



Eye Health

Subhash Suthar D Pharm
Clinical & Therapeutics Applications
(Eye)

AGE-RELATED

eye diseases and conditions

Cataract

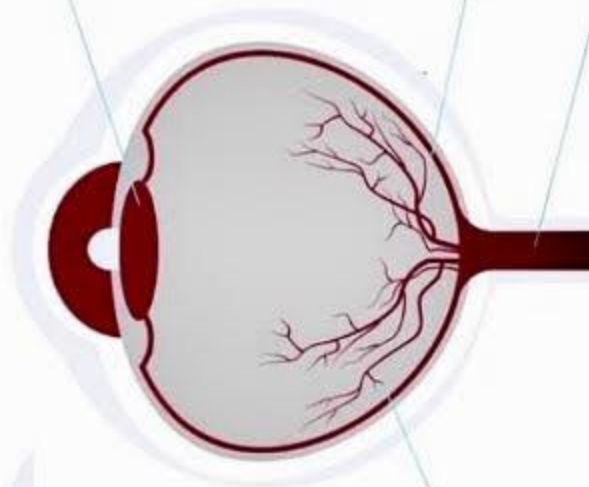
Clouding of the lens of the eye.

Age-related macular degeneration (AMD)

Damage to the macular of the eye.

Glaucoma

Damage to the optic nerve.



Dry eye

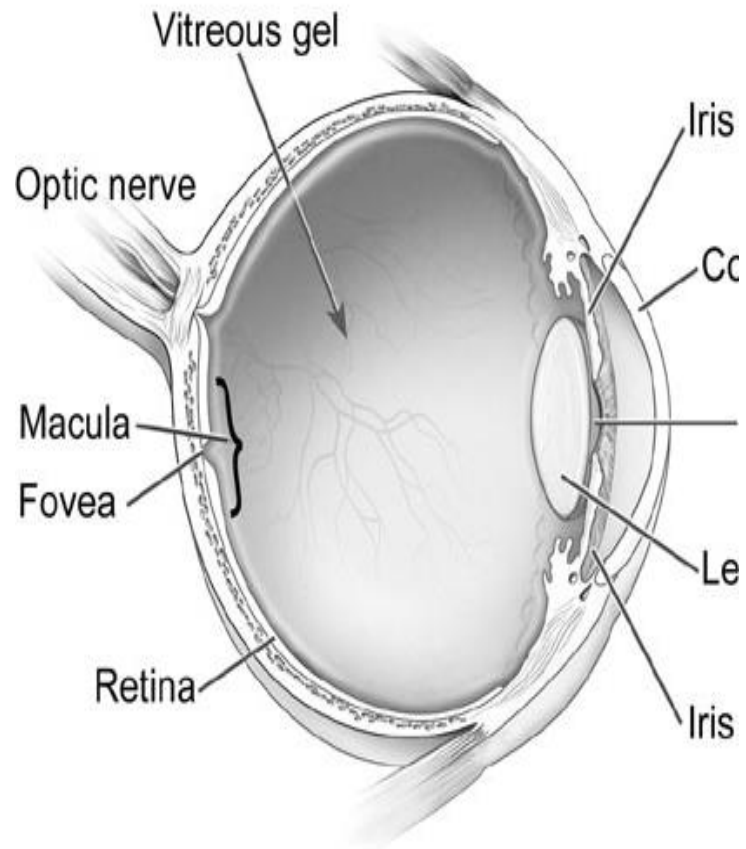
Eyes do not make enough tears

Diabetic retinopathy

Damage to the blood vessels in the retina.

