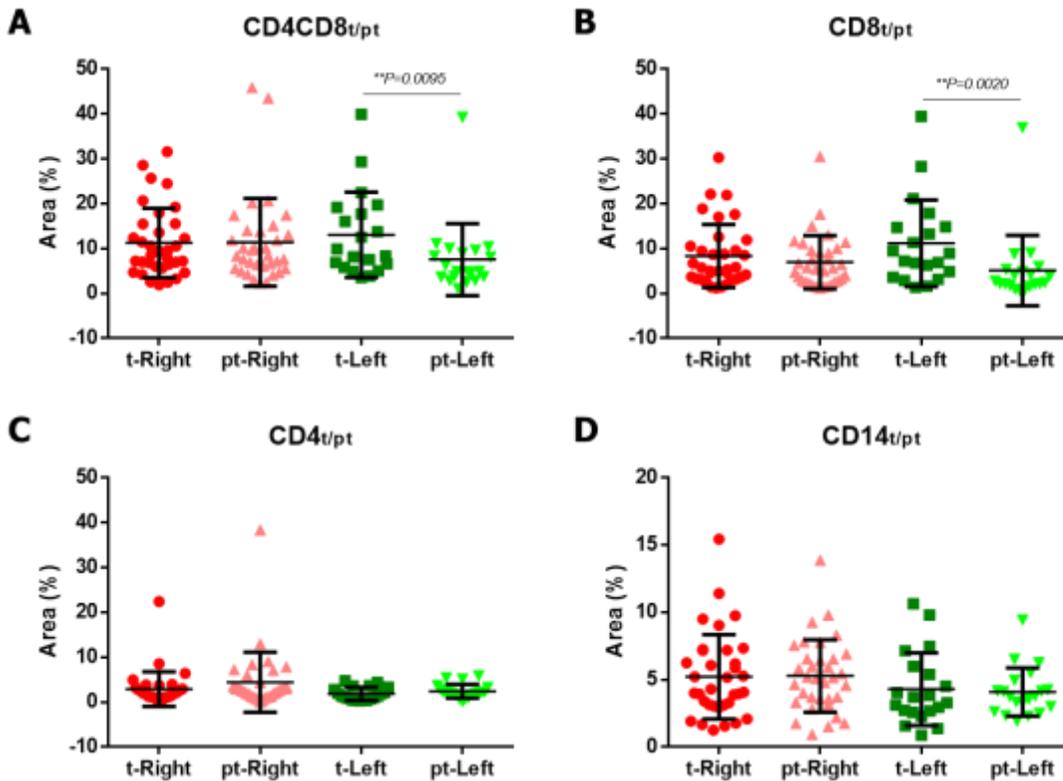
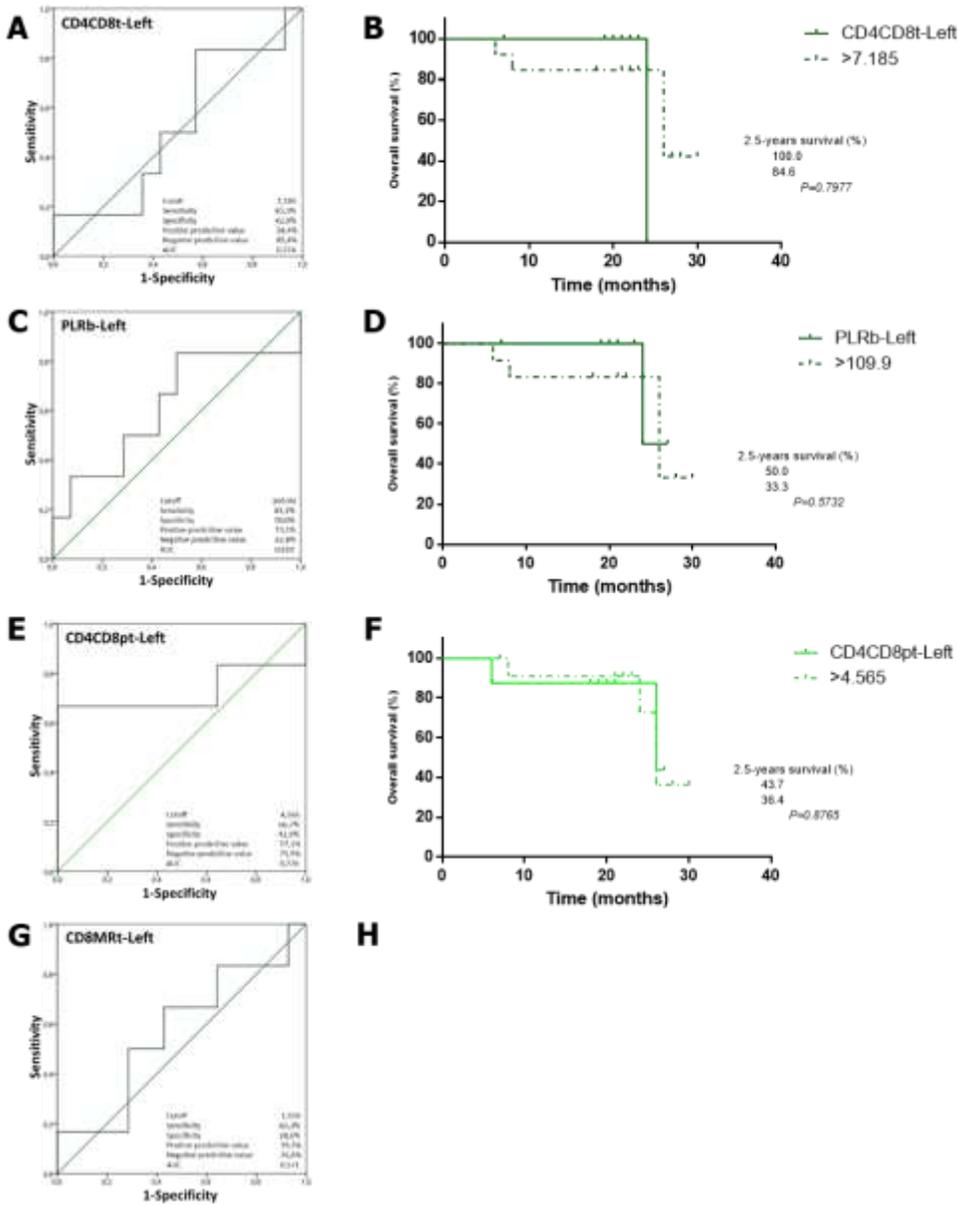


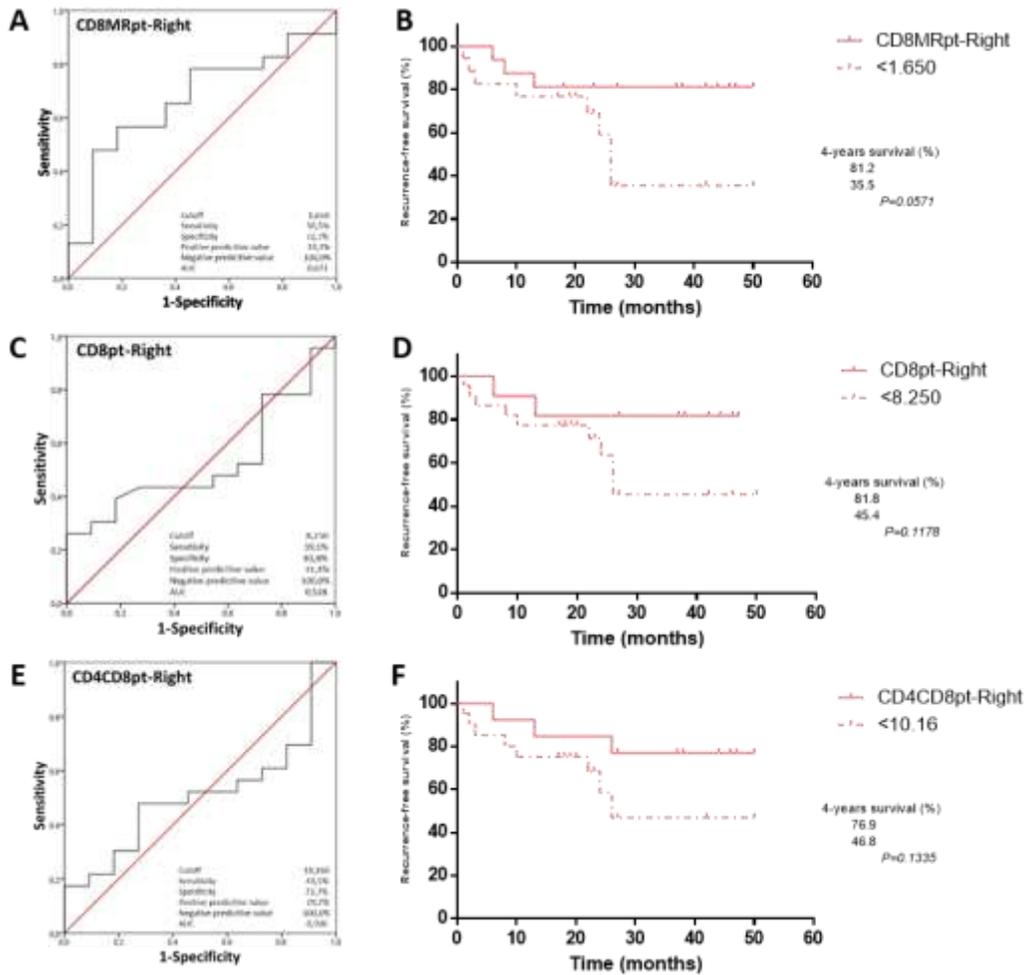
**Supplementary Figure 1 Image processing pipeline to determine the expression of markers in the tissues.** Step 1: Blank photo ( $B$ ) is measured for total area ( $A_B$ ) and mean value ( $Mean$ ). Step 2:  $Mean$  is used as  $k1$  value in formulae to divide original photo by blank, rendering the normalised photo ( $k2$  value is set to 0.0). Step 3: Red colour threshold is adjusted to minimum brightness in hue, saturation and brightness space with dark background, and the tissue-delimited area ( $A_{Td}$ ) is measured. Step 4: Colour is deconvoluted for HDAB vector and Colour\_2 channel further processed. Step 5: Red threshold is adjusted to minimum brightness in dark background, and binary image made. Step 6: Particles are outlined with default