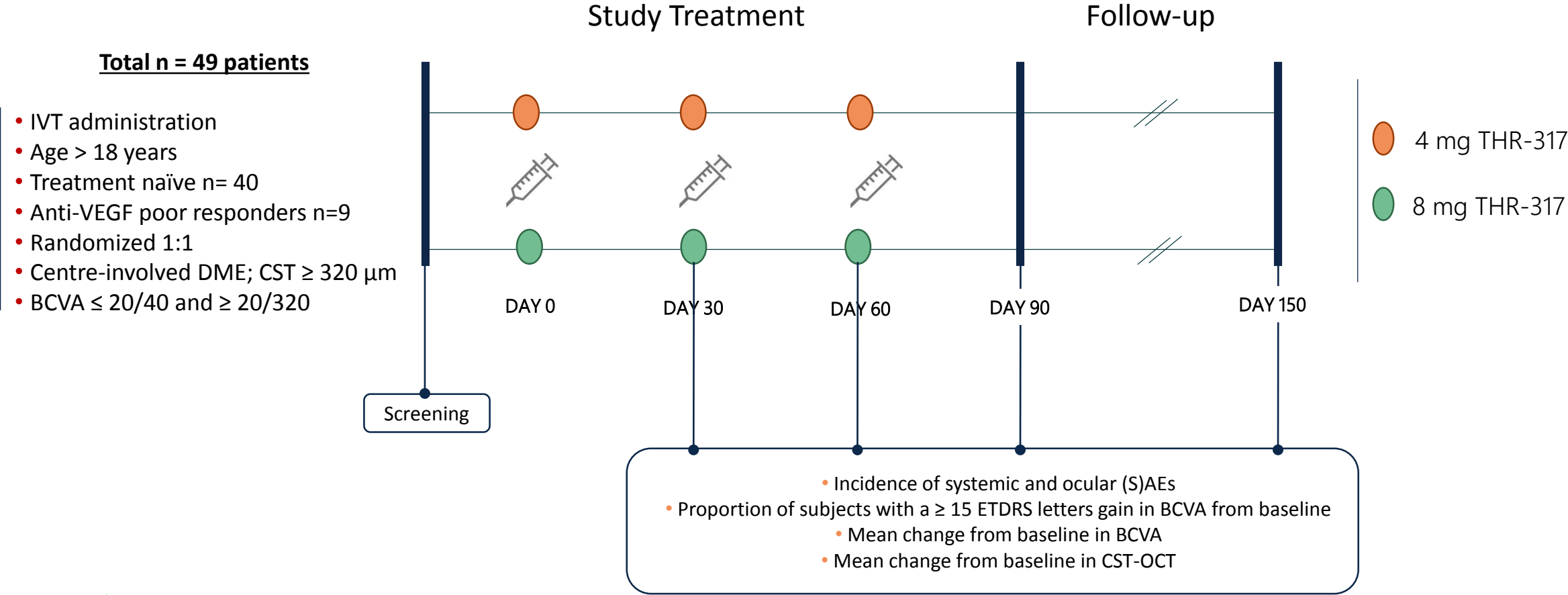
- Member of the VEGF-family signaling via binding to VEGFR-1, NRP-1, NRP-2 (low picomolar range)
- Key molecule in pathological angiogenesis, edema and inflammation
- Increasing levels of PIGF correlate with disease severity

\* Carmeliet *et al.* 2001 *Nat Med* **7**: :575-83  
Van de Veire *et al.* 2010 *Cell*. **141**: 178-90  
Van Bergen *et al.* 2017 *Experimental Eye Res.* **165** : 136-50



