



Société Francophone de Psychogériatrie  
et de Psychiatrie de la Personne Âgée

## What's up/What's next en gériatrie, psychogériatrie et psychiatrie de la personne âgée ?

Dr Mathieu HERRMANN, psychiatre, BRON  
Dr Alexis LEPETIT, psychiatre et gériatre, LYON  
Dr Julien VERNAUDON, gériatre, VILLEFRANCHE-SUR-SAÔNE

**LE VINATIER**

PSYCHIATRIE UNIVERSITAIRE  
LYON MÉTROPOLE



**hno**

Hôpitaux  
Nord-Ouest  
Villefranche-sur-Saône





## Conflits et lien d'intérêt

- Julien VERNAUDON : aucun
- Alexis LEPETIT
  - Laboratoires Lundbeck
    - Investigateur principal protocole Memory
    - Symposium satellite (congrès SF3PA 2019, 2023 et 2024)
    - Participation à un board d'expert (2023)
  - Acadia Pharmaceuticals
    - Investigateur associé protocole ACP-103-032
    - Investigateur associé protocole ACP-103-033
  - Laboratoire Delbert
- Mathieu HERRMANN
  - Aucun dans le cadre de cette présentation
  - Investigateur associé étude Lundbeck 17354N (2018-2020)



## Vos orateurs

3 domaines

- Psychiatrie de la personne âgée
  - Dr Mathieu Herrmann
  
- Prise en charge des symptômes psychocomportementaux des troubles neurocognitifs majeurs
  - Dr Alexis Lepetit
  
- Gériatrie
  - Dr Julien Vernaudo



# Antipsychotiques d'action prolongée et PA

Wei Y, Yan VKC, Huang C, Deng EK et al. Disease relapse, all-cause mortality, and adverse events associated with long-acting injectable antipsychotics versus oral antipsychotics in older people with schizophrenia in Hong Kong: a population-based within-subject analysis. *Lancet Psychiatry* 2025; 18:830-40



# Contexte

Clinical Interventions in Aging

Open Access Full Text Article

## Efficacy and safety of risperidone long-acting injection in elderly people with schizophrenia

This article was published in the following Dove Press journal:  
Clinical Interventions in Aging  
25 August 2009

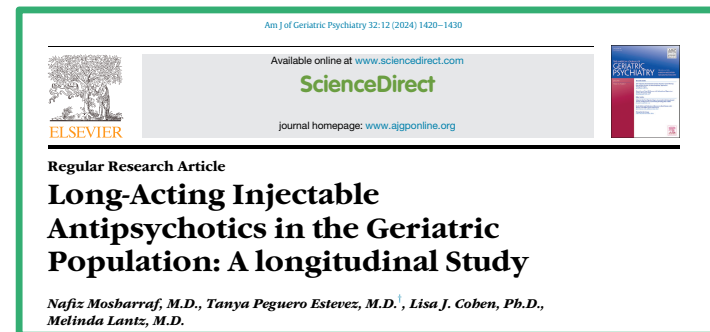
Dovepress  
open access to scientific and medical research  
REVIEW



### Regular Research Article

## A Comparison of Long-Acting Injectable Antipsychotics With Oral Antipsychotics on Time to Rehospitalization Within 1 Year of Discharge in Elderly Patients With Schizophrenia

Ching-Hua Lin, M.D., Ph.D., Feng-Chua Chen, B.S., Hung-Yu Chan, M.D., Ph.D., Chun-Chi Hsu, M.D.



### Regular Research Article

## Long-Acting Injectable Antipsychotics in the Geriatric Population: A longitudinal Study

Nafiz Mosharraf, M.D., Tanya Peguero Estevez, M.D., Lisa J. Cohen, Ph.D., Melinda Lantz, M.D.

Original Investigation | Psychiatry

July 28, 2022

## Association of Long-Acting Injectable Antipsychotics and Oral Antipsychotics With Disease Relapse, Health Care Use, and Adverse Events Among People With Schizophrenia

Yue Wei, MPH<sup>1</sup>, Vincent K. C. Yan, BPharm<sup>1</sup>, Wei Kang, MSc<sup>1</sup>, et al

## Oral Antipsychotic Versus Long-Acting Injections Antipsychotic in Schizophrenia Spectrum Disorder: a Mirror Analysis in a Real-World Clinical Setting

By Nicola Poloni, Marta Ielmini, Ivano Caselli, Giulia Lucca, Alessandra Gasparini, Giorgia Lorenzoli, Camilla Callegari

## Disease relapse, all-cause mortality, and adverse events associated with long-acting injectable antipsychotics versus oral antipsychotics in older people with schizophrenia in Hong Kong: a population-based within-subject analysis

Yue Wei, Vincent K C Yan, David J Castle, Caige Huang, Eunice Kehui Deng, Shek-Ming Leung, Hei Hang Edmund Yiu, Kyung Jin Lee, Simon S Y Lui, Vanessa W S Ng, Joseph F Hayes, Francisco T T Lai, Huali Wang, Eric W C Yan, Esther W Chan

Lancet Psychiatry 2025;  
12: 830-40

Etudes monocentriques, rétrospectives, faibles effectifs et durées de suivi  
Pas d'étude du risque de mortalité et EI détaillé



# Méthodes et résultats

## Objectif principal

Taux de rechute (hospitalisation pour schizophrénie)



n = 4696 65+ (24 985)

51,2% Femmes

2004-2023 avec suivi moyen 7,92ans (SD 5,31)

## Objectifs secondaires

Mortalité toute cause

Effets secondaires

Admission pour cause CV

Sd EP

Atteinte hépatique aigue

Atteinte rénale aigue

Multicentrique

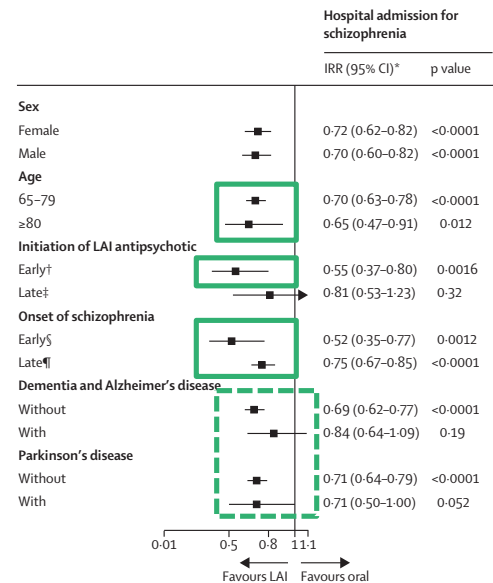
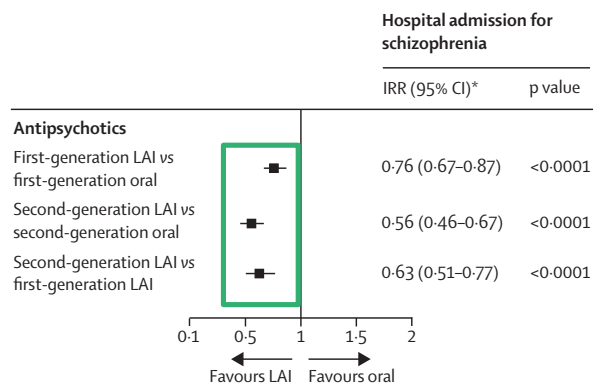
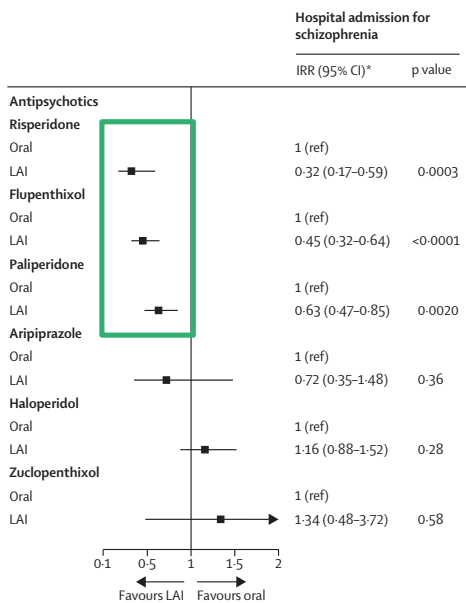
Analyse intra-individuelle sur données de population

Registre du Hong Kong Hospital Authority



# Résultats

**Objectif principal**  
Taux de rechute (hospitalisation pour schizophrénie)

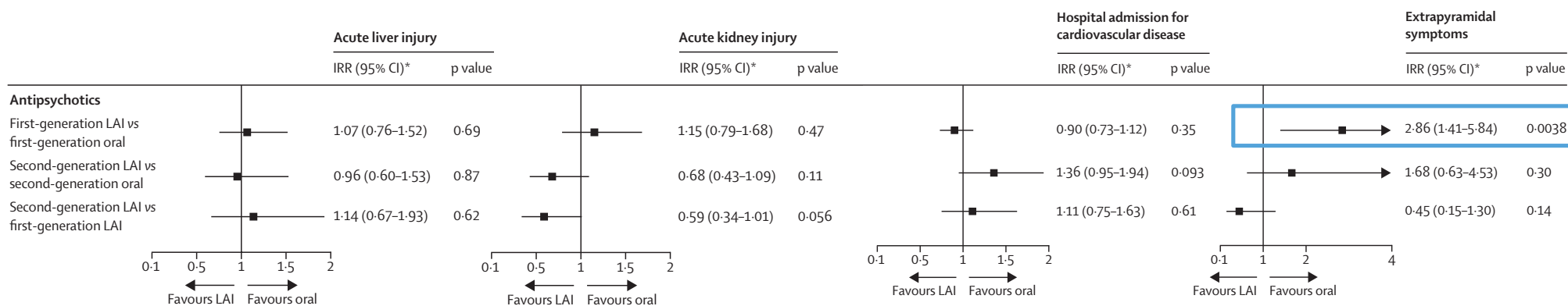


# Résultats

## Objectifs secondaires

- Mortalité toute cause
- Effets secondaires
- Admission pour cause CV
- Sd EP
- Atteinte hépatique aigue
- Atteinte rénale aigue

↘ Mortalité toute cause  
HR = 0,23 (p<0,0001)





## APAP vs PO

**Diminution des  
réhospitalisations  
Diminution de la mortalité**

**Pas de majoration du risque  
d'EI  
Sauf ↗ risque Sd EP avec 1G  
Données limitées dans les TNC**



# Arrêt des antipsychotiques dans les SPCD

Roche S, Naran N, Scholtz J, Liu KY, Reeves S, Howard R. Systematic review and meta-analysis of antipsychotic discontinuation in dementia. *Alzheimer's Dement.* 2025;11:e70188.  
[doi.org/10.1002/trc2.70188](https://doi.org/10.1002/trc2.70188)

# Arrêt des antipsychotiques dans les SPCD

Roche et al. 2025

DOI: 10.1002/trc2.70188

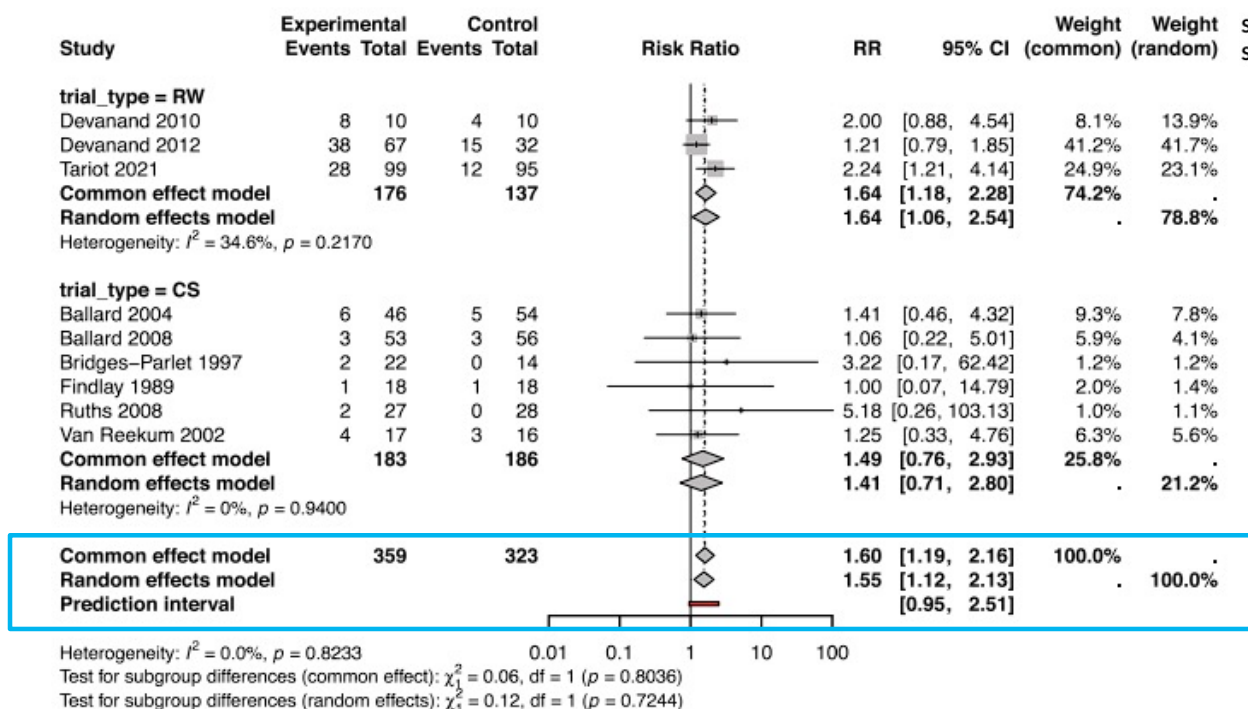
RESEARCH ARTICLE

Roche ET AL.

9 of 12

## Systematic review and meta-analysis of antipsychotic discontinuation in dementia

Sophie Roche<sup>1,2</sup> | Nimesh Naran<sup>1</sup> | Janneke Scholtz<sup>1</sup> | Kathy Y. Liu<sup>2</sup> | Suzanne Reeves<sup>2</sup> | Rob Howard<sup>2</sup>



- 9 articles
- 682 patients
- **Risque de rechute à l'arrêt de l'AP d'environ 50%**

**FIGURE 3** Forest plot of relative risk difference following antipsychotic withdrawal. CS, cessation study; Events, relapse events per group; RR, risk ratio; RW, randomized withdrawal trial; Total, sample size; Weight, adjusted fixed-effects weight using Mantel-Haenszel method; 95% CI, associated 95% confidence interval.

# Arrêt des antipsychotiques dans les SPCD

Roche et al. 2025

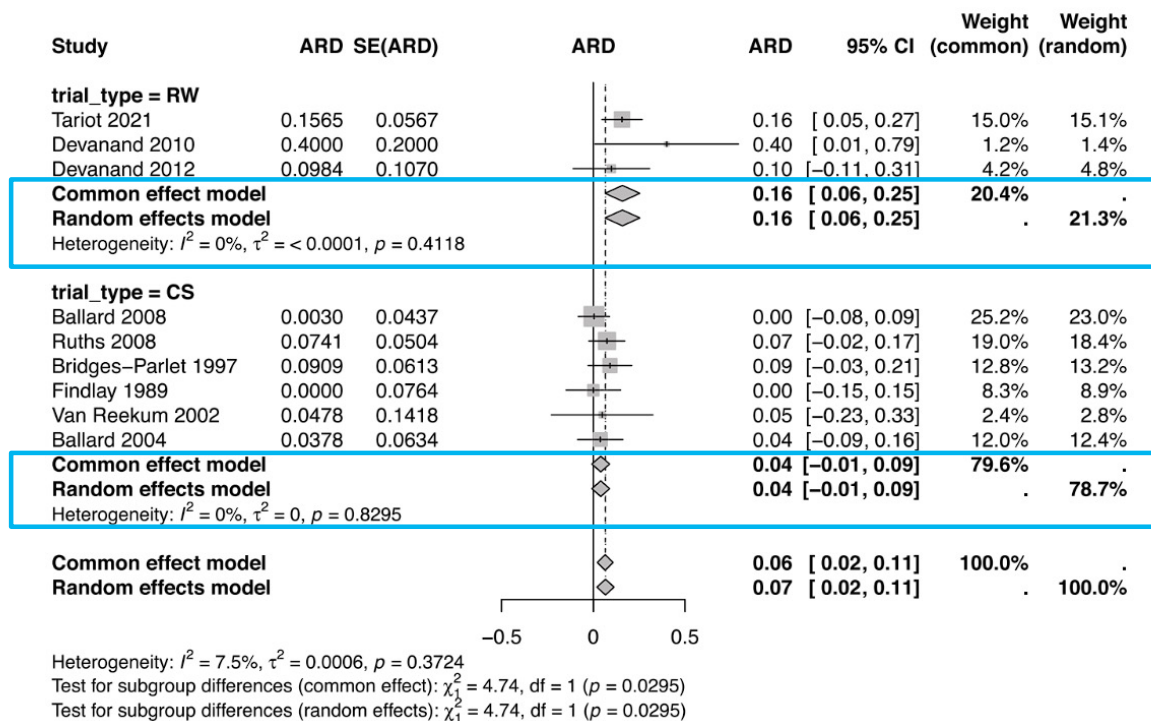
DOI: 10.1002/trc2.70188

RESEARCH ARTICLE

Translational Research  
Clinical Interventions

## Systematic review and meta-analysis of antipsychotic discontinuation in dementia

Sophie Roche<sup>1,2</sup> | Nimesh Naran<sup>1</sup> | Janneke Scholtz<sup>1</sup> | Kathy Y. Liu<sup>2</sup> | Suzanne Reeves<sup>2</sup> | Rob Howard<sup>2</sup>



