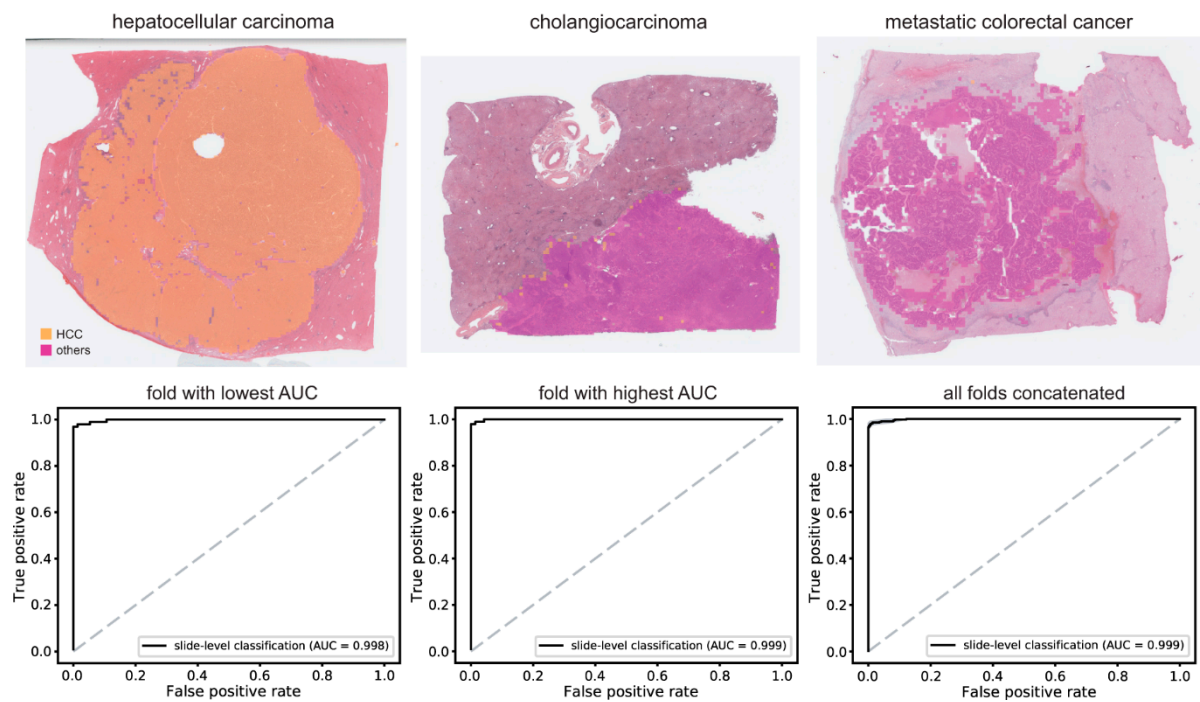


**Supplementary Figure S1.** The receiver operating characteristic curve of slide-level classification results for the external datasets (Seoul St. Mary's Hospital datasets). AUC: area under the curve.



**Supplementary Figure S2.** Classification results between hepatocellular carcinoma and other cancer types (cholangiocarcinoma and metastatic colorectal cancer), classified by a classifier trained with mixed datasets. Upper panels: representative tissue images of hepatocellular carcinoma, cholangiocarcinoma, and metastatic colorectal cancers which were correctly classified by the classifier. Lower panels: the receiver operating characteristic curves of slide-level classification results for folds with the lowest and highest area under the curve (AUC) and concatenated results of all 5-folds. HCC: hepatocellular carcinoma.