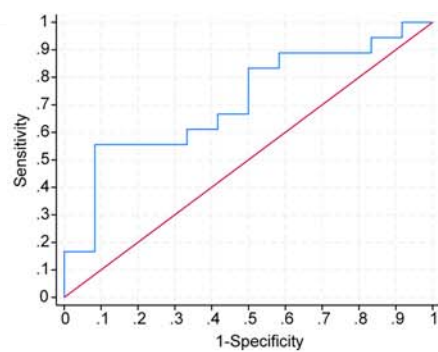


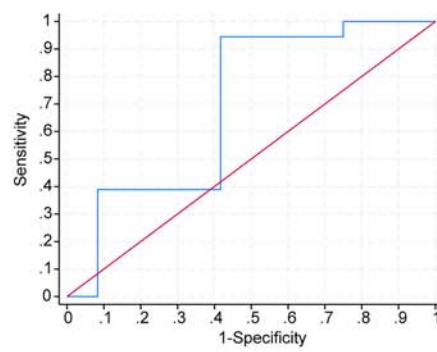
Expanded View Figures

Figure EV1. Time dependent ROC curves for luminal breast cancer at 5 years.

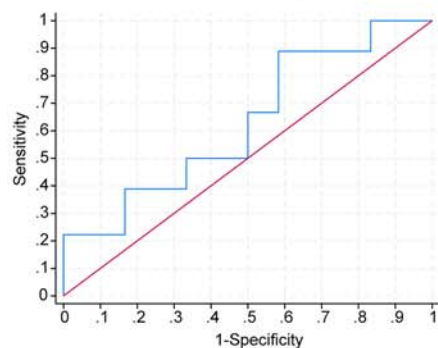
Plots of the time-dependent ROC analysis at 5 years performed for each of the clinical variables analyzed: tumor size, percentage of PV-1+ cells among CD31+ cells, Ki-67, age, number of positive lymph nodes, PgR, number of comorbidities, ER and tumor stage. $n = 30$ (metastatic, $n = 18$; non-metastatic, $n = 12$).