parameters and chromogen area ( $A_C$ ) is measured. Finally, percentage of relative area for each marker is calculated as: relative area (%) =  $100 \times A_C / (A_B - A_{Td})$ ; as for this example: Relative area = 12.3%.



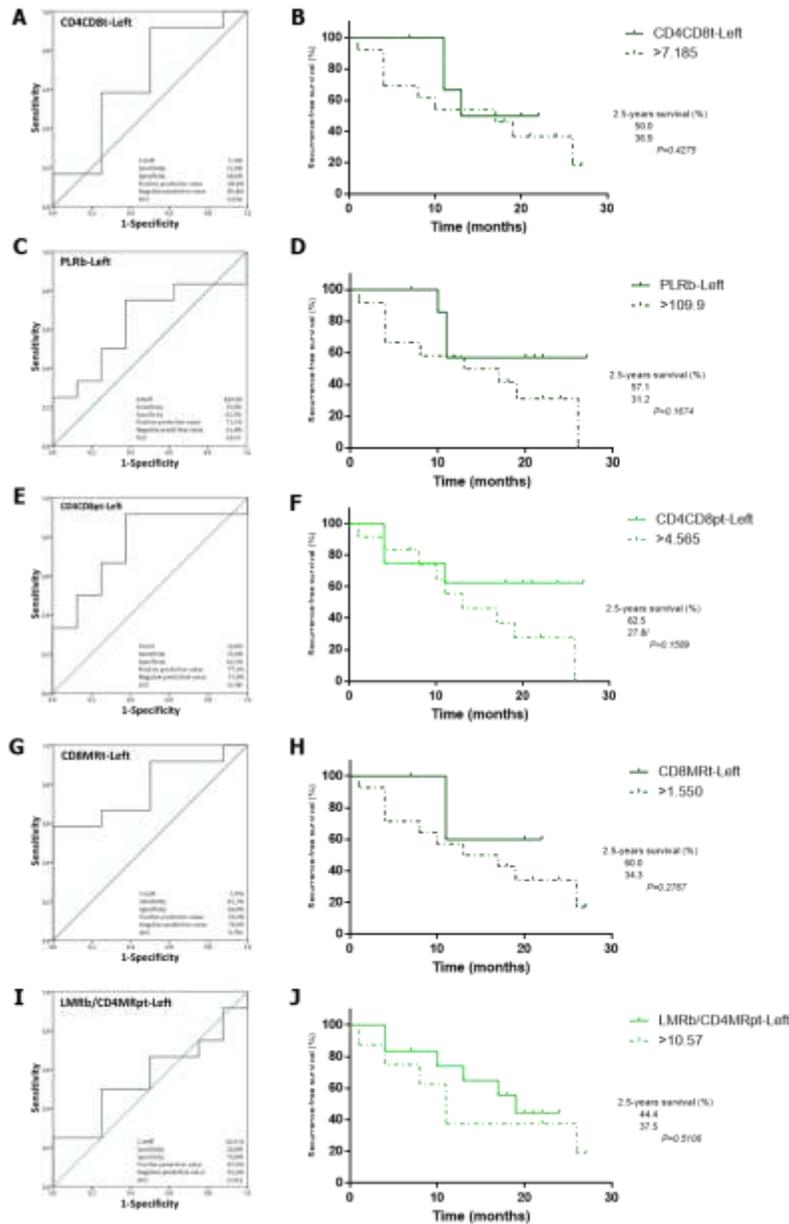
**Supplementary Figure 2 Leukocyte infiltration in tissues from colorectal cancer patients.** Lymphocytes and monocytes infiltrated in right-sided colorectal cancer tumours (t, orange,  $n = 34$ ) and peritumours (pt, light red,  $n = 34$ ), and left-sided colorectal cancer tumours (t, green,  $n = 20$ ) and peritumours (pt, light green,  $n = 20$ ), represented as the percentage of total sample area for (A) (CD4<sup>+</sup> plus CD8<sup>+</sup>) lymphocytes, (B) CD8<sup>+</sup> lymphocytes, (C) CD4<sup>+</sup> lymphocytes and (D) CD14<sup>+</sup> monocytes (<sup>b</sup> $P < 0.01$ , unpaired Mann-Whitney  $U$  test, data are mean  $\pm$  SD).



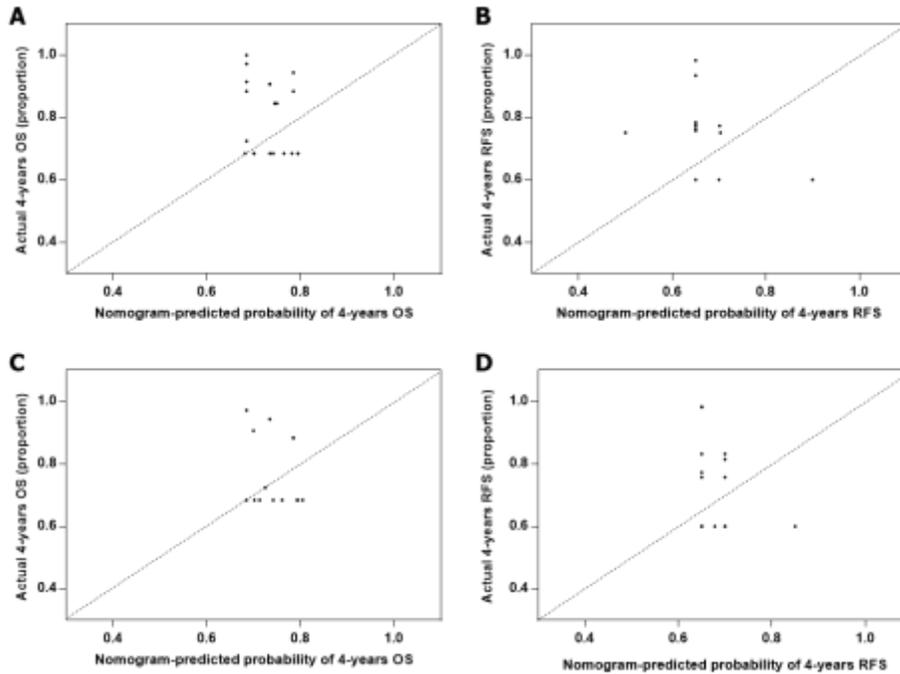
