ASX RELEASE
15 September 2022

2RT® Webinar Presentation by Professor Robyn H. Guymer, MBBS, PhD Today

Nova Eye Medical Limited (ASX: EYE) (**Nova Eye Medical** or the **Company**), a medical technology company committed to advanced ophthalmic treatment technologies and devices, is pleased to advise that **TODAY** (15 September 2022) at 12.00pm Eastern Australian time, Professor Robyn H. Guymer, MBBS, PhD will give a presentation on 2RT®, covering the clinical history of 2RT® and the potential clinical application of 2RT®. The presentation is attached.

Link to register for the webinar is below:
https://us06web.zoom.us/webinar/register/WN_6DK2w44RTAmZToYlz_zDqA

After registering, you will receive a confirmation email containing information about joining the webinar.

This release dated 15 September 2022 has been authorised for lodgement to ASX by the Board of Directors of Nova Eye Medical Limited and lodged by Simon Gray, Company Secretary.

– ENDS –

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ABOUT ALPHARET PTY LTD

AlphaRET Pty Ltd (AlphaRET) is a wholly owned subsidiary of Nova Eye Medical Limited. AlphaRET is focussed on executing the commercialization efforts for 2RT®

For additional information about AlphaRET and 2RT®, please visit:
www.alpha-RET.com

ABOUT NOVA EYE MEDICAL LIMITED

Nova Eye Medical Limited is a medical technology company that develops, manufactures and sells a portfolio of proprietary ophthalmic treatment technologies and devices. Used by eye surgeons in more than 100 countries globally, these technologies include the iTrack™ portfolio of minimally invasive glaucoma surgery (MIGS) technologies, consumable surgical devices designed to restore the eye's natural outflow pathway to lower pressure inside the eye in patients with glaucoma. The Molteno3® glaucoma drainage device platform is designed to enhance surgical utility and optimize clinical outcomes for long-term IOP control in cases of severe or complex glaucoma. It also offers the benefit of a simplified and faster surgical profile. With its sales headquarters based in Fremont, California, Nova Eye Medical is supported by sales offices in Adelaide, Australia and Berlin, Germany, and a global network of more than 50 distribution partners. Manufacturing facilities are located in Fremont, California and Dunedin, New Zealand.

For additional information about Nova Eye Medical and its technologies, please visit:
www.nova-eye.com

2RT® WEBINAR PRESENTATION BY PROFESSOR ROBYN H. GUYMER, MBBS, PHD

AlphaRET

CENTRE FOR Eye Research Australia

Professor Guymer AM is the Deputy Director, Centre for Eye Research Australia (CERA) and Professor in the Department of Surgery (Ophthalmology), University of Melbourne, and Senior Medical Retinal Specialist, Royal Victorian Eye and Ear Hospital, East Melbourne, Australia. She is one of the world's leading retinal experts and is well respected in the fields of both early and late-stage age-related macular degeneration or AMD.

AlphaRET

Presentation of the AlphaRET 2RT laser program in AMD.

Robyn Guymer

CENTRE FOR Eye Research Australia

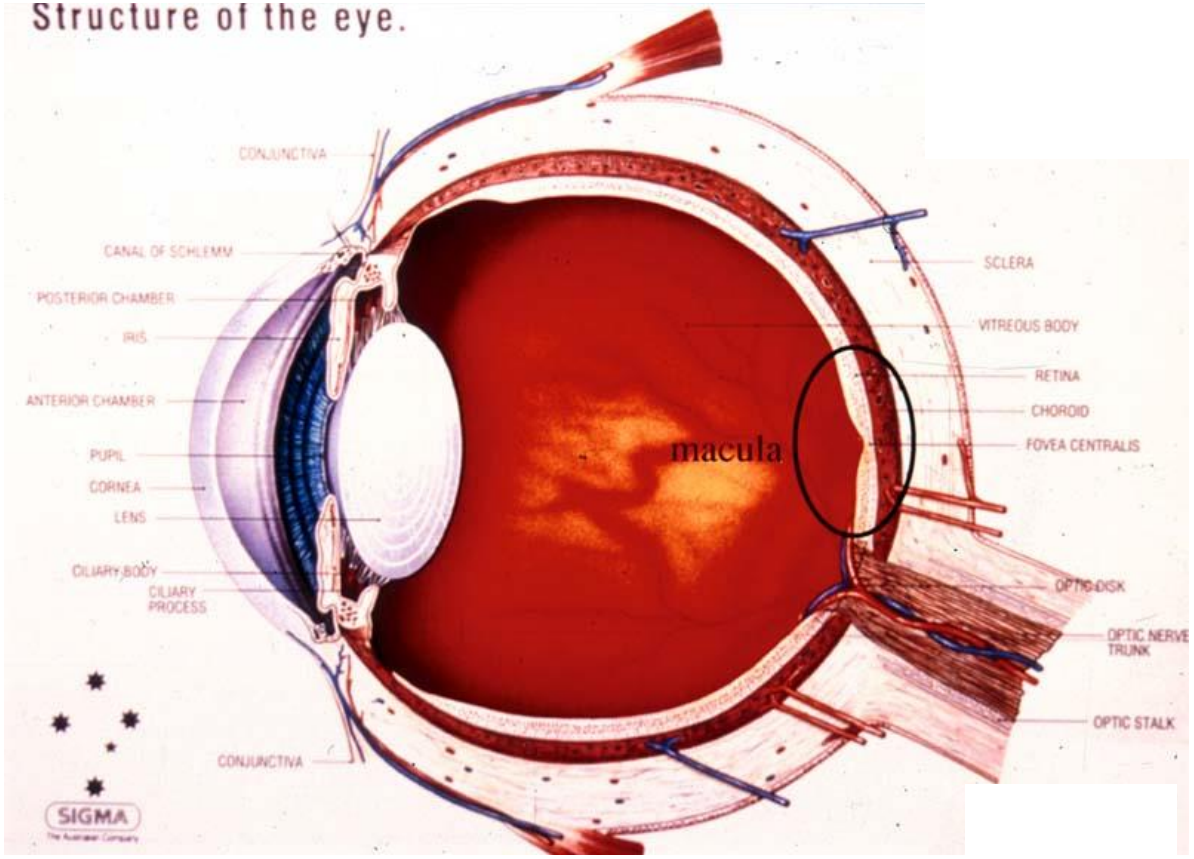
the royal victorian eye and ear hospital