**Attention à la méthodologie des études incluses:**

RW: essais randomisés d'interruption du traitement (population enrichie)  
 Risque absolu de rechute à l'arrêt: 54,9 %

**VS**

CS: essais de discontinuation  
 Risque absolu de rechute à l'arrêt :10,7%



# Amyloid-beta-targeting monoclonal antibodies for people with mild cognitive impairment or mild dementia due to Alzheimer's disease

16 avril 2026





# Anticorps anti-amyloïde

## Contexte

- **Aducanumab**
  - FDA accord le 07/06/2021
  - EMA refus le 17/12/2021
  - Arrêt production et commercialisation 2024
- **Lecanemab**
  - FDA accord le 06/01/2023
  - EMA refus le 26/07/2024
  - EMA accord le 14/11/2024
  - AMM par Commission européenne le 15/04/2025
  - HAS refus accès précoce le 09/09/2025
  - HAS SMR insuffisant le 07/11/2025
- **Donanemab**
  - FDA accord le 02/07/2024
  - EMA refus le 28/03/2025
  - EMA accord le 24/07/2025
  - HAS refus accès précoce le 28/03/2026
  - HAS SMR insuffisant le 26/05/2026



## Méthodes

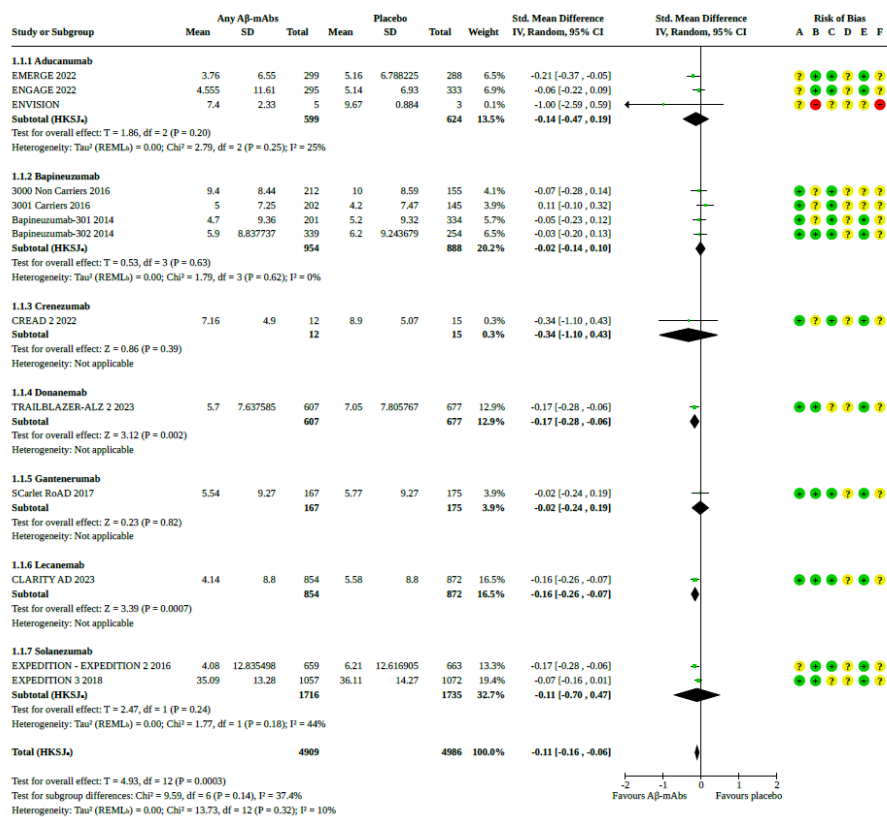
- Méta analyse
- 17 études vs placebo  $\geq$  18 mois
  - Aducanumab : 3
  - Bapineuzumab : 4
  - Crenezumab : 2
  - Donanemab : 1
  - Gantenerumab : 4
  - Lecanemab : 1
  - Solanezumab : 2
- 20.342 patients
- Résultats à 18 mois
  - Cognition (ADAS-Cog)
  - Sévérité du TNC (CDR-SB)
  - Statut fonctionnel (ADCS-ADL, ADSC-iADL, ADSC-ADL-MCI)
  - Effets indésirables : ARIA-E, ARIA-H, EI graves, mortalité



# Résultats

## Cognition : peu ou pas de différence vs placebo

Figure 2. Forest plot showing the effect of Amyloid $\beta$ -targeting monoclonal antibodies versus placebo on cognitive function at 18 months

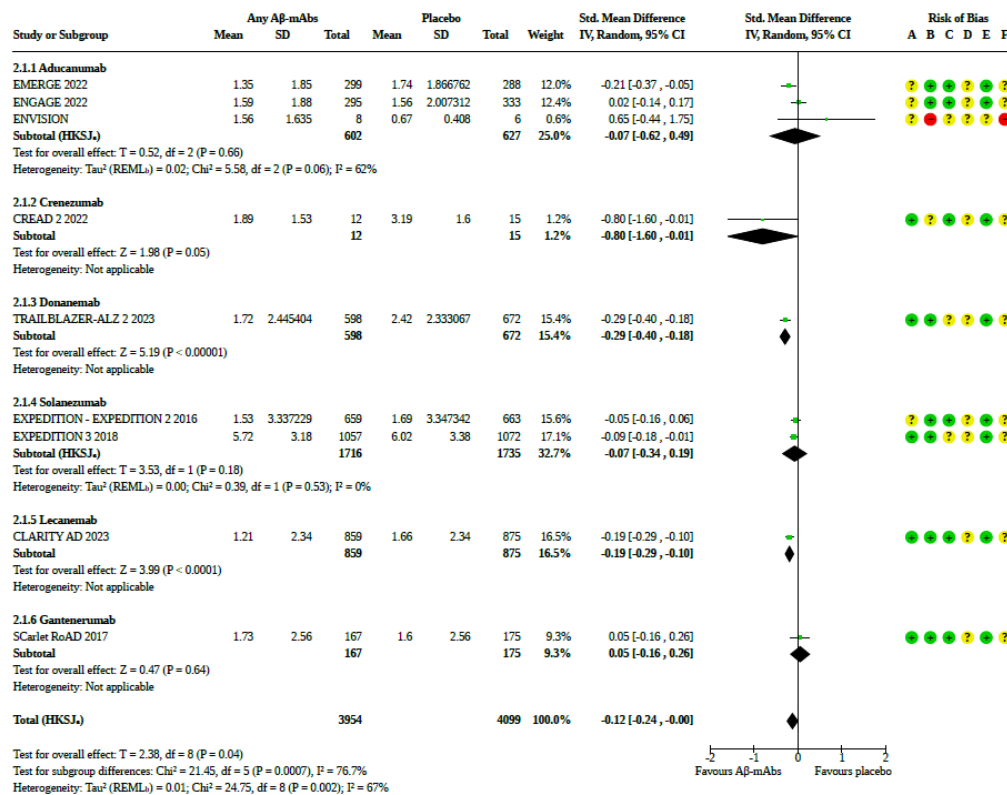




# Résultats

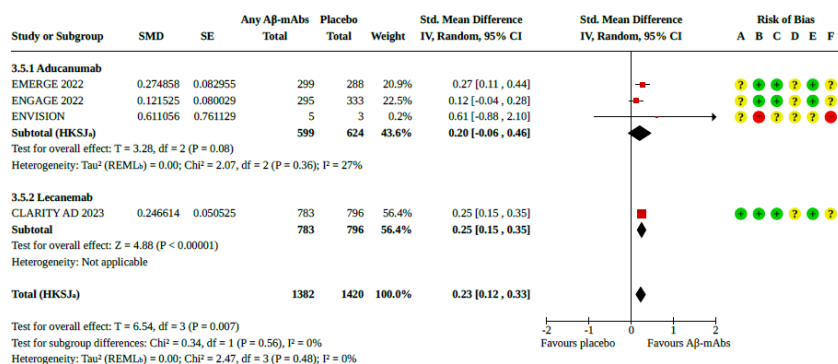
## Sévérité du TNC : peu ou pas de différence vs placebo

Figure 3. Forest plot showing the effect of Amyloid $\beta$ -targeting monoclonal antibodies versus placebo on dementia severity at 18 months

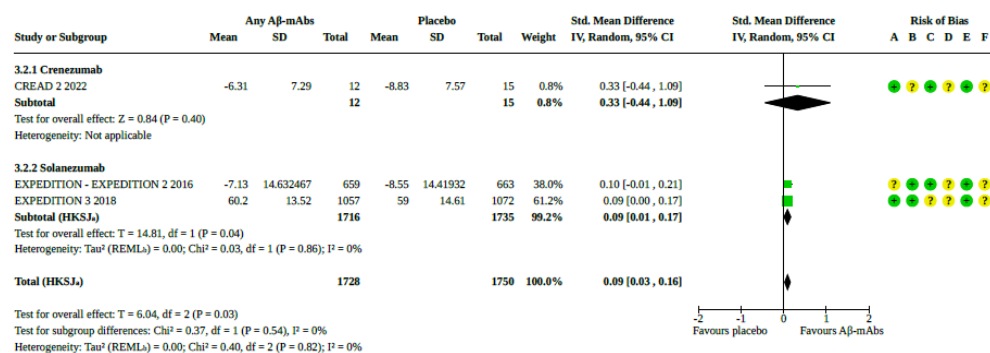


## Statut fonctionnel: peu ou pas de différence vs placebo ADL, faible effet IADL

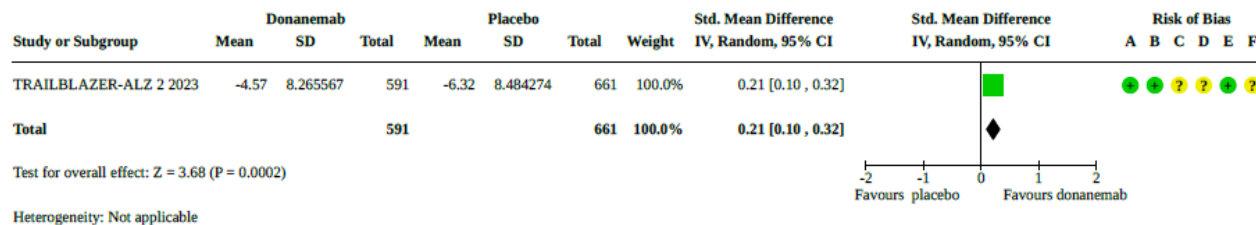
**Figure 5. Forest plot showing the effect of Amyloid $\beta$ -targeting monoclonal antibodies versus placebo on functional ability -measured with ADCS-ADL-MCI- at 18 months**



**Figure 4. Forest plot showing the effect of Amyloid $\beta$ -targeting monoclonal antibodies versus placebo on functional ability at 18 months**



**Figure 6. Forest plot showing the effect of Amyloid $\beta$ -targeting monoclonal antibodies versus placebo on functional ability - measured with ADCS-iADL- at 18 months**



## Effets indésirables : petite augmentation risque ARIA-E, pas des EI graves ni mortalité

Figure 7. Forest plot showing the effect of Amyloid $\beta$ -targeting monoclonal antibodies versus placebo on any Amyloid-Related Imaging Abnormality edema (ARIA E) at 18 months

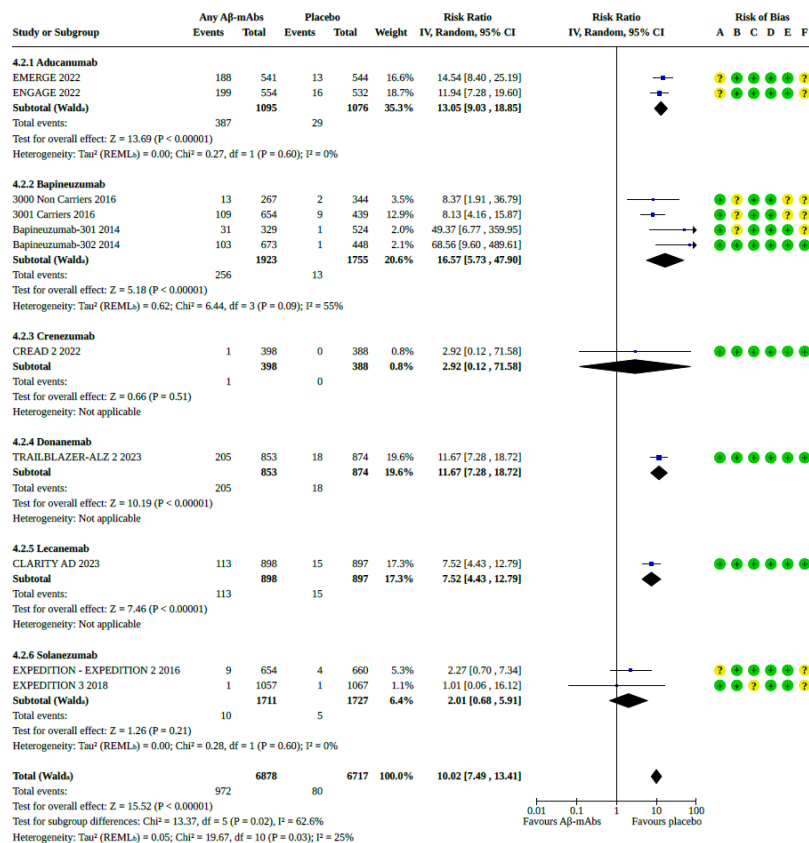
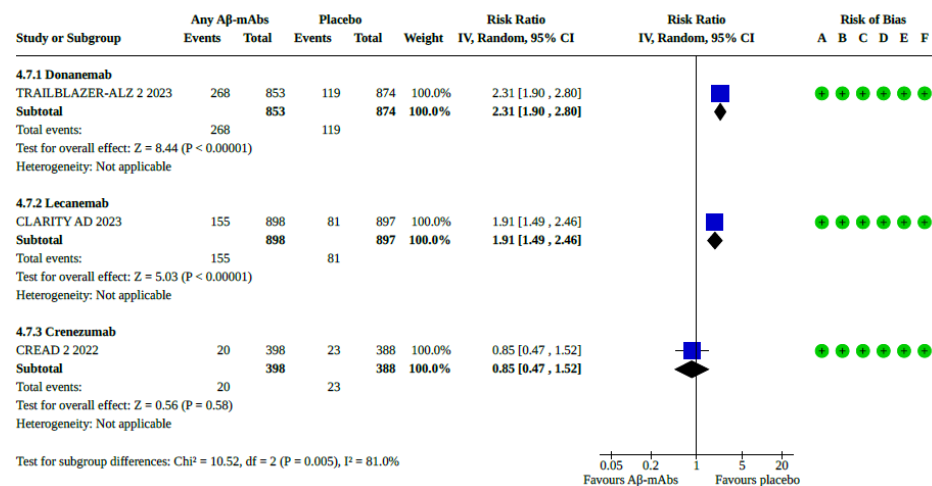


Figure 9. Forest plot showing the effect of Amyloid $\beta$ -targeting monoclonal antibodies versus placebo on any Amyloid-Related Imaging Abnormality haemorrhage (ARIA H) at 18 months





## Conclusion

- Effet des Ac anti-amyloïde sur cognition, sévérité du TNC à 18 mois chez patients avec TNC L ou TNC M léger insignifiant
- Effet sur le statut fonctionnel au mieux faible
- Augmentation ARIA
- Peu d'EI graves
- La disparition des lésions amyloïde ne semble pas entraîner d'effets cliniques pertinents.
- Balance bénéfique/ risque non favorable



## Réactions

- Fox NC, Kohlhaas S, Schott JM. Alzheimer's disease immunotherapy and the amyloid hypothesis: when aggregation obscures interpretation. Lancet. 2026 Apr 23
  - Ac avec cibles amyloïdes et propriétés pharmacologies différentes => dilution des effets cliniques et indésirables
  - Effet clinique pertinent
  - AMM dans plusieurs pays



# Traitements du TSPT de la Personne Âgée : Revue systématique et méta- analyse

Gómez-Bautista D, Lye V, Zabihi S, Beenakker M et al. Effectiveness of treatments for post-traumatic stress disorder for older people: A systematic review and meta-analysis of randomized controlled trials. *Journal of Affective Disorders*. 2026; 394:120433



# Contexte

Journal of Affective Disorders 394 (2026) 120433



Contents lists available at [ScienceDirect](#)

Journal of Affective Disorders

journal homepage: [www.elsevier.com/locate/jad](http://www.elsevier.com/locate/jad)



Effectiveness of treatments for post-traumatic stress disorder for older people: A systematic review and meta-analysis of randomized controlled trials

Denise Gómez-Bautista<sup>a</sup>, Valerie Lye<sup>a</sup>, Sedigheh Zabihi<sup>b</sup>, Margreet Beenakker<sup>c</sup>, Mía Maria Günak<sup>d</sup>, Moïse Roche<sup>a</sup>, Sjacko Sobczak<sup>c,e,f</sup>, Joan M. Cook<sup>g</sup>, Monica Cations<sup>h</sup>, Miranda Olf<sup>i,j</sup>, Vasiliki Orgeta<sup>k</sup>, on behalf of the Global Collaboration on Trauma and Ageing group

Principes thérapeutiques extrapolés de l'adulte plus jeune pour

- Pharmacothérapie
- Traitements psychologiques

Peu de données efficacité/tolérance chez la PA

Journal of Anxiety Disorders 114 (2025) 103047



Contents lists available at [ScienceDirect](#)

