Supplementary Figures and Tables
Panel I


Panel II


Panel III



Panel V
CD105 FITC


Figure 1: Gating Strategy: Figure showing the gating strategies for the 6 flow cytometry panels as described in the Methods section. Data analysis was performed by first creating a 'Live'-gate around the three populations of lymphocytes, monocytes and granulocytes on the Forward/Sideward-Scatter plot (see suppl fig 1). For panel I: CD34+ were first gated and the population was further refined by selecting the CD45dim subpopulation. Within the latter population the KDR + cells were subsequently enumerated (see suppl fig 1). In panel II, CD133 + cells were selected by plotting side-scatter versus PE and gating CD133+ cells in the lymphocytic region. In panel III the the CXCR4/CD184 + cells were gated on the histogram plot. In panel IV CD14 + and CD105 + cells were gated as shown, no double positive cells were observed. In panel $V$ CD140b/PDGFRb + Cells were gated in the lymphocytic region.

## Correlations between PC Subtypes



Figure 2: Correlationmatrix: Correlations between PC populations in peripheral blood and bone marrow. In the left/lower half correlation plots are given, in the right/upper half the Spearman's rank correlation coefficent for an pairwise comparison and the associated $p$-value are given.


Figure 3: ROC Curve: Receiver Operated Curve (ROC) displaying the sensitivity and specificity of various cutoffs in PC numbers in discrimnating patients who will undergo an event and patients who will not experience a major event. Areas Under Curve (AUCs) $+95 \%$ CI for CD34+ (in black) and CD133+ (in red) cells in peripheral blood are given in the lower right corner. Shaded areas indicate $95 \%$ confidence intervals of the curves, as derived by bootstrapping (2000 iterations).


Figure 4: Relative BM and PB PC numbers in CLI patients compared to Healthy Controls: Figure shows BM PC number on y-axis and PB PC numbers on x -axis for $34+\mathrm{PCs}$ in panel $\mathbf{A}$ and CD133+ PCs in panel B. Closed circles denote CLI patients and open circles indicate healthy controls. The colored quandrants are based on the median values of the CLI patients for the respective cell populations as in main Figure 2. Healthy controls show relatively higher BM PC values ( $\mathrm{p}=0.00002$ for CD34+ and $\mathrm{p}=0.003$ for CD133+), than PB PC numbers ( $\mathrm{p}=0.003$ for CD34+ and $\mathrm{p}=0.61$ for CD133+). In addition, healthy control BM PC numbers exceed the range of CLI numbers in $6 / 17$ cased for CD34+ PCs $(\mathrm{p}=0.018)$ and $2 / 17$ cases ( ns ) for CD133+ PCs; PB PC numbers showed a complete overlap in range.

## Full Model

| Risk Factor | PB CD34+ PCs |  | PB CD133+ PCs |  | BM CD34+ PCs |  | BM CD133+ PCs |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | HR | P-value | HR | P-value | HR | P-value | HR | P-value |
| PCs | 0.71 | 0.07 | 0.62 | 0.012 | 0.49 | 0.03 | 0.65 | 0.16 |
| Age | 1.02 | 0.12 | 1.02 | 0.15 | 1.02 | 0.07 | 1.02 | 0.06 |
| Sex (Male) | 1.37 | 0.34 | 1.12 | 0.74 | 1.34 | 0.38 | 1.31 | 0.40 |
| GFR | 1.00 | 0.66 | 1.00 | 0.51 | 1.00 | 0.37 | 1.00 | 0.61 |
| History of CVA | 2.28 | 0.008 | 2.47 | 0.004 | 2.76 | 0.002 | 2.34 | 0.007 |
| Histor of MI | 1.41 | 0.22 | 1.48 | 0.16 | 1.33 | 0.31 | 1.35 | 0.28 |
| Ulcers | 1.92 | 0.04 | 1.99 | 0.03 | 1.95 | 0.038 | 1.98 | 0.032 |
| Triglycerides | 1.05 | 0.73 | 1.06 | 0.66 | 1.03 | 0.82 | 1.05 | 0.75 |
| Cholesterol | 1.01 | 0.92 | 1.01 | 0.92 | 1.05 | 0.72 | 1.01 | 0.94 |
| Likelihood Ratio |  | 0.00004 |  | 0.00001 |  | 0.00003 |  | 0.00007 |

## Most efficient models by backward factor Reduction

| PB CD34+ PCs Model factors: CD34+ PCs, Age, History of CVA, History of MI, Ulcers |  |  | PB CD133+PCs M | Model factors: CD133+ PCs, History of CVA, History of MI, Ulcers |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Optimal Model: | AIC: 603.8 |  | Optimal model | AIC 599.8 |  |
| Reduction |  |  | Reduction |  |  |
| Model - CD34+PCs | AIC: 605.1 | $\mathrm{p}=0.07$ | Model - CD133+ PCs | AIC: 606.7 | $p=0.003$ |
| Model - Age | AIC: 604 | $p=0.14$ | Model - CVA | AIC: 608.9 | $p=0.0009$ |
| Model - CVA | AIC: 609.5 | $p=0.006$ | Model - MI | AIC: 601.1 | $p=0.06$ |
| Model - MI | AIC: 604.6 | $\mathrm{p}=0.09$ | Model - Ulcers | AIC: 603.9 | $p=0.014$ |
| Model - Ulcers | AIC: 607 | $\mathrm{p}=0.02$ |  |  |  |


| CD34+ PCs Mo | tory of CVA, | BMPCs, Age <br> lcers |  |  | + BMPCs, A <br> Ulcers |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Optimal Model | AIC: 602.8 |  | Optimal Model | AIC: 605.1 |  |
| Reduction |  |  | Reduction |  |  |
| Model-CD34+ PCs | AIC: 606.0 | $p=0.023$ | Model - CD133+ PCs | AIC: 606.0 | $p=0.09$ |
| Model - Age | AIC: 604.7 | $p=0.048$ | Model - Age | AIC: 607.2 | $p=0.04$ |
| Model - CVA | AIC: 611.7 | $p=0.001$ | Model - CVA | AIC: 612.1 | $p=0.003$ |
| Model - Ulcers | AIC: 605.2 | $p=0.036$ | Model - Ulcers | AIC: 608.0 | $\mathrm{p}=0.03$ |

Table 1: Adjusted Models: Cox proportional hazards models corrected for Age, Sex, GFR, history of CVA, history of MI, ulcers, triglycerides and cholesterol are presented in the upper half of the table. In the lower half the results of automated backward exclusion of model factors based on AIC are presented. In each case the optimal model is given with associated AIC value, below the penalty of further exclusion of model factors are presented.

