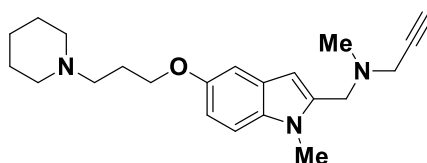


# CONTILISANT, A SMALL MOLECULE DESIGNED FOR ALZHEIMER'S DISEASE THERAPY

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**Contilisant** is a neuroprotective, nontoxic, antioxidant, permeable small molecule designed for the potential therapy of Alzheimer's disease (AD), based on the cholinergic hypothesis, as a multi-target directed ligand.<sup>1,2</sup>



**Contilisant**

**Contilisant** shows satisfactory *in vitro* pharmacological properties on selected biological targets (hAChE, IC<sub>50</sub> = 0.53 μM; hBuChE, IC<sub>50</sub> = 1.69 μM; hMAO A, IC<sub>50</sub> = 0.145 μM; hMAO B, IC<sub>50</sub> = 0.078 μM; hH3R, K<sub>i</sub> = 10.8 nM).<sup>1</sup> Furthermore, **Contilisant** is an affine and selective S1R agonist, in the nanomolar range (hS1R K<sub>i</sub> = 65.2 nM), based on the binding affinity and functional experiments.<sup>2</sup> **Contilisant** is able to restore the cognitive impairment induced by LPS in an *in vivo* NOR test, as an appropriate AD animal model,<sup>1</sup> and significantly restores the cognitive deficit induced by Aβ<sub>1-42</sub> in the radial maze assay in an *in vivo* AD animal model, comparing very favorably with donepezil.<sup>2</sup> To sum up, **Contilisant** is our most advanced lead-compound for AD, ready to enter in the pre-clinical analysis for its potential development as AD therapy.

## References

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