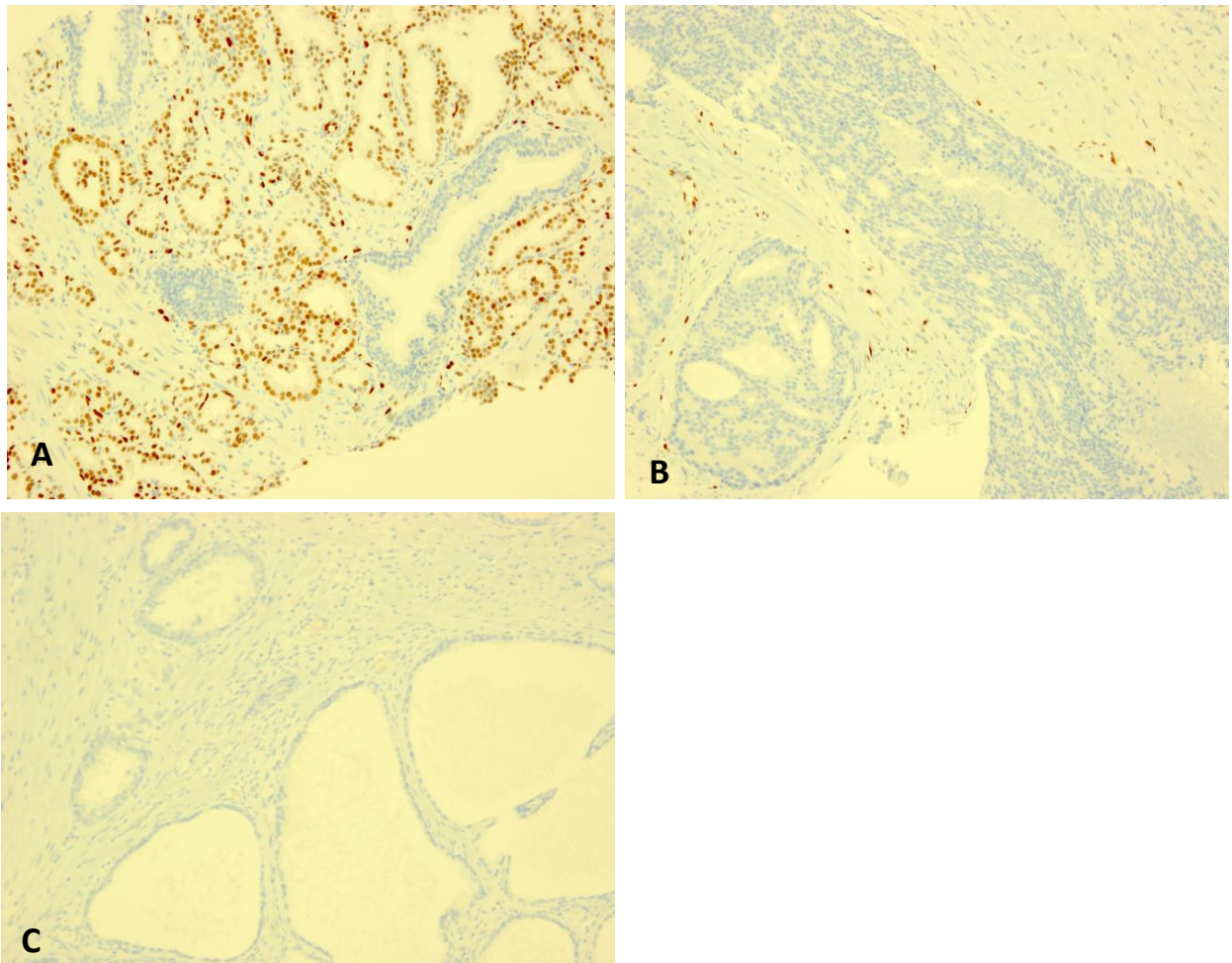
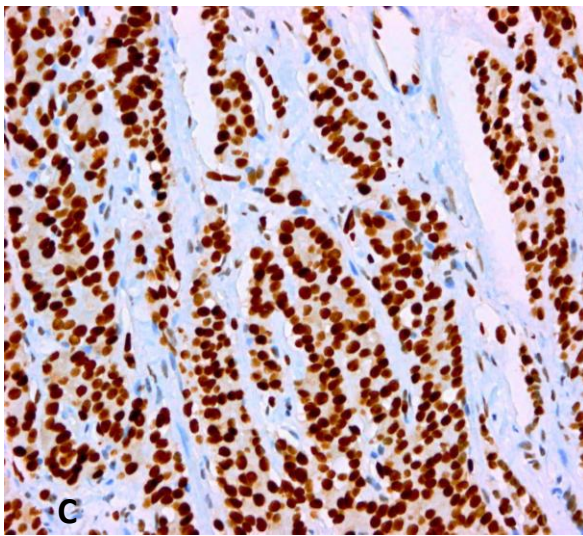
