

Technology Opportunity, Ref. No. IS-22/010

## Eyedrop composition for dry eye disease

The invention relates to an eyedrop solution comprising at least one bacterial strain, proteins, and/or metabolites for treating dry eye disease and associated conditions characterised by dry eyes.

**Keywords** Dry Eye Disease, Probiotic

**Inventors** Prof. Dr. Martin S. Zinkernagel, Dr. Denise C. Zysset-Burri

**Reference** Schlegel, I.; De Goüyon Matignon de Pontourade, C.M.F.; Lincke, J.-B.; Keller, I.; Zinkernagel, M.S.; Zysset-Burri, D.C. The Human Ocular Surface Microbiome and Its Associations with the Tear Proteome in Dry Eye Disease. *Int. J. Mol. Sci.* 2023, 24, 14091.  
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**Background** Dry Eye Disease (DED) is considered to be one of the most common ocular surface disease worldwide with a prevalence of up to 34%. DED is characterized by ocular discomfort such as foreign body sensation, burning sensation, itching or chronic eye pain. It is also associated with reduced and/or fluctuating vision which may restrict activities of daily living. Despite this, the current understanding of the pathogenesis of DED is incomplete and treatment options are limited to moisturizing eye drops, antibiotics and crude immune modulators with partially severe side effects.

**Invention** The invention relates to an eyedrop solution comprising at least one bacterial strain (in particular a strain of the bacterium *Acinetobacter johnsonii*), proteins, and/or metabolites for the treatment of dry eye disease and associated conditions characterised by dry eyes.

**Fields of Use** Eyedrop composition for dry eye disease

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**Contact** *Unitecra, Technology Transfer University Bern, Urs Dommann, dommann@unitecra.ch*