

What is claimed is:

1. A method of detecting preeclampsia and/or determining an increased risk for preeclampsia in a pregnant female, the method comprising:

identifying in a biosample obtained from the pregnant women a plurality of circulating RNA (C-RNA) molecules;

wherein a plurality of C-RNA molecules is selected from:

(a) a plurality of C-RNA molecules encoding at least a portion of a protein selected from any one or more, any two or more, any three or more, any four or more, any five or more, any six or more, any seven or more, any eight or more, any nine or more, any ten or more, any eleven or more, any twelve, any thirteen or more, any fourteen or more, any fifteen or more, any sixteen or more, any seventeen or more, any eighteen or more, any nineteen or more, any twenty or more, any twenty one or more, any twenty two or more, any twenty three or more, any twenty four or more, any twenty five or more, any fifty or more, any seventy or more, or all seventy-five ARRDC2, JUN, SKIL, ATP13A3, PDE8B, GSTA3, PAPP2, TIPARP, LEP, RGP1, USP54, CLEC4C, MRPS35, ARHGEF25, CUX2, HEATR9, FSTL3, DDI2, ZMYM6, ST6GALNAC3, GBP2, NES, ETV3, ADAM17, ATOH8, SLC4A3, TRAF3IP1, TTC21A, HEG1, ASTE1, TMEM108, ENC1, SCAMP1, ARRDC3, SLC26A2, SLIT3, CLIC5, TNFRSF21, PPP1R17, TPST1, GATSL2, SPDYE5, HIPK2, MTRNR2L6, CLCN1, GINS4, CRH, C10orf2, TRUB1, PRG2, ACY3, FAR2, CD63, CKAP4, TPCN1, RNF6, THTPA, FOS, PARN, ORAI3, ELMO3, SMPD3, SERPINF1, TMEM11, PSMD11, EBI3, CLEC4M, CCDC151, CPAMD8, CNFN, LILRA4, ADA, C22orf39, PI4KAP1, and ARFGAP3; or

(b) a plurality of C-RNA molecules encoding at least a portion of a protein selected from any one or more, any two or more, any three or more, any four or more, any five or more, any six or more, any seven or more, any eight or more, any nine or more, any ten or more, any eleven or more, any twelve or more, any thirteen or more, any fourteen or more, any fifteen or more, any sixteen or more, any seventeen or more, any eighteen or more, any nineteen or more, any twenty or

more, any twenty one or more, any twenty two or more, any twenty three or more, any twenty four or more, any twenty five or more, any twenty six or more, or all twenty-seven of TIMP4, FLG, HTRA4, AMPH, LCN6, CRH, TEAD4, ARMS2, PAPP2, SEMA3G, ADAMTS1, ALOX15B, SLC9A3R2, TIMP3, IGFBP5, HSPA12B, CLEC4C, KRT5, PRG2, PRX, ARHGEF25, ADAMTS2, DAAM2, FAM107A, LEP, NES, and VSIG4; or

(c) a plurality of C-RNA molecules encoding at least a portion of a protein selected from any one or more, any two or more, any three or more, any four or more, any five or more, any six or more, any seven or more, any eight or more, any nine or more, any ten or more, any eleven or more, any twelve, any thirteen or more, any fourteen or more, any fifteen or more, any sixteen or more, any seventeen or more, any eighteen or more, any nineteen or more, any twenty or more, any twenty one or more, any twenty two or more, any twenty three or more, any twenty four or more, any twenty five or more, any fifty or more, any seventy-five or more, any one hundred or more, or all one hundred twenty-two of CYP26B1, IRF6, MYH14, PODXL, PPP1R3C, SH3RF2, TMC7, ZNF366, ADCY1, C6, FAM219A, HAO2, IGIP, IL1R2, NTRK2, SH3PXD2A, SSUH2, SULT2A1, FMO3, FSTL3, GATA5, HTRA1, C8B, H19, MN1, NFE2L1, PRDM16, AP3B2, EMP1, FLNC, STAG3, CPB2, TENC1, RP1L1, A1CF, NPR1, TEK, ERFFI1, ARHGEF15, CD34, RSPO3, ALPK3, SAMD4A, ZCCHC24, LEAP2, MYL2, NRG3, ZBTB16, SERPINA3, AQP7, SRPX, UACA, ANO1, FKBP5, SCN5A, PTPN21, CACNA1C, ERG, SOX17, WWTR1, AIF1L, CA3, HRG, TAT, AQP7P1, ADRA2C, SYNPO, FN1, GPR116, KRT17, AZGP1, BCL6B, KIF1C, CLIC5, GPR4, GJA5, OLAH, C14orf37, ZEB1, JAG2, KIF26A, APOLD1, PNMT, MYOM3, PITPNM3, TIMP4, HTRA4, AMPH, LCN6, CRH, TEAD4, ARMS2, PAPP2, SEMA3G, ADAMTS1, ALOX15B, SLC9A3R2, TIMP3, IGFBP5, HSPA12B, PRG2, PRX, ARHGEF25, ADAMTS2, DAAM2, FAM107A, LEP, NES, VSIG4, HBG2, CADM2, LAMP5, PTGDR2, NOMO1, NXF3, PLD4, BPIFB3, PACSIN1, CUX2, FLG, CLEC4C, and KRT5; or

(d) a plurality of C-RNA molecules encoding at least a portion of a protein selected from any one or more, any two or more, any three or more, any four or more, any five or more, any six or more, any seven or more, any eight or more, any nine or more, any ten or more, any eleven or more, any twelve or more, any thirteen or more, any fourteen or more, any fifteen or more, any sixteen or more, any seventeen or more, any eighteen or more, any nineteen or more, any twenty or more, any twenty-one or more, any twenty-two or more, any twenty-three or more, any twenty-four or more, any twenty-five or more, any twenty-six or more, any twenty-seven or more, any twenty-eight or more, any twenty-nine or more, or all thirty of VSIG4, ADAMTS2, NES, FAM107A, LEP, DAAM2, ARHGEF25, TIMP3, PRX, ALOX15B, HSPA12B, IGFBP5, CLEC4C, SLC9A3R2, ADAMTS1, SEMA3G, KRT5, AMPH, PRG2, PAPP2, TEAD4, CRH, PITPNM3, TIMP4, PNMT, ZEB1, APOLD1, PLD4, CUX2, and HTRA4; or

