Definizione di DEMENZA

Sindrome clinica caratterizzata dal deterioramento della memoria e delle altre funzioni cognitive rispetto al livello di sviluppo cognitivo precedentemente raggiunto dal paziente

Il deterioramento è documentato da una storia clinica di riduzione di performance e da anomalie evidenziate dall'esame neurologico e dai test neuropsicologici

(McKhann et al.,1984)

Con il termine *demenza*, in genere, non si intende una malattia specifica ma una sindrome, vale a dire un insieme di disturbi (sintomi). Le demenze comprendono una serie complessa di malattie permanenti (croniche) che portano alla degenerazione progressiva e irreversibile del sistema nervoso centrale e compromettono le capacità della mente (funzioni cognitive)

ICD-10. CRITERI PER LA DIAGNOSI DI DEMENZA

- Indebolimento della memoria a lungo termine e a breve termine
- Almeno uno dei seguenti
  - indebolimento del pensiero astratto
  - alterazione del giudizio
  - altri disturbi delle funzioni corticali
  - cambiamento di personalità
- I disturbi interferiscono significativamente con le attività sociali e le relazioni interpersonali
- I disturbi non si manifestano esclusivamente nel corso di eventi deliranti
- Uno dei seguenti:
  - evidenza di un fattore organico causante la ipomnesia
  - presunzione di un fattore organico ed esclusione di un disturbo mentale non organico

DSM-5 Criteri diagnostici DISTURBI NEUROCOGNITIVI

- **A. evidenza di un significativo declino cognitivo da un precedente livello di prestazioni in uno o più domini cognitivi (attenzione complessa, funzioni esecutive, apprendimento e memoria, linguaggio, funzione percettivo-motoria o cognizione sociale) basata su:**
- 1.preoccupazione dell'individuo, di un informatore attendibile o del clinico che vie è uno stato un significativo declino delle funzioni cognitive; e
- 2. **una significativa compromissione delle performance cognitive**, preferibilmente documentata da test neuropsicologici standardizzati o, in loro assenza, da un'altra valutazione clinica quantificata
- B. **i deficit cognitivi interferiscono con l'indipendenza nelle attività quotidiane** (per es., come minimo, necessitano di assistenza nelle attività strumentali complesse della vita quotidiana, come pagare le bollette o gestire i farmaci)
- C. I deficit cognitivi non si verificano esclusivamente in un contesto di un delirium
- D. I deficit cognitivi non sono meglio spiegati da un altro disturbo mentale (es. disturbo depressivo maggiore, schizofrenia).

Quali sono le Demenze

PRIMARIE

CORTICALI

- D. Alzheimer
- D. Frontotemporale
- D. Di Pick

PRIMARIE

SOTTOCORTICALI

- Parkinson-Demenza
- D. Corpi di Lewy
- D. Cortico Basale
- Paralisi sopranucleare progressive (PSP)
- Atrofia multisistemica
- Malattia di Huntington

PRIMARIE

VARIANTI

- Afasia progressiva primaria
- D. Semantica
- D. Corticale posteriore

DEMENZA CORTICALE E SOTTOCORTICALE

CORTICALE

- **memoria**: disturbo di apprendimento
- **cognitività** : deficit corticali (aprassia, acalculia, agnosia, deficit pensiero astratto, critica e giudizio)
- **affettività** : disinibizione/indifferenza
- **motilità** : normale
- **linguaggio** : afasia

SOTTOCORTICALE

- **memoria**: disturbo di richiamo del materiale mnesico; apprendimento discreto
- **cognitività** : rallentamento dei processi cognitivi; incapacità di utilizzo di conoscenze acquisite
- **affettività** : apatia
- **motilità** : segni extrapiramidali
- **linguaggio** : disartria e ipofonia

Quali sono le Demenze

SECONDARIE

INFETTIVE

Sifilide,
Meningite micotica,
M. di Lyme, AIDS,
Encefalite erpetica,
Maningite batterica

SECONDARIE

INFIAMMATORIE

Sclerosi multipla,
Sarcoidosi, Lupus,
Encefalite limbica

SECONDARIE

TOSSICHE

Farmaci,
etilismo cronico,
metalli pesanti,
anticrittogamici

SECONDARIE

DEMILIENIZZANTI

Neoplasie primarie del cervello,
Metastasi cerebrali,
Carcinomatosi cerebrale

SECONDARIE

METABOLICHE

Malattie tiroide e paratiroide,
Ipopituitarismo,
Malattia di Cushing,
Epatopatia, Uremia,
Porfiria, Carenza Vit B12,
Folati, Tiamina,
Alterazioni elettrolitiche