Journal of Anxiety Disorders

journal homepage: [www.elsevier.com/locate/janxdis](http://www.elsevier.com/locate/janxdis)



Review

PTSD and cognition in older adults: A systematic literature review

Jasmijn E. van Rossum<sup>a,\*</sup>, Semmy Op den Camp<sup>a,b</sup>, Renske Uiterwijk<sup>b</sup>, Kay Deckers<sup>c</sup>, Vasiliki Orgeta<sup>d</sup>, Bernice J.A. Gulpers<sup>b</sup>, Sjacko Sobczak<sup>a,b,e</sup>

Prévalence vie entière 4,5-7% pour les 60+

Sous-diagnostic et fréquence TSPT sub-syndromique

Déclin accéléré en cognition générale, mémoire et attention

# Méthodes et résultats



Effectiveness of treatments for post-traumatic stress disorder for older people: A systematic review and meta-analysis of randomized controlled trials

Denise Gómez-Bautista<sup>a</sup>, Valerie Lye<sup>a</sup>, Sedigheh Zabihi<sup>b</sup>, Margreet Beenakker<sup>c</sup>, Mia Maria Günak<sup>d</sup>, Moise Roche<sup>e</sup>, Sjacko Sobczak<sup>f,g,h</sup>, Joan M. Cook<sup>b</sup>, Monica Cations<sup>b</sup>, Miranda Olf<sup>h</sup>, Vasiliki Orgeta<sup>h</sup>, on behalf of the Global Collaboration on Trauma and Ageing group



## Objectif principal

Taux de rémission et sévérité des symptômes de TSPT

## Objectif secondaire clé

Symptômes dépressifs



10 RCT (analyse qualitative)  
8 RCT (méta-analyse)



n = 682  
~ 50% de vétérans ou trauma guerre  
Majorité d'hommes  
1 étude avec âge moyen > 80ans  
ÉU/Israël (5)

## Interventions psychologiques (6sem - 24mois)

- Thérapie exposition narrative (4)
- TCC centrée sur trauma (1)
  - TCC par internet (1)
- Thérapie par réminiscence (1)
- Soins collaboratifs incluant case management et PST (1)
  - Psychothérapie à orientation spirituelle (1)
  - Accompagnement à l'activité physique (1)

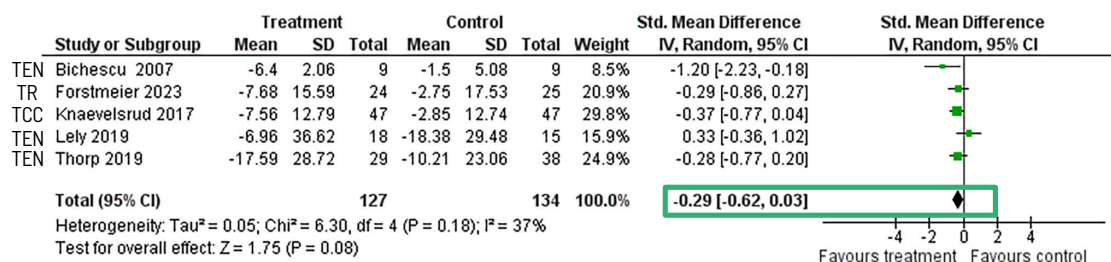


Fig. 2. Trauma-based treatments versus treatment as usual for PTSD symptoms post-treatment.

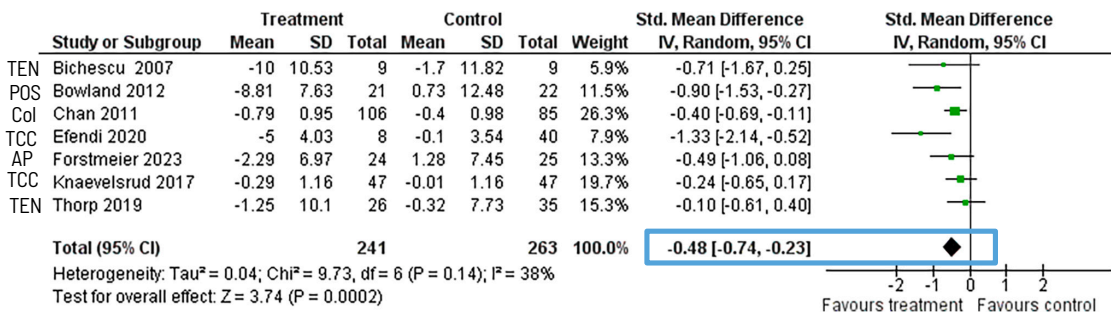


Fig. 3. Trauma-based treatments versus treatment as usual for depressive symptoms post-treatment.

**Objectif principal**  
Taux de rémission et sévérité des symptômes de TSPT

Faible niveau de preuve

**Objectif secondaire clé**  
Symptômes dépressifs

Niveau de preuve modéré  
Effet de taille moyen



## Pharmacothérapies ?

activity counselling (1 trial). Intervention duration varied from 6 weeks to 24 months, with sessions lasting from 60 to 120 min each. Control conditions included waiting lists, usual care, relaxation training, supportive group therapy, psychoeducation, and present-centred therapy.

We did not identify any trials evaluating pharmacological treatments.

Nécessité d'études à plus large échelle, population plus diversifiée

Techniques possibles chez PA et bénéfiques

Adaptations à facteurs liés à l'âge (troubles sensoriels, cognitifs, comorbidités physiques...)



# Anxiété et maladie de Parkinson

Berry, A.J., Costello, H., Jesús, S., Price, G. and Jha, A. (2025), Management of Anxiety in Parkinson's Disease. *Mov Disord Clin Pract*, 12: 1490-1501.  
[doi.org/10.1002/mdc3.70144](https://doi.org/10.1002/mdc3.70144)

# Anxiété et maladie de Parkinson

Berry et al. 2025

## Management of Anxiety in Parkinson's Disease

Alex J. Berry, MRCPsych,<sup>1</sup> Harry Costello, MRCPsych, PhD,<sup>1,2</sup> Silvia Jesús, MD, PhD,<sup>3</sup> Gary Price, FRCPsych, PhD,<sup>1</sup> and Ashwani Jha, MRCP, PhD<sup>4\*</sup>

**TABLE 1** Summary of anxiety rating scales in Parkinson's disease.

Scale	Description
Parkinson Anxiety Scale (PAS) <sup>22</sup>	Validated in PD, divided into sections screening for "persisting anxiety," "episodic anxiety" and "avoidance behavior," and rates the severity of symptoms. A score of >14 has been suggested as a "cut off" score for an anxiety disorder. There are both self-rated and observer-rated versions of the PAS, and they take 2–5 min to administer.
Geriatric Anxiety Inventory (GAI) <sup>23</sup>	A 20-item self-report measure of severity of anxiety symptoms. The scale excludes the inclusion of somatic symptoms of anxiety which overlap with PD motor features, making it a useful scale in PD
Non-Motor Symptoms of Parkinson's disease scale (NMSS) <sup>24</sup>	Clinician-based scale. Validated in PD and can screen for a multitude of other non-motor symptoms. Questions are weighted towards depression and apathy rather than anxiety specifically.
Neuropsychiatric Inventory (NPI) <sup>25</sup>	Clinician-based scale, which can be administered to caregivers, and may be helpful in identifying problems with caregiver burden. Is validated for use in dementia.
State-Trait Anxiety Inventory (STAI) <sup>26</sup>	Self-assessment Likert scale, where a cut off >40 has been proposed to detect clinically significant anxiety in the general population
Liebowitz Social Anxiety Scale <sup>27</sup>	Self-assessment tool using a Likert scale to rate fear and avoidance of several scenarios that may provoke anxiety. This scale has been used by some study groups to assess for presence of anxiety symptoms in PD.
Hospital Anxiety and Depression Rating Scale (HADS) <sup>28</sup>	Self-assessment symptom severity scale, which has the advantage of screening for depressive symptoms too. Scoring >11 is felt to represent the presence of clinically significant anxiety.
Hamilton Anxiety Rating Scale (HAM-A) <sup>29</sup>	Clinician-administered questionnaire. Focused towards detection of generalized anxiety symptoms (rather than panic attacks, or phobic anxiety brought on by particular scenarios)
Beck Anxiety Inventory (BAI) <sup>30</sup>	Self-assessment scale, focused towards the assessment of panic symptoms predominantly

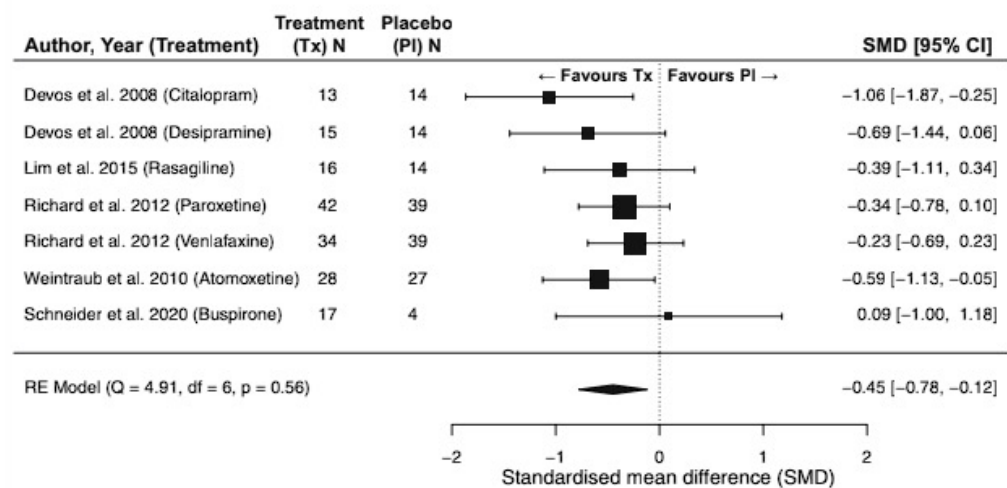
- Prévalence moyenne: **31%** (6-55%)
- Dépression + Anxiété: **19,3%**
- Facteurs de risque
  - Sexe féminin
  - Perte d'autonomie importante
  - Âge de début précoce de la MPI
  - Haute dose de L-DOPA quotidienne
  - Insomnie
  - Antécédent d'anxiété
  - Fluctuations motrices

# Anxiété et maladie de Parkinson

Berry et al. 2025

## Management of Anxiety in Parkinson's Disease

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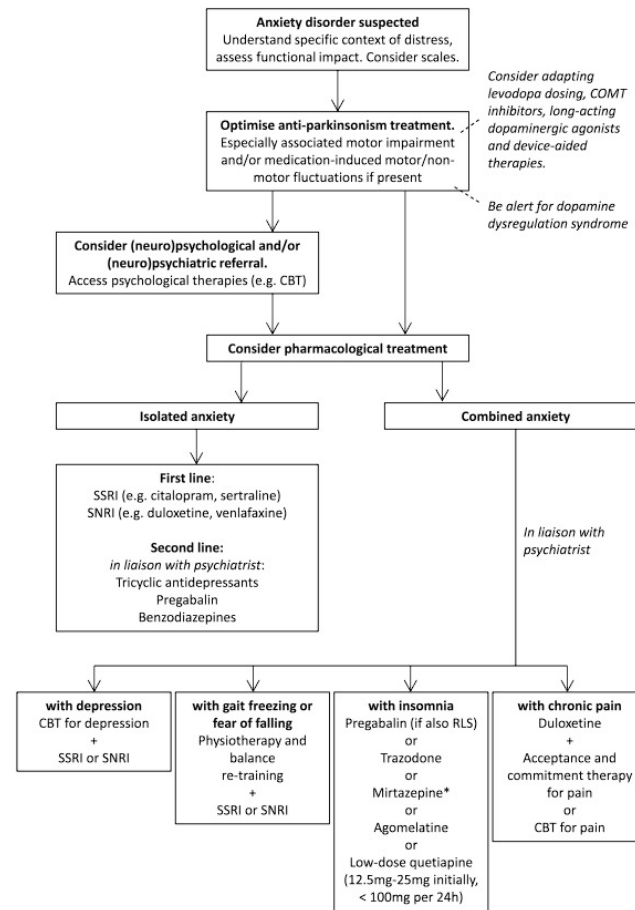
**Figure 1.** Forest plot of anxiety symptom change with treatment versus placebo in RCTs of pharmacological therapies in PD where anxiety is reported as a secondary outcome measure. The included RCTs were identified from three published systematic reviews of treatments for depression in PD, rather than through an independent systematic review of anxiety treatments. A multilevel meta-analysis was performed, clustering by study as a random effect to account for multiple treatment arms from two included studies.

# Anxiété et maladie de Parkinson

Berry et al. 2025

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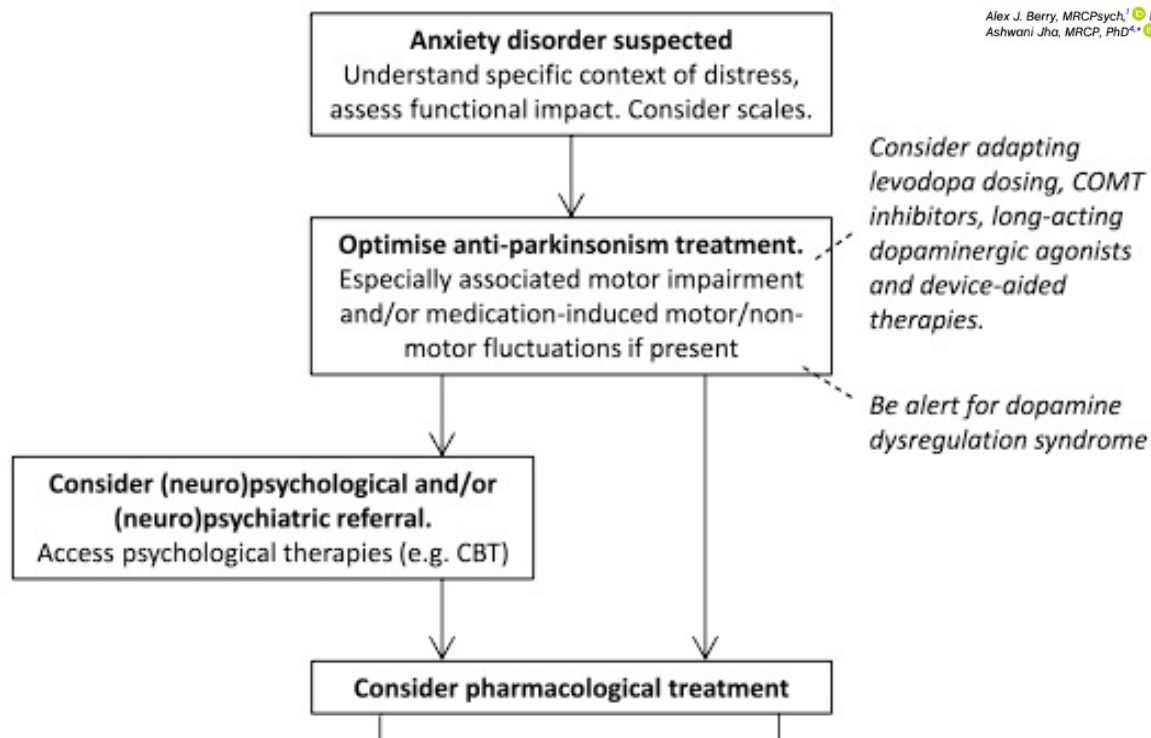


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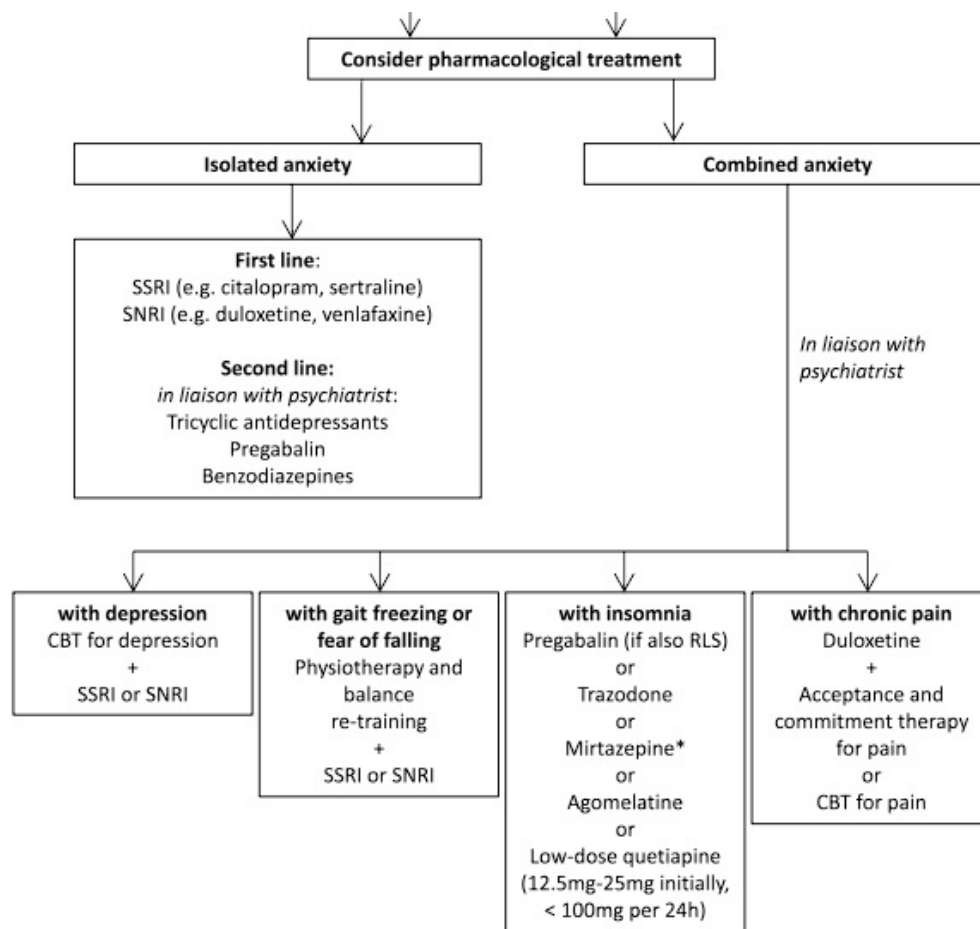


