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## King's College Hospital First to Trial new Radiation Eye Treatment

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28 February - A 20 minute non invasive procedure that uses the same amount of radiation as a dental x-ray could offer patients with a blinding disease a new treatment option.

The non-invasive system called the 'IRay' treats wet Age-related Macular Degeneration (wet AMD) and is being used as part of a clinical trial at King's College Hospital in London. King's is part of King's Health Partners Academic Health Sciences Centre, which is focussed on turning interesting results from the laboratory into meaningful outcomes for patients.

Age-related macular degeneration affects thousands of people and is the leading cause of blindness in the UK for people older than 65 years. Neovascular or wet AMD is an aggressive form of the disease affecting 250,000 people in this country and if left untreated can quickly lead to loss of central vision.

Currently, patients with this condition have a series of injections directly into the eye, as frequently as every four weeks, for the remainder of their life. This new alternative treatment, if proved to be a success, will mean that patients do not have to rely on such intensive treatment with eye injections, and some may avoid the need for ongoing eye injections altogether.

The machine delivers precise low energy radiation to the eye structures affected by wet AMD. Preliminary evidence suggests that this can close the blood vessels that cause loss of vision.

The device, developed by USA-based company Oraya Therapeutics, uses low voltage radiation. Treatment occurs in a clinic, eradicating the need for surgery. Patients sit at the machine with their chin placed on a chin rest. A contact lens is then placed on the surface of the eye to help maintain eye position and tracking. A robot tracks any eye movement and maintains stability, so that the controlled dose of radiation can be precisely delivered. The dose to other areas of the body is low, and the total dose of radiation is similar to a dental x-ray.

Consultant Ophthalmic Surgeon, Mr Tim Jackson, who leads the trial at King's said: "This is an exciting new technology that targets one of the most common causes of blindness in the UK. If the initial results are borne out in these important larger studies then a majority of patients will have something to look forward to - an easily administered, one-off treatment that maintains or improves vision, and fewer injections into their eye."

Jonny Gathorne-Hardy, 77 from North Norfolk is the first wet AMD patient to take part in the UK trial at King's. Jonny, who is an author, began losing the sight in his left eye three years ago as a result of wet AMD. He now relies heavily on his right eye, but was told a few months ago that this eye had developed wet AMD also.

Desperate to reduce the number of injections, he was referred to eye specialist Tim Jackson at King's for the trial. Although clinical trials do not guarantee that every patient is having the treatment, Jonny is optimistic about IRay. He said: "This treatment was painless and quick and I hope that being part of the trial will reduce the chances of my condition further deteriorating so that I can be a writer for many more years to come."

The trial will be recruiting at multiple sites in the UK, including Belfast, Manchester, Liverpool, Wolverhampton, Bradford, Torquay, and Southampton.

Jim Taylor, Oraya's president and CEO said: "We believe this therapy addresses a significant clinical need in treating wet AMD and reduce the treatment burden for the patient."

**Anyone wishing to be considered for the IRay trials need to firstly match up to the eligibility criteria on the INTREPID study website. Please see [www.intrepidstudy.info](http://www.intrepidstudy.info). If you are eligible to take part in the trials and would like more information, please call 020 32991297. Please note that recruitment is taking place throughout the month of March 2011.**

## Notes to editors

The clinical trial of the I-Ray launched at King's is known as The INTREPID study (I-Ray plus aNti-VEGF **TRE**atment for **P**atients with wet AMD). For more information please see [www.intrepidstudy.info](http://www.intrepidstudy.info).

Oraya Therapeutics, Inc. is a privately-held company developing innovative and non-invasive therapies for diseases of the eye. Founded in 2006, Oraya is funded by Essex Woodlands Health Ventures, Synergy Life Science Partners, Scale Venture Partners and Domain Associates.

The other UK recruiting sites are:

Royal Wolverhampton Hospital NHS Trust  
Compton Road, Wolverhampton, WV39QR  
Chief investigator: Mr Yit Yang

Manchester Royal Eye Hospital  
Oxford Road, Manchester M13 9WL.  
Chief Investigator: Mr Tariq Aslam

Royal Liverpool University Hospital  
Prescot Street, Liverpool, L7 8XP  
Chief investigator: Mr Heinrich Heimann

Royal Victoria Hospital  
Grosvenor Road, Belfast, BT126BA  
Chief investigator: Prof. Usha Chakravarthy

Bradford Royal Infirmary  
Duckworth Lane, Bradford, BD96RJ  
Chief investigator: Mr Faruque Ghanchi

Torbay Hospital  
Newton Road, Torquay, Devon, TQ2 7AA  
Chief investigator: Mr Mick Cole

Southampton University Hospital  
Tremona Road, Southampton, Hampshire, SO166YD  
Chief investigator: Prof Andrew Loteryl

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[www.kch.nhs.uk](http://www.kch.nhs.uk)

2. King's College Hospital NHS Foundation Trust is one of the UK's largest and busiest teaching hospitals, with nearly 7,000 staff providing around 1,000, 000 patient contacts a year. King's has a unique profile, with a full range of local hospital services for people in the London boroughs of Lambeth and Southwark as well as specialist services to patients from further afield. The Trust is recognized internationally for its work in liver disease and transplantation, neurosciences, cardiac, haemato-oncology, stroke and major trauma. King's also plays a key role in the training and education of medical, nursing and dental students with its academic partner, King's College London. For more information, visit [www.kch.nhs.uk](http://www.kch.nhs.uk)

4. King's College Hospital and Guy's and St Thomas' are both part of King's Health Partners Academic Health

Sciences Centre (AHSC), a pioneering collaboration between King's College London, and Guy's and St Thomas', King's College Hospital and South London and Maudsley NHS Foundation Trusts.

King's Health Partners is one of only five AHSCs in the UK and brings together an unrivalled range and depth of clinical and research expertise, spanning both physical and mental health. Our combined strengths will drive improvements in care for patients, allowing them to benefit from breakthroughs in medical science and receive leading edge treatment at the earliest possible opportunity.

For more information, visit [www.kingshealthpartners.org](http://www.kingshealthpartners.org)

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