

# Supplementary Information

## Cancer Types

- (1) **ACC** - Adrenocortical Carcinoma
- (2) **BLCA** - Bladder Urothelial Carcinoma
- (3) **BRCA** - Breast Invasive Carcinoma
- (4) **CESC** - Cervical Squamous Cell Carcinoma and Endocervical Adenocarcinoma
- (5) **CHOL** - Cholangiocarcinoma
- (6) **COAD** - Colon Adenocarcinoma
- (7) **DLBC** - Lymphoid Neoplasm Diffuse Large B-cell Lymphoma
- (8) **ESCA** - Esophageal Carcinoma
- (9) **GBM** - Glioblastoma Multiforme
- (10) **HNSC** - Head and Neck Squamous Cell Carcinoma
- (11) **KICH** - Kidney Chromophobe
- (12) **KIRC** - Kidney Renal Clear Cell Carcinoma
- (13) **KIRP** - Kidney Renal Papillary Cell Carcinoma
- (14) **LAML** - Acute Myeloid Leukemia
- (15) **LGG** - Brain Lower Grade Glioma
- (16) **LIHC** - Liver Hepatocellular Carcinoma
- (17) **LUAD** - Lung Adenocarcinoma
- (18) **LUSC** - Lung Squamous Cell Carcinoma
- (19) **MESO** - Mesothelioma
- (20) **OV** - Ovarian Serous Cystadenocarcinoma
- (21) **PAAD** - Pancreatic Adenocarcinoma
- (22) **PCPG** - Pheochromocytoma and Paraganglioma
- (23) **PRAD** - Prostate Adenocarcinoma
- (24) **READ** - Rectum Adenocarcinoma
- (25) **SARC** - Sarcoma
- (26) **SKCM** - Skin Cutaneous Melanoma
- (27) **STAD** - Stomach Adenocarcinoma
- (28) **TGCT** - Testicular Germ Cell Tumors
- (29) **THCA** - Thyroid Carcinoma

- (30) **THYM** - Thymoma
- (31) **UCEC** - Uterine Corpus Endometrial Carcinoma
- (32) **UCS** - Uterine Carcinosarcoma
- (33) **UVM** - Uveal Melanoma

## Combinations of Cancer Types for Pan-Cancers

- (1) **GBMLGG**: {GBM, LGG}
- (2) **COADREAD**: {COAD, READ}
- (3) **KIPAN**: {KIRC, KICH, KIRP}
- (4) **STES**: {ESCA, STAD}
- (5) **PanGI**: {COAD, STAD, READ, ESCA}
- (6) **PanGyn**: {OV, CESC, UCS, UCEC}
- (7) **PanSCCs**: {LUSC, HNSC, ESCA, CESC, BLCA}