SUPPLEMENTAL TABLE 1. Inconsistency across studies regarding anatomical definitions of Braak regions

Study	Braak I	Braak II	Braak III	Braak IV	Braak V	Braak VI
Schöll, 2016 *(11)*	Entorhinal cortex	Hippocampus	Amygdala, parahippocampal gyrus, fusiform gyrus, lingual gyrus	Inferior temporal cortex; middle temporal cortex; temporal pole; thalamus; caudal, rostral, isthmus, posterior cingulate; Insula	Frontal cortex; parietal cortex; occipital cortex; transverse, superior temporal cortex; precuneus; banks of superior temporal sulcus; nucleus accumbens; caudate nucleus; putamen	Cuneus, paracentral gyrus, pericalcarine, postcentral gyrus, precentral gyrus
Schwarz, 2016 *(24)*	Transentorhinal cortex	Hippocampus	Fusiform gyrus	Extrastriate visual cortex; middle temporal gyrus	Superior temporal gyrus	Primary (striate) visual cortex
Maass, 2017 *(18)*	Entorhinal cortex	Hippocampus	Amygdala, parahippocampal gyrus, fusiform gyrus, lingual gyrus	Inferior temporal cortex; middle temporal cortex; temporal pole; caudal, rostral, isthmus, posterior cingulate; Insula	Frontal cortex; parietal cortex; occipital cortex; transverse, superior temporal cortex; precuneus; banks of superior temporal sulcus.	Cuneus, paracentral gyrus, pericalcarine, postcentral gyrus, precentral gyrus
Marquié, 2017 *(35)*	NA*	NA*	NA*	NA*	NA*	NA*
Lowe, 2018 *(34)*	NR	NR	NR	NR	NR	NR
Betthauser, 2020 *(19)*	Entorhinal cortex	Hippocampus	Temporal portion of fusiform gyrus	Inferior temporal gyrus, middle temporal gyrus, insular cortex	Superior temporal, angular, supramarginal, middle frontal gyri, planum temporale, the occipital portion of the fusiform gyrus	Heschl's gyrus, intracalcarine cortex
Franzmeier, 2020 *(20)*	Entorhinal cortex	Hippocampus†	Amygdala, parahippocampal gyrus, fusiform gyrus, lingual gyrus	Inferior temporal cortex; middle temporal cortex; temporal pole; thalamus; caudal, rostral, isthmus, posterior cingulate; Insula	Frontal cortex; parietal cortex; occipital cortex; transverse, superior temporal cortex; precuneus; banks of superior temporal sulcus; nucleus accumbens; caudate nucleus; putamen	Cuneus, paracentral gyrus, pericalcarine, postcentral gyrus, precentral gyrus
Leuzy, 2020 *(29)*	NA	NA	NR	NR	NR	NR
Pascoal, 2020 *(17)*	Transentorhinal cortex	Entorhinal cortex and hippocampus	Amygdala, parahippocampal gyrus, fusiform gyrus, lingual gyrus	Inferior parietal, inferior temporal, insula, lateral temporal, posterior cingulate	Orbitofrontal, superior temporal, inferior frontal, cuneus, anterior cingulate, supramarginal gyrus, lateral occipital, precuneus, superior parietal, superior frontal, rostro medial frontal cortices	Paracentral gyrus, pericalcarine gyrus, postcentral gyrus, precentral gyrus
Kreisl, 2021 *(22)*	Entorhinal cortex	Hippocampus	Amygdala, parahippocampal gyrus, fusiform gyrus, lingual gyrus	Inferior parietal cortex, inferior temporal cortex, insula, posterior cingulate cortex	Orbitofrontal, superior temporal, inferior frontal, cuneus, anterior cingulate, supramarginal gyrus, lateral occipital, precuneus, superior parietal, superior frontal, rostro medial frontal cortices	Paracentral gyrus, pericalcarine gyrus, postcentral gyrus, precentral gyrus

