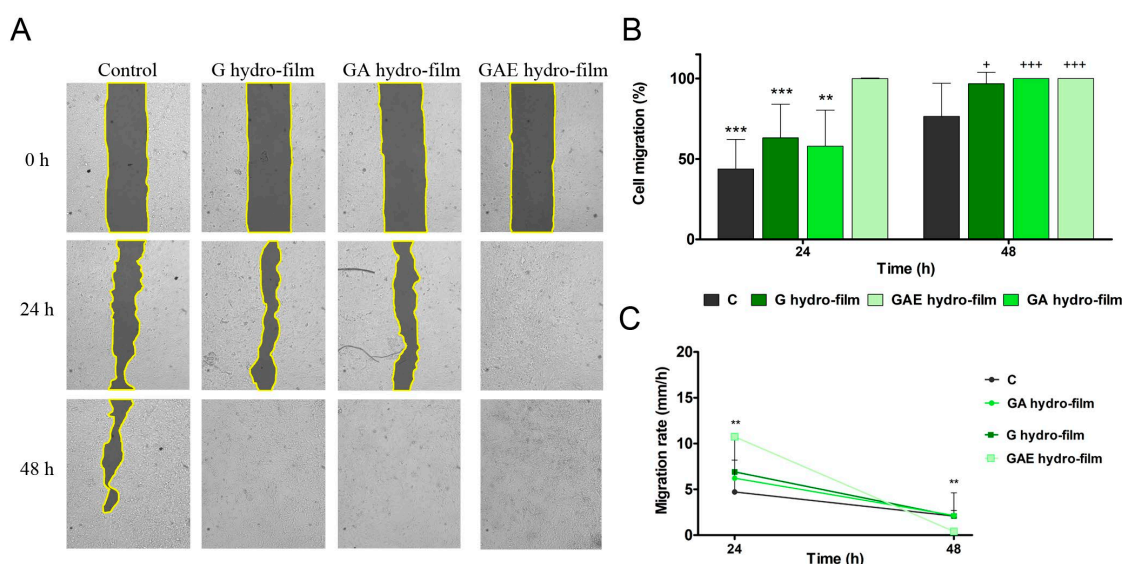


Supplementary Figure 1. The effect of pH in the water uptake and aqueous degradation of the hydro-films. (A) The water uptake of G hydro-films submerged in buffers with pH 5 and pH 8. (B) The water uptake of GA hydro-films submerged in buffers with pH 5 and pH 8. (C) The aqueous degradation profile of G hydro-films submerged in buffers with pH 5 and pH 8. (D) The aqueous degradation profile of GA hydro-films submerged in buffers with pH 5 and pH 8. * $p < 0.05$ comparing hydro-films at pH 5 and pH 8; ** $p < 0.01$ comparing hydro-films at pH 5 and pH 8 and *** $p < 0.001$ comparing hydro-films at pH 5 and pH 8.



Supplementary Figure 2. *In vitro* scratch assay in HaCaT cells using mitomycin to inhibit cell proliferation. (A) Images of cell migration at different time points. (B) Quantitative analysis of cell migration, results are displayed as mean ± SD percentage of cell migration in regards to the initial gap size. * $p < 0.05$, ** $p < 0.01$ and *** $p < 0.001$ comparing with GAE hydro-films. + $p < 0.05$ and +++ $p < 0.001$ comparing to the control group. (C) Migration rate, expressed as cellular progress in function of time. ** $p < 0.01$ comparing GAE hydro-film with the rest of the groups.