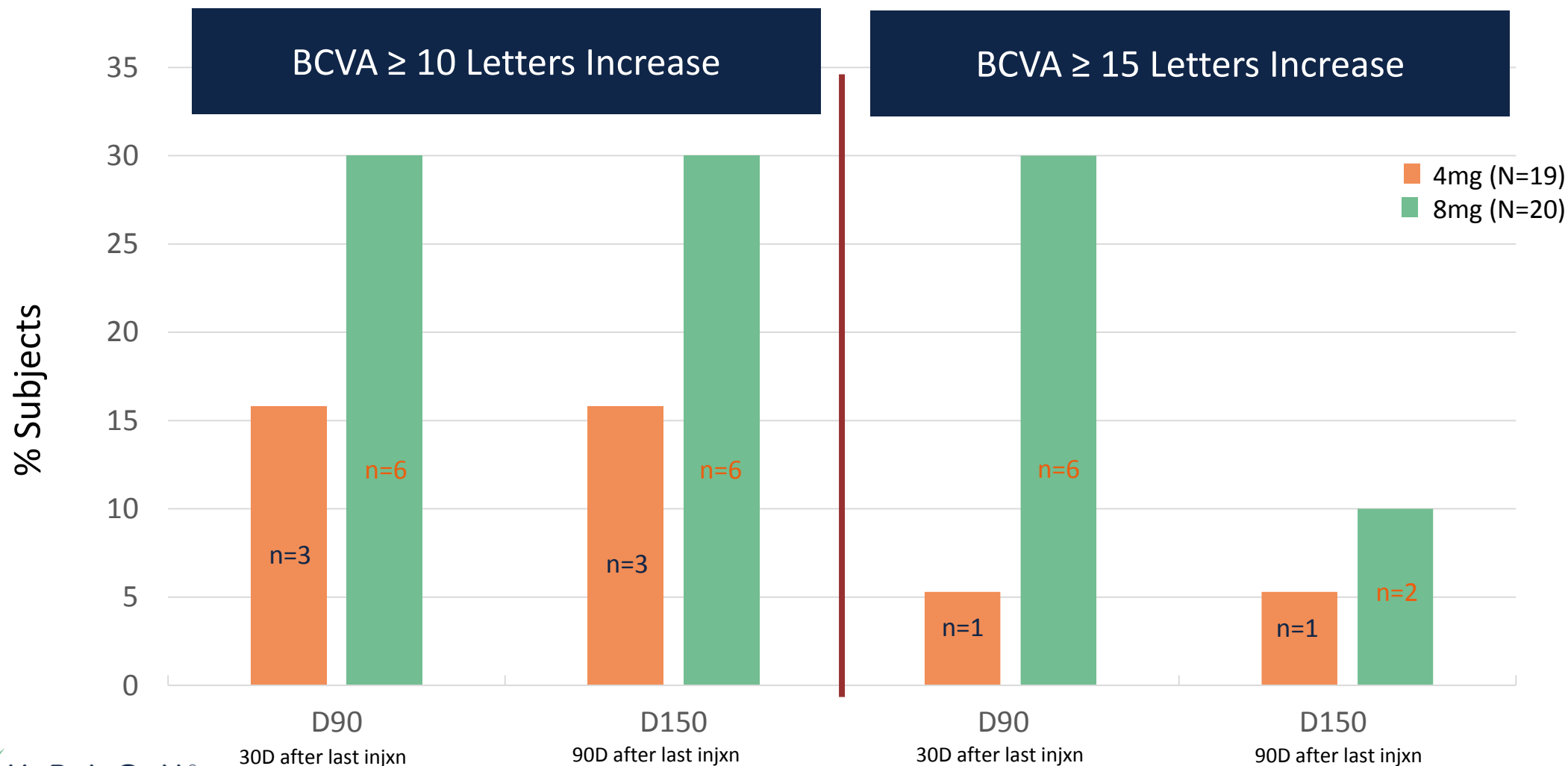
# THR-317-001: DME Phase I/II

Single-masked, multicenter study to evaluate the safety and efficacy [ClinicalTrials.gov Identifier: NCT03071068](https://clinicaltrials.gov/ct2/show/study/NCT03071068)



