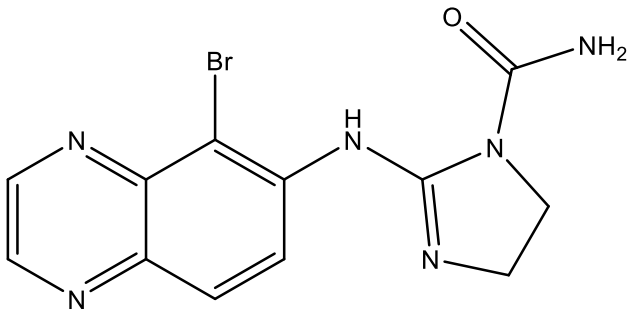
WHAT IS CLAIMED IS:

1. An ophthalmic formulation comprising about 2.75 wt% carbachol, or a pharmaceutically acceptable salt thereof, about 0.1 wt% brimonidine, or a pharmaceutically acceptable salt thereof, about 0.2 wt% hydroxypropylmethyl cellulose (HPMC), and from about 0.05 wt % to about 1 wt % of one or more buffers, wherein the pH of the formulation is from about 7 to about 7.6, and wherein the formulation comprises less than 5 wt % impurity A after storage for about 5 months, wherein impurity A has the structure:



,

or a tautomer thereof, wherein the concentration of impurity A is measured by high-performance liquid chromatography (HPLC) in pH 3.5 potassium octane sulfonate buffer:acetonitrile (64:36 v/v) and impurity A has a relative retention time (RRT) of about 0.9 relative to brimonidine.

2. The ophthalmic formulation of claim 1, wherein the formulation is stored at 40 ºC and not more than (NMT) 25% relative humidity for about 5 months.

3. The ophthalmic formulation of claim 1, wherein the formulation comprises less than 0.25 wt % impurity A.

4. The ophthalmic formulation of claim 3, wherein the formulation comprises less than 0.1 wt % impurity A.

5. The ophthalmic formulation of claim 1, wherein the formulation comprises less than 1 wt % impurity A after storage at 25 ºC and 40% relative humidity for about 5 months.

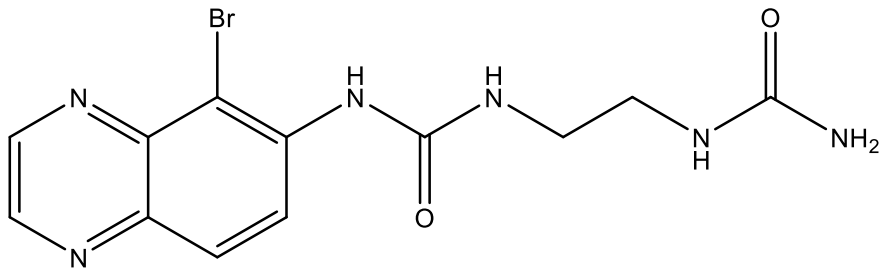
6. The ophthalmic formulation of claim 1, wherein the one or more buffers is a phosphate buffer.

7. The ophthalmic formulation of claim 6, wherein the phosphate buffer comprises sodium phosphate monobasic monohydrate and sodium phosphate dibasic heptahydrate.

8. The ophthalmic formulation of any one of claims 1-7, wherein the formulation does not contain benzalkonium chloride.

9. The ophthalmic formulation of any one of claims 1-8, wherein the formulation does not contain EDTA.

10. The ophthalmic formulation of any one of claims 1-9, further comprising impurity B, wherein the formulation comprises less than 2 wt % impurity B after storage for about 5 months, wherein impurity B has the structure:



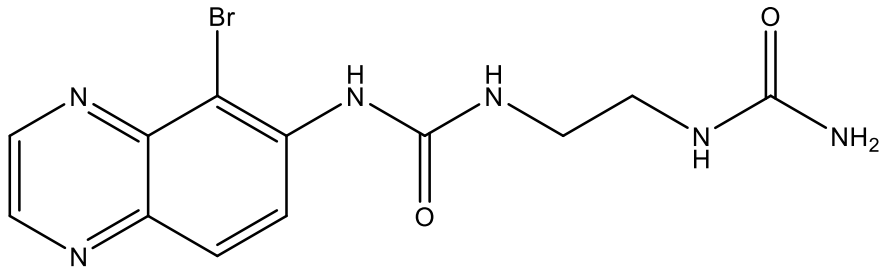

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or a tautomer thereof, wherein the concentration of impurity B is measured by high-performance liquid chromatography (HPLC) in pH 3.5 potassium octane sulfonate buffer:acetonitrile (64:36 v/v) and impurity B has a relative retention time (RRT) of about 0.67 relative to brimonidine.