(e) a plurality of C-RNA molecules encoding at least a portion of a protein selected from any one or more, any two or more, any three or more, any four or more, any five or more, any six or more, any seven or more, any eight or more, any nine or more, any ten or more, any eleven or more, any twelve or more, any thirteen or more, any fourteen or more, any fifteen or more, any sixteen or more, any seventeen or more, any eighteen or more, any nineteen or more, any twenty or more, any twenty-one or more, any twenty-two or more, any twenty-three or more, any twenty-four or more, any twenty-five or more, or all twenty-six of ADAMTS1, ADAMTS2, ALOX15B, AMPH, ARHGEF25, CELF4, DAAM2, FAM107A, HSPA12B, HTRA4, IGFBP5, KCNA5, KRT5, LCN6, LEP, LRRC26, NES, OLAH, PACSIN1, PAPP2, PRX, PTGDR2, SEMA3G, SLC9A3R2, TIMP3, and VSIG4; or

(f) a plurality of C-RNA molecules encoding at least a portion of a protein selected from any one or more, any two or more, any three or more, any four or more, any five or more, any six or more, any seven or more, any eight or more, any nine or more, any ten or more, any eleven or more, any twelve or more, any thirteen or more, any fourteen or more, any fifteen or more, any sixteen or more, any seventeen or more, any eighteen or more, any nineteen or more, any twenty or

more, any twenty-one or more, or all twenty-two of ADAMTS1, ADAMTS2, ALOX15B, ARHGEF25, CELF4, DAAM2, FAM107A, HTRA4, IGFBP5, KCNA5, KRT5, LCN6, LEP, LRRC26, NES, OLAH, PRX, PTGDR2, SEMA3G, SLC9A3R2, TIMP3, and VSIG4; or

5 (g) a plurality of C-RNA molecules encoding at least a portion of a protein selected from any one or more, any two or more, any three or more, any four or more, any five or more, any six or more, any seven or more, any eight or more, any nine or more, any ten or more, or all eleven of CLEC4C, ARHGEF25, ADAMTS2, LEP, ARRDC2, SKIL, PAPP2, VSIG4, ARRDC4, CRH, and NES;

10 or

(h) a plurality of C-RNA molecules encoding at least a portion of a protein selected from any one or more, any two or more, any three or more, any four or more, any five or more, any six or more, any seven or more, any eight or more, any nine or more, any ten or more, any eleven or more, any twelve or more, any thirteen or more, any fourteen or more, any fifteen or more, any sixteen or more, any seventeen or more, any eighteen or more, any nineteen or more, any twenty or more, any twenty-one or more, any twenty-two or more, any twenty-three or more, or all twenty-four of LEP, PAPP2, KCNA5, ADAMTS2, MYOM3, ATP13A3, ARHGEF25, ADA, HTRA4, NES, CRH, ACY3, PLD4, SCT, NOX4, PACSIN1, SERPINF1, SKIL, SEMA3G, TIPARP, LRRC26, PHEX, LILRA4, and PER1,

20 is indicative of preeclampsia and/or an increased risk for preeclampsia in the pregnant women.

2. A method of detecting preeclampsia and/or determining an increased risk for preeclampsia in a pregnant female, the method comprising:

purifying a population of circulating RNA (C-RNA) molecules from a biosample obtained from the pregnant female;

identifying protein coding sequences encoded by the C-RNA molecules within the purified population of C-RNA molecules;

wherein the protein coding sequences encoded by the C-RNA molecules encoding at least a portion of a protein are selected from:

(a) any one or more, any two or more, any three or more, any four or more, any five or more, any six or more, any seven or more, any eight or more, any nine or more, any ten or more, any eleven or more, any twelve, any thirteen or more, any fourteen or more, any fifteen or more, any sixteen or more, any seventeen or more, any eighteen or more, any nineteen or more, any twenty or more, any twenty one or more, any twenty two or more, any twenty three or more, any twenty four or more, any twenty five or more, any fifty or more, any seventy or more, or all seventy-five of ARRDC2, JUN, SKIL, ATP13A3, PDE8B, GSTA3, PAPP2, TIPARP, LEP, RGP1, USP54, CLEC4C, MRPS35, ARHGEF25, CUX2, HEATR9, FSTL3, DDI2, ZMYM6, ST6GALNAC3, GBP2, NES, ETV3, ADAM17, ATOH8, SLC4A3, TRAF3IP1, TTC21A, HEG1, ASTE1, TMEM108, ENC1, SCAMP1, ARRDC3, SLC26A2, SLIT3, CLIC5, TNFRSF21, PPP1R17, TPST1, GATSL2, SPDYE5, HIPK2, MTRNR2L6, CLCN1, GINS4, CRH, C10orf2, TRUB1, PRG2, ACY3, FAR2, CD63, CKAP4, TPCN1, RNF6, THTPA, FOS, PARN, ORAI3, ELMO3, SMPD3, SERPINF1, TMEM11, PSMD11, EBI3, CLEC4M, CCDC151, CPAMD8, CNFN, LILRA4, ADA, C22orf39, PI4KAP1, and ARFGAP3; or

(b) any one or more, any two or more, any three or more, any four or more, any five or more, any six or more, any seven or more, any eight or more, any nine or more, any ten or more, any eleven or more, any twelve or more, any thirteen or more, any fourteen or more, any fifteen or more, any sixteen or more, any seventeen or more, any eighteen or more, any nineteen or more, any twenty or more, any twenty one or more, any twenty two or more, any twenty three or more, any twenty four or more, any twenty five or more, any twenty six or more, or all twenty-seven of TIMP4, FLG, HTRA4, AMPH, LCN6, CRH, TEAD4, ARMS2, PAPP2, SEMA3G, ADAMTS1, ALOX15B, SLC9A3R2, TIMP3, IGFBP5, HSPA12B, CLEC4C, KRT5, PRG2, PRX, ARHGEF25, ADAMTS2, DAAM2, FAM107A, LEP, NES, and VSIG4; or

