

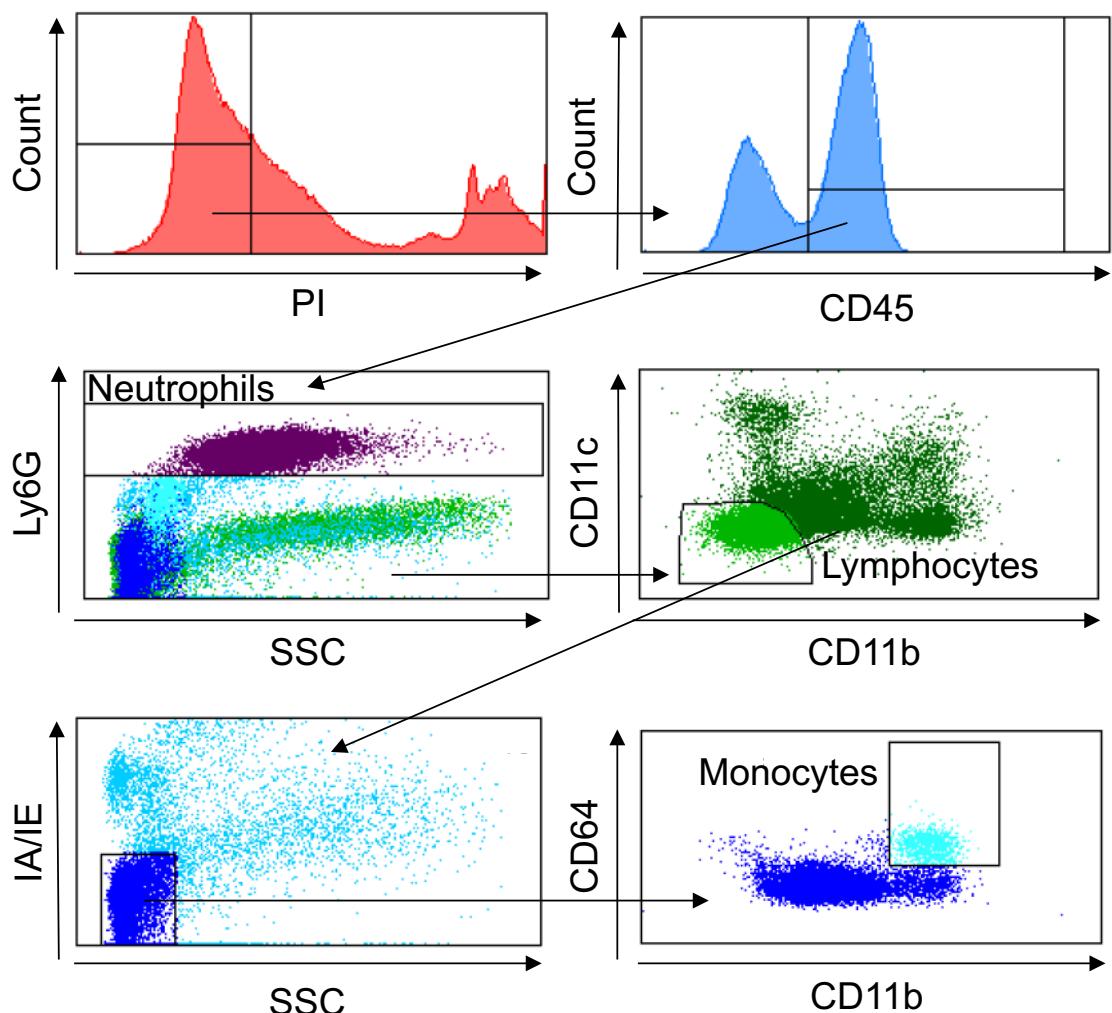
Supplement

Table S1: List of antibodies used for the identification of the different cell types, all anti-mouse

