Human PBMC-derived CD14+ cells, in particular CD14++CD16+ intermediate monocytes/macrophages, increased the survival of CD34+ HSPC to yield more erythroid cells in ex vivo cultures.

Peripheral blood mononuclear cells

CD14+ cells present

CD14+ cells depleted

CD34+ cells

CD14++CD16+ intermediate monocytes/macrophages

direct effect on cell survival

Erythroblast yield

Heideveld et al., Haematologica, 2015