Supplemental Figure 1. Spleen [68Ga]Pentixafor uptake is not associated with PFS/OS in different entities. Kaplan-Meier survival curves of progression-free survival (PFS) and overall survival of different solid tumor entities, comparing patients with low to patients with high spleen-to-liver ratio (SUV\textsubscript{maxSpleen}/SUV\textsubscript{meanLiver}), adrenal cancer, PFS: low, n = 13, high, n = 13, OS: low, n = 13, high, n = 13; DSRCT, PFS: low, n = 5, high, n = 4, OS: low, n = 5, high, n = 4; neuroendocrine tumors, PFS: low, n = 13, high, n = 11, OS: low, n = 13, high, n = 11; NSCLC, PFS: low, n = 3, high, n = 3, OS: low, n = 3, high, n = 3; pancreatic adenocarcinoma, PFS: low, n = 4, high, n = 4, OS: low, n = 4, high, n = 4; SCLC, PFS: low, n = 5, high, n = 4, OS: low, n = 5, n = 4. All statistical analyses were performed using log-rank (Mantel-Cox) test. P values as indicated on the graphs.
Supplemental Figure 2. Spleen $[^{68} \text{Ga}]$Pentixafor uptake is not associated with PFS/OS in all entities, or adrenal cancers and neuroendocrine tumors, when comparing the highest to the lowest quartile of spleen CXCR4 expression.

A Kaplan-Meier survival curves of progression-free survival, comparing the quartile with highest to the quartile of lowest spleen-to-liver ratio (SUV$_{\text{maxSpleen}}$/SUV$_{\text{meanLiver}}$). All cancers: low, n = 30, high, n = 30; adrenal cancers: low, n = 6, high, n = 6; neuroendocrine tumors: low, n = 6, high, n = 6.

B Kaplan-Meier survival curves of overall survival, comparing the quartile with highest to the quartile of lowest spleen-to-liver ratio (SUV$_{\text{maxSpleen}}$/SUV$_{\text{meanLiver}}$). All cancers: low, n = 30, high, n = 30; adrenal cancers: low, n = 6, high, n = 6; neuroendocrine tumors: low, n = 6, high, n = 6.

All statistical analyses were performed using log-rank (Mantel-Cox) test. P values as indicated on the graphs.
Supplemental Figure 3. Spleen [^{68}Ga]Pentixafor is positively associated with platelet counts in solid cancers.

Correlations of spleen-to-liver ratios (SUV\textsubscript{maxSpleen}/SUV\textsubscript{meanLiver}) of all patients in this study with serum CRP levels (mg/dl), n = 128; serum LDH levels (U/l), n = 121; blood hemoglobin levels (g/dl), n = 138; peripheral leucocyte count (/nl), n = 138 and peripheral platelet count (/nl), n = 138.

All statistical analyses were performed using simple linear regression. R\textsuperscript{2} and P values as indicated on the graphs.
Supplemental Figure 4. Spleen [68Ga]Pentixafor uptake is not associated with serum CRP levels.

Correlations of spleen-to-liver ratios (SUV_{max,Spleen}/SUV_{mean,Liver}) with serum CRP levels (mg/dl) in patients with adrenal cancer, n = 31; DSRCT, n = 9; neuroendocrine tumor, n = 25; NSCLC, n = 9; pancreatic adenocarcinoma, n = 7 and SCLC, n = 9.

All statistical analyses were performed using simple linear regression. R² and P values as indicated on the graphs.
Supplemental Figure 5. Spleen \([^{68}\text{Ga}]\text{Pentixafor}\) uptake is not associated with serum LDH levels. Correlations of spleen-to-liver ratios (SUV\(_{\text{max}\text{ Spleen}}/\text{SUV}\_\text{mean Liver}\)) with serum LDH levels (U/l) in patients with adrenal cancer, n = 31; DSRCT, n = 9; neuroendocrine tumor, n = 25; NSCLC, n = 9; pancreatic adenocarcinoma, n = 7 and SCLC, n = 9.

All statistical analyses were performed using simple linear regression. \(R^2\) and \(P\) values as indicated on the graphs.
Supplemental Figure 6. Spleen $[^{68}\text{Ga}]$Pentixafor uptake is not associated with blood hemoglobin levels. Correlations of spleen-to-liver ratios (SUV\text{max, Spleen}/SUV\text{mean, Liver}) with blood hemoglobin levels (g/dl) in patients with adrenal cancer, n = 31; DSRCT, n = 9; neuroendocrine tumors, n = 25; NSCLC, n = 9; pancreatic adenocarcinoma, n = 7 and SCLC, n = 10.

All statistical analyses were performed using simple linear regression. $R^2$ and P values as indicated on the graphs.
Supplemental Figure 7. Spleen $[^{68}\text{Ga}]{\text{Pentixafor}}$ is not associated with leucocyte count and/or platelet counts in some entities.

A Correlations of spleen-to-liver ratios ($\text{SUV}_{\text{maxSpleen}}/\text{SUV}_{\text{meanLiver}}$) with peripheral leucocyte count in patients with adrenal cancer, $n = 31$; DSRCT, $n = 9$; pancreatic adenocarcinoma, $n = 9$ and SCLC, $n = 10$.

B Correlation of spleen-to-liver ratios ($\text{SUV}_{\text{maxSpleen}}/\text{SUV}_{\text{meanSpleen}}$) with peripheral platelet count in patients with DSRCT, $n = 9$ and pancreatic adenocarcinoma, $n = 9$.

All statistical analyses were performed using simple linear regression. $R^2$ and $P$ values as indicated on the graphs.