

Summary of the Invention

[0005] Some aspects and/or embodiments of the invention present disclosure are:

1. A method for diagnosing or aiding in the diagnosis of a disease or condition in a subject comprising:

a) determining a first profile of one or more markers of the disease or condition from a population of circulating diseased cells isolated from the subject, wherein the circulating diseased cells are affected by the disease or condition;

b) determining a second profile of at least one of the one or more markers from a population of control cells or a control bodily fluid sample isolated from the subject, wherein the control cells or the control bodily fluid sample are substantially free of cells affected by the disease or condition; and

c) identifying a difference between the first and second profiles, wherein the difference is indicative of the presence of said disease or condition in the subject.

2. A method for assessing the risk of developing a disease or condition in a subject comprising:

a) determining a first profile of one or more markers of the disease or condition from a population of circulating diseased cells isolated from the subject, wherein the circulating diseased cells are affected by the disease or condition;

b) determining a second profile of at least one of the one or more markers from a population of control cells or a control bodily fluid sample isolated from the subject, wherein the control cells or the control bodily fluid sample are substantially free of cells affected by the disease or condition; and

c) identifying a difference between the first and second profiles, wherein the difference is indicative of the risk of developing said disease or condition in the subject.

104. The method of embodiment 102, wherein the difference is at least 1.05-fold, 1.1-fold, 1.2-fold, 1.3-fold, 1.4-fold, 1.5-fold, 2-fold, 2.5-fold, 3-fold, 4-fold, 5-fold, 6-fold, 7-fold, 8-fold, 9-fold, or 10-fold difference.

105. The method of embodiment 1, further comprising determining at least one diagnostic parameter of said disease or condition.

106. The method of embodiment 105, wherein the diagnostic parameter is determined by physical inspection, visual inspection, biopsy, scanning, histology, radiology, imaging, ultrasound, use of a commercial kit, genetic testing, immunological testing, analysis of bodily fluids, or monitoring neural activity.

107. The method of any one of embodiments 1-6, wherein the one or more markers comprise at least one or more of the markers identified by the method of embodiment 58.

108. A kit comprising a plurality of marker detection agents that detect at least one or more of the markers identified by the method of embodiment 58.

109. Use of a composition comprising a compound identified by the method of embodiment 6 for the manufacture of a medicament for the treatment or prevention of A method for treating or preventing a disease or condition in a subject comprising administering to said subject a composition comprising a compound identified by the method of embodiment 6.

110. The method of any one of embodiments 1-6 and 58, wherein the control bodily fluid sample is a cell-free bodily fluid isolated from a bodily fluid.

111. The method of embodiment 110, wherein the cell-free bodily fluid is plasma or serum.

112. The method of embodiment 110, wherein the bodily fluid is blood, urine, stool, saliva, lymph fluid, cerebrospinal fluid, synovial fluid, cystic fluid, ascites, pleural effusion, fluid obtained from a pregnant woman in the first trimester, fluid obtained from a pregnant woman in the second trimester, fluid obtained from a pregnant woman in the third trimester, maternal blood, amniotic fluid, chorionic villus sample, fluid from a preimplantation embryo, maternal urine, maternal saliva, placental sample, fetal blood, lavage and cervical vaginal fluid, interstitial

108. A kit comprising a plurality of marker detection agents that detect at least one or more of the markers identified by the method of claim 58.

109. Use of a composition comprising a compound identified by the method of claim 6 for the manufacture of a medicament for the treatment or prevention of ~~A method for treating or preventing a disease or condition in a subject comprising administering to said subject a composition comprising a compound identified by the method of claim 6.~~

110. The method of any one of claims 1-6 and 58, wherein the control bodily fluid sample is a cell-free bodily fluid isolated from a bodily fluid.

111. The method of claim 110, wherein the cell-free bodily fluid is plasma or serum.

112. The method of claim 110, wherein the bodily fluid is blood, urine, stool, saliva, lymph fluid, cerebrospinal fluid, synovial fluid, cystic fluid, ascites, pleural effusion, fluid obtained from a pregnant woman in the first trimester, fluid obtained from a pregnant woman in the second trimester, fluid obtained from a pregnant woman in the third trimester, maternal blood, amniotic fluid, chorionic villus sample, fluid from a preimplantation embryo, maternal urine, maternal saliva, placental sample, fetal blood, lavage and cervical vaginal fluid, interstitial fluid, buccal swab sample, sputum, bronchial lavage, Pap smear sample, or ocular fluid.