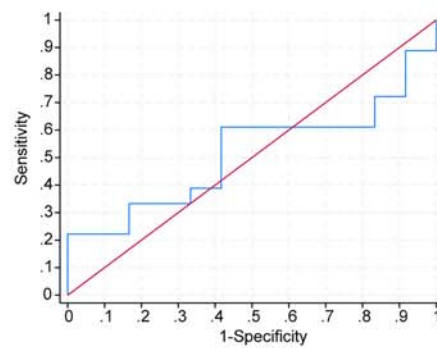
Tumor size



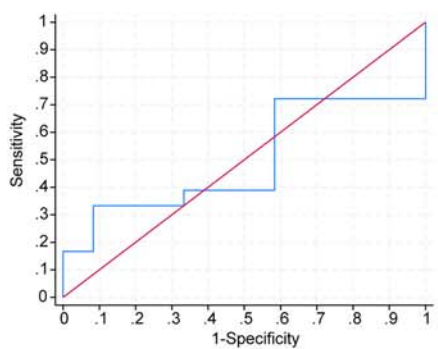
% PV-1+ cells



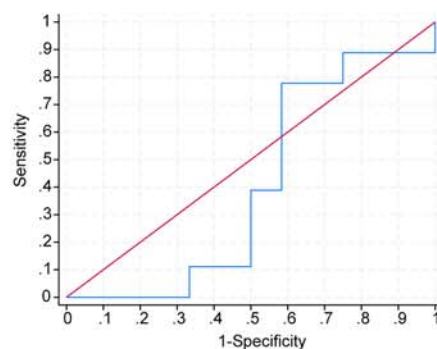
Ki-67



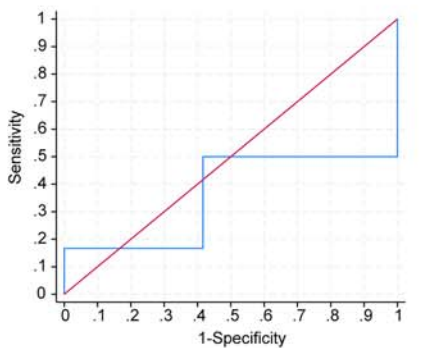
Age



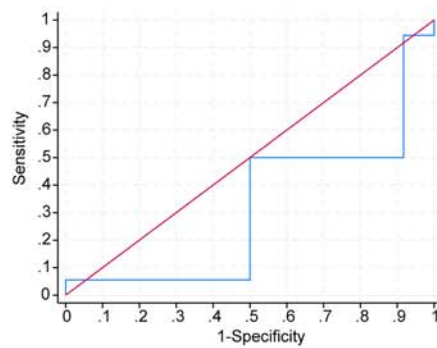
Number of positive lymph nodes



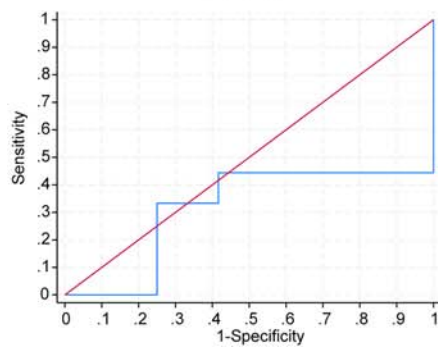
PgR



Number of comorbidities

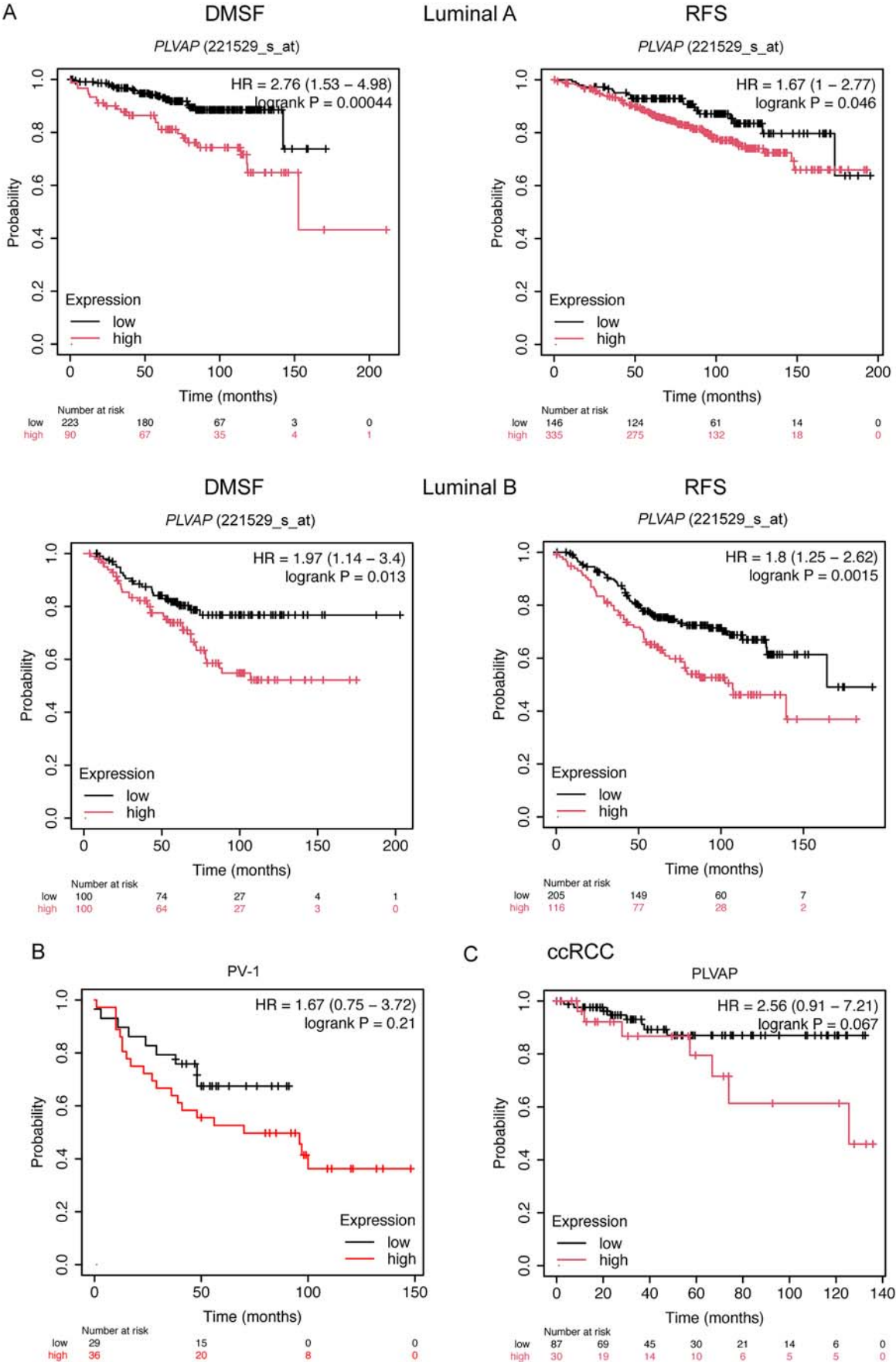


ER



Tumor stage

— Reference Line



**Figure EV2. Kaplan-Meier survival analysis of PV-1 expression levels using the KM plotter tool.**

(A) Distant-metastasis-free survival (DMSF) and relapse-free survival (RFS) were analyzed using mRNA gene chip data from Luminal A (DMSF, $n = 313$; RFS, $n = 481$) and Luminal B (DMSF, $n = 200$; RFS, $n = 321$) breast cancer patients treated with endocrine therapy. (B) Overall survival (OS) analysis based on PV-1 protein expression in breast cancer tissue ($n = 65$), including Luminal A, Luminal B, HER2-positive, and triple-negative breast cancer (TNBC) subtypes. (C) Relapse-free survival (RFS) was analyzed using mRNA-seq data from ccRCC patients ($n = 117$).