Lineage Cocktail			Lung Lineage ⁺ Staining		
Epitope	Dilution	Manufacturer	Epitope	Dilution	Manufacturer
B220 Biotin Clone: RA3-6B2	3,34µl/10 ⁷ cells	eBioscience	CD45 V500 Clone:30-F11	1:100	BD Horizon
CD11b (Mac-1) Biotin Clone: m1/70	3,14µl/10 ⁷ cells	eBioscience	MHCII(I-A/I-E) Pe- eFluor610 Clone: M5/114.15.2	1:200	eBioscience
Gr-1 Biotin Clone: RB6-8C5	2,86µl/10 ⁷ cells	eBioscience	Ly6G eFluor450 Clone: RB6-8C5	1:100	eBioscience
CD8a Biotin Clone: 53-6.7	5µl/10 ⁷ cells	eBioscience	Ly6C APC-eFluor780 Clone: HK1.4	1:100	eBioscience
CD5 Biotin Clone: 53->.3/3	5µl/10 ⁷ cells	eBioscience	CD24 PerCP/Cy5.5 Clone: M1/69	1:100	eBioscience
Ter-119 Biotin	3,2µl/10 ⁷ cells	eBioscience	CD11c Pe-Cy7 Clone: N418	1:100	eBioscience
			CD11b AF700 Clone: M1/70	1:200	eBioscience
CD45 Biotin Clone: 30-F11	2,5µl/10 ⁷ cells	BioLegend	CD64 APC Clone: X54-5/7.1	1:100	BioLegend
CD31 Biotin Clone: 390	5µl/10 ⁷ cells	Biolegend			

MSC Staining			EPC and HSPC Staining		
Epitope	Dilution	Manufacturer	Epitope	Dilution	Manufacturer
Streptavidin eFluor450	1:100	eBioscience	Streptavidin eFluor450	1:100	eBioscience
CD90.2 AF700 Clone: 30-H12	1:75	BioLegend	CD45 V500 Clone:30-F11	1:100	BD Horizon
CD105 APC Clone: MJ7/18	1:75	BioLegend	Ly-6A/E (Sca-1) Pe- Cy7 Clone: D7	1:200	eBioscience
Ly-6A/E (Sca-1) APC-Cy7 Clone: D7	1:200	BioLegend	CD31 FITC Clone: 390	1:50	BDPharmingen
CD51 Pe Clone: RMV-7	1:100	BioLegend	CD34 eFluor660 Clone: RAM 34	1:50	eBioscience
CD44 Pe-Cy7 Clone: IM7	1:100	BioLegend	CD309 (Flk-1) PerCP/Cy5.5 Clone: 89B3A5	1:100	BioLegend
CD29 FITC Clone: HMβ-1	1:100	BioLegend			

