

WHAT IS CLAIMED IS:

1. A method of determining a predisposition to symptomatic contact lens wear in a patient, said method comprising:
 - a) optionally determining a baseline concentration of interleukin-17A (IL-17A) in a non-stimulated tear sample of the patient;
 - b) delivering a stimulus to sensory neurons of a cornea of the patient to produce a stimulated tear sample in the patient;
 - c) determining a concentration of IL-17A in the stimulated tear sample; and
 - d) classifying the patient as being predisposed to symptomatic contact lens wear if
 - i) the concentration of IL-17A in the stimulated tear sample is at or above a cut-off value predetermined to be associated with a predisposition to symptomatic contact lens wear, and/or
 - ii) the concentration of IL-17A in the stimulated tear sample is higher than the baseline concentration of IL-17A.
2. A method of determining a predisposition to asymptomatic contact lens wearer in a patient, said method comprising:
 - a) determining a baseline concentration of IL-17A in a non-stimulated tear sample of the patient;
 - b) delivering a stimulus to sensory neurons of a cornea of the patient to produce a stimulated tear sample in the patient;
 - c) determining a concentration of IL-17A in the stimulated tear sample; and

- d) classifying the patient as predisposed to being an asymptomatic contact lens wearer if the concentration of IL-17A in the stimulated tear sample is less than 150% of the baseline concentration of IL-17A.
3. The method of claim 1, wherein the baseline concentration of IL-17A is determined in a non-stimulated tear sample of the patient, and the patient is classified as being predisposed to symptomatic contact lens wear where if the post-stimulus concentration of IL-17A is higher than the baseline concentration of IL-17A.
4. The method of claim 1 or claim 2, wherein the stimulus is a mechanical stimulus delivered by contact lens wear.
5. The method of claim 1 or claim 2, wherein IL-17A concentration is measured using an immunochromatographic assay.
6. A kit for determining a predisposition for symptomatic contact lens wear in a patient, said kit comprising an antibody that specifically binds to IL-17A, wherein a high risk of symptomatic contact lens wear is determined using the kit if the concentration of IL-17A in a stimulated tear sample of the patient is higher than a cut-off value predetermined to be associated with symptomatic contact lens wear.
7. The kit of claim 6, wherein the cut-off value is at least 75 pg/ml.

8. The kit of claim 6, comprising a lateral flow chromatographic test strip.
9. The kit of claim 8, comprising a sample application zone; a reagent zone comprising an antibody conjugate comprising a detectable label conjugated to a first capture antibody that specifically binds IL-17A, wherein the antibody conjugate is in fluid communication with the sample application zone; and a test zone comprising a second capture antibody that specifically binds IL-17A in fluid communication with the reagent zone.
10. A kit for determining a predisposition for asymptomatic contact lens wear in a patient, said kit comprising an antibody that specifically binds to IL-17A, wherein a predisposition for asymptomatic contact lens wear is determined using the kit if the concentration of IL-17A in a stimulated tear sample of the patient is lower than the concentration of IL-17A in a non-stimulated tear sample of the patient.
11. The kit of claim 10, comprising a lateral flow chromatographic test strip comprising:
 - a) a first sample application zone for applying the non-stimulated tear sample;
 - b) a second sample application zone for applying the stimulated tear sample;
 - c) a first reagent zone in fluid communication with the first sample application zone,
 - d) a second reagent zone in fluid communication with the second sample application zone,
 - e) a first test zone in fluid communication with the first reagent zone, and
 - f) a second test zone in fluid communication with the second reagent zone,wherein the first and second reagent zones each comprise an antibody conjugate comprising a detectable label conjugated to a first capture antibody that specifically binds IL-17A, the

first and second test zones each comprise a second capture antibody that specifically binds IL-17A, and wherein a lower concentration of IL-17A in the stimulated tear sample of the patient is determined by a lower concentration of the detectable label in the first reagent zone compared to the second reagent zone after application of the non-stimulated and stimulated tear samples to the first and second sample application zones, respectively.