SECONDARIE

PSICHIATRICHE

Depressione, schizofrenia
ad esordio tardivo

SECONDARIE

TRAUMATICHE

Trauma cranico,
Encefalopatia
post-anossica

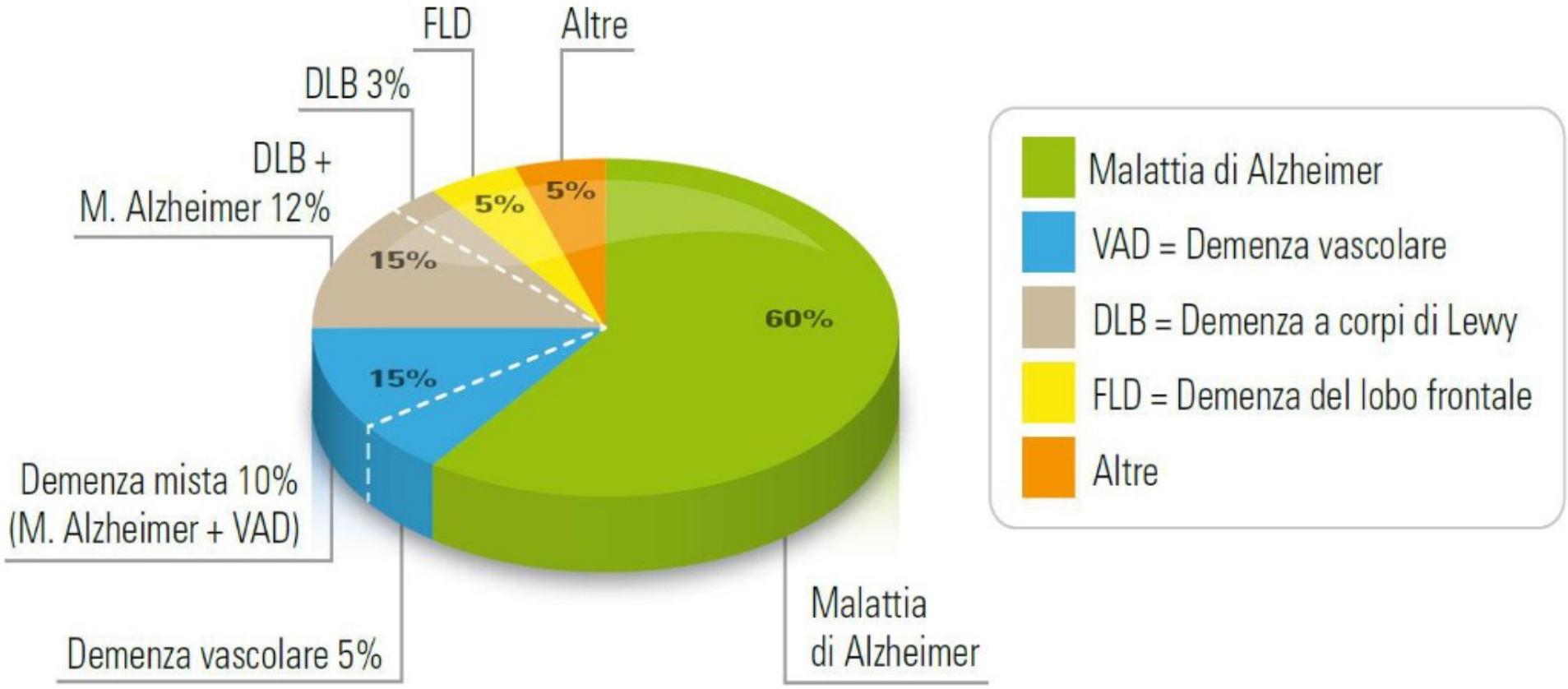
SECONDARIE

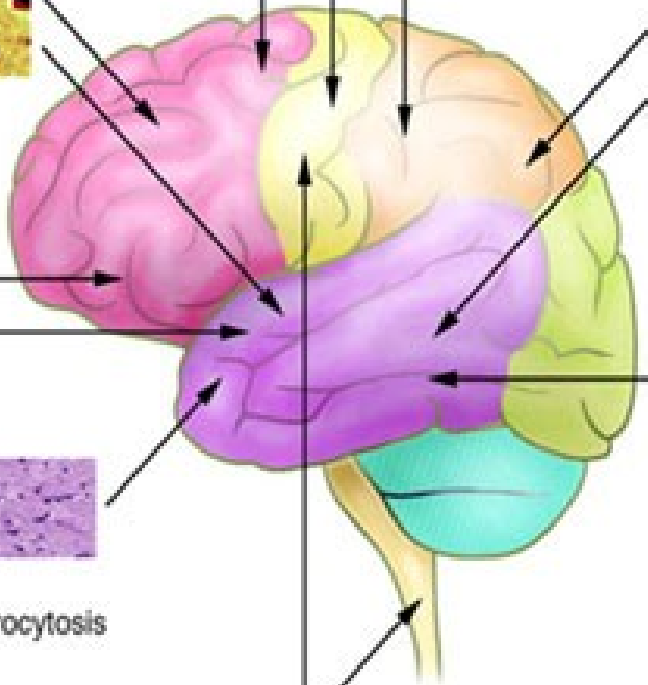
D. Vascolare

M. di Creutzfeld Jacob

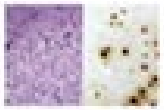
Idrocefalo

PREVALENZA DELLE VARIE FORME DI DEMENZA





MALATTIE PRIONICHE
Location: diffuse cortical
Macro: cerebral atrophy
Micro: spongiosis, PrP deposits



DEMENZA FRONTOTEMPORALE
Location: frontotemporal
Macro: cerebral atrophy
Micro: tau deposits, Pick bodies

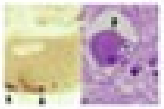
MALATTIA DI ALZHEIMER
Location: temporoparietal
Macro: cerebral atrophy
Micro: Aβ plaques, tangles

DEMENZA A CORPI DI LEWY
Location: frontotemporal
Macro: cerebral atrophy
Micro: Lewy bodies

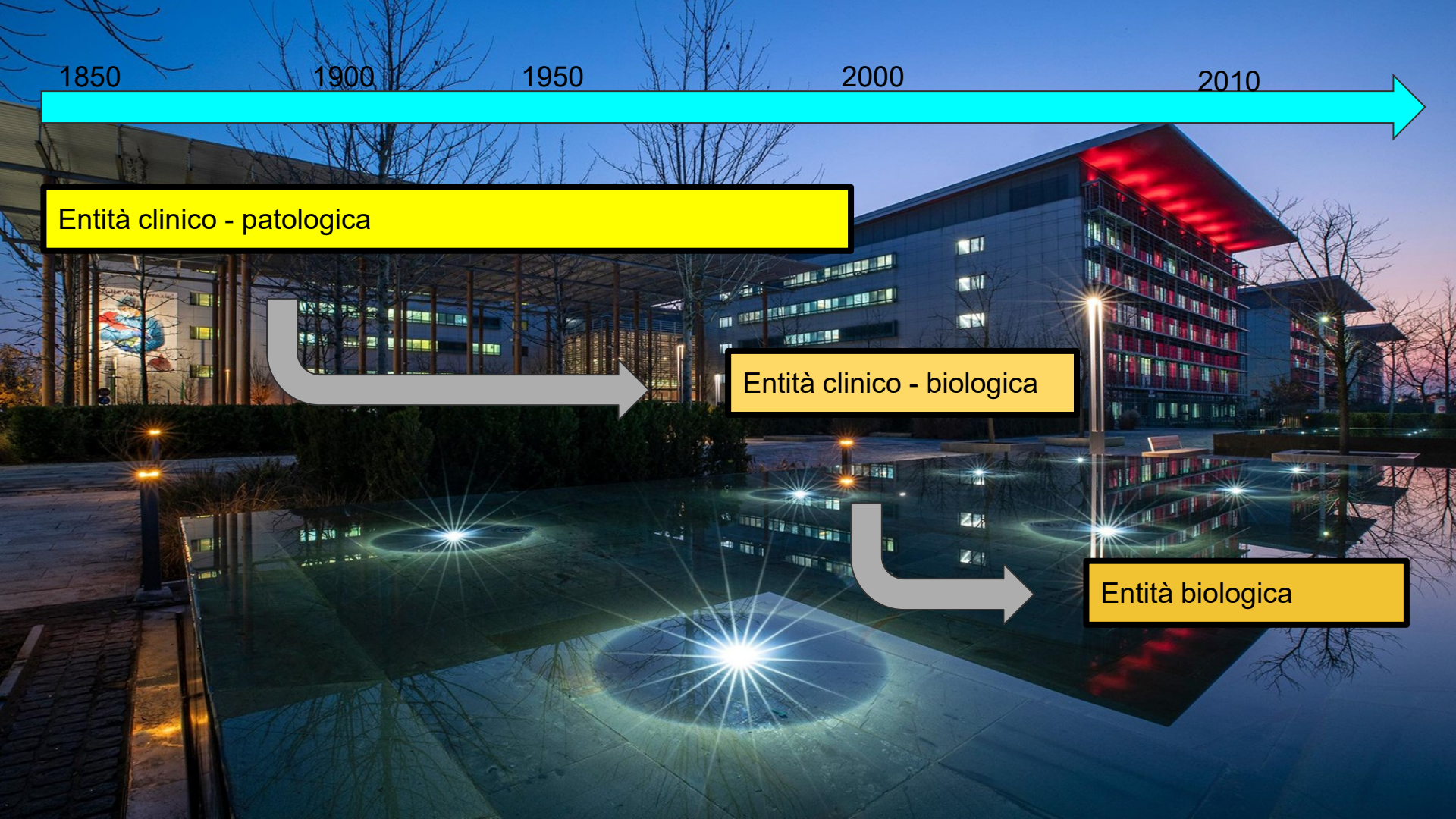
MALATTIA DI PARKINSON
Location: midbrain
Macro: pallor of substantia nigra
Micro: Lewy bodies

MALATTIA DI HUNGTINTON
Location: basal ganglia
Macro: neostriatal atrophy
Micro: neuronal loss and astrocytosis

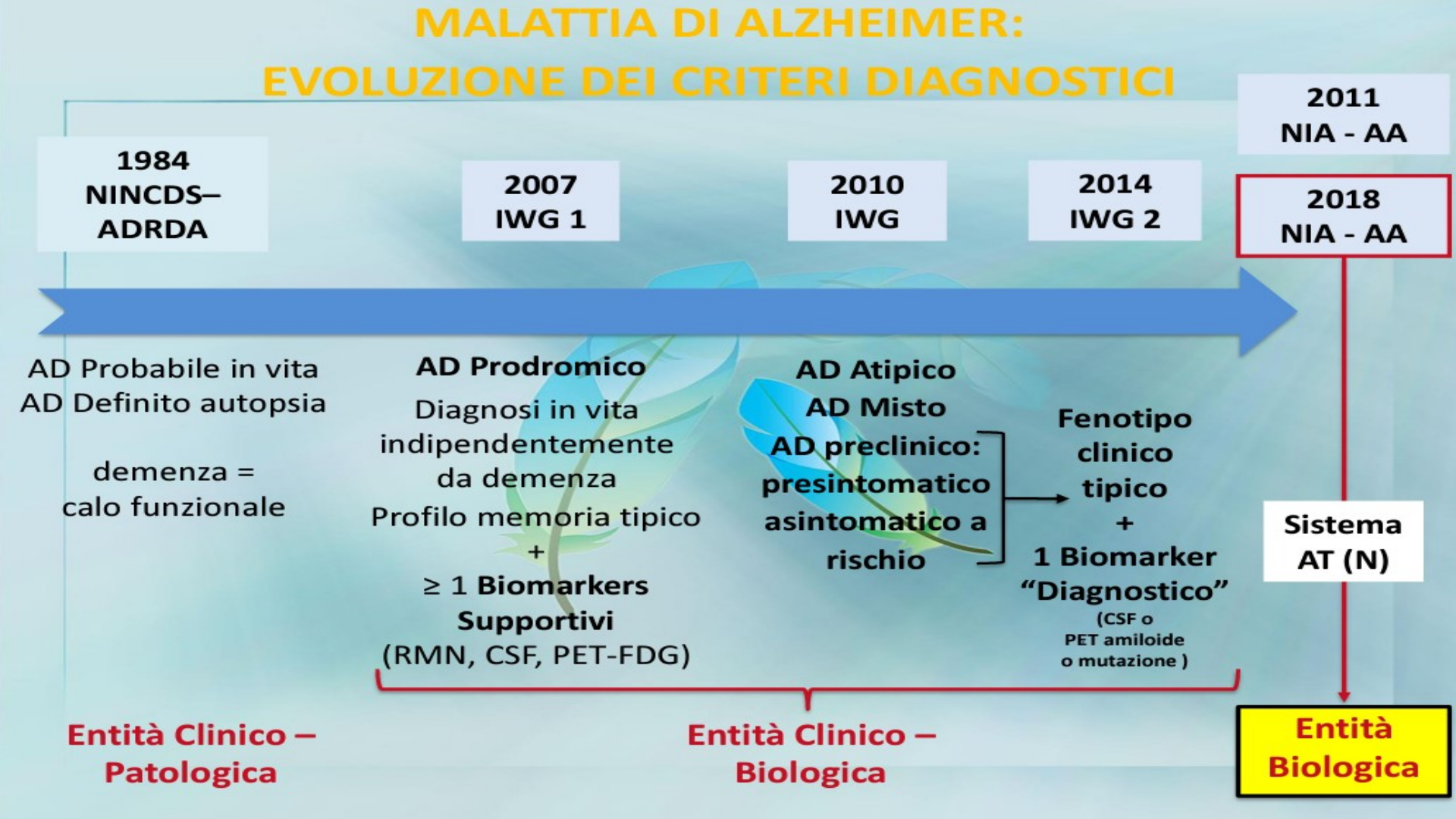
SCLEROSI LATERALE AMIOTROFICA
Location: motor cortex, brainstem, spinal cord
Macro: atrophy of motor neurons and muscles
Micro: inclusions (Bunina bodies, Lewy body–like)