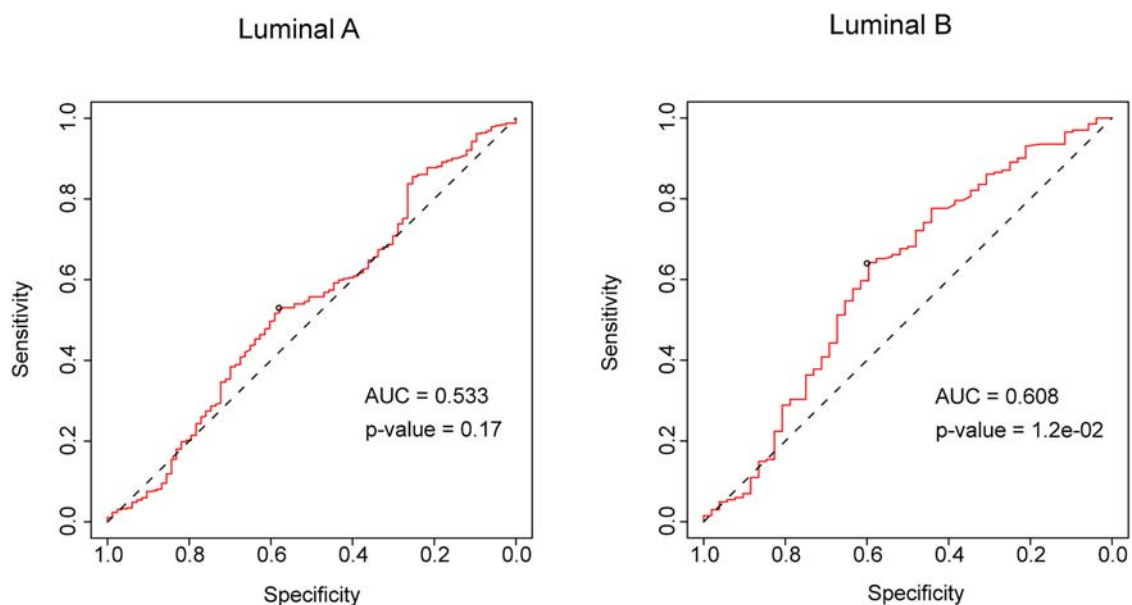
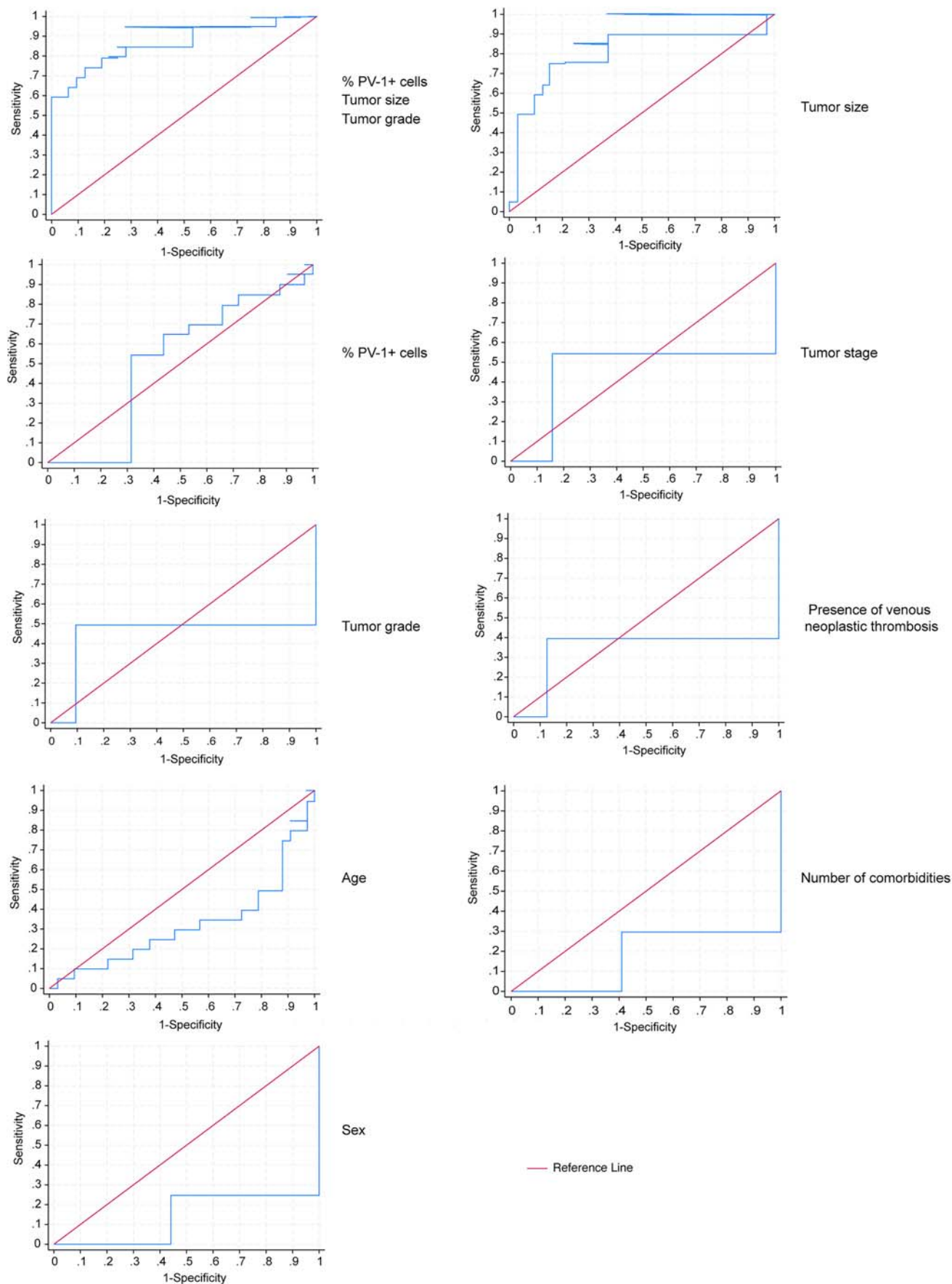


Figure EV3. ROC curve analysis of PV-1 expression in luminal breast cancer subtypes using ROC Plotter.

ROC Plotter constructs the ROC curve using 5-year relapse-free survival (RFS) as the clinical endpoint. Patients are classified based on clinical outcome: those without relapse within 5 years, and those with relapse within 5 years. PV-1 gene expression is evaluated as a continuous predictor of outcome. The analysis was performed separately for luminal A ($n = 637$; AUC = 0.533) and luminal B ($n = 253$; AUC = 0.608) breast cancer patients treated with endocrine therapy.



**Figure EV4. Time-dependent ROC curves for ccRCC at 5 years.**

Plots of the time-dependent ROC analysis at 5 years performed for each of the clinical variables analyzed (tumor size, percentage of PV-1+ cells among CD31+ cells, tumor stage, tumor grade, presence of venous neoplastic thrombosis, age, number of comorbidities and sex) and for the combination of tumor size, tumor grade, and percentage of PV-1+ cells. $n = 52$ (metastatic, $n = 22$; non-metastatic, $n = 30$).

