

## Evaluation the biocompatibility of novel peptide hydrogel in rabbit eye

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A peptide containing a RGD (arginine-glycine-aspartic acid) sequence as well as a hydrophobic N-fluorenyl-9-methoxycarbonyl (Fmoc) tail was prepared via a standard Fmoc solid phase peptide synthesis (SPPS) technique. The supramolecular self-assembly of such peptide through  $\pi$ - $\pi$  stacking from Fmoc tail can transfer the peptide aqueous solution into a three-dimensional hydrogel. The biocompatibility of the peptide hydrogel was evaluated via clinical follow-up and histological analysis. The data obtained demonstrated that the peptide hydrogel exhibited good biocompatibility when injected to the subconjunctival space and anterior chamber of rabbit, indicating a potential application in ophthalmology as an implantable drug delivery system for the treatment to ocular anterior segment diseases such as glaucoma, iridocyclitis, and keratopathy.

### Biography

Liang Liang has completed his Ph.D at the age of 33 years from Huazhong University of Technology and Science, and his research direction is glaucoma. Now he is the ophthalmologist in the first college of clinical medical science, China Three Gorges University. He has published more than 5 papers about peptide hydrogel being applied at field of ophthalmology in reputed journals.

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