12. The kit of claim 6 or 10, further comprising a tear collection device.
13. Use of an antibody that specifically binds IL-17A in the manufacture of a device for the diagnosis of predisposition to symptomatic contact lens wear in a patient.
14. The use of claim 13, wherein the device comprises a lateral flow chromatographic test strip
15. A method for selecting a treatment for a patient in need of vision correction, said method comprising:
 - a) optionally determining a baseline concentration of interleukin-17A (IL-17A) in a non-stimulated tear sample of the patient;
 - b) delivering a stimulus to sensory neurons of a cornea of the patient to produce a stimulated tear sample in the patient;
 - c) collecting the stimulated tear sample;
 - d) determining a concentration of IL-17A in the stimulated tear sample; and
 - e) prescribing the patient a treatment for preventing or reducing discomfort associated with contact lens wear when

- i) the concentration of IL-17A in the stimulated tear sample is at or above a cut-off value predetermined to be associated with a predisposition to symptomatic contact lens wear, and/or
 - ii) the concentration of IL-17A in the stimulated tear sample is higher than the baseline concentration of IL-17A.
16. The method of claim 15, wherein the concentration of IL-17A in the stimulated tear sample is determined by contacting the stimulated tear sample with an antibody that specifically binds IL-17A, and detecting antibody that has bound to the IL-17A.
17. The method of claim 16, wherein the antibody that specifically binds IL-17A is a component of an immunochromatic assay.
18. The method of claim 15, wherein the patient is prescribed contact lenses for the vision correction and the treatment for reducing discomfort associated with contact lens wear is selected from administration of a neuropathic agent, an anti-inflammatory agent, a wetting eye drop, and combinations thereof.
19. The method of claim 15, wherein the treatment for preventing or reducing discomfort associated with contact lens wear comprises prescribing the patient spectacle lenses for vision correction.
20. A method for treating a patient in need of vision correction, said method comprising:

- a) optionally determining a baseline concentration of interleukin-17A (IL-17A) in a non-stimulated tear sample of the patient;
- b) delivering a stimulus to sensory neurons of a cornea of the patient to produce a stimulated tear sample in the patient;
- c) collecting the stimulated tear sample;
- d) determining a concentration of IL-17A in the stimulated tear sample; and
- e) providing a prescription to the patient for treatment for preventing or reducing discomfort associated with contact lens wear when
 - i) the concentration of IL-17A in the stimulated tear sample is at or above a cut-off value predetermined to be associated with a predisposition to symptomatic contact lens wear, and/or
 - ii) the concentration of IL-17A in the stimulated tear sample is higher than the baseline concentration of IL-17A.

21. The method of claim 20, wherein the concentration of IL-17A in the stimulated tear sample is determined by contacting the stimulated tear sample with an antibody that specifically binds IL-17A, and detecting antibody that has bound to the IL-17A.

22. The method of claim 21, wherein the antibody that specifically binds IL-17A is a component of an immunochromatic assay.

23. The method of claim 20, wherein the patient is prescribed contact lenses for the vision correction and the treatment for reducing discomfort associated with contact lens wear is

selected from administration of a neuropathic agent, an anti-inflammatory agent, a wetting eye drop, and combinations thereof.

24. The method of claim 20, wherein the treatment for preventing or reducing discomfort associated with contact lens wear comprises prescribing the patient spectacle lenses for vision correction.
25. The method of claim 20, wherein the prescription is for contact lenses for the vision correction and for administering a neuropathic agent, an anti-inflammatory agent, a wetting eye drop, or any combinations thereof.
26. The method of claim 20, wherein the prescription is for spectacle lenses for vision correction.
27. A method for treating a patient in need of vision correction, said method comprising:
 - a) optionally determining a baseline concentration of interleukin-17A (IL-17A) in a non-stimulated tear sample of the patient;
 - b) delivering a stimulus to sensory neurons of a cornea of the patient to produce a stimulated tear sample in the patient;
 - c) collecting the stimulated tear sample;
 - d) determining a concentration of IL-17A in the stimulated tear sample and whether the concentration is at or above a cut-off value predetermined to be associated with a predisposition to symptomatic contact lens wear, and/or whether the concentration of

IL-17A in the stimulated tear sample is higher than the baseline concentration of IL-17A, and if so, then

- e) providing prescribed contact lenses to the patient for the vision correction and administering a neuropathic agent, an anti-inflammatory agent, a wetting eye drop, or any combinations thereof or providing prescribed spectacle lenses to the patient for the vision correction.