THE UNIVERSITY OF MELBOURNE

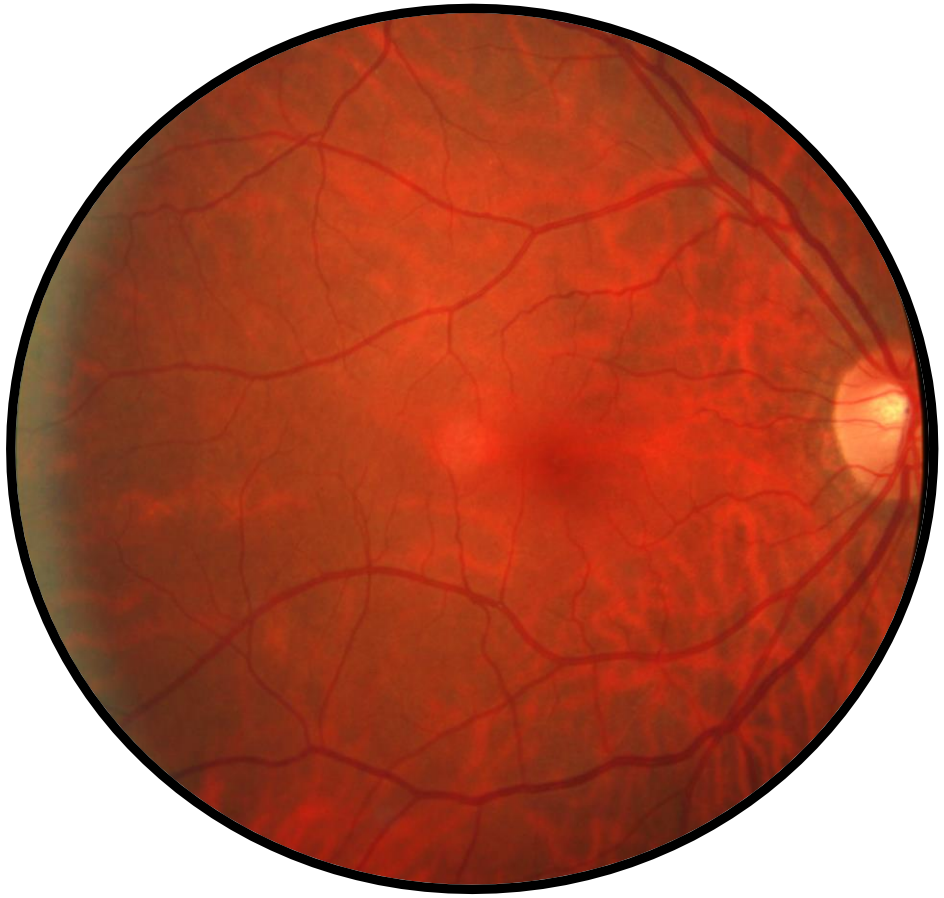
Age related macular degeneration (AMD)

The most common cause of irreversible vison loss in people over 50 in our community

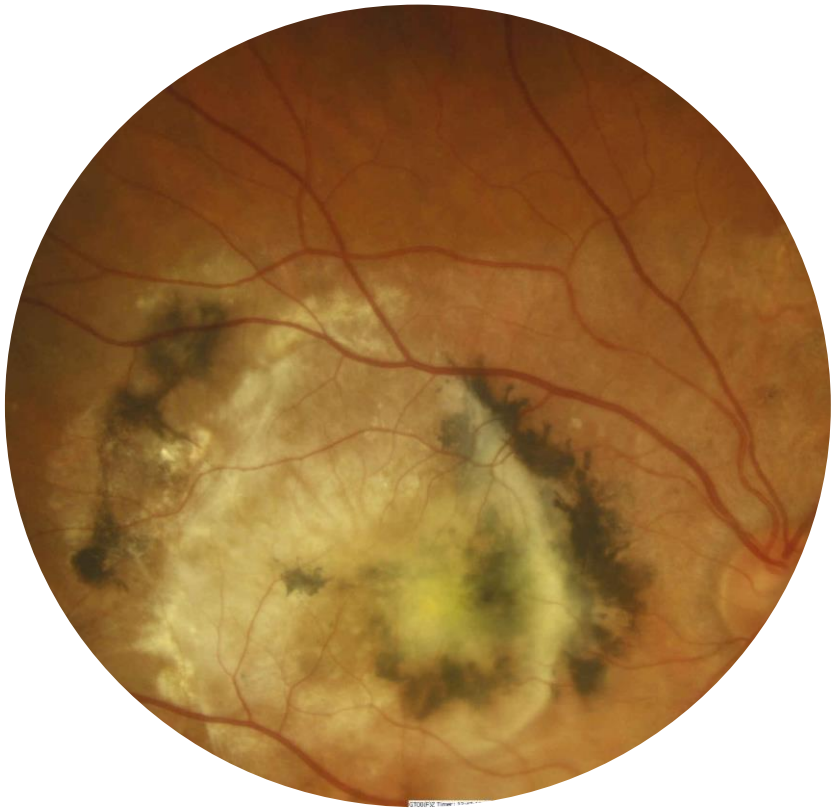
The macula



A normal macula



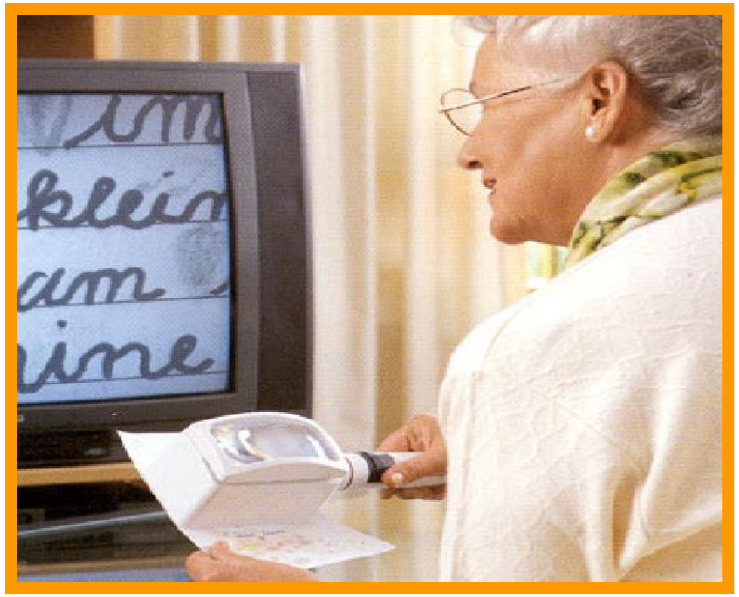
Age–related macular degeneration



End stage without treatment

Age-related macular degeneration

- Reading
- Recognizing faces
- Driving

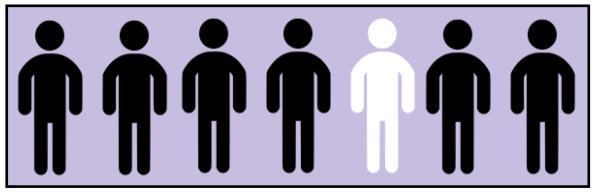


Late Atrophic AMD (DRY)

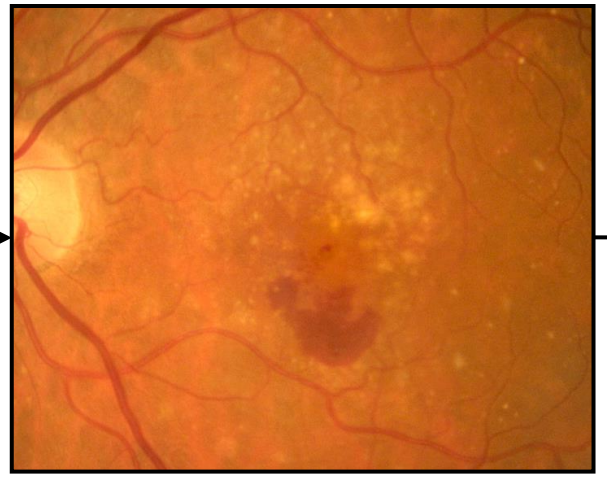
Death or neural tissue (“dry”)

