

## CLAIMS

1. A method for determining a likelihood of cancer recurrence in a patient with prostate cancer, comprising:
  - measuring an expression level of GSTM2 in a biological sample comprising prostate cancer tissue obtained from the patient;
  - predicting a likelihood of cancer recurrence for the patient;
  - wherein an increased expression level of GSTM2 is negatively associated with an increased risk of recurrence.
2. A method of claim 1, wherein said expression level is measured using an RNA transcript of GSTM2.
3. A method of claim 1, further comprising normalizing said expression level to obtain a normalized expression level.
4. A method of any one of claims 1-3, wherein the likelihood of cancer recurrence is based on clinical recurrence-free interval (cRFI).
5. A method of any one of claims 1-3, wherein the likelihood of cancer recurrence is based on biochemical recurrence-free interval (bRFI).
6. A method of any one of claims 1-4, wherein the biological sample has a positive TMPRSS2 fusion status.
7. A method of any one of claims 1-4, wherein the biological sample has a negative TMPRSS2 fusion status.
8. A method of any one of claims 1-7, wherein the patient has early-stage prostate cancer.
9. A method of any one of claims 1-8, wherein the biological sample comprises prostate tumour tissue with the primary Gleason pattern for said prostate tumour.

10. A method of any one of claims 1-8, wherein the biological samples comprises prostate tumour tissue with the highest Gleason pattern for said prostate tumour.

11. A method of any one of claims 1-10, wherein the biological sample is prostate tumour tissue.

12. A method of any one of claims 1-11, further comprising determining a likelihood of upgrading or upstaging in the patient with prostate cancer,  
wherein an increased expression level of GSTM2 is negatively associated with an increased risk of upgrading/upstaging.

13. A method of any one of claims 1-12, wherein the biological sample is a fixed, paraffin-embedded tissue sample.

## CLAIMS

1. A method for determining a likelihood of cancer recurrence in a patient with prostate cancer, comprising:  
  
    measuring an expression level of GSTM2 in a biological sample comprising prostate tissue obtained from the patient;  
  
    predicting a likelihood of cancer recurrence for the patient;  
  
wherein an increased expression level of GSTM2 is negatively associated with an increased risk of recurrence.
2. A method as claimed in claim 1, wherein said expression level is measured using an RNA transcript of GSTM2.
3. A method as claimed in claim 1, further comprising normalizing said expression level to obtain a normalized expression level.
4. A method as claimed in claim 1, 2 or 3, wherein the likelihood of cancer recurrence is based on clinical recurrence-free interval (cRFI).
5. A method as claimed in claim 1, 2 or 3, wherein the likelihood of cancer recurrence is based on biochemical recurrence-free interval (bRFI).
6. A method as claimed in any preceding claim, wherein the biological sample has a positive TMPRSS2 fusion status.
7. A method as claimed in any preceding claim, wherein the biological sample has a negative TMPRSS2 fusion status.
8. A method as claimed in any preceding claim, wherein the patient has early-stage prostate cancer.
9. A method as claimed in any preceding claim, wherein the biological sample comprises prostate tumour tissue with the primary Gleason pattern for said prostate tumour.

10. A method as claimed in any preceding claim, wherein the biological samples comprises prostate tumour tissue with the highest Gleason pattern for said prostate tumour.
11. A method as claimed in any preceding claim, wherein the biological sample is prostate tumour tissue.
12. A method as claimed in any preceding claim, wherein the biological sample is non-tumour prostate tissue.
13. A method as claimed in any preceding claim, further comprising determining a likelihood of upgrading or upstaging in the patient with prostate cancer, wherein an increased expression level of GSTM2 is negatively associated with an increased risk of upgrading/up-staging.
14. A method as claimed in any preceding claim, wherein the biological sample is a fixed, paraffin-embedded tissue sample.