(c) any one or more, any two or more, any three or more, any four or more, any five or more, any six or more, any seven or more, any eight or more, any nine or more, any ten or more, any eleven or more, any twelve, any thirteen or more, any fourteen or more, any fifteen or more, any sixteen or more, any seventeen or more, any eighteen or more, any nineteen or more, any twenty or more, any twenty one or more, any twenty two or more, any twenty three or more, any twenty four or more, any twenty five or more, any fifty or more, any seventy-five or more, any one hundred or more, or all one hundred twenty-two of CYP26B1, IRF6, MYH14, PODXL, PPP1R3C, SH3RF2, TMC7, ZNF366, ADCY1, C6, FAM219A, HAO2, IGIP, IL1R2, NTRK2, SH3PXD2A, SSUH2, SULT2A1, FMO3, FSTL3, GATA5, HTRA1, C8B, H19, MN1, NFE2L1, PRDM16, AP3B2, EMP1, FLNC, STAG3, CPB2, TENC1, RP1L1, A1CF, NPR1, TEK, ERRFI1, ARHGEF15, CD34, RSPO3, ALPK3, SAMD4A, ZCCHC24, LEAP2, MYL2, NRG3, ZBTB16, SERPINA3, AQP7, SRPX, UACA, ANO1, FKBP5, SCN5A, PTPN21, CACNA1C, ERG, SOX17, WWTR1, AIF1L, CA3, HRG, TAT, AQP7P1, ADRA2C, SYNPO, FN1, GPR116, KRT17, AZGP1, BCL6B, KIF1C, CLIC5, GPR4, GJA5, OLAH, C14orf37, ZEB1, JAG2, KIF26A, APOLD1, PNMT, MYOM3, PITPNM3, TIMP4, HTRA4, AMPH, LCN6, CRH, TEAD4, ARMS2, PAPP2, SEMA3G, ADAMTS1, ALOX15B, SLC9A3R2, TIMP3, IGFBP5, HSPA12B, PRG2, PRX, ARHGEF25, ADAMTS2, DAAM2, FAM107A, LEP, NES, VSIG4, HBG2, CADM2, LAMP5, PTGDR2, NOMO1, NXF3, PLD4, BPIFB3, PACSIN1, CUX2, FLG, CLEC4C, and KRT5; or

(d) any one or more, any two or more, any three or more, any four or more, any five or more, any six or more, any seven or more, any eight or more, any nine or more, any ten or more, any eleven or more, any twelve or more, any thirteen or more, any fourteen or more, any fifteen or more, any sixteen or more, any seventeen or more, any eighteen or more, any nineteen or more, any twenty or more, any twenty-one or more, any twenty-two or more, any twenty-three or more, any twenty-four or more, any twenty-five or more, any twenty-six or more, any twenty-seven or more, any twenty-eight or more, any twenty-nine or more, or all thirty of VSIG4, ADAMTS2, NES, FAM107A, LEP, DAAM2, ARHGEF25,

TIMP3, PRX, ALOX15B, HSPA12B, IGFBP5, CLEC4C, SLC9A3R2, ADAMTS1, SEMA3G, KRT5, AMPH, PRG2, PAPP2, TEAD4, CRH, PITPNM3, TIMP4, PNMT, ZEB1, APOLD1, PLD4, CUX2, and HTRA4; or

(e) any one or more, any two or more, any three or more, any four or more, any five or more, any six or more, any seven or more, any eight or more, any nine or more, any ten or more, any eleven or more, any twelve or more, any thirteen or more, any fourteen or more, any fifteen or more, any sixteen or more, any seventeen or more, any eighteen or more, any nineteen or more, any twenty or more, any twenty-one or more, any twenty-two or more, any twenty-three or more, any twenty-four or more, any twenty-five or more, or all twenty-six of ADAMTS1, ADAMTS2, ALOX15B, AMPH, ARHGEF25, CELF4, DAAM2, FAM107A, HSPA12B, HTRA4, IGFBP5, KCNA5, KRT5, LCN6, LEP, LRRC26, NES, OLAH, PACSIN1, PAPP2, PRX, PTGDR2, SEMA3G, SLC9A3R2, TIMP3, and VSIG4; or

(f) any one or more, any two or more, any three or more, any four or more, any five or more, any six or more, any seven or more, any eight or more, any nine or more, any ten or more, any eleven or more, any twelve or more, any thirteen or more, any fourteen or more, any fifteen or more, any sixteen or more, any seventeen or more, any eighteen or more, any nineteen or more, any twenty or more, any twenty-one or more, or all twenty-two of ADAMTS1, ADAMTS2, ALOX15B, ARHGEF25, CELF4, DAAM2, FAM107A, HTRA4, IGFBP5, KCNA5, KRT5, LCN6, LEP, LRRC26, NES, OLAH, PRX, PTGDR2, SEMA3G, SLC9A3R2, TIMP3, and VSIG4; or

(g) any one or more, any two or more, any three or more, any four or more, any five or more, any six or more, any seven or more, any eight or more, any nine or more, any ten or more, or all eleven of CLEC4C, ARHGEF25, ADAMTS2, LEP, ARRDC2, SKIL, PAPP2, VSIG4, ARRDC4, CRH, and NES; or

(h) any one or more, any two or more, any three or more, any four or more, any five or more, any six or more, any seven or more, any eight or more, any nine or more, any ten or more, any eleven or more, any twelve or more, any thirteen or more, any fourteen or more, any fifteen or more, any sixteen or more, any

seventeen or more, any eighteen or more, any nineteen or more, any twenty or more, any twenty-one or more, any twenty-two or more, any twenty-three or more, or all twenty-four of LEP, PAPP2, KCNA5, ADAMTS2, MYOM3, ATP13A3, ARHGEF25, ADA, HTRA4, NES, CRH, ACY3, PLD4, SCT, NOX4, PACSIN1, SERPINF1, SKIL, SEMA3G, TIPARP, LRRC26, PHEX, LILRA4, and PER1,

is indicative of preeclampsia and/or an increased risk for preeclampsia in the pregnant women.