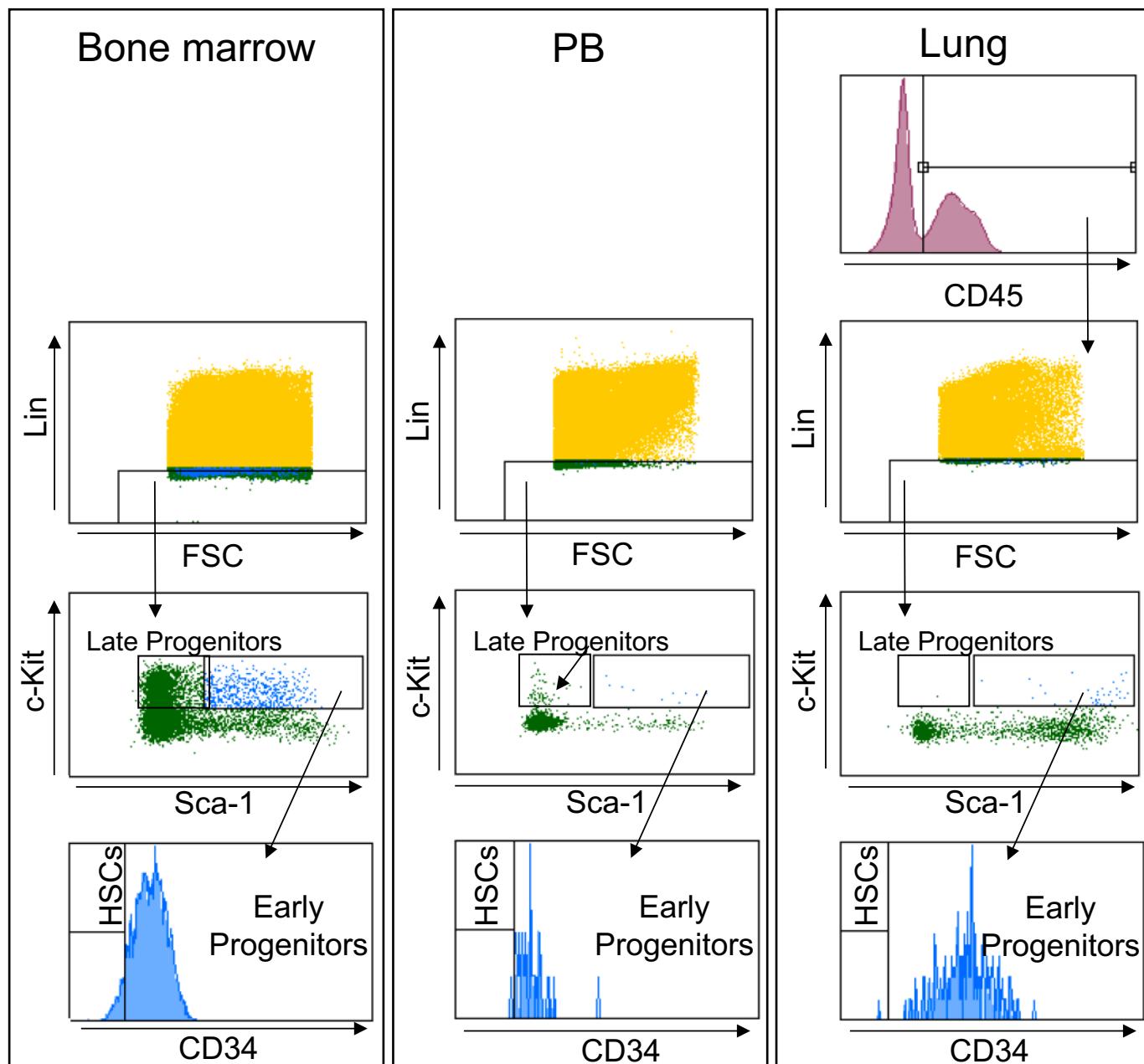
Fibroblast/Myofibroblast staining			AnnexinV and PI Staining		
Epitope	Dilution	Manufacturer	Epitope	Dilution	Manufacturer
Ly-6A/E (Sca-1) Pe- Cy7 Clone: D7	1:100	eBioscience	PI (Propidium iodide)	1:20	Sigma-Aldrich
CD49e FITC Clone: 5H10-27(MFR5)	1:50	BioLegend	Fixable Viability Dye eFluor780	1:1000	eBioscience
CD45 Biotin Clone: 30-F11	2,5µl/10 ⁷ cells	BioLegend	Annexin V	1:50	BioLegend
CD31 Biotin Clone: 390	5µl/10 ⁷ cells	BioLegend			
LYVE1 Biotin Clone: ALY7	1:400	eBioscience			
Ter-119 Biotin	3,2µl/10 ⁷ cells	eBioscience			
CD326 (Ep-CAM) Biotin Clone: G8.8	1:200	BioLegend			
CD146 Biotin Clone: ME-9F1	1:200	BioLegend			
Streptavidin eFluor450	1:100	eBioscience			



	Negative Marker	Positive Marker
Neutrophils	PI	CD45, Ly6G
Monocytes	PI, Ly6G, IA/IE	CD45, CD11b, CD64
Lymphocytes	PI, Ly6G, CD11b, CD11c	CD45

Figure S1a: Gating strategy of inflammatory cells in lung tissue. Established and verified in lung tissue by Yu et al. (2016) Table below summarizes the used surface markers for the identification of the inflammatory cells.

Yu Y-RA, O'Koren EG, Hotten DF, Kan MJ, Kopin D, Nelson ER, et al. A Protocol for the Comprehensive Flow Cytometric Analysis of Immune Cells in Normal and Inflamed Murine Non-Lymphoid Tissues. PLoS ONE. 2016;11(3):e0150606.

a

	Negative Marker	Positive Marker
Late Progenitors	PI, Lineage Cocktail	C-Kit
Early Progenitors	PI, Lineage Cocktail	Sca-1, c-Kit, CD34
HSCs	PI, Lineage Cocktail, CD34	Sca-1, c-Kit

