

New drug delivers sight for sore eyes in Australia

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Pioneering a more complex nanodrug to combat inflammation and side effects

A potential improved treatment for two of the leading causes of blindness – age and diabetes-related eye problems – has been demonstrated in research involving a University of Queensland (UQ) expert in Australia.

Professor Di Yu of the UQ Diamantina Institute collaborated with scientists from the Chinese Academy of Sciences and Beijing Chaoyang Hospital to address an issue affecting approximately 450 million people worldwide.

“There is a high prevalence of ocular neovascular disease, with 415 million people at risk of loss of sight through diabetes, and as many as 50 million with age-related macular degeneration,” Professor Yu said.

The current treatment for these diseases is delivered via an injection in the eyeball.

However, Professor Yu and his collaborators are pioneering a more complex nanodrug which not only delivers an antibody, but simultaneously combats inflammation and identified side effects.

The new design allows the nanodrug to concentrate on lesions and deliver lasting benefits. With the impressive results, further developments are now underway to translate it into a new therapy.