Impact of CD34 subsets on engraftment kinetics in allogeneic peripheral blood stem cell transplantation.

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Abstract:

Our objective was to evaluate, probably for the first time, the impact of CD34 subsets on engraftment kinetics in allogeneic PBSC transplantation (PBSCT). PBSC graft components were analyzed in 62 cases for the absolute count/kg of total CD34+ and the following subsets: DR- and +, CD71+/-, CD38+/-, CD33+/- and CD61+/-.. Time to ANC >0.5 and >1 x 10(9)/l and platelets >20 and >50 x 10(9)/l was reported. The median value for each parameter was used to discriminate rapid from slow engraftment. Four parameters showed significant predictive power of early neutrophil engraftment, namely CD34+/DR- (P = 0.002), CD34+/CD38- (P = 0.02), CD34+/CD61- (P = 0.04) and total CD34+ cell dose (P = 0.04). Four parameters showed significant predictive power of early platelet engraftment, namely CD34+/CD61+ (P = 0.02), CD34+/CD38- and total CD34+ cell dose (P = 0.04) and CD34+/CD71- (P = 0.05). Comparing patients who received > to those who received

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