Low vision

Difficulty seeing, even with glasses, medicine, or surgery



Anatomy of eye

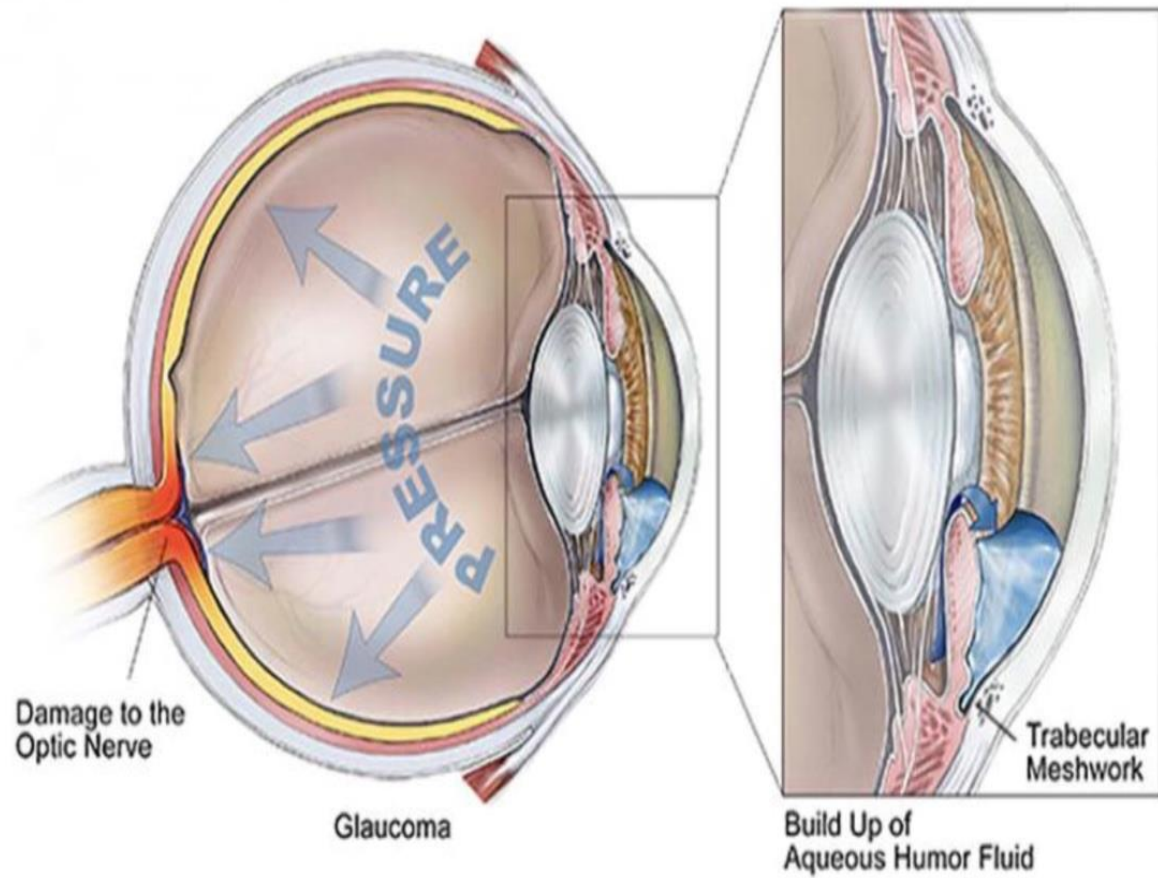



Illustration by Bob Morreale, courtesy of BrightFocus Foundation.



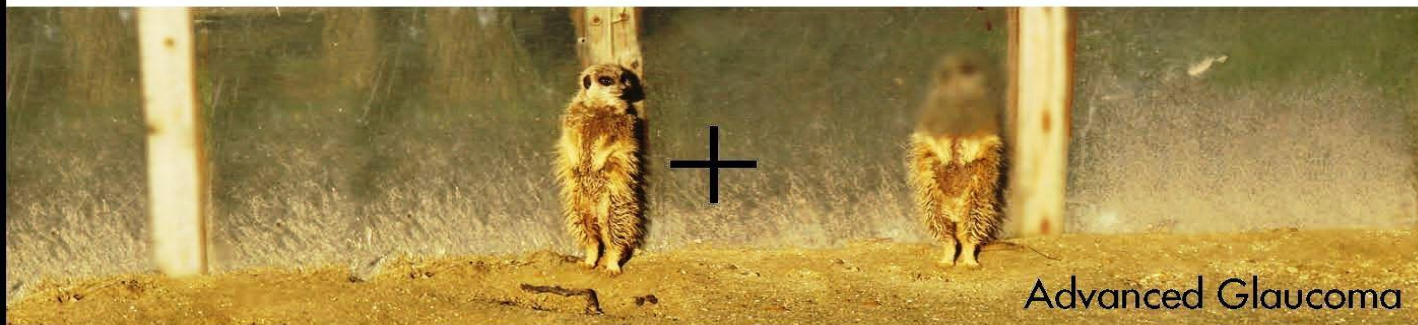
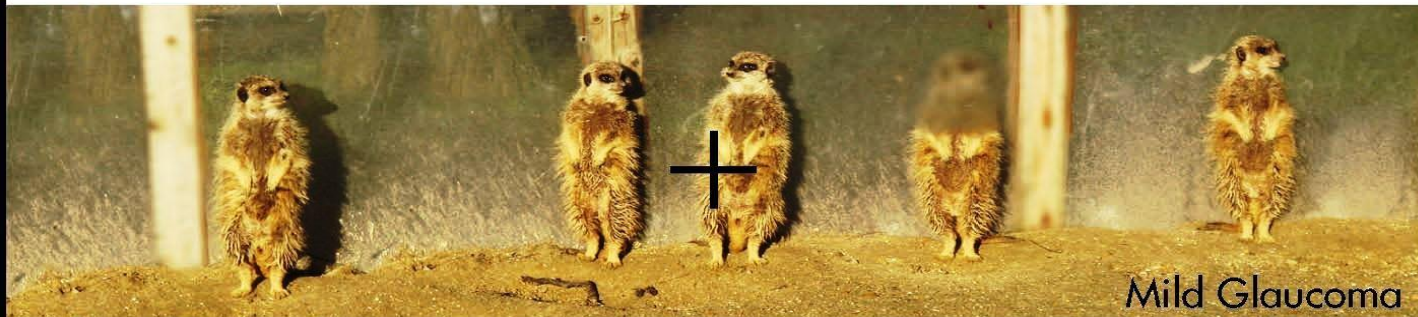
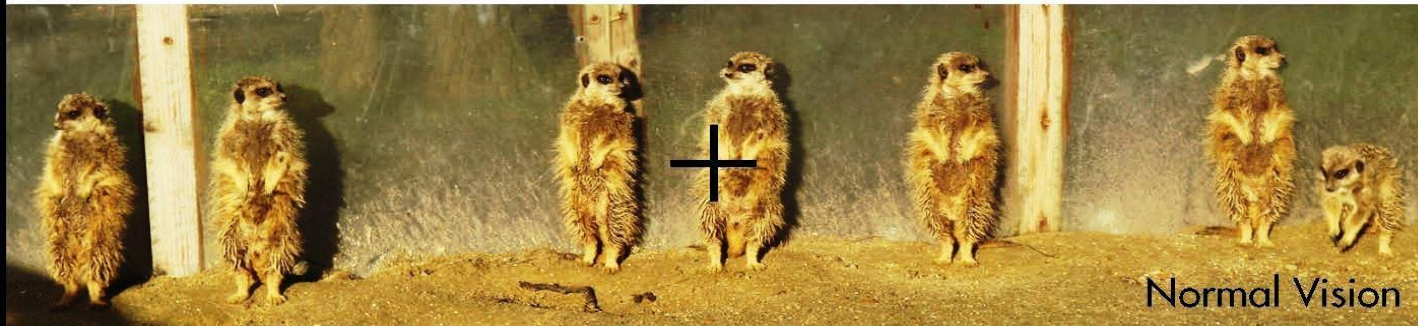
Three Signs You should Visit Eye Clinic For a Thorough Eye Exam

