

## **CONVENTIONAL DOSAGE OF ACETYL-CHOLINESTERASE INHIBITORS TO AD IS ADEQUATE?**

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Acetyl-cholinesterase inhibitor (AChE-I), including donepezil, rivastigmine, and galantamine, was recommended in the treatment of Alzheimer's disease (AD). Taking higher dosage of these drugs were called and advocated in order to have better therapeutic response. Various conventional dosages were made to fit these claims. Unfortunately, the therapeutic response rate for these drugs to AD was ranged from 20-60%, and not every AD patients will be satisfied with these treatments under currently conventional dosage.

Any of these three drugs has its specific metabolic pathway manipulated by corresponding gene and other factors in every AD patient. Every AD patient is unique and independent from others, and has his own therapeutic dosage of AChE-I. The various plasma concentrations for these drugs, examined in our studies, among AD patients for these drugs have highlighted these points. The conventional dosage of AChE-I is convenient for clinical treatment, but not adequate to every AD patient. The plasma concentration and other biomarker, if any, could be monitored accordingly.