CLAIMS

1. A method for producing a sustained drug release sheet for treating nerve injury , the sheet comprising a non-woven fabric that is formed from nanofibers containing a drug and a biocompatible polymer, the drug being selected from vitamin B12 and an extract from inflamed skins of rabbits inoculated with vaccinia virus, the method comprising the following steps (1) and (2):

(1) preparing a solution containing the drug, the biocompatible polymer and a solvent; and

(2) subjecting the solution to spinning by an electrospinning method to form a non-woven fabric.

2. A method for producing a sustained drug release sheet for treating nerve injury, the sheet comprising a non-woven fabric that is formed from nanofibers containing a drug and a biocompatible polymer, the drug being selected from vitamin B12 and an extract from inflamed skins of rabbits inoculated with vaccinia virus, the method comprising the following steps (1) and (2):

(1) preparing a solution containing the drug, the biocompatible polymer, a solvent and hyaluronic acid; and

(2) subjecting the solution to spinning by an electrospinning method to form a non-woven fabric.

3. A method for producing a sustained drug release sheet for treating nerve injury, the sheet comprising a non-woven fabric that is formed from nanofibers containing a drug and a biocompatible polymer, the drug being selected from vitamin B12 and an extract from inflamed skins of rabbits inoculated with vaccinia virus, the method comprising the following steps (1), (2) and (3):

(1) preparing a solution containing the drug, the biocompatible polymer, a solvent and hyaluronic acid;

(2) subjecting the solution to spinning by an electrospinning method to form a non-woven fabric; and

(3) coating the non-woven fabric with hyaluronic acid.

4. The production method according to any one of claims 1 to 3, wherein the electrospinning method is performed at a voltage of 10 to 30 kV.

5. The production method according to any one of claims 1 to 4, wherein the electrospinning method is performed at a flow rate of 0.1 to 1 mL/h.

6. The production method according to any one of claims 1 to 5, wherein the biocompatible polymer is a biodegradable aliphatic polyester or a polyacrylamide derivative.

7. The production method according to claim 6, wherein the biodegradable aliphatic polyester is selected from the group consisting of polycaprolactone or a copolymer thereof, polylactic acid or a copolymer thereof, polyglycolic acid or a copolymer thereof, and mixtures of these components.

8. The production method according to claim 6, wherein the polyacrylamide derivative is selected from the group consisting of poly(N-isopropylacrylamide) or a copolymer thereof, poly(2-hydroxyethylmethacrylamide) or a copolymer thereof, a copolymer of N-isopropylacrylamide and 2-hydroxyethylmethacrylamide, and mixtures of these components.

9. The production method according to any one of claims 1 to 8, wherein the vitamin B12 is methylcobalamin.

10. The production method according to any one of claims 1 to 9, wherein the nerve injury is discontinuity nerve injury or continuity nerve injury to peripheral nerves.

11. The production method according to claim 10, wherein the continuity nerve injury is entrapment neuropathy.

12. The production method according to any one of claims 1 to 11, wherein the weight of the sheet is 1 mg/cm^2 to 50 mg/cm^2.

13. The production method according to any one of claims 1 to 12, wherein the sheet is implanted into the periphery of a nerve injury site upon use.

14. The production method according to any one of claims 1 to 13, wherein the nerve injury treatment is realized through acceleration of nerve regeneration.