

表一：Neuron number remains stable in the superior temporal sulcus region during normal aging. (Handbook of Aging Brain 2ed)

Age	n	Numbers of neuron $\bar{X} \pm$ SD(10^3)
<60	5	94.28 \pm 7.0
61-70	6	94.36 \pm 11.6
71-80	10	92.17 \pm 8.8
81<90	7	96.36 \pm 9.2
>90	4	84.87 \pm 8.3

表二：Neuron number remains stable in the superior temporal sulcus region in Alzheimer' s reflects of symptoms. (Handbook of Aging Brain 2ed)

	During (years)	n	Numbers of neuron $\bar{X} \pm$ SD(10^3)
Control (age:69~90)	---	28	96.0 \pm 10.0
	0-3	10	77.7 \pm 23.5
	4-6	13	54.7 \pm 16.1
Alzheimer' s disease	7-9	12	38.4 \pm 7.7
	10-12	6	34.1 \pm 7.7
	13-15	8	33.3 \pm 7.8
	>15	4	29.7 \pm 6.8

表三：DSM-IV and NINCDS-ADRDA Diagnostic Criteria for Dementia

DSM-IV Diagnostic Criteria

- A.** The development of multiple cognitive deficits manifested by both
- (1) memory impairment (impaired ability to learn new information or to recall previously learned information)
 - (2) one (or more) of the following cognitive disturbances:
 - (a) aphasia (language disturbance)
 - (b) apraxia (impaired ability to carry out motor activities despite intact motor function)
 - (c) agnosia (failure to recognize or identify objects despite intact sensory function)
 - (d) disturbance in executive functioning (i.e., planning, organizing, sequencing, abstracting)
- B.** The cognitive deficits in Criteria A1 and A2 each cause significant impairment in social or occupational functioning and represent a significant decline from a previous level of functioning.
- C.** The deficits do not occur exclusively during the course of a delirium.
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NINCDS-ADRDA Diagnostic Criteria

- A.** Decline in memory and other cognitive functions in comparison with the patient's previous level of functions as determined by
- (1) a history of decline in performance
 - (2) abnormalities noted on clinical examination
 - (3) abnormalities noted on neuropsychological tests
- B.** Diagnosis of dementia cannot be made when consciousness is impaired by delirium, drowsiness, stupor, or coma or when other clinical abnormalities prevent adequate evaluation of mental status.
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表四：DSM-IV and NINCDS-ADRDA Diagnostic Criteria for Alzheimer's disease

