CLAIMS

1. An herbal composition comprising

from about 29% to about 35% of a concentrated Vitex negundo extract, by weight relative to the total weight of the herbal composition, concentrated in at least one iridoid glycoside or a pharmaceutically acceptable salt or solvate thereof;

from about 34% to about 40% of a concentrated Cardiospermum halicacabum extract, by weight relative to the total weight of the herbal composition, concentrated in at least one hydroxy flavone derivative or a pharmaceutically acceptable salt or solvate thereof;

from about 4% to about 8% of a concentrated Bambusa arundinacea extract, by weight relative to the total weight of the herbal composition, concentrated in silica;

from about 2% to about 6% of a concentrated Citrus sinensis extract, by weight relative to the total weight of the herbal composition, concentrated in at least one bioflavonoid or a pharmaceutically acceptable salt or solvate thereof;

from about 2% to about 6% of a concentrated Boswellia serrata extract, by weight relative to the total weight of the herbal composition, concentrated in at least one pentacyclic triterpenic acid or a pharmaceutically acceptable salt or solvate thereof; and

from about 12% to about 18% of a concentrated Curcuma longa extract, by weight relative to the total weight of the herbal composition, concentrated in at least one water soluble saponin glycoside or a pharmaceutically acceptable salt or solvate thereof;

wherein the combination of the amount of the composition comprising the concentrated Vitex negundo extract, the concentrated Cardiospermum halicacabum

extract, the concentrated Bambusa arundinacea extract, the concentrated Citrus sinensis extract, the concentrated Boswellia serrata extract, and the concentrated Curcuma longa extract is effective to improve or maintain joint health or increase joint space in the subject.

2. The herbal composition according to claim 1, wherein the ratio of the concentrated Vitex negundo extract to the concentrated Cardiospermum halicacabum extract is from about 1:1 to about 1:2.5.

3. The herbal composition according to claim 1, wherein the composition comprises about 32.5% of the Vitex negundo extract, about 37.5% of the Cardiospermum halicacabum extract, about 5% of the Bambusa arundinacea extract, about 5% of the Citrus sinensis extract, about 5% of the Boswellia serrata extract, and about 15% of the Curcuma longa extract, by weight relative to the total weight of the composition.

4. The herbal composition according to claim 1, wherein each extract is standardized to a powder comprised of particles of substantially uniform size before being mixed with other extracts.

5. The herbal composition according to claim 2, wherein the Vitex negundo extract is an extract from Vitex negundo aerial parts,

the Cardiospermum halicacabum extract is an extract from Cardiospermum halicacabum aerial parts,

the Bambusa arundinacea extract is an extract from Bambusa arundinacea shoots,

the Citrus sinensis extract is an extract of Citrus sinensis peels,

the Boswellia serrata extract is an extract of Boswellia serrata gum, and

the Curcuma longa extract is an extract of Curcuma longa rhizomes.

6. The herbal composition according to claim 3, wherein the amount of the composition comprising the Vitex negundo extract, the Cardiospermum halicacabum extract, the Bambusa arundinacea extract, the Citrus sinensis extract, the Boswellia serrata extract, and the Curcuma longa extract is effective to improve or maintain joint health or reduce, alleviate, and/or slow the progression of at least one symptom in the subject as shown by improvement in the subject's joint health as measured by changes in baseline versus end point scores in:

a 30 second chair stand test (30SCST);

a Western Ontario and McMaster Universities Osteoarthritis Index (WOMAC) score (WOMAC A Pain), (WOMAC B Stiffness), and/or (WOMAC C Physical function);

range of motion in knee flexion; and/or

radiographic minimum joint space width.

7. The herbal composition according to claim 6, wherein the composition is effective to increase joint space in a subject as measured by changes in baseline versus endpoint scores in radiographic minimum joint space.

8. The herbal composition according to claim 4, wherein the Vitex negundo extract, the Cardiospermum halicacabum extract, the Citrus sinensis extract, the Boswellia serrata gum extract, and the Curcuma longa extract are from one or more extractions with aqueous alcohol.

