**Supplementary Table 1. Summary of optic nerve regeneration in the BXD strains**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Strains** | **N** | **Age (Days)\*** | **Axons at 0.5mm from crush** | **Axons at 1mm from crush** | **Longest 5 Axons (µm)** | **Longest 1 Axon (µm)** |
| **C57BL/6J Control** | 6 | 67 | 0±0 | 0±0 | 179.2±45 | 350±56.3 |
| **DBA/2J Control** | 6 | 63 | 0±0 | 0±0 | 235.3±36.8 | 366.7±55.8 |
| **BXD102/RwwJ** | 5 | 61 | 236.1±24.4 | 1±0 | 787.2±46.5 | 1107±40.6 |
| **BXD11/TyJ** | 5 | 60 | 276.5±16.1 | 1±0.6 | 801.3±77.5 | 1152.7±149 |
| **C57BL/6J** | 5 | 67 | 356.3±34.0 | 2.4±1.1 | 902.2±110.9 | 1165.2±114.8 |
| **BXD40 /TyJ** | 9 | 62 | 321.5±39.2 | 2.7±0.8 | 962.1±87.5 | 1184.8±116.6 |
| **BXD38/TyJ** | 4 | 67 | 424.9±50.0 | 3±1 | 966.8±103.1 | 1210.5±63.2 |
| **BXD75/RwwJ** | 5 | 65 | 242.8±47.8 | 3.5±1.2 | 1090.8±122.8 | 1318±120.3 |
| **DBA/2J** | 8 | 63 | 612.5±48.8 | 4.5±0.8 | 1125.5±66.4 | 1298.1±49.2 |
| **BXD31/TyJ** | 4 | 61 | 511.4±67.2 | 6±1 | 1283.7±152.9 | 1519.3±216.7 |
| **BXD29 -Tlr4lps-2J/J** | 4 | 65 | 759.8 ± 79.2 | 12.6±0.6 | 2025.5±223.3 | 2386.8±162.6 |

\*: Ages of mice at the initial regeneration treatment (Day 0)