CLAIMS

1. A method of testing for pancreatic ductal adenocarcinoma comprising determining the level of expression or concentration of each of LYVE1, REG1 and TFF1 in a biological sample obtained from a patient, in which an increase in one or more of the biomarkers in a test sample compared to a control sample from a healthy patient indicates the presence of pancreatic ductal adenocarcinoma.

2. A method according to Claim 1, in which the REG1 protein is REG1A and/or REG1B.

3. A method according to Claim 1 or 2, in which the determining step is carried out using a binding molecule or binding molecules specific for the protein or proteins whose level of expression or concentration is being determined.

4. A method according to Claim 3 in which the binding molecule is an antibody or an antibody fragment, a protein, or an aptamer.

5. A method according to any preceding claim in which the biological sample is a urine, whole blood, serum or pancreatic tissue sample.

6. A method according to any preceding claim in which the sample is from a human.

7. A method according to any preceding claim, in which the pancreatic ductal adenocarcinoma is stage I or stage II pancreatic ductal adenocarcinoma.

8. A method according to any preceding claim, in which the method is capable of distinguishing between stage I PDAC and a healthy patient, between stage I PDAC and chronic pancreatitis (CP), or between stage I PDAC and a later stage of PDAC.

9. A method according to any preceding claim, further comprising the step of comparing the level of expression or concentration of one or more miRNAs with a reference.

10. A method according to Claim 9, in which the reference is a biological sample from a healthy patient.

11. A method according to any preceding claim, in which the biological sample is from a patient having or suspected of having PDAC.

12. A method according to any preceding claim, further comprising determining the level of expression or concentration of CA19.9 protein.

13. Use of a combination of each of LYVE1, REG1 and TFF1 proteins in a method of testing for pancreatic ductal adenocarcinoma.

14. Use of the combination of proteins according to Claim 13, in which the REG1 protein is REG1A and/or REG1B.

15. Use of the combination of proteins according to Claim 13 or 14, in which the proteins are urinary proteins.

16. Use of the combination of proteins according to Claim 13, 14 or 15, in which the level of expression or concentration is measured using a binding molecule or binding molecules specific for the protein or proteins being analysed.

17. Use of the combination of proteins according to Claim 16, in which the binding molecule is an antibody or an antibody fragment, a protein, or an aptamer.

18. A method according to any of Claims 1 to 12 or use of the combination of proteins according to any of Claims 13 to 17, in which the pancreatic ductal adenocarcinoma is stage I or stage II pancreatic ductal adenocarcinoma.

19. A kit for testing for pancreatic ductal adenocarcinoma comprising a means for measuring the expression or concentration of each of LYVE1, REG1 or TFF1 in a biological sample.

20. A method according to any of Claims 1 to 12, use of the combination of proteins according to any of Claims 13 to 17 or a kit for testing for pancreatic ductal adenocarcinoma according to Claim 19, in which the REG1 protein is REG1A and/or REG1B.

21. A kit according to Claim 19 or 20, in which the means for measuring is a biosensor.

22. A kit according to Claim 21, in which the biosensor is an electrochemical, electronic, piezoelectric, gravimetric, pyroelectric biosensor, ion channel switch, evanescent wave, surface plasmon resonance or biological biosensor

23. A kit according to Claim 21, in which the means for detecting comprises a dipstick coated with a membrane, in which the dipstick comprises:

(a) a first section to which is bound an unlabelled binding molecule with specific affinity for the protein whose expression or concentration is being measured;

(b) a second section that is blocked with a non-reactive protein; and

(c) a third section to which is bound the protein whose expression or concentration is being measured.

24. A kit according to any of Claims 19 to 23, in which the kit further comprises one or more vessels for containing the biological sample.

25. A kit according to any of Claims 19 to 24, in which the kit further comprises one or more solvents for extracting LYVE1, REG1 and/or TFF1 proteins from the biological sample.

26. A kit according to any of Claims 19 to 25, in which the means for detecting the amount of expression or concentration of the one or more biomarkers is a microarray.