entità clinico-patologica


1850
1900
1950
2000
2010
Entità clinico - patologica
Entità clinico - biologica
Entità biologica

MALATTIA DI ALZHEIMER: EVOLUZIONE DEI CRITERI DIAGNOSTICI



Clinical diagnosis of Alzheimer's disease:

Report of the NINCDS-ADRDA Work Group* under the auspices of Department of Health and Human Services Task Force on Alzheimer's Disease

Guy McKhann, MD; David Drachman, MD; Marshall Folstein, MD; Robert Katzman, MD; Donald Price, MD; and Emanuel M. Stadlan, MD

Neurology. 1984 Jul;34(7):939-44. doi: 10.1212/wnl.34.7.939.

Table 1. Criteria for clinical diagnosis of Alzheimer's disease

I. The criteria for the clinical diagnosis of PROBABLE Alzheimer's disease include:

dementia established by clinical examination and documented by the Mini-Mental Test,[1] Blessed Dementia Scale,[2] or some similar examination, and confirmed by neuropsychological tests;

deficits in two or more areas of cognition;

progressive worsening of memory and other cognitive functions;

no disturbance of consciousness;

onset between ages 40 and 90, most often after age 65; and

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:

progressive deterioration of specific cognitive functions such as language (aphasia), motor skills (apraxia), and perception (agnosia);

impaired activities of daily living and altered patterns of behavior;

family history of similar disorders, particularly if confirmed neuropathologically; and

laboratory results of:

normal lumbar puncture as evaluated by standard techniques,

normal pattern or nonspecific changes in EEG, such as increased slow-wave activity, and

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:

plateaus in the course of progression of the illness;

associated symptoms of depression, insomnia, incontinence, delusions, illusions, hallucinations, catastrophic verbal, emotional, or physical outbursts, sexual disorders, and weight loss;

other neurologic abnormalities in some patients, especially with more advanced disease and including motor signs such as increased muscle tone, myoclonus, or gait disorder;

seizures in advanced disease; and

CT normal for age.

IV. Features that make the diagnosis of PROBABLE Alzheimer's disease uncertain or unlikely include:

sudden, apoplectic onset;

focal neurologic findings such as hemiparesis, sensory loss, visual field deficits, and incoordination early in the course of the illness; and

seizures or gait disturbances at the onset or very early in the course of the illness.

V. Clinical diagnosis of POSSIBLE Alzheimer's disease:

may be made on the basis of the dementia syndrome, in the absence of other neurologic, psychiatric, or systemic disorders sufficient to cause dementia, and in the presence of variations in the onset, in the presentation, or in the clinical course;

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; and

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:

the clinical criteria for probable Alzheimer's disease and

histopathologic evidence obtained from a biopsy or autopsy.

VII. Classification of Alzheimer's disease for research purposes should specify features that may differentiate subtypes of the disorder, such as:

familial occurrence;

onset before age of 65;

presence of trisomy-21; and

coexistence of other relevant conditions such as Parkinson's disease.

POSITION PAPER | VOLUME 6, ISSUE 8, P734-746, AUGUST 2007

Purchase Sub

Research criteria for the diagnosis of Alzheimer's disease: revising the NINCDS–ADRDA criteria

Bruno Dubois, MD • Howard H Feldman, MD • Claudia Jacova, PhD • Steven T DeKosky, MD • Pascale Barberger-Gateau, MD • Jeffrey Cummings, MD • et al. Show all authors • Show footnotes

Published: July 09, 2007 • DOI: https://doi.org/10.1016/S1474-4422(07)70178-3

Panel 2: **Diagnostic criteria for AD**

Probable AD: A plus one or more supportive features B, C, D, or E

Core diagnostic criteria

A. Presence of an early and significant episodic memory impairment that includes the following features:

1. Gradual and progressive change in memory function reported by patients or informants over more than 6 months
2. Objective evidence of significantly impaired episodic memory on testing: this generally consists of recall deficit that does not improve significantly or does not normalise with cueing or recognition testing and after effective encoding of information has been previously controlled
3. The episodic memory impairment can be isolated or associated with other cognitive changes at the onset of AD or as AD advances

Supportive features

B. Presence of medial temporal lobe atrophy
- Volume loss of hippocampi, entorhinal cortex, amygdala evidenced on MRI with qualitative ratings using visual scoring (referenced to well characterised population with age norms) or quantitative volumetry of regions of interest (referenced to well characterised population with age norms)

C. Abnormal cerebrospinal fluid biomarker
- Low amyloid β_{1-42} concentrations, increased total tau concentrations, or increased phospho-tau concentrations, or combinations of the three
- Other well validated markers to be discovered in the future

D. Specific pattern on functional neuroimaging with PET
- Reduced glucose metabolism in bilateral temporal parietal regions
- Other well validated ligands, including those that foreseeably will emerge such as Pittsburg compound B or FDDNP

E. Proven AD autosomal dominant mutation within the immediate family

Exclusion criteria

History
- Sudden onset
- Early occurrence of the following symptoms: gait disturbances, seizures, behavioural changes

Clinical features
- Focal neurological features including hemiparesis, sensory loss, visual field deficits
- Early extrapyramidal signs

Other medical disorders severe enough to account for memory and related symptoms
- Non-AD dementia
- Major depression
- Cerebrovascular disease
- Toxic and metabolic abnormalities, all of which may require specific investigations
- MRI FLAIR or T2 signal abnormalities in the medial temporal lobe that are consistent with infectious or vascular insults

Criteria for definite AD

AD is considered definite if the following are present:
- Both clinical and histopathological (brain biopsy or autopsy) evidence of the disease, as required by the NIA-Reagan criteria for the post-mortem diagnosis of AD; criteria must both be present[139]
- Both clinical and genetic evidence (mutation on chromosome 1, 14, or 21) of AD; criteria must both be present

Position Paper

Advancing research diagnostic criteria for Alzheimer's disease: the IWG-2 criteria

Bruno Dubois, Howard H Feldman, Claudia Jacova, Harald Hampel, José Luis Molinuevo, Kaj Blennow, Steven T DeKosky, Serge Gauthier, Dennis Selkoe, Randall Bateman, Stefano Cappa, Sebastian Crutch, Sebastiaan Engelborghs, Giovanni B Frisoni, Nick C Fox, Douglas Galasko, Marie-Odile Habert, Gregory A Jicha, Agneta Nordberg, Florence Pasquier, Gil Rabinovici, Philippe Robert, Christopher Rowe, Stephen Salloway, Marie Sarazin, Stéphane Epelbaum, Leonardo C de Souza, Bruno Vellas, Pieter J Visser, Lon Schneider, Yaakov Stern, Philip Scheltens, Jeffrey L Cummings

