CLAIMS

1. A polymeric eye insert, the insert comprising: a biodegradable polymer and one or more mucoadhesive polymers that are biocompatible with the ocular surface and tear film of the eye; wherein the biodegradable polymer increases a dissolution time of the polymeric eye insert by at least 15 percent comparing to the control polymeric eye insert which is the same polymeric eye insert except the biodegradable polymer is not present.

2. The polymeric eye insert of claim 1, wherein the biodegradable polymer is PLGA or PLA.

3. The polymeric eye insert of claim 2, wherein the biodegradable polymer is PLGA.

4. The polymeric eye insert of claim 1, wherein the one or more mucoadhesive polymers are selected from the group consisting of: hyaluronic acid or salts thereof, hydroxypropylmethylcellulose (HPMC), methylcellulose, tamarind seed polysaccharide (TSP), guar, hydroxypropyl guar (HP guar), scleroglucan poloxamer, poly(galacturonic) acid, sodium alginate, pectin, xanthan gum, xyloglucan gum, chitosan, sodium carboxymethylcellulose, polyvinyl alcohol, polyvinyl pyrrolidine, carbomer, polyacrylic acid and combinations thereof.

5. The polymeric eye insert of claim 1, wherein the biodegradable polymer is present in an amount of from 0.5% to 10% w/w.

6. The polymeric eye insert of claim 4, wherein the one or more mucoadhesive polymers are HP guar, hyaluronic acid, sodium hyaluronate or polyvinyl pyrrolidine.

7. The polymeric eye insert of claim 1, wherein the one or more mucoadhesive polymers are present in an amount of from about 50 % to about 90% w/w, about 60% to about 85% w/w, about 70 % to about 85% w/w, or about 80% to about 90% w/w of the polymeric eye insert, provided that the sum of the % w/w of mucoadhesive polymers and % w/w of the biodegradable polymer and other components not listed above is 100 %w/w.

8. The polymeric eye insert of claim 1, further comprising a plasticizer or softener.

9. The polymeric eye insert of claim 8, wherein the plasticizer or softener is selected from the group consisting of: polyethylene glycol (PEG), a PEG derivative, water, Vitamin E, and triethyl citrate.

10. The polymeric eye insert of claim 8, wherein the plasticizer or softener is present in an amount of from about 2 % to about 25% w/w, about 5% to about 20% w/w, about 5 % to about 15% w/w, or about 5% to about 10% w/w of the polymeric eye insert, provided that the sum of the % w/w of mucoadhesive polymers and % w/w of the biodegradable polymer, % w/w of the the plasticizer or softener and other components not listed above is 100 %w/w.

11. The polymeric eye insert of claim 9, wherein the plasticizer or softener is PEG.

12. The polymeric eye insert of any one of the preceding claims, wherein the control insert is comprised of approximately 38.5% w/w HP guar, approximately 9.5% w/w PVP, approximately 38.5% w/w sodium hyaluronate, 5 % w/w PLGA, and approximately 9.5% PEG.

13. The polymeric eye insert of claim 1, further comprising 1-5000 ppm alpha-2 adrenergic receptor agonist.

14. The polymer eye insert of claim 1, further comprising 10-100 ppm Menthone Glycerin Acetal.

15. The polymeric eye insert of claim 1, wherein the insert shape is a film, a rod, a sphere, an annulus, or an irregular shape having a maximum size in any single dimension of 5-6 mm.