# Anxiété et maladie de Parkinson

Berry et al. 2025

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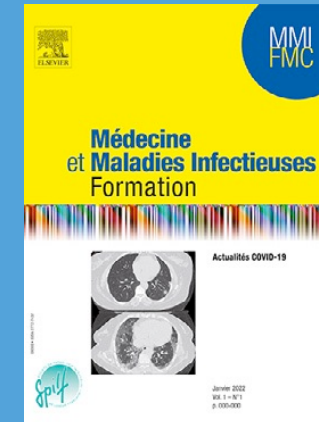




# Antibiothérapie sous-cutanée: recommandations pour la pratique clinique - Société de Pathologie Infectieuse de Langue Française/Société Française de Gériatrie et de Gériatologie



11 décembre 2025



Emmanuel Forestier; Gaëtan Gavazzi; Sylvain Diamantis; Sylvain Goutelle; Claire Roubaud-Baudron. Antibiothérapie sous-cutanée: recommandations pour la pratique clinique - Société de Pathologie Infectieuse de Langue Française/Société Française de Gériatrie et de Gériatologie. Médecine et Maladies Infectieuses Formation, Mars 01, 2026, Volume 5, Numéro 1, Pages 64-77



## Contexte et méthodes

- Situations complexes pour ATB IV ou PO
- ceftriaxone SC
  - Hors AMM en 2014 suite avis EMA
  - ANSM 22/10/2019 : « dans certaines situations, le clinicien peut juger indispensable l'administration de la ceftriaxone par voie sous-cutanée au regard du rapport bénéfice/risque pour son patient et sous réserve d'en informer ce dernier ou sa famille
- Pas d'autre ATB SC
- Recommandations de bonnes pratiques cliniques

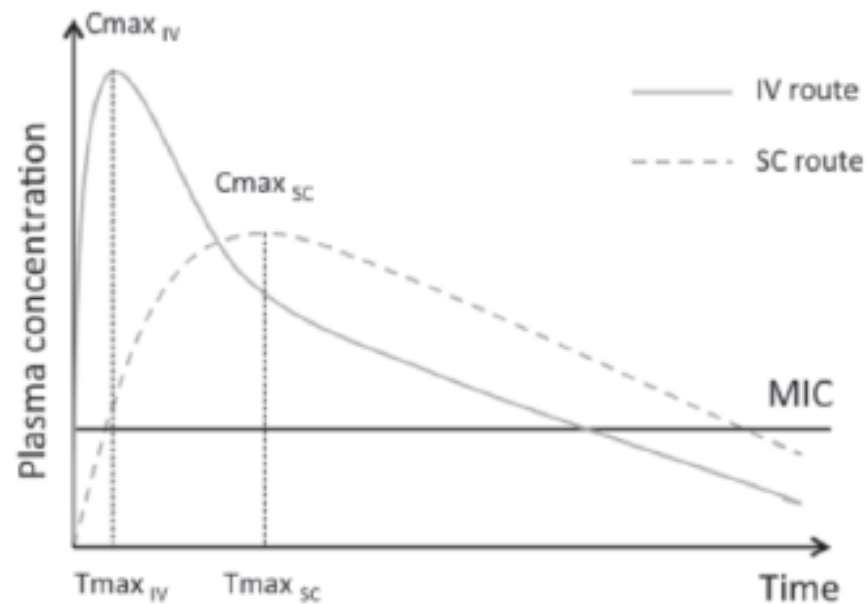
Grade A : Preuve scientifique établie.  
Grade B : Présomption scientifique.  
Grade C : Faible niveau de preuve scientifique.  
AE : Avis d'Expert.

1: Accord fort.  
2: Accord modéré.  
3: Accord faible.



## Rationnel utilisation voie SC

- Voie SC contre-indiquée pour les ATB concentration dépendants (Grade B-1)





## Indications et contre-indications ATB SC

- Voie SC contre-indiquée en cas d'infection grave, notamment sepsis et choc septique (Grade C-1)
- Décision de la voie SC basée sur éléments cliniques (Grade C-1)
  - En faveur :
    - Capital veineux de mauvaise qualité
    - Troubles du comportement et risque d'arrachage du KT IV
    - Troubles de la vigilance et de la déglutition
    - Absence ou indisponibilité d'un ATB approprié PO
    - Anticoagulation CI injection IM
    - Nécessité de mobilisation
    - Situations de fin de vie
    - Thérapie prolongée
  - En défaveur : nécessité d'une voie IV pour un autre ttt, dermatose extensive, lymphoedème majeur



## Quels antibiotiques ?

- Ceftriaxone (Grade A-1)
- Céfazoline, ertapénem, méropénem, pipéracilline-tazobactam, témocilline, benzathine benzylpenicilline (Grade B-1)
- Téricoplamine (Grade C-1)
- Certaines beta-lactamines (amoxicilline +/- a. clavulanique, céfépime, céfazidime), daptomycine après avis spécialisé (Grade C-1)



## Administration

- Sites : cuisse, abdomen, scapula (Grade C-1)
- Mêmes posologies et dilutions que voie IV (Grade C-1)
- Vitesse 30-60 minutes par gravité avec KT souple (Grade C-1)
- SC directe non recommandée (Grade C-1)
- Initiation SC directe pour ceftriaxone, ertapénem, méropénem, pipéracilline-tazobactam, témocilline, céfazoline (Grade B-1)
- Téricoplamine dose de charge IV 48h avant relais SC (Grade B-1)
- Benzathine benzylpenicilline : injection SC directe après anesthésie locale à la lidocaïne (Grade B-3)



## Surveillance

- Point de ponction à chaque perfusion et au minimum 1 fois/ jour (Grade C-1)
- Vigilance renforcée si antiagrégant plaquettaire ou anticoagulant (Grade C-2)
- Arrêt perfusion si EI local important, retrait KT et réévaluation (Grade C-1)
- Déclaration pharmacovigilance si EI grave (avis d'expert)
- Traçabilité pose KT SC et ablation à 5 jours maximum (Grade C-1)
- Dosage plasmatique téicoplamine et adaptation de dose (Grade B-1)
- Surveillance plasmatique (Grade C-1) :
  - Infection complexe
  - Posologies fortes
  - Insuffisance rénale
  - Poids extrêmes



## Aspects réglementaires

- ATB voie SC si absence d'alternative PO et balance bénéfique/ risque favorable comparée à voie IV ou IM (Grade B-1)
- Information du patient ou de son représentant légal sur le caractère hors AMM et traçabilité du consentement (avis d'expert)
- En établissement de santé : protocoles institutionnels validés par le référent ATB et le pharmacien (avis d'expert)
- En ambulatoire : mention à faire figurer en toutes lettres sur ordonnance (avis d'expert)

*« Modalité d'administration hors AMM, validée après information et accord du patient de la balance bénéfique/ risque favorable, en accord avec les recommandations de bonnes pratiques cliniques SPILF/ SFGG 2025 de l'antibiothérapie sous-cutanée, et avec la lettre aux professionnels de santé de l'ANSM de novembre 2019 »*



# Troubles du spectre bipolaire chez la Personne Âgée

Eyler LT, Klaus F, Van Dyne A, Xin Ng H, Dols A et Sajatovic M. The spectrum of bipolar disorder in older adults. *Neuropsychopharmacology*. Jan 2026



# Méthodes et résultats

Données (principalement) issues de 2 initiatives de recherche et collaboration internationale



GAGE-BD - Global Aging and Geriatric Experiments in BD  
5000 participants depuis 2019  
ENIGMA-BD : Enhancing NeuroImaging Genetics through Meta-Analysis BD, depuis 2012



Développement d'une cohorte américaine multisite (10) avec suivi longitudinal BD<sup>2</sup>

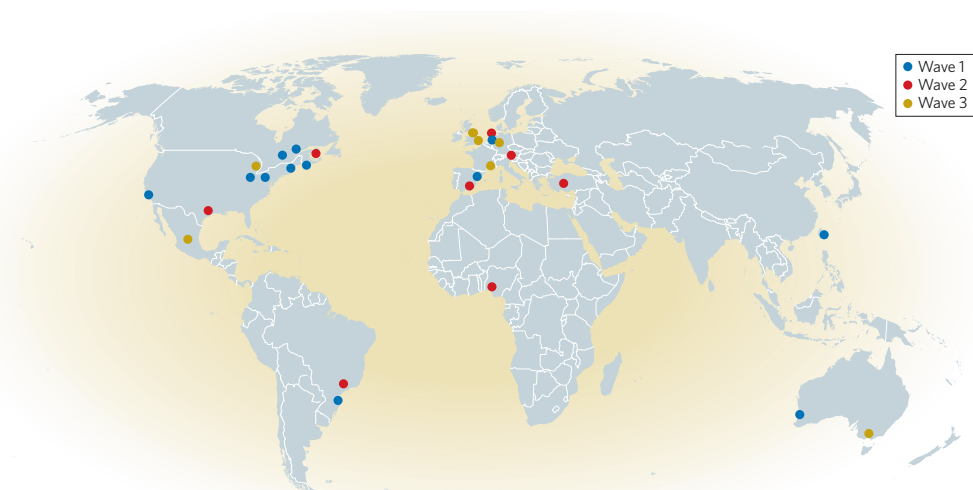


REVIEW ARTICLE **OPEN**

## The spectrum of bipolar disorder in older adults

Lisa T. Eyler<sup>1</sup>, Federica Klaus<sup>1</sup>, Angelina Van Dyne<sup>2</sup>, Hui Xin Ng<sup>3</sup>, Annemiek Dols<sup>4</sup> and Martha Sajatovic<sup>5</sup>

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0,5 à 0,9% des 50+  
LOBD = 5-10%



# Particularités cliniques et comorbidités

## Fréquence des états mixtes (70%)

Irritabilité / Troubles du langage et pensée  
Troubles attentionnels, tristesse, anxiété

## Charge somatique ↗

↗ avec âge  
Femmes > Hommes  
2,42 en moyenne  
Pas d'impact direct sur fonctionnement

## Comorbidités psy

Addiction 20%  
Troubles Anxieux 22%  
Troubles de la  
Personnalité 14,6%

Moindre sévérité des  
symptômes maniaques  
(+/- dépressifs)

Pas de différences  
d'intensité entre OABD  
(50+) et OOABD (70+)

## LOBD

Comorbidités neurologiques 71%  
Neurovasculaires, TNC...

## Type 1 vs type 2

Comorbidités psychiatriques et  
somatiques ns

## Implications pratiques

Rechercher ++ caractéristiques mixte et risque  
suicidaire

Prise en charge globale ++  
Bilan cognitif et surveillance LOBD

# Troubles cognitifs et évolution

**Troubles cognitifs**  
Fréquents  
Persistants  
Hétérogènes

Fort impact sur les capacités fonctionnelles

**Type 1 vs type 2**  
Fonctionnement général ns  
Performance cognitive ns

Hétérogénéité d'évolution

Augmentation du risque de troubles neuro-évolutifs (2-6x)  
Difficultés diagnostic différentiel (DFTvc, DCL)

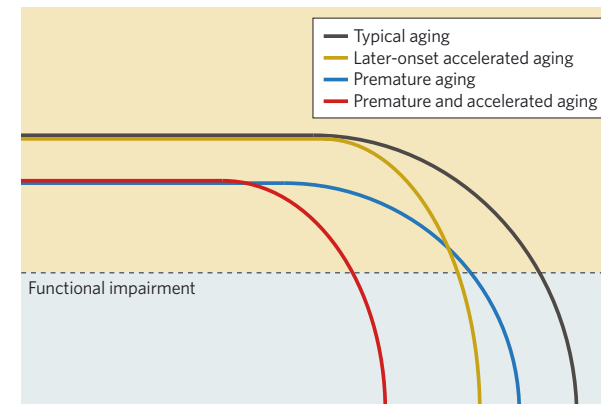
## Implications pratiques

Evaluation initiale et suivi  
Pas de généralisation individuelle sur pronostic évolutif  
Limiter BZD, (antipsychotiques ?), épisodes maniaques  
Avis spécialisé consultation mémoire

**Table 1.** Summary of Cognitive Deficits in OABD.

<ul style="list-style-type: none"> <li>•<b>Lower</b> episodic memory, attention, information processing speed, verbal fluency and executive functioning <i>compared to the general population.</i></li> <li>•<b>Mixed</b> findings on global cognition: lower and comparable results</li> </ul>
<ul style="list-style-type: none"> <li>•Correlates of cognitive performance               <ul style="list-style-type: none"> <li>◦<b>Better:</b> <i>more years of education, higher IQ, younger age, fewer manic episodes,</i></li> <li>◦<b>Worse:</b> <i>benzodiazepine, antipsychotics, history of psychosis</i></li> </ul> </li> <li>•<b>Lower psychosocial functioning</b> associated with <i>global and specific (e.g., memory, attention, executive functioning) cognitive deficits.</i></li> </ul>
<ul style="list-style-type: none"> <li>•<b>Mixed findings</b> for cognitive trajectories in OABD.               <ul style="list-style-type: none"> <li>◦Both <i>accelerated cognitive decline</i> and <i>similar cognitive trajectories</i> to non-affected individuals noted.</li> <li>◦Could be explained by <b>high interindividual heterogeneity in OABD.</b></li> </ul> </li> <li>•<b>2-6x prevalence of dementias</b> (Alzheimer's disease, bvFTD, DLB), as well as Parkinson's disease</li> <li>•High <b>symptomatic overlap</b> between <i>bvFTD, DLB</i> and <i>OABD</i>, with bedside tools available for differentiation.</li> </ul>

OABD older-age bipolar disorder, bvFTD behavioral variant of frontotemporal dementia, DLB dementia with Lewy bodies.



**Fig. 2** Theoretical trajectories of change in cognitive performance over time in bipolar disorder. Colored lines show potential course

# Neurobiologie et neuroimagerie OABD

## Génétiques

Variants associés à OABD  
Régulation sérotonine  
Angiogenèse

## Neurodégénérescence

↗ NfL DFT vs BD  
Pas de hausse des  
marqueurs classiques

## Vieillessement cérébral

Accélééré  
Précoce  
↗ « Âge cérébral » sous  
antiépileptique (+ AP) vs Li

## Epigénétique

Vieillessement biologique  
accélééré  
↗ âge épigénétique  
Accélééré par le tabagisme  
Ralentir par  
thymorégulateurs

## Inflammation

↗ IL-6, CRP, TNF $\alpha$   
↗ CRP dans LOBD  
↘ **Vit B9 et B12**  
Impact sur  
fonctionnement cognitif

## Diminution volume SG

CPF et hippocampe  
↗ **Leucopathie**

## Implications pratiques

Chercher et corriger déficit B9 et B12  
NfL pour DFT vs OABD  
Prévention/sevrage tabagique  
Lithium si possible  
Vigilance sur association antiE + AP



Journal of Affective Disorders  
Volume 403, 15 June 2026, 121234



Research paper

## Brain aging in bipolar disorder using a neuroimaging and machine learning-derived metric: Findings from the ENIGMA BD Working Group

Hui Xin Ng<sup>a</sup>, Christoph Abé<sup>b, bj</sup>, Martin Alda<sup>c</sup>, Silvia Alonso-Lana<sup>d, e</sup>, Gerard Anmella<sup>ij, k</sup>



n=2919, 18-75ans  
+2 à +5ans  
Type 1 > Type 2





# Thérapeutique

**Table 2.** Therapeutic approaches in OABD.

Category	Treatment	Key Findings/Notes
Pharmacological	<b>Lithium</b>	<ul style="list-style-type: none"> <li>• Most effective for acute mania and mood stabilization.</li> <li>• Possibly neuroprotective (may reduce dementia risk).</li> <li>• Requires lower dosing, close monitoring due to renal clearance, toxicity risks.</li> <li>• Recommended serum levels: 0.4–0.8 mmol/L (age 60–79), 0.4–0.7 mmol/L (age 80+).</li> </ul>
	<b>Valproic Acid (VPA)</b>	<ul style="list-style-type: none"> <li>• Less effective than lithium in RCTs for acute mania.</li> <li>• Often used despite limited OABD-specific evidence.</li> </ul>
	<b>Lamotrigine</b>	<ul style="list-style-type: none"> <li>• Effective in delaying depressive/mood episodes.</li> <li>• Better cognitive side effect profile.</li> </ul>
	<b>Second-generation Antipsychotics (SGAs)</b>	<ul style="list-style-type: none"> <li>• Effective and generally well-tolerated: quetiapine, risperidone, aripiprazole, asenapine, lurasidone, cariprazine.</li> <li>• Watch for increased risk of metabolic, neurologic side effects; FDA black box warning in dementia.</li> </ul>
	<b>Antidepressants</b>	<ul style="list-style-type: none"> <li>• Controversial due to mania risk: should be used cautiously, ideally with mood stabilizers.</li> <li>• Limited OABD-specific data.</li> <li>• Safer options include mirtazapine, bupropion.</li> </ul>
Neuromodulation	<b>ECT</b>	<ul style="list-style-type: none"> <li>• Highly effective for TRBD, mania, catatonia.</li> <li>• Older adults respond well; fewer cognitive side effects than younger adults.</li> <li>• Often underused due to stigma.</li> <li>• Should not be reserved only for last-resort.</li> </ul>
	<b>rTMS</b>	<ul style="list-style-type: none"> <li>• Inconclusive evidence; small sample sizes.</li> <li>• Requires further research specific to OABD.</li> </ul>
Novel Treatments	<b>Ketamine/Esketamine</b>	<ul style="list-style-type: none"> <li>• Promising for BD depression; mostly studied in unipolar depression.</li> <li>• No data in OABD.</li> <li>• Higher risk of cognitive/cardiovascular side effects in older adults.</li> </ul>
	<b>Psilocybin/Psychedelics</b>	<ul style="list-style-type: none"> <li>• Early evidence shows antidepressant effects.</li> <li>• Limited and cautious use in BD/OABD.</li> <li>• Safety not yet established: needs more rigorous study.</li> </ul>
Behavioral	<b>CBT</b>	<ul style="list-style-type: none"> <li>• Moderately effective in reducing mania symptoms.</li> <li>• No OABD-specific adaptations in studies. Remote delivery is promising.</li> </ul>
	<b>Psychoeducation</b>	<ul style="list-style-type: none"> <li>• Some benefit, though less than CBT.</li> <li>• Could be combined with other interventions.</li> </ul>

ECT Electroconvulsive therapy, TRBD treatment-resistant BD depression, rTMS repetitive transcranial magnetic stimulation, CBT cognitive behavioral therapy.