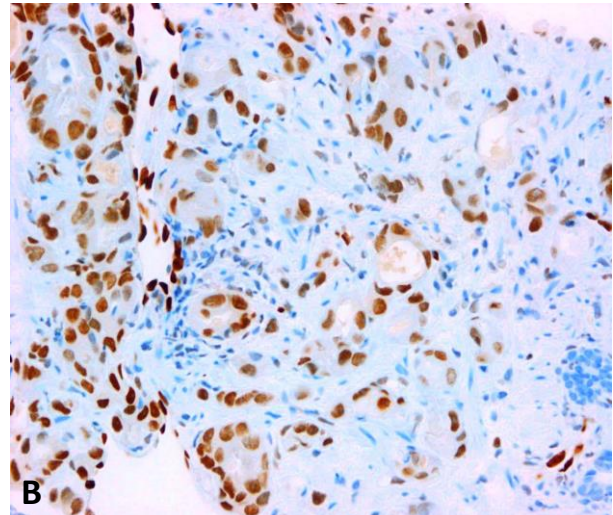
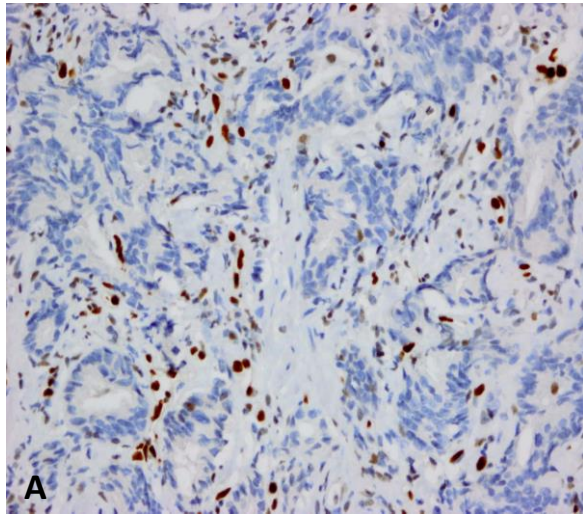


