

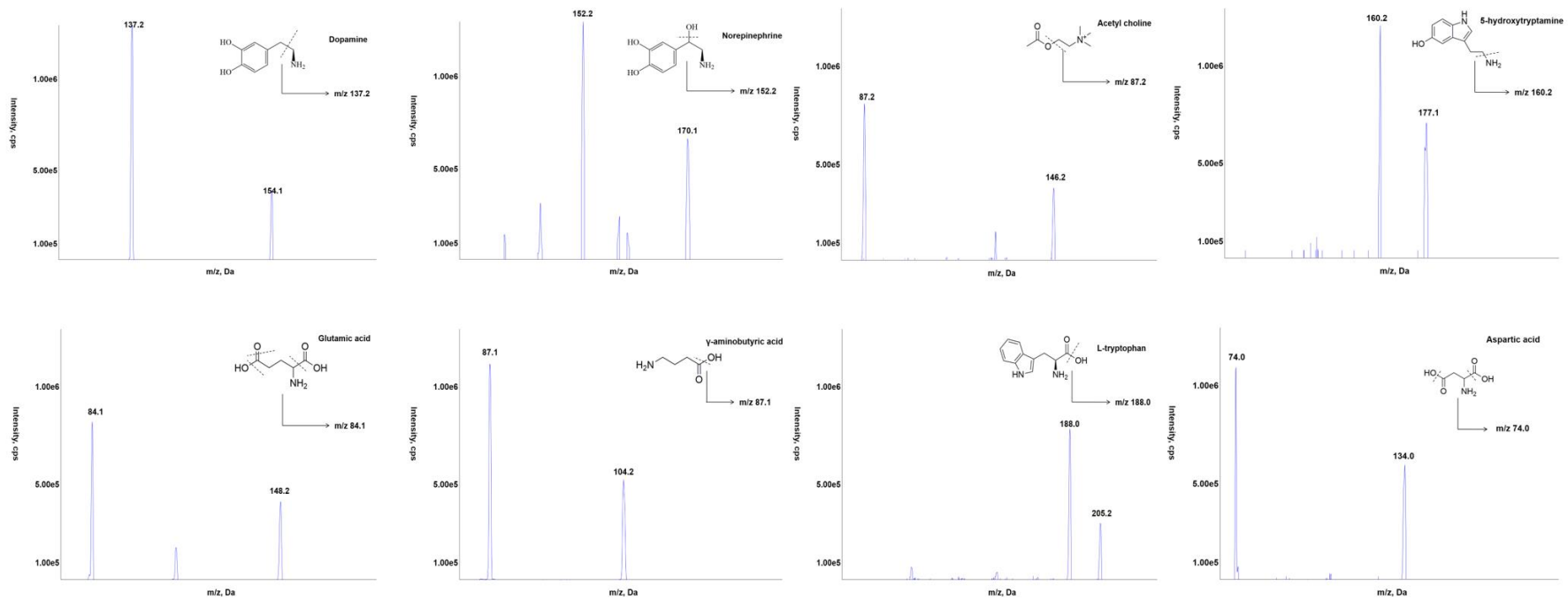
Supplementary Material

Rapid analysis of neurotransmitters in the brain tissue of Alzheimer's disease rats before and after oral administration of *Xanthoceras sorbifolia* Bunge by HPLC-ESI-MS/MS

