

1 **Vimentin and Ki67 expression in circulating tumour cells derived**
2 **from castrate-resistant prostate cancer**

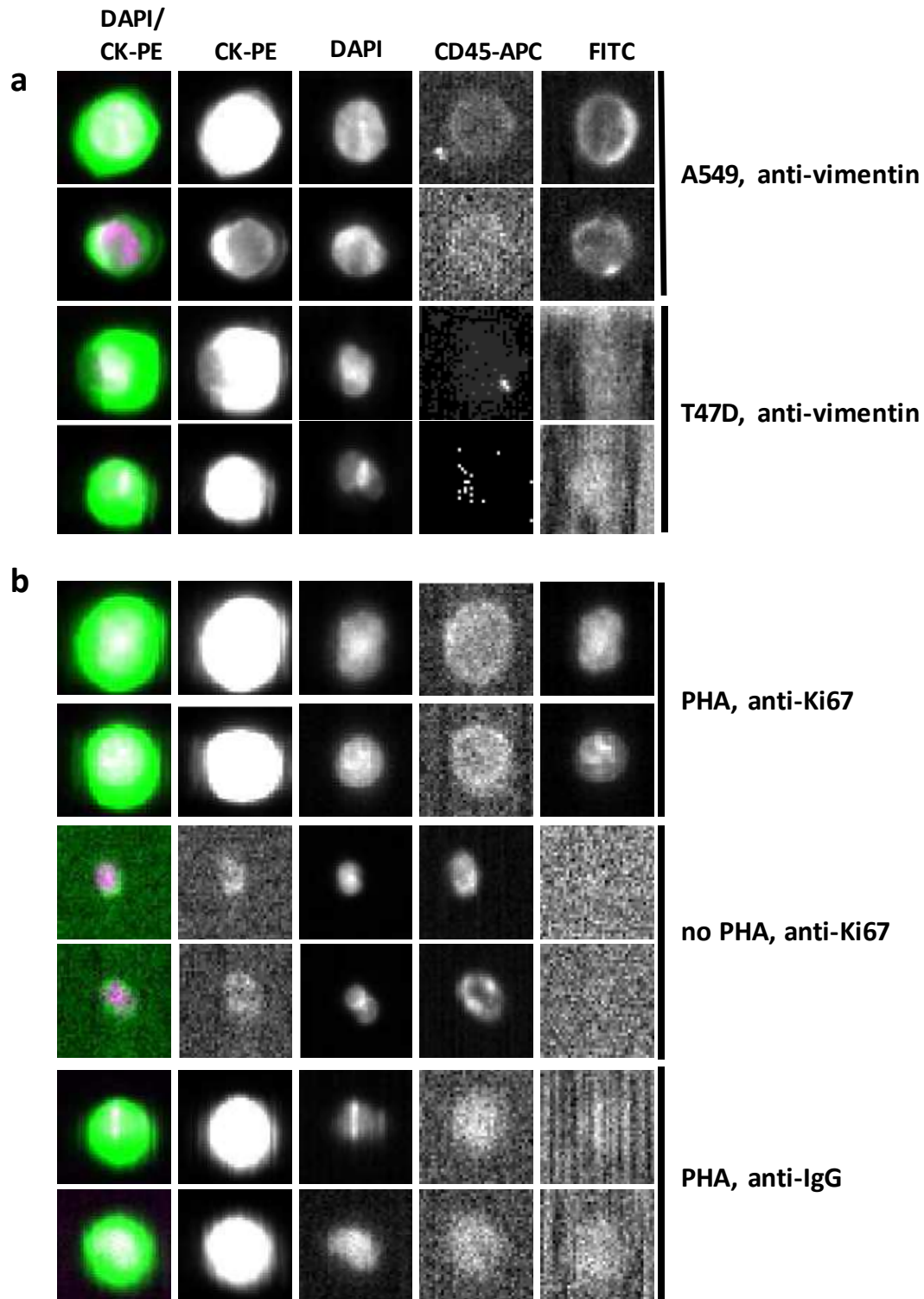
3 **Additional Files**

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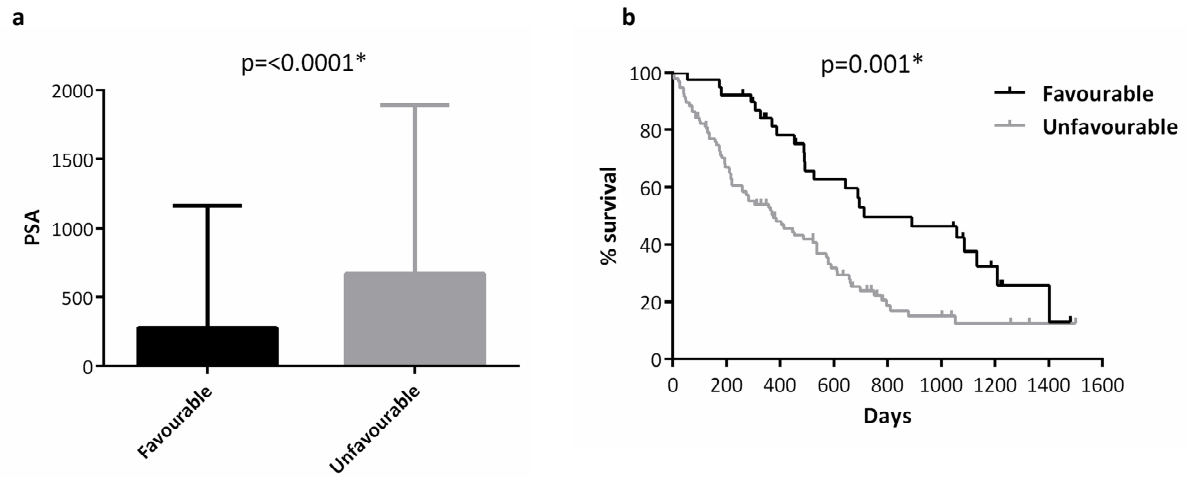
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23 **Supplementary Figure 1 Validation of vimentin and Ki67 staining using the CellSearch platform** a) Representative pictures from
 24 CellSearch system analyses of vimentin staining in A549 cells (vimentin +ve) and T47D cells (vimentin - ve) using the free channel (FITC). b)
 25 Representative pictures from CellSearch system analyses of Ki67 staining in A549 cells using the free channel (FITC). PHA was added to cells
 26 in the top and bottom panels to stimulate proliferation. PHA = phytohaemagglutinin A.



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28 **Supplementary Figure 2 Prognostic impact of standard CTCs in two cohorts of patients with CRPC** Prognostic comparison of unfavourable
 29 category of patients at baseline (≥ 5 standard CTCs overall) compared to favourable category (< 5 standard CTCs overall), as assessed by bar
