CLAIMS

1. An use of a hydrogel-forming polymer in the manufacture of a medicament (but not comprising mitomycin C) for the treatment of human urethral stricture,

wherein the hydrogel-forming polymer is for application to the internal surface of the urethra after the urethral stricture is incised, and

wherein a hydrogel-forming polymer has a storage elastic modulus at 10°C of 50 Pa or less and at 25°C and 37°C of 100 Pa or more, and

wherein the hydrogel-forming polymer is formed by bonding a plurality of blocks having a cloud point selected from the group consisting of copolymer of polypropylene oxide and other alkylene oxides, copolymer of poly N-substituted acrylamide derivative, poly N-substituted methacrylamide derivative, N-substituted acrylamide derivative or N-substituted methacrylamide derivative, polyvinyl methyl ether and partially acetylated polyvinyl alcohol.

2. The use according to claim 1, the hydrophilic block is selected from the group consisting of methylcellulose, dextran, polyethylene oxide, polyvinyl alcohol, poly N-vinyl pyrrolidone, polyvinyl pyridine, polyacrylamide, polymethacrylamide, poly N-methylacrylamide, polyhydroxymethyl acrylate, polyacrylic acid, polymethacrylic acid, polyvinyl sulfonic acid, polystyrene sulfonic acid, poly N, N-dimethylaminoethyl methacrylate, poly N, N-diethylaminoedimethylaminopropylacrylamide and salts thereof.

3. The use according to claim 1 or 2, wherein the hydrogel-forming polymer is formed by bonding poly-N-isopropylacrylamide and polyethylene oxide.

4. The use according to any one of claims 1 to 3, wherein the treatment with the therapeutic agent for human urethral stenosis comprises an operation of cooling the therapeutic agent to a temperature of 10°C or lower and injecting and placing the agent on the inner surface of the urethra.

5. The use according to claim 1 to 4, wherein the inner surface of the urethra includes a site incised by a transurethral endoscopic procedure.

6. The use according to any one of claims 1 to 5, wherein the therapeutic agent for urethral stricture includes human cells.

7. The use according to claim 6, wherein the human cell is an autologous cell.

8. The use according to claim 6 or 7, wherein the human cell is a human epithelial cell.

9. The use according to claim 8, wherein the human epithelial cells are human mucosal epithelial cells.

10. The use according to claim 9, wherein the human mucosal epithelial cells are human oral mucosal epithelial cells or human urethral mucosal epithelial cells.

11. The use according to any one of claims 8 to 10, wherein the human cell is a differentiated cell or is derived from a stem cell.

12. The use according to claim 11, wherein the stem cell is an embryonic stem cell, an iPS cell, or a mesenchymal stem cell.

13. The use according to any one of claims 6 to 12, wherein the therapeutic agent is applied after being mixed with human cells immediately before application, or applied after being mixed and cultured with the therapeutic agent.

14. The use according to any one of claims 1 to 13, further comprising a cytokine.

15. A method for manufacturing the therapeutic agent according to any one of claims 7 to 14, wherein the storage elastic modulus at 10°C is 50 Pa or less and the storage elastic modulus at 25°C and 37°C is 100 Pa or more, comprising culturing human cells in the hydrogel-forming polymer,

wherein the hydrogel-forming polymer is formed by bonding a plurality of blocks having a cloud point selected from the group consisting of copolymer of polypropylene oxide and other alkylene oxides, copolymer of poly N-substituted acrylamide derivative, poly N-substituted methacrylamide derivative, N-substituted acrylamide derivative or N-substituted methacrylamide derivative, polyvinyl methyl ether and partially acetylated polyvinyl alcohol.

16. The method of claim 15, wherein the human cells comprise human epithelial cells.

17. The method according to claim 16, wherein the human epithelial cells are human mucosal epithelial cells.

18. The method according to any one of claims 15 to 17, wherein the human cell is a differentiated cell or is derived from a stem cell.

19. The method according to any one of claims 15 to 18, wherein the culturing is performed in a hydrogel-forming polymer containing autologous serum.