Pascoal, 2021 *(25)*	Transentorhinal cortex	Entorhinal cortex and hippocampus	Amygdala, parahippocampal gyrus, fusiform gyrus, lingual gyrus	Inferior parietal, inferior temporal, insula, lateral temporal, posterior cingulate	Orbitofrontal, superior temporal, inferior frontal, cuneus, anterior cingulate, supramarginal gyrus, lateral occipital, precuneus, superior parietal, superior frontal, rostro medial frontal cortices	Paracentral gyrus, pericalcarine gyrus, postcentral gyrus, precentral gyrus
Seemiller, 2021 *(28)*	Not applicable	Not applicable	Amygdala, parahippocampal gyrus, fusiform gyrus, lingual gyrus	Inferior temporal cortex, insula, middle temporal cortex, posterior cingulate, temporal pole, thalamus	Frontal cortex, parietal cortex, occipital cortex, superior temporal cortex, precuneus, caudate nucleus, putamen	Cuneus, paracentral gyrus, postcentral gyrus, precentral gyrus
Shokouhi, 2020 *(21)*	Entorhinal cortex	Hippocampus	Amygdala, parahippocampal gyrus, fusiform gyrus, lingual gyrus	Middle temporal, caudal anterior cingulate, rostral anterior cingulate, posterior cingulate, isthmus cingulate, insular cortex, inferior temporal, temporal pole	Superior frontal, rostral middle frontal, medial orbitofrontal, superior temporal, superior parietal, precuneus, banks of superior temporal sulcus, nucleus accumbens, pars opercularis, lateral occipital, parietal supramarginal, inferior parietal	Pericalcarine cortex, precentral gyrus, postcentral gyrus, paracentral lobule, cuneus
Nihashi, 2022 *(23)*	Entorhinal cortex	Hippocampus	Amygdala, parahippocampal gyrus, fusiform gyrus, lingual gyrus	Inferior temporal cortex; middle temporal cortex; temporal pole; thalamus; caudal, rostral, isthmus, posterior cingulate; Insula	Frontal cortex; parietal cortex; occipital cortex; transverse, superior temporal cortex; precuneus; banks of superior temporal sulcus; nucleus accumbens; caudate nucleus; putamen	Precentral gyrus; postcentral gyrus; paracentral gyrus; cuneus; pericalcarine
Rullmann, 2022 *(27)*	Transentorhinal cortex	Hippocampus	Fusiform gyrus	Middle temporal gyrus and extrastriate visual cortex	Superior temporal gyrus	Primary visual cortex
Therriault, 2022 *(26)*	Transentorhinal cortex	Entorhinal cortex and hippocampus	Amygdala, parahippocampal gyrus, fusiform gyrus, lingual gyrus	Inferior parietal, inferior temporal, insula, lateral temporal, posterior cingulate	Orbitofrontal, superior temporal, inferior frontal, cuneus, anterior cingulate, supramarginal gyrus, lateral occipital, precuneus, superior parietal, superior frontal, rostro medial frontal cortices	Paracentral gyrus, pericalcarine gyrus, postcentral gyrus, precentral gyrus

NA: not applicable; NR: not reported.

* Autoradiographic study

† Excluded due to off-target binding

SUPPLEMENTAL TABLE 2. Discrepancies in anatomical definitions of meta-ROIs based on Braak framework

Study	Braak I/II	Braak III/IV	Braak V/VI
Lowe, 2016 *(36)*	NA*	NA*	NA*
Lowe, 2018 *(34)*	NR	NR	NR
Cho, 2019 *(33)*	NR	NR	NR
Timmers, 2019 *(31)*	Entorhinal cortex, hippocampus†	Parahippocampal, fusiform, lingual gyrus, amygdala, inferior temporal, middle temporal cortex, temporal pole, thalamus, caudal, rostral, isthmus, posterior cingulate and insula	Frontal, parietal, occipital cortex; transverse, superior temporal cortex, precuneus, banks of superior temporal sulcus, nucleus accumbens, caudate nucleus, putamen, precentral gyrus, postcentral gyrus, paracentral gyrus, cuneus, and pericalcarine
Baek, 2020 *(32)*	Entorhinal cortex and hippocampus	Amygdala, parahippocampal, fusiform, lingual, inferior and middle temporal, and insula cortices	Orbitofrontal, superior, middle and inferior frontal, precentral, paracentral, postcentral, precuneus, inferior and superior parietal, supramarginal, superior temporal, medial and lateral occipital, and anterior and posterior cingulate cortices
Leuzy, 2020 *(29)*	Entorhinal cortex	Amygdala, fusiform gyrus, inferior temporal cortex, middle temporal cortex, and parahippocampus	Anterior cingulate, inferior frontal cortex, inferior parietal cortex, insular cortex, lateral occipital cortex, lingual gyrus, medial occipital cortex, middle frontal cortex, orbitofrontal cortex, paracentral cortex, precentral cortex, precuneus, postcentral cortex, posterior cingulate, superior frontal cortex, superior parietal cortex, superior temporal gyrus, and supramarginal gyrus
Kim, 2021 *(30)*	Entorhinal cortex, hippocampus	Parahippocampal, fusiform, lingual, middle temporal, caudal anterior cingulate, rostral anterior cingulate, posterior cingulate, cingulate isthmus, insula, inferior temporal and temporal pole	Superior frontal, lateral orbitofrontal, medial orbitofrontal, frontal pole, caudal middle frontal, rostral middle frontal, pars opercularis, pars orbitalis, pars triangularis, lateral occipital, supramarginal, inferior parietal, superior parietal, precuneus, superior temporal, transverse temporal, pericalcarine, postcentral, cuneus, precentral and paracentral
Seemiller, 2021 *(28)*	Entorhinal cortex	Not included	Not included