Lancet Neurol 2014; 13: 614-29

Panel 1: IWG-2 criteria for typical AD (A plus B at any stage)

A Specific clinical phenotype

- Presence of an early and significant episodic memory impairment (isolated or associated with other cognitive or behavioural changes that are suggestive of a mild cognitive impairment or of a dementia syndrome) that includes the following features:
  - Gradual and progressive change in memory function reported by patient or informant over more than 6 months
  - Objective evidence of an amnestic syndrome of the hippocampal type,* based on significantly impaired performance on an episodic memory test with established specificity for AD, such as cued recall with control of encoding test

B In-vivo evidence of Alzheimer's pathology (one of the following)

- Decreased $A\beta_{1-42}$ together with increased T-tau or P-tau in CSF
- Increased tracer retention on amyloid PET
- AD autosomal dominant mutation present (in *PSEN1*, *PSEN2*, or *APP*)

Exclusion criteria† for typical AD

History

- Sudden onset
- Early occurrence of the following symptoms: gait disturbances, seizures, major and prevalent behavioural changes

Clinical features

- Focal neurological features
- Early extrapyramidal signs
- Early hallucinations
- Cognitive fluctuations

Other medical conditions severe enough to account for memory and related symptoms

- Non-AD dementia
- Major depression
- Cerebrovascular disease
- Toxic, inflammatory, and metabolic disorders, all of which may require specific investigations
- MRI FLAIR or T2 signal changes in the medial temporal lobe that are consistent with infectious or vascular insults

AD=Alzheimer's disease. *Hippocampal amnestic syndrome might be difficult to identify in the moderately severe to severe dementia stages of the disease, in which in-vivo evidence of Alzheimer's pathology might be sufficient in the presence of a well characterised dementia syndrome. †Additional investigations, such as blood tests and brain MRI, are needed to exclude other causes of cognitive disorders or dementia, or concomitant pathologies (vascular lesions).

Panel 2: IWG-2 criteria for atypical AD (A plus B at any stage)

A Specific clinical phenotype (one of the following)

- Posterior variant of AD (including)
  - An occipitotemporal variant defined by the presence of an early, predominant, and progressive impairment of visuoperceptive functions or of visual identification of objects, symbols, words, or faces
  - A biparietal variant defined by the presence of early, predominant, and progressive difficulty with visuospatial function, features of Gerstmann syndrome, of Balint syndrome, limb apraxia, or neglect
- Logopenic variant of AD defined by the presence of an early, predominant, and progressive impairment of single word retrieval and in repetition of sentences, in the context of spared semantic, syntactic, and motor speech abilities
- Frontal variant of AD defined by the presence of early, predominant, and progressive behavioural changes including association of primary apathy or behavioural disinhibition, or predominant executive dysfunction on cognitive testing
- Down's syndrome variant of AD defined by the occurrence of a dementia characterised by early behavioural changes and executive dysfunction in people with Down's syndrome

B In-vivo evidence of Alzheimer's pathology (one of the following)

- Decreased $A\beta_{1-42}$ together with increased T-tau or P-tau in CSF
- Increased tracer retention on amyloid PET
- Alzheimer's disease autosomal dominant mutation present (in *PSEN1*, *PSEN2*, or *APP*)

Exclusion criteria* for atypical AD

History

- Sudden onset
- Early and prevalent episodic memory disorders

Other medical conditions severe enough to account for related symptoms

- Major depression
- Cerebrovascular disease
- Toxic, inflammatory, or metabolic disorders

AD=Alzheimer's disease. *Additional investigations, such as blood tests and brain MRI, are needed to exclude other causes of cognitive disorders or dementia, or concomitant pathologies (vascular lesions).

Panel 3: IWG-2 criteria for mixed AD (A plus B)

A Clinical and biomarker evidence of AD (both are required)

- Amnestic syndrome of the hippocampal type or one of the clinical phenotypes of atypical AD
- Decreased $A\beta_{1-42}$ together with increased T-tau or P-tau in CSF, or increased tracer retention on amyloid PET

B Clinical and biomarker evidence of mixed pathology

For cerebrovascular disease (both are required)

- Documented history of stroke, or focal neurological features, or both
- MRI evidence of one or more of the following: corresponding vascular lesions, small vessel disease, strategic lacunar infarcts, or cerebral haemorrhages

For Lewy body disease (both are required)

- One of the following: extrapyramidal signs, early hallucinations, or cognitive fluctuations
- Abnormal dopamine transporter PET scan

AD=Alzheimer's disease.

entità clinico - biologica

Biomarcatori (IWG 2 - 2014)

Diagnostic marker

- Pathophysiological marker
- Reflects in-vivo pathology
- Is present at all stages of the disease
- Observable even in the asymptomatic state
- Might not be correlated with clinical severity
- Indicated for inclusion in protocols of clinical trials

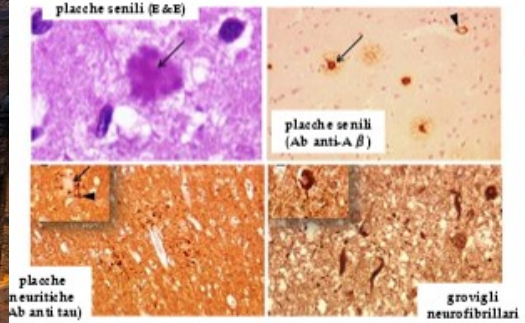
Progression marker

- Topographical or downstream marker
- Poor disease specificity
- Indicates clinical severity (staging marker)
- Might not be present in early stages
- Quantifies time to disease milestones
- Indicated for disease progression

Biomarcatori Fisiopatologici

- Placche Senili = Aβ Amiloide
- Grovigli Neurofibrillari = Proteina Tau
- Perdita neuronale e sinaptica

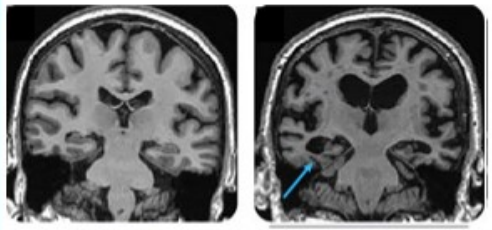
Alzheimer Pathology



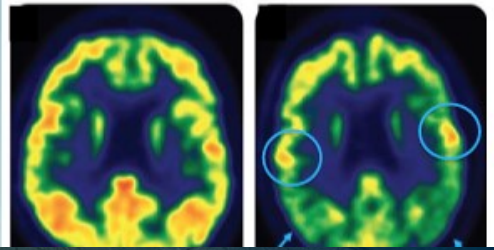
CSF Biomarkers

Amyloid e Tau PET

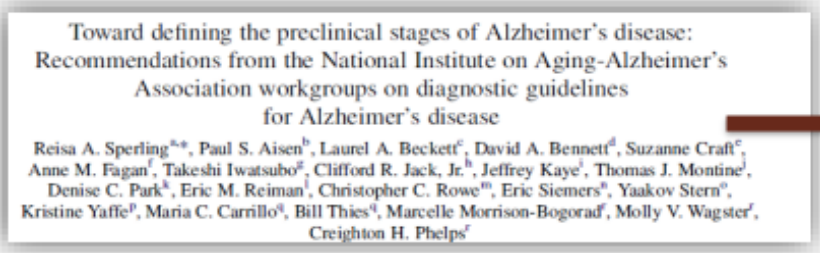
Biomarcatori Topografici



Atrofia temporale mesiale in MRI

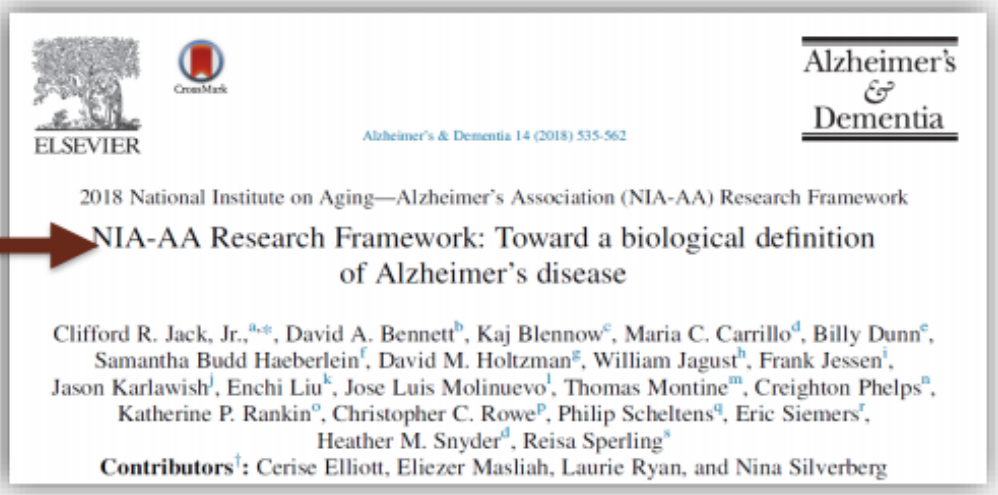


FDG – PET
Ipometabolismo temporale mesiale e corticale parieto temporale (con risparmio della corteccia sensitivo motoria e corteccia visiva primaria)