- Hazy or Blurred Vision
- Rainbow Halos When Looking at Bright Lights
- Nausea or Vomiting due to Eye Pain

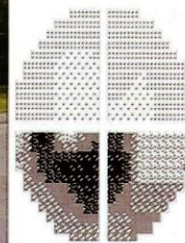
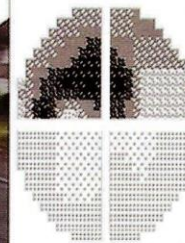
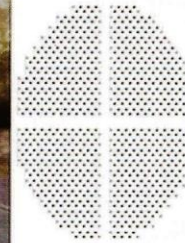
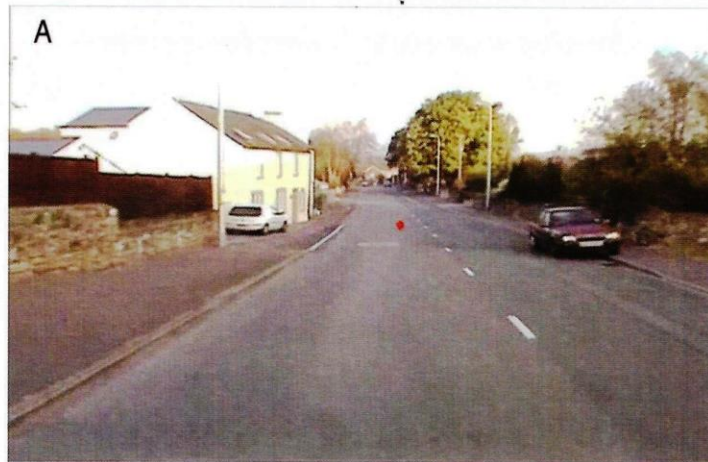
Types of Glaucoma

- **Open angle G.**
- **Angle-closure G.**
- **Normal tension G.**
- **Congenital G.**
- **Secondary G.**

Can you see the difference?



GLAUCOMA gradually steals sight and can blind
Book an eye test today



TREATMENT OF GLAUCOMA

**The earlier glaucoma is diagnosed the earlier
treatment can start**

Medication – eye Drops

Laser treatment

Surgery (Trabeculotomy)

**There is no cure for Glaucoma as yet and vision loss is
irreversible**

Treatment

- **Medication – Eye drops**
- **Laser treatment :Argon, YAG, SLT (Selective Laser Trabeculoplasty)**
- **MIGS (Minimum Invasive Glaucoma Surgery) Implants/ tubes**
- **Surgery**

