leuprolide acetate during *in vitro* and *in vivo* release. This property is quite counter intuitive and unexpected. This property can be advantageously used to tailor and fine tune the formulation to prepare better and improved products.

[0016a] In one aspect, the present invention provides a pharmaceutical composition comprising: a) a combination of a strong acid salt and a weak acid salt of a LHRH agonist selected from a group consisting of leuprolide, triptorelin, and goserelin, wherein the molar ratio of (strong acid anion + weak acid anion) to the LHRH agonist is ≤ 2:1, the molar ratio of the strong acid anion to the LHRH agonist is from 1:1 to less than 2:1, the strong acid is selected from the group consisting of methanesulfonic acid and HCl, and the weak acid is selected from the group consisting of acetic acid and formic acid; b) a biodegradable polymer selected from the group of a homopolymer polylactide or polylatic acid, and a copolymer poly (lactic acid-co-glycolic acid) or poly (lactide-co-glycolide), wherein the ratio of lactide:glycolide (or lactic acid:glycolic acid) of the copolymer is from 50:50 to less than 100:0; and c) N-methyl-2-pyrrolidone (NMP), wherein the pharmaceutical composition having a selected release duration ranging from one month to 6 months can be prepared by varying the ratios of a strong acid salt and a weak acid salt of the LHRH agonist .

[0016b] In another aspect, the present invention provides a pharmaceutical composition comprising: a) a combination of leuprolide mesylate and leuprolide acetate, wherein the molar ratio of (mesylate + acetate) to leuprolide is ≤ 2:1 and the molar ratio of mesylate anion to leuprolide is from 1:1 to less than 2:1; b) a biodegradable polymer selected from the group of a homopolymer polylactide or polylatic acid, and a copolymer poly (lactic acid-co-glycolic acid) or poly (lactide-co-glycolide), wherein the ratio of lactide:glycolide (or lactic acid:glycolic acid) of the copolymer is from 50:50 to less than 100:0; and c) N-methyl-2-pyrrolidone (NMP); wherein the pharmaceutical composition

having a selected release duration ranging from one month to 6 months can be prepared by varying the ratios of mesylate to leuprolide.

[0016c] In another aspect, the present invention provides a pharmaceutical composition comprising: a) a combination of leuprolide mesylate and leuprolide formate, wherein the

What is claimed is:

1. A pharmaceutical composition comprising:

    a) a combination of a strong acid salt and a weak acid salt of a LHRH agonist selected from a group consisting of leuprolide, triptorelin, and goserelin, wherein the molar ratio of (strong acid anion + weak acid anion) to the LHRH agonist is ≤ 2:1, the molar ratio of the strong acid anion to the LHRH agonist is from 1:1 to less than 2:1, the strong acid is selected from the group consisting of methanesulfonic acid and HCl, and the weak acid is selected from the group consisting of acetic acid and formic acid;

    b) a biodegradable polymer selected from the group of a homopolymer polylactide or polylatic acid, and a copolymer poly (lactic acid-co-glycolic acid) or poly (lactide-co-glycolide), wherein the ratio of lactide:glycolide (or lactic acid:glycolic acid) of the copolymer is from 50:50 to less than 100:0; and

    c) N-methyl-2-pyrrolidone (NMP);

    wherein the pharmaceutical composition having a selected release duration ranging from one month to 6 months can be prepared by varying the ratios of a strong acid salt and a weak acid salt of the LHRH agonist.

2. The pharmaceutical composition of claim 1 wherein the LHRH agonist is leuprolide.

3. The pharmaceutical composition of claim 1 wherein the strong acid is methanesulfonic acid.

4. The pharmaceutical composition of claim 1 wherein the weak acid is acetic acid.

5. A pharmaceutical composition comprising:

   a) a combination of leuprolide mesylate and leuprolide acetate, wherein the molar ratio of (mesylate + acetate) to leuprolide is ≤ 2:1 and the molar ratio of mesylate anion to leuprolide is from 1:1 to less than 2:1;

   b) a biodegradable polymer selected from the group of a homopolymer polylactide or polylatic acid, and a copolymer poly (lactic acid-co-glycolic acid) or poly (lactide-co-glycolide), wherein the ratio of lactide:glycolide (or lactic acid:glycolic acid) of the copolymer is from 50:50 to less than 100:0; and

   c) N-methyl-2-pyrrolidone (NMP);

   wherein the pharmaceutical composition having a selected release duration ranging from one month to 6 months can be prepared by varying the ratios of mesylate to leuprolide.

6. A pharmaceutical composition comprising:

   a) a combination of leuprolide mesylate and leuprolide formate, wherein the molar ratio of (mesylate + formate) to leuprolide is ≤ 2:1 and the molar ratio of mesylate anion to leuprolide is from 1:1 to less than 2:1;

b) a biodegradable polymer selected from the group of a homopolymer polylactide or polylatic acid, and a copolymer poly (lactic acid-co-glycolic acid) or poly (lactide-co-glycolide), wherein the ratio of lactide:glycolide (or lactic acid:glycolic acid) of the copolymer is from 50:50 to less than 100:0; and

c) N-methyl-2-pyrrolidone (NMP);

wherein the pharmaceutical composition having a selected release duration ranging from one month to 6 months can be prepared by varying the ratios of mesylate to leuprolide.

7. The pharmaceutical composition of claim 5 or 6 wherein the molar ratio of mesylate anion to leuprolide is from 1.4:1 to less than 2:1.

8. The pharmaceutical composition of claim 5 or 6 wherein the molar ratio of mesylate anion to leuprolide is from 1.5:1 to 1.8:1.

9. The pharmaceutical composition of any of claims 1, 5 and 6 wherein the biodegradable polymer has at least one hydroxyl terminal group.

10. The pharmaceutical composition of any of claims 1, 5 and 6 wherein the biodegradable polymer has 30 – 60% of the composition by weight, has an average molecular weight of 8,000 to 50,000, and has a polydispersity less than or equals to 2.5.