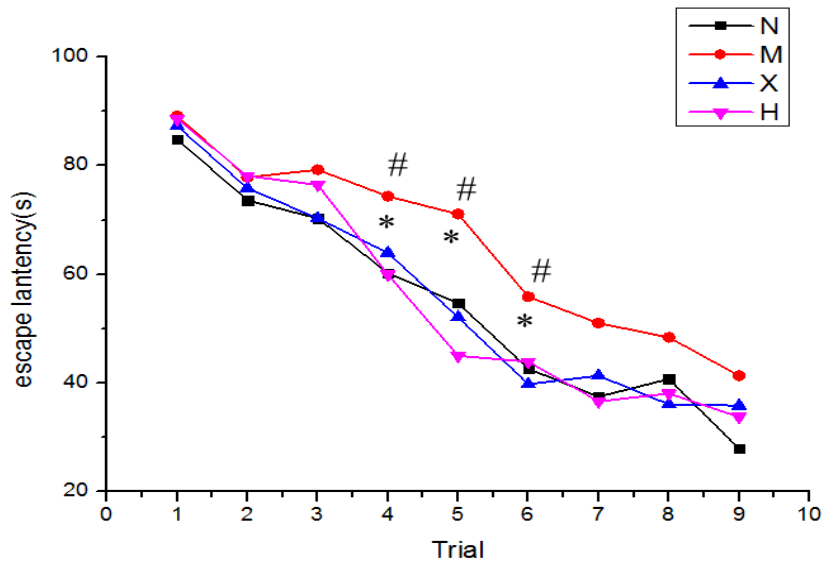
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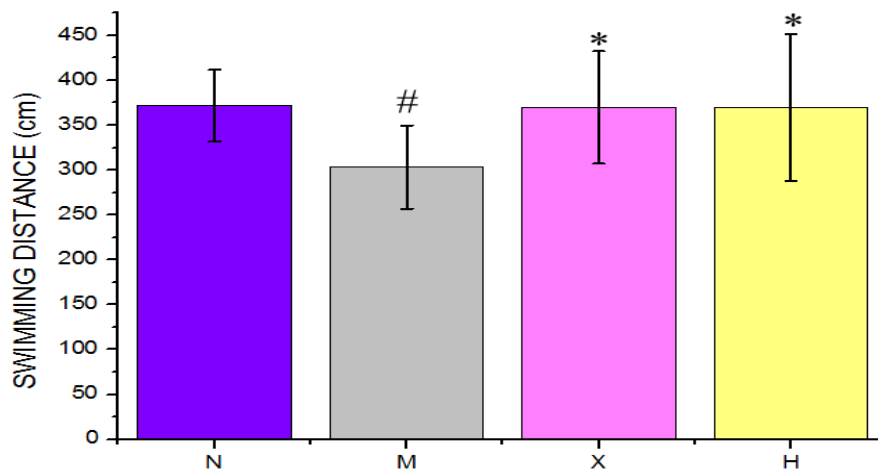
Supplementary Figure 1 Chemical structures and full scan of product ion spectrums from Dopamine, Norepinephrine, Acetyl choline, 5-hydroxytryptamine, Glutamic acid, γ -aminobutyric acid, L-tryptophan and Aspartic acid.



Supplementary Figure 2 Effect of *Xanthoceras sorbifolia* Bunge on escape latency in rats with AD in the directional swimming test of 5 days.

N: control group; M: model group; X: *Xanthoceras sorbifolia* Bunge group; H: huperzine group.

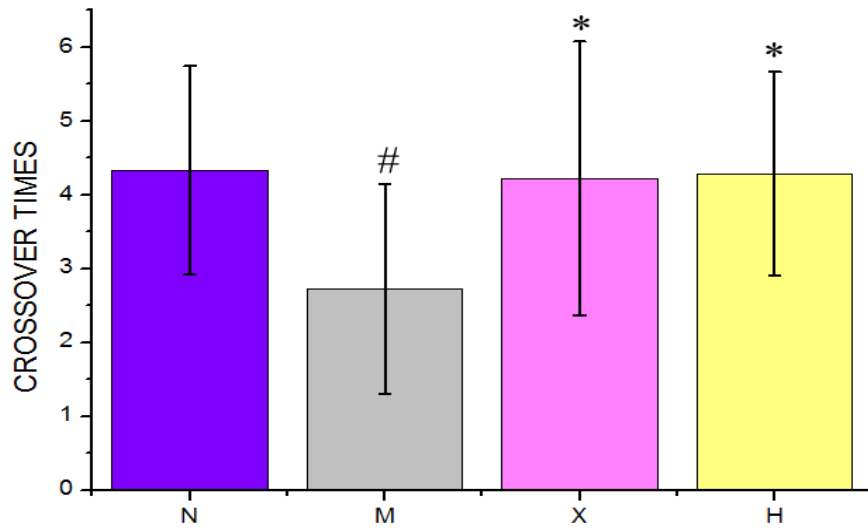
#p < 0.05, compared with N group; *p < 0.05, compared with X group.



Supplementary Figure 3 The effect of *Xanthoceras sorbifolia* Bunge on the swimming distance in the target quadrant in model rats in probe test.

N: control group; M: model group; X: *Xanthoceras sorbifolia* Bunge group; H: huperzine group.

#p < 0.05 compared with control group; *p < 0.05, compared with model group.



Supplementary Figure 4 The effect of *Xanthoceras sorbifolia* Bunge on the number of across the platform in model rats in probe test.

N: control group; M: model group; X: *Xanthoceras sorbifolia* Bunge group; H: huperzine group.

$p < 0.05$ compared with control group; * $p < 0.05$, compared with model group.