3. The method of claim 1 or 2, wherein identifying protein coding sequences encoded by C-RNA molecules within the biosample comprises hybridization, reverse transcriptase PCR, microarray chip analysis, or sequencing, wherein sequencing optionally comprises:

- a) massively parallel sequencing of clonally amplified molecules; or
- b) RNA sequencing.

4. The method of claim any one of claims 1 to 3, further comprising:

removing intact cells from the biosample;

treating the biosample with a deoxynuclease (DNase) to remove cell free DNA (cfDNA);

synthesizing complementary DNA (cDNA) from C-RNA molecules in the biosample;

and/or

enriching the cDNA sequences for DNA sequences that encode proteins by exome enrichment;

prior to identifying protein coding sequence encoded by the circulating RNA (C-RNA) molecules.

5. A method of detecting preeclampsia and/or determining an increased risk for preeclampsia in a pregnant female, the method comprising:

removing intact cells from a biosample obtained from the pregnant female;

treating the biosample with a deoxynuclease (DNase) to remove cell free DNA (cfDNA);

synthesizing complementary DNA (cDNA) from RNA molecules in the biosample;

enriching the cDNA sequences for DNA sequences that encode proteins (exome enrichment);

sequencing the resulting enriched cDNA sequences; and

identifying protein coding sequences encoded by enriched C-RNA molecules;

wherein protein coding sequences encoded by the C-RNA molecules encoding at least a portion of a protein selected from:

(a) any one or more, any two or more, any three or more, any four or more, any five or more, any six or more, any seven or more, any eight or more, any nine or more, any ten or more, any eleven or more, any twelve, any thirteen or more, any fourteen or more, any fifteen or more, any sixteen or more, any seventeen or more, any eighteen or more, any nineteen or more, any twenty or more, any twenty one or more, any twenty two or more, any twenty three or more, any twenty four or more, any twenty five or more, any fifty or more, any seventy or more, or all seventy-five ARRDC2, JUN, SKIL, ATP13A3, PDE8B, GSTA3, PAPP2, TIPARP, LEP, RGP1, USP54, CLEC4C, MRPS35, ARHGEF25, CUX2, HEATR9, FSTL3, DDI2, ZMYM6, ST6GALNAC3, GBP2, NES, ETV3, ADAM17, ATOH8, SLC4A3, TRAF3IP1, TTC21A, HEG1, ASTE1, TMEM108, ENC1, SCAMP1, ARRDC3, SLC26A2, SLIT3, CLIC5, TNFRSF21, PPP1R17, TPST1, GATSL2, SPDYE5, HIPK2, MTRNR2L6, CLCN1, GINS4, CRH, C10orf2, TRUB1, PRG2, ACY3, FAR2, CD63, CKAP4, TPCN1, RNF6, THTPA, FOS, PARN, ORAI3, ELMO3, SMPD3, SERPINF1, TMEM11, PSMD11, EBI3, CLEC4M, CCDC151, CPAMD8, CNFN, LILRA4, ADA, C22orf39, PI4KAP1, and ARFGAP3; or

(b) any one or more, any two or more, any three or more, any four or more, any five or more, any six or more, any seven or more, any eight or more, any nine or more, any ten or more, any eleven or more, any twelve or more, any thirteen or more, any fourteen or more, any fifteen or more, any sixteen or more, any seventeen or more, any eighteen or more, any nineteen or more, any twenty or more, any twenty one or more, any twenty two or more, any twenty three or more, any twenty four or more, any twenty five or more, any twenty six of more, or all twenty-seven of TIMP4, FLG, HTRA4, AMPH, LCN6, CRH, TEAD4, ARMS2,

PAPPA2, SEMA3G, ADAMTS1, ALOX15B, SLC9A3R2, TIMP3, IGFBP5, HSPA12B, CLEC4C, KRT5, PRG2, PRX, ARHGEF25, ADAMTS2, DAAM2, FAM107A, LEP, NES, and VSIG4; or

(c) any one or more, any two or more, any three or more, any four or more, any five or more, any six or more, any seven or more, any eight or more, any nine or more, any ten or more, any eleven or more, any twelve, any thirteen or more, any fourteen or more, any fifteen or more, any sixteen or more, any seventeen or more, any eighteen or more, any nineteen or more, any twenty or more, any twenty one or more, any twenty two or more, any twenty three or more, any twenty four or more, any twenty five or more, any fifty or more, any seventy-five or more, any one hundred or more, or all one hundred twenty-two of CYP26B1, IRF6, MYH14, PODXL, PPP1R3C, SH3RF2, TMC7, ZNF366, ADCY1, C6, FAM219A, HAO2, IGIP, IL1R2, NTRK2, SH3PXD2A, SSUH2, SULT2A1, FMO3, FSTL3, GATA5, HTRA1, C8B, H19, MN1, NFE2L1, PRDM16, AP3B2, EMP1, FLNC, STAG3, CPB2, TENC1, RP1L1, A1CF, NPR1, TEK, ERRFI1, ARHGEF15, CD34, RSPO3, ALPK3, SAMD4A, ZCCHC24, LEAP2, MYL2, NRG3, ZBTB16, SERPINA3, AQP7, SRPX, UACA, ANO1, FKBP5, SCN5A, PTPN21, CACNA1C, ERG, SOX17, WWTR1, AIF1L, CA3, HRG, TAT, AQP7P1, ADRA2C, SYNPO, FN1, GPR116, KRT17, AZGP1, BCL6B, KIF1C, CLIC5, GPR4, GJA5, OLAH, C14orf37, ZEB1, JAG2, KIF26A, APOLD1, PNMT, MYOM3, PITPNM3, TIMP4, HTRA4, AMPH, LCN6, CRH, TEAD4, ARMS2, PAPPA2, SEMA3G, ADAMTS1, ALOX15B, SLC9A3R2, TIMP3, IGFBP5, HSPA12B, PRG2, PRX, ARHGEF25, ADAMTS2, DAAM2, FAM107A, LEP, NES, VSIG4, HBG2, CADM2, LAMP5, PTGDR2, NOMO1, NXF3, PLD4, BPIFB3, PACSIN1, CUX2, FLG, CLEC4C, and KRT5; or

