CLAIMS

1. Use of an expanded stem cell population in the manufacture of a medicament for treating a disease or disorder associated with neuronal cell loss in a brain, wherein the use comprises:

expanding at least one neural stem cell isolated from spinal cord tissue of a human to form the expanded stem cell population and wherein,

a therapeutically effective amount of the expanded stem cell population is to be introduced to at least one area of the brain of a subject.

2. The use of claim 1 wherein the expanded stem cell population differentiates into neurons that integrate *in vivo* into the brain of the subject.

3. The use of claim 1, wherein the disease or disorder is caused by cerebral ischemia, hemorrhage, and trauma.

4. The use of claim 3, wherein the disease or disorder involves paralysis, speech impairment, loss of memory, or reasoning ability.

5. The use of claim 3, wherein the disease or disorder involves motor dysfunction or cognitive deficit.

6. The use of claim 1, wherein the human has a gestational age of about 5 to about 20 weeks.

7. The use of claim 1, wherein expanding the at least one neural stem cell includes culturing the neural stem cell in absence of serum.

8. The use of claim 1, wherein expanding the at least one neural stem cell includes exposing the at least one neural stem cell to at least one growth factor.

9. The use of 8, wherein the growth factor is selected from the group consisting of bFGF, EGF, TGF-alpha, aFGF and combinations thereof.