

Figure 1

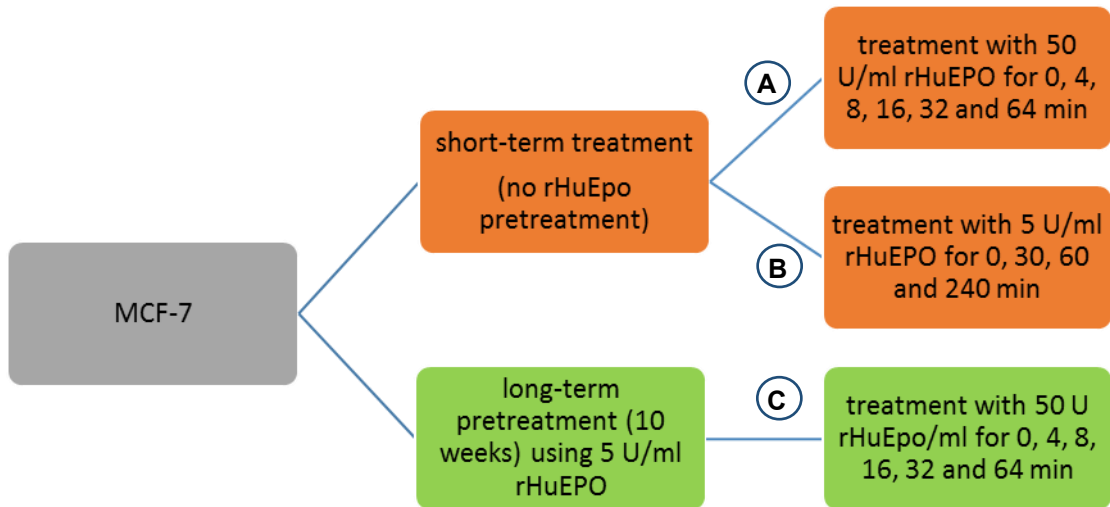


Figure 2

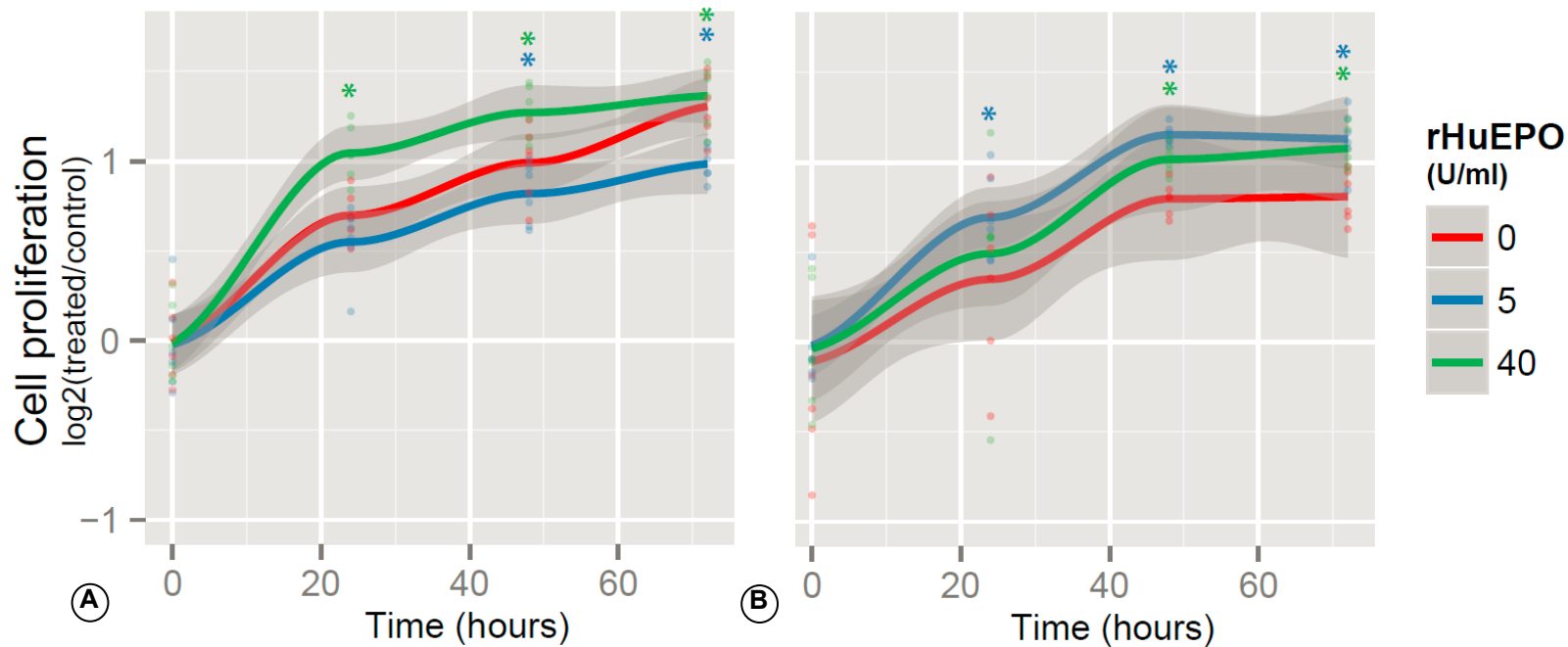


Figure 3

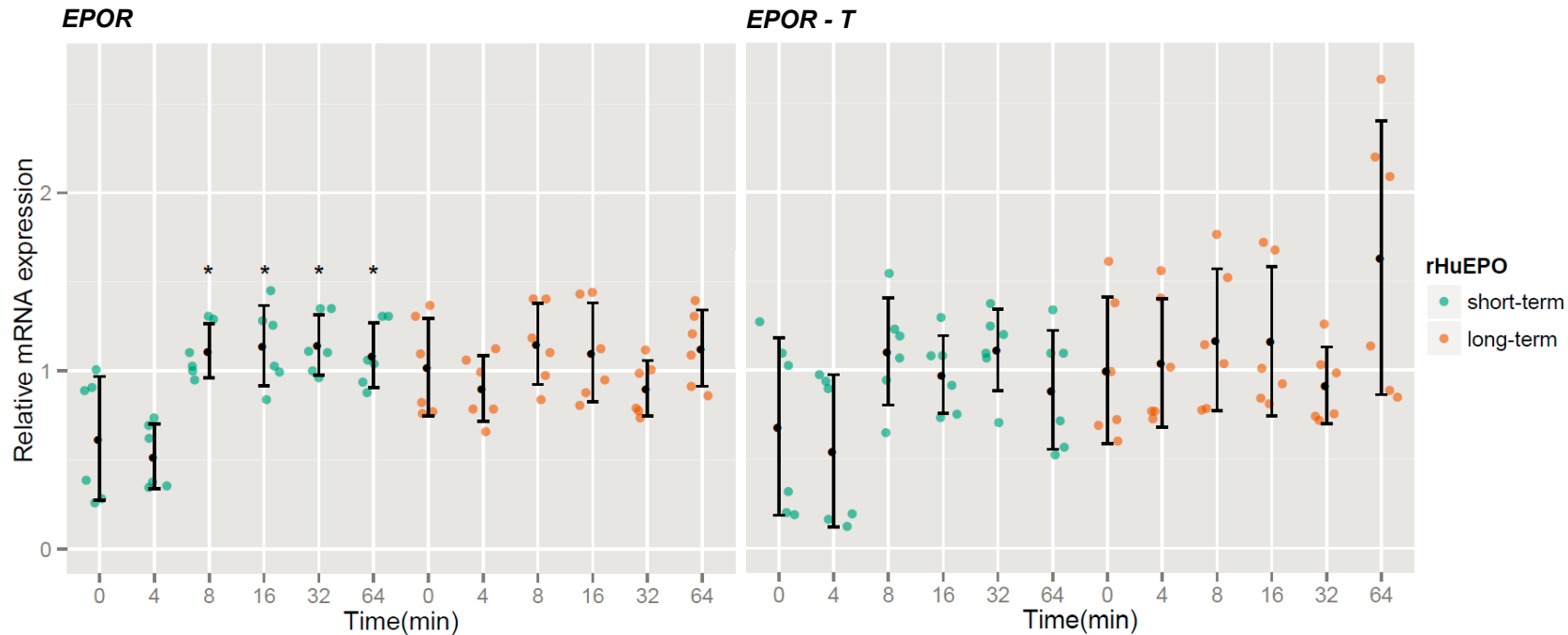


Figure 4

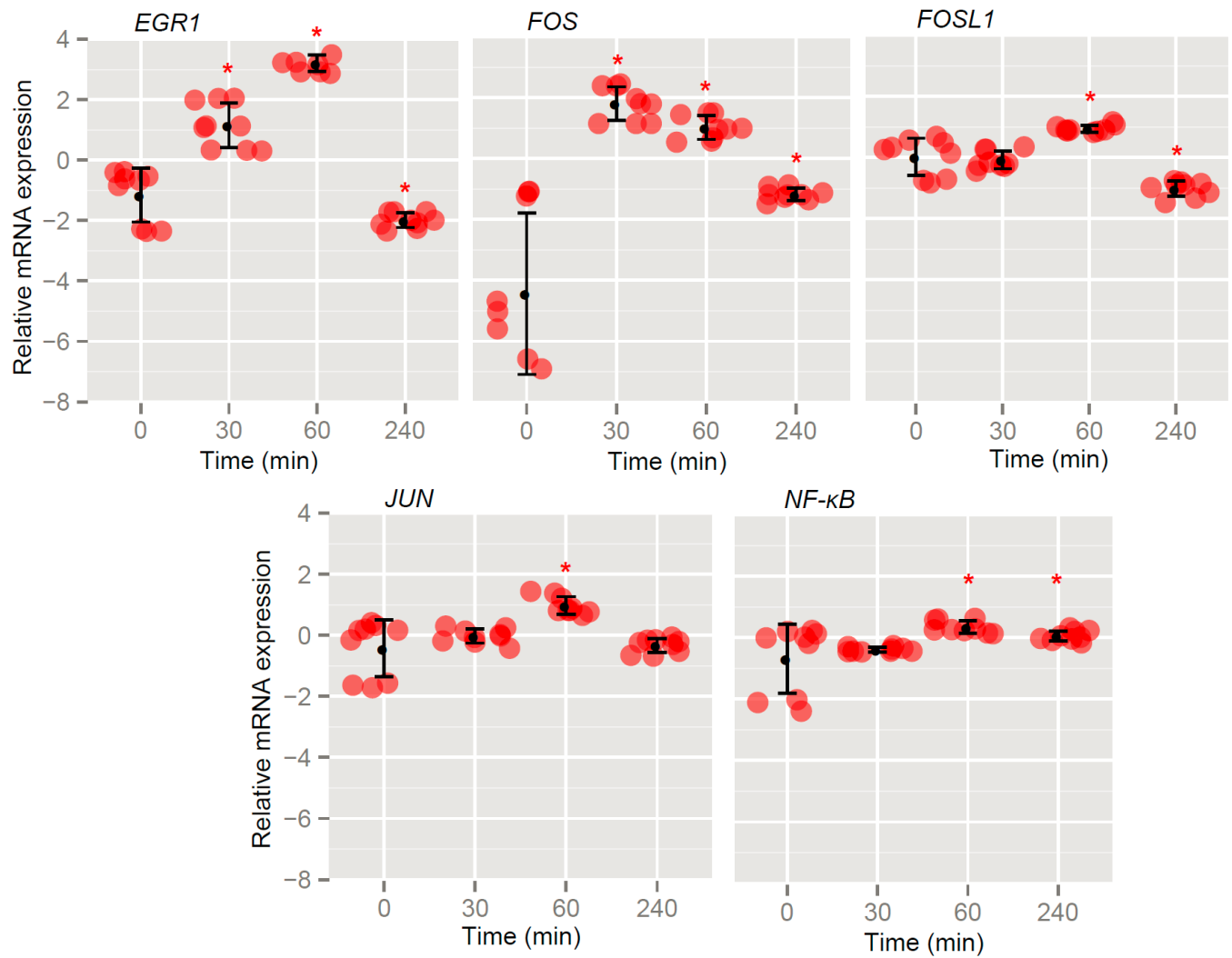


Figure 5

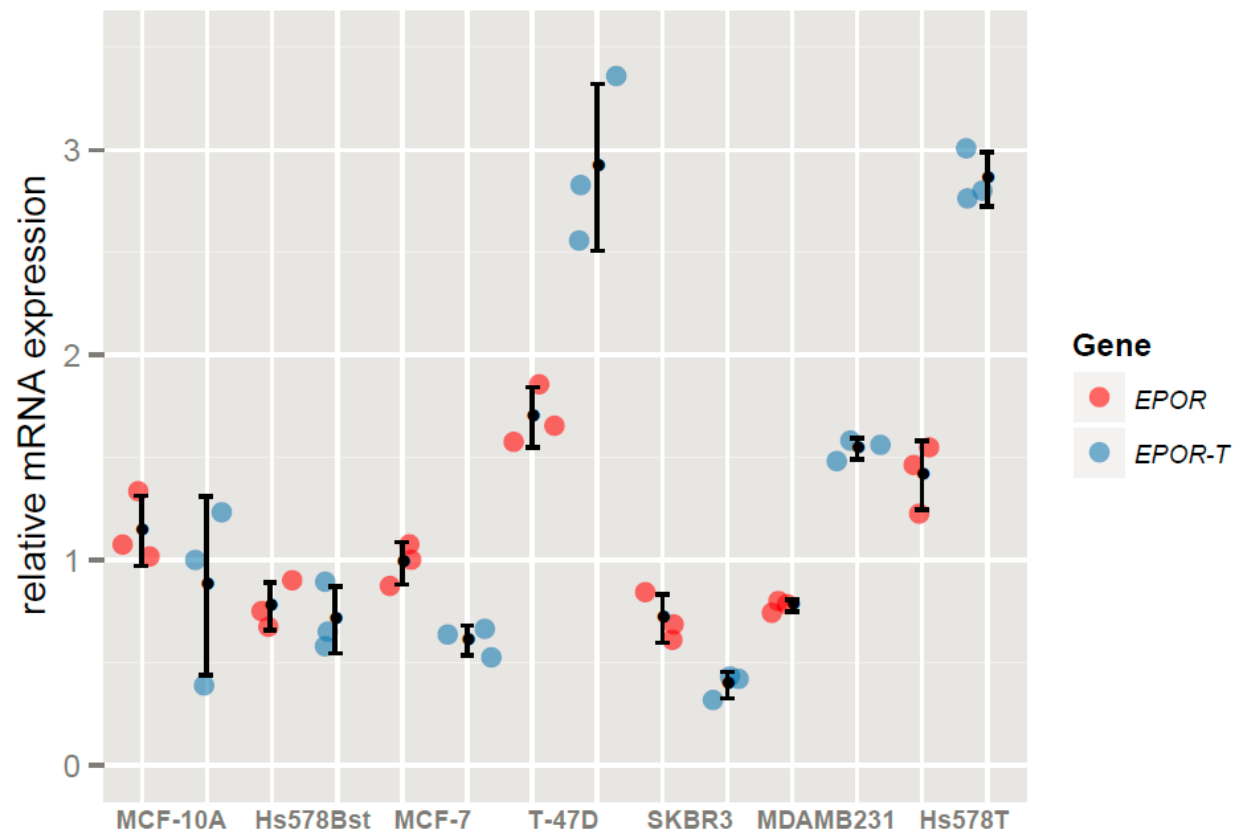


Figure 1: Protocol of treatment of MCF-7 cells with recombinant human erythropoietin for isolation of total RNA.

Figure 2: Differential effects of recombinant human EPO on MCF-7 cell proliferation (A) MCF-7 cells were cultured in complete medium in the presence of indicated