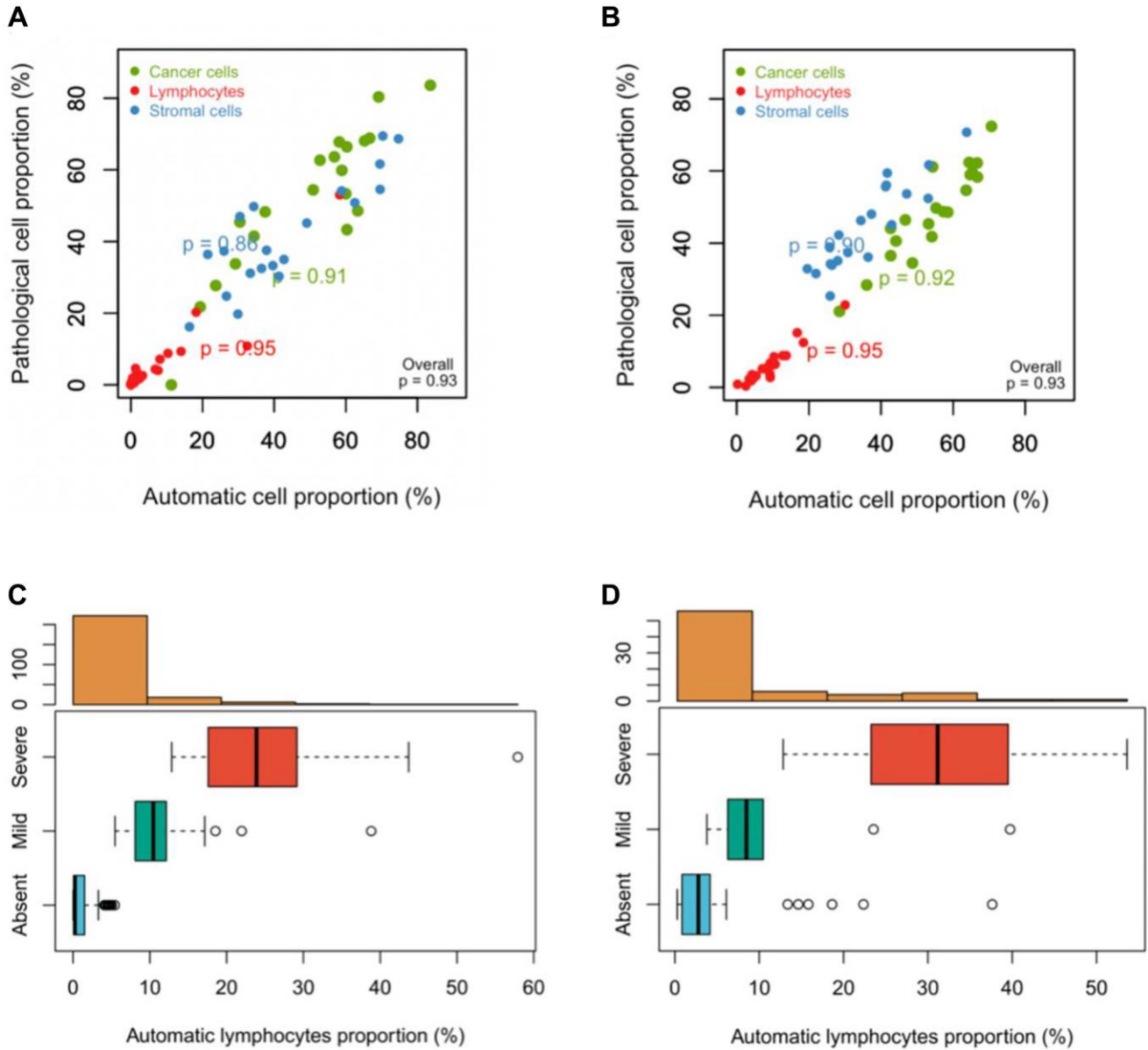
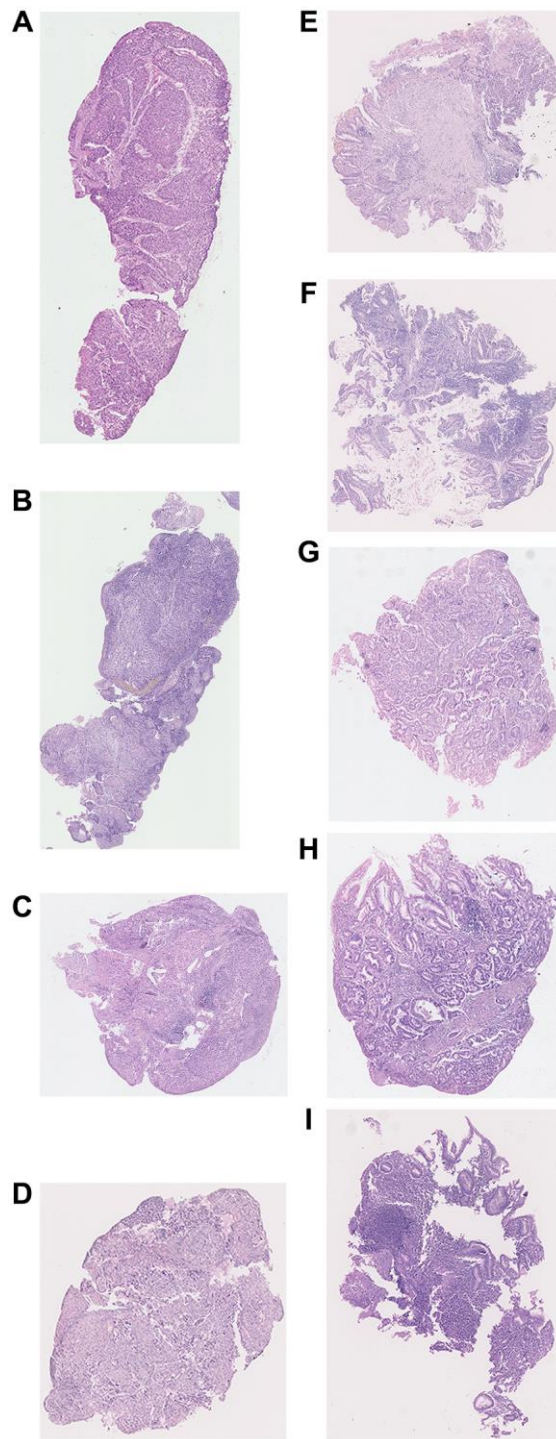