# Sevrage en benzodiazépines

Brunner E, Chen CA, Klein T, Maust D, Mazer-Amirshahi M, Mecca M, Najera D, Ogbonna C, Rajneesh KF, Roll E, Sanders AE, Snodgrass B, VandenBerg A, Wright T, Boyle M, Devoto A, Framnes-DeBoer S, Kleykamp B, Norrington J, Lindsay D; Clinical Guideline Committee (CGC) Members; ASAM Staff and Contractors. Joint Clinical Practice Guideline on Benzodiazepine Tapering: Considerations When Risks Outweigh Benefits. *J Gen Intern Med.* 2025 Sep;40(12):2814-2859. doi: 10.1007/s11606-025-09499-2.

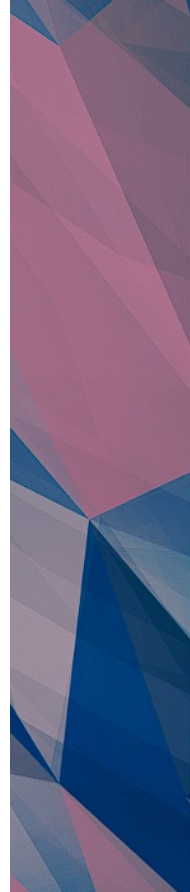


# Recommendations ASAM 2025

Brunner et al. 2025

*This clinical practice guideline has been endorsed by:*

American Academy of Neurology (AAN)  
American Academy of Physician Associates (AAPA)  
American Academy of Sleep Medicine (AASM)  
American Association of Nurse Practitioners (AANP)  
American Association of Psychiatric Pharmacists (AAPP)  
American College of Medical Toxicology (ACMT)  
American College of Obstetricians and Gynecology (ACOG)  
American Geriatrics Society (AGS)  
American Society of Addiction Medicine (ASAM)



The JOINT  
CLINICAL PRACTICE GUIDELINE ON

# Benzodiazepine Tapering:

Considerations when Benzodiazepine  
Risks Outweigh Benefits



# Recommandations ASAM 2025

Brunner et al. 2025

## ■ Cas général

### **Benzodiazepine Tapering Strategies**

#### **The Tapering Process**

##### *Recommendations for the Tapering Process*

6. Clinicians should generally consider dose reductions of 5% to 10% when determining the initial pace of the BZD taper. The pace of the taper should typically not exceed 25% every 2 weeks (*Clinical Consensus*, Strong Recommendation).
7. Clinicians can consider transitioning patients without contraindications to a comparable dose of a longer-acting BZD medication for the taper (*Clinical Consensus*, Conditional Recommendation).



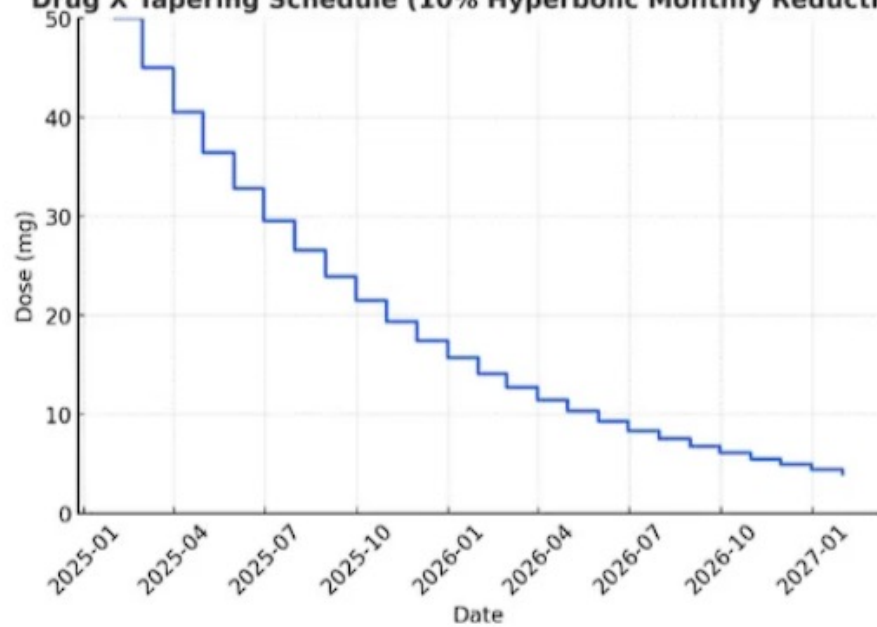
The JOINT  
CLINICAL PRACTICE GUIDELINE ON  
**Benzodiazepine  
Tapering:**  
Considerations when Benzodiazepine  
Risks Outweigh Benefits



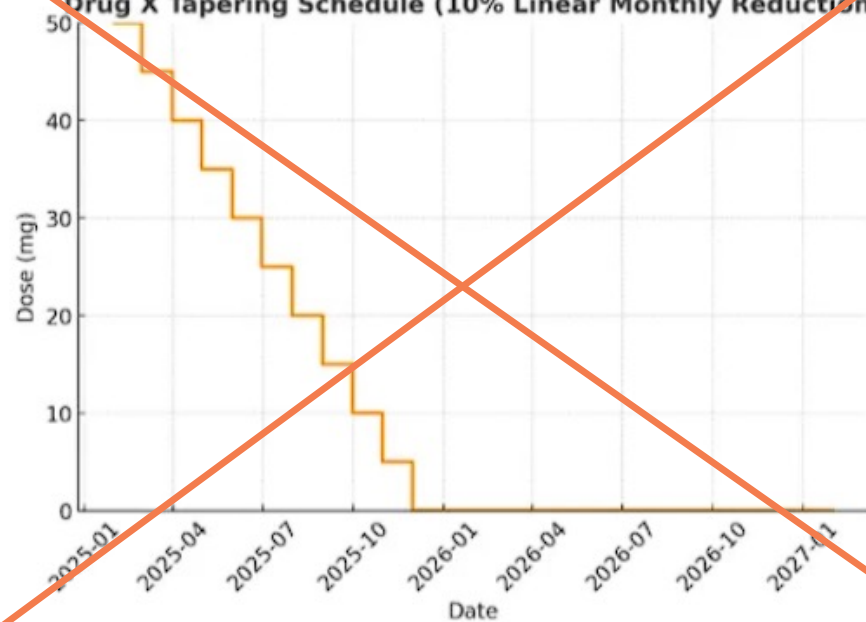
# Recommendations ASAM 2025

Brunner et al. 2025

**Drug X Tapering Schedule (10% Hyperbolic Monthly Reduction)**



**Drug X Tapering Schedule (10% Linear Monthly Reduction)**





# Recommendations ASAM 2025

Brunner et al. 2025

## ■ Section Personnes Âgées

The patient panel noted that in older adults, even lower BZD doses might be associated with significant withdrawal risk due to metabolism changes. They emphasized the importance of starting with smaller dose reductions and proceeding more slowly with tapering in this population. As with all patients, clinicians should prioritize developing individualized tapering plans through shared decision-making.

### *Transitioning Older Adults to a Longer-Acting Benzodiazepine for Tapering*

As discussed in [The Tapering Process](#), clinicians can consider transitioning patients without contraindications (eg, liver dysfunction) to a comparable dose of a longer-acting BZD for the taper. However, metabolic changes associated with aging—namely, reduced hepatic clearance—may increase risk of adverse events and toxicity.<sup>171</sup> As a result, the CGC cautioned against transitioning older adults to longer-acting BZDs prior to tapering.



The JOINT  
CLINICAL PRACTICE GUIDELINE ON

## **Benzodiazepine Tapering:**

Considerations when Benzodiazepine  
Risks Outweigh Benefits



# Reduction of Antihypertensive Treatment in Nursing Home Residents

29 août 2025



The NEW ENGLAND  
JOURNAL of MEDICINE

Benetos A, Gautier S, Freminet A, Metz A, Labat C, Georgiopoulos I, Bertin-Hugault F, Beuscart JB, Hanon O, Karcher P, Manckoundia P, Novella JL, Diallo A, Vicaut E, Rossignol P; RETREAT-FRAIL Study Group. Reduction of Antihypertensive Treatment in Nursing Home Residents. *N Engl J Med.* 2025 Nov 20;393(20):1990-2000.



## Design

- Essai pragmatique, interventionnel et randomisé
- Evaluant l'effet d'une stratégie protocolisée de réduction progressive des traitements antihypertenseurs par rapport aux soins habituels
- Sur la mortalité toutes causes confondues
- Chez les résidents d'EHPAD > 80 ans, fragiles
- Présentant une TAS < 130 mmHg et recevant au moins 2 antiHTA



## Design

- Randomisation 1:1
  - Stratégie de réduction progressive des antiHTA
  - Soins habituels
- Suivi 4 ans
- Evaluation
  - Autonomie : IADL
  - Cognition : MMSE
  - Force musculaire : hand-grip
  - Motricité : SPPB
  - Qualité de vie : EQ-5D-3L
  - Fragilité : Clinical Frailty Scale



## Design

- Diminution des traitements M3, M6 et chaque M6 si TAS<130 mmHg
- Critère de jugement principal : décès toutes causes
- Critères de jugement secondaires :
  - Évènements cardiovasculaires majeurs
  - Décès de cause non cardiovasculaire
  - Évolution de TAS et TAD
  - Évolution capacité fonctionnelle
  - Evolution cognitive
  - Nombre de chutes
  - Nombre de fractures
  - Nombre de ttt
  - Nombre de ttt antiHTA
  - Score EQ-5D-3L
  - Décès liés au Covid-19



# Résultats

- 1048 résidents de 108 EHPAD inclus
  - 528 stratégie de diminution
  - 520 soins courants

**Table 1. Characteristics of the Patients at Baseline (Intention-to-Treat Population).\***

Characteristic	Step-Down Strategy (N=528)	Usual Care (N=520)	Total (N=1048)
Age — yr	90.0±4.8	90.1±5.3	90.1±5.0
Female sex — no. (%)	423 (80.1)	423 (81.3)	846 (80.7)
Weight — kg†	64.9±14.8	65.2±15.0	65.1±14.9
Height — m‡	1.59±0.09	1.58±0.09	1.59±0.09
Body-mass index§	25.9±5.6	26.3±5.8	26.1±5.7
Systolic blood pressure — mm Hg¶	113±11	114±11	114±11
Diastolic blood pressure — mm Hg¶	65±10	65±10	65±10
Heart rate — beats/min¶	72±12	71±12	71±12
MMSE score	13.5±10.0	13.3±10.1	13.4±10.0
ADL score**	3.1±2.0	3.2±2.0	3.1±2.0
SPPB score††	1.2 ±1.9	1.2 ±2.0	1.2 ±1.9
EQ-5D-3L questionnaire score ‡‡	0.431±0.407	0.468±0.398	0.449±0.403
Peak muscular force — kg§§	11.7±6.4	12.0±6.8	12.0±6.8
Clinical Frailty Scale score — no./total no. (%)¶¶			
1, 2, or 3	47/525 (9.0)	52/514 (10.1)	99/1039 (9.5)
4 or 5	147/525 (28.0)	164/514 (31.9)	311/1039 (29.9)
6	118/525 (22.5)	111/514 (21.6)	229/1039 (22.0)
7 or 8	213/525 (40.6)	187/514 (36.4)	400/1039 (38.5)
Medications			
No. of list 1 and list 2 antihypertensive medications	2.6±0.7	2.5±0.7	2.5±0.7
No. of concomitant medications	6.7±3.2	6.7±2.8	6.7±3.0



## Résultats

<b>Table 2. Medications at Baseline and at the Last Follow-up Visit.*</b>			
<b>Medications</b>	<b>Step-Down Strategy (N = 528)</b>	<b>Usual Care (N = 520)</b>	<b>Total (N = 1048)</b>
<b>At baseline — no.</b>			
List 1 antihypertensive medications	1.8±0.8	1.8±0.7	1.8±0.8
List 2 antihypertensive medications	0.7±0.7	0.7±0.7	0.7±0.7
List 1 and list 2 antihypertensive medications	2.6±0.7	2.5±0.7	2.5±0.7
Concomitant medications	6.7±3.2	6.7±2.8	6.7±3.0
All medications	9.3±3.4	9.3±2.9	9.3±3.2
<b>At last follow-up visit — no.</b>			
List 1 antihypertensive medications	0.5±0.7	1.2±0.9	0.8±0.9
List 2 antihypertensive medications	1.1±1.0	0.8±0.9	0.9±0.9
List 1 and list 2 antihypertensive medications	1.5±1.1	2.0±1.1	1.8±1.1
Concomitant medications	6.8±3.7	6.6±3.5	6.7±3.6
All medications	8.3±4.1	8.6±3.8	8.5±3.9

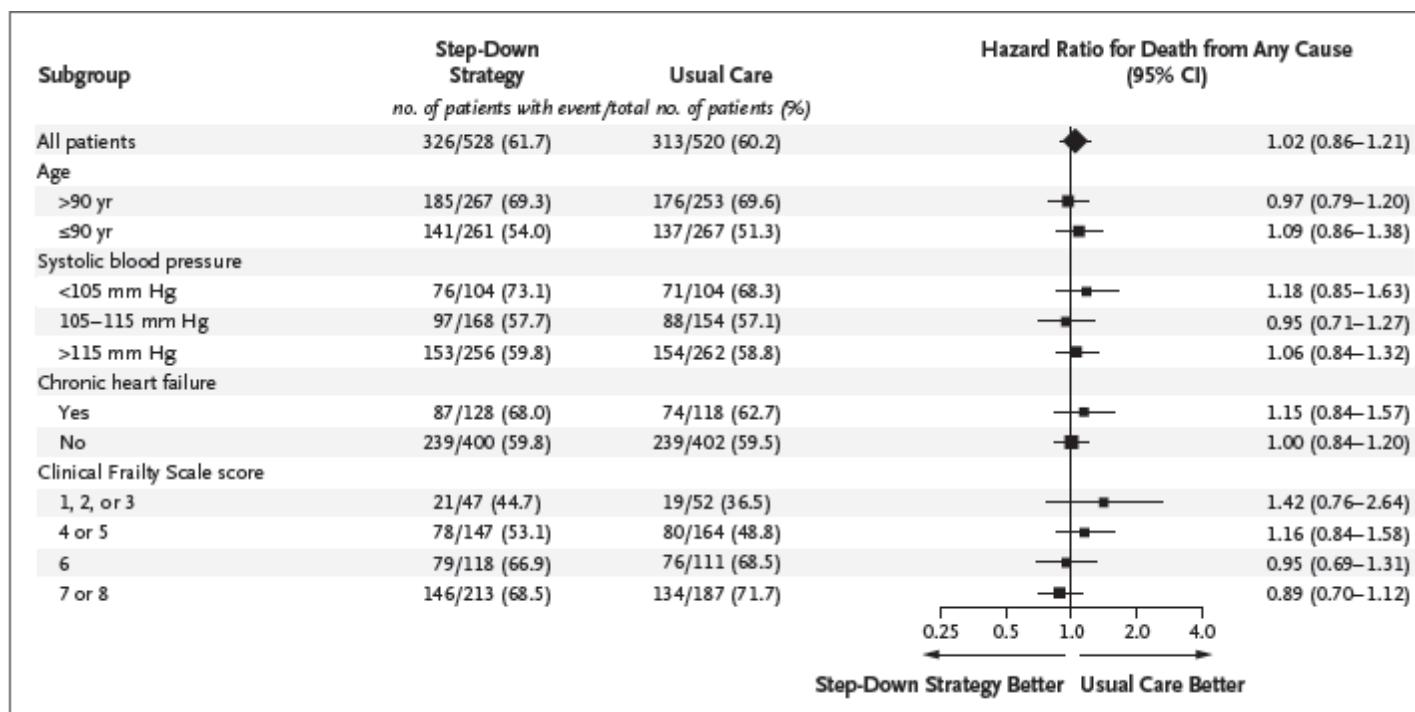


# Résultats

**Table 3. Primary and Secondary End Points.\***

End Points	Step-Down Strategy (N=528)	Usual Care (N=520)	Adjusted Effect Measure (95% CI)	P Value†
<b>Primary end point: death from any cause</b>				
Intention-to-treat analysis — no. (%)	326 (61.7)	313 (60.2)	1.02 (0.86–1.21)‡	0.78
Per-protocol analysis — no./total no. (%)§	311/499 (62.3)	305/497 (61.4)	1.04 (0.87–1.23)‡	
<b>Secondary end points</b>				
Death from noncardiovascular causes — no. (%)	284 (53.8)	278 (53.5)	1.00 (0.83–1.19)¶	
Acute heart failure — no. (%)	67 (12.7)	57 (11.0)	1.19 (0.80–1.78)‖	
<b>Falls</b>				
Overall — no. (%)	264 (50.0)	260 (50.0)	—	
No. of falls per year	0.81±2.08	0.71±1.91	1.14 (0.84–1.51)**	
<b>Fractures</b>				
Overall — no. (%)	41 (7.8)	48 (9.2)	—	
No. of fractures per year	0.03±0.17	0.04±0.17	0.80 (0.51–1.26)††	
Death from Covid-19 — no. (%)	6 (1.1)	16 (3.1)	0.38 (0.10–1.00)‡‡	
Composite of major adverse cardiovascular events — no. (%)§§	102 (19.3)	90 (17.3)	1.15 (0.84–1.56)¶¶	

# Résultats



**Figure 2. Subgroup Analyses of Death from Any Cause.**

All the analyses except those of systolic blood pressure (measured while the patient was seated) were adjusted for baseline systolic blood pressure. The level of frailty was assessed with an algorithm that calculated a composite score. The algorithm included data on functional capacities (autonomy, mobility, and cognitive status) measured in the trial to classify frailty levels according to scores on the validated Clinical Frailty Scale. Scores range from 1 to 9, with a score of 1 indicating fit, 2 well, 3 managing well, 4 vulnerable, 5 mild frailty, 6 moderate frailty, 7 severe frailty, 8 very severe frailty, and 9 terminally ill. Clinical Frailty Scale scores were missing for three patients in the step-down group and six patients in the usual-care group.