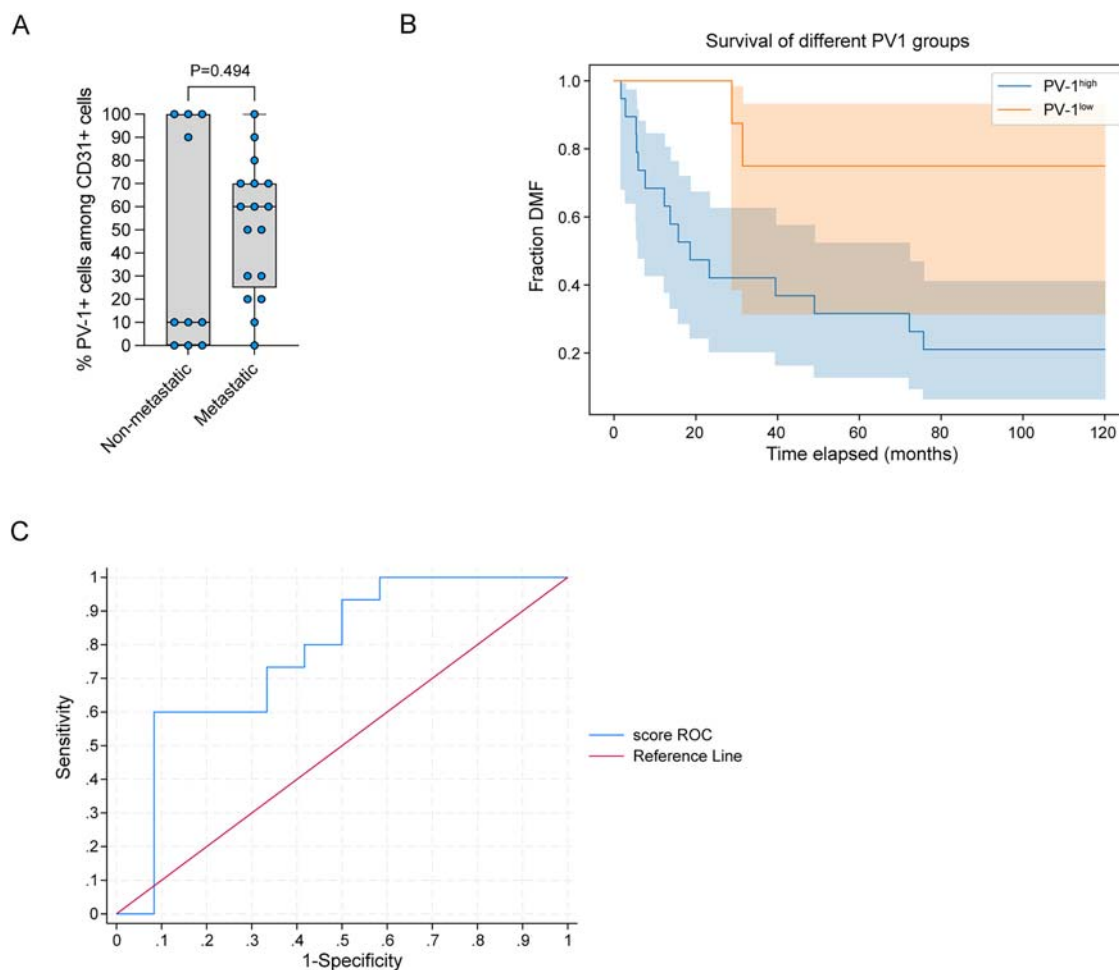


Figure EV5. PV-1+ cell frequency in the primary tumor of metastatic and non-metastatic sarcoma patients from the LMS, MPNST, SFT, and UPS histotypes.

(A) Percentage of PV-1+ cells among CD31+ cells in the primary tumor of metastatic ($n = 17$) and non-metastatic ($n = 10$) sarcoma patients. Data are represented using box and whisker plots. Boxplots display values of minimum, first quartile, median, third quartile, and maximum. Each data point represents one sample. Statistical significance was evaluated using the two-sided Mann-Whitney unpaired test. (B) Metastasis-free survival of sarcoma patients depending on the PV-1 group (high vs. low). PV-1^{high} group: % PV-1+/CD31+ cells ≥ 20 ; PV-1^{low}: % PV-1+/CD31+ cells < 20 . $n = 27$ (metastatic, $n = 17$; non-metastatic, $n = 10$). (C) Plot of the time-dependent ROC analysis at 5 years performed for the combination of PV-1 group and tumor size (score). $n = 27$ (metastatic, $n = 17$; non-metastatic, $n = 10$).