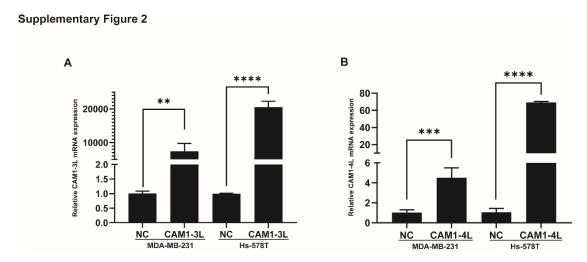


Supplementary Figure 1 Low CEACAM1 expression levels in the subgroup with poorer **prognosis.** The expression levels of CEACAM1 in the subgroups with poorer prognosis for the four clinical characteristics of Stage (A), DSS (B), OS(C), and PFS (D) were significantly lower than the subgroups with better prognosis.



Supplementary Figure 2 Overexpressing CEACAM1 expression in BLBC cells. Expression of CEACAM1-3L (A) and CEACAM1-4L (B) mRNA in breast cancer cells (MDA-MB-231 and HS-578T) after overexpression. ** p < 0.01, *** p < 0.001, *** p < 0.0001.