

Injectable Implanted Drug Delivery

■ ■ ■ [Profile of our research work]

Biomaterials and body response

Preparation & formulation design

- *Body response & biocompatibility*
- *biodegradation, variations of composition & structure*
- *Modification to attenuate the body response and promote the controlled drug release*

In situ Implant DDS

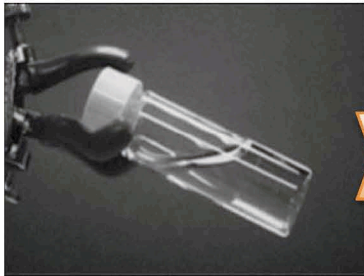
- *Formulation design & optimization*
- *Drug-polymer interaction*
- *Drug-loaded hydrogel*
- *Drug -loaded microparticle/ hydrogel complex*

long-term Controlled Drug Release

- *In vitro / in vivo drug release kinetics*
- *Modeling the drug release process*
- *Accessing the controlled (constant) drug delivery*

Injectable Implanted Drug Delivery

■ ■ ■ [Injectable Implant Drug Delivery Based on Thermosensitive Hydrogel]



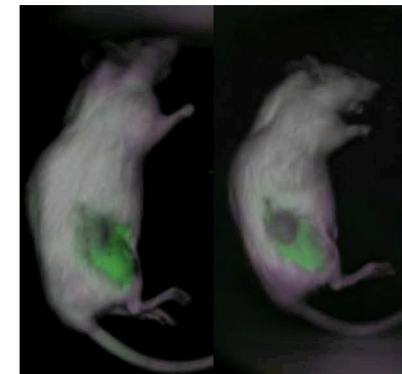
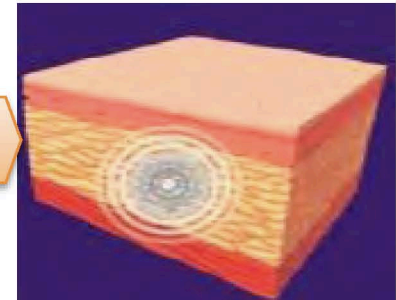
Solution at room temperature



Fast sol-gel transition after injection (at body temperature)



Semi-solid hydrogel containing the drug



Controlled drug release based on the degradation of the hydrogel

Nanoparticles for cell-targeted drug delivery

