Table S1:

Biological processes characterizing significant proteins in the blood serum of patients in all experimental groups with analysis stratified by sex (PANTHER).

Control group Male

|  |  |  |  |
| --- | --- | --- | --- |
|  | Groups of biological processes | Number of processes | Process ID \* |
| Biological regulation | negative regulation of blood coagulation | 1 | GO:0030195 |
| regulation of catalytic activity | 15 | GO:0050790 |
| regulation of cell adhesion | 7 | GO:0030155 |
| regulation of signaling | 1 | GO:0023051 |
| regulation of transport | 5 | GO:0051049 |
| signal transduction | 6 | GO:0007165 |
| Metabolic process | macromolecule metabolic process | 7 | GO:0043170 |
| organonitrogen compound metabolic process | 5 | GO:1901564 |
| Cellular process | cell death | 2 | GO:0008219 |
| cellular component organization | 11 | GO:0016043 |
| multicellular organismal process | 4 | GO:0032501 |
| transport | 2 | GO:0006810 |

Control group Female

|  |  |  |  |
| --- | --- | --- | --- |
|  | Groups of biological processes | Number of processes | Process ID \* |
| Biological regulation | regulation of catalytic activity | 10 | GO:0050790 |
| regulation of cell adhesion | 3 | GO:0030155 |
| regulation of cell cycle | 8 | GO:0051726 |
| regulation of metabolic process | 4 | GO:0019222 |
| regulation of organelle organization | 4 | GO:0033043 |
| regulation of transport | 2 | GO:0051049 |
| Metabolic process | cellular macromolecule biosynthetic process | 4 | GO:0034645 |
| macromolecule metabolic process | 3 | GO:0043170 |
| Cellular process | cell cycle process | 4 | GO:0022402 |
| cellular component organization | 8 | GO:0016043 |
| multicellular organismal process | 7 | GO:0032501 |

Acute polymorphic psychotic disorder Group

Male

|  |  |  |  |
| --- | --- | --- | --- |
|  | Groups of biological processes | Number of processes | Process ID \* |
| Biological regulation | ion homeostasis | 1 | GO:0050801 |
| negative regulation of blood coagulation | 1 | GO:0030195 |
| positive regulation of gene expression | 1 | GO:0010628 |
| positive regulation of peptide secretion | 1 | GO:0002793 |
| positive regulation of response to stimulus | 1 | GO:0048584 |
| regulation of cell activation | 2 | GO:0050865 |
| regulation of cell adhesion | 2 | GO:0030155 |
| Regulation of cytosolic calcium ion concentration | 1 | GO:0051480 |
| Regulation of hydrolase activity | 1 | GO:0051336 |
| regulation of metabolic process | 2 | GO:0019222 |
| regulation of protein transport | 1 | GO:0051223 |
| regulation of signaling | 1 | GO:0023051 |
| Metabolic process | macromolecule metabolic process | 7 | GO:0043170 |
| organonitrogen compound metabolic process | 5 | GO:1901564 |
| Cellular process | cell death | 2 | GO:0008219 |
| cellular component organization | 11 | GO:0016043 |
| multicellular organismal process | 4 | GO:0032501 |
| transport | 2 | GO:0006810 |

Acute polymorphic psychotic disorder Group

Female

|  |  |  |  |
| --- | --- | --- | --- |
|  | Groups of biological processes | Number of processes | Process ID \* |
| Biological regulation | positive regulation of metabolic process | 1 | GO:0009893 |
| regulation of gene expression | 2 | GO:0010468 |
| regulation of cell cycle process | 1 | GO:0010564 |
| positive regulation of gene expression | 1 | GO:0010628 |
| regulation of metabolic process | 3 | GO:0019222 |
| regulation of cell adhesion | 1 | GO:0030155 |
| regulation of chromosome organization | 2 | GO:0033044 |
| regulation of system process | 1 | GO:0044057 |
| positive regulation of cell cycle | 1 | GO:0045787 |
| positive regulation of biological process | 2 | GO:0048518 |
| regulation of transport | 2 | GO:0051049 |
| regulation of cellular component organization | 2 | GO:0051128 |
| Metabolic process | DNA metabolic process | 1 | GO:0006259 |
| DNA replication | 2 | GO:0006260 |
| nucleobase-containing compound metabolic  process | 2 | GO:0006139 |
| nucleoside phosphate metabolic process | 2 | GO:0006753 |
| organic substance metabolic process | 2 | GO:0071704 |
| organonitrogen compound metabolic process | 2 | GO:1901564 |
| purine-containing compound metabolic process | 2 | GO:0072521 |
| translational initiation | 1 | GO:0006413 |
| Cellular process | antigen processing and presentation | 1 | GO:0019882 |
| cell cycle process | 4 | GO:0022402 |
| cell death | 4 | GO:0008219 |
| cellular component organization | 6 | GO:0016043 |
| Chromosome organization | 1 | GO:0051276 |
| leukocyte activation | 4 | GO:0045321 |
| multicellular organismal process | 2 | GO:0032501 |
| organelle localization | 4 | GO:0051640 |
| protein folding | 2 | GO:0006457 |
| Transmembrane transport | 4 | GO:0055085 |
| transport | 2 | GO:0006810 |
| vesicle-mediated transport | 4 | GO:0016192 |