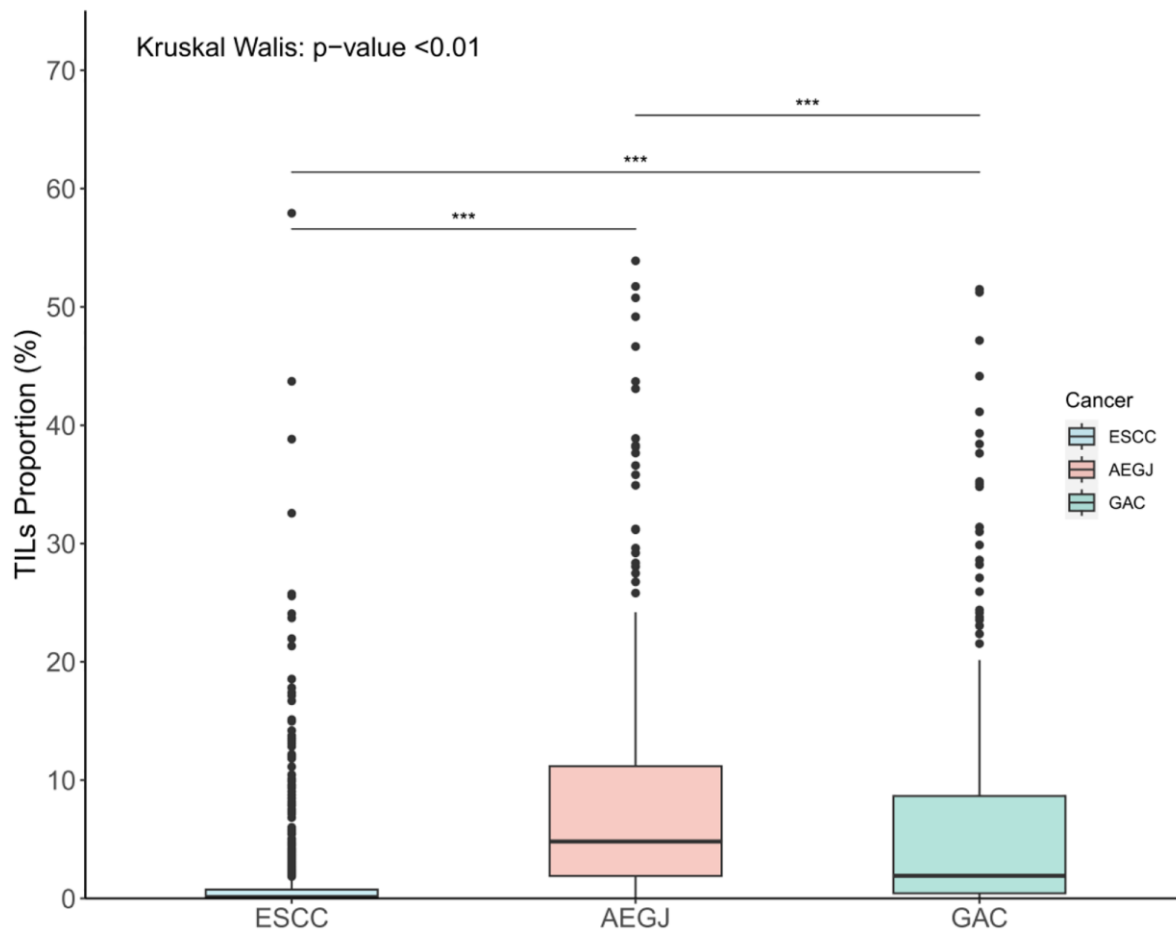
SUPPLEMENTARY FIGURES



Supplementary Figure 1. Verifications of the cell training sets. (A, B) Cell proportions obtained by automated image analysis were compared to a pathologist’s counts for a total of 10,000 single cells in the two representative sets of 20 ESCC and 20 GAC tissue samples. (C, D) TIL proportions versus manual grading of TIL infiltration in random one-third samples of ESCC and GAC.



Supplementary Figure 2. The raw images of TILs intensity examples in ESCC, AEGJ, and GAC H&E-stained tissue sections (H&E×200). (A–C) The H&E-stained tumor tissue sections with low TILs grade (0.00%, 0.02%), medium TILs grade (0.02%, 0.75%), and high TILs grade (0.75%, 57.92%) infiltration in ESCC. (D–F) The H&E-stained tumor tissue sections with low TILs grade (0.01%, 1.87%), medium TILs grade (1.87%, 11.14%), and high TILs grade (11.14%, 53.89%) infiltration in AEGJ. (G–I) The H&E-stained tumor tissue sections with low TILs grade (0.00%-0.43%), medium TILs grade (0.43%, 8.54%), and high TILs grade (8.54%, 75.05%) infiltration in GAC.



Supplementary Figure 3. Comparison of the TILs proportions in 752 ESCC, 214 AEGJ, and 256 GAC cases without stratification.