Toward defining the preclinical stages of Alzheimer's disease: Recommendations from the National Institute on Aging-Alzheimer's Association workgroups on diagnostic guidelines for Alzheimer's disease

Reisa A. Sperling[a,*], Paul S. Aisen[b], Laurel A. Beckett[c], David A. Bennett[d], Suzanne Craft[e], Anne M. Fagan[f], Takeshi Iwatsubo[g], Clifford R. Jack, Jr.[h], Jeffrey Kaye[i], Thomas J. Montine[j], Denise C. Park[k], Eric M. Reiman[l], Christopher C. Rowe[m], Eric Siemers[n], Yaakov Stern[o], Kristine Yaffe[p], Maria C. Carrillo[q], Bill Thies[q], Marcelle Morrison-Bogorad[r], Molly V. Wagster[r], Creighton H. Phelps[r]



ELSEVIER

Alzheimer's & Dementia 14 (2018) 535-562

Alzheimer's & Dementia

2018 National Institute on Aging—Alzheimer's Association (NIA-AA) Research Framework

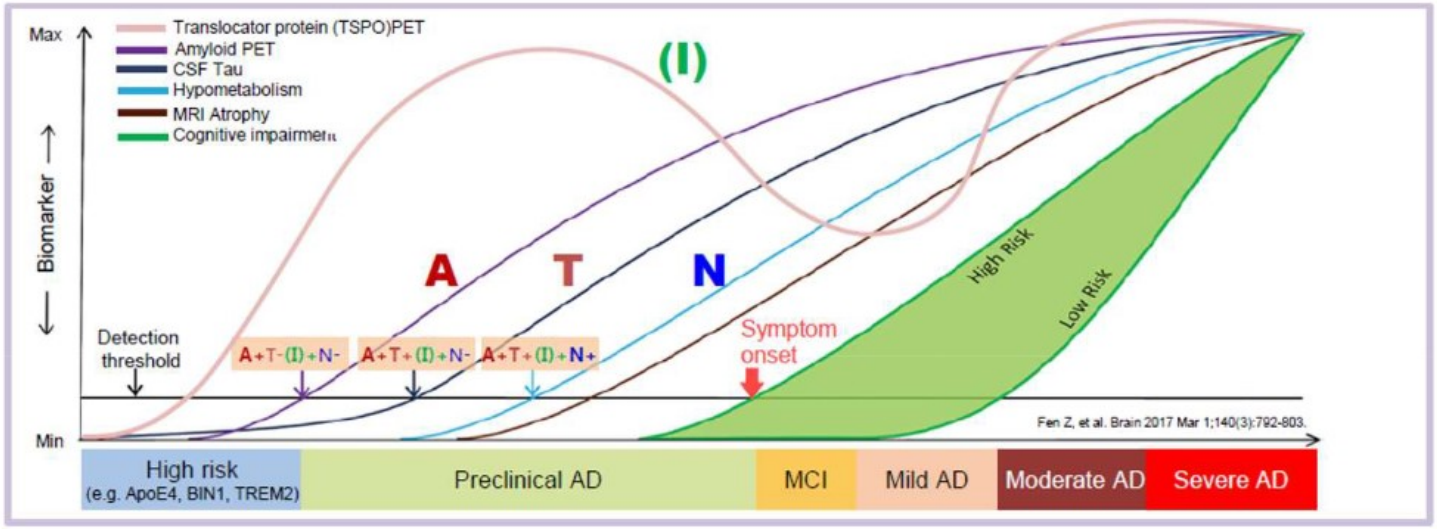
NIA-AA Research Framework: Toward a biological definition of Alzheimer's disease

Clifford R. Jack, Jr.,[a,*], David A. Bennett[b], Kaj Blennow[c], Maria C. Carrillo[d], Billy Dunn[e], Samantha Budd Haeberlein[f], David M. Holtzman[g], William Jagust[h], Frank Jessen[i], Jason Karlawish[j], Enchi Liu[k], Jose Luis Molinuevo[l], Thomas Montine[m], Creighton Phelps[n], Katherine P. Rankin[o], Christopher C. Rowe[p], Philip Scheltens[q], Eric Siemers[r], Heather M. Snyder[d], Reisa Sperling[s]

Contributors[†]: Cerise Elliott, Eliezer Masliah, Laurie Ryan, and Nina Silverberg

Il *Framework* del 2018 dovrebbe essere considerato un'evoluzione naturale delle raccomandazioni precliniche di AD del NIA-AA 2011 basate sul concetto che l'AD, identificato dai biomarker o dai marcatori di imaging, può esistere in assenza di sintomi.

AD mechanisms / biomarkers beyond Amyloid and Tau



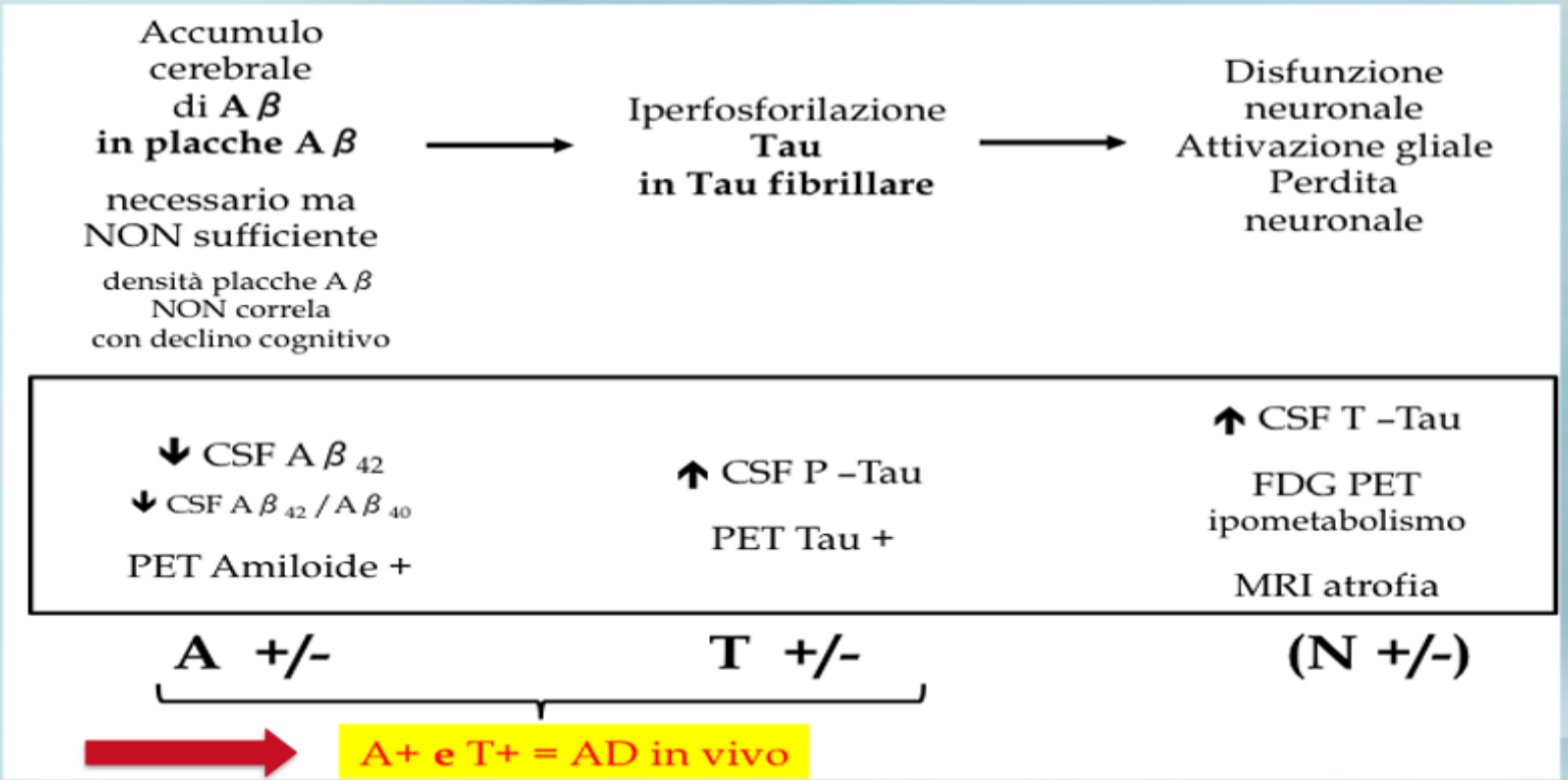
Alzheimer s Dementia - 2018 - Jack - NIA-AA (National Institute on Aging e la Alzheimer's Association) Research Framework Toward a **biological definition** of Alzheimer s disease

