## Supplementary Table 1. Clinical characteristics of PPA variants.

| Variant | Clinical Features* | Neuroimaging | Genetics† | Alternative Nomenclature |
|---------|--------------------|--------------|----------|--------------------------|
| naPPA  | At least one of the following core features must be present: 1. Agrammatism in language production; and/or 2. Effortful, halting speech with inconsistent speech sound errors and distortions (AOS). • At least two of the following three other features must be present: 1. Impaired comprehension of syntactically complex sentences; 2. Spared single-word comprehension; and/or 3. Spared object knowledge. | • Predominant location Left frontal lobe • Features MR: atrophy PET: hypoperfusion or hypometabolism | FTLD-tau (50–70%) FTLD-TDP (20%) AD (12–25%) | Progressive nonfluent aphasia or PNFA Agrammatic PPA or PPA-G |
| svPPA  | Both of the following core features must be present: 1. Impaired confrontation naming; and 2. Impaired single-word comprehension. • At least three of the following other diagnostic features must be present: 1. Impaired object knowledge, particularly for low-frequency or low-familiarity items; 2. Surface dyslexia or dysgraphia; 3. Spared repetition; and/or 4. Spared speech production (grammar and motor speech). | • Predominant location Left anterior ventral temporal lobe • Features MR: atrophy PET: hypoperfusion or hypometabolism | FTLD-TDP (69–83%) AD (25%) | Semantic dementia or SD Semantic PPA or PPA-S |
| lvPPA  | Both of the following core features must be present: 1. Impaired single-word retrieval in spontaneous speech and naming; and 2. Impaired repetition of sentences and phrases. • At least three of the following other features must be present: 1. Speech (phonological) errors in spontaneous speech and naming; 2. Spared single-word comprehension and object knowledge; | • Predominant location Left posterior temporal lobe and parietal lobe • Features MR: atrophy | AD (50%–60%) FTLD-TDP (38%) FTLD-tau (5%–10%) | Logopenic progressive aphasia or LPA Logopenic PPA or PPA-L Progressive mixed aphasia or PMA |
3. Spared motor speech; and/or
4. Absence of frank agrammatism.

PET: hypoperfusion or hypometabolism

*Based on expert consensus⁵² †Based on numerous studies¹¹,²³

AOS: Apraxia of speech; MR: Magnetic resonance; PET: Positron emission tomography; FTLD-tau: Frontotemporal lobar degeneration with tau-positive pathology; FTLD-TDP: Frontotemporal lobar degeneration with TDP-43 pathology; AD: Alzheimer disease; PPA: Primary progressive aphasia; svPPA: Semantic variant; lvPPA: Logopenic variant.