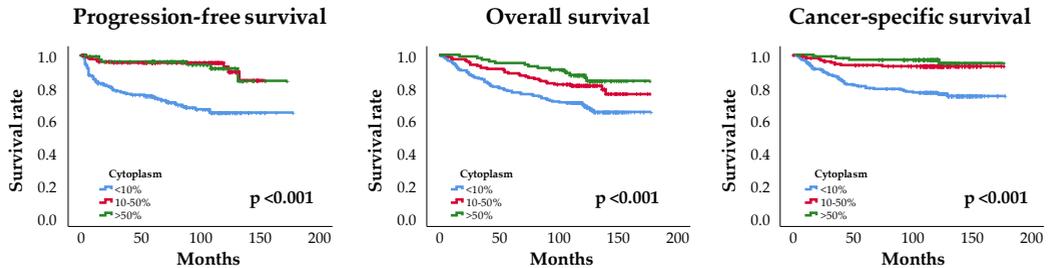
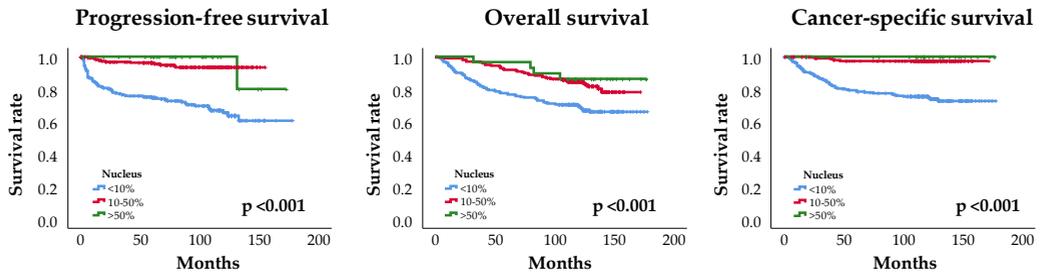


A

Cytoplasmic staining extent	<10%	10-50%	>50%
Case number	203	150	100

B

Nuclear staining extent	<10%	10-50%	>50%
Case number	225	198	30

Figure S1. Establishment of the cut-off criteria for pAMPK positivity. First, prognosis of ccRCC was evaluated according to the pAMPK-staining extent (<10%; 10-50%; >50%) for both (a) cytoplasmic and (b) nuclear staining in the discovery cohort. In both localization of pAMPK expression, tumors showing <10% expression showed distinctly poor outcomes. Based on the distribution of the cases and the prognostic implications, therefore, pAMPK-positivity in $\geq 10\%$ of tumor cells was set as the cutoff.