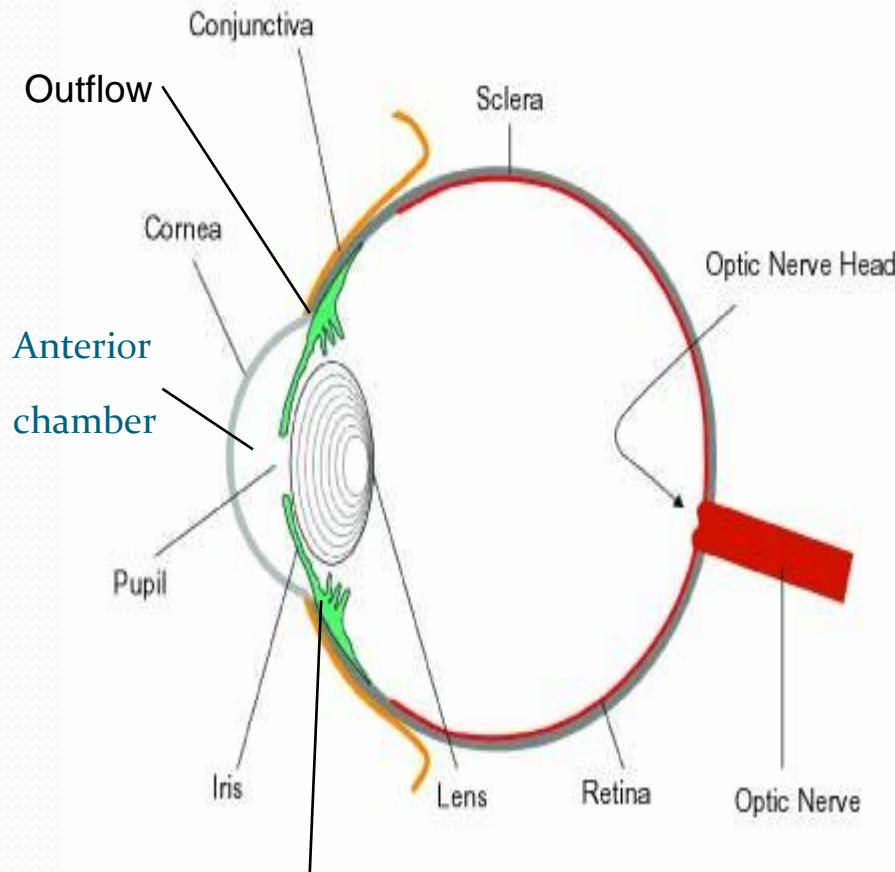
Drops

Frequently the first treatment option

Used to decrease pressure in the eye

Even if pressure is 'normal' reducing it helps to stop deterioration of vision

Pressure can be lowered in two ways



Production of fluid

- Either decrease the production of fluid

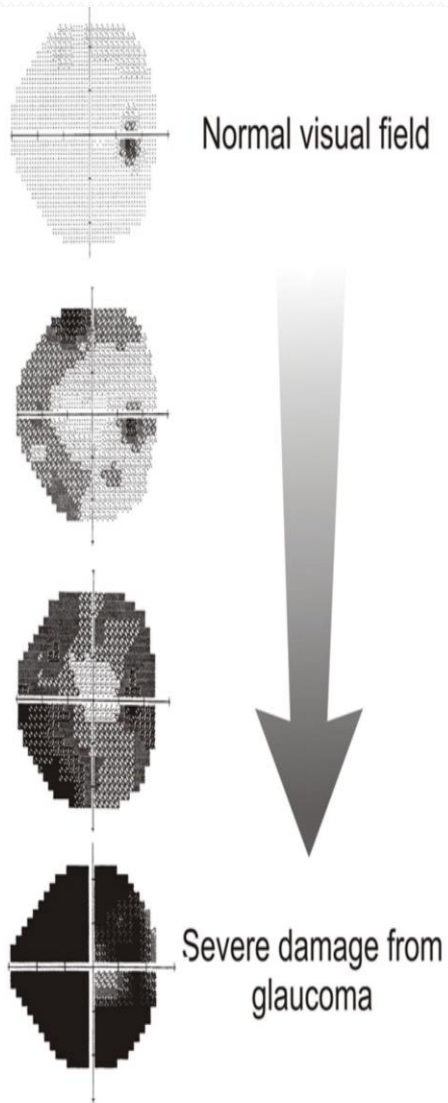
- Or increase the outflow of fluid from the anterior chamber

- Or



Progressive Visual Field Loss.

Where do you want to be?





Use your drops correctly

Drops are for life

They slow down or stop the
deterioration of vision – they cannot
reverse the process

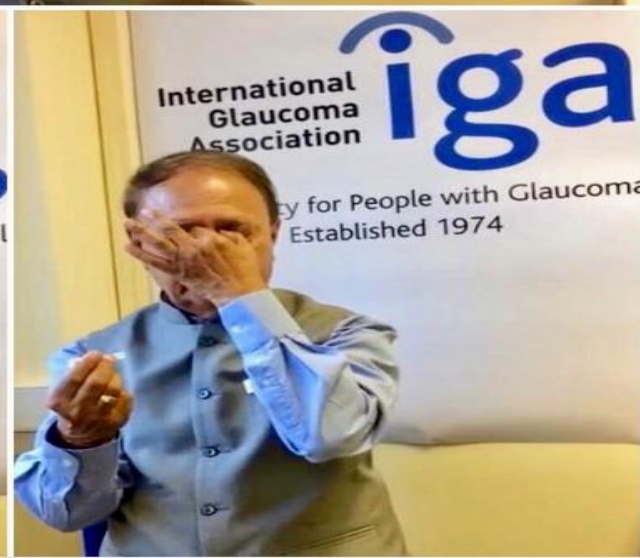
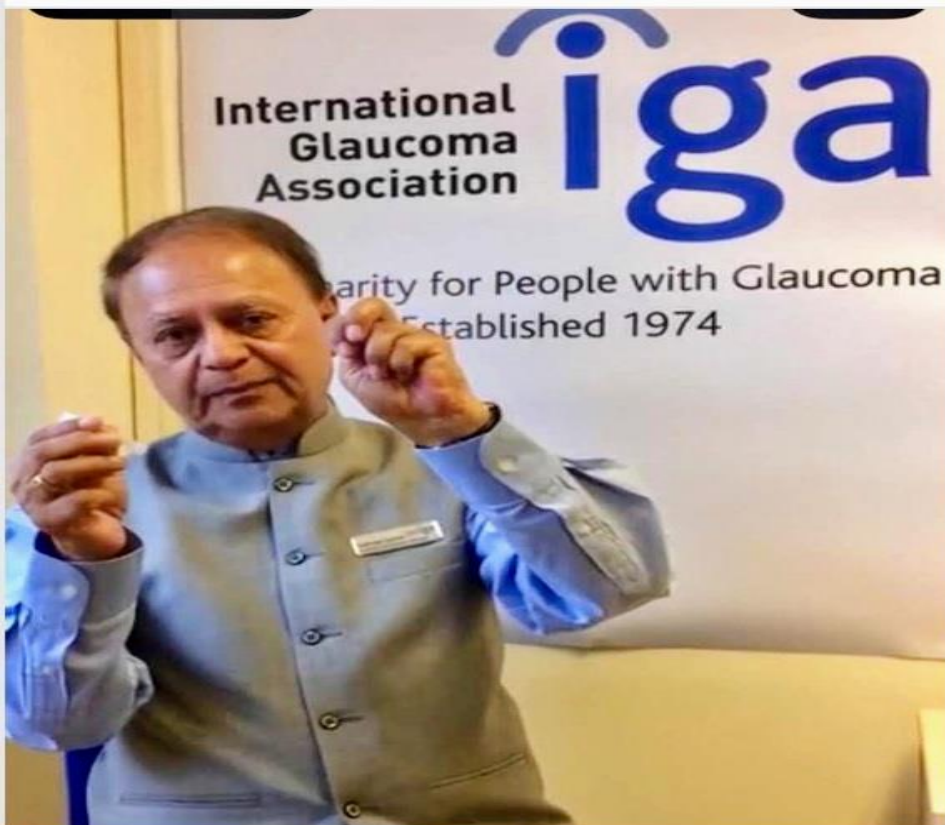
Take them at the correct time every
day – get into
the habit