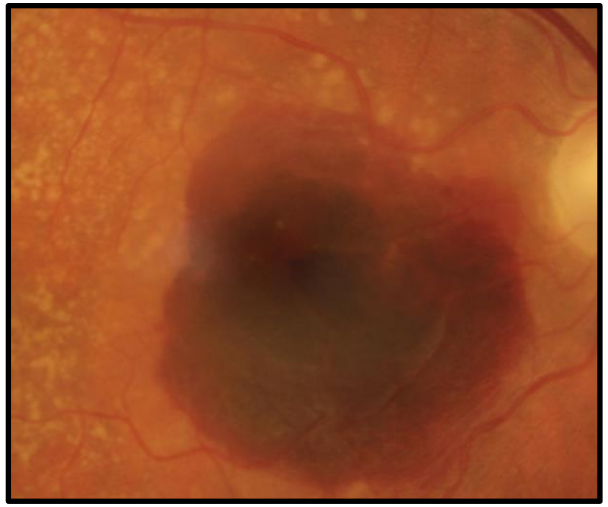
Early Stages of AMD
(early and iAMD)

One in seven over 50 years old



Late Neovascular AMD (WET)



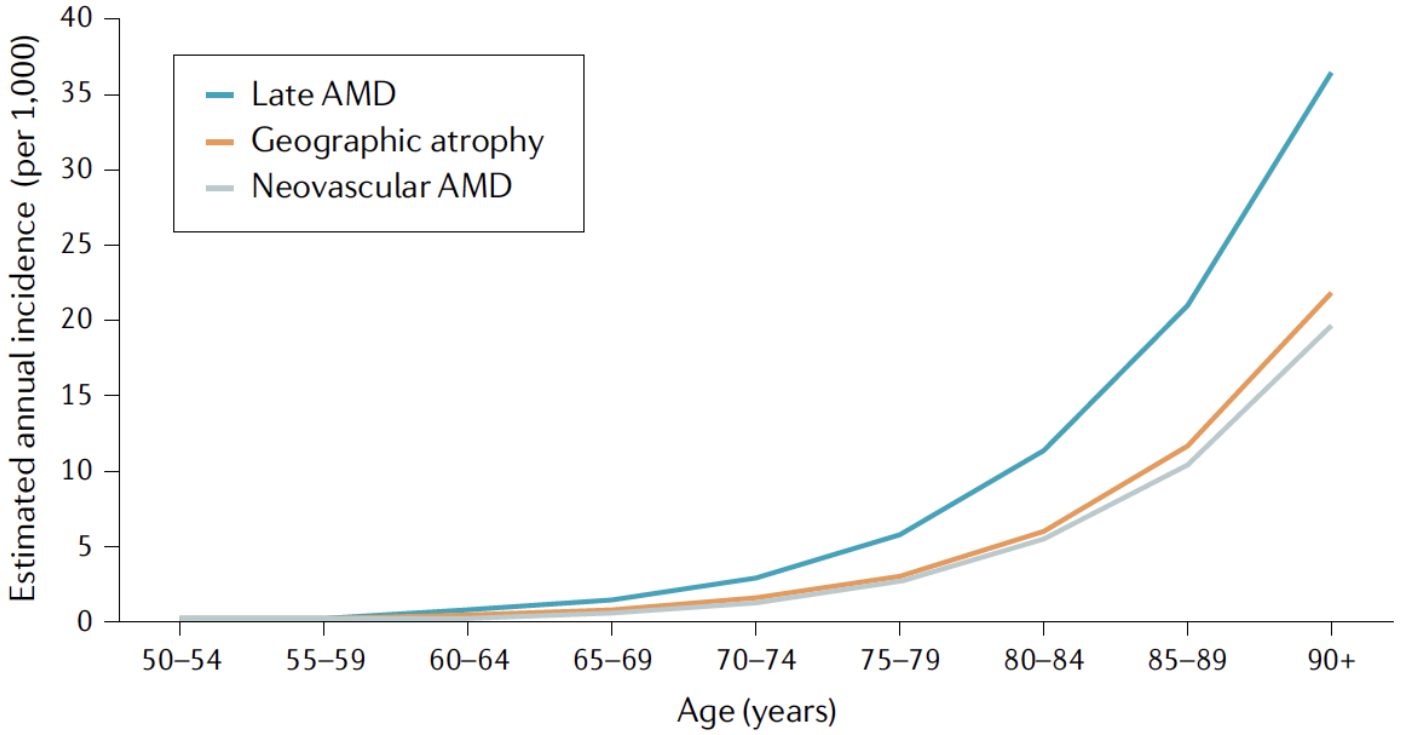


Bleeding and fluid leakage (“wet”)

- The global prevalence of AMD in 2020 was estimated to be 196M
- With the ageing population, the prevalence of AMD is estimated to grow to 288 million in 2040
- ~15% of the global population over 50 years of age are estimated to have some form of AMD.
- The prevalence of
  - non late AMD is ~13%
  - wet AMD ~1%
  - dry AMD~ 1%
- In 2040 it is estimated that 20 million people in Europe will be affected by non late AMD and 4 million people by late AMD.

Wong, W. L. et al. Global prevalence of AMD and disease burden projection for 2020 and 2040: a systematic review and metaanalysis. Lancet Glob. Health 2, e106–e116 (2014).
Colijn, J. M. et al. Prevalence of AMD in Europe: the past and the future. Ophthalmology 124, 1753–1763 (2017).