9. The herbal composition according to claim 8, wherein the alcohol comprises methanol, ethanol, or combinations thereof.

10. The herbal composition according to claim 5, wherein the composition further comprises at least one pharmaceutically acceptable excipient and/or antioxidant.

11. An herbal composition comprising:

from about 8% to about 12% of a concentrated Vitex negundo extract, by weight relative to the total weight of the herbal composition, concentrated in at least one iridoid glycoside or a pharmaceutically acceptable salt or solvate thereof;

from about 18% to about 22% of a concentrated Cardiospermum halicacabum extract, by weight relative to the total weight of the herbal composition, concentrated in at least one hydroxy flavone derivative or a pharmaceutically acceptable salt or solvate thereof;

from about 4% to about 8% of a concentrated Bambusa arundinacea extract, by weight relative to the total weight of the herbal composition, concentrated in silica;

from about 3% to about 6% of a concentrated Citrus sinensis extract, by weight relative to the total weight of the herbal composition, concentrated in at least one bioflavonoid or a pharmaceutically acceptable salt or solvate thereof;

from about 4% to about 6% of a concentrated Boswellia serrata extract, by weight relative to the total weight of the herbal composition, concentrated in at least one pentacyclic triterpenic acid or a pharmaceutically acceptable salt or solvate thereof;

from about 12% to about 18% of a concentrated Curcuma longa extract, by weight relative to the total weight of the herbal composition, concentrated in at least one water soluble saponin glycoside or a pharmaceutically acceptable salt or solvate thereof; and

from about 37% to about 42% of Glucosamine or a pharmaceutically acceptable salt or solvate thereof;

wherein the amount of the composition comprising the concentrated Vitex negundo extract, the concentrated Cardiospermum halicacabum extract, the concentrated Bambusa arundinacea extract, the concentrated Citrus sinensis extract, the concentrated Boswellia serrata extract, the concentrated Curcuma longa extract, and the Glucosamine is effective to improve or maintain joint health or increase joint space in the subject.

12. The herbal composition according to claim 11, wherein the ratio of the concentrated Vitex negundo extract to the concentrated Cardiospermum halicacabum extract is from about 1:1.5 to about 1:2.5.

13. The herbal composition according to claim 11, wherein the composition comprises about 10% of the Vitex negundo extract, about 20% of the Cardiospermum halicacabum extract, about 5% of the Bambusa arundinacea extract, about 4% of the Citrus sinensis extract, about 5% of the Boswellia serrata extract, about 15% of the Curcuma longa extract, and about 40% of the Glucosamine, by weight relative to the total weight of the composition.

14. The herbal composition according to claim 11, wherein each extract is standardized to a powder comprised of particles of substantially uniform size before being mixed with other extracts.

15. The herbal composition according to claim 12, wherein the Vitex negundo extract is an extract from Vitex negundo aerial parts,

the Cardiospermum halicacabum extract is an extract from Cardiospermum halicacabum aerial parts,

the Bambusa arundinacea extract is an extract from Bambusa arundinacea shoots,

the Citrus sinensis extract is an extract of Citrus sinensis peels,

the Boswellia serrata extract is an extract of Boswellia serrata gum, and

the Curcuma longa extract is an extract of Curcuma longa rhizomes.

16. The herbal composition according to claim 13, wherein the amount of the composition comprising the Vitex negundo extract, the Cardiospermum halicacabum extract, the Bambusa arundinacea extract, the Citrus sinensis extract, the Boswellia serrata extract, the Curcuma longa extract, and the Glucosamine is effective to improve or maintain joint health or reduce, alleviate, and/or slow the progression of at least one symptom in the subject as shown by improvement in the subject's joint health as measured by changes in baseline versus end point scores in:

a 30 second chair stand test (30SCST);

a Western Ontario and McMaster Universities Osteoarthritis Index (WOMAC) score (WOMAC A Pain), (WOMAC B Stiffness), and/or (WOMAC C Physical function);

range of motion in knee flexion; and/or

radiographic minimum joint space width.