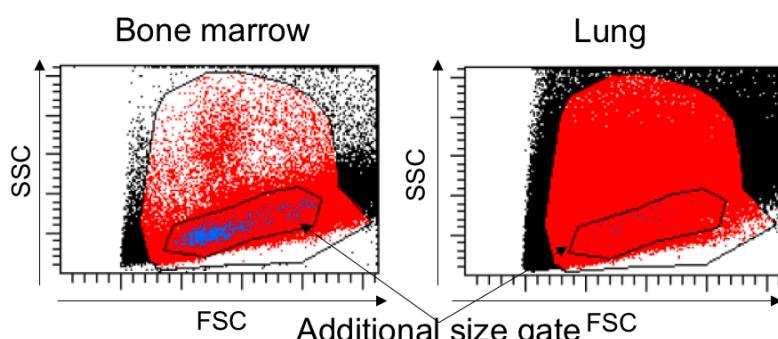
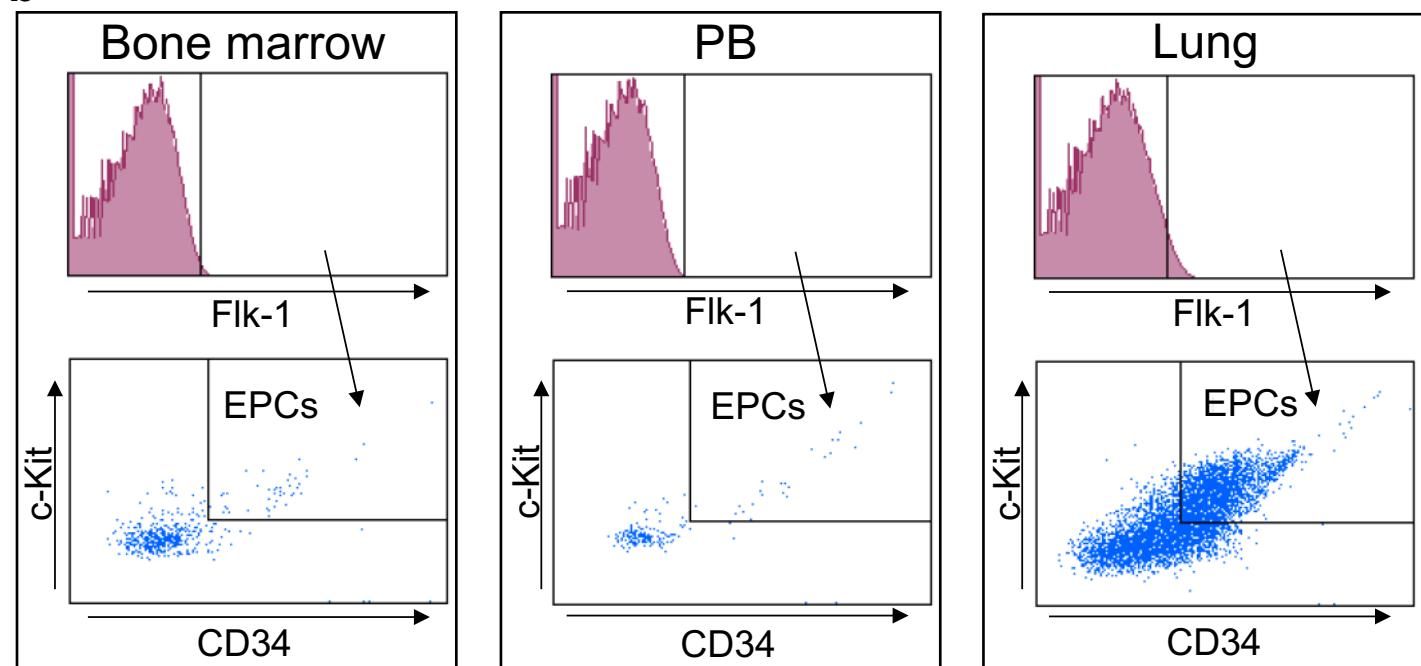


Figure S1b: Gating strategy of HSPCs

a Representative gating in bone marrow (used as reference, right panel), PB (middle panel) and lung tissue (right panel). Marker panel is given below. **b** Size gate for the early progenitor and HSC population in lung at the level of forward and side scatter to remove false positive cells, BM gate was used for orientation.