**Supplementary figures**

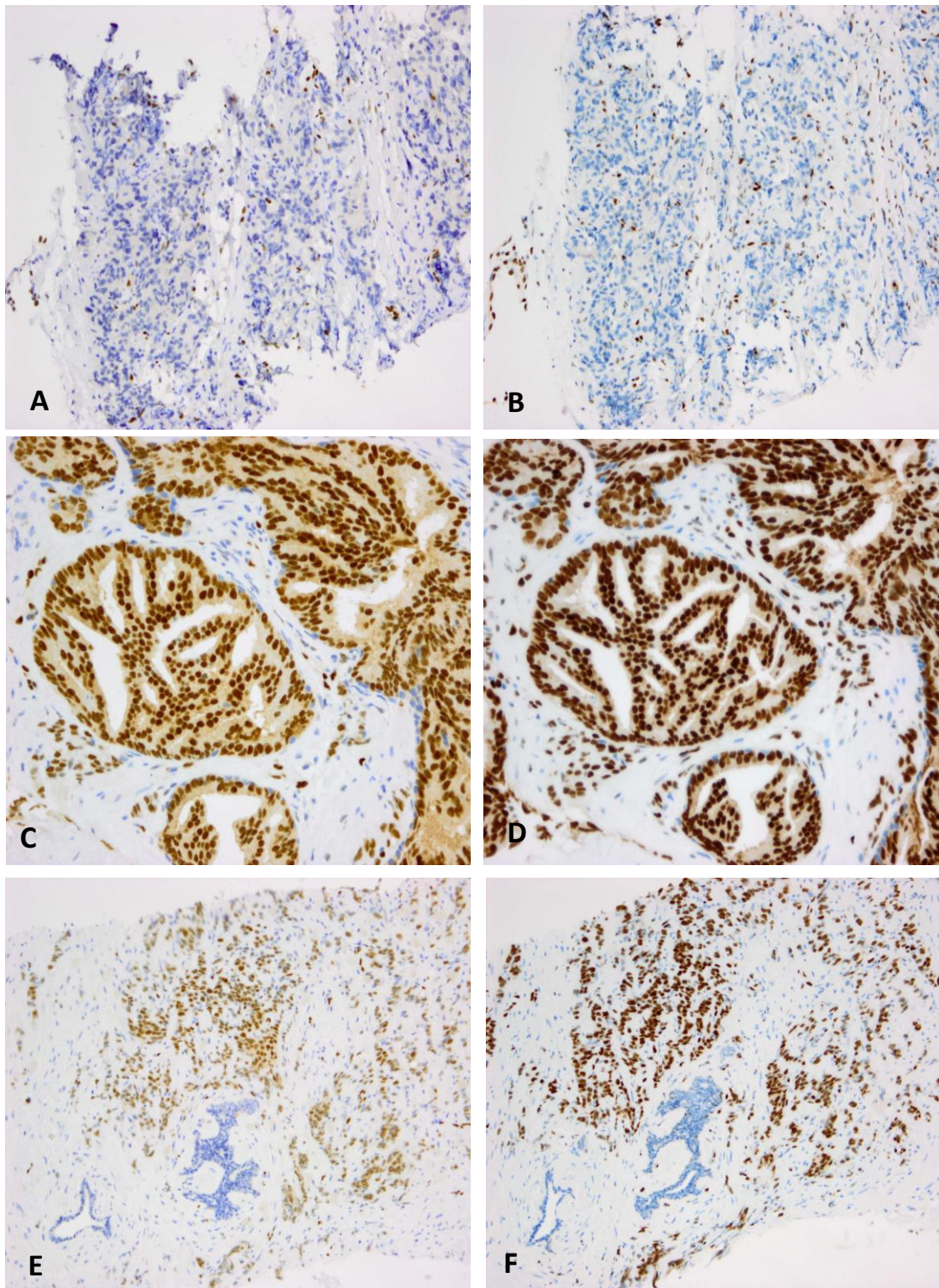


**Supplementary Figure 1** – Immunohistochemistry of prostate core biopsy samples depicting failure of internal control, stained with anti-ERG (EPR3864) rabbit monoclonal antibody 5ml (23 $\mu$ g/ml) staining kit. ERG stains brown upon detection and small amounts are normally detected in cells. **A)** Prostate Cancer staining positive for ERG overexpression, **B)** Prostate Cancer from a patient that is negative for ERG overexpression with positive internal control endothelial staining and **C)** No brown colour is detected as the staining on this control slide was unsuccessful.