Develop a good technique



**SUBHASH
SAYS
W.O.K*
THIS WAY!**

#WristOnKnuckles Drops Technique, simple to explain, easy to adapt.



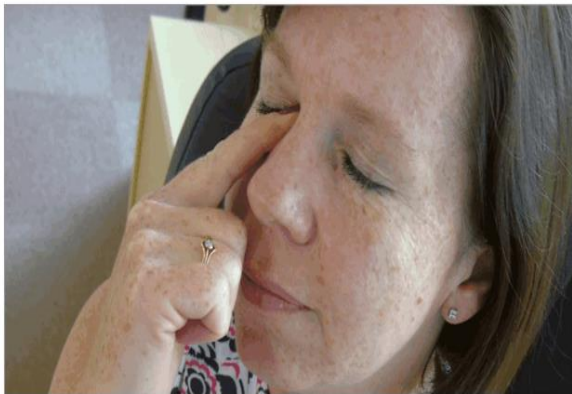
Occlude the Puncta

The dose of drug in
eye drops is very low

But can get into the
system

So – shut your eye
after putting in drop

And occlude your
puncta





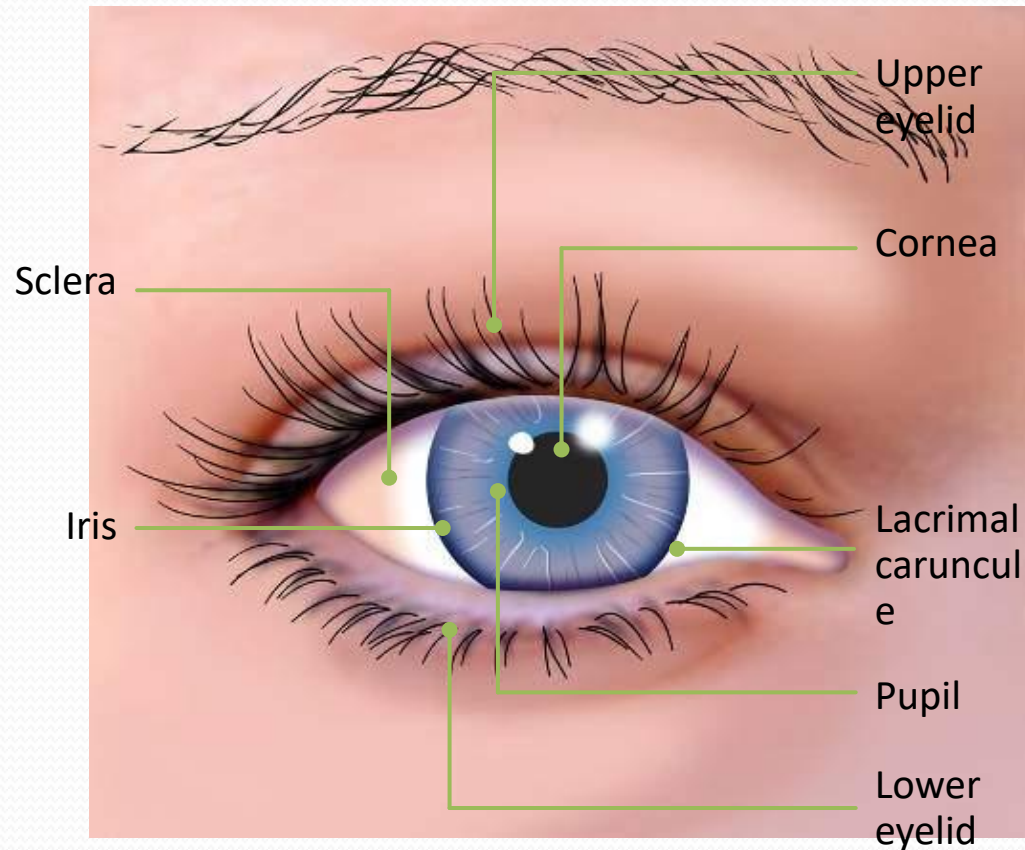
Dry Eyes & Blepharitis

Common symptoms

- Sore, gritty eyes
- Stinging, burning
- Watery eyes
- Smeary vision
- Irritation from air conditioning or wind
- Red eyes and eyelids



