CLAIMS

1. An injectable hydrogel including:
    - oxidized nanocrystalline cellulose,
    - gelatine peptide chains,

wherein the oxidized nanocrystalline cellulose and the gelatine peptide chains are cross-linked.

2. The injectable hydrogel of the previous claim, wherein the oxidized nanocrystalline cellulose and the gelatine peptide chains are cross-linked by imine moieties.

3. The injectable hydrogel of anyone of the previous claims, wherein the gelatine peptide chains have a concentration of 1.0 to 2.5 weight/volume % before cross-linking and/or the oxidized nanocrystalline cellulose has a concentration of 0.1 to 0.5 weight/volume % before cross-linking.

4. The injectable hydrogel of anyone of the previous claims, wherein the injectable hydrogel includes 0.5 to 2.5 weight/volume % of cross-linked oxidized nanocrystalline cellulose and gelatine peptide chains.

5. The injectable hydrogel of anyone of the previous claims, wherein the injectable hydrogel has an elastic modulus of 10 to 220 Pa from 0.1 to 10.0 Hz.

6. The injectable hydrogel of anyone of the previous claims, wherein the injectable hydrogel has a loss modulus below 10 Pa from 0.1 to 10.0 Hz.

7. The injectable hydrogel of any one of the previous claims, wherein the injectable hydrogel has a ratio of loss modulus to elastic modulus (tan δ) is above 10^5 at 0.1 Hz.

8. The injectable hydrogel of any one of the previous claims, wherein the complex viscosity of the injectable hydrogel is below 1.0 mPa.s from 0.1 to 10.0 Hz.

9. The injectable hydrogel of anyone of the previous claims, wherein the injectable hydrogel has a cross-linking degree of 25 to 60%, preferably 38 to 49%.

10. A method to prepare an injectable hydrogel according to any of the previous claims, the method including the steps of:
    - Diluting oxidized nanocrystalline cellulose in apyrogenic water
    - Adding gelatine peptide chains to the diluted oxidized nanocrystalline cellulose at room temperature
    - Reacting the gelatine peptide chains and the oxidized nanocrystalline cellulose.

11. The method to prepare an injectable hydrogel according to claim 9, wherein the reacting step is performed for 10 to 25 hours, preferably at a temperature of 15 to 25 °C.

12. The method to prepare an injectable hydrogel according to claim 9 or claim 10, wherein the reacting step is performed at a pH of more than 7 and at most 8.

13. The method to prepare an injectable hydrogel according to any one of claims 9 to 11, further including a step of diluting the gelatine peptide

chains in water at 37 °C and the cooling down of the diluted gelatine peptide chains at room temperature.

14. Use of the injectable hydrogel according to anyone of claims 1 to 9 in the manufacture of a medicament to cure or relieve the symptoms of osteoarthritis.

15. A syringe containing a hydrogel according to anyone of claims 1 to 9.