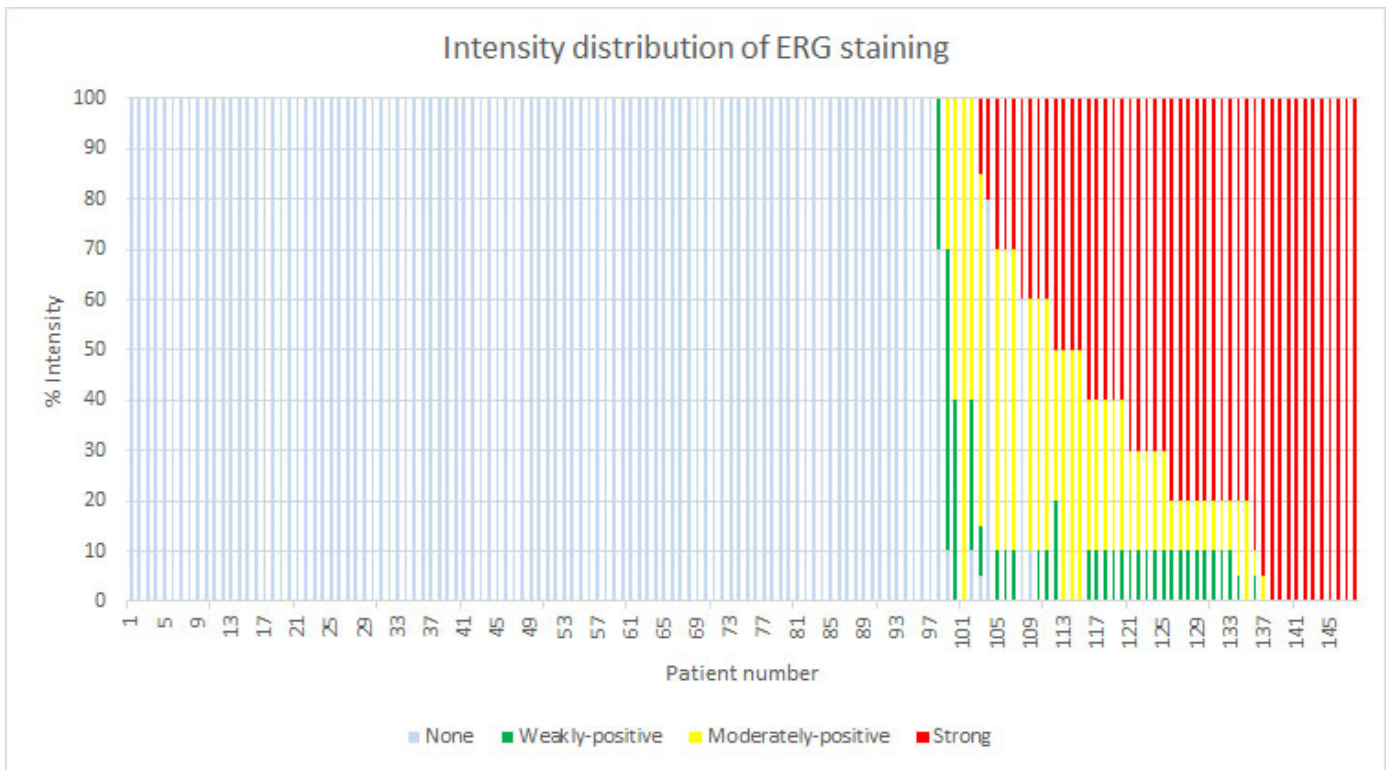


**Supplementary Figure 2:** Range of staining using the ERG-antibody (EPR3864 clone). **A)** ERG expression is negative in tumour cells, but positive in nuclei of lymphocytes and endothelial cells (X200). **B)** Moderate ERG expression is seen in tumour epithelial cell nuclei (X200). **C)** A strongly positive ERG expression is seen showing fused acinar prostate cancer (X200).





**Supplementary Figure 3:** Comparison of IHC of Abcam anti-ERG antibody clone [9FY] (ab139431) with Roche monoclonal anti-ERG antibody (EPR3864). **A)** and **B)** ERG negative prostate cancer staining with anti-ERG antibody clone [9FY] (ab13943) and anti-ERG antibody (EPR3864) respectively (X100). **C)** and **D)** Strongly positive (+3) ERG staining showing cribriform formation, which is characteristic feature of high grade prostate cancer (X200) with anti-ERG antibody clone [9FY] (ab13943) and anti-ERG antibody (EPR3864) respectively. **E)** and **F)** Strongly positive (+3) ERG staining with anti-ERG antibody [9FY] (ab139431) and anti-ERG antibody (EPR3864) respectively, demonstrating a sheet of cancer cells in prostate cancer with Gleason score 4.



**Supplementary Figure 4:** Intensity distribution of ERG staining across the study population. This is the raw data used for calculating the H-score.