

CLAIMS

1. An *in vitro* method for diagnosing pancreatic cancer in an individual, the method comprising:
measuring level of each protein biomarker of a combination of biomarkers selected from CTSB and THBS4; CTSB and C5; and CTSB and C2 in a biological sample from the individual, wherein the individual is classified as having or not having pancreatic cancer, or the likelihood of the individual having pancreatic cancer is determined, based on up-regulation or down-regulation of the protein biomarkers as described in Table 1, wherein up-regulation refers to a level of the protein biomarker that is greater than a level of the protein biomarker that is typically detected in similar biological samples from healthy individuals, and wherein down-regulation refers to a level of the protein biomarker that is less than the level of the protein biomarker that is typically detected in similar biological samples from healthy individuals.
2. The method of claim 1, wherein the diagnosis comprises the differential diagnosis of pancreatic cancer from benign conditions such as pancreatitis or a gastrointestinal disorder.
3. The method of claim 1 wherein the individual has an abdominal mass.
4. An *in vitro* method for screening an asymptomatic high risk individual for pancreatic cancer, the method comprising:
measuring level of each protein biomarker of a combination of biomarkers selected from CTSB and THBS4; CTSB and C5; and CTSB and C2 in a biological sample from the individual, wherein the individual is classified as having or not having pancreatic cancer, or the likelihood of the individual having pancreatic cancer is determined, based on up-regulation or down-regulation of the protein biomarkers as described in Table 1, wherein up-regulation refers to a level of the protein biomarker that is greater than a level of the protein biomarker that is typically detected in similar biological samples from healthy individuals, and wherein down-regulation refers to a level of the protein biomarker that is less than the level of the protein biomarker that is typically detected in similar biological samples from healthy individuals.
5. The method of any one of claims 1 to 4, wherein measuring the biomarker levels comprises performing an *in vitro* assay.
6. The method of claim 5, wherein said *in vitro* assay comprises at least one capture reagent corresponding to each of said biomarkers, and further comprising selecting said at least one capture reagent from the group consisting of aptamers, antibodies, and a nucleic acid probe.
7. The method of claim 5, wherein the *in vitro* assay is selected from the group consisting of an immunoassay, an aptamer-based assay, a histological or cytological assay.
8. The method of any one of claims 1 to 7, wherein the biological sample is selected from the group consisting of whole blood, plasma, serum and pancreatic fluid.

9. The method of claim 8, wherein the biological sample is plasma.
10. The method according to any one of claims 1 to 9, wherein the biological sample is pancreatic tissue and wherein the levels of the protein biomarkers derive from a histological or cytological analysis of said pancreatic tissue.
11. The method according to any one of claims 1 to 10, further comprising measuring the levels of one or more additional protein biomarkers.
12. The method according to claim 11, wherein the levels of at least 4, 5, 6, 7 or 9 protein biomarkers are measured.
13. The method according to any one of claims 1 to 12, wherein the individual is high risk for pancreatic cancer due to smoking, alcohol consumption or family history of pancreatic cancer.
14. The method according to any one of claims 11 or 12, wherein the protein biomarkers are selected from Table 18.
15. The method according to any one of claims 11, 12 or 14, wherein the level of the biomarker protein CA19-9 is measured.
16. The method according to any one of claims 1 to 15, wherein the individual is a human.
17. The method according to any one of claims 1 to 16, wherein said individual is classified as having or not having pancreatic cancer, or the likelihood of the individual having pancreatic cancer is determined, based on said biomarker levels and at least one item of additional biomedical information corresponding to said individual.
18. The method of claim 17, wherein said at least one item of additional biomedical information is independently selected from the group consisting of:
 - (a) information corresponding to the presence or absence of a pancreatic mass or other abdominal mass,
 - (b) information corresponding to physical descriptors of said individual,
 - (c) information corresponding to a change in weight of said individual,
 - (d) information corresponding to the ethnicity of said individual,
 - (e) information corresponding to the gender of said individual,
 - (f) information corresponding to said individual's smoking history,

- (g) information corresponding to said individual's alcohol use history,
- (h) information corresponding to said individual's occupational history,
- (i) information corresponding to said individual's family history of pancreatic cancer or other cancer,
- (j) information corresponding to the presence or absence in said individual of at least one genetic marker correlating with a higher risk of pancreatic cancer or cancer in said individual or a family member of said individual,
- (k) information corresponding to clinical symptoms of said individual,
- (l) information corresponding to other laboratory tests,
- (m) information corresponding to gene expression values of said individual, and
- (n) information corresponding to said individual's exposure to known carcinogens.