 30 charts comparing baseline PSA (a) and Kaplan-Meier plots of overall survival (b). Mann-Whitney test performed for (a) and log-rank tests
 31 for (b); Bar chart shows mean \pm standard deviation, $p < 0.05$.

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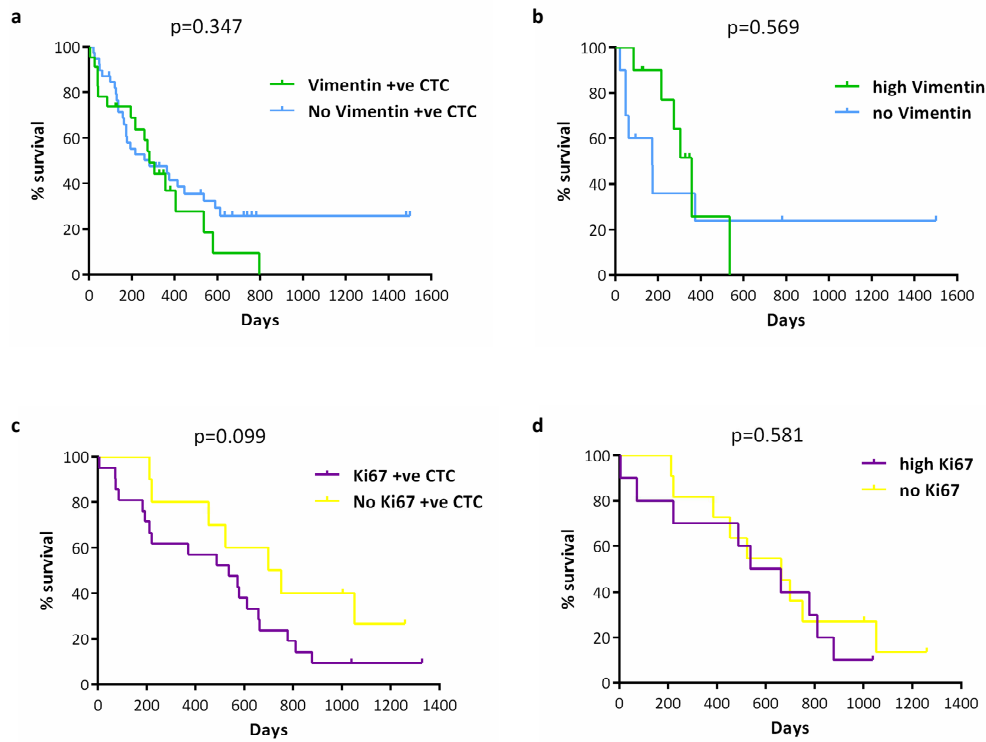
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45 **Supplementary Figure 3 Prognostic impact of vimentin/Ki67 CTC proportions and their presence in the unfavourable subgroup (a)**

46 Kaplan-Meier survival of patients with ≥ 1 vimentin-positive CTC in unfavourable subgroup (≥ 5 standard CTCs overall) at baseline compared
 47 to those in this subgroup with no vimentin-positive CTC (b) Kaplan-Meier survival of patients with highest proportion of vimentin-positive
 48 CTC at baseline compared to those with the highest proportion of vimentin-negative CTC (c) Kaplan-Meier survival of patients with ≥ 1 Ki67-
 49 positive CTC in unfavourable subgroup (≥ 5 standard CTCs overall) at baseline compared to those with no Ki67-positive CTC (d) Kaplan-
 50 Meier survival of patients with highest proportion of Ki67-positive CTC at baseline compared to those with the highest proportion of Ki67-
 51 negative CTC. Log-rank tests for all; $p < 0.05$.

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