## Discussion

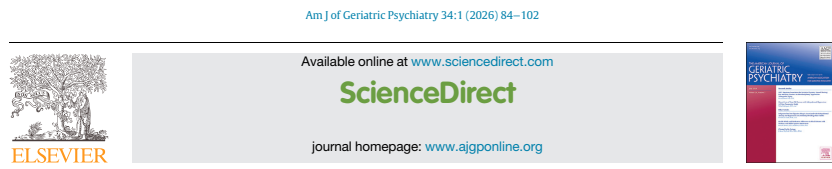
- Baisse de TAS 4.1 mmHg et TAD 1.8 mmHg
- Pas de différence entre les groupes sur critères de jugement
- Patients plus fragiles que dans les autres études
- Effet croisé non anticipé
- Biais de surestimation des EI par médecins traitants



# Kétamine et psychédéliques dans la dépression de la Personne Âgée

Sukhdeo R, Tamura JK, Dri CE et McIntyre RS. Ketamine and Esketamine for Late-Life Depression: A systematic Review of Efficacy, Safety and Tolerability. Am J of Geriatric Psychiatry 34:1 (2026) 84-102

# Kétamine et dépression de la PA



Clinical Review Article

## Ketamine and Esketamine for Late-Life Depression: A Systematic Review of Efficacy, Safety, and Tolerability

Ronesh Sukhdeo, H.B.Sc.<sup>\*</sup>, Jocelyn K. Tamura, M.D.<sup>\*</sup>, Christine E. Dri, B.H.Sc., Roger S. McIntyre, M.D.<sup>3</sup>



13 études  
7 RCT, 4 en ouvert,  
2 analyses post-hoc



60+  
n=757  
Sous-groupes (10/13)  
Dépression résistante

Kétamine intranasale (5)

2 RCT  
2 en ouvert  
1 analyse post-hoc  
n=438 65+ et 2 60+

Kétamine IV (4)

1 RCT  
2 en ouvert  
1 analyse post-hoc  
n=29 60+

Kétamine SC (1)  
Kétamine orale (1)

SC : RCT, n=16 65+  
PO : RCT, n=12 65+

Association induction par kétamine  
et ECT (2)

2 RCT  
n=160 60+

# Kétamine et dépression de la PA

## Kétamine IN

Signal positif mais résultats mixtes  
Tendance positive mais ns (TRANSFORM-3)

Meilleure efficacité 65-74 vs 75+  
Réponse maintenue à long terme (160sem)

## Kétamine IV

Efficacité sur études en ouvert

## Kétamine SC, po et kétamine + ECT

Effet dose pour SC (significatif à partir 0,2mg/kg)  
Absence d'effets significatifs (po, k+ECT)

## Tolérance

Légers et transitoires : vertiges, nausées, HTA, dissociation

Intérêt clonidine prophylactique sur HTA et dissociation ?

Bonne tolérance cognitive (voire amélioration)  
Amélioration de la tolérance cognitive ECT avec ketofol vs propofol



GRADE Très faible à faible



# Agents psychédéliques

REVIEW ARTICLE **OPEN**

## Psychedelic therapeutics in psychiatric conditions

Philip D. Harvey<sup>1,2</sup> and Charles B. Nemeroff<sup>3</sup>

© The Author(s) 2026

Neuropsychopharmacology



<1,4%  
des participants ont 65+

### Psilocybine

Effet agoniste 5HT<sub>2A</sub> (et autres)  
↗ neuroplasticité, ↘ inflammation  
Augmentation de l'empathie, créativité, réduction des affects négatifs...

Profil de sécurité ? Cardio-vasculaire, confusion, sd sérotoninergique, polymédication...

Aucun essai spécifiques dépression résistante PA

Essai de faisabilité dans deuil prolongé

Essais en cours dans MCI/MA + dépression et MPI + dépression

Drugs & Aging  
<https://doi.org/10.1007/s40266-025-01221-5>

CURRENT OPINION



## Use of Psychedelic Agents in Older Adults with Treatment-Resistant Major Depressive Disorder: What the Evidence Shows

Lou Vinarcsik<sup>1</sup> · Charles Smoller<sup>1</sup> · George Grossberg<sup>1</sup>

Accepted: 10 June 2025

### LSD microdosage

Tolérance satisfaisante chez volontaires âgés sains  
(55-75ans)

### Ayahuasca, MDMA...


Données quasi-inexistantes

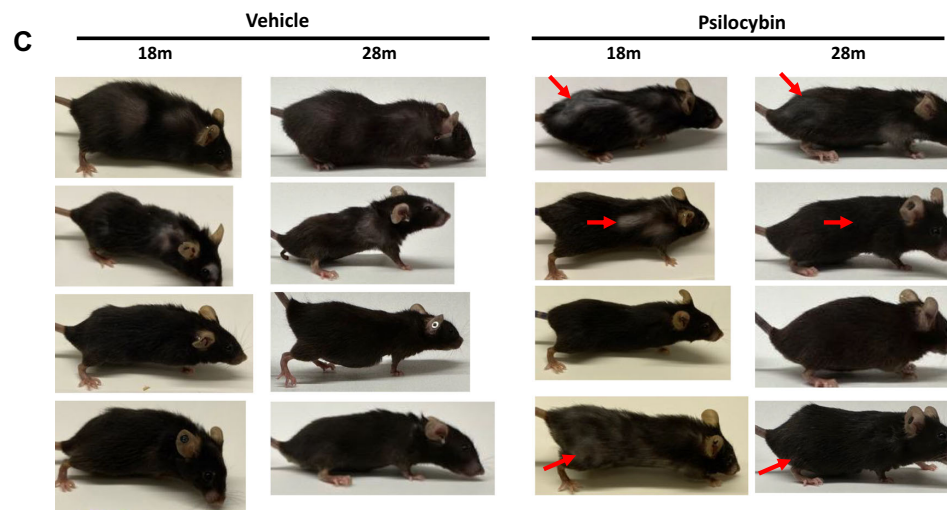
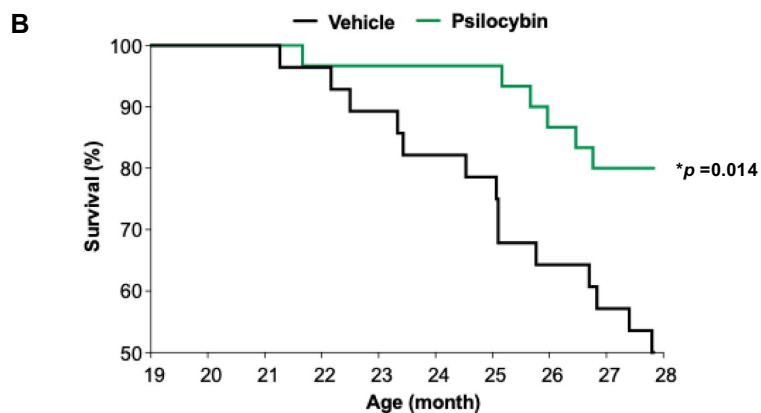


<https://doi.org/10.1038/s41514-025-00244-x>

## Psilocybin treatment extends cellular lifespan and improves survival of aged mice

 Check for updates

Kosuke Kato<sup>1,2</sup>, Jennifer M. Kleinhenz<sup>1,3</sup>, Yoon-Joo Shin<sup>1</sup>, Cristian Coarfa<sup>4</sup>, Ali J. Zarrabi<sup>5</sup> & Louise Hecker<sup>1,3,6</sup>  [npj Aging](#) | (2025)11:55



**Fig. 2 | Psilocybin treatment in aged mice extends lifespan.** C57BL/6J aged (19 month) female mice were treated with vehicle ( $n = 28$ ) or psilocybin ( $n = 30$ ) by oral gavage. Mice were given a lower dose (5 mg/kg) of psilocybin in month 1, followed by monthly dosing with high dose (15 mg/kg). At 10 months post-initial treatment, when the first group of mice reached median survival, all were euthanized. **A** Schematic diagram of treatment protocol. **B** Kaplan–Meier survival curve over the

10-month treatment duration, showing vehicle-treated ( $n = 14$  out of 28) vs. psilocybin-treated ( $n = 24$  out of 30) mice; \* $p = 0.014$  using the Log-rank Mantel–Cox test. **C** Representative images of mice prior to treatment (19 month) and after the final treatment (28 month) with vehicle or psilocybin. Red arrows indicate regions where hair growth and/or hair color changes were observed.



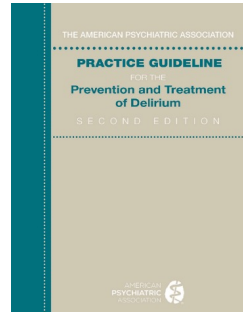
# Recommandation APA sur la prévention et le traitement du syndrome confusionnel

The American Psychiatric Association Practice Guideline for the Prevention and Treatment of Delirium  
Second Edition . 2025



# Practice Guideline for the Prevention and Treatment of Delirium - Second Edition

American Psychiatric Association, September 2<sup>nd</sup>, 2025

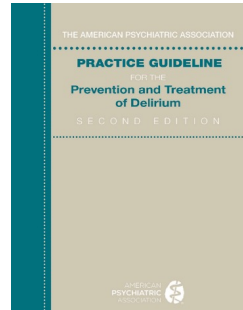


- Prise en charge médicamenteuse
  - **Contre-indication des BZD** sauf dans 7 situations précises
    - Sevrage alcoolique/BZD
    - Intoxication aiguë (anticholinergique, psychostimulant, psychédélique, substances multiples/inconnues)
    - Catatonie
    - Syndrome malin des neuroleptiques
    - Syndrome sérotoninergique
    - Encéphalite auto-immune
    - Poursuite d'un traitement chronique par BZD pendant la confusion pour éviter le sevrage.



# Practice Guideline for the Prevention and Treatment of Delirium - Second Edition

American Psychiatric Association, September 2<sup>nd</sup>, 2025

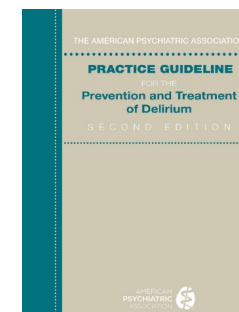


- Les autres psychotropes et notamment les antipsychotiques ne doivent être utilisés que si
  - Echec des mesures de désescalade verbale/non verbale
  - Causes de la confusion évaluées et si possible traitées
  - Détresse majeure du patient ou risque pour son intégrité physique / celle des tiers
  
- Dexmedetomidine
  - Prévention du delirium chez les patients nécessitant sédation/anesthésie lors d'une chirurgie lourde, ventilation mécanique en réanimation
  - Sédation des patients confus nécessitant une ventilation mécanique



# Practice Guideline for the Prevention and Treatment of Delirium - Second Edition

American Psychiatric Association, September 2<sup>nd</sup>, 2025



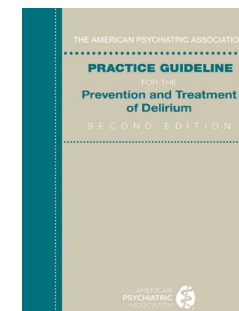
**TABLE 7 Antipsychotic medications that may be used in the treatment of severe neuropsychiatric disturbances of delirium**

	Aripiprazole	Haloperidol	Olanzapine	Quetiapine	Risperidone	Ziprasidone
<b>Pharmacological properties<sup>a</sup></b>						
Route	Oral (tablet, disintegrating tablet, <sup>b</sup> solution)	Oral (tablet, concentrate), parenteral (short-acting lactate IM or IV injection) <sup>c</sup>	Oral (tablet, disintegrating tablet <sup>b</sup> ), parenteral (short-acting solution for IM injection) <sup>d</sup>	Oral (immediate-release tablet, extended-release tablet)	Oral (tablet, disintegrating tablet, <sup>b</sup> solution)	Oral (capsule), parenteral (short-acting solution for IM injection)
Usual adult starting dose in delirium <sup>e</sup>	2 mg oral	0.5–2 mg oral/IM/IV	2.5 mg oral/IM	12.5–25 mg immediate-release oral <sup>f</sup>	0.25–0.5 mg oral	20 mg oral; 10–20 mg IM
Typical maximum daily dose in delirium	5–10 mg oral	20 mg oral/IM/IV	5–10 mg oral; 20–30 mg IM	100–200 mg immediate-release oral <sup>f</sup>	1–2 mg oral	40–80 mg oral; 20–40 mg IM
Oral bioavailability (%)	87	86	57	100	70	60 (with food)
Time to peak level <sup>g</sup>	3–5 hours oral	2–6 hours oral; 20 minutes IM; 2–10 minutes IV	6 hours oral; 15–45 minutes IM	1.5 hours immediate-release oral; 6 hours extended-release oral	1 hour oral	6–8 hours oral; 15–60 minutes IM



# Practice Guideline for the Prevention and Treatment of Delirium - Second Edition

American Psychiatric Association, September 2<sup>nd</sup>, 2025



If the clinician decides to begin an antipsychotic to reduce neuropsychiatric disturbances of delirium, antipsychotic medications are usually begun on an as-needed (i.e., prn) basis and should be started at a low dose, typically half or less than that of a usual adult starting dose (Table 7).

medication order can help avoid excess sedation or other side effects of treatment. In addition, orders for antipsychotic medication should be limited in duration (e.g., 3–5 days), and potential benefits and risks of use should be reviewed before continuing treatment. Before discharge, the need for continued treatment should be reassessed (see Statement 15).



# Recombinant zoster vaccine is associated with a reduced risk of dementia

9 février 2026



Rayens E, Sy LS, Qian L, Ackerson BK, Tubert J, Luo Y, Modha PP, Calderon RO, Chmielewski-Yee E, Oraichi D, Yun H, Koro C, Tseng HF. Recombinant zoster vaccine is associated with a reduced risk of dementia. Nat Commun. 2026 Feb 9;17(1):2056.