NA: not applicable; NR: not reported.

* Autoradiographic study

† Regions analyzed separately

SUPPLEMENTAL TABLE 3. Statistical and practical approaches to applying *in vivo* PET-based Braak staging

Study	Ligand uptake measure	Method to calculate thresholds for abnormal tau	Reference group for threshold calculation (age)	Assigned individual-level Braak stages	Braak staging followed a hierarchical pattern	Other approaches
Schöll, 2016 *(11)*	SUVR*	Conditional reference-tree regression model	NA	Yes	NR	NA
Schwarz, 2016 *(24)*	SUVR*	Mean + 2.5*SD	CU (21–39 years)	Yes	Yes†	NA
Maass, 2017 *(18)*	SUVR*	Conditional reference-tree regression model	NA	Yes	NR	NA
Lowe, 2018 *(34)*	SUVR	95th percentile	Aβ- CU (30-49 years)	No	NA	NA
Cho, 2019 *(33)*	SUVR*	NA	NA	No	NA	NA
Timmers, 2019 *(31)*	BPND*	NA	NA	No	NA	NA
Baek, 2020 *(32)*	SUVR*	Z-score 2	Aβ- CU (65.9 (9.7)[#] years)	No	NA	NA
Betthauser, 2020 *(19)*	SUVR*	NA	NA	No	NA	NA
Franzmeier, 2020 *(20)*	SUVR	NA	NA	No	NA	Gaussian mixture modeling to assess tau positivity probability
Leuzy, 2020 *(29)*	SUVR*	Mean + 2.5*SD; mean + 2*SD; mean + 1.5*SD	Aβ- CU (20-40 years)	No	NA	NA

Pascoal, 2020 *(17)*	SUVR*	Mean + 2.5*SD; Gaussian mixture model	Aβ- CU (22.2 (1.3)[#] years)	Yes	Yes†	NA
Shokouhi, 2020 *(21)*	SUVR*	NA	NA	No	NA	NA
Kim, 2021 *(30)*	SUVR*	NA	NA	No	NA	NA
Kreisl, 2021 *(22)*	SUVR*	Mean + 1*SD; mean + 2*SD; mean + 3*SD	Aβ- CU (64 (3)[#] years)	No	NA	NA
Pascoal, 2021 *(25)*	SUVR*	Mean + 2.5*SD	Aβ- CU (22.2 (1.3)[#] years)	Yes	Yes	NA
Seemiller, 2021 *(28)*	SUVR*	NA	NA	No	NA	Tau peaks (highest t-scores from voxel-wise tau-PET comparisons between AD and CU groups)
Nihashi, 2022 *(23)*	SUVR*	NA	NA	No	NA	NA
Rullmann, 2022 *(27)*	DVR*	Mean + 2.5*SD	Aβ- CU (67 (11)[#] years)	Yes	Yes†	NA
Therriault, 2022 *(26)*	SUVR*	Mean + 2.5*SD	Aβ- CU (22.2 (1.3)[#] years)	Yes	Yes†	NA

Aβ: amyloid-β; AD: Alzheimer's disease; BPND: non-displaceable binding potential; CU: cognitively unimpaired; DVR: distribution volume ratio; NA: not applicable; NR: not reported; PET: positron emission tomography; ROI: region of interest; SD: standard deviation; SUVR: standardized uptake value ratio.

*Study performed analyses with the ligand uptake measure in Braak ROIs as a continuous variable

†Study identified participants following a non-hierarchical pattern and disclaimed their Braak non-conformant status

[#]Mean (SD)