Schizotypal disorder Group

Male

|  |  |  |  |
| --- | --- | --- | --- |
|  | Groups of biological processes | Number of processes | Process ID \* |
| Biological regulation | blood coagulation | 1 | GO:0007596 |
| negative regulation of blood coagulation | 1 | GO:0030195 |
| negative regulation of cellular catabolic process | 1 | GO:0031330 |
| organonitrogen compound metabolic process | 1 | GO:1901564 |
| positive regulation of cellular process | 1 | GO:0048522 |
| positive regulation of peptide secretion |  | GO:0002793 |
| regulation of catalytic activity | 1 | GO:0050790 |
| regulation of immune response | 1 | GO:0050776 |
| Regulation of response to external stimulus | 1 | GO:0032101 |
| regulation of signal transduction | 1 | GO:0009966 |
| G protein-coupled receptor signaling pathway | 1 | GO:0007186 |
| Metabolic process | organonitrogen compound metabolic process | 2 | GO:1901564 |
| translation | 1 | GO:0006412 |
| metabolic process | 3 | GO:0008152 |
| Cellular process | cell death | 1 | GO:0008219 |
| cellular component organization | 5 | GO:0016043 |
| cellular metabolic process | 1 | GO:0044237 |
| chaperone-mediated protein folding | 1 | GO:0061077 |
| Developmental process | 1 | GO:0032502 |
| gene expression | 1 | GO:0010467 |
| peptide secretion | 1 | GO:0002790 |
| protein folding | 1 | GO:0006457 |

Schizotypal disorder Group

Female

|  |  |  |  |
| --- | --- | --- | --- |
|  | Groups of biological processes | Number of processes | Process ID \* |
| Biological regulation | blood coagulation | 1 | GO:0007596 |
| G protein-coupled receptor signaling pathway | 1 | GO:0007186 |
| regulation of catalytic activity | 1 | GO:0050790 |
| regulation of cell activation | 1 | GO:0050865 |
| regulation of cell cycle process | 1 | GO:0010564 |
| regulation of gene expression | 2 | GO:0010468 |
| regulation of metabolic process | 1 | GO:0019222 |
| regulation of protein stability | 1 | GO:0031647 |
| regulation of response to stimulus | 1 | GO:0048583 |
| response to external stimulus | 1 | GO:0009605 |
| response to stress | 2 | GO:0006950 |
| signal transduction | 1 | GO:0007165 |
| regulation of signal transduction | 2 | GO:0009966 |
| Metabolic process | immune response | 2 | GO:0006955 |
| immune system process | 2 | GO:0002376 |
| metabolic process | 2 | GO:0008152 |
| organonitrogen compound metabolic process | 1 | GO:1901564 |
| Cellular process | cell death | 1 | GO:0008219 |
| cell recognition | 1 | GO:0008037 |
| cellular component organization | 1 | GO:0016043 |
| cellular response to stress | 2 | GO:0033554 |
| chaperone-mediated protein folding | 1 | GO:0061077 |
| chromosome organization | 3 | GO:0051276 |
| Developmental process | 2 | GO:0032502 |
| ion transmembrane transport | 1 | GO:0034220 |
| multicellular organism development | 1 | GO:0007275 |
| multicellular organismal process | 1 | GO:0032501 |
| production of molecular mediator of immune  response | 2 | GO:0002440 |
| protein folding | 1 | GO:0006457 |
| vesicle-mediated transport | 3 | GO:0016192 |

