AMYPAD publishes Centiloid guidelines and recommendations for clinical context-of-use in Alzheimer's disease

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Abstract:

Amyloid-PET quantification through the tracer-independent Centiloid (CL) scale has emerged as an essential tool for the accurate measurement ofamyloid-β (Aβ) pathology in Alzheimer's disease (AD) patients. The AMYPAD consortium set out to integrate existing literature and recent work from the consortium to provide clinical context-of-use recommendations for the CL scale. Compared to histopathology, visual reads, and cerebrospinal fluid, CL quantification accurately reflects the amount of AD pathology. With high certainty, a CL value below 10 excludes the presence of Aβ pathology, while a value above 30 corresponds well with pathological amounts. Values falling in between these two cutoffs ("intermediate range") are related to an increased risk of disease progression. Together, CL quantification is a valuable adjunct to visual assessments of amyloid-PET images. An abnormal amyloid biomarker assessment is a key criterion to determine eligibility for anti-amyloid disease-modifying therapies, and amyloid-PET quantification can add further value by precisely monitoring amyloid clearance, and hence guiding patient management decisions.

Highlights

· Centiloid (CL) quantification robustly reflects of the amount of Aβ pathology.

· CL < 10/CL > 30 reflects Aβ-negativity/positivity thresholds with high certainty.

· CL quantification is a valuable adjunct to visual assessments of amyloid-PET.

· CL quantification can support trial design and treatment management.

· CL quantification could support the identification of early or emerging Aβ pathology.

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