(d) any one or more, any two or more, any three or more, any four or more, any five or more, any six or more, any seven or more, any eight or more, any nine or more, any ten or more, any eleven or more, any twelve or more, any thirteen or more, any fourteen or more, any fifteen or more, any sixteen or more, any seventeen or more, any eighteen or more, any nineteen or more, any twenty or

more, any twenty-one or more, any twenty-two or more, any twenty-three or more, any twenty-four or more, any twenty-five or more, any twenty-six or more, any twenty-seven or more, any twenty-eight or more, any twenty-nine or more, or all thirty of VSIG4, ADAMTS2, NES, FAM107A, LEP, DAAM2, ARHGEF25, TIMP3, PRX, ALOX15B, HSPA12B, IGFBP5, CLEC4C, SLC9A3R2, ADAMTS1, SEMA3G, KRT5, AMPH, PRG2, PAPP2, TEAD4, CRH, PITPNM3, TIMP4, PNMT, ZEB1, APOLD1, PLD4, CUX2, and HTRA4; or

(e) any one or more, any two or more, any three or more, any four or more, any five or more, any six or more, any seven or more, any eight or more, any nine or more, any ten or more, any eleven or more, any twelve or more, any thirteen or more, any fourteen or more, any fifteen or more, any sixteen or more, any seventeen or more, any eighteen or more, any nineteen or more, any twenty or more, any twenty-one or more, any twenty-two or more, any twenty-three or more, any twenty-four or more, any twenty-five or more, or all twenty-six of ADAMTS1, ADAMTS2, ALOX15B, AMPH, ARHGEF25, CELF4, DAAM2, FAM107A, HSPA12B, HTRA4, IGFBP5, KCNA5, KRT5, LCN6, LEP, LRRC26, NES, OLAH, PACSIN1, PAPP2, PRX, PTGDR2, SEMA3G, SLC9A3R2, TIMP3, and VSIG4; or

(f) any one or more, any two or more, any three or more, any four or more, any five or more, any six or more, any seven or more, any eight or more, any nine or more, any ten or more, any eleven or more, any twelve or more, any thirteen or more, any fourteen or more, any fifteen or more, any sixteen or more, any seventeen or more, any eighteen or more, any nineteen or more, any twenty or more, any twenty-one or more, or all twenty-two of ADAMTS1, ADAMTS2, ALOX15B, ARHGEF25, CELF4, DAAM2, FAM107A, HTRA4, IGFBP5, KCNA5, KRT5, LCN6, LEP, LRRC26, NES, OLAH, PRX, PTGDR2, SEMA3G, SLC9A3R2, TIMP3, and VSIG4; or

(g) any one or more, any two or more, any three or more, any four or more, any five or more, any six or more, any seven or more, any eight or more, any nine or more, any ten or more, or all eleven of CLEC4C, ARHGEF25, ADAMTS2, LEP, ARRDC2, SKIL, PAPP2, VSIG4, ARRDC4, CRH, and NES; or

(h) any one or more, any two or more, any three or more, any four or more, any five or more, any six or more, any seven or more, any eight or more, any nine or more, any ten or more, any eleven or more, any twelve or more, any thirteen or more, any fourteen or more, any fifteen or more, any sixteen or more, any seventeen or more, any eighteen or more, any nineteen or more, any twenty or more, any twenty-one or more, any twenty-two or more, any twenty-three or more, or all twenty-four of LEP, PAPP2, KCNA5, ADAMTS2, MYOM3, ATP13A3, ARHGEF25, ADA, HTRA4, NES, CRH, ACY3, PLD4, SCT, NOX4, PACSIN1, SERPINF1, SKIL, SEMA3G, TIPARP, LRRC26, PHEX, LILRA4, and PER1, is indicative of preeclampsia and/or an increased risk for preeclampsia in the pregnant women.

6. A method of identifying a circulating RNA signature associated with an increased risk of preeclampsia, the method comprising:

removing intact cells from a biosample obtained from the pregnant female;
treating the biosample with a deoxynuclease (DNase) to remove cell free DNA (cfDNA);
synthesizing complementary DNA (cDNA) from RNA molecules in the biosample;
enriching the cDNA sequences for DNA sequences that encode proteins (exome enrichment);
sequencing the resulting enriched cDNA sequences; and
identifying protein coding sequences encoded by enriched C-RNA molecules.

7. A method comprising:

removing intact cells from a biosample obtained from the pregnant female;
treating the biosample with a deoxynuclease (DNase) to remove cell free DNA (cfDNA);
synthesizing complementary DNA (cDNA) from RNA molecules in the biosample;
enriching the cDNA sequences for DNA sequences that encode proteins (exome enrichment);
sequencing the resulting enriched cDNA sequences; and

identifying protein coding sequences encoded by the enriched C-RNA molecules;
wherein protein coding sequences encoded by the C-RNA molecules includes at least a portion of a protein are selected from:

(a) any one or more, any two or more, any three or more, any four or more, any five or more, any six or more, any seven or more, any eight or more, any nine or more, any ten or more, any eleven or more, any twelve, any thirteen or more, any fourteen or more, any fifteen or more, any sixteen or more, any seventeen or more, any eighteen or more, any nineteen or more, any twenty or more, any twenty one or more, any twenty two or more, any twenty three or more, any twenty four or more, any twenty five or more, any fifty or more, any seventy or more, or all seventy-five ARRDC2, JUN, SKIL, ATP13A3, PDE8B, GSTA3, PAPP2, TIPARP, LEP, RGP1, USP54, CLEC4C, MRPS35, ARHGEF25, CUX2, HEATR9, FSTL3, DDI2, ZMYM6, ST6GALNAC3, GBP2, NES, ETV3, ADAM17, ATOH8, SLC4A3, TRAF3IP1, TTC21A, HEG1, ASTE1, TMEM108, ENC1, SCAMP1, ARRDC3, SLC26A2, SLIT3, CLIC5, TNFRSF21, PPP1R17, TPST1, GATSL2, SPDYE5, HIPK2, MTRNR2L6, CLCN1, GINS4, CRH, C10orf2, TRUB1, PRG2, ACY3, FAR2, CD63, CKAP4, TPCN1, RNF6, THTPA, FOS, PARN, ORAI3, ELMO3, SMPD3, SERPINF1, TMEM11, PSMD11, EBI3, CLEC4M, CCDC151, CPAMD8, CNFN, LILRA4, ADA, C22orf39, PI4KAP1, and ARFGAP3; or