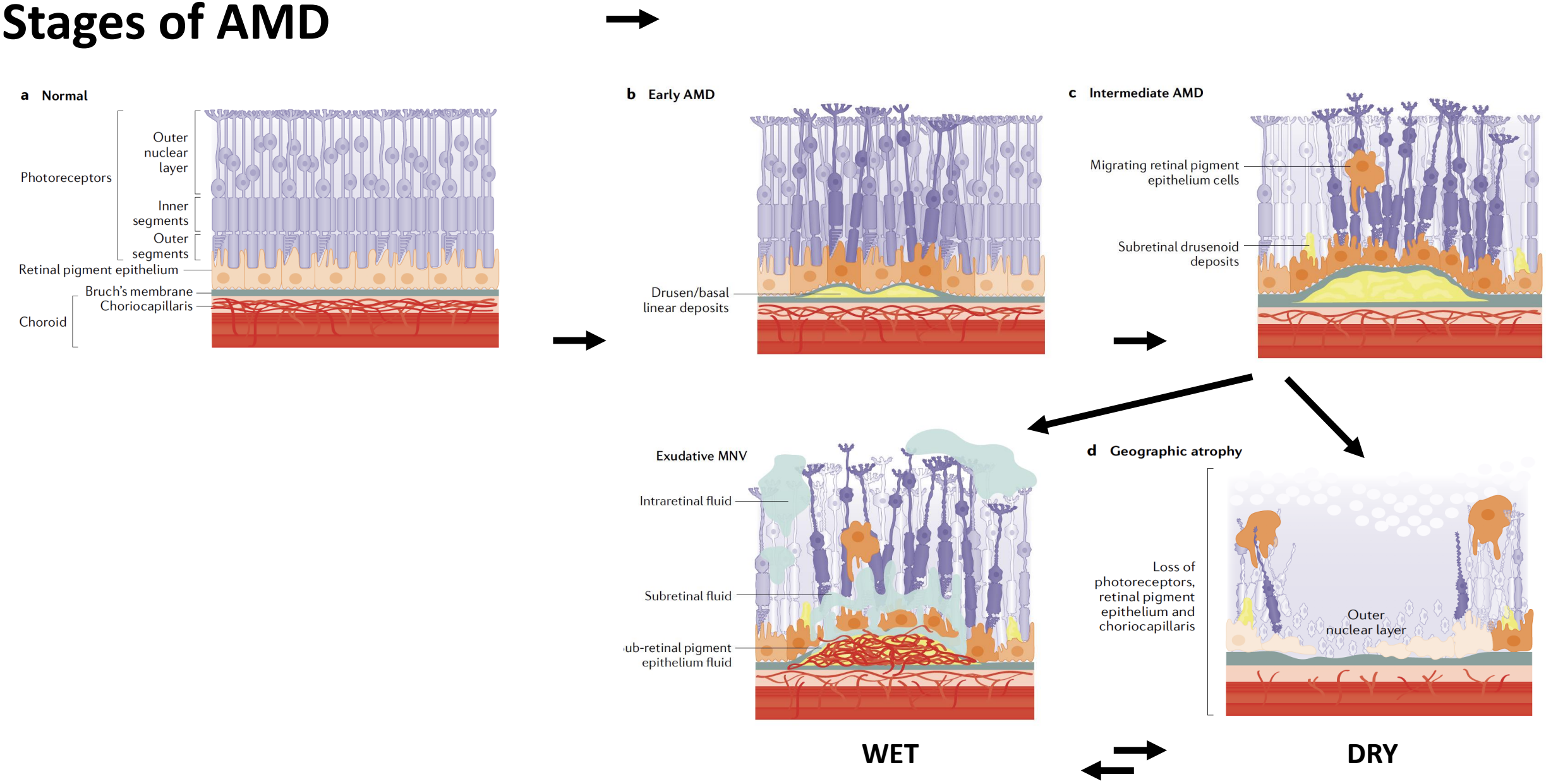
AMD increases exponentially with age



Annual incidence of AMD by 5year age groups per 1000 cases of AMD

Rudnicka, A. R. et al. Incidence of late- stage age- related macular degeneration in American whites: systematic review and meta- analysis. Am. J. Ophthalmol. 160, 85–93.e83 (2015).

Stages of AMD



Fleckenstein M et al. Nature Reviews Disease Primers Age- related macular degeneration. 2021.7:31

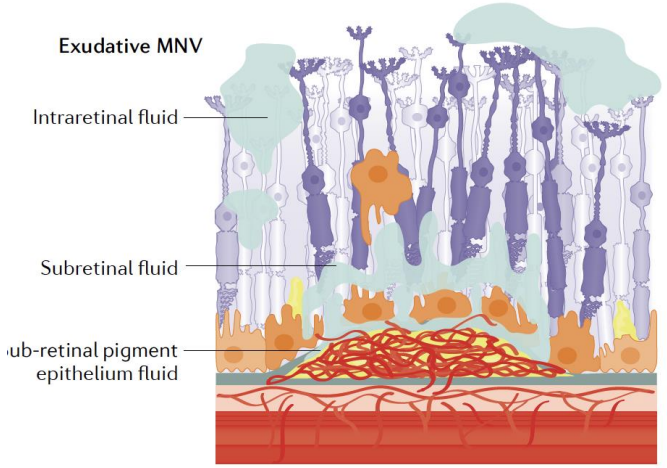
Stages of AMD and treatment

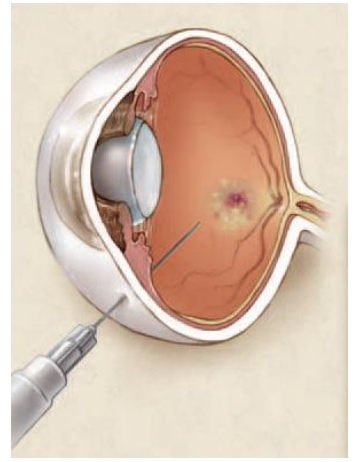
WET:

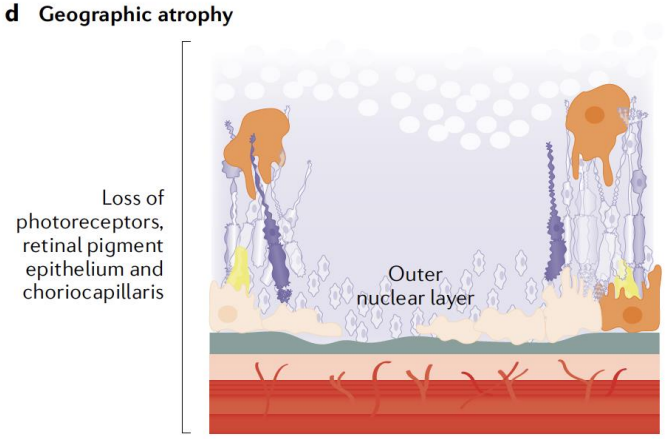
- The only stage of AMD that has a treatment is the late exudative AMD.
- Treatment are expensive, frequent long term, injections into the eye
- Huge expense on the health system and burden on clinicians and patients

DRY

- Soon to have our first treatment for late stage dry AMD.
- Again will be expensive, frequent long term, injections into the eye.







- **No treatment to stop or slow progression of iAMD cases to late AMD**

Early Stages of AMD

One in seven over 50 years old

AlphaRET
2RT laser

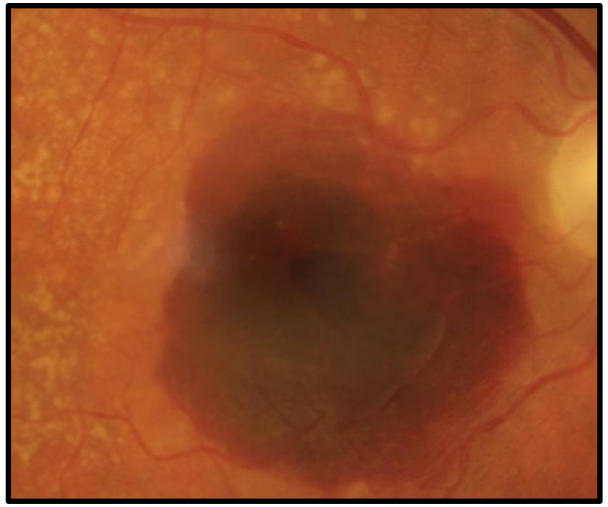
X

Late Atrophic AMD (DRY)

Death or neural tissue (“dry”)

Late Neovascular AMD (WET)

Bleeding and fluid leakage (“wet”)



AlphaRET 2RT laser

- There is an urgent need for an effective intervention to slow or prevent progression of age-related macular degeneration (AMD) from its early stages to vision-threatening late complications.

