**Table S5: GSEA analysis between high-risk and low-risk groups (promoted biological functions).**

|  |  |  |  |
| --- | --- | --- | --- |
| ID | ES | NES | pvalue |
| go\_very\_low\_density\_lipoprotein\_particle\_remodeling | 0.887434 | 2.390189 | 1.98E-06 |
| go\_triglyceride\_rich\_lipoprotein\_particle\_remodeling | 0.885009 | 2.464035 | 3.42E-07 |
| go\_complement\_activation\_lectin\_pathway | 0.873119 | 2.389054 | 2.67E-06 |
| go\_platelet\_dense\_granule\_lumen | 0.871294 | 2.42585 | 9.9E-07 |
| go\_alcohol\_dehydrogenase\_nad\_p\_plus\_activity | 0.86067 | 2.2559 | 2.65E-05 |
| go\_chylomicron | 0.847338 | 2.359152 | 6.56E-06 |
| go\_glyoxylate\_metabolic\_process | 0.844408 | 2.213275 | 6.14E-05 |
| go\_blood\_coagulation\_intrinsic\_pathway | 0.837189 | 2.530543 | 2E-07 |
| go\_fatty\_acid\_beta\_oxidation\_using\_acyl\_coa\_dehydrogenase | 0.83296 | 2.183269 | 0.000118 |
| go\_urea\_cycle | 0.83096 | 2.238084 | 0.000121 |
| kegg\_primary\_bile\_acid\_biosynthesis | 0.847215 | 2.524414 | 2.89E-07 |
| kegg\_fatty\_acid\_metabolism | 0.765637 | 2.896549 | 1E-10 |
| kegg\_complement\_and\_coagulation\_cascades | 0.738595 | 3.04783 | 1E-10 |
| kegg\_glycine\_serine\_and\_threonine\_metabolism | 0.711765 | 2.544408 | 2.27E-07 |
| kegg\_renin\_angiotensin\_system | 0.669718 | 2.062439 | 0.001817 |
| kegg\_valine\_leucine\_and\_isoleucine\_degradation | 0.667422 | 2.542512 | 8.42E-08 |
| kegg\_peroxisome | 0.639025 | 2.697852 | 1E-10 |
| kegg\_histidine\_metabolism | 0.625501 | 2.165818 | 0.000229 |
| kegg\_parkinsons\_disease | 0.608925 | 2.673643 | 1E-10 |
| kegg\_ribosome | 0.604297 | 2.580318 | 1E-10 |