(b) any one or more, any two or more, any three or more, any four or more, any five or more, any six or more, any seven or more, any eight or more, any nine or more, any ten or more, any eleven or more, any twelve or more, any thirteen or more, any fourteen or more, any fifteen or more, any sixteen or more, any seventeen or more, any eighteen or more, any nineteen or more, any twenty or more, any twenty one or more, any twenty two or more, any twenty three or more, any twenty four or more, any twenty five or more, any twenty six or more, or all twenty-seven of TIMP4, FLG, HTRA4, AMPH, LCN6, CRH, TEAD4, ARMS2, PAPP2, SEMA3G, ADAMTS1, ALOX15B, SLC9A3R2, TIMP3, IGFBP5, HSPA12B, CLEC4C, KRT5, PRG2, PRX, ARHGEF25, ADAMTS2, DAAM2, FAM107A, LEP, NES, and VSIG4;

(c) any one or more, any two or more, any three or more, any four or more, any five or more, any six or more, any seven or more, any eight or more, any nine or more, any ten or more, any eleven or more, any twelve, any thirteen or more, any fourteen or more, any fifteen or more, any sixteen or more, any seventeen or more, any eighteen or more, any nineteen or more, any twenty or more, any twenty one or more, any twenty two or more, any twenty three or more, any twenty four or more, any twenty five or more, any fifty or more, any seventy-five or more, any one hundred or more, or all one hundred twenty-two of CYP26B1, IRF6, MYH14, PODXL, PPP1R3C, SH3RF2, TMC7, ZNF366, ADCY1, C6, FAM219A, HAO2, IGIP, IL1R2, NTRK2, SH3PXD2A, SSUH2, SULT2A1, FMO3, FSTL3, GATA5, HTRA1, C8B, H19, MN1, NFE2L1, PRDM16, AP3B2, EMP1, FLNC, STAG3, CPB2, TENC1, RP1L1, A1CF, NPR1, TEK, ERRFI1, ARHGEF15, CD34, RSPO3, ALPK3, SAMD4A, ZCCHC24, LEAP2, MYL2, NRG3, ZBTB16, SERPINA3, AQP7, SRPX, UACA, ANO1, FKBP5, SCN5A, PTPN21, CACNA1C, ERG, SOX17, WWTR1, AIF1L, CA3, HRG, TAT, AQP7P1, ADRA2C, SYNPO, FN1, GPR116, KRT17, AZGP1, BCL6B, KIF1C, CLIC5, GPR4, GJA5, OLAH, C14orf37, ZEB1, JAG2, KIF26A, APOLD1, PNMT, MYOM3, PITPNM3, TIMP4, HTRA4, AMPH, LCN6, CRH, TEAD4, ARMS2, PAPP2, SEMA3G, ADAMTS1, ALOX15B, SLC9A3R2, TIMP3, IGFBP5, HSPA12B, PRG2, PRX, ARHGEF25, ADAMTS2, DAAM2, FAM107A, LEP, NES, VSIG4, HBG2, CADM2, LAMP5, PTGDR2, NOMO1, NXF3, PLD4, BPIFB3, PACSIN1, CUX2, FLG, CLEC4C, and KRT5; or

(d) any one or more, any two or more, any three or more, any four or more, any five or more, any six or more, any seven or more, any eight or more, any nine or more, any ten or more, any eleven or more, any twelve or more, any thirteen or more, any fourteen or more, any fifteen or more, any sixteen or more, any seventeen or more, any eighteen or more, any nineteen or more, any twenty or more, any twenty-one or more, any twenty-two or more, any twenty-three or more, any twenty-four or more, any twenty-five or more, any twenty-six or more, any twenty-seven or more, any twenty-eight or more, any twenty-nine or more, or all thirty of VSIG4, ADAMTS2, NES, FAM107A, LEP, DAAM2, ARHGEF25,

TIMP3, PRX, ALOX15B, HSPA12B, IGFBP5, CLEC4C, SLC9A3R2, ADAMTS1, SEMA3G, KRT5, AMPH, PRG2, PAPP2, TEAD4, CRH, PITPNM3, TIMP4, PNMT, ZEB1, APOLD1, PLD4, CUX2, and HTRA4; or

(e) any one or more, any two or more, any three or more, any four or more, any five or more, any six or more, any seven or more, any eight or more, any nine or more, any ten or more, any eleven or more, any twelve or more, any thirteen or more, any fourteen or more, any fifteen or more, any sixteen or more, any seventeen or more, any eighteen or more, any nineteen or more, any twenty or more, any twenty-one or more, any twenty-two or more, any twenty-three or more, any twenty-four or more, any twenty-five or more, or all twenty-six of ADAMTS1, ADAMTS2, ALOX15B, AMPH, ARHGEF25, CELF4, DAAM2, FAM107A, HSPA12B, HTRA4, IGFBP5, KCNA5, KRT5, LCN6, LEP, LRRC26, NES, OLAH, PACSIN1, PAPP2, PRX, PTGDR2, SEMA3G, SLC9A3R2, TIMP3, and VSIG4; or