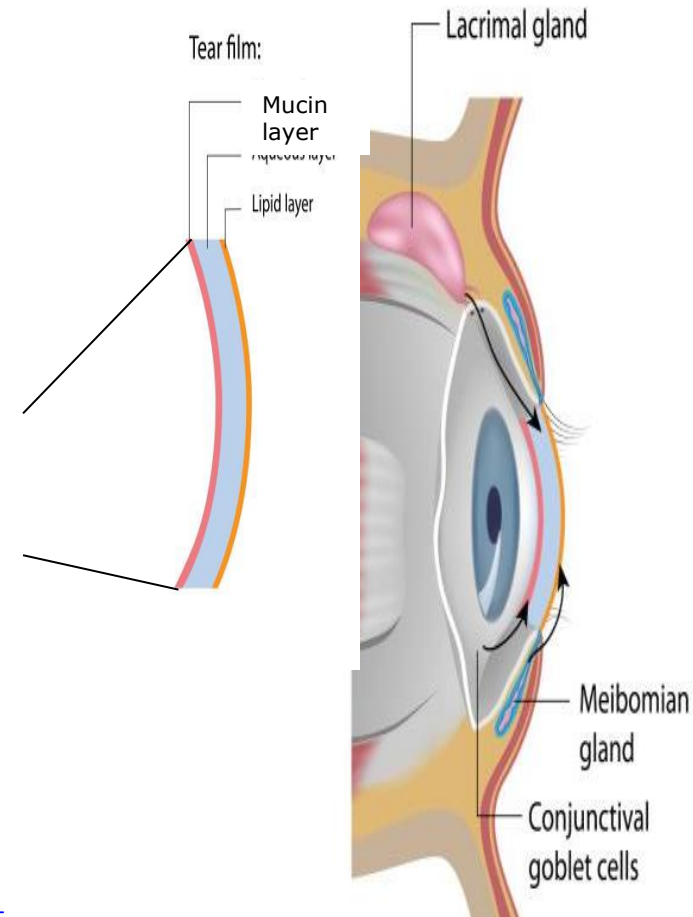
External anatomy of the eye



- Adapted from Tortora GJ, Anagnostakos NP, eds Principles of anatomy and physiology, 6th edn. New York, HarperCollins Publishers, 1990.

