The lab's research provides evidence of the neuromodulatory potential of $A_{2A}R$ antagonists on NMDAR function, which is the target of several current AD therapies on market. Their work also explores the cross-antagonism and potential synergistic neuroprotection it may offer, particularly as it pertains to microglia activation. Taken together with the growing body of work in this area, the findings point to Adenosine A1 and A_{2A} receptors as potential targets for particularly dementia-related neurodegenerative diseases, not only Parkinson's but also Alzheimer's. It also suggests a potential application of a creative approach in countering the overactivity of NMDAR that in part, is thought to be responsible for accelerated neuronal death in AD where NMDAR itself is unable to be full blocked due to its requirement for neural cell viability.

Reference

1. Franco, R., Rivas-Santisteban, R., Casanovas, M., Lillo, A., Saura, C. A., & Navarro, G. (2020). Adenosine A2A Receptor Antagonists Affects NMDA Glutamate Receptor Function. Potential to Address Neurodegeneration in Alzheimer's Disease. Cells, 9(5), 1075. https://doi.org/10.3390/cells9051075 (and references included therein).

PerkinElmer, Inc.
940 Winter Street
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P: (800) 762-4000 or
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