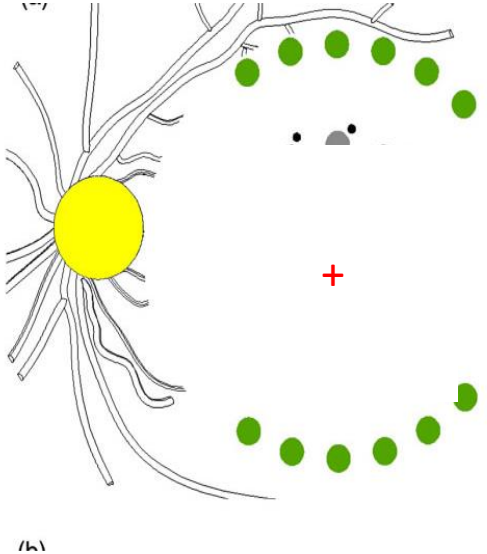
- Could 2RT laser specifically trigger a response that would slow AMD disease progression?

- A decade of pre clinical laboratory work, pilot clinical studies and the large randomized clinical trial, (LEAD) suggest that it can.

Ophthalmology 2019;126:829-838

Subthreshold Nanosecond Laser Intervention in Age-Related Macular Degeneration

The LEAD Randomized Controlled Clinical Trial



- 292 participants across 6 sites followed for 3 years,
- half received subthreshold nanosecond laser (SNL) wit the 2RT laser every 6 months, half received sham treatment

- Results
- Overall, progression to late AMD was not significantly slowed with SNL compared to sham treatment

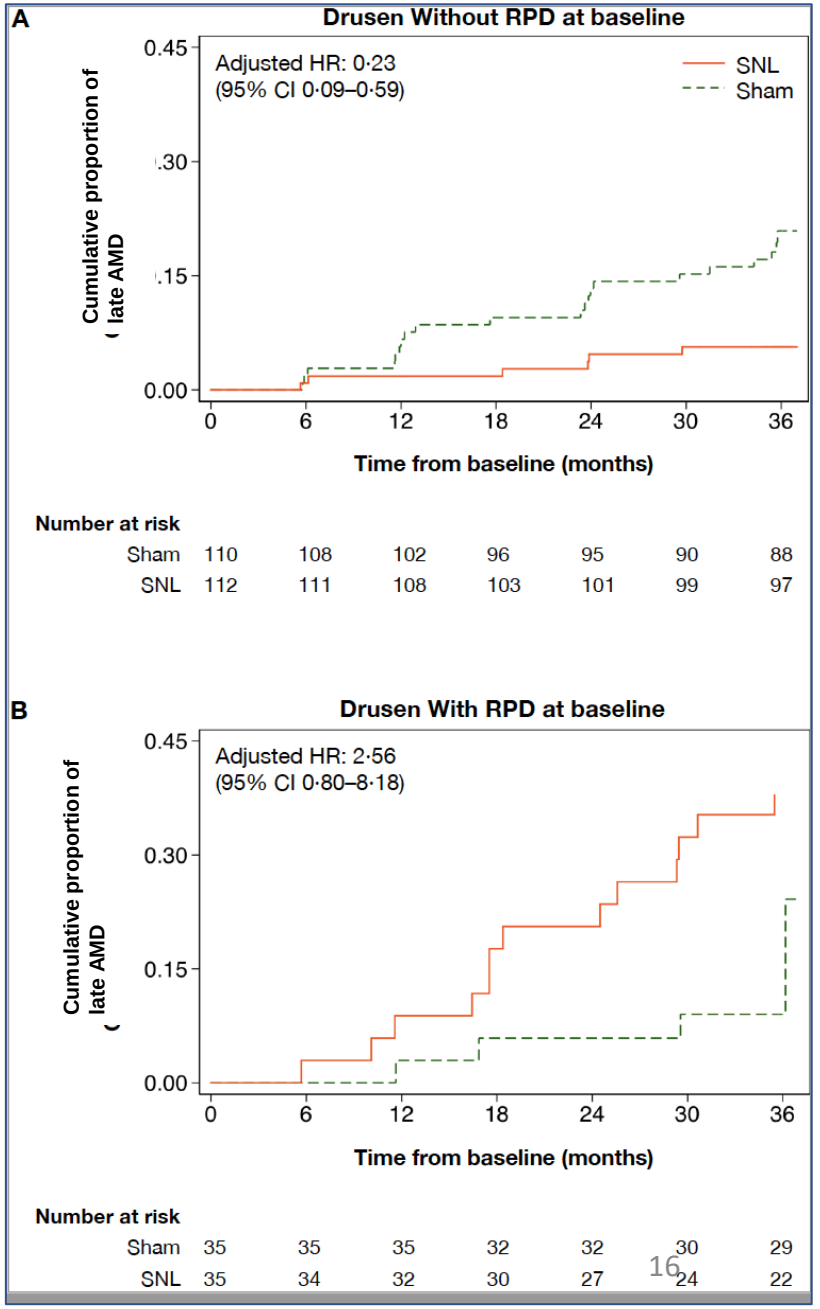
Post hoc analysis- different AMD subgroups

- There was strong evidence of a significant treatment effect modified by the presence, at baseline, of a particular deposit in the retina call RPD. RPD are thought to signify sicker eyes

- ~4 fold reduced progression rate for the 76% participants without RPD at baseline with SNL treatment (aHR 0·23, 95% CI 0·09–0·59)

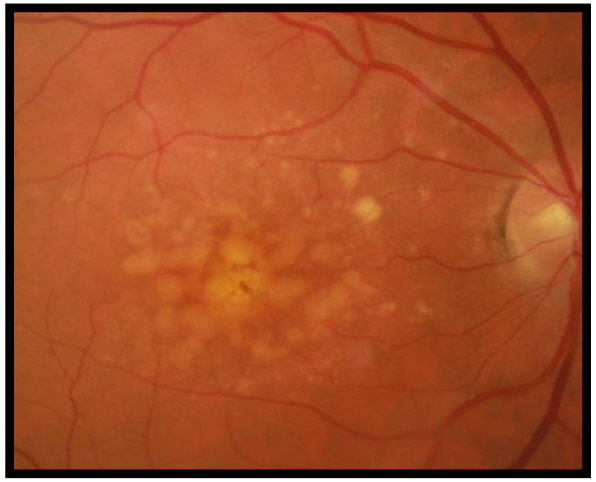
- ~2.5 fold increased progression rate for the 24 % participants with RPD with SNL treatment (aHR 2·56, 95% CI 0·80–8.18)

Failure plot of progression to late AMD.



