copolymer and a cationic acrylic copolymer. Also provided are methods of using the transdermal compositions and kits containing the transdermal compositions.

In a first aspect of the present disclosure, there is provided a transdermal composition, the composition comprising:

(A) a matrix comprising:

(i) a propynylaminoindan; and

(ii) a pressure sensitive adhesive ~~comprising~~consisting essentially of:

(a) an acrylate copolymer that lacks pendant functional groups; and

(b) a cationic acrylic copolymer; and

(B) a backing.

In a second aspect of the present disclosure, there is provided a use of a transdermal composition as defined above in the manufacture of a medicament for achieving a therapeutic flux of the propynylaminoindan over an extended period of time.

In a third aspect of the present disclosure, there is provided a kit comprising two or more transdermal compositions as defined above.

In a fourth aspect of the present disclosure, there is provided a transdermal composition as defined above for use in achieving a therapeutic flux of the propynylaminoindan over an extended period of time.

BRIEF DESCRIPTION OF THE FIGURES

Figure 1 shows a cross sectional view of an embodiment of the transdermal active agent formulation described herein.

Figures 2A to 2B provide graphs of flux as a function of time (middle point between the two sampling time points) for various formulations.

DETAILED DESCRIPTION

Propynylaminoindan (e.g., Rasagiline) transdermal compositions are provided. Aspects of the transdermal compositions include a matrix which includes the propynylaminoindan, a pressure sensitive adhesive that includes an acrylate copolymer and a cationic acrylic copolymer. Also provided are methods of using the transdermal compositions and kits containing the transdermal compositions.

WHAT IS CLAIMED IS:

1. A transdermal composition, the composition comprising:

(A) a matrix comprising:

(i) a propynylaminoindan; and

(ii) a pressure sensitive adhesive ~~comprising~~consisting essentially of:

(a) an acrylate copolymer that lacks pendant functional groups; and

(b) a cationic acrylic copolymer; and

(B) a backing.

2. The transdermal composition according to Claim 1, wherein the propynylaminoindan is rasagiline.

3. The transdermal composition according to Claim 2, wherein rasagiline is present as a free base.

4. The transdermal composition according to Claim 2, wherein the rasagiline is present as a salt.

5. The transdermal composition according to Claim 4, wherein the salt is rasagiline mesylate.

6. The transdermal composition according to Claim 5, wherein the pressure sensitive adhesive is ~~the same as or substantially the same as DuroTak® 87-9301~~a composition comprising an acrylate copolymer that lacks pendant functional groups in a solvent system comprising ethyl acetate and cyclohexane.

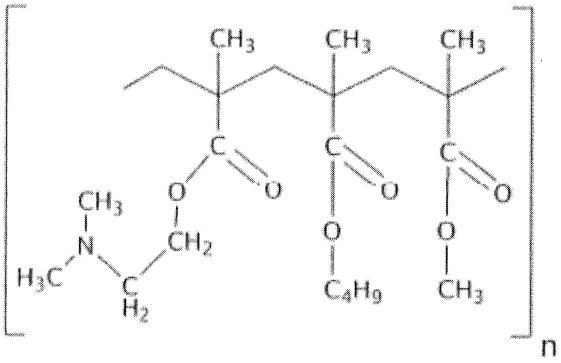
7. The transdermal composition according to Claim 5, wherein the pressure sensitive adhesive is ~~the same as or substantially the same as Gelva® 7883~~ an acrylate vinyl acetate that lacks –COOH functional groups.

8. The transdermal composition according to any of Claims 1 to 7, wherein the pressure sensitive adhesive is present in an amount ranging from 75 to 90% by weight of the matrix.

9. The transdermal composition according to any of Claims 1 to 8, wherein the cationic acrylic copolymer is an aminated methacrylate copolymer.

10. The transdermal composition according to Claim 9, wherein the aminated methacrylate copolymer is a copolymer of diethylaminoethyl methacrylate, butyl methacrylate and methyl methacrylate.

11. The transdermal composition according to Claim 10, wherein the aminated methacrylate copolymer is described by the formula:



~~12. The transdermal composition according to any of Claims 1 to 11, wherein the composition further comprises a second pressure sensitive adhesive comprising -COOH functionality.~~

~~13. The transdermal composition according to Claim 12, wherein the second pressure sensitive adhesive is present in an amount ranging from 2 to 10% by weight of the matrix.~~

~~14~~12. The transdermal composition according to any of the preceding claims, wherein the matrix comprises an enhancer.

~~15~~13. The transdermal composition according to any of the preceding claims, wherein the transdermal composition exhibits a therapeutic flux of the propynylaminoindan over an extended period of time.

~~16~~14. The transdermal composition according to any of the preceding claims, wherein the matrix has a single layer configuration.

~~17~~15. The transdermal composition according to any of the preceding claims, wherein the composition further comprises a release liner.

~~18~~16. The transdermal composition according to any of the preceding claims, wherein the composition is storage stable.

~~19~~17. Use of a transdermal composition according to any of Claims 1 to ~~18~~ 16 in the manufacture of a medicament for achieving a therapeutic flux of the propynylaminoindan over an extended period of time.

~~20~~18. A kit comprising two or more transdermal compositions according to any of Claims 1 to ~~18~~16.

~~21~~19. A transdermal composition according to any of Claims 1 to ~~18~~ 16 for use in achieving a therapeutic flux of the propynylaminoindan over an extended period of time.