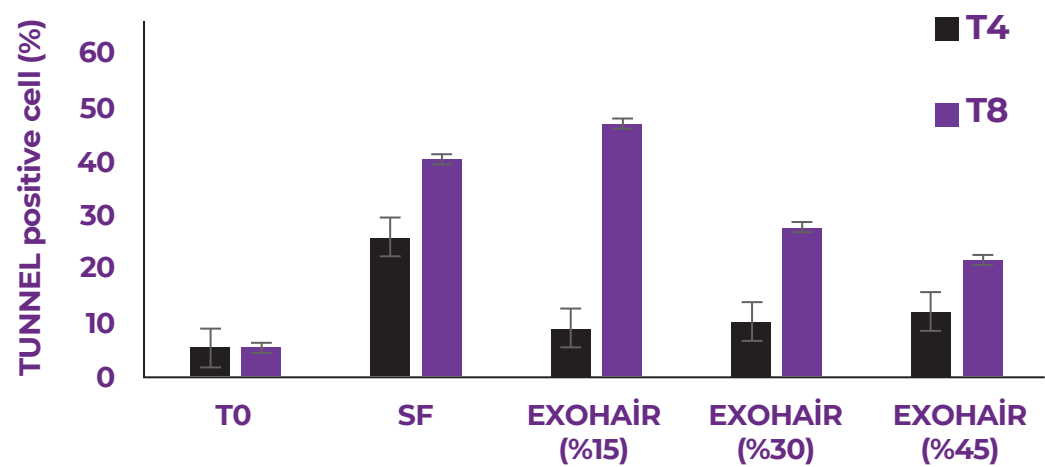


Solution content analysis was conducted to optimize the preparation of the ExoHair solution for hair graft application. Studies were carried out to determine the % of exosome content added to the solution. The ratio of the solution that would be most effective on hair grafts was decided at the end of comparative experiments with isotonic sodium chloride (SF, 0.9%).



**Graphic 1:** Statistical comparison of Tunnel (demonstration of apoptotic cells) positive cells in hair follicles kept in ExoHair solutions containing SF (isotonic sodium chloride - saline) and different concentrations of exosomes for 4 and 8 hours between groups. There was a significant increase in the percentage of apoptotic cells in the T0 (untreated) group compared to the SF group. Although there is a decrease in apoptotic cell % in different concentrations of ExoHair solution compared to SF group in general, it is noted that hair grafts are largely preserved (compared to SF group) in ExoHair solutions with 30% and 45% concentration. (T0: Follicles were not soaked in any solution. T4: Follicles were kept in solution for 4 hours. T8: Follicles were kept in solution for 8 hours. ). (  $p < 0.0001$  Comparison with No Treatment (T0), \*  $p < 0.05$  Comparison with SF (4th hour), # \*  $p < 0.001$  Comparison with SF (8th hour).)

Comparative experiments with ExoHair and isotonic sodium chloride (SF, 0.9%) showed that ExoHair solution improved proliferation and cell quality of hair grafts.