**CLAIMS:**

1. The method for producing a scaffold graft material, comprising the steps of:

(i) providing a whole blood sample in combination with an anti-coagulant agent and a coagulation activator or surface which initiates coagulation, the arrangement being such that the anti-coagulant agent is sufficient to prevent coagulation of the blood sample within about 5 minutes;

(ii) subjecting the blood sample to a separation force while the blood sample is coagulating to separate the whole blood into a densely coagulated material (pelleted material) and supernatant;

(iii) separating the densely coagulated material from the supernatant to provide the scaffold graft material for tissue repair and/or tissue support or reinforcement in the subject.

2. The method according to claim 1, wherein the blood sample is subjected to a one-step centrifugation in the range of about 2250 x g to 3750 x g.

3. The method according to claim 2, wherein the centrifugation period is between 50 and 60 mins.

4. The method according to any one of claims 1 to 3, further comprising (iv) harvesting the densely coagulated material.

5. The method according to any one of claims 1 to 4 wherein tissue repair and/or support is tissue repair and/or tissue support or reinforcement of a vaginal wall.

6. The method according to any one of claims 1 to 5, wherein the blood is autologous to the subject.

7. The method according to any one of claim 1 to 6, wherein the scaffold material comprises a substantially homogenous mixture of plasma, platelets, red blood cells and white blood cells.

8. The method according to claim 7, wherein the densely coagulated material comprises at least about 95% of the platelets in the whole blood.

9. The method according to claim 7 or 8, wherein the densely coagulated material comprises about 30% or less of the water content of plasma.

10. The method according to any one of claims 7 to 9, wherein the densely coagulated material comprises less than 10% red and white blood cells.

11. The method according to any one of claims 1 to 4, wherein the coagulation activator is selected from a calcium salt, iron (ferrous) salt, aluminium salt, sodium salt or zinc salt and the anti-coagulant agent is selected from heparin, ethylenediaminetetraacetic acid (EDTA), citrate, oxalate, and thrombin inhibitor.

12. The method according to claim 11, wherein the coagulation activator is calcium gluconate and the anti-coagulant is sodium citrate.

13. The method of any one of claims 1 to 4, wherein the volumes of the whole blood, anti-coagulant agent and coagulation activator are in a ratio of about 8-12:1:1 v/v.

14. The method of claim 13, wherein the volumes of the whole blood, sodium citrate and calcium gluconate are in a ratio of about 9:1:1 v/v.

15. A scaffold graft material, produced by, or obtainable by, the method of any one of claims 1 to 14.

16. A scaffold graft material for tissue repair and/or tissue support or reinforcement in a subject produced from whole blood, wherein the scaffold material is a flexibly solid non-gel homogenous material comprising about 95-100% platelets, less than 10% red and white blood cells and at least about 30% water content of plasma.

17. The scaffold graft material according to claim 16 which comprises an ultimate tensile strength of at least 3Mpa.

18. The scaffold graft material according to claim 16 or 17, which comprises a suture retention strength of at least 20N.

19. The scaffold graft material according to any one of claims 16 to 18, wherein the graft forms a disc of relatively uniform cross-sectional thickness following centrifugation and having a diameter in the range of about 3-5cm, and thickness of between 1.5 and 3mm.

20. The scaffold graft according to claim 19, further comprising a surgical glue applied to one or both sides of the disc.

21. The scaffold graft according to claim 19 which includes one or more further materials or growth factors to assist in strengthening the graft.

22. The scaffold graft material according to claim 19 comprising a suture retention strength of at least 20N.

23. A method of treating a subject afflicted with pelvic organ prolapse (POP), said method comprising the steps of:

(i) providing a scaffold graft material according to any one of claims 15 to 19; and

(ii) affixing the scaffold graft material to a site of surgical repair of the prolapse.

24. The method according to claim 23, wherein the prolapse is selected from anterior compartment prolapse, posterior compartment prolapse, anterior and posterior prolapse, global prolapse, anterior and apical prolapse, posterior and apical prolapse and apical prolapse.

25. The method of claim 23 or 24, wherein the scaffold graft material or PRP is affixed to the site of surgical repair in a "sandwich" arrangement comprising a first layer of adhesive applied to the underlying fascia, the scaffold material, and then a second, overlaying, layer of adhesive.

26. A method of repairing or augmenting damaged or injured pelvic tissue in a subject, said method comprising the steps of:

(i) providing a scaffold graft material according to any one of claims 15 to 19; and

(ii) affixing the scaffold graft material to a target site in the subject to repair or augment the damaged or injured tissue.

27. The method of claim 26, wherein the target site is a site of injury or defect, more particularly a tear in the vaginal wall epithelium or connective tissue fascia.

28. The method according to any one of claims 23 to 27, wherein one or more scaffold graft materials are delivered to the site or surgical repair or target site.

29. A kit of parts comprising:

(i) a venepuncture needle;

(ii) cannula;

(iii) at least one lidded blood collection container pre-filled with an anti-coagulant agent and a coagulation activator (or is provided with a surface which initiates coagulation);

(iv) pliers;

(v) at least one syringe pre-filled with a saline solution; and optionally,

(vi) instructions for preparing the graft according to any one of claims 1 to 14.

30. A kit comprising at least one lidded blood collection container pre-filled with an anti-coagulant agent and a coagulation activator, together with instructions for preparation of a scaffold graft material according to any one of claims 1 to 14.

31. A kit according to claim 29 for use, or when used to treat a subject afflicted with pelvic organ prolapse.

32. A sterile container when used for the preparation of a scaffold graft material, the sterile container comprising whole blood, an anti-coagulant and a coagulation activator in a ratio of about 8-12:1:1 v/v.