**Supplementary Figure 3** Receiver operating curve analyses for overall survival and Kaplan-Meier curves for optimal cutoff values in left-sided colorectal cancer patients for non-significant predictors. A-B: CD4CD8<sub>i</sub>; C-D: PLR<sub>b</sub>; E-F: CD4CD8<sub>pt</sub>; G-H: CD8MR<sub>i</sub>; survival proportions at 26 mo after surgery, median follow-up, are shown (log-rank test). CD4CD8: CD4<sup>+</sup> plus CD8<sup>+</sup>-lymphocyte; PLR: Platelet-to-lymphocyte ratio; CD8MR: CD8<sup>+</sup>-lymphocyte-to-monocyte ratio.



**Supplementary Figure 4** Receiver operating curve analyses for recurrence-free survival and Kaplan-Meier curves for optimal cutoff values in RCRC patients for non-significant predictors. A-B: CD8MR<sub>pt</sub>; C-D: CD8<sub>pt</sub>; E-F: CD4CD8<sub>pt</sub>; survival proportions at 26 mo after surgery, median follow-up, are shown (log-rank test). RCRC: Right-sided colorectal cancer; CD8MR: CD8<sup>+</sup>-lymphocyte-to-monocyte ratio; CD8: CD8<sup>+</sup>-lymphocyte; CD4CD8: CD4<sup>+</sup> plus CD8<sup>+</sup>-lymphocyte.



**Supplementary Figure 5 Receiver operating curve analyses for recurrence-free survival (RFS) and Kaplan-Meier curves for optimal cutoff values in LCRC patients for non-significant predictors.** A-B: CD4CD8<sub>i</sub>; C-D: PLR<sub>b</sub>; E-F: CD4CD8<sub>pt</sub>; G-H: CD8MR<sub>i</sub>; I-J: LMR<sub>b</sub>/CD4MR<sub>pt</sub>; survival proportions at 26 mo after surgery, median follow-up, are shown (log-rank test). LCRC: Left-sided colorectal cancer; CD4CD8: CD4<sup>+</sup> plus CD8<sup>+</sup>-lymphocyte; PLR: Platelet-to-lymphocyte ratio; CD8MR: CD8<sup>+</sup>-lymphocyte-to-monocyte ratio; LMR: Lymphocyte-to-monocyte ratio; CD4MR: CD4<sup>+</sup>-lymphocyte-to-monocyte ratio.



**Supplementary Figure 6 Calibration plots of the nomograms.** A-B: For predictive OS and RFS in the training set, respectively; C-D: For predictive OS and RFS in the validation set, respectively. The dashed line indicates a reference line where an ideal nomogram would lie. OS: Overall survival; RFS: Recurrence-free survival.

**Supplementary Table 1. Antibodies used in the study.**

<b>Specie reactivity</b>	<b>Antigen</b>	<b>Clone</b>	<b>Host</b>	<b>Company</b>	<b>Cat. No</b>
Primary					
Human	CD4	EPR6855	Rabbit	Abcam	ab133616
Human	CD8	Polyclonal	Rabbit	Abcam	ab4055
Human	CD14	Polyclonal	Goat	Abcam	ab45870
Secondary					
HRP-Goat-IgG	Rabbit-IgG	Polyclonal	-	Sigma-Aldrich	AQ106P
HRP-Mouse-IgG	Goat-IgG	Polyclonal	-	Sigma-Aldrich	AP124P
HRP-Rabbit-IgG	Goat-IgG	Polyclonal	-	Sigma-Aldrich	AP132P