

The following slides from
Harvard Medical School
highlight how key substances
in leukocyte-rich PRP
are critical for stem cells to be effective.

Defining the Concentration and Composition of Platelet-Rich Plasma (PRP) and Bone Marrow Concentrate (BMAC) for use in Regenerative Medicine

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How Do Stem Cells Find Their Site

- Migration of stem cells to different organs requires active navigation, a process termed homing
- Homing is a multistep process signaled by stromal derived factor 1 alpha (SDF-1 α), stem cell factor (SCF), and activation of lymphocyte function – associated antigen
- Stem cells finalize their homing uniquely, by selective access and anchorage to their specialized niches

The Importance of Stromal Derive Factor-1 Alpha SDF-1 α

- Unlike growth factors and stem cells, it is rarely referred to in articles.
- It is released from platelets and endothelial cells.
- Without its presence stem cells would not know where to go.