b

	Negative Marker	Positive Marker
EPCs	PI	Flk-1, CD34, c-Kit

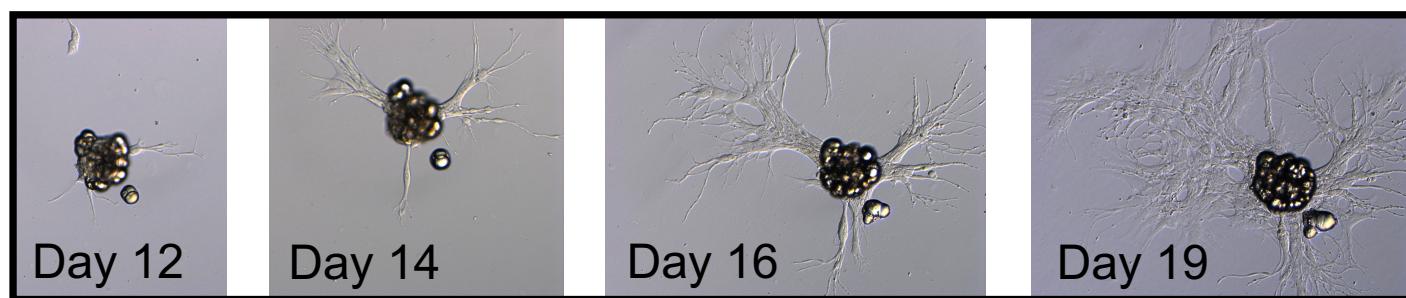
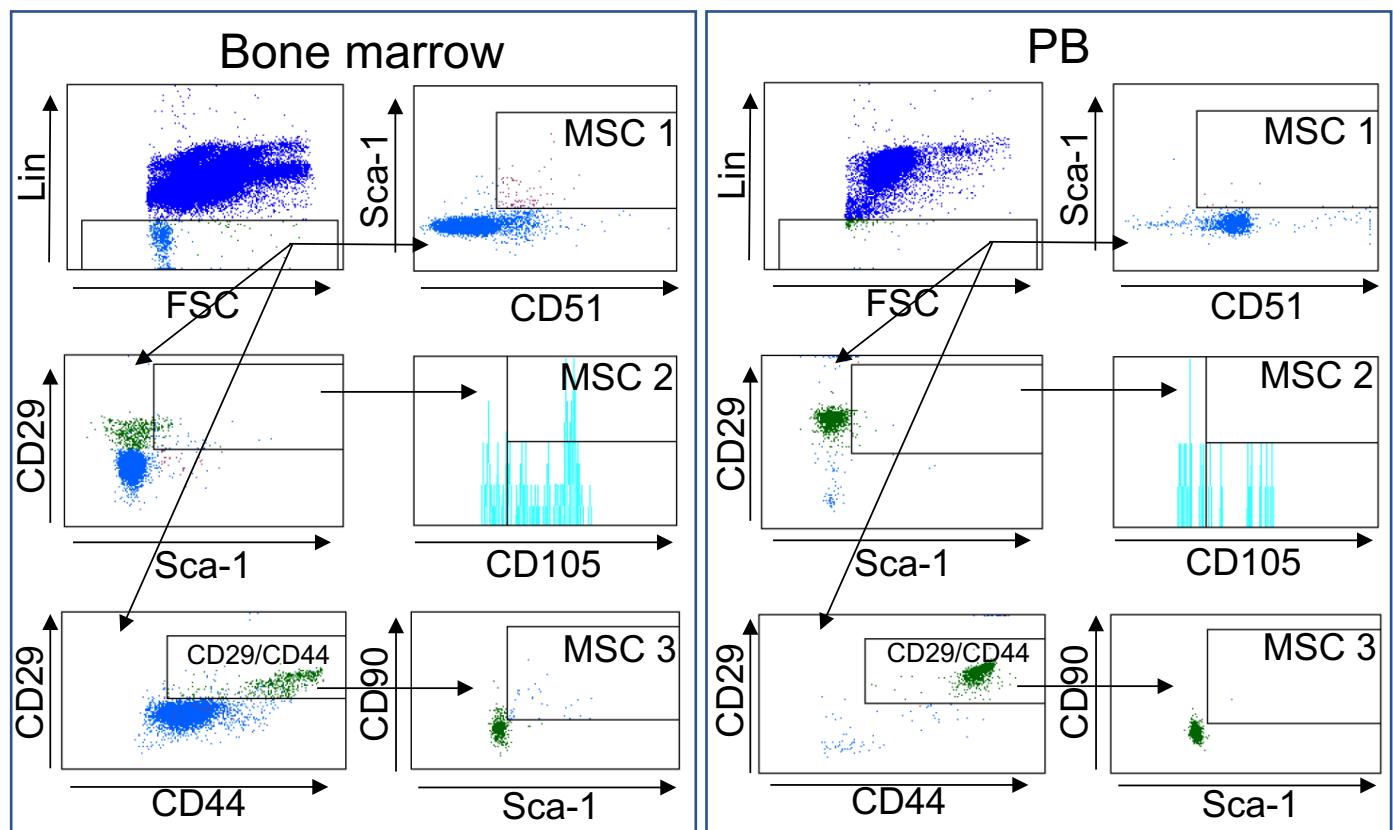