Early Stages of AMD

Alpha RET
2RT laser



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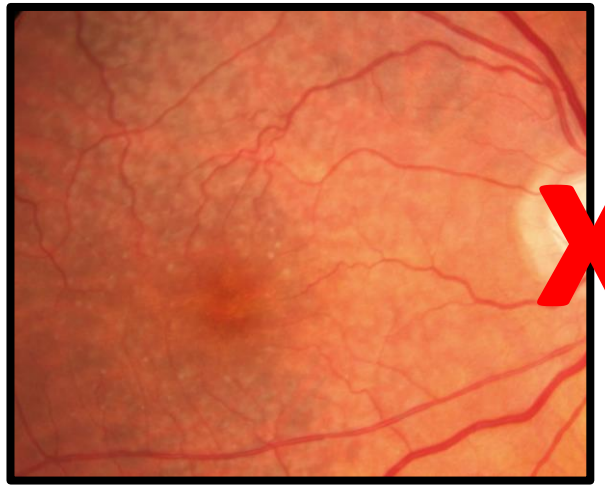

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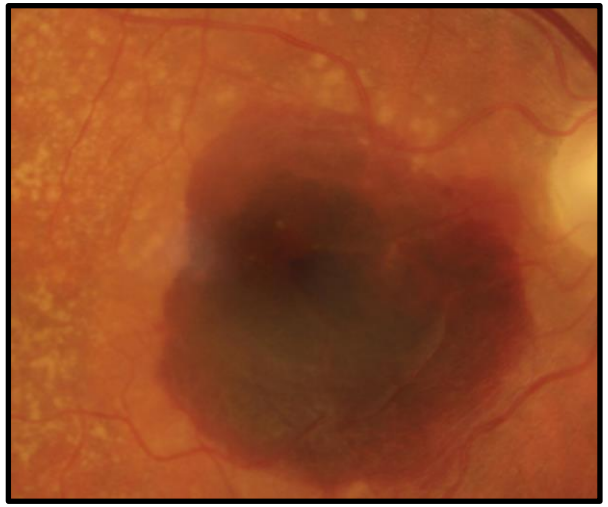
Late Atrophic AMD

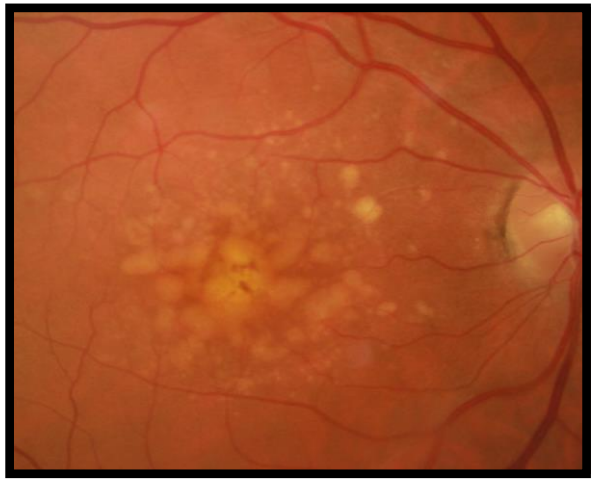
Death or neural tissue (“dry”)

Late Neovascular AMD



Bleeding and fluid leakage (“wet”)

Early Stages of AMD

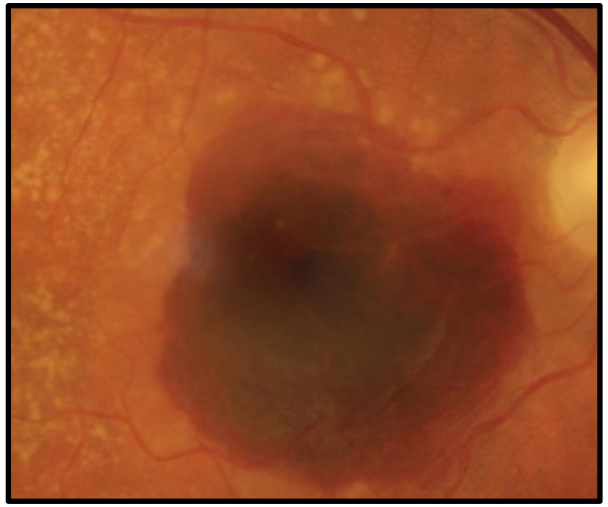


2RT laser

Late Atrophic AMD

Death or neural tissue (“dry”)

Late Neovascular AMD



Bleeding and fluid leakage (“wet”)

We need a validation study

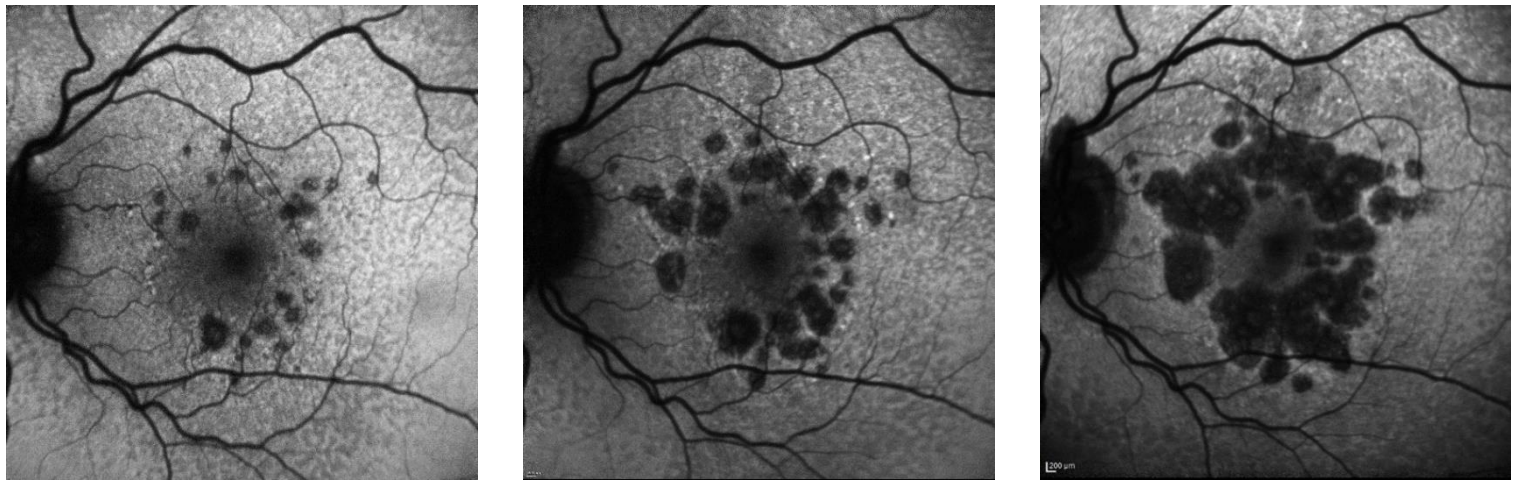
To confirm slowing progression from iAMD

Late-stage AMD- GA treatment trials

Current trials aim to slow progression of GA growth, not to stop or reverse it.

