CLAIMS

1. A liquid pharmaceutical formulation, suitable for lyophilization, comprising:

- nerve growth factor (NGF) at a concentration between 5 µg/ml and 300 µg/ml, preferably between 10 µg/ml and 50 µg/ml, more preferably between 15 µg/ml and 25 µg/ml;

- at least one cryoprotectant agent at a concentration between 30 mg/ml and 60 mg/ml, preferably between 40 mg/ml and 55 mg/ml;

- at least one bulking agent at a concentration between 5 mg/ml and 20 mg/ml, preferably between 10 mg/ml and 15 mg/ml;

– at least one antioxidant at a concentration between 0.005 mg/ml and 0.020 mg/ml, preferably between 0.008 mg/ml and 0.015 mg/ml;

- at least one poloxamer at a concentration of at least 0.25 mg/ml, preferably between 1 mg/ml and 4 mg/ml;

- at least one buffer agent in an amount sufficient to maintain the pH of the formulation comprised between 6.5 to 8, and

- water.

2. The liquid pharmaceutical formulation according to claim 1, wherein said nerve growth factor (NGF) is human nerve growth factor (hNGF), preferably having the amino acid sequence of SEQ. ID NO.1 or SEQ ID NO.2.

3. The liquid pharmaceutical formulation according to claim 1 or 2, wherein said at least one cryoprotectant agent is selected from fructose, glucose, mannose, sorbose, xylose, maltose, lactose, sucrose, dextran and trehalose or a mixture thereof, preferably trehalose.

4. The liquid pharmaceutical formulation according to any one of claims 1-3, wherein said at least one bulking agent is selected from mannitol, sorbitol, inositol, dulcitol, xylitol, arabitol, or a mixture thereof, preferably mannitol.

5. The liquid pharmaceutical formulation according to any one of claims 1-4, said at least one antioxidant is selected from L-methionine and cysteine, preferably L-methionine,

6. The liquid pharmaceutical formulation according to any one of claims 1-5, said at least one poloxamer is Poloxamer 188.

7. The liquid pharmaceutical formulation according to any one of claims 1-6, comprising:

- said nerve growth factor at a concentration between 10 µg/ml and 50 µg/ml, preferably between 15 µg/ml and 25 µg/ml;

- said trehalose at a concentration between 40 mg/ml and 55 mg/ml;

- said mannitol at a concentration between 10 mg/ml and 15 mg/ml;

– said L-methionine at a concentration between 0.008 mg/ml and 0.015 mg/ml;

- said Poloxamer 188 at a concentration between 1 mg/ml and 4 mg/ml;

- said buffer agent in an amount sufficient to maintain the pH of the formulation comprised between 6.5 to 8, and

- water.

8. A method for preparing a nerve growth factor (NGF) formulation in form of powder, comprising the step of: lyophilizing said liquid pharmaceutical formulation according to any one of claims 1-7, to obtain said nerve growth factor (NGF) formulation in form of powder.

9. A pharmaceutical formulation comprising nerve growth factor (NGF), in form of powder, obtained by said method according to claim 8.

10. Use of the liquid pharmaceutical formulation, suitable for lyophilization, according to any one of claims 1-7, or said pharmaceutical formulation comprising nerve growth factor (NGF), in form of powder according to claim 9, in the manufacture of a medicament for the treatment of a nerve injury.