**CLAIMS**

1. A method of detecting pre-eclampsia in an individual, the method comprising:

(a) providing a sample of or from the individual;

(b) detecting the level of expression, activity or amount of a pre-eclampsia biomarker polypeptide in a microparticle type of the sample;

(i) in which the pre-eclampsia biomarker polypeptide is selected from the group consisting of PlGF, FLT1, BNP, ANP, CD9, PAI-1, TGF β, PCT, S100b, TIMP1, CD105 and IL6; and

(ii) in which the microparticle type is selected from a CTB binding microparticle and an Annexin V binding microparticle;

(c) comparing the level of expression, activity or amount of the selected pre-eclampsia biomarker in the same microparticle type of a sample of or from an individual known to be not suffering from pre-eclampsia;

in which a modulated level of expression, activity or amount of the selected pre-eclampsia biomarker polypeptide indicates that the individual is suffering from, or is likely to be suffering from, pre-eclampsia.

2. A method according to Claim 1, in which the method comprises detecting an elevated level of ANP, CD105, IL6, TIMP1, PlGF, FLT1, BNP, PAI-1, TGF β, PCT or S100b in a CTB binding microparticle, in which an elevated level indicates that the individual is suffering from, or is likely to suffer from, pre-eclampsia.

3. A method according to Claim 1 or 2, in which the method comprises detecting an elevated level of PlGF, FLT1, BNP, PAI-1, TGF β, PCT or S100b in an Annexin V binding microparticle, in which an elevated level indicates that the individual is suffering from, or is likely to suffer from, pre-eclampsia.

4. A method according to Claim 1, 2 or 3, in which the method comprises detecting an elevated level of CD9 in an Annexin V binding microparticle, in which an elevated level indicates that the individual is suffering from, or is likely to suffer from, pre-eclampsia.

5. A method according to any preceding claim, in which the method comprises detecting a lowered level of CD9 in an CTB binding microparticle, in which a lowered level indicates that the individual is suffering from, or is likely to suffer from, pre-eclampsia.

6. A method according to any preceding claim, which further comprises detecting a modulated level of expression, activity or amount of a pre-eclampsia biomarker polypeptide selected from the polypeptides set out in Table 1A, Table 1B and Table 1C, Table 2A, Table 2B and Table 2C; Table 3A and Table 3B and Table 4A and Table 4B.

7. A method according to any preceding claim, which further comprises establishing a profile comprising the expression, activity or amount of a plurality of pre-eclampsia biomarker polypeptides of the individual, and comparing the profile against a profile of an individual known to be not suffering from pre-eclampsia.

8. A method according to any preceding claim, which further comprises a step of normalising the level, concentration or amount of the selected polypeptide between two or more samples, in which the normalisation is preferably conducted with reference to BNP, CD9 and/or TIMP-1 polypeptide.

9. A method according to any preceding claim: (a) which further comprises a step of selecting microparticles by size, for example, by size exclusion chromatography; (b) in which the microparticles comprise CD9+ microparticles; (c) in which the sample is selected from the group consisting of: urine, blood, tears, saliva, bronchoaveolar fluid, tumoral effusions, epididymal fluid, amniotic fluid and milk; or (d) in which the microparticles comprise microvesicles, exosomes, ectosomes or apoptotic bodies.

10. A method of monitoring the progress of an individual suffering from pre-eclampsia, the method comprising monitoring the modulation of expression of a pre-eclampsia biomarker polypeptide in a cell, tissue or organ of the individual by a method according to any preceding claim.

11. A method of prognosis of an individual suffering from pre-eclampsia, the method comprising detecting modulation of expression of a pre-eclampsia biomarker polypeptide in a cell, tissue or organ of the individual by a method according to any of Claims 1 to 9.

12. A method of choosing a therapy for an individual suffering from pre-eclampsia, the method comprising detecting modulation of expression of pre-eclampsia biomarker

polypeptide in a cell, tissue or organ of the individual by a method according to any of Claims 1 to 9 and choosing an appropriate therapy based on the severity of the pre-eclampsia.

13. A method of determining the likelihood of success of a particular therapy in an individual suffering from pre-eclampsia, the method comprising comparing the therapy with a therapy determined by a method according to Claim 12.

14. A method of treatment or prevention of pre-eclampsia in a cell, tissue, organ or organism, the method comprising detecting pre-eclampsia in a cell, tissue, organ or organism by a method according to any of Claims 1 to 9, and administering a treatment for pre-eclampsia to the cell, tissue, organ or organism, preferably an antihypertensive, isradipine, Labetolol, Hydralazine, Nifedipine or magnesium sulfate.