Schizophrenia Group

Male

|  |  |  |  |
| --- | --- | --- | --- |
|  | Groups of biological processes | Number of processes | Process ID \* |
| Biological regulation | hemostasis | 2 | GO:0007599 |
| intracellular signal transduction | 1 | GO:0035556 |
| multicellular organismal homeostasis | 2 | GO:0048871 |
| negative regulation of catalytic activity | 1 | GO:0043086 |
| positive regulation of T cell activation | 2 | GO:0050870 |
| regulation of actin cytoskeleton organization | 3 | GO:0032956 |
| regulation of catalytic activity | 5 | GO:0050790 |
| regulation of metabolic process | 3 | GO:0019222 |
| regulation of developmental process | 4 | GO:0050793 |
| regulation of gene expression | 2 | GO:0010468 |
| regulation of programmed cell death | 8 | GO:0043067 |
| regulation of protein stability | 4 | GO:0031647 |
| regulation of RNA metabolic process | 6 | GO:0051252 |
| regulation of secretion | 2 | GO:0051046 |
| Metabolic process | ATP metabolic process | 2 | GO:0046034 |
| cellular macromolecule catabolic process | 7 | GO:0044265 |
| cholesterol transport | 1 | GO:0030301 |
| multicellular organismal process | 6 | GO:0032501 |
| organonitrogen compound metabolic process | 3 | GO:1901564 |
| macromolecule metabolic process | 5 | GO:0043170 |
| nucleic acid metabolic process | 5 | GO:0090304 |
| Cellular process | actin cytoskeleton organization | 2 | GO:0030036 |
| axonemal dynein complex assembly | 1 | GO:0070286 |
| cell adhesion | 2 | GO:0007155 |
| cellular component organization | 3 | GO:0016043 |
| cellular macromolecule localization | 7 | GO:0070727 |
| chromosome organization | 5 | GO:0051276 |
| developmental process | 2 | GO:0032502 |
| immune response | 2 | GO:0006955 |
| movement of cell or subcellular component | 2 | GO:0006928 |
| protein folding | 12 | GO:0006457 |
| protein transport | 8 | GO:0015031 |
| response to external stimulus | 2 | GO:0009605 |
| transposition | 1 | GO:0032196 |
| vacuole organization | 4 | GO:0007033 |
| vesicle-mediated transport | 4 | GO:0016192 |

Schizophrenia Group

Female

|  |  |  |  |
| --- | --- | --- | --- |
|  | Groups of biological processes | Number of processes | Process ID \* |
| Biological regulation | activation of immune response | 2 | GO:0002253 |
| cation homeostasis | 1 | GO:0055080 |
| cellular homeostasis | 2 | GO:0019725 |
| intracellular signal transduction | 3 | GO:0035556 |
| regulation of actin cytoskeleton organization | 7 | GO:0032956 |
| regulation of catalytic activity | 2 | GO:0050790 |
| regulation of cell activation | 7 | GO:0050865 |
| regulation of cellular response to stress | 5 | GO:0080135 |
| regulation of gene expression |  | GO:0010468 |
| regulation of metabolic process | 4 | GO:0019222 |
| regulation of multicellular organismal process | 8 | GO:0051239 |
| regulation of protein secretion | 6 | GO:0050708 |
| regulation of RNA metabolic process | 7 | GO:0051252 |
| regulation of sequestering of calcium ion | 2 | GO:0051282 |
| signal transduction | 1 | GO:0007165 |
| Metabolic process | macromolecule metabolic process | 15 | GO:0043170 |
| metabolism of nitrogenous compounds | 8 | GO:0006807 |
| multicellular organismal process | 4 | GO:0032501 |
| nucleic acid metabolic process | 4 | GO:0090304 |
| cholesterol transport | 1 | GO:0030301 |
| Cellular process | actin cytoskeleton organization | 5 | GO:0030036 |
| cell cycle process | 2 | GO:0022402 |
| cell recognition | 1 | GO:0008037 |
| cellular component organization | 2 | GO:0016043 |
| Cellular protein localization | 3 | GO:0034613 |
| chromosome organization | 3 | GO:0051276 |
| immune response | 2 | GO:0006955 |
| immune system process | 3 | GO:0002376 |
| Intracellular transport | 4 | GO:0046907 |
| ion transport | 1 | GO:0006811 |
| protein folding | 9 | GO:0006457 |
| response to external stimulus | 2 | GO:0009605 |
| vacuole organization | 3 | GO:0007033 |
| vesicle-mediated transport | 2 | GO:0016192 |