11. The ophthalmic formulation of claim 10, wherein the formulation comprises less than 0.1 wt % impurity B after storage for about 5 months.

12. The ophthalmic formulation of claim 10, wherein the formulation comprises less than 2 wt % impurity B after storage at 40 ºC and NMT 25% relative humidity for about 5 months.

13. An ophthalmic formulation comprising about 2.75 wt % carbachol, about 0.1 wt % brimonidine, about 0.2 wt % HPMC, and from about 0.05 wt % to about 1 wt % of one or more buffers, wherein the pH is about 7.4, and wherein the formulation comprises less than about 2 wt % impurity B after storage for about 5 months, wherein impurity B has the structure:

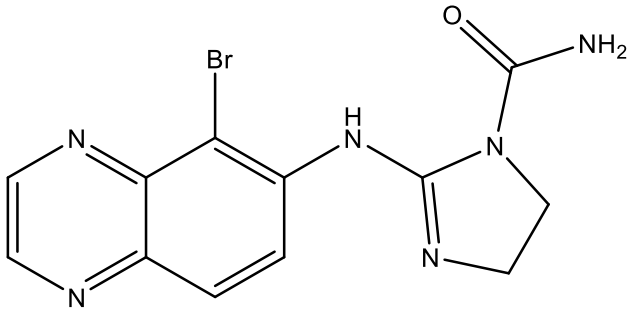



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or a tautomer thereof, wherein the concentration of impurity B is measured by high-performance liquid chromatography (HPLC) in pH 3.5 potassium octane sulfonate buffer:acetonitrile (64:36 v/v) and impurity B has a relative retention time (RRT) of about 0.67 relative to brimonidine.

14. The ophthalmic formulation of claim 13, wherein the ophthalmic formulation does not contain benzalkonium chloride.

15. The ophthalmic formulation of claim 13 or 14, wherein the formulation does not contain impurity A, wherein impurity A has the structure:




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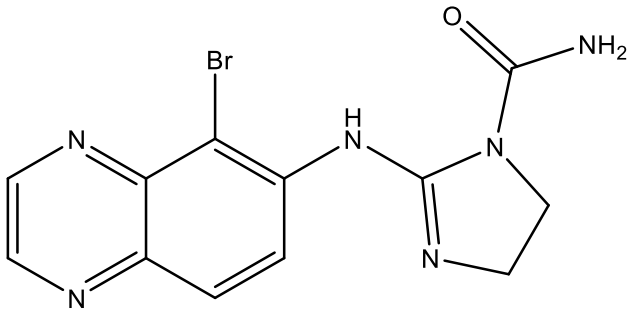
or a tautomer thereof, wherein the concentration of impurity A is measured by high-performance liquid chromatography (HPLC) in pH 3.5 potassium octane sulfonate buffer:acetonitrile (64:36 v/v) and impurity A has a relative retention time (RRT) of about 0.9 relative to brimonidine.

16. Use of the ophthalmic formulation of any one of claims 1-15 in the manufacture of a medicament for ameliorating or reducing presbyopia in a subject.

17. The use of claim 16, wherein the ophthalmic formulation is administered to both eyes of the subject.

18. The use of claim 16 or 17, wherein the amelioration or reduction of presbyopia is effective for at least 9 hours.

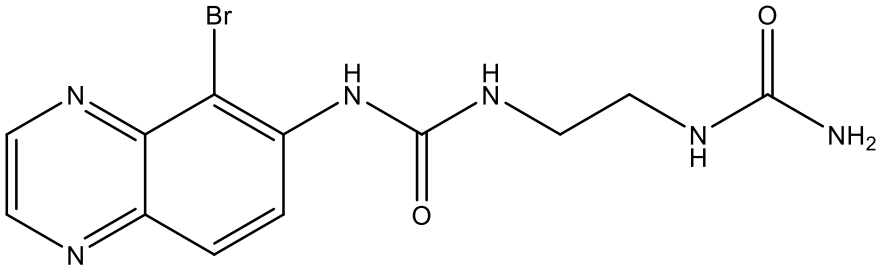
19. Impurity A, having the structure:




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or a tautomer, salt or solvate thereof.

20. Impurity B, having the structure:




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or a tautomer, salt or solvate thereof.