15. A kit for detecting pre-eclampsia in an individual or susceptibility of the individual to pre-eclampsia comprising means for detection of pre-eclampsia biomarker polypeptide expression, activity or amount in a microparticle of or from the individual or a sample taken from him or her, preferably further comprising a therapeutic drug for treatment, prophylaxis or alleviation of pre-eclampsia, such as an antihypertensive, isradipine, Labetolol, Hydralazine, Nifedipine or magnesium sulfate.

16. A method or purified sample substantially as hereinbefore described with reference to and as shown in Figures 1 to 6 of the accompanying drawings.

**CLAIMS**

1. A method of detecting pre-eclampsia in an individual, the method comprising detecting:

(a) an elevated level of expression, activity or amount of CD105, IL6, PlGF, TIMP1 or ANP in a Cholera Toxin subunit B (CTB) binding microparticle, but not an Annexin V (AV) binding microparticle;

(b) an elevated level of expression, activity or amount of FLT1 or BNP in both a Cholera Toxin subunit B (CTB) binding microparticle and an Annexin V (AV) binding microparticle; or

(c) a lowered level of expression, activity or amount of CD9 in a Cholera Toxin subunit B (CTB) binding microparticle and an elevated level of expression, activity or amount of CD9 in a Annexin V (AV) binding microparticle;

in a sample of or from an individual

in which the modulated level of expression, activity or amount of the selected polypeptide indicates that the individual is suffering from, or is likely to be suffering from, pre-eclampsia.

2. A method according to any preceding claim, which further comprises detecting a modulated level of expression, activity or amount of a pre-eclampsia biomarker polypeptide selected from the polypeptides set out in Table 1A, Table 1B and Table 1C; Table 2A, Table 2B and Table 2C; Table 3A and Table 3B and Table 4A and Table 4B.

3. A method according to any preceding claim, which further comprises establishing a profile comprising the expression, activity or amount of a plurality of pre-eclampsia biomarker polypeptides of the individual, and comparing the profile against a profile of an individual known to be not suffering from pre-eclampsia.

4. A method according to any preceding claim, which further comprises a step of normalising the level, concentration or amount of the selected polypeptide between two or more samples, in which the normalisation is preferably conducted with reference to BNP, CD9 and/or TIMP-1 polypeptide.

5. A method according to any preceding claim: (a) which further comprises a step of selecting microparticles by size, for example, by size exclusion chromatography; (b) in which

the microparticles comprise CD9+ microparticles; (c) in which the sample is selected from the group consisting of: urine, blood, tears, saliva, bronchoaveolar fluid, tumoral effusions, epididymal fluid, amniotic fluid and milk; or (d) in which the microparticles comprise microvesicles, exosomes, ectosomes or apoptotic bodies.

6. A method of monitoring the progress of an individual suffering from pre-eclampsia, the method comprising monitoring the modulation of expression of a pre-eclampsia biomarker polypeptide in a cell, tissue or organ of the individual by a method according to any preceding claim.

7. A method of prognosis of an individual suffering from pre-eclampsia, the method comprising detecting modulation of expression of a pre-eclampsia biomarker polypeptide in a cell, tissue or organ of the individual by a method according to any of Claims 1 to 5.

8. A method of choosing a therapy for an individual suffering from pre-eclampsia, the method comprising detecting modulation of expression of pre-eclampsia biomarker polypeptide in a cell, tissue or organ of the individual by a method according to any of Claims 1 to 5 and choosing an appropriate therapy based on the severity of the pre-eclampsia.

9. A method of determining the likelihood of success of a particular therapy in an individual suffering from pre-eclampsia, the method comprising comparing the therapy with a therapy determined by a method according to Claim 8.

10. A method according to Claim 8 or 9, in which the therapy comprises an antihypertensive, isradipine, Labetolol, Hydralazine, Nifedipine or magnesium sulfate.

11. A kit for detecting pre-eclampsia in an individual or susceptibility of the individual to pre-eclampsia comprising means for detection of pre-eclampsia biomarker polypeptide expression, activity or amount in a microparticle of or from the individual or a sample taken from him or her, preferably further comprising a therapeutic drug for treatment, prophylaxis or alleviation of pre-eclampsia, such as an antihypertensive, isradipine, Labetolol, Hydralazine, Nifedipine or magnesium sulfate.