NINCDS-ADRDA Criteria for Clinical Diagnosis of Alzheimer's Disease

- I. The criteria for the clinical diagnosis of *probable* Alzheimer's disease include:
 1. Dementia established by clinical examination and documented by the Mini-Mental State Test, Blessed Dementia Scale, or some similar examination, and confirmed by neuropsychological tests
 2. Deficits in two or more areas of cognition
 3. Progressive worsening of memory and other cognitive functions
 4. No disturbance of consciousness
 5. Onset between ages 40 and 90, most often after age 65
 6. Absence of systemic disorders or other brain diseases that in and of themselves could account for the progressive deficits in memory and cognition
 - II. The diagnosis of *probable* Alzheimer's disease is supported by:
 1. Progressive deterioration of specific cognitive functions such as language (aphasia), motor skills (apraxia), and perception (agnosia)
 2. Impaired activities of daily living and altered patterns of behavior
 3. Family history of similar disorders, particularly if confirmed neuropathologically
 4. Laboratory results of:
 - a. Normal lumbar puncture as evaluated by standard techniques
 - b. Normal pattern or nonspecific changes in EEG, such as increased slow-wave activity
 - c. Evidence of cerebral atrophy on CT with progression documented by serial observation
 - III. Other clinical features consistent with the diagnosis of *probable* Alzheimer's disease, after exclusion of causes of dementia other than Alzheimer's disease include:
 1. Plateaus in the course of progression of the illness
 2. Associated symptoms of depression, insomnia, incontinence, delusions, illusions, hallucinations; catastrophic verbal, emotional, or physical outbursts; sexual disorders; and weight loss
 3. Other neurologic abnormalities in some patients, especially those with more advanced disease and including motor signs such as increased muscle tone, myoclonus, or gait disorder
 4. Seizures in advanced disease
 5. CT normal for age
 - IV. Features that make the diagnosis of *probable* Alzheimer's disease uncertain or unlikely include:
 1. Sudden, apoplectic onset
 2. Focal neurological findings such as hemiparesis, sensory loss, visual field deficits, and incoordination early in the course of the illness
 3. Seizures or gait disturbances at the onset or very early in the course of the illness
 - V. Clinical diagnosis of *possible* Alzheimer's disease:
 1. May be made on the basis of the dementia syndrome; in the absence of other
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- neurological, psychiatric, or systemic disorders sufficient to cause dementia; and in the presence of variations in the onset, presentation, or clinical course
 - 2. May be made in the presence of a second systemic or brain disorder sufficient to produce dementia, which is not considered to be the cause of the dementia
 - 3. Should be used in research studies when a single, gradually progressive, severe cognitive deficit is identified in the absence of other identifiable cause
- VI. Criteria for diagnosis of *definite* Alzheimer's disease are:
- 1. The clinical criteria for probable Alzheimer's disease
 - 2. Histopathologic evidence obtained from a biopsy or autopsy
- VII. Classifications of Alzheimer's disease for research purposes should specify features that may differentiate subtypes of the disorder, such as:
- 1. Familial occurrence
 - 2. Onset before age 65
 - 3. Presence of trisomy-21
 - 4. Coexistence of other relevant conditions such as Parkinson's disease
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DSM-IV Diagnostic Criteria for Dementia of the Alzheimer's Type

- A. The development of multiple cognitive deficits manifested by both
 - (1) memory impairment (impaired ability to learn new information or to recall previously learned information)
 - (2) one (or more) of the following cognitive disturbances:
 - (a) aphasia (language disturbance)
 - (b) apraxia (impaired ability to carry out motor activities despite intact motor function)
 - (c) agnosia (failure to recognize or identify objects despite intact sensory function)
 - (d) disturbance in executive functioning (i.e., planning, organizing, sequencing, abstracting)
 - B. The cognitive deficits in Criteria A1 and A2 each cause significant impairment in social or occupational functioning and represent a significant decline from a previous level of functioning.
 - C. The course is characterized by gradual onset and continuing cognitive decline.
 - D. The cognitive deficits in Criteria A1 and A2 are not due to any of the following:
 - (1) other central nervous system conditions that cause progressive deficits in memory and cognition (e.g., cerebrovascular disease, Parkinson's disease, Huntington's disease, subdural hematoma, normal-pressure hydrocephalus, brain tumor)
 - (2) systemic conditions that are known to cause dementia (e.g., hypothyroidism, vitamin B12 or folic acid deficiency, niacin deficiency, hypercalcemia, neurosyphilis, HIV infection)
 - (3) substance-induced conditions
 - E. The deficits do not occur exclusively during the course of a delirium.
 - F. The disturbance is not better accounted for by another Axis I disorder (e.g., Major Depressive Disorder, Schizophrenia).
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表五 : Genetic factors predisposing to Alzheimer' s disease : relationships to the β -amyloid phenotype

Chromosome	Gene Defect	Age of onset	A β phenotype
21	β -APP mutation	50s	Production of total A β peptides or of A β_{42} peptides
19	ApoE4 polymorphism	60s and older	Denisty of A β plaques and vascular deposits
14	Presillin 1 mutation	40s and 50s	Production of A β_{42} peptides
1	Presillin 2 mutation	50s	Production of A β_{42} peptides

Ref : **Diagnosis of Alzheimer' s disease Disease 1th.**