concentrations of rHuEPO (short-term treated) (B) MCF-7 cells were cultured in complete medium in the presence of 5 U/ml of rHuEPO for 10 weeks (long-term pretreated cells), EPO was added to the pretreated cells at indicated concentrations. Asterisk (\*) denotes statistical significance for Type 1 error  $\alpha = 0.05$ .

Figure 3: Effects of recombinant human EPO on relative *EPOR* and *EPOR-T* expression. MCF-7 cells were stimulated with 50 U/ml rHuEPO (short-term, green) or cultured in complete medium in the presence of 5 U/ml of rHuEPO for 10 weeks and stimulated with 50 U/ml rHuEPO (long-term, red). Error bars represent standard deviations (SD) between six replicate samples; asterisk (\*) denotes statistical significance for Type 1 error  $\alpha = 0.05$ .

Figure 4: Early gene response upon rHuEPO stimulation of MCF-7 cells. The expression of *EGR1*, *FOS*, *FOSL1*, *JUN* and *NF- $\kappa$ B* was determined at the indicated time-points during rHuEPO treatment (5 U/ml) of MCF-7 cells grown in serum-stripped growth medium. Error bars represent standard deviations (SD) determined from six replicate samples; asterisk (\*) denotes statistical significance for Type 1 error  $\alpha = 0.05$ .

Figure 5: Expression of *EPOR* isoforms in different breast cancer cell lines; expression of functional *EPOR* (red); expression of truncated form of *EPOR-T* (blue). Cell lines differ in the level of invasiveness with MCF-10A cell line being the least invasive and Hs578T cell line being the most invasive (Table 1). Error bars represent standard deviations (SD) of the relative expression values determined in triplicate samples.