

Symposium | Cultural Psychiatry : [Symposium 58] 25th Anniversary of the Korea-Japan Young Psychiatrists Association (KJYPA)-Friendship and Research Collaboration

🏠 Sat. Sep 27, 2025 9:00 AM - 10:30 AM JST | Sat. Sep 27, 2025 12:00 AM - 1:30 AM UTC 🏠 Session Room 5 (Conference Room A)

[Symposium 58] 25th Anniversary of the Korea-Japan Young Psychiatrists Association (KJYPA)-Friendship and Research Collaboration

Moderator: Takahiro A. Kato (Department of Psychiatry, Hokkaido University Graduate School of Medicine),
Seok Woo Moon (Konkuk University Chungju Hospital)
Discussant: Toshihide Kuroki

[SY-58-04] Differential Effects of Soluble and Plaque Amyloid on Late-Life Depression: The Moderating Role of Tau Pathology

*Gihwan Byeon¹, Su Hyung Kim², Sunghwan Kim³, Seunggyun Ha⁴, Yoo Hyun Um², Sheng-Min Wang³, Hyun Kook Lim^{3,5,6}, Dong Woo Kang¹ (1. Department of Psychiatry, Seoul St. Mary's Hospital, College of Medicine, The Catholic University of Korea, Seoul, Republic of Korea (Korea), 2. Department of Psychiatry, St. Vincent's Hospital, College of Medicine, The Catholic University of Korea, Seoul, Republic of Korea (Korea), 3. Department of Psychiatry, Yeouido St. Mary's Hospital, College of Medicine, The Catholic University of Korea, Seoul, Republic of Korea (Korea), 4. Division of Nuclear Medicine, Department of Radiology, Seoul St. Mary's Hospital, College of Medicine, The Catholic University of Korea, Seoul, Republic of Korea (Korea), 5. Research Institute, NEUROPHET Inc.; Seoul, Republic of Korea (Korea), 6. CMC Institute for Basic Medical Science, the Catholic Medical Center of The Catholic University of Korea, Seoul, Republic of Korea (Korea))

Keywords : Alzheimer Disease、Amyloid beta-Peptides、Tau Proteins、Depression

Background: Alzheimer's disease (AD) and late-life depression frequently co-occur, yet the interactive effects of AD pathologies on depressive symptoms remain unclear.

Aims: To examine how MDS-oligomerized amyloid-beta (OAβ), amyloid PET, and tau PET are associated with depressive symptoms in older adults across the cognitive spectrum.

Method: We analyzed 103 participants (24 cognitively normal, 54 with mild cognitive impairment, 25 with amyloid-positive dementia) who underwent amyloid/tau PET, plasma MDS-OAβ measurement, and clinical depression assessments (CSDD, HAM-D, GDS-SV). Generalized linear models were used to assess interaction effects.

Results: A significant negative interaction was found between MDS-OAβ and tau PET SUVR on depression scores. MDS-OAβ levels were positively associated with depression only in the low-tau group, but negatively in the high-tau group. Global amyloid SUVR predicted greater depression severity only in the high-tau subgroup.

Conclusions: The associations between amyloid markers and depression differ by tau pathology stage. MDS-OAβ and Amyloid PET SUVR may reflect distinct mechanisms underlying depression in the AD continuum.