CLAIMS

1. Use of a ticagrelor, an enantiomer thereof, or a pharmaceutically acceptable salt thereof, or a combination of ticagrelor, an enantiomer thereof, or a pharmaceutically acceptable salt thereof with a second agent in a weight ratio of 1:0.1 to 1:50, for the manufacture of a medicament for treating a human subject diagnosed with an autism spectrum disorder, an intellectual disability, epilepsy, an anxiety disorder, a mood disorder, a disorder of social interaction, irritability, aggression, self-injurious behavior, hyperactivity, inattention, Fragile X syndrome, or diagnosed with elevated TNFα, or diagnosed with elevated inflammatory cytokine marker of neuroinflammation, wherein the medicament is to be administered without administering antioxidants to the human subject.

2. The use of claim 1, comprising administering the ticagrelor or the combination orally or parenterally.

3. The use of claim 1, comprising administering less than 60, 40, 30, or 20 mg/day of the ticagrelor, enantiomer or pharmaceutically acceptable salt thereof.

4. The use of claim 1, comprising delivering the ticagrelor, enantiomer or pharmaceutically acceptable salt thereof such that a ticagrelor plasma level is sufficient to treat autism symptoms in a human subject.

5. The use of claim 4, wherein a ticagrelor plasma level of about 50-300 ng/mL is achieved in the human subject.

6. The use of claim 4, comprising delivering the ticagrelor, enantiomer or pharmaceutically acceptable salt thereof such that a ticagrelor plasma level sufficient to treat autism symptoms in a child or adult is maintained for at least 5 hours.

7. The use of claim 6, wherein the maintained ticagrelor plasma level is about 50-300 ng/mL.

8. The use of claim 1, wherein a ticagrelor plasma level of about 50-300 ng/mL is maintained

for at least 7 hours.

9. The use of claim 1, wherein a ticagrelor plasma level of about 80-200 ng/mL is maintained for at least 5 hours.

10. The use of claim 1, wherein a ticagrelor plasma level of about 80-200 ng/mL is maintained for at least 7 hours.

11. The use of claim 1, wherein the orally administering is via a solid orally disintegrating tablet (ODT) or a solid orally dissolving film (ODF) or a Self-microemulsifying drug delivery system (SMEDDS).

12. Use of a combination of ticagrelor, an enantiomer thereof, or a pharmaceutically acceptable salt thereof with a second agent in a weight ratio of 1:0.1 to 1:50, wherein the second agent is selected from the group consisting of a magnesium ion containing-compound, a zinc ion containing-compound, L-lysine or a salt thereof, L-arginine or a salt thereof, lecithin, or a combination thereof, for the manufacture of a medicament, for treating a human subject diagnosed with an autism spectrum disorder, an intellectual disability, epilepsy, an anxiety disorder, a mood disorder, a disorder of social interaction, irritability, aggression, self-injurious behavior, hyperactivity, inattention, Fragile X syndrome, or diagnosed with elevated TNFα, or diagnosed with elevated inflammatory cytokine marker of neuroinflammation.

13. The use of claim 12, comprising administering the ticagrelor or the combination orally.

14. The use of claim 12, wherein the second agent is a magnesium ion containing-compound.

15. The use of claim 12, wherein the second agent is a zinc ion containing-compound.

16. The use of claim 12, wherein the second agent is L-lysine or a salt thereof.

17. The use of claim 12, wherein the second agent is L-arginine or a salt thereof.

18. The use of claim 12, wherein the second agent is lecithin.

19. Use of ticagrelor, an enantiomer thereof, or a pharmaceutically acceptable salt thereof, or a combination of ticagrelor, an enantiomer thereof, or a pharmaceutically acceptable salt thereof with a second agent in a weight ratio of 1:0.1 to 1:50, wherein the second agent is selected from the group consisting of a magnesium ion containing-compound, a zinc ion containing-compound, L-lysine or a salt thereof, L-arginine or a salt thereof, lecithin, or a combination thereof, for the manufacture of a medicament, for treating a human subject diagnosed with an intellectual disability, irritability, aggression, self-injurious behavior, hyperactivity, inattention, Fragile X syndrome, or diagnosed with elevated TNFα, or diagnosed with elevated inflammatory cytokine marker of neuroinflammation.