Claims

[Claim 1] A composition for use as a topical ocular medicament, comprising:

an insulin;
a set of excipients; and
a penetration enhancer,

wherein the insulin is a rapid-acting insulin selected from insulin glulisine, insulin lispro , insulin aspart, or regular insulin (insulin R), and wherein the penetration enhancer which is a prostaglandin analogue, is selected from latanoprost, unoprostone, bimatoprost, travoprost, tafluprost and latanoprostene.

[Claim 2] The composition for use as a topical ocular medicament according to claim 1, wherein the set of excipients comprises one or more excipients selected from the group consisting of:

a surfactant;
a buffering agent;
a chelating agent;
a viscosity enhancer;
a tonicity agent;
a preservative; and
a solvent.

[Claim 3] The composition for use as a topical ocular medicament according to claim 1, wherein the concentration of the insulin ranges from 1.735 mg/mL to 34.7 mg/mL.

[Claim 4] The composition for use as a topical ocular medicament according to claim 1. wherein the concentration of latanoprost ranges from 0.000625% to 0.2%.

[Claim 5] The composition for use as a topical ocular medicament according to claim 1, wherein the concentration of unoprostone ranges from 0.015% to 0.6%.

[Claim 6] The composition for use as a topical ocular medicament according to claim 1, wherein the concentration of travoprost ranges from 0.002% to 0.16%.

[Claim 7] The composition for use as a topical ocular medicament according to claim 1, wherein the concentration of bimatoprost ranges from 0.00125% to 0.12%.

[Claim 8] The composition for use as a topical ocular medicament according to claim 1, wherein the concentration of tafluprost ranges from 0.0001875% to 0.06%.

[Claim 9] The composition for use as a topical ocular medicament according to claim 1, wherein the concentration of latanoprostene ranges from 0.00015% to 0.06%.

[Claim 10] Use of a prostaglandin analogue according to claim 1 in the manufacture of a medicament comprising insulin, for enhancing the absorption of insulin when administered topically in the eye.

[Claim 11] Use of a prostaglandin analogue according to claim 1 in the manufacture of a medicament comprising insulin, for systemic delivery of insulin via topical ocular administration.

[Claim 12] Use of a prostaglandin analogue and insulin according to claim 1 in the manufacture of an ophthalmic medicament for use as insulin therapy.

[Claim 13] Use of a composition comprising insulin and a prostaglandin analogue according claim 1, in the manufacture of a medicament as insulin therapy, wherein the prostaglandin analogue enhances ocular permeability.

[Claim 14] The composition according to claim 1, for use in the treatment of a disorder that responds to systemic insulin therapy.

[Claim 15] The composition according to claim 1, for use in the treatment of absolute systemic insulin deficiency.

[Claim 16] The composition according to claim 1, for use in the treatment of relative systemic insulin deficiency.

[Claim 17] The composition according to claim 1, for use in the treatment of impaired systemic insulin sensitivity.