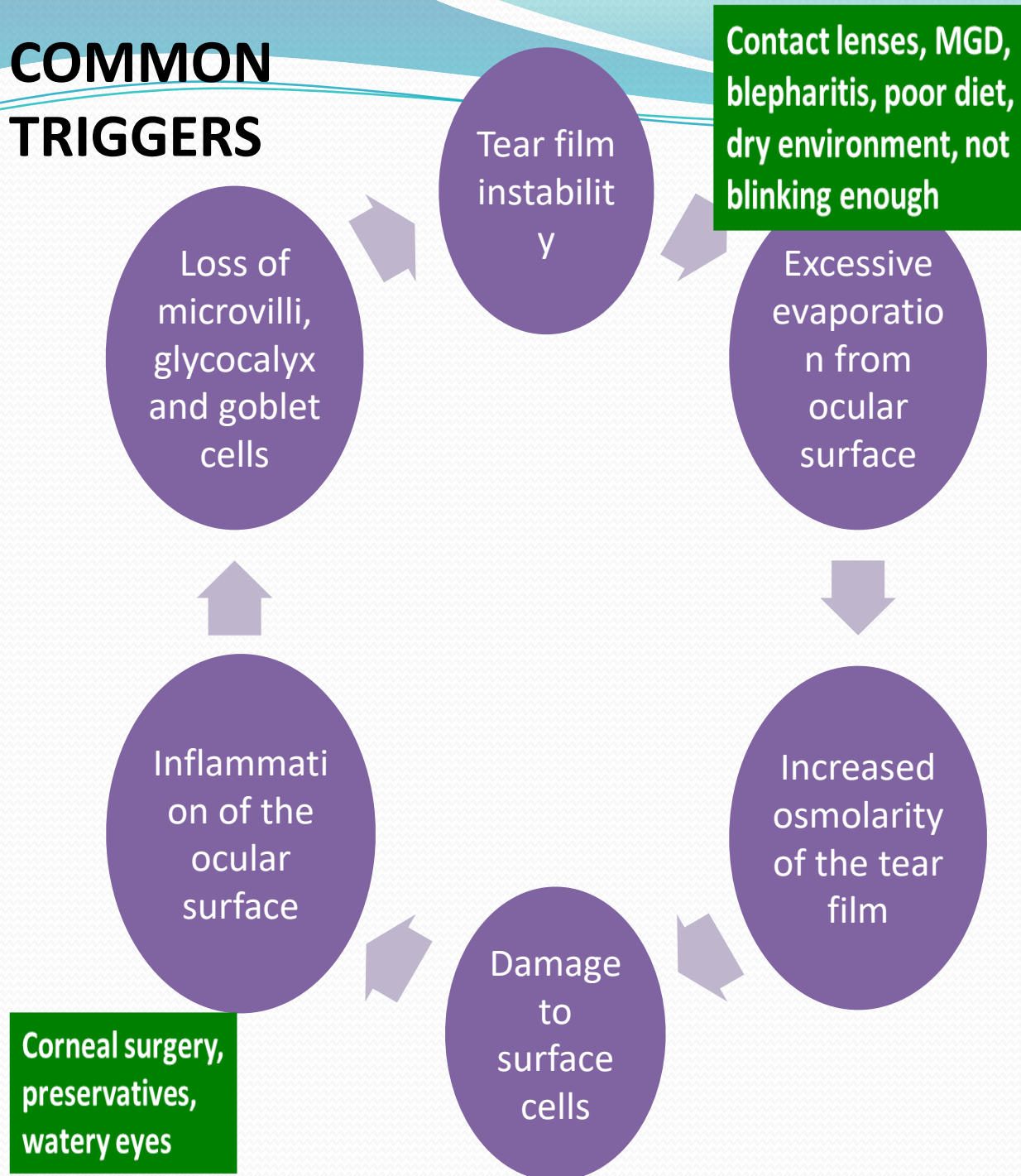
Tears are composed of three layers¹


- Lipid layer
 - Secreted from the meibomian glands
 - Seals moisture onto the eyeball and smooths the eye surface
 - Allows free flow of the eyelid over the eyeball
- Aqueous layer
 - Moisturises, nourishes and protects the eyeball
- Mucin layer
 - Adheres tears to the surface of the eye and allows them to spread evenly



References: 1. Facts about tears. Available from: <https://www.aao.org/eye-health/tips-prevention/facts-about-tears>. Accessed March 2018.

COMMON TRIGGERS





**8 out of 10
dry eye
problems
feature
blepharitis**

Who suffers from blepharitis?

Affects all age groups, elderly are most at risk



Looking after eyelids

WARM

MASSAGE

CLEAN

Eye Health Regime

Your Optometrist/Optician has recommended that you use the products detailed below. This will help you maintain good eyelid hygiene and manage your Dry Eye symptoms.



Name _____ Next appointment date _____

STEPS	Recommended usage/additional information
1. Heat and Massage <input type="checkbox"/> Yes <input type="checkbox"/> No	_____ _____ _____
2. Cleanse <input type="checkbox"/> Blephaclean <input type="checkbox"/> Blephagel <input type="checkbox"/> Blephasol Duo / Blephasol	_____ _____ _____
3. Lubricate <input type="checkbox"/> Hyabak <input type="checkbox"/> Hyabak UD <input type="checkbox"/> Thealoz <input type="checkbox"/> Thealoz Duo <input type="checkbox"/> Thealoz Duo UD <input type="checkbox"/> Thealoz Duo Gel	_____ _____ _____ _____ _____
4. Nutritional Supplements <input type="checkbox"/> Hyabak Caps <input type="checkbox"/> Nutrofol Total	_____ _____ _____

As part of your eye health regime it is equally important to ensure that you eat a balanced diet, including plenty of fresh fruit and vegetables, drink plenty of water each day and try to incorporate daily blinking exercises into your daily regime.