	Amyloid (A)	Tau (T)	Neuroinflammation (I)	Neurodegeneration (N)
Pathophysiology	Aβ monomer, Aβ oligomer Aβ protofibrils, Aβ plaque	Tau monomer, tau oligomer, neurofibrillary tangles	Over-activated microglia	Nerve cell death, synaptic loss
Imaging biomarker	Amyloid PET (fibrillary, insoluble, Aβ plaque)	Tau PET(neurofibrillary tangles) †	TSPO PET, P2X7 PET†	MRI atorophy FDG PET[5](metabolism)
CSF biology	Aβ42	P-tau[1] (181, 217)	CSF (sTREM2[2],YKL40[3]) †	Total tau, NfL[4]†, neurogranin†
Blood biomarker†	Aβ42/40†	P-tau (181, 217) †	-	Total tau†, NfL†
Risk or causal genes	ApoE4, PSEN1/2, ABCA7†	BIN1[6]†	TREM2†, CD33†, PLCG2†	CLU†, PICALM†

Jack C et al. Alz & Dem. 2018;14:535-562. † New measures that complement elements of the original framework provided by courtesy of Dr. Jeffrey Lee Cummings

NIA- AA 2018

approach where the neuropathologic changes detected by biomarkers define the disease. Defining AD by biomarkers indicative of neuropathologic change independent from clinical symptoms represents a profound shift in thinking. For many years, AD was conceived as a



AT(N) profiles	Biomarker category	
A-T-(N)-	Normal AD biomarkers	
A+T-(N)-	Alzheimer's pathologic change	Alzheimer's continuum
A+T+(N)-	Alzheimer's disease	
A+T+(N)+	Alzheimer's disease	
A+T-(N)+	Alzheimer's and concomitant suspected non Alzheimer's pathologic change	
A-T+(N)-	Non-AD pathologic change	
A-T-(N)+	Non-AD pathologic change	
A-T+(N)+	Non-AD pathologic change	

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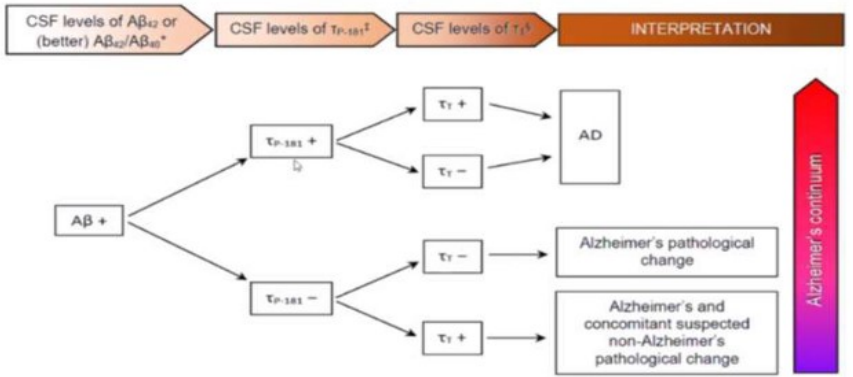
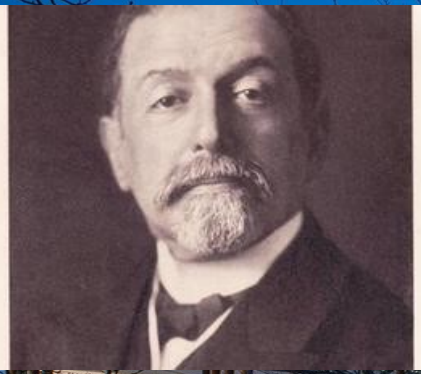
Alzheimer's & Dementia 14 (2018) 535-562
Alzheimer's & Dementia

2018 National Institute on Aging—Alzheimer's Association (NIA-AA) Research Framework

NIA-AA Research Framework: Toward a biological definition of Alzheimer's disease



Entità biologica



1892
Arnold Pick
first described a patient with progressive aphasia and focal frontotemporal atrophy
Alois Alzheimer
later characterized the disorder as "Pick disease," defined by inclusions called Pick bodies

Über eigenartige Krankheitsfälle des späteren Alters, Alzheimer A
Z Gesamte Neurol Psychiatr.
1911;4:356.

Frontotemporal Lobar Degeneration (FTLD)

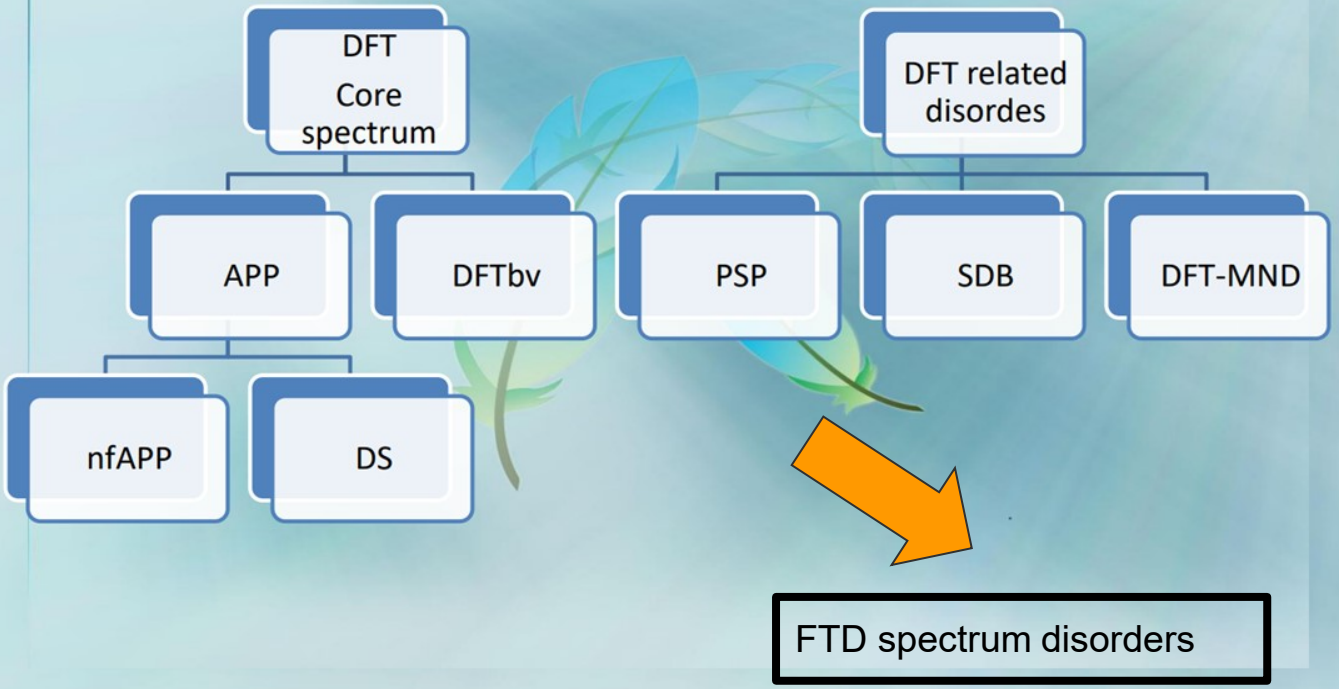
Neary Criteria (1998)

- Frontotemporal dementia
- Primary progressive aphasia (PPA)
- Semantic dementia (SD)

Other Family Members

- Progressive non-fluent aphasia (PNFA)
- Logopenic aphasia
- Progressive supranuclear palsy (PSP)
- Cortical basal degeneration (CBD)
- FTD-motor neuron disease

DFT


DFT
Core spectrum
DFT related disordes
APP
DFTbv
PSP
SDB
DFT-MND
nfAPP
DS
FTD spectrum disorders