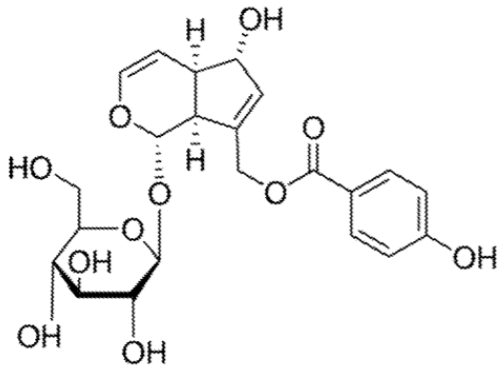
17. The herbal composition according to claim 11, wherein the Vitex negundo extract, the Cardiospermum halicacabum extract, the Citrus sinensis extract, the Boswellia serrata gum extract, and the Curcuma longa extract are from one or more extractions with aqueous alcohol.

18. The herbal composition according to claim 17, wherein the alcohol comprises methanol, ethanol, or combinations thereof.

19. The herbal composition according to claim 15, wherein the composition further comprises at least one pharmaceutically acceptable excipient and/or antioxidant.

20. The herbal composition according to claim 16, wherein the composition is effective to increase joint space in a subject as measured by changes in baseline versus endpoint scores in radiographic minimum joint space.

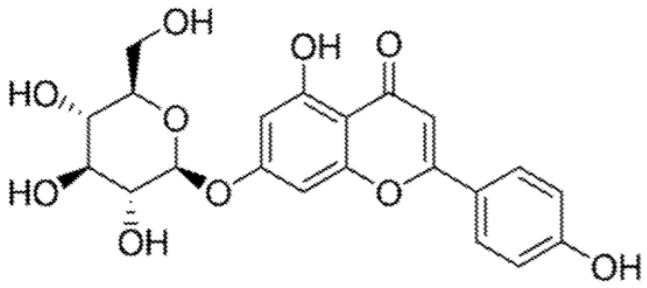
21. The herbal composition according to claim 1, wherein the at least one iridoid glycoside is a compound according to Formula (I):



(I)

or a pharmaceutically acceptable salt of solvate thereof; and

wherein the at least one flavone derivative is a compound according to Formula (II):



(II)

or a pharmaceutically acceptable salt of solvate thereof.

22. The herbal composition according to claim 11, wherein the at least one iridoid glycoside is a compound according to Formula (I) or a pharmaceutically acceptable salt of solvate thereof; and

wherein the at least one flavone derivative is a compound according to Formula (II) or a pharmaceutically acceptable salt of solvate thereof.

23. An herbal composition consisting essentially of:

from about 29% to about 35% of a concentrated Vitex negundo extract, by weight relative to the total weight of the herbal composition, concentrated in at least one iridoid glycoside or a pharmaceutically acceptable salt or solvate thereof;

from about 34% to about 40% of a concentrated Cardiospermum halicacabum extract, by weight relative to the total weight of the herbal composition, concentrated in at least one hydroxy flavone derivative or a pharmaceutically acceptable salt or solvate thereof;

from about 4% to about 8% of a concentrated Bambusa arundinacea extract, by weight relative to the total weight of the herbal composition, concentrated in silica;

from about 2% to about 6% of a concentrated Citrus sinensis extract, by weight relative to the total weight of the herbal composition, concentrated in at least one bioflavonoid or a pharmaceutically acceptable salt or solvate thereof;

from about 2% to about 6% of a concentrated Boswellia serrata extract, by weight relative to the total weight of the herbal composition, concentrated in at least one pentacyclic triterpenic acid or a pharmaceutically acceptable salt or solvate thereof; and

from about 12% to about 18% of a concentrated Curcuma longa extract, by weight relative to the total weight of the herbal composition, concentrated in at least one water soluble saponin glycoside or a pharmaceutically acceptable salt or solvate thereof.

