|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | UM | other melanomas | other tumors | other diseases |
| PALMD | n/a | n/a | n/a | calcific aortic valve stenosis1-3 |
| ROBO1 | metastasis4 | reduce invasion5  angiogenesis6 | Multiple myeloma7  Bladder cancer8  NSCLC9  …… | Hirschsprung disease10  Callosal Dysgenesis11  cardiac fibrosis12  …… |
| CNTN3 | n/a | n/a | renal cell carcinomas13  glioblastoma multiforme14  colorectal cancer15  …… | neurodevelopmental delay16,17  Male infertility18  Acute aortic dissection19  …… |
| DTWD1 | n/a | hypoxia20 | cell renal cell carcinoma21  gastric cancer22 | bipolar disorder23 |
| ZNF667-AS1 | n/a | inhibit proliferation and invasion24 | bladder cancer25  ovarian cancer26  oral squamous cell carcinoma27  …… | rheumatoid arthritis28  spinal cord injury29 |
| KIRREL | n/a | prognosis30 | breast cancer31  gastric cancer32  pancreatic cancer33  …… | mycoplasma pneumoniae34 |
| NQO1 | n/a | redox cycle  metabolize  metastasis  apoptosis35 | colorectal cancer36  gastric cancer37  breast cancer38  …… | acute kidney injury39  spinal cord injury40  Alzheimer's disease41  …… |
| IGFBP2 | n/a | regulate PD-L1 expression42  apoptosis43  BRAF V600E resistance44 | glioma45  colorectal cancer46  osteosarcoma47  …… | cardiometabolic dysfunction48  obesity49  diabetes50  …… |
| PDLIM1 | n/a | n/a | ovarian cancer51  glioma52  chronic myelogenous leukaemia53  …… | diabetic retinopathy54  Cardiovascular Disease55  Friedreich's Ataxia56  …… |
| FMN1 | n/a | n/a | pancreatic cancer57  colorectal cancer58 | Cenani-Lenz syndrome59  Pseudoexfoliation syndrome60  schizophrenia61  …… |
| RAB2A | n/a | n/a | glioblastoma62  bladder cancer63  breast cancer64  …… | osteoarthritis65  autism and schizophrenia66  Alzheimer's disease67  …… |
| EMP3 | aggressiveness68 | n/a | lung cancer69  glioma70  acute myeloid leukemia71  …… | keratoconus72 |
| FABP5 | prognosis73,74 | high expression75  apoptosis76  cisplatin sensitivity77 | lung adenocarcinoma78  gastric cancer79  breast cancer80  …… | type 2 Diabetes Mellitus81  psoriasis82  cerebral ischemia-reperfusion83  …… |
| PTP4A3 | liver metastasis84  aggressiveness85,86 | stem cell differentiation87  chemotherapy88  migration89  …… | multiple myeloma90  ovarian cancer91  colorectal cancer92  …… | Alzheimer disease93 |
| CELF2 | prognosis94 | n/a | prostate cancer95  nasopharyngeal carcinoma96  breast cancer97  …… | Alzheimer's disease98 |
| LINC00152 | n/a | n/a | glioma99  acute myeloid leukemia100  breast cancer101  …… | rheumatoid arthritis102 |
| WARS | prognosis94  progression103 | n/a | n/a | n/a |
| HTR2B | high expression104,105  metastasis4 | n/a | colorectal cancer106  pancreatic cancer107  ovarian cancer108  …… | atrial fibrillation109  age-related osteoarthritis110  constipation111  …… |

Supplementary Table 1: Research status of differentially expressed genes in UM metastasis tissues. For more than 3 diseases, only the first three are displayed.

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