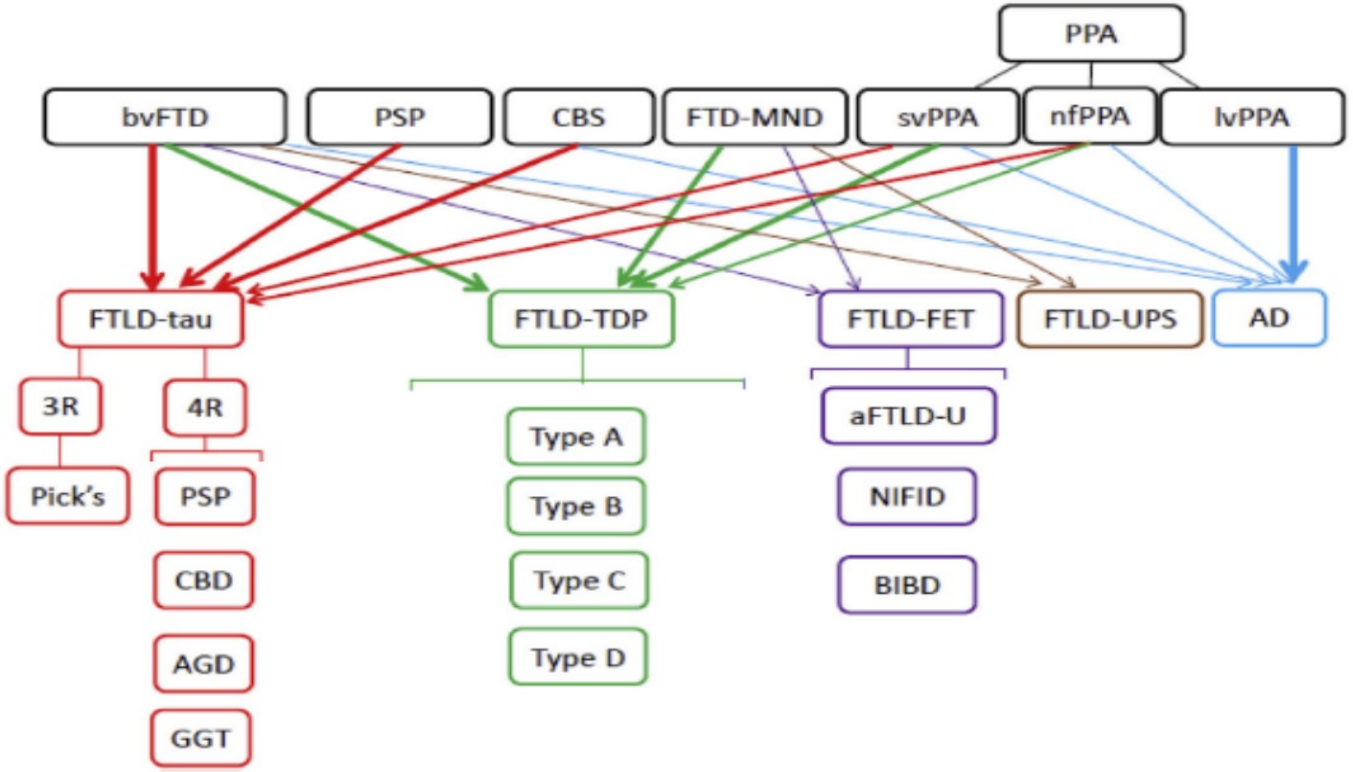


Fig. 6. Clinical and pathologic correlations in FTD spectrum disorders. This figure summarizes the overlap of FTD spectrum disorders (bvFTD, PSP, CBS, FTD-MND, svPPA, nfPPA) and their neuropathology (FTLD-tau, FTLD-TDP, FTLD-FET, FTLD-UPS) with a small portion of clinical syndromes being caused by AD abnormality. The clinical syndrome of lvPPA is highly correlated with AD abnormality.

criteri per FTD

doi:10.1093/brain/awr179 Brain 2011: 134; 2456–2477 | 2456

BRAIN
A JOURNAL OF NEUROLOGY

Sensitivity of revised diagnostic criteria for the behavioural variant of frontotemporal dementia

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The following symptom must be present to meet criteria for bvFTD

A. Shows progressive deterioration of behaviour and/or cognition by observation or history (as provided by a knowledgeable informant).

II. Possible bvFTD

Three of the following behavioural/cognitive symptoms (A–F) must be present to meet criteria. Ascertainment requires that symptoms be persistent or recurrent, rather than single or rare events.

A. Early* behavioural disinhibition [one of the following symptoms (A.1–A.3) must be present]:
   - A.1. Socially inappropriate behaviour
   - A.2. Loss of manners or decorum
   - A.3. Impulsive, rash or careless actions

B. Early apathy or inertia [one of the following symptoms (B.1–B.2) must be present]:
   - B.1. Apathy
   - B.2. Inertia

C. Early loss of sympathy or empathy [one of the following symptoms (C.1–C.2) must be present]:
   - C.1. Diminished response to other people's needs and feelings
   - C.2. Diminished social interest, interrelatedness or personal warmth

D. Early perseverative, stereotyped or compulsive/ritualistic behaviour [one of the following symptoms (D.1–D.3) must be present]:
   - D.1. Simple repetitive movements
   - D.2. Complex, compulsive or ritualistic behaviours
   - D.3. Stereotypy of speech

E. Hyperorality and dietary changes [one of the following symptoms (E.1–E.3) must be present]:
   - E.1. Altered food preferences
   - E.2. Binge eating, increased consumption of alcohol or cigarettes
   - E.3. Oral exploration or consumption of inedible objects

F. Neuropsychological profile: executive/generation deficits with relative sparing of memory and visuospatial functions [all of the following symptoms (F.1–F.3) must be present]:
   - F.1. Deficits in executive tasks
   - F.2. Relative sparing of episodic memory
   - F.3. Relative sparing of visuospatial skills

III. Probable bvFTD

All of the following symptoms (A–C) must be present to meet criteria.

A. Meets criteria for possible bvFTD

B. Exhibits significant functional decline (by caregiver report or as evidenced by Clinical Dementia Rating Scale or Functional Activities Questionnaire scores)

C. Imaging results consistent with bvFTD [one of the following (C.1–C.2) must be present]:
   - C.1. Frontal and/or anterior temporal atrophy on MRI or CT
   - C.2. Frontal and/or anterior temporal hypoperfusion or hypometabolism on PET or SPECT

IV. Behavioural variant FTD with definite FTLD Pathology

Criterion A and either criterion B or C must be present to meet criteria.

A. Meets criteria for possible or probable bvFTD

B. Histopathological evidence of FTLD on biopsy or at post-mortem

C. Presence of a known pathogenic mutation

V. Exclusionary criteria for bvFTD

Criteria A and B must be answered negatively for any bvFTD diagnosis. Criterion C can be positive for possible bvFTD but must be negative for probable bvFTD.