(f) any one or more, any two or more, any three or more, any four or more, any five or more, any six or more, any seven or more, any eight or more, any nine or more, any ten or more, any eleven or more, any twelve or more, any thirteen or more, any fourteen or more, any fifteen or more, any sixteen or more, any seventeen or more, any eighteen or more, any nineteen or more, any twenty or more, any twenty-one or more, or all twenty-two of ADAMTS1, ADAMTS2, ALOX15B, ARHGEF25, CELF4, DAAM2, FAM107A, HTRA4, IGFBP5, KCNA5, KRT5, LCN6, LEP, LRRC26, NES, OLAH, PRX, PTGDR2, SEMA3G, SLC9A3R2, TIMP3, and VSIG4; or

(g) any one or more, any two or more, any three or more, any four or more, any five or more, any six or more, any seven or more, any eight or more, any nine or more, any ten or more, or all eleven of CLEC4C, ARHGEF25, ADAMTS2, LEP, ARRDC2, SKIL, PAPP2, VSIG4, ARRDC4, CRH, and NES; or

(h) any one or more, any two or more, any three or more, any four or more, any five or more, any six or more, any seven or more, any eight or more, any nine or more, any ten or more, any eleven or more, any twelve or more, any thirteen or more, any fourteen or more, any fifteen or more, any sixteen or more, any

seventeen or more, any eighteen or more, any nineteen or more, any twenty or more, any twenty-one or more, any twenty-two or more, any twenty-three or more, or all twenty-four of LEP, PAPP2, KCNA5, ADAMTS2, MYOM3, ATP13A3, ARHGEF25, ADA, HTRA4, NES, CRH, ACY3, PLD4, SCT, NOX4, PACSIN1, SERPINF1, SKIL, SEMA3G, TIPARP, LRRC26, PHEX, LILRA4, and PER1.

8. The method of any one of claims 1 to 7, wherein the biosample comprises plasma and/ or, wherein the biosample is obtained from a pregnant female: at less than 16 weeks gestation; at less than 20 weeks gestation; or at greater than 20 weeks gestation.

9. A circulating RNA (C-RNA) signature for an elevated risk of preeclampsia, the C-RNA signature comprising any one or more, any two or more, any three or more, any four or more, any five or more, any six or more, any seven or more, any eight or more, any nine or more, any ten or more, any eleven or more, any twelve, any thirteen or more, any fourteen or more, any fifteen or more, any sixteen or more, any seventeen or more, any eighteen or more, any nineteen or more, any twenty or more, any twenty one or more, any twenty two or more, any twenty three or more, any twenty four or more, any twenty five or more, any fifty or more, any seventy or more, or up to all seventy-five of ARRDC2, JUN, SKIL, ATP13A3, PDE8B, GSTA3, PAPP2, TIPARP, LEP, RGP1, USP54, CLEC4C, MRPS35, ARHGEF25, CUX2, HEATR9, FSTL3, DDI2, ZMYM6, ST6GALNAC3, GBP2, NES, ETV3, ADAM17, ATOH8, SLC4A3, TRAF3IP1, TTC21A, HEG1, ASTE1, TMEM108, ENC1, SCAMP1, ARRDC3, SLC26A2, SLIT3, CLIC5, TNFRSF21, PPP1R17, TPST1, GATSL2, SPDYE5, HIPK2, MTRNR2L6, CLCN1, GINS4, CRH, C10orf2, TRUB1, PRG2, ACY3, FAR2, CD63, CKAP4, TPCN1, RNF6, THTPA, FOS, PARN, ORAI3, ELMO3, SMPD3, SERPINF1, TMEM11, PSMD11, EBI3, CLEC4M, CCDC151, CPAMD8, CNFN, LILRA4, ADA, C22orf39, PI4KAP1, and ARFGAP3.

10. A circulating RNA (C-RNA) signature for an elevated risk of preeclampsia, the C-RNA signature comprising any one or more, any two or more, any three or more, any four or more, any five or more, any six or more, any seven or more, any eight or more, any nine or more, any ten or more, any eleven or more, any twelve or more, any thirteen or more, any fourteen or more,

any fifteen or more, any sixteen or more, any seventeen or more, any eighteen or more, any nineteen or more, any twenty or more, any twenty one or more, any twenty two or more, any twenty three or more, any twenty four or more, any twenty five or more, any twenty six or more, or all twenty-seven of TIMP4, FLG, HTRA4, AMPH, LCN6, CRH, TEAD4, ARMS2, PAPP2, SEMA3G, ADAMTS1, ALOX15B, SLC9A3R2, TIMP3, IGFBP5, HSPA12B, CLEC4C, KRT5, PRG2, PRX, ARHGEF25, ADAMTS2, DAAM2, FAM107A, LEP, NES, and VSIG4.

11. A circulating RNA (C-RNA) signature for an elevated risk of preeclampsia, the C-RNA signature comprising a plurality of CYP26B1, IRF6, MYH14, PODXL, PPP1R3C, SH3RF2, TMC7, ZNF366, ADCY1, C6, FAM219A, HAO2, IGIP, IL1R2, NTRK2, SH3PXD2A, SSUH2, SULT2A1, FMO3, FSTL3, GATA5, HTRA1, C8B, H19, MN1, NFE2L1, PRDM16, AP3B2, EMP1, FLNC, STAG3, CPB2, TENC1, RP1L1, A1CF, NPR1, TEK, ERFFI1, ARHGEF15, CD34, RSPO3, ALPK3, SAMD4A, ZCCHC24, LEAP2, MYL2, NRG3, ZBTB16, SERPINA3, AQP7, SRPX, UACA, ANO1, FKBP5, SCN5A, PTPN21, CACNA1C, ERG, SOX17, WWTR1, AIF1L, CA3, HRG, TAT, AQP7P1, ADRA2C, SYNPO, FN1, GPR116, KRT17, AZGP1, BCL6B, KIF1C, CLIC5, GPR4, GJA5, OLAH, C14orf37, ZEB1, JAG2, KIF26A, APOLD1, PNMT, MYOM3, PITPNM3, TIMP4, HTRA4, AMPH, LCN6, CRH, TEAD4, ARMS2, PAPP2, SEMA3G, ADAMTS1, ALOX15B, SLC9A3R2, TIMP3, IGFBP5, HSPA12B, PRG2, PRX, ARHGEF25, ADAMTS2, DAAM2, FAM107A, LEP, NES, VSIG4, HBG2, CADM2, LAMP5, PTGDR2, NOMO1, NXF3, PLD4, BPIFB3, PACSIN1, CUX2, FLG, CLEC4C, and KRT5.