24. The herbal composition according to claim 23, wherein the composition further comprises at least one pharmaceutically acceptable excipient and/or antioxidant.

25. The herbal composition according to claim 24, wherein the ratio of the concentrated Vitex negundo extract to the concentrated Cardiospermum halicacabum extract is from about 1:1 to about 1:2.5.

26. The herbal composition according to claim 24, wherein the composition comprises about 32.5% of the Vitex negundo extract, about 37.5% of the Cardiospermum halicacabum extract, about 5% of the Bambusa arundinacea extract, about 5% of the Citrus sinensis extract, about 5% of the Boswellia serrata extract, and about 15% of the Curcuma longa extract, by weight relative to the total weight of the composition.

27. The herbal composition according to claim 26, wherein the Bambusa arundinacea extract comprises about 50% to about 75% by weight silica.

28. The herbal composition according to claim 23, wherein the at least one iridoid glycoside is a compound according to Formula (I) or a pharmaceutically acceptable salt of solvate thereof; and

wherein the at least one flavone derivative is a compound according to Formula (II) or a pharmaceutically acceptable salt of solvate thereof.

29. An herbal composition consisting essentially of:

from about 8% to about 12% of a concentrated Vitex negundo extract, by weight relative to the total weight of the herbal composition, concentrated in at least one iridoid glycoside or a pharmaceutically acceptable salt or solvate thereof;

from about 18% to about 22% of a concentrated Cardiospermum halicacabum extract, by weight relative to the total weight of the herbal composition, concentrated in at least one hydroxy flavone derivative or a pharmaceutically acceptable salt or solvate thereof;

from about 4% to about 8% of a concentrated Bambusa arundinacea extract, by weight relative to the total weight of the herbal composition, concentrated in silica;

from about 3% to about 6% of a concentrated Citrus sinensis extract, by weight relative to the total weight of the herbal composition, concentrated in at least one bioflavonoid or a pharmaceutically acceptable salt or solvate thereof;

from about 4% to about 6% of a concentrated Boswellia serrata extract, by weight relative to the total weight of the herbal composition, concentrated in at least one pentacyclic triterpenic acid or a pharmaceutically acceptable salt or solvate thereof;

from about 12% to about 18% of a concentrated Curcuma longa extract, by weight relative to the total weight of the herbal composition, concentrated in at least one water soluble saponin glycoside or a pharmaceutically acceptable salt or solvate thereof; and

from about 37% to about 42% of Glucosamine or a pharmaceutically acceptable salt or solvate thereof.

30. The herbal composition according to claim 29, wherein the composition further comprises at least one pharmaceutically acceptable excipient and/or antioxidant.

31. The herbal composition according to claim 30, wherein the ratio of the concentrated Vitex negundo extract to the concentrated Cardiospermum halicacabum extract is from about 1:1 to about 1:2.5.

32. The herbal composition according to claim 30, wherein the composition comprises about 10% of the Vitex negundo extract, about 20% of the Cardiospermum halicacabum extract, about 5% of the Bambusa arundinacea extract, about 4% of the Citrus sinensis extract, about 5% of the Boswellia serrata extract, about 15% of the Curcuma longa extract, and about 40% of the Glucosamine, by weight relative to the total weight of the composition.

33. The herbal composition according to claim 32, wherein the Bambusa arundinacea extract comprises about 50% to about 75% by weight silica.

34. The herbal composition according to claim 29, wherein the at least one iridoid glycoside is

a compound according to Formula (I) or a pharmaceutically acceptable salt of solvate thereof; and

wherein the at least one flavone derivative is a compound according to Formula (II) or a pharmaceutically acceptable salt of solvate thereof.

35. Use of an herbal composition in improving or maintaining joint health or increasing joint space in a subject, wherein the herbal composition comprises any one of the compositions of claims 1-34.