**Fig.S1** Biological characteristics and external validation of m5Cscore. **A** Matrix-activation related genes were differential expressed between m5Cscore groups. **B** Immune-activation related genes were differential expressed between m5Cscore groups. **C** Expression of PD-1in two m5Cscore groups. **D-E** Survival analyses for low and high m5Cscore patient groups in the external groups (GSE48276, P=0.036; GSE31684, P=0.017). **F-G** Differences of local recurrence between two m5Cscore groups in GSE31684.