## Contexte

- Réactivation VZV > 50 ans : augmentation risque TNC M
  - Dépôts amyloïdes
  - Réactivation HSV-1 quiescent
  - Anomalies vasculaires et évènements cérébro-vasculaires

*Polisky V. et al. Nat Med. 2025*

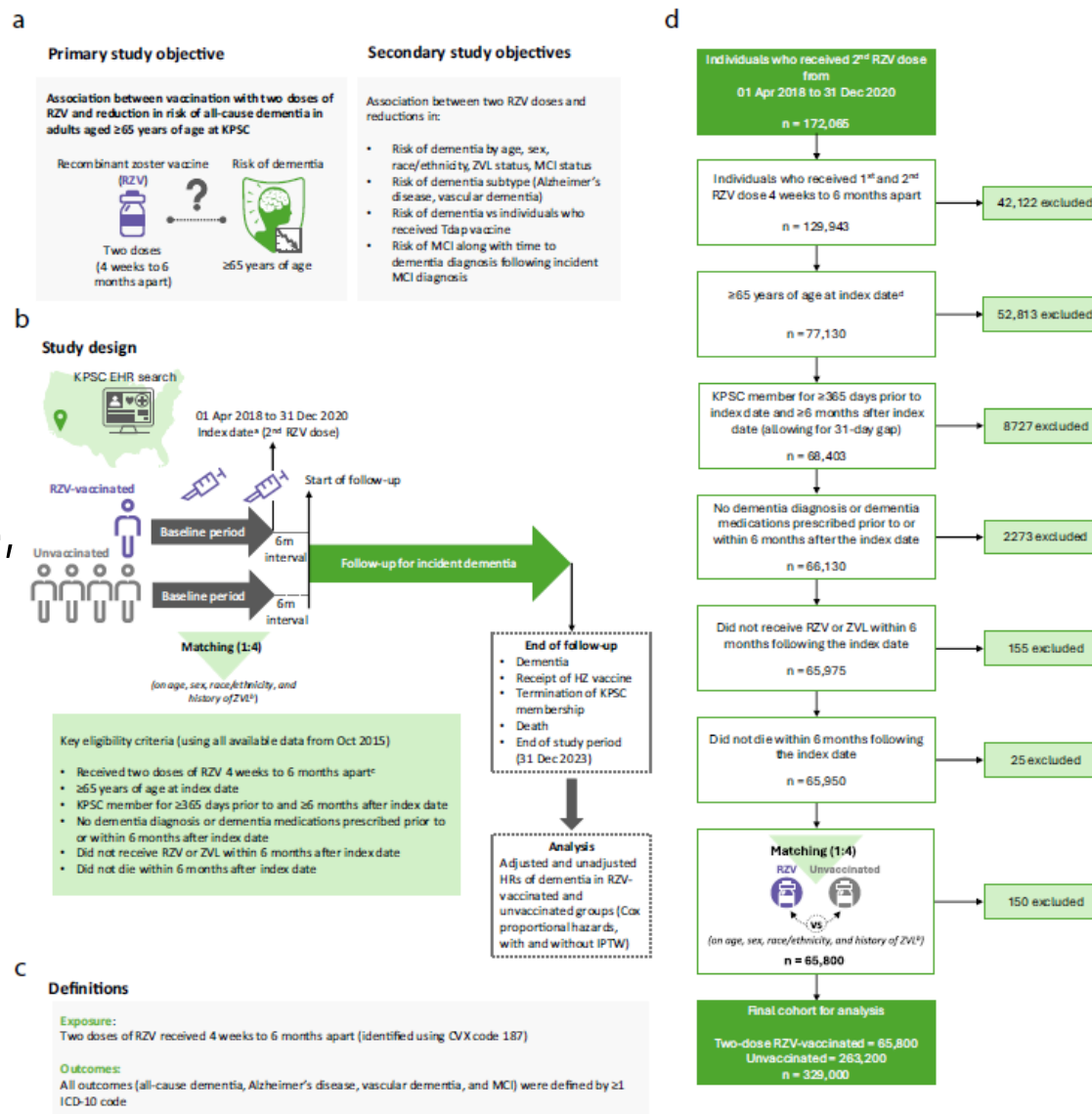
*Gao J. et al. Neurol Sci. 2024*

- Effets du vaccin VZV sur risque TNC M

*Eyting M. et al. Nature. 2025*

# Objectifs :

- 1 : réduction TNC M
- 2 :
  - Réduction TNC M par âge, sexe, ethnité, statut VZV, statut TNC L
  - Type de TNC M
  - Vs vaccin DTaP/Ca
  - Risque TNC L





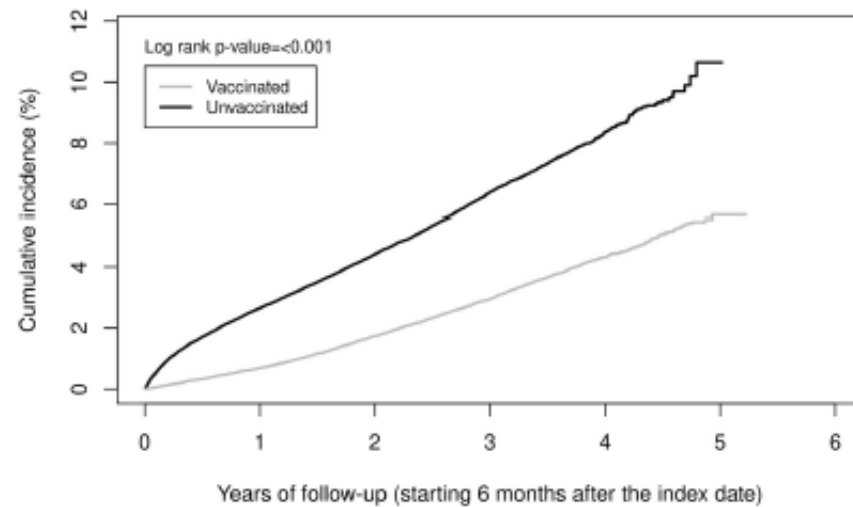
# Réduction risque TNC M

Suivi :

- 3,4 ans RZV
- 1,8 an non RZV

Dementia	Incidence per 1000 person-years (95% CI)		aHR (95% CI) <sup>a</sup>	
	Vaccinated	Unvaccinated		
Overall	10.74 (10.32–11.18)	23.04 (22.61–23.48)	◆	0.49 (0.46–0.51)
Dementia subtype				
Alzheimer's disease	3.17 (2.95–3.42)	5.74 (5.53–5.95)	◆	0.48 (0.44–0.53)
Vascular dementia	1.04 (0.91–1.18)	2.33 (2.20–2.47)	◆	0.45 (0.39–0.53)
Age at index date, years				
65–69 <sup>b</sup>	2.59 (2.25–2.99)	4.42 (4.10–4.76)	◆	0.53 (0.44–0.64)
70–79	8.85 (8.33–9.40)	17.90 (17.38–18.43)	◆	0.49 (0.45–0.53)
≥80 <sup>c</sup>	34.33 (32.44–36.34)	83.35 (81.21–85.56)	◆	0.48 (0.45–0.52)
Sex				
Female	10.07 (9.54–10.62)	23.82 (23.25–24.40)	◆	0.45 (0.42–0.48)
Male	11.68 (11.01–12.39)	21.98 (21.33–22.64)	◆	0.55 (0.51–0.59)
Race/Ethnicity, n (%)				
Non-Hispanic White	11.08 (10.54–11.64)	25.10 (24.52–25.69)	◆	0.46 (0.43–0.48)
Non-Hispanic Black <sup>d</sup>	14.58 (12.38–17.16)	28.96 (26.87–31.21)	◆	0.49 (0.40–0.60)
Hispanic <sup>e</sup>	10.53 (9.50–11.66)	20.63 (19.66–21.65)	◆	0.55 (0.48–0.63)
Non-Hispanic Asian <sup>f</sup>	9.04 (8.11–10.07)	17.98 (17.03–18.97)	◆	0.51 (0.44–0.58)
ZVL status				
No <sup>g</sup>	9.94 (9.25–10.70)	19.80 (19.17–20.45)	◆	0.51 (0.47–0.56)
Yes	11.12 (10.60–11.66)	25.15 (24.57–25.73)	◆	0.46 (0.43–0.49)
MCI status				
No	9.53 (9.14–9.95)	20.16 (19.76–20.57)	◆	0.48 (0.46–0.51)
Yes <sup>h</sup>	99.00 (88.39–110.87)	219.86 (208.31–232.06)	◆	0.53 (0.47–0.61)



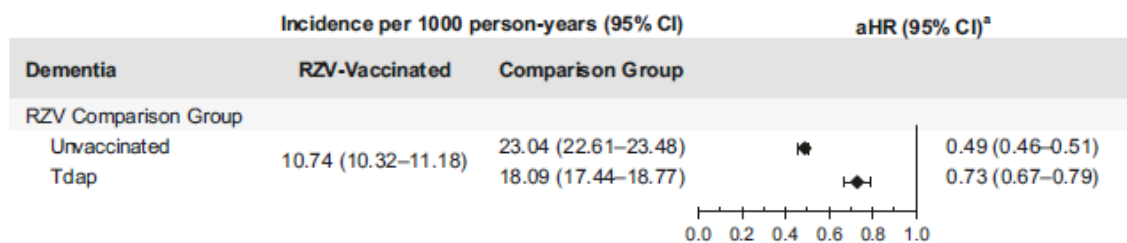


	0	1	2	3	4	5	6
<b>Vaccinated</b>							
Number at risk	65,800	62,888	59,888	47,928	17,053	151	0
Cumulative events	0	449	1,096	1,784	2,294	2,401	2,401
Cumulative incidence	0	0.7	1.74	2.95	4.32	5.67	5.67
<b>Unvaccinated</b>							
Number at risk	263,200	176,826	125,601	53,513	7,928	1	0
Cumulative events	0	5,729	8,505	10,304	10,930	10,983	10,983
Cumulative incidence	0	2.65	4.42	6.38	8.36	10.64	10.64

**Fig. 3 | Cumulative incidence of dementia among two-dose RZV-vaccinated versus unvaccinated individuals.** RZV recombinant zoster vaccine.

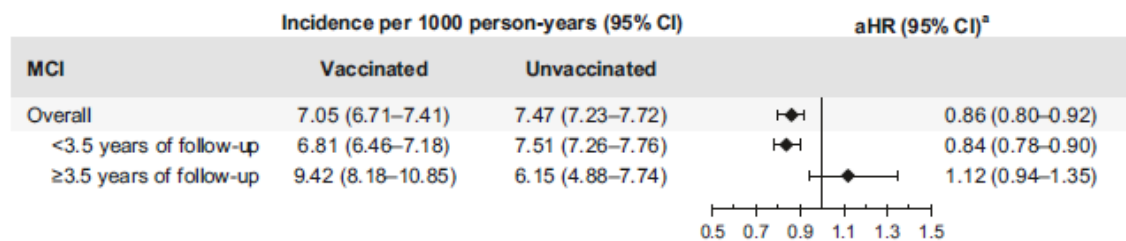


# Biais vaccination





## Réduction risque TNC L





## Discussion

- Résultats : diminution de 51 % du risque de TNC M
- Limites
  - Système de santé
  - Probables facteurs confondants résiduels
  - Courte période de suivi
  - Vaccinations VZV en cours de suivi
  - Problèmes de classifications des événements et TNC
  - Sous diagnostic TNC L
- Perspectives : autres effets « désirables » de la vaccination VZV ?



# ECT et *Oldest Old*

Arnison T, Eriksson A, Nordenskjöld A et al. Electroconvulsive Therapy in the Oldest-Old Patients with depression: Response and Remission Rates, Prognostic factors, Adverse Events and Mortality. Am J of Geriatric Psychiatry 33:10 (2025) 1065-1076

# ECT en population très âgée



Regular Research Article

## Electroconvulsive Therapy in the Oldest-Old Patients With Depression: Response and Remission Rates, Prognostic Factors, Adverse Events and Mortality

Tor Arnison, Psy.D., Ph.D., Alina Eriksson, M.D., Axel Nordenskjöld, M.D., Ph.D.

Population peu étudiée  
 Peu de preuves  
 Polymédication  
 Comorbidités  
 Crainte de risque d'EI ↗ vs  
 jeune

Registres  
 Q-ECT  
 Swedish NPR  
 Swedish CDR



n=522  
 85+  
 ECT



n=522  
 18-35  
 ECT



n=522  
 85+  
 nonECT

TABLE 1. Characteristics of Patients Aged ≥ 85 Treated With ECT, Patients Aged 18–35 Treated With ECT, and Patients Aged ≥ 85 Receiving Treatments Other Than ECT, for Depression

	Oldest-Old ECT Group	Young ECT Group	Oldest-Old Non-ECT Group
Group size (n)	522	522	522
Age, M (SD/Range)	87.2 (2.4/85–99)	28.0 (4.6/18–35)	87.1(2.3/85–96)
Sex, n (%)			
Female	377 (72.2)	366 (70.1)	375 (71.8)
Male	145 (27.8)	156 (29.9)	147 (28.2)
Diagnosis, n (%)			
MDD, moderate F32.1/F33.1	171 (32.8)	171 (32.8)	180 (34.5)
MDD, severe without psychotic features F32.2/F33.2	263 (50.4)	263 (50.4)	259 (49.6)
MDD, severe with psychotic features F32.3/F33.3	88 (16.9)	88 (16.9)	83 (15.9)
ECT treatment prior to index ECT, n (%)			
Yes	395 (75.7)	394 (75.5)	a
No	127 (24.3)	128 (24.5)	a
Co-morbidity, n (%)			
Rheumatic arthritis	64 (12.3)	9 (1.7)	62 (11.9)
Peripheral vascular disease	14 (2.7)	1 (0.2)	18 (3.5)
Metastatic cancer	4 (0.8)	0 (0.0)	6 (1.2)
COPD	6 (1.2)	3 (0.6)	6 (1.2)
Congestive heart failure	24 (4.6)	0 (0.0)	22 (4.2)
Peptic ulcer disease	14 (2.7)	2 (0.4)	11 (2.1)
Myocardial infarction	41 (7.9)	0 (0.0)	35 (6.7)
Severe liver disease	2 (0.4)	1 (0.2)	0 (0.0)
Severe kidney disease	12 (2.3)	2 (0.4)	7 (1.3)
Hemiplegia	3 (0.6)	1 (0.2)	4 (0.8)
Diabetes	22 (4.2)	11 (2.1)	19 (3.6)
Dementia	16 (3.1)	0 (0.0)	14 (2.7)
Cerebrovascular disease	64 (12.3)	3 (0.6)	68 (13.0)



# Efficacité

## Réponse

Oldest-old ECT (82%) >  
Young ECT (67,4%)

## Rémission

Oldest-old ECT (53,3%) >  
Young ECT (27,4%)

Moins de séances/séries  
mais des paramètres plus  
élevés

**TABLE 2. ECT-related parameters in the Oldest-old and Young ECT groups**

	Oldest-old ECT group	Young ECT group	$\chi^2$ (df)/t(df)	P
Response, yes (%)	428 (82.0)	352 (67.4)	29.18 (1)*	<.001
Remission, yes (%)	130 (53.3)	79 (27.4)	21.88 (1)*	<.001
Electrode placement			2.02 (3)**	.568
Unilateral, n (%)	473 (91.1)	464 (89.2)		
Bilateral, n (%)	42 (8.1)	48 (9.2)		
Other, n (%)	4 (0.8)	8 (1.5)		
ECT sessions per series, Med. (IQR)	6.0 (2.0)	8.0 (3.0)	3.92 (1042)***	< .001
Seizure time, s, Med. (IQR)	49.0 (30.0)	47.0 (30.0)	2.97 (815)***	.003
Pulse width, ms, Med. (IQR)	0.50 (0.05)	0.50 (0)	6.44 (842)***	< .001
Frequency, Hz, Med. (IQR)	70.0 (20.0)	50.0 (30.0)	17.22 (839)***	< .001
Duration, s, Med. (IQR)	6.9 (2.0)	6.0 (2.4)	4.12 (841)***	< .001
Current, mA, Med. (IQR)	800.0 (100.0)	800.0 (100.0)	1.20 (841)***	.232
Charging dose, mC, Med. (IQR)	427.5 (194.0)	251.0 (143.0)	19.35 (841)***	< .001



# Facteurs pronostiques

**Caractéristiques psychotiques**  
seul facteur pronostic de réponse et rémission

**Comorbidités somatiques**  
Absence d'impact

**TABLE 3. Results for the Firth's Logistic Regression Analysis of Factors Prognostic of Response and Remission After ECT for Depression in 522 Patients Aged  $\geq 85$  Years**

Predictor	Outcome											
	Response						Remission					
	Univariate			Multivariate			Univariate			Multivariate		
	OR (95% CI)	Wald $\chi^2$ (df)	p	OR (95% CI)	Wald $\chi^2$ (df)	p	OR (95% CI)	Wald $\chi^2$ (df)	p	OR (95% CI)	Wald $\chi^2$ (df)	p
Age	1.01 (0.92–1.10)	0.01 (1)	0.918	1.00 (0.90–1.11)	0.01 (1)	0.977	1.07 (0.96–1.19)	1.35 (1)	0.246	1.07 (0.95–1.20)	1.10 (1)	0.294
Sex (male)	0.78 (0.48–1.26)	1.03 (1)	0.310	0.70 (0.40–1.20)	1.71 (1)	0.191	1.24 (0.71–2.17)	0.57 (1)	0.451	1.24 (0.67–2.28)	0.47 (1)	0.491
CCI (0 reference)												
1	1.01 (0.60–1.70)	0.99 (1)	0.321	0.89 (0.50–1.57)	0.07 (1)	0.793	1.05 (0.60–1.85)	0.04 (1)	0.834	1.12 (0.60–2.07)	0.44 (1)	0.505
2+	0.60 (0.33–1.10)	2.97 (1)	0.090	0.67 (0.32–1.39)	0.89 (1)	0.345	1.26 (0.57–2.76)	0.274 (1)	0.601	1.97 (0.80–4.89)	1.90 (1)	0.168
Electrode placement (unilateral reference)												
Bilateral	1.54 (0.61–3.93)	1.60 (1)	0.450	1.17 (0.459–3.06)	0.10	0.757	0.99 (0.35–2.81)	0.23 (1)	0.631	0.63 (0.20–1.97)	0.62	0.430
Other	0.50 (0.10–2.51)	1.16 (1)	0.282	2.50 (0.09–71.54)	0.24 (1)	0.627	0.29 (<0.01–27.02)	0.28	0.594	<sup>a</sup>	<sup>a</sup>	<sup>a</sup>
Charging dose	1.00 (1.00–1.00)	1.99 (1)	0.159	1.00 (1.00–1.00)	2.62 (1)	0.106	1.0 (1.00–1.00)	1.08 (1)	0.298	1.00 (1.00–1.00)	0.38 (1)	0.535
Severity of depression (moderate reference)												
Severe no psychotic features	1.12 (0.63–2.00)	1.77 (1)	0.183	1.07 (0.54–2.11)	2.21 (1)	0.137	0.97 (0.48–1.95)	2.54 (1)	0.111	0.99 (0.46–2.13)	3.26 (1)	0.071
Severe with psychotic features	2.34 (1.18–4.65)	7.84 (1)	0.005	2.52 (1.13–5.66)	7.38 (1)	0.007	2.17 (1.01–4.68)	7.05 (1)	0.008	2.83 (1.22–6.57)	9.89 (1)	0.002



