Journal of Pharmaceutical Research and Drug Information
Vol. 7, No. 4+5, 2016, pp. 128-131
Received 16 August 2016, accepted 28 September 2016

# Design, synthesis new hetero cyclic derivatives of N-(3-methoxy-4-aminoalkyloxyphenyl) thiourea as Glutaminyl cyclase inhibitors towards treament of Alzheimer's disease

Tran Phuong Thao[1], Pham The Hai[1], Hoang Van Hai[2]
*[1]Hanoi University of Pharmacy, [2]Seoul National University, Republic of Korea*

***Summary:*** *Glutaminyl cyclase (QC) is an enzyme that catalyzes the intramolecular cyclization of N-terminal glutamate of $A\beta_{3E\text{-}42}$ to form pyroglutamate at the N-terminus. Recent researches have validated QC as a molecular target for designing drugs to treat Alzheimer disease. This paper reports the synthesis of a new heterocyclic series of N-3-methoxy-4-aminoalkyloxyphenylthioureas designed as potential QC inhibitors. The structures of synthesized compounds were confirmed by spectra analysis, including MS and $^1$H-NMR.*