



**Figure S5. Landscape of candidate cancer-associated genes and survival analysis.** (A) Compare the mutational spectrum and landscape of candidate cancer-associated genes with those reported for liver cancer tissues by cBioProtal for cancer Genomics (including samples from TCGA and ICGC). (B) Progression-free survival in the training set calculated with the use of follow-up times ( $P < 0.05$  by the log-rank test) from liver cancer tissues by cBioProtal for cancer Genomics. (C) Overall survival in the training set calculated with the use of follow-up times ( $P < 0.05$  by the log-rank test) from liver cancer tissues by cBioProtal for cancer Genomics.