Thea Pharmaceuticals
Driving Innovation, Education and Professionalism

Optician/
Optometrist name _____

Signed _____

Re-order reference BLE001 - Revised Feb 2017

So.....how to find a dry eye drop that works

Choose
Preservative Free



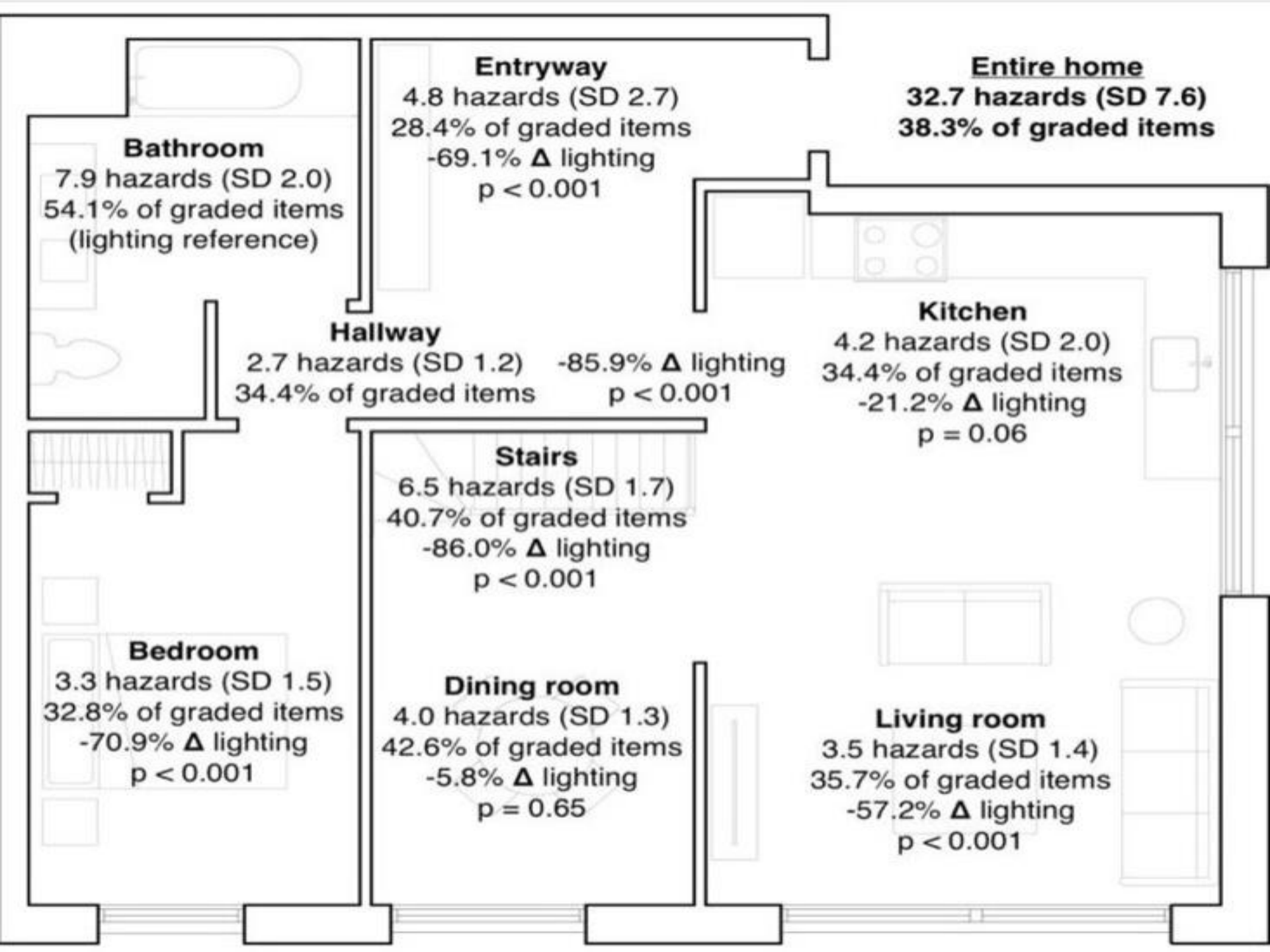
Choose Hylauronic
Acid



Choose
Bioprotectants



Easy to use,
economical bottle



Eye Health

- Nutrition for Eye Health
- Fact or Fiction?



Definition & Diagnosis

- Age-related Macular degeneration (AMD) is the leading cause of irreversible vision loss in developed countries. It affects the central part of the Retina (the macula) which may result in blurred or no vision in the center of visual field in one or both eyes
- AMD prevalence increases with age
- AMD is a multifactorial disease resulting from a combination of genetic & environmental risk factors

Risk factors

- Dietary habits (including glycaemic index and high fat intake have been associated with increased risk of early and/or progression to advanced
- Smoking and genetics are the most consistent risk factors

Current treatments for AMD

- There is no definitive treatment to prevent or to cure AMD especially Dry AMD
- Intravitreal injections of anti-VEGF antibodies is the most effective way to stabilise or even improve visual acuity in the majority of patients with neovascular AMD
- The efficacy of anti-VEGF is highly dependent on early diagnosis of neovascular lesions
- Lucentis/Eylea/Beovu
- Avastin /Macugen
- Photodynamic Therapy are tailored to individual patients need. There are some more in research stages at the moment

Ocular Nutrition & AMD

- Association between minerals , antioxidants or Omega-3-fatty acids and early or late AMD has been confirmed in some prospective population based studies.
- A reduced risk of early or advanced AMD was associated with higher dietary intake of essential micronutrients including minerals (Zinc) Vitamins (A,B,C,D,E) carotenoids & Omega-3-fatty acids

Top tips for better eye health this winter

Drink plenty of water



ਰੋਮ - ਖੋਜ ਮੌਕੇ ਏਥੇ ਦਿੱਤੇ ਗਏ ਹਨ

ਮੂਰਫੀਲਡਜ਼

ਕੀ ਤੁਸੀਂ ਕਿਸੇ ਖੋਜ ਅਧਿਐਨ ਵਿੱਚ ਭਾਗ ਲੈਣ ਵਿੱਚ
ਦਿਲਚਸਪੀ ਰੱਖਦੇ ਹੋ?
ਮੂਰਫੀਲਡਜ਼ ਵਿਖੇ ਕੀ ਖੋਜ ਕੀਤੀ ਜਾਂਦੀ ਹੈ ਨੂੰ ਆਕਾਰ
ਦੇਣਾ ਚਾਹੁੰਦੇ ਹੋ?

research.moorfields.nhs.uk ਵਿਖੇ ਸੰਮਿਲਤ ਹੋ
ਜਾਓ

ਜਾਂ, ਆਪਣੇ ਸਮਾਰਟਫੋਨ ਦੇ ਕੈਮਰੇ ਨੂੰ ਖੋਲ੍ਹੋ, 'ਤੇ
ਪੁਆਇੰਟ ਕਰੋ

ਸੱਜੇ ਪਾਸੇ QR CODE, ਫੇਰ ਇਸ ਦੇ ਲਿੰਕ 'ਤੇ ਕਲਿੱਕ
ਜਾਓ



रोम - अनुसंधान अवसर मूरफील्ड्स

एक शोध अध्ययन में भाग लेने में रुचि रखते हैं?

मूरफील्ड्स में क्या शोध किया जाता है, इसे
आकार देना चाहते हैं?

research.moorfields.nhs.uk में शामिल हो
जाओ

या, अपना स्मार्टफोन कैमरा खोलें, इंगित करें
दाईं ओर QR कोड, फिर लिंक पर क्लिक करें
वेबसाइट पर जाएं।



રોમ - સંશોધન પર તકો મૂરફીલ્ડ્સ

સંશોધન અભ્યાસમાં ભાગ લેવામાં રસ છે?
મૂરફીલ્ડ્સમાં શું સંશોધન કરવામાં આવે છે તે
આકાર આપવા માંગો છો?

research.moorfields.nhs.uk પર સામેલ
થાઓ

અથવા, તમારા સ્માર્ટફોનનો કેમેરા ખોલો, આ
તરફ ઇશારો કરો

જમણી બાજુએ QR CODE, પછી આની લિંક
પર ક્લિક કરો

વેબસાઈટ પર જાઓ





Please be Safe

- Thank you
- Any questions?

