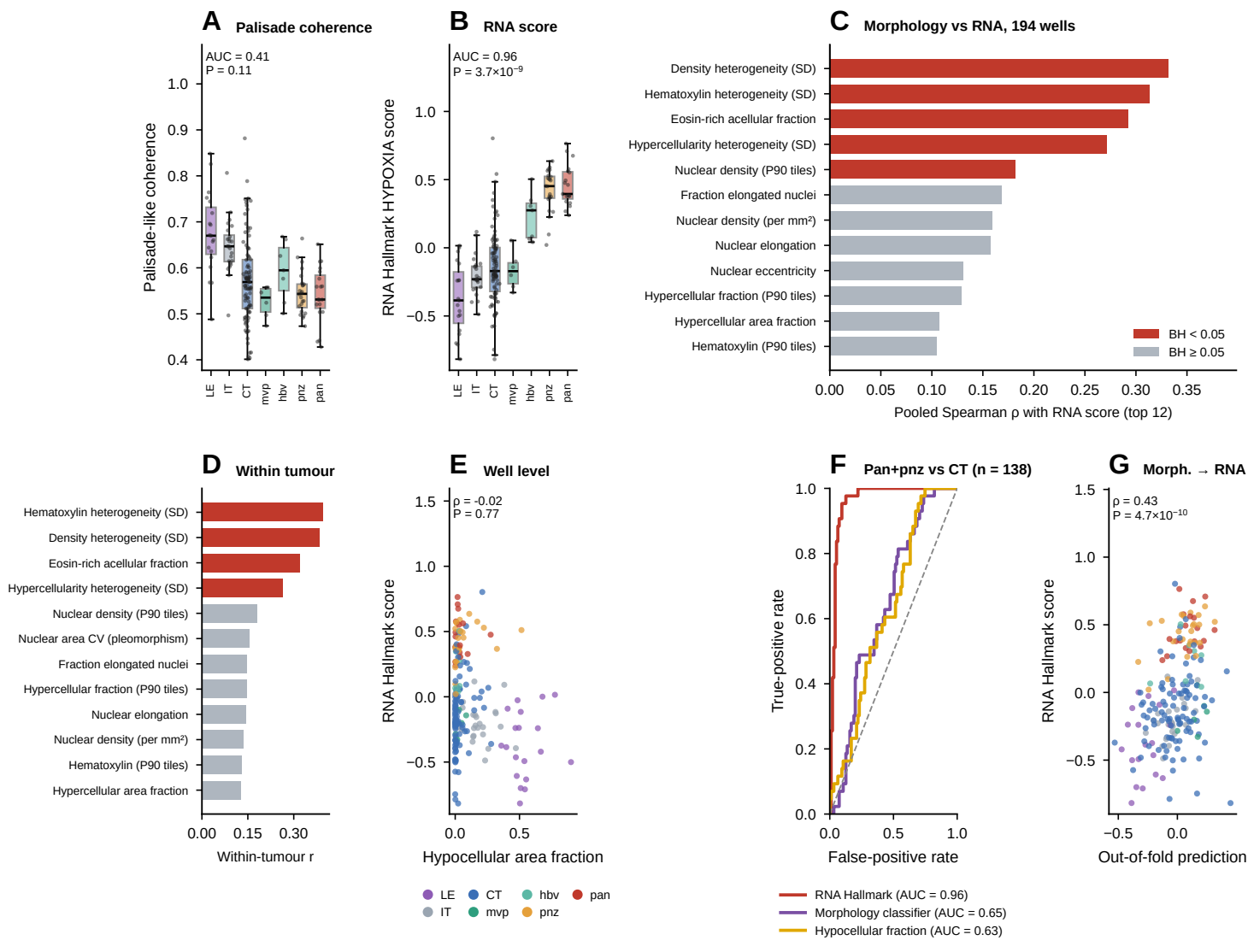

A
Palisade coherence
AUC = 0.41
P = 0.11
Palisade-like coherence
LE
IT
CT
mvp
hbv
pnz
pan
B
RNA score
AUC = 0.96
P = 3.7×10⁻⁹
RNA Hallmark HYPOXIA score
C
Morphology vs RNA, 194 wells
Density heterogeneity (SD)
Hematoxylin heterogeneity (SD)
Eosin-rich acellular fraction
Hypercellularity heterogeneity (SD)
Nuclear density (P90 tiles)
Fraction elongated nuclei
Nuclear density (per mm²)
Nuclear elongation
Nuclear eccentricity
Hypercellular fraction (P90 tiles)
Hypercellular area fraction
Hematoxylin (P90 tiles)
BH < 0.05
BH ≥ 0.05
Pooled Spearman ρ with RNA score (top 12)
D
Within tumour
Hematoxylin heterogeneity (SD)
Density heterogeneity (SD)
Eosin-rich acellular fraction
Hypercellularity heterogeneity (SD)
Nuclear density (P90 tiles)
Nuclear area CV (pleomorphism)
Fraction elongated nuclei
Hypercellular fraction (P90 tiles)
Nuclear elongation
Nuclear density (per mm²)
Hematoxylin (P90 tiles)
Hypercellular area fraction
Within-tumour r
E
Well level
ρ = -0.02
P = 0.77
RNA Hallmark score
Hypocellular area fraction
LE
IT
CT
mvp
hbv
pnz
pan
F
Pan+pnz vs CT (n = 138)
True-positive rate
False-positive rate
RNA Hallmark (AUC = 0.96)
Morphology classifier (AUC = 0.65)
Hypocellular fraction (AUC = 0.63)
G
Morph. → RNA
ρ = 0.43
P = 4.7×10⁻¹⁰
RNA Hallmark score
Out-of-fold prediction