12. A circulating RNA (C-RNA) signature for an elevated risk of preeclampsia, the C-RNA signature comprising any one or more, any two or more, any three or more, any four or more, any five or more, any six or more, any seven or more, any eight or more, any nine or more, any ten or more, any eleven or more, any twelve or more, any thirteen or more, any fourteen or more, any fifteen or more, any sixteen or more, any seventeen or more, any eighteen or more, any nineteen or more, any twenty or more, any twenty-one or more, any twenty-two or more, any twenty-three or more, any twenty-four or more, any twenty-five or more, any twenty-six or more, any twenty-seven or more, any twenty-eight or more, any twenty-nine or more, or all thirty of VSIG4, ADAMTS2, NES, FAM107A, LEP, DAAM2, ARHGEF25, TIMP3, PRX, ALOX15B,

HSPA12B, IGFBP5, CLEC4C, SLC9A3R2, ADAMTS1, SEMA3G, KRT5, AMPH, PRG2, PAPP2, TEAD4, CRH, PITPNM3, TIMP4, PNMT, ZEB1, APOLD1, PLD4, CUX2, and HTRA4.

13. A circulating RNA (C-RNA) signature for an elevated risk of preeclampsia, the C-RNA signature comprising any one or more, any two or more, any three or more, any four or more, any five or more, any six or more, any seven or more, any eight or more, any nine or more, any ten or more, any eleven or more, any twelve or more, any thirteen or more, any fourteen or more, any fifteen or more, any sixteen or more, any seventeen or more, any eighteen or more, any nineteen or more, any twenty or more, any twenty-one or more, any twenty-two or more, any twenty-three or more, any twenty-four or more, any twenty-five or more, or all twenty-six of ADAMTS1, ADAMTS2, ALOX15B, AMPH, ARHGEF25, CELF4, DAAM2, FAM107A, HSPA12B, HTRA4, IGFBP5, KCNA5, KRT5, LCN6, LEP, LRRC26, NES, OLAH, PACSIN1, PAPP2, PRX, PTGDR2, SEMA3G, SLC9A3R2, TIMP3, and VSIG4.

14. A circulating RNA (C-RNA) signature for an elevated risk of preeclampsia, the C-RNA signature comprising any one or more, any two or more, any three or more, any four or more, any five or more, any six or more, any seven or more, any eight or more, any nine or more, any ten or more, any eleven or more, any twelve or more, any thirteen or more, any fourteen or more, any fifteen or more, any sixteen or more, any seventeen or more, any eighteen or more, any nineteen or more, any twenty or more, any twenty-one or more, or all twenty-two of ADAMTS1, ADAMTS2, ALOX15B, ARHGEF25, CELF4, DAAM2, FAM107A, HTRA4, IGFBP5, KCNA5, KRT5, LCN6, LEP, LRRC26, NES, OLAH, PRX, PTGDR2, SEMA3G, SLC9A3R2, TIMP3, and VSIG4.

15. A circulating RNA (C-RNA) signature for an elevated risk of preeclampsia, the C-RNA signature comprising any one or more, any two or more, any three or more, any four or more, any five or more, any six or more, any seven or more, any eight or more, any nine or more, any ten or more, or all eleven of CLEC4C, ARHGEF25, ADAMTS2, LEP, ARRDC2, SKIL, PAPP2, VSIG4, ARRDC4, CRH, and NES, optionally wherein the C-RNA signature consists essentially of:

ADAMTS2, ARHGEF25, ARRDC2, CLEC4C, LEP, PAPP2, and VSIG4;
ADAMTS2, ARHGEF25, ARRDC2, CLEC4C, LEP, PAPP2, SKIL, and VSIG4;
ADAMTS2, ARHGEF25, ARRDC4, CLEC4C, LEP, NES, SKIL, and VSIG4;
ADAMTS2, ARHGEF25, ARRDC2, ARRDC4, CLEC4C, CRH, LEP, PAPP2,
SKIL, and VSIG4;
ADAMTS2, ARHGEF25, ARRDC2, CLEC4C, LEP, and SKIL; or
ADAMTS2, ARHGEF25, ARRDC2, ARRDC4, CLEC4C, LEP, PAPP2, and SKIL.

16. A circulating RNA (C-RNA) signature for an elevated risk of preeclampsia, the C-RNA signature comprising any one or more, any two or more, any three or more, any four or more, any five or more, any six or more, any seven or more, any eight or more, any nine or more, any ten or more, any eleven or more, any twelve or more, any thirteen or more, any fourteen or more, any fifteen or more, any sixteen or more, any seventeen or more, any eighteen or more, any nineteen or more, any twenty or more, any twenty-one or more, any twenty-two or more, any twenty-three or more, or all twenty-four of LEP, PAPP2, KCNA5, ADAMTS2, MYOM3, ATP13A3, ARHGEF25, ADA, HTRA4, NES, CRH, ACY3, PLD4, SCT, NOX4, PACSIN1, SERPINF1, SKIL, SEMA3G, TIPARP, LRRC26, PHEX, LILRA4, and PER1.

17. A solid support array comprising a plurality of agents capable of binding and/or identifying a C-RNA signature of any one of claims 9 to 16.

18. A kit comprising a plurality of probes capable of binding and/or identifying a C-RNA signature of any one of claims 9-16.

19. A kit comprising a plurality of primers for selectively amplifying a C-RNA signature of any one of claims 9-16.

20. The method of any one of claims 1 to 8, wherein the biosample is a blood sample and the blood sample is collected, shipped, and/or stored in a tube that has cell- and DNA-stabilizing properties prior to processing the blood sample into plasma, wherein preferably the tube comprises a Streck Cell-Free DNA BCT® blood collection tube.