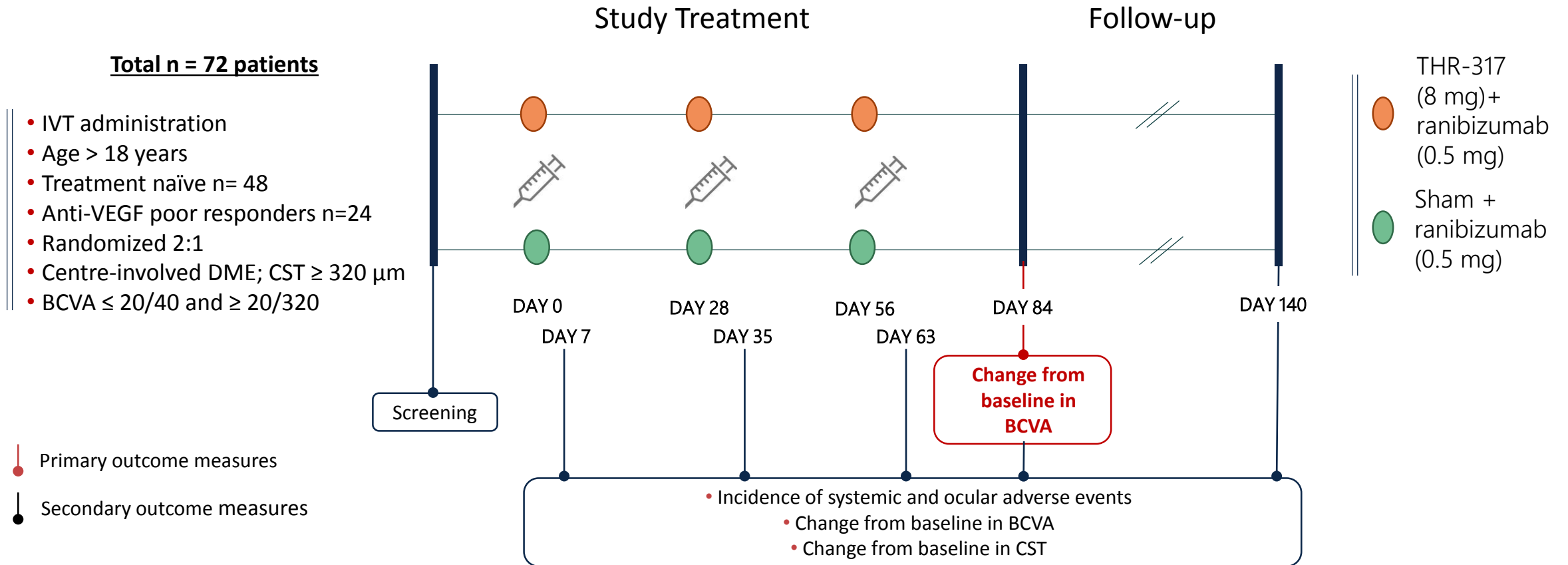
# THR-317-001: 30% of anti-VEGF naïve patients achieved $\geq 10$ letter vision gain at D150

Proportion of Subjects with ETDRS Letters Gained from Baseline



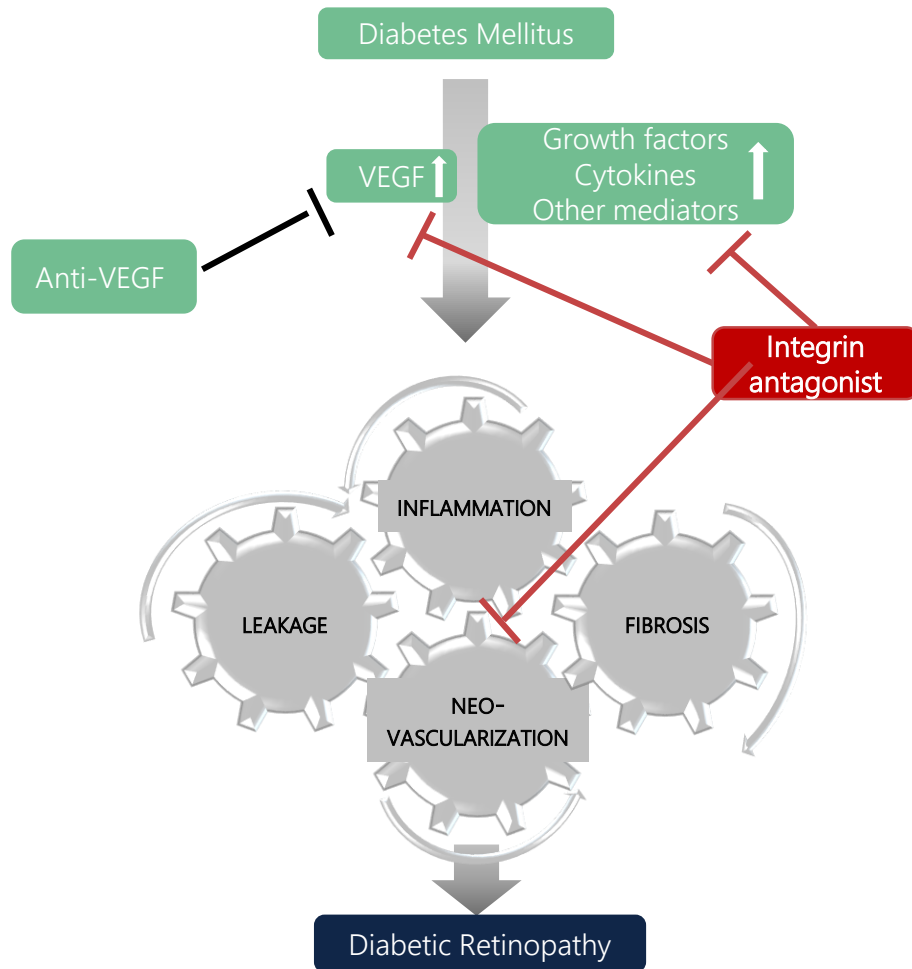
# THR-317-002: Phase 2 Study in THR-317 + ranibizumab for DME

