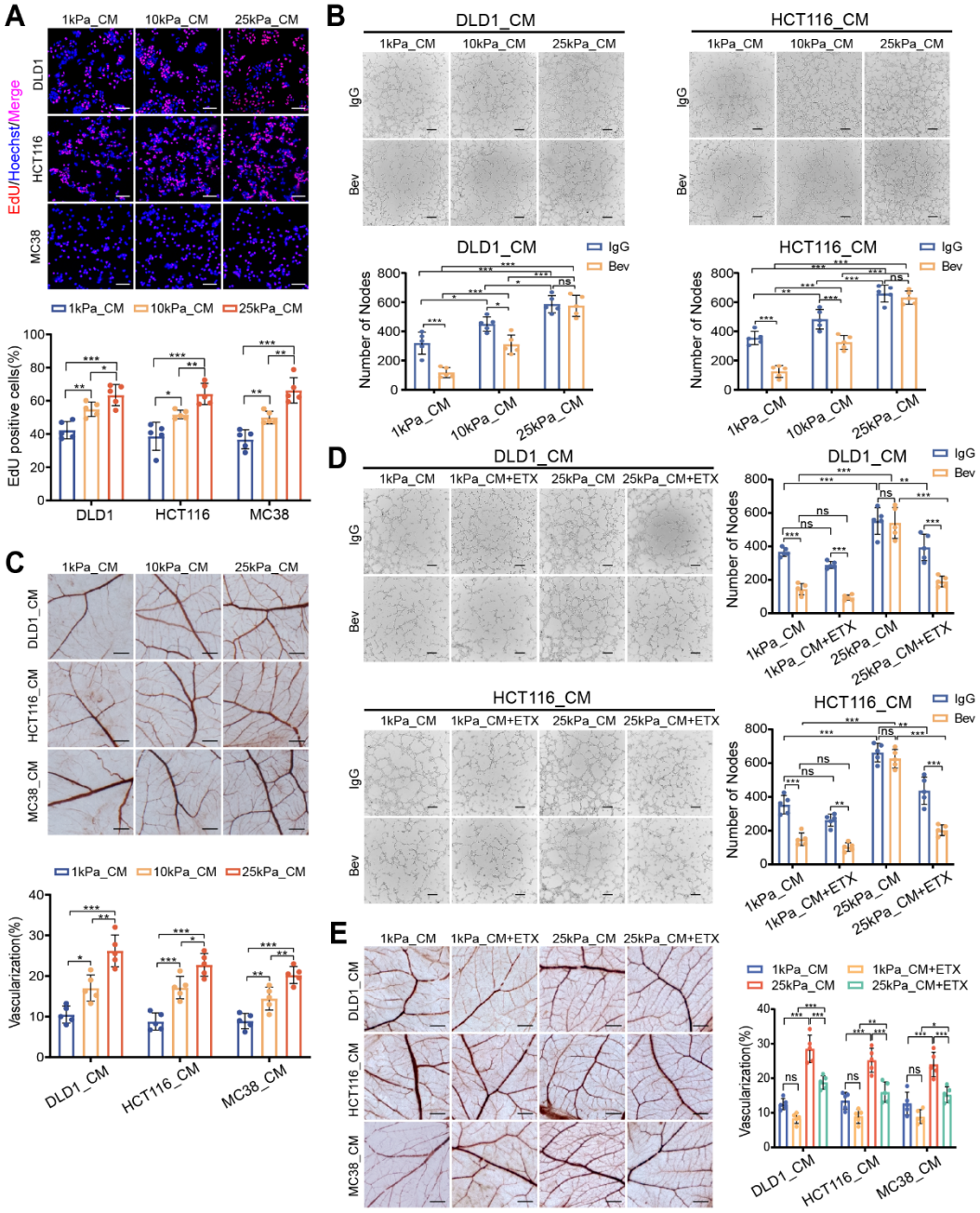
Supplementary Fig. S8



Supplementary Figure. S8 Matrix stiffness induced lipid crosstalk between HSCs and colon cancer cells promote tumor proliferation and angiogenesis. (A) Representative images (left) and quantification (right) of proliferation of DLD1, HCT116 and MC38 cells treated with conditioned medium from HSCs cultured on 1kPa, 10kPa and 25kPa polyacrylamide hydrogels, as determined by EdU assay. Scale bar: 100μm (one-way ANOVA, n=5 independent experiments). (B) Representative images (upper) and quantification (lower) of capillary tube formation of HUVECs treated with culture medium of DLD1 and HCT116 cells, along with IgG or 9% Bevacizumab. DLD1 and HCT116 cells were treated with conditioned medium from LX-2 cells cultured on 1kPa, 10kPa and 25kPa polyacrylamide hydrogels before. Scale bar: 200μm (one-way ANOVA, n=5 independent experiments). (C)

Representative images (upper) and quantification (lower) of neovessels formation in CAM treated with culture medium of DLD1, HCT116 and MC38 cells. DLD1 and HCT116 cells were treated with conditioned medium from LX-2 cells cultured on 1kPa, 10kPa and 25kPa polyacrylamide hydrogels, and MC38 cells were treated with conditioned medium from JS-1 cells cultured on 1kPa, 10kPa and 25kPa polyacrylamide hydrogels before. Scale bar: 1mm (one-way ANOVA, n=5 independent experiments). (D) Representative images (left) and quantification (right) of capillary tube formation of HUVECs treated with culture medium of DLD1 and HCT116 cells, along with IgG or 9% Bevacizumab. DLD1 and HCT116 cells were treated with conditioned medium from LX-2 cells cultured on 1kPa and 25kPa polyacrylamide hydrogels before, along with or without Etomoxir (ETX). Scale bar: 200μm (one-way ANOVA, n=5 independent experiments). (E) Representative images (left) and quantification (right) of neovessels formation in CAM treated with culture medium of DLD1, HCT116 and MC38 cells. DLD1 and HCT116 cells were treated with conditioned medium from LX-2 cells cultured on 1kPa and 25kPa polyacrylamide hydrogels, and MC38 cells were treated with conditioned medium from JS-1 cells cultured on 1kPa, 10kPa and 25kPa polyacrylamide hydrogels. At the same time, DLD1, HCT116 and MC38 cells were treated with or without Etomoxir (ETX). Scale bar: 1mm (one-way ANOVA, n=5 independent experiments). Data are graphed as the mean ± SD. ns, not significant, $P>0.05$; *$P < 0.05$; **$P < 0.01$; ***$P < 0.001$.