Table 4 The mutual pathway set between our identified cell subtypes and similar cell types

|  |  |  |  |
| --- | --- | --- | --- |
| IVH  effected  area |  |  |  |
| 1 | 1.  2. | 1.Oligodendroglia  2.Astrocytes  3.Neuroglia  4.Neurons  5.Interneurons  6.Pyramidal Cells | 1.GO:0010035 (response to inorganic substance) |
| 2.GO:0043269 (regulation of ion transport) |
| 3.GO:0044057 (regulation of system process) |
| 4.GO:0051129 (negative regulation of cellular component organization) |
| 5.GO:0042063 (gliogenesis) |
| 6.GO:1903530 (regulation of secretion by cell) |
| 7.GO:0034330 (cell junction organization) |
| 8.GO:0010942 (positive regulation of cell death) |
| 9.GO:1901214 (regulation of neuron death) |
| 10.GO:0007611 (learning or memory) |
| 11.GO:0050803 (regulation of synapse structure or activity) |
| 2 | 1.  2.  3. | 1. Neurons  2. Astrocytes  3. Oligodendroglia  4. Neuroglia  5. Interneurons  6. Pyramidal Cells  7. Purkinje Cells | 1.GO:0008283 (cell population proliferation) |
| 2.GO:0051090 (regulation of DNA-binding transcription factor activity) |
| 3.GO:0042063 (gliogenesis) |
| 4.GO:0051345 (positive regulation of hydrolase activity) |
| 5.GO:0055082 (cellular chemical homeostasis) |
| 6.GO:0010035 (response to inorganic substance) |
| 7.GO:0010942 (positive regulation of cell death) |
| 8.GO:0014070 (response to organic cyclic compound) |
| 9.GO:0030335 (positive regulation of cell migration) |
| 3 | 1.  2.  3. | 1. Neuroglia  2. Neurons  3. Astrocytes  4. Oligodendroglia  5. Interneurons | 1.GO:0006979 (response to oxidative stress) |
| 2.GO:0051090 (regulation of DNA-binding transcription factor activity) |
| 3.GO:0001666 (response to hypoxia) |
| 4.WP2432 (Spinal cord injury) |
| 5.GO:0060627 (regulation of vesicle-mediated transport) |
| 6.GO:0007626 (locomotory behavior) |
| 7.GO:0042063 (gliogenesis) |
| 8.GO:0043269 (regulation of ion transport) |
| 9.GO:0044057 (regulation of system process) |