Randomized, single-masked, active-controlled, multicenter study [ClinicalTrials.gov Identifier: NCT03499223](https://clinicaltrials.gov/ct2/show/study/NCT03499223)



# 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

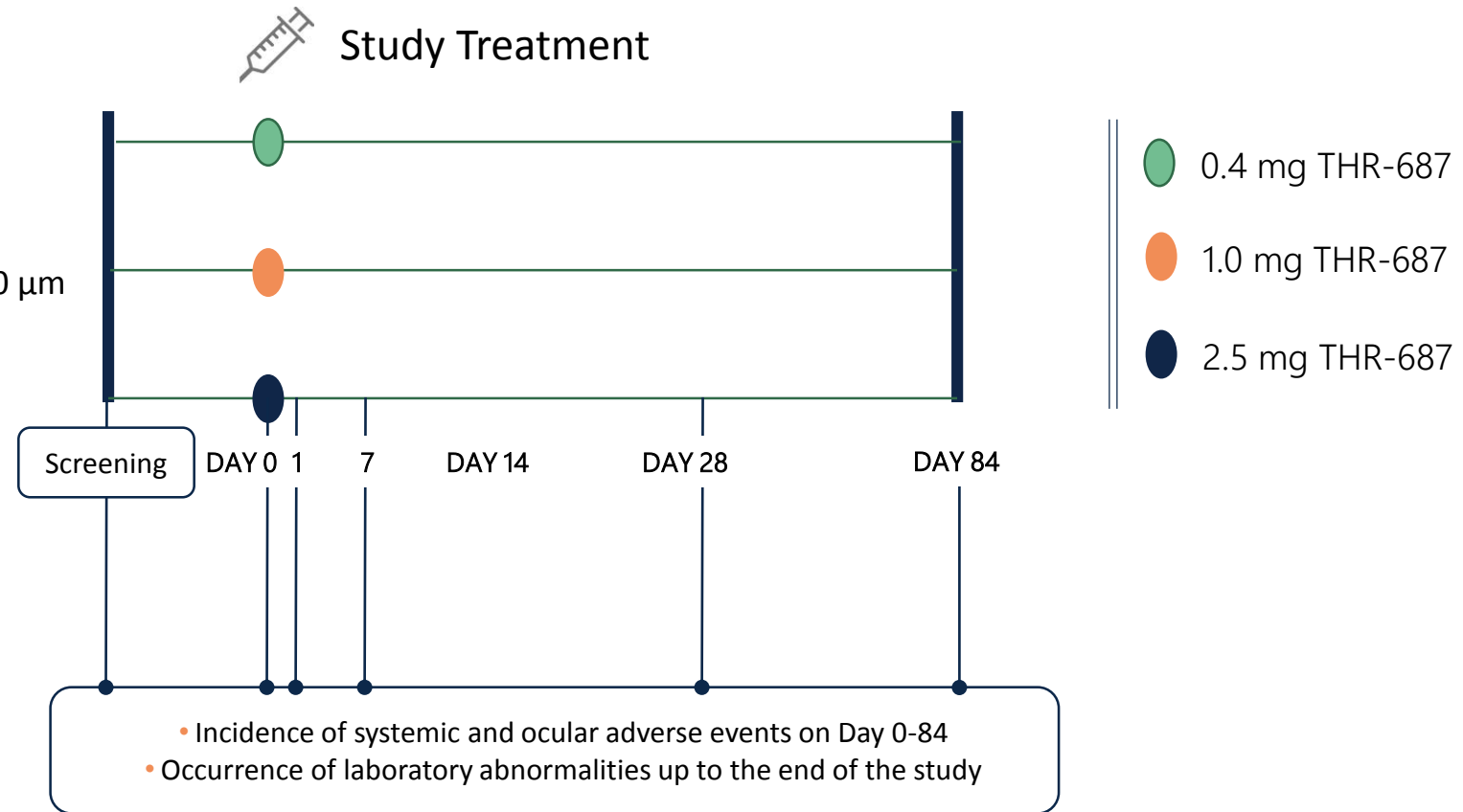
\* Hu *et al.* 2018 *Experimental Eye Research* **22**: 43-52