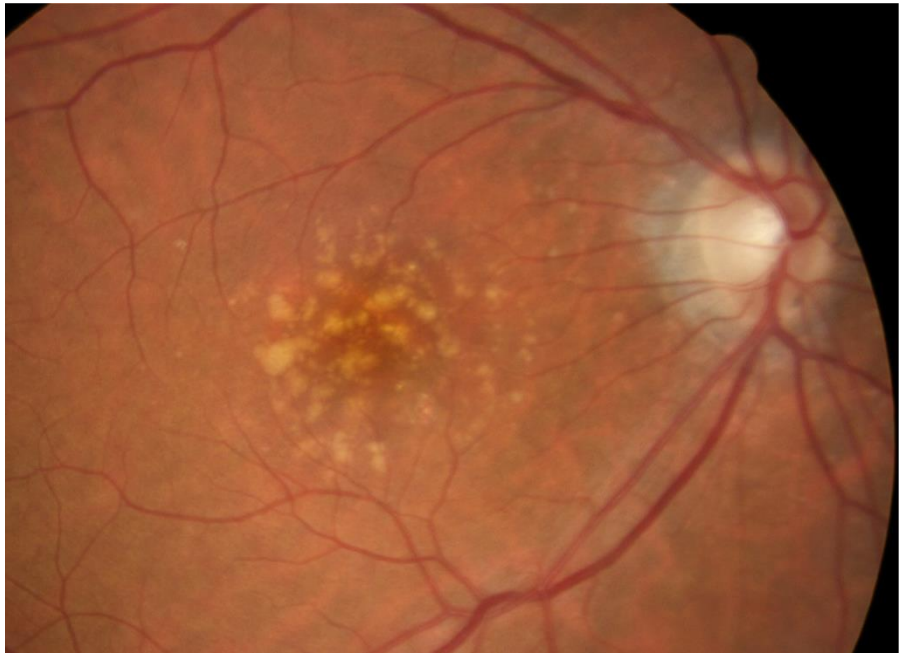
- They measure growth of GA over time
- It would be ideal to start earlier before there is significant cell death
- Prevention of progression to GA is critical since the loss of cells and thus vision is irreversible

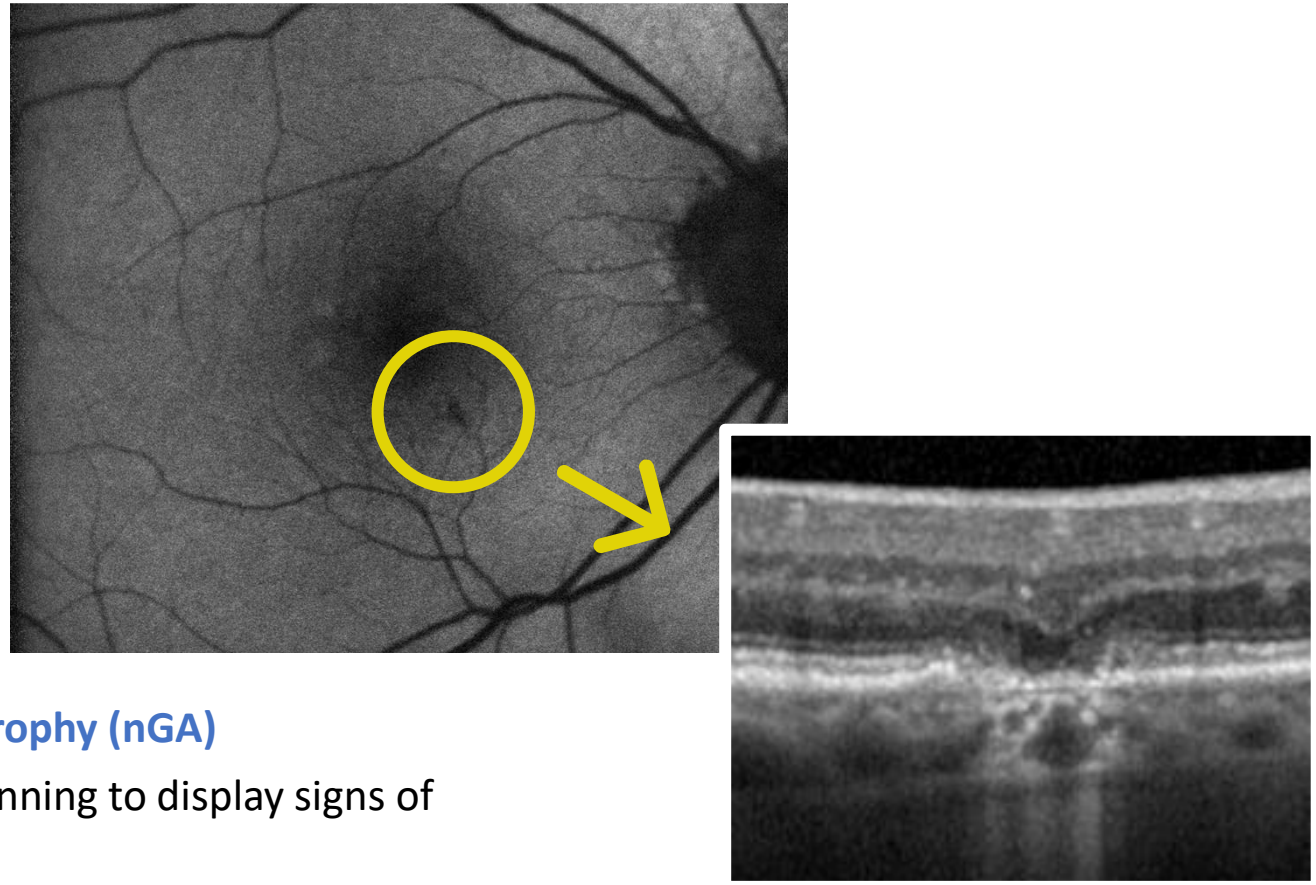
Time



Can we start earlier in treatment trials of GA?