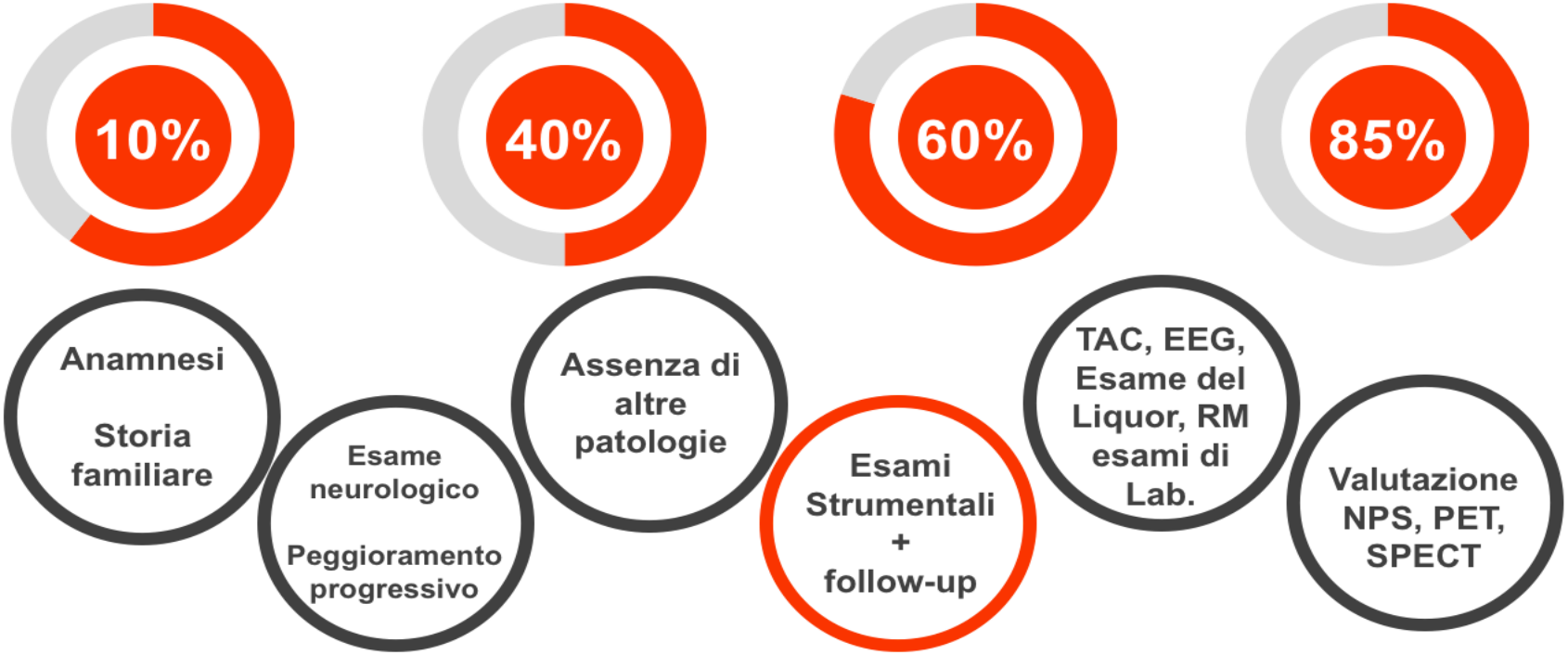
A. Pattern of deficits is better accounted for by other non-degenerative nervous system or medical disorders

B. Behavioural disturbance is better accounted for by a psychiatric diagnosis

C. Biomarkers strongly indicative of Alzheimer's disease or other neurodegenerative process

*As a general guideline 'early' refers to symptom presentation within the first 3 years (for further discussion see Supplementary material, Appendix 1).
bvFTD = behavioural variant FTD.

La diagnosi “probabile”



CONCLUSIONI

evoluzione storica dell’approccio alla diagnosi delle demenze

miglioramento della sensibilità e della specificità delle indagini a nostra disposizione

approccio più precoce alla patologia

avvento di nuove terapie che impattano il decorso della malattia


AMBULATORIO CDCD
ASST- Papa Giovanni XXIII

Presa in carico del paziente

Prima visita

pz accompagnato
anamnesi mirata
valutazione neurologica
valutazione neuropsicologica di base
EON / MMSE (o altro test di screening)
richiesta esami


Visita di controllo
controllo clinico
Terapia per i disturbi cognitivi
Terapia per i disturbi comportamentali
altre terapie

Specialisti a disposizione

neurologo
psichiatra
geriatra
neuroradiologo
med. nucleare
psicologo e neuropsicologo
assistenti sociali
altro

Esami strumentali

TC
RM 1,5 e 3 tesla
PET FDG
amyloid PET
Dat Scan
EEG
altro…


Biochimica
esami ematici di routine
esami ematici specifici per demenze
profilo demenza su CSF
pannello encefaliti e Ag onconeuronali su siero e CSF


in corso di definizione
markers plasmatici
Neurofilamenti
RT - quIC

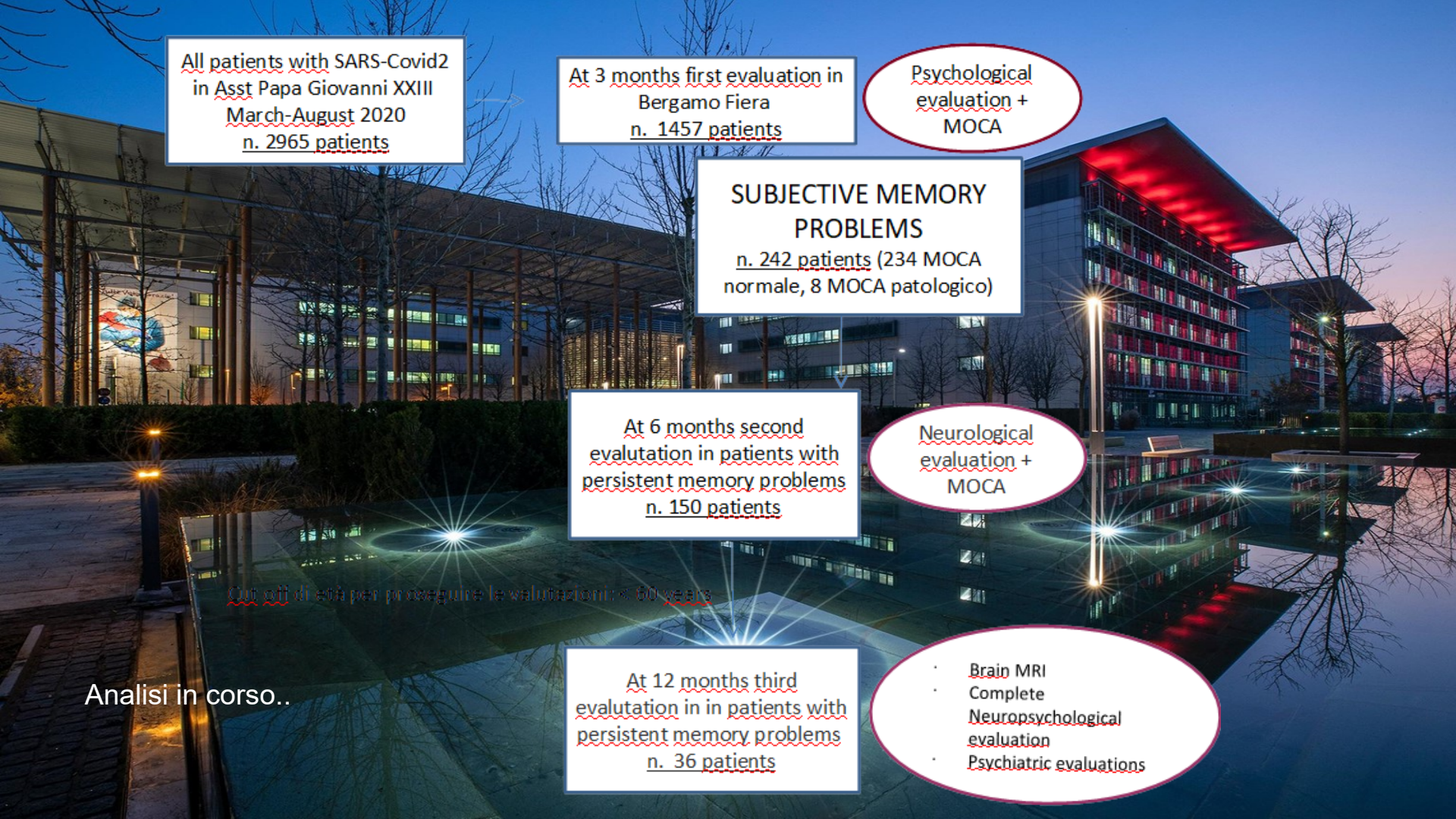
Neuropsychological and cognitive impact of COVID-19: an observational study in patients with subjective memory impairment after SarsCov2 infection

Obbiettivi dello studio

Valutare eventuali sequele cognitive a medio - lungo termine in pazienti che lamentano disturbi di memoria persistenti post infezione SarsCov2

Valutare se presente correlazione tra i disturbi cognitivi riscontrati e la fase acuta dell'infezione

Definire una batteria neuropsicologica standardizzata che possa obiettivare deficit cognitivi in ambiti specifici


All patients with SARS-Covid2 in Asst Papa Giovanni XXIII March-August 2020 n. 2965 patients
At 3 months first evaluation in Bergamo Fiera n. 1457 patients
Psychological evaluation + MOCA
SUBJECTIVE MEMORY PROBLEMS n. 242 patients (234 MOCA normale, 8 MOCA patologico)
At 6 months second evalutation in patients with persistent memory problems n. 150 patients
Neurological evaluation + MOCA
Qui età per proseguire le valutazioni: < 60 years
At 12 months third evalutation in in patients with persistent memory problems n. 36 patients
Brain MRI
Complete Neuropsychological evaluation
Psychiatric evaluations
Analisi in corso..


GRAZIE
per l’ ATTENZIONE