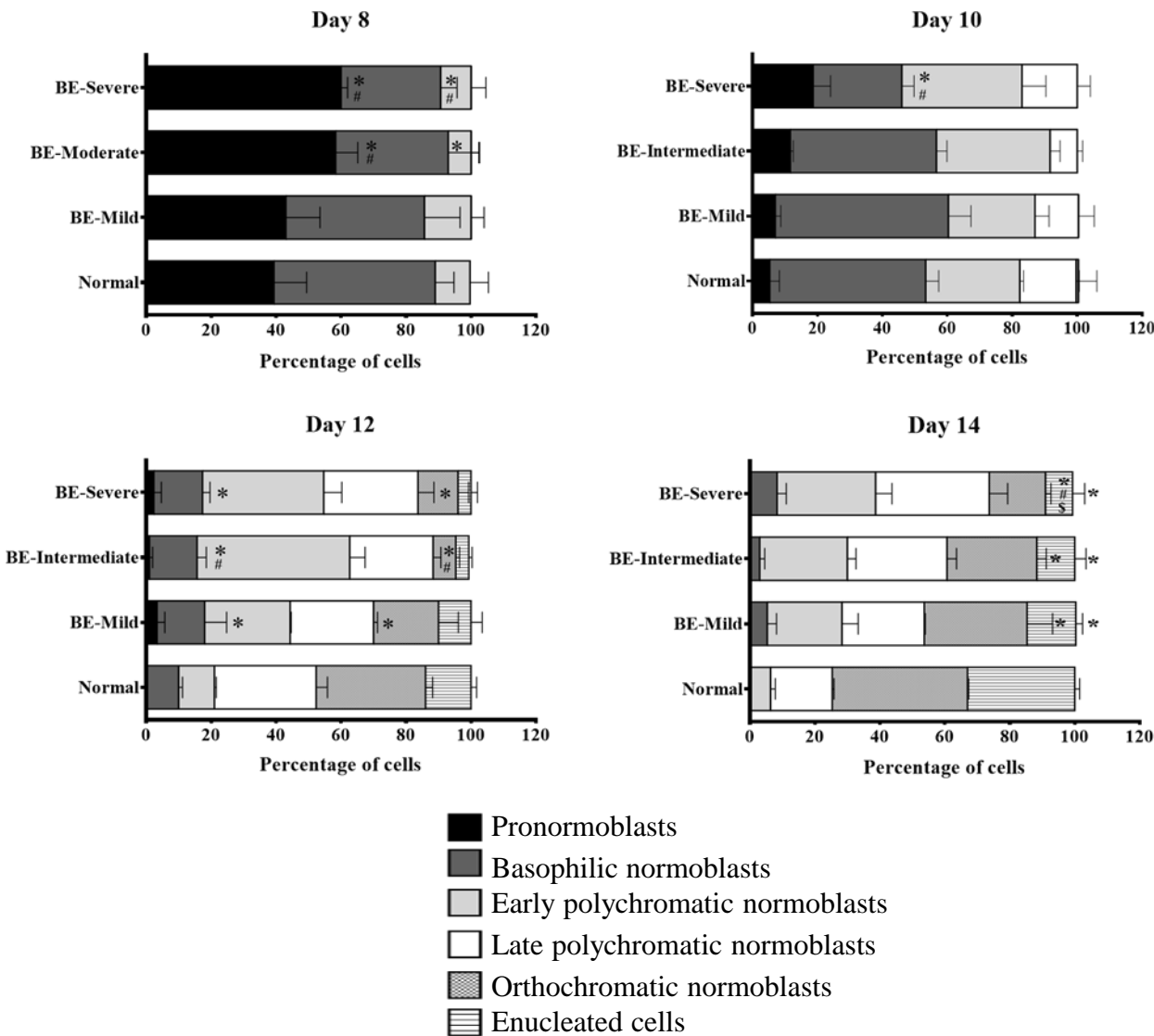
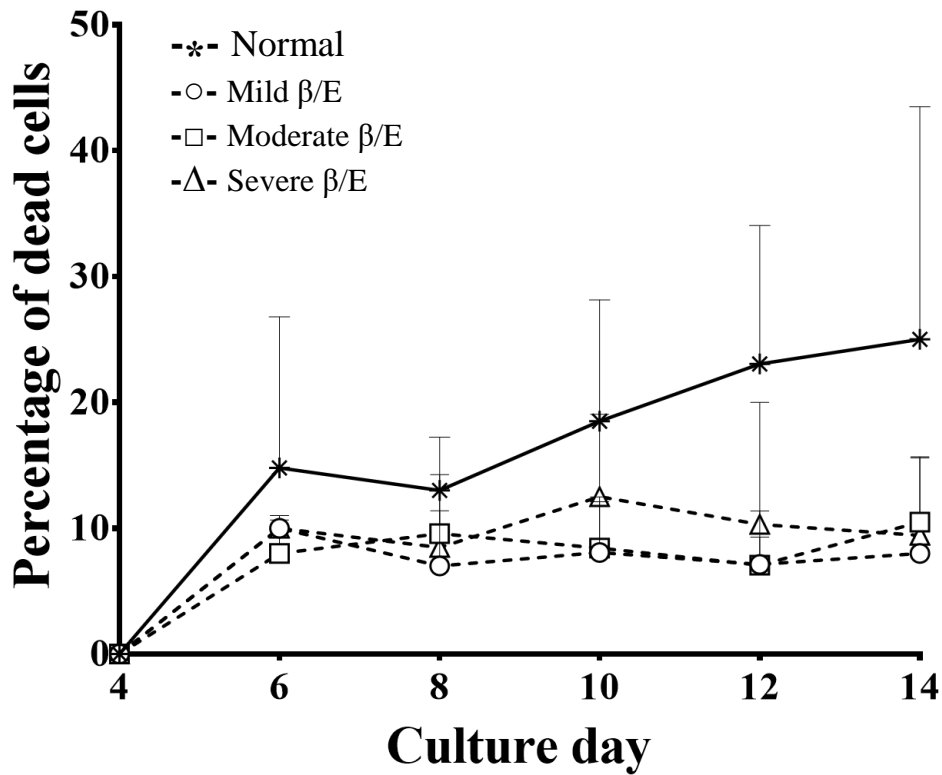


Suriyun T., et al. Supplemental Figure 1.



**Supplemental Figure 1.** The cell classifications by morphology of  $\beta$ -thalassemia/HbE patients and normal controls during erythroblast culture (\* $p<0.05$  compare to normal, # $p<0.05$  compare to mild  $\beta$ -thalassemia/HbE, \$ $p<0.05$  compare to moderate  $\beta$ -thalassemia/HbE). Early polychromatic normoblasts have a nucleus containing clumps of condensed chromatin with polychromatic cytoplasm, whereas late polychromatic normoblasts are smaller, have a small eccentric nucleus with large clumps of condensed chromatin and faintly polychromatic cytoplasm.

Suriyun T., et al. Supplemental Figure 2.



**Supplemental Figure 2.** Cell death of erythroid cells during *in vitro* CD34<sup>+</sup> culture was analyzed based on trypan blue assay and monitored until day 14 of culture, the mean and SEM value of percentage of dead cells from five independent subjects of mild, moderate and severe  $\beta^0$ -thalassemia/HbE ( $\beta/E$ ) and healthy normal subjects were plotted against time in days. -\* - normal, -○ - mild  $\beta/E$ , -□ - moderate  $\beta/E$ , -△ - severe  $\beta/E$ .