



Supplementary Fig. S1. (A–F) Relationship between DIN and histopathologic features: Inflammatory cell infiltration (A), stromal fibrosis (B), combined normal tissue presence (C), extracellular mucin pool (D), necrosis (E), and tumor cell proportion (F). (G–L) Relationship between RIN and the same histopathologic features. For all variables, statistical comparisons were conducted using the Kruskal-Wallis test, and the corresponding p-values are displayed on each graph.