# Tolérance : effets secondaires

Effets secondaires ns  
mais patterns différents

**OO-ECT**  
Plaintes  
mnésiques  
Confusion  
Complications  
CV

**Y-ECT**  
Plaintes  
mnésiques  
Céphalées

Hospitalisations à 1sem  
OO-nonECT > OO-ECT  
OR 2,68, p < 0,01

Pas plus de mortalité  
Tendance pour OO-  
nonECT  
OR 4,56, p = 0,06

TABLE 4. Prevalence of the Most Common Clinician-Reported Adverse Events During Treatment With ECT in Patients Aged ≥ 85 (Oldest-Old ECT Group) or 18–35 Years (Young ECT Group)

	Oldest-Old ECT Group, n (% of Age Group)	Young ECT Group, n (% of Age Group)	Odds Ratio (95% CI)	Wald $\chi^2$ (df), p
<b>Adverse events, total n (%)</b>	103 (19.7)	121 (23.2)	0.82 (0.61–1.10)	1.79 (1), 0.180
<i>Specific adverse events</i>				
Memory impairment	39 (7.5 %)	69 (13.2 %)		
Confusion	23 (4.4 %)	8 (1.5 %)		
Cardiovascular complications	23 (4.4 %)	4 (0.8 %)		
Headache	8 (1.5 %)	39 (7.5 %)		
Nausea/Vomiting	6 (1.1 %)	8 (1.5 %)		
Muscle pain	3 (0.6 %)	7 (1.3 %)		
Suicide attempt	0 (0.0 %)	6 (1.1 %)		

TABLE 5. Causes of Hospitalization or Death (Within 1 Week From Discharge) in Oldest-Old Patients Treated for Depression Either With or Without ECT, as Well as in Young Patients (Aged 18–35) Who Received ECT

	Young ECT Group, n (%)	Oldest-Old ECT Group, n (%)	Oldest-Old Non-ECT Group, n (%)
<b>Total number of hospitalizations, n (%)</b>	23 (4.4)	30 (5.7)	72 (13.8)
<b>Cause of hospitalization</b>			
Infectious diseases	0 (0)	1 (0.2)	2 (0.4)
Cancer	0 (0)	0 (0.0)	2 (0.4)
Organic mental disorders <sup>a</sup>	0 (0)	1 (0.2)	7 (1.3)
Depression relapse	10 (2.2)	7 (1.3)	14 (2.7)
Other psychiatric condition	7 (1.3)	0 (0)	0 (0)
Dissociative stupor	0 (0)	1 (0.2)	0 (0.0)
Cardiovascular disease	0 (0)	5 (1.0)	8 (1.5)
Cerebrovascular disease	0 (0)	1 (0.2)	2 (0.4)
Influenza or pneumonia	0 (0)	4 (0.8)	6 (1.1)
Urinary disease	0 (0)	2 (0.4)	1 (0.2)
Syncope and collapse	0 (0)	1 (0.2)	0 (0.0)
Intestinal diseases	0 (0)	0 (0.0)	5 (1.0)
Musculoskeletal diseases	0 (0)	0 (0.0)	5 (1.0)
Traumatic injury	1 (0.2)	4 (0.8)	6 (1.1)
Pregnancy-related	2 (0.4)	0 (0)	0 (0)
Poisoning	5 (1.0)	0 (0)	0 (0)
Other	0 (0)	3 (0.6)	6 (1.1)
<b>Total number of deaths, n(%)</b>	0 (0)	2 (0.4)	9 (1.7)
<b>Cause of death</b>			
Heart failure	0 (0)	1 (0.2)	2 (0.4)
Infection	0 (0)	0 (0.0)	3 (0.6)
Asphyxiation	0 (0)	0 (0.0)	1 (0.2)
Unspecified	0 (0)	1 (0.2)	3 (0.6)

<sup>a</sup> Including dementia, delirium, disorientation and mild cognitive disorder.



## Conclusion

Meilleure réponse et  
rémission

Bonne tolérance  
Moindre risque d'hospitalisation  
précoce que pour traitement non-ECT

Pas d'impact des comorbidités sur la  
réponse/rémission (mais prévalence plutôt faible  
dans l'étude)



# Autorisation de mise sur le marché dextrometorphane-bupropion (AUVELTY®) dans l'agitation liée à la maladie d'Alzheimer

FDA Approves First Non-Antipsychotic Drug to Treat Agitation Associated with Dementia. FDA  
April 30<sup>th</sup>, 2026



# Dextrometorphane-bupropion (AUVELTY®)

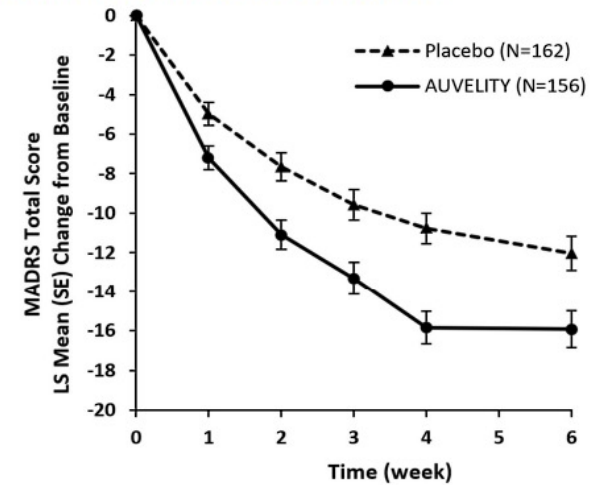
Dépression

 **Auvelity™**  
(dextromethorphan HBr and bupropion HCl)  
extended-release tablets 45mg/105mg



19 août 2022

Figure 3: Change from Baseline in MADRS Total Score by Week (Study 1)



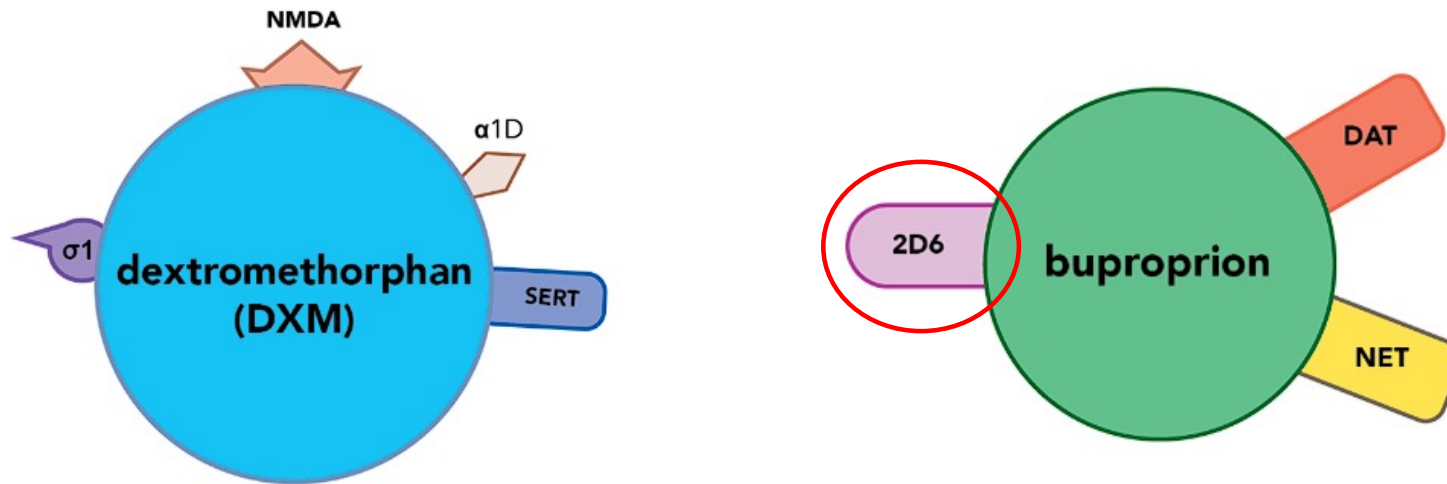
Placebo (N)	161	162	159	159	157	150
AUVELITY (N)	156	155	142	132	128	124

SE = Standard Error



# Pharmacodynamie

Neuroscience Education Institute, April 30th 2026





# Dextrometorphane-bupropion (AUVELTY®)

ADVANCE-1 - O'Gorman et al. 2020

DOI: 10.1002/alz.047684

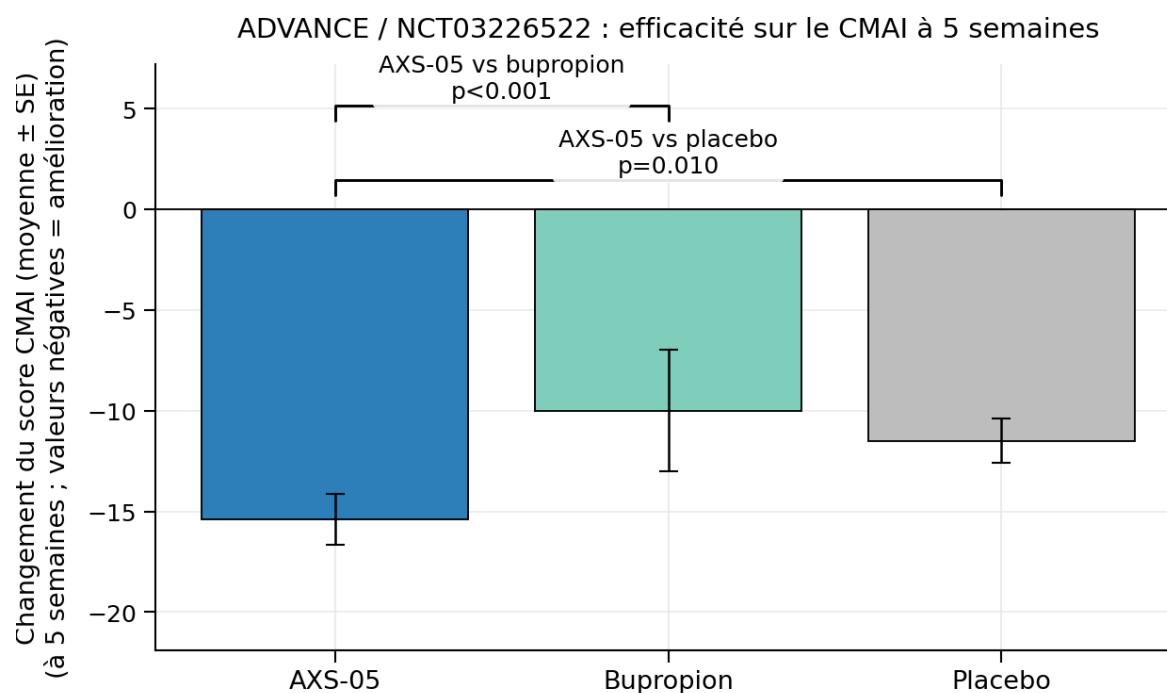
DRUG DEVELOPMENT  
PODIUM PRESENTATIONS

Alzheimer's & Dementia  
THE JOURNAL OF THE ALZHEIMER'S ASSOCIATION

Developments in clinical trials and cognitive assessment

Efficacy and safety of AXS-05, a novel, oral, NMDA-receptor antagonist with multimodal activity, in agitation associated with Alzheimer's disease: Results from ADVANCE-1, a phase 2/3, double-blind, active and placebo-controlled trial

Cedric O'Gorman<sup>1</sup> | Amanda Jones<sup>1</sup> | Jeffrey L. Cummings<sup>2</sup> | Herriot Tabuteau<sup>1</sup>



Source : ClinicalTrials.gov NCT03226522 (population mITT).

Durée: **5 semaines**

**366 sujets inclus**

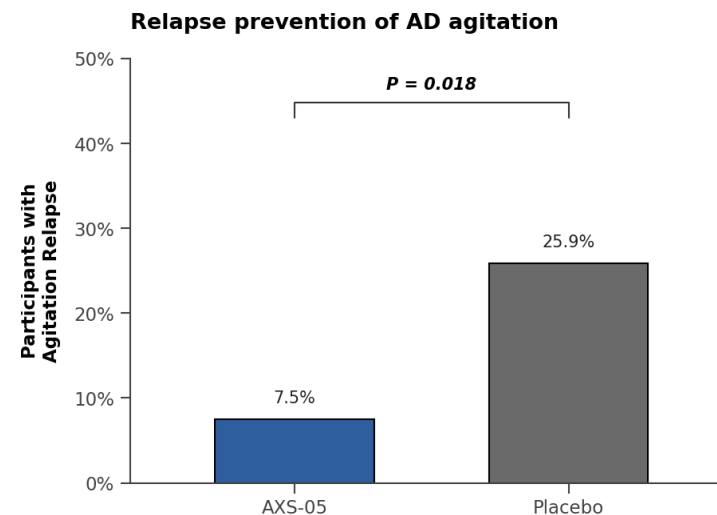
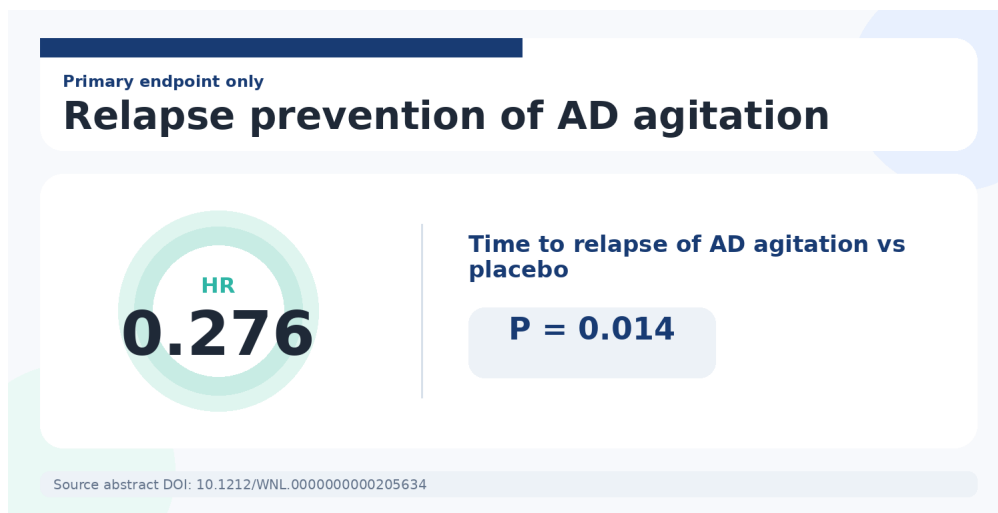
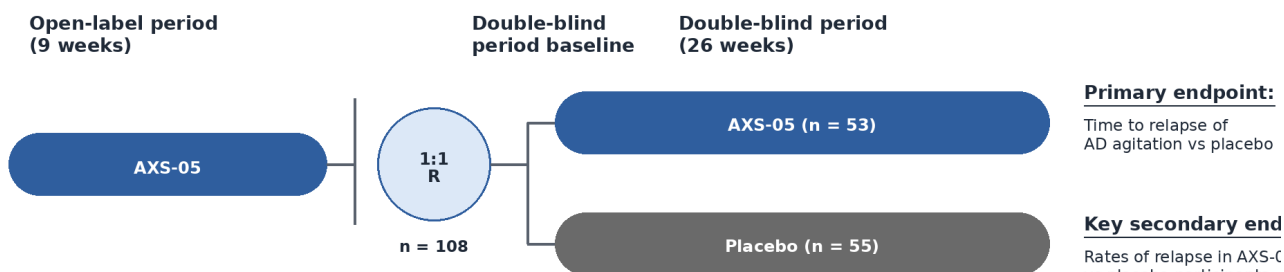
- AXS-05: 159
- Bupropion: 49
- Placebo: 158



# Dextrometorphane-bupropriion (AUVELTY®)

ACCORD – AAN Annual Meeting – Cummings et al. 2024, April 2024

## Study design (schematic)



Source abstract DOI: 10.1212/WNL.000000000205634



# Dextrometorphane-bupropion (AUVELTY®)

ACCORD-2 – Psych Congress Elevate Poster – Cummings et al., May 2025

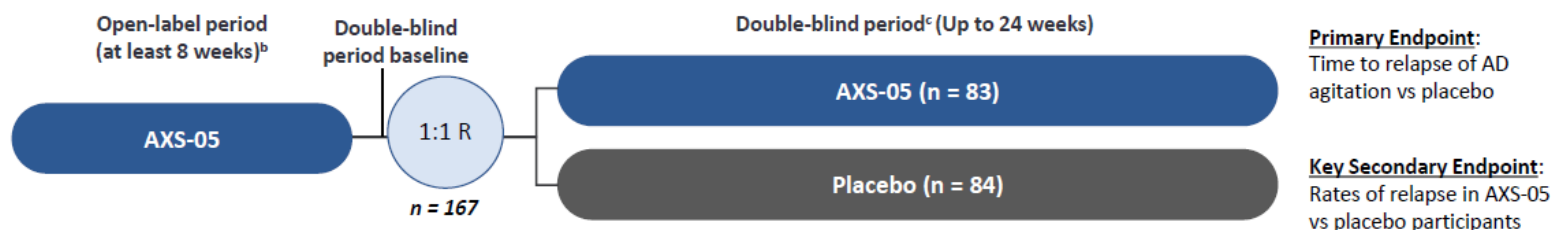