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

Ongoing Open-label, Multicenter, Dose Escalation Study [ClinicalTrials.gov Identifier: NCT03666923](https://clinicaltrials.gov/ct2/show/study/NCT03666923)

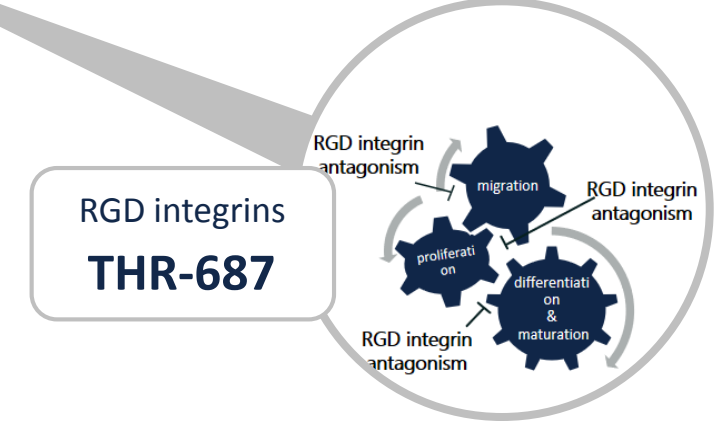
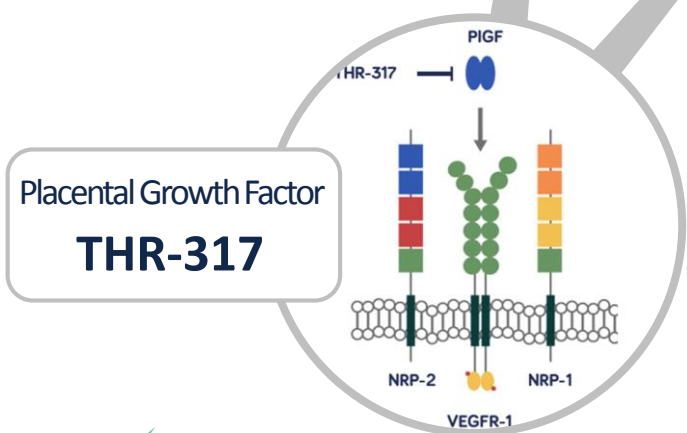
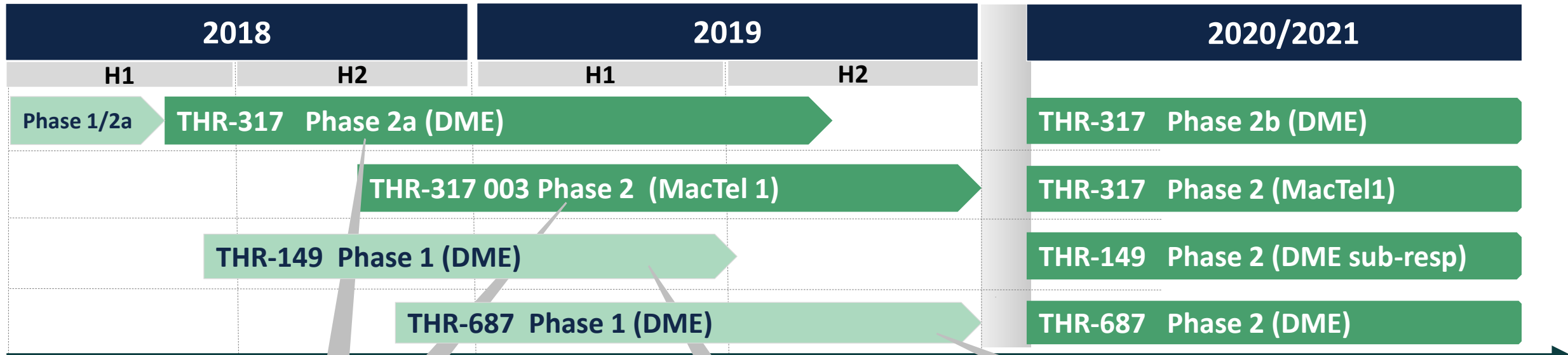
**Total n = 12-18 patients**

- IVT administration
- Age > 18 years
- Central-involved DME CST >300  $\mu\text{m}$  (OCT)
- BCVA  $\leq 62$  and  $\geq 23$  letters



# 2019 – Exciting year for Oxurion

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



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