

2. The method of claim 1, wherein the polymer system further comprises a biologically-active agent.

3. The method of claim 1, wherein the thermoplastic polymer is selected from the group consisting of polylactides, polyglycolides, polycaprolactones, polydioxanones, polycarbonates, polyhydroxybutyrates, polyalkylene oxalates, polyanhydrides, polyamides, polyesteramides, polyurethanes, polyacetates, polyketals, polyorthocarbonates, polyphosphazenes, polyhydroxyvalerates, polyalkylene succinates, poly(malic acid), poly (amino acids), polyvinylpyrrolidone, polyethylene glycol, polyhydroxycellulose, polyorthoesters, and combinations thereof.

4. The method of claim 1, wherein the thermoplastic polymer is selected from the group consisting of polylactides, polycaprolactones and glycolide copolymers thereof.

5. The method of claim 1, wherein the solvent is selected from the group consisting of N-methyl-2-pyrrolidone, 2-pyrrolidone, ethanol, propylene glycol, acetone, ethyl acetate, methyl acetate, methyl ethyl ketone, dimethylformamide, dimethyl sulfoxide, tetrahydrofuran, caprolactam, decylmethylsulfoxide, oleic acid, 1-dodecylazacycloheptan-2-one, and combinations thereof.

6. The method of claim 1, wherein the solvent is selected from the group consisting of N-methyl-2-pyrrolidone, 2-pyrrolidone, dimethyl sulfoxide, acetone, and combinations thereof.

7. A method of encapsulating a prosthetic device, comprising:

(a) applying a polymer system to the prosthetic device, wherein the polymer system comprises an effective amount of a water-insoluble biodegradable thermoplastic polymer, and a biocompatible, water-soluble organic solvent which is capable of dissolving the thermoplastic polymer and capable of dissipating or diffusing into a body fluid; and

(b) implanting the prosthesis in a patient wherein the polymer system forms a solid biodegradable matrix that encapsulates the prosthetic device, wherein the proportion of polymer in solvent and the polymer molecular weight are effective to provide said dissipating or diffusing function.

8. The method of claim 7, wherein the polymer system further comprises a biologically-active agent.

9. The method of claim 7, wherein the thermoplastic polymer is selected from the group consisting of polylactides, polyglycolides, polycaprolactones, polydioxanones, polycarbonates, polyhydroxybutyrates,

polyalkylene oxalates, polyanhydrides, polyamides, polyesteramides, polyurethanes, polyacetates, polyketals, polyorthocarbonates, polyphosphazenes, polyhydroxyvalerates, polyalkylene succinates, poly(malic acid), poly (amino acids), polyvinylpyrrolidone, polyethylene glycol, polyhydroxycellulose, polyorthoesters, and combinations thereof.

10. The method of claim 7, wherein the thermoplastic polymer is selected from the group consisting of polylactides, polycaprolactones and glycolide copolymers thereof.

11. The method of claim 7, wherein the solvent is selected from the group consisting of N-methyl-2-pyrrolidone, 2-pyrrolidone, ethanol, propylene glycol, acetone, ethyl acetate, methyl acetate, methyl ethyl ketone, dimethylformamide, dimethyl sulfoxide, tetrahydrofuran, caprolactam, decylmethylsulfoxide, oleic acid, 1-dodecylazacycloheptan-2-one, and combinations thereof.

12. The method of claim 7, wherein the solvent is selected from the group consisting of N-methyl-2-pyrrolidone, 2-pyrrolidone, dimethyl sulfoxide acetone, and combinations thereof.

13. An implant comprising:

(a) a polymer system comprising an effective amount of a water-insoluble biodegradable thermoplastic polymer and a biocompatible, water-soluble organic solvent which is capable of dissolving the thermoplastic polymer and capable of dissipating or diffusing into a body fluid; and

(b) the implant wherein the polymer system forms a solid biodegradable matrix which adheres the implant to the tissue, wherein the proportion of polymer in solvent and the polymer molecular weight are effective to provide said dissipating or diffusing function.

14. An encapsulated prosthetic device, comprising:

(a) a polymer system comprising an effective amount of a water-insoluble biodegradable thermoplastic polymer, and a biocompatible, water-soluble organic solvent which is capable of dissolving the thermoplastic polymer and capable of dissipating or diffusing into a body fluid; and

(b) a prosthetic device wherein the polymer system forms a solid biodegradable matrix that encapsulates the prosthetic device, wherein the proportion of polymer in solvent and the polymer molecular weight are effective to provide said dissipating or diffusing function.

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