

# Light-responsive in situ hydrogel for intraocular drug delivery

**Domain:** Therapeutics

**About Technology:** This technology involves a UV-triggered intravitreal gel depot designed for sustained drug release, minimizing injection frequency in chorioretinal conditions and providing a promising alternative for patients unresponsive to anti-VEGF therapy

**Intended Use:** Spironolactone-loaded, long-acting, light-responsive in situ hydrogel: a novel therapy beyond anti-VEGF for treating diabetic retinopathy

## Advantages:

- Enables up to 90 days of sustained drug release with enhanced biocompatibility, Reduces injection frequency
- Improves safety and patient adherence



**Development Status:** Preclinical studies completed

**Institute(s):** Department of Pharmacy, Birla Institute of Technology and Sciences (BITS), Hyderabad Campus

**Inventor(s):** Prof. Nirmal Jayabalan, Sai Shreya Cheruvu