Figure S1c: Gating strategy of EPCs and endothelial potential confirmation. **a** Gating for EPCs in BM (left panel), PB (middle panel) and lung tissue (right panel), marker for the identification are listed below. **b** To confirm endothelial potential EPC-CFU Assay was performed (Asahara et al., 1997). 500 BM-derived EPC were incubated in MethoCult plus cytokines at 37°C. An endothelial colony is shown at different time points, confirming existing potential.

Asahara, T., Murohara, T., Sullivan, A., Silver, M., van der Zee, R., Li, T., Witzenbichler, B., Schatteman, G., and Isner, J.M. (1997). Isolation of putative progenitor endothelial cells for angiogenesis. *Science* 275, 964–967.



	Negative Marker	Positive Marker
MSC 1	CD45, CD31, Lineage	Sca-1, CD51
MSC 2	CD45, CD31, Lineage	Sca-1, CD29, CD105
MSC 3	CD45, CD31, Lineage	CD44, CD29, Sca-1, CD90

Figure S1d: Gating strategy of different MSC populations. On the left side a typical flow plot for BM is illustrated on the right for PB. The marker panel below informs on used surface markers.

Table S2: Correlation of the fold change from the different cell populations after TXT induction within a tissue **a** PB **b** lung tissue **c** Correlation of the fold change from the different cell populations after TXT induction between PB and the lung tissue.

Correlations with a Spearman's r (r-value) > 0.5 and a p-value < 0.05 are highlighted in red.

a

PB	Early Progenitors		Late progenitors		EPCs		MSC1		MSC2		MSC3		Monocytes		Lymphocytes		Neutrophils	
	r - value	p - value	r - value	p - value	r - value	p - value	r - value	p - value	r - value	p - value	r - value	p - value	r - value	p - value	r - value	p - value	r - value	p - value
HSCs	0.65	0.00	0.60	0.00	0.36	0.01	0.22	0.09	0.13	0.24	0.33	0.03	0.01	0.48	0.01	0.48	0.11	0.25
Early Progenitors			0.61	0.00	0.35	0.01	0.13	0.21	0.29	0.06	0.28	0.06	0.08	0.31	0.02	0.44	0.06	0.35
Late progenitors					0.49	0.00	0.10	0.27	0.43	0.01	0.34	0.03	-0.30	0.03	0.04	0.40	0.15	0.18
EPCs							0.17	0.15	0.20	0.15	0.22	0.11	-0.34	0.01	0.16	0.15	0.27	0.05
MSC1									0.30	0.05	0.52	0.00	0.30	0.03	0.39	0.01	0.42	0.00
MSC2											0.40	0.02	-0.21	0.12	0.13	0.25	0.01	0.49
MSC3													-0.03	0.44	0.14	0.23	0.21	0.13
Monocytes															0.49	0.00	0.11	0.24
Lymphocytes																	0.51	0.00

b

Lung	Early Progenitors		Late progenitors		EPCs		Monocytes		Lymphocytes		Neutrophils	
	r - value	p - value	r - value	p - value	r - value	p - value	r - value	p - value	r - value	p - value	r - value	p - value
HSCs	0.53	0.00	0.36	0.01	0.29	0.03	0.02	0.46	-0.05	0.39	0.10	0.28
Early Progenitors			0.38	0.01	0.36	0.01	0.04	0.41	0.20	0.12	0.26	0.06
Late progenitors					0.08	0.3	0.19	0.13	0.32	0.03	0.37	0.01
EPCs							0.26	0.06	0.00	0.49	0.00	0.49
Monocytes									0.61	0.00	0.39	0.01
Lymphocytes											0.34	0.02

c

PB	Lung	
	Spearman's r	p-value
HSC	0.1392	0.1927
Early Progenitors	0.2472	0.0572
Late Progenitors	-0.03022	0.4247
EPCs	-0.09586	0.273
Monocytes	0.2739	0.0556
Lymphocytes	0.09112	0.2986
Neutrophils	0.01485	0.4663