

PICKERING EMULSION-BASED EYE DROP

Development of an innovative ophthalmic composition that enhances bioavailability and tolerance of active principles that are sparingly soluble in water or relatively unstable in water.

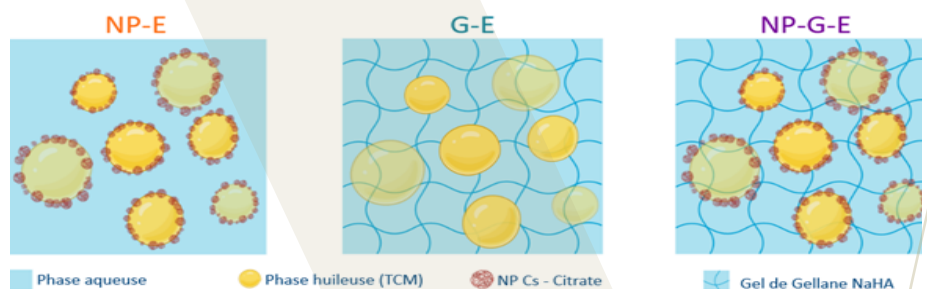
PRESENTATION

Current treatment of glaucoma contain preservative or non-particular surfactant that display deleterious effects (allergy, inflammation). To address this issue the inventors propose a novel ophthalmic composition, comprising a nonionic oil-in-water emulsion (Pickering emulsion), and stabilized with organic nanoparticles. Those innovative ophthalmic compositions could encapsulate active principles with poor solubility in water (steroids and prostaglandins) and could ensure an ocular extended-release. These compositions are useful as a drug, in particular for ocular instillation of drugs involved in treatments of inflammation and glaucoma.

COMPETITIVE ADVANTAGES

- Free of non-particulate surfactant and preservative.
- Highly stable at room temperature
- Utilization of lipid globules to restore the tear film lipid layer.
- Encapsulation of lipophilic active principles (steroids et prostaglandins)
- Innovative method for preparing high quality emulsions

Ophthalmic composition - Nonionic oil-in-water emulsion -
Non-particular surfactant - Pickering emulsion -
Organic nanoparticles - Preservative



APPLICATIONS

- Eye drop formulation for lipophilic active principles (corticoids and prostaglandins)
- Dry eye
- Ocular inflammation
- Glaucoma

INTELLECTUAL PROPERTY

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CONTACT

- ☎ +33 (0)1 44 23 21 50
- ✉ industriels@erganeo.com
- Ref. projet : 719a

LABORATORIES

Université Paris Cité (UPC)
Assistance Publique - Hôpitaux de Paris (AP-HP)
Centre National de la Recherche Scientifique (CNRS)
Institut National de la Santé et de la Recherche médicale (INSERM)
Unither