**Supplementary Table S1.** The full name and corresponding *P*-values at FDR = 0.05 for each cancer type in PancanQTL

|  |  |  |  |
| --- | --- | --- | --- |
| Cancer type | Disease full name | Cis *P*-value at FDR = 0.05 | Trans *P*-value at FDR = 0.05 |
| ACC | Adrenocortical carcinoma | 6.01×10-6 | 7.62×10-10 |
| BLCA | Bladder Urothelial Carcinoma | 1.55×10-4 | 6.01×10-9 |
| BRCA | Breast invasive carcinoma | 7.73×10-4 | 7.39×10-8 |
| CESC | Cervical squamous cell carcinoma and endocervical adenocarcinoma | 1.02×10-4 | 1.42×10-9 |
| CHOL | Cholangiocarcinoma | 6.74×10-9 | 3.45×10-9 |
| COAD | Colon adenocarcinoma | 1.72×10-4 | 1.94×10-9 |
| DLBC | Lymphoid Neoplasm Diffuse Large B-cell Lymphoma | 3.61×10-7 | 2.64×10-13 |
| ESCA | Esophageal carcinoma | 3.90×10-5 | 2.43×10-10 |
| GBM | Glioblastoma Multiforme | 6.00×10-5 | 2.93×10-10 |
| HNSC | Head and Neck squamous cell carcinoma | 2.89×10-4 | 6.04×10-9 |
| KICH | Kidney Chromophobe | 8.97×10-6 | 4.37×10-9 |
| KIRC | Kidney renal clear cell carcinoma | 5.28×10-4 | 8.52×10-9 |
| KIRP | Kidney renal papillary cell carcinoma | 1.77×10-4 | 1.55×10-9 |
| LAML | Acute Myeloid Leukemia | 6.46×10-5 | 3.26×10-10 |
| LGG | Lower Grade Glioma | 6.04×10-4 | 1.30×10-8 |
| LIHC | Liver hepatocellular carcinoma | 1.68×10-4 | 1.12×10-8 |
| LUAD | Lung adenocarcinoma | 2.72×10-4 | 3.84×10-9 |
| LUSC | Lung squamous cell carcinoma | 2.47×10-4 | 8.68×10-9 |
| MESO | Mesothelioma | 1.56×10-5 | 2.68×10-10 |
| OV | Ovarian serous cystadenocarcinoma | 1.46×10-4 | 5.70×10-9 |
| PAAD | Pancreatic adenocarcinoma | 1.02×10-4 | 6.62×10-10 |
| PCPG | Pheochromocytoma and Paraganglioma | 9.22×10-5 | 6.80×10-10 |
| PRAD | Prostate adenocarcinoma | 6.65×10-4 | 9.19×10-9 |
| READ | Rectum adenocarcinoma | 2.32×10-5 | 3.64×10-11 |
| SARC | Sarcoma | 7.78×10-5 | 3.80×10-9 |
| SKCM | Skin Cutaneous Melanoma | 1.41×10-5 | 1.95×10-10 |
| STAD | Stomach adenocarcinoma | 1.69×10-4 | 1.54×10-9 |
| TGCT | Testicular Germ Cell Tumors | 6.40×10-5 | 3.55×10-10 |
| THCA | Thyroid carcinoma | 9.07×10-4 | 8.03×10-9 |
| THYM | Thymoma | 7.91×10-5 | 2.40×10-10 |
| UCEC | Uterine Corpus Endometrial Carcinoma | 2.32×10-5 | 1.29×10-10 |
| UCS | Uterine Carcinosarcoma | 5.35×10-7 | 3.04×10-12 |
| UVM | Uveal Melanoma | 2.68×10-5 | 2.96×10-12 |