Within iAMD there will be a group who are more progressed

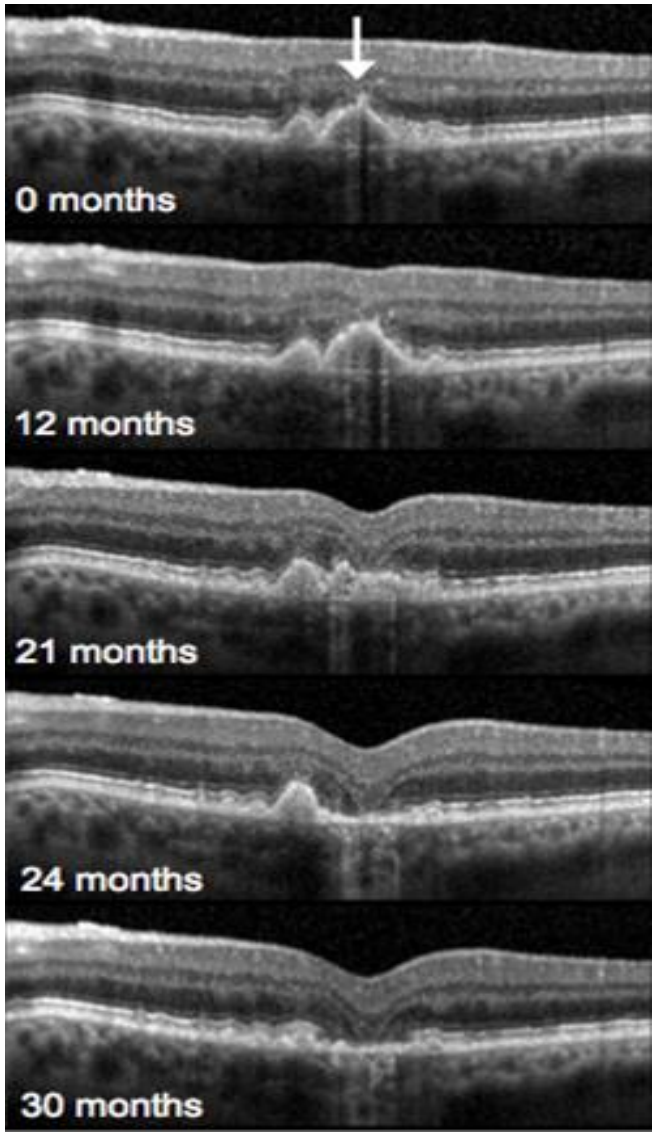


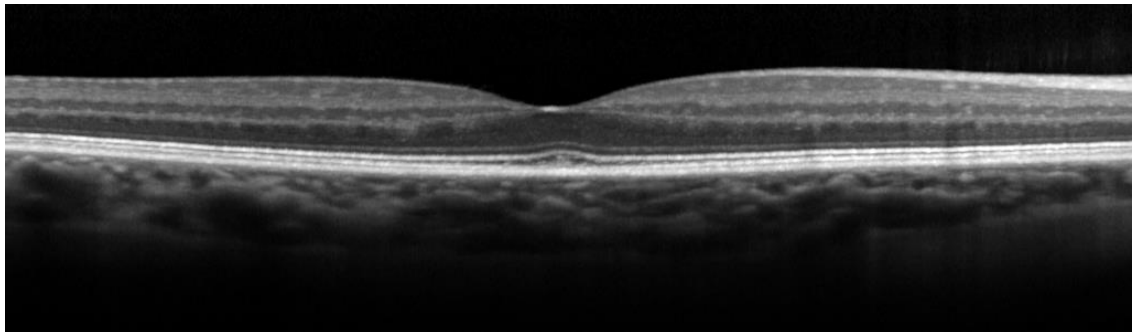


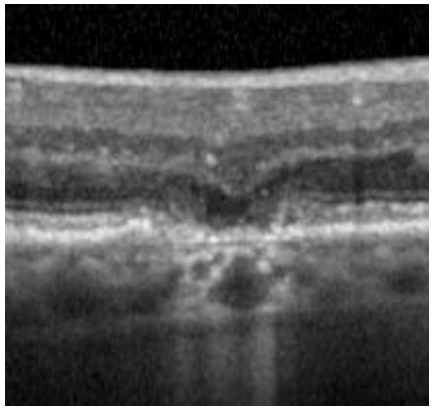
- On OCT these features **nascent geographic atrophy (nGA)**
- **Nascent** = just coming into existence and beginning to display signs of future potential

Wu Z, et al. Ophthalmology. 2014 8;121(12):2415-22.

The beginning of cell death as seen on OCT scan

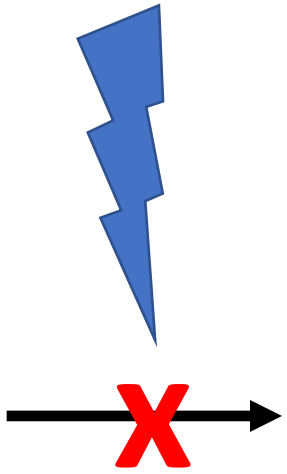


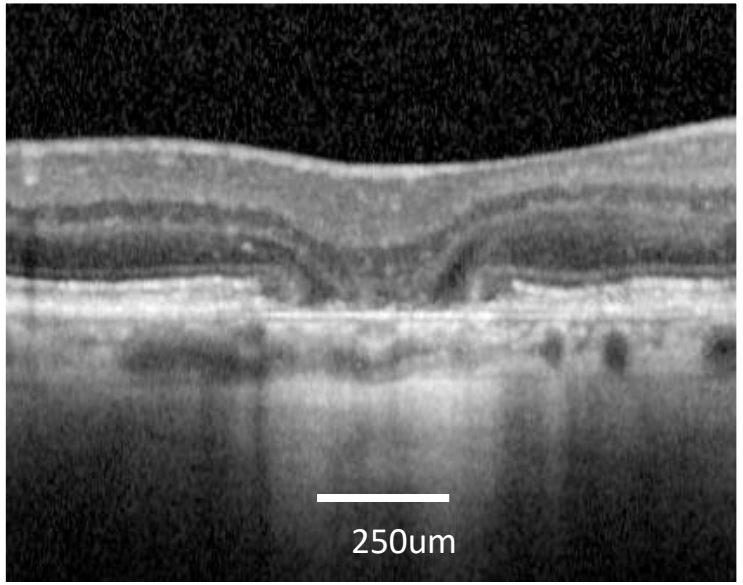




Nascent GA (nGA)

2RT laser





Planned international studies

1. Repeat LEAD (without RPD) to show we can slow progression of iAMD to late AMD. (Cohort B)
   - Cohort B, ~600 patients with a high risk of AMD progression,
   - Follow up for 36 months

2. New subgroup study: slow progression from the earliest signs for cell death (nGA) to late stage AMD. (Cohort A)
   - Cohort A, ~400 patients with a very high risk of AMD progression,
   - Follow up for 24 months

What does success look like?

- People identified through optometry or a family history with early stages of AMD are referred to an ophthalmologist (~1 in 10 people over 50)
- Images are performed to confirm iAMD and exclude those with RPD or those with late stage AMD
- 2RT laser is performed in outpatients/ private practices
    - Safe and easy to perform
    - Bilateral
    - Potentially every 6 months for many years
- Significantly reduces progression to late AMD, which requires ongoing regular (every few months), expensive injections into the eye (often both) to try to save vision

AlphaRET

Thank you

CENTRE FOR
Eye Research
Australia

the royal victorian
eye and ear
hospital

THE UNIVERSITY OF
MELBOURNE

Thank you Professor Guymer.

Any Questions?

Estimate of Addressable Market

Intermediate stage disease - AlphaRET

(Treats underlying causes of AMD.)

Intermediate AMD

54 million people worldwide(1)

Addressable by 2RT®

There is currently no treatment for patients with iAMD. Nutraceuticals are currently recommended(2)

Late stage macular degeneration

Wet AMD (CNV)

Choroidal Neovascularization

15 million people worldwide (1)

- Australian PBS A$0.6 billion (3)
- USA Medicare US$3.5 billion (4)

Highest spends on any drug in USA and Australia. Treating symptoms only. Requires retreatment

Dry AMD (GA)

Geographic Atrophy

14 million people worldwide (1)

No treatment. Candidate therapies include:

- Iveric Bio, US$1.2 bn (NASDAQ: ISEE)
- Apellis, US$6.7 bn (NASDAQ: APLS).

DISEASE PROGRESSION

1. AlphaRET estimate based on LEAD study and MarketScope 2018 Ophthalmic Lasers Report
2. Macular Degeneration Foundation Australia recommendation pamphlet “Nutrition for AMD”.USA National Eye Institute AREDS/AREDS 2 study concluded that supplements reduces the rate of progression from intermediate AMD to advanced AMD by 25% 3. Australian June 2021 PBS data. 4. Expenditure on Eylea, Avastin and Lucentis USA Medicare Report Aug 2018