

CLAIMS

1. Use of belinostat (PubChem CID: 6918638) in the preparation of a medicament for the treatment, prophylaxis or alleviation of atopic dermatitis.
2. Use according to Claim 1, in which the medicament comprises a pharmaceutical composition comprising belinostat together with a pharmaceutically acceptable excipient, carrier or diluent.
3. Use according to Claim 1 or 2, in which the belinostat or pharmaceutical composition is to be applied topically.
4. Use of belinostat (PubChem CID: 6918638) in the restoration of barrier function.
5. An *in vitro* or *ex-vivo* method of up-regulating the expression of miR-335 in a cell, the method comprising exposing the cell to belinostat (PubChem CID: 6918638).
6. A method of diagnosis of atopic dermatitis (AD) in an individual, the method comprising detecting the activity or expression level of miR-335 in a sample of or from an individual.
7. A method according to Claim 6, in which a decreased activity or expression level of miR-335 as compared to the activity or expression level of miR-335 in individual known not to be suffering from atopic dermatitis indicates that the individual is suffering, or is likely to be suffering, from atopic dermatitis.
8. A method according to Claim 6 or 7, in which an expression level of 95% or less, 90% or less, 85% or less, 80% or less, 75% or less, 70% or less, 65% or less, 60% or less, 55% or less, 50% or less, 45% or less, 40% or less, 35% or less, 30% or less, 25% or less, 20% or less, 15% or less, 10% or less, 5% or less of miR-335, as compared to the expression level of that miR-335 in or of an individual known not to be suffering from atopic dermatitis, is indicative of atopic dermatitis.
9. A method according to Claim 6, 7 or 8, in which the sample comprises a skin sample.
10. A kit for detecting atopic dermatitis in an individual or susceptibility of the individual to atopic dermatitis, the kit comprising means for detection of the activity or expression level of miR-335 in the individual or a sample taken from him or her, in which the means for detection

preferably comprises an miR-335 polynucleotide or a fragment thereof or a complementary nucleotide to a an miR-335 polynucleotide or a fragment thereof.

11. miR-335 for use in a method of diagnosis, treatment, prophylaxis or alleviation of atopic dermatitis.

- 5 12. miR-335 according to Claim 11, which comprises a polynucleotide sequence having miRBase Accession Number MI0000816, or a variant, homologue, derivative or fragment thereof such as a sequence having 95%, 96%, 97%, 98% or 99% sequence identity thereto and comprising miR-335 activity.