Publication No. 2012/0052077); for a contact lens care and storage solution (U.S. Patent Application Publication No. 2012/0321611) or for systemic injection to, for example, inhibit cell-cell adhesions or motility within the vasculature (see, e.g., US provisional application 61/908,959 filed November 26, 2013).

[0034a] In yet another aspect of the present disclosure, there is provided a use of the composition as described herein, for the preparation of a medicament for the treatment of an articular joint by viscosupplementation.

[0034b] In a further aspect of the present disclosure, there is provided a use of the composition as described herein, for the preparation of a medicament for the treatment of dry eye disease.

[0034c] In another aspect of the present disclosure, there is provided a use of the composition as described herein, for the preparation of a medicament for the treatment or prevention of fibrosis.

[0034d] In yet another aspect of the present disclosure, there is provided a composition as described herein, for use in the treatment of an articular joint by viscosupplementation.

[0034e] In a further aspect of the present disclosure, there is provided a composition as described herein, for use in the treatment of dry eye disease.

[0034f] In another aspect of the present disclosure, there is provided a composition as described herein, for use in the treatment or prevention of fibrosis.

[0034g] In yet another aspect of the present disclosure, there is provided a composition as described herein, for use in systemic injection to inhibit cell-cell adhesion or motility within the vasculature.

BRIEF DESCRIPTION OF THE DRAWINGS

[0035] FIGS. 1 and 2 are plasmid maps of vectors used in development of the lubricin-expressing CHO-M clone used in the process of the invention and encoding the full length sequence of hPRG4.

[0036] FIGS. 3 and 4 depict polyacrylamide gels useful in assessing the structure of the rhlubricin of the invention.

[0037] FIG. 5 is a graphical depiction of the productivity of one lubricin production run measuring micrograms of lubricin produced over time per liter of culture of transfected CHO-M cells. There are three bars at each date of harvest. The bar at the left is "Std Curve 24 Jun 14." The bar in the middle is "Std Curve 24 Jul 14," and the bar at the right is "Std Curve 25 Jul 14."

[0038] FIG. 6 is a diagram showing core 1 glycans of rhlubricin of the invention.

[0039] FIG. 7 is a chromatograph, with peaks labeled, showing the relative abundance of the various di- and tri-saccharides pendent from SER and THR residues in the rhlubricin of the invention.

[0040] FIG. 8 is a diagram showing the larger range of glycans extending into the core 2 structures on native lubricin extracted from human synovial fluid.

[0041] FIG. 9 is a chromatograph, with peaks labeled, showing the relative abundance of the various sugar residues in native human lubricin.

[0042] FIGS. 10A, 10B, and 10C are plots of surface tension vs. rhPRG4 and/or polyoxyethylene surfactant concentrations showing the reduction in surface tension with increased concentration of rhPRG4.

28. The composition of any of claims 20-27, further comprising a monomeric lubricin species admixed with multimeric lubricin species.

29. The composition of any of claims 20-28, comprising a dimeric lubricin species.

30. The composition of any of claims 20-29, comprising a lubricin species comprising at least five disulfide-bonded or non-covalently associated individual glycosylated amino acid chains having a molecular weight of at least 1200 kDa.

31. The composition of any of claims 20-30, further comprising hyaluronic acid or a salt thereof in admixture with said lubricin glycoprotein.

32. Use of the composition of any of claims 20-31, for the preparation of a medicament for the treatment of an articular joint by viscosupplementation.

33. Use of the composition of any of claims 20-31, for the preparation of a medicament for the treatment of dry eye disease.

34. Use of the composition of any of claims 20-31, for the preparation of a medicament for the treatment or prevention of fibrosis.

35. The composition of any of claims 20-31, for use in the treatment of an articular joint by viscosupplementation.

36. The composition of any of claims 20-31, for use in the treatment of dry eye disease.

37. The composition of any of claims 20-31, for use in the treatment or prevention of fibrosis.

38. The composition of any of claims 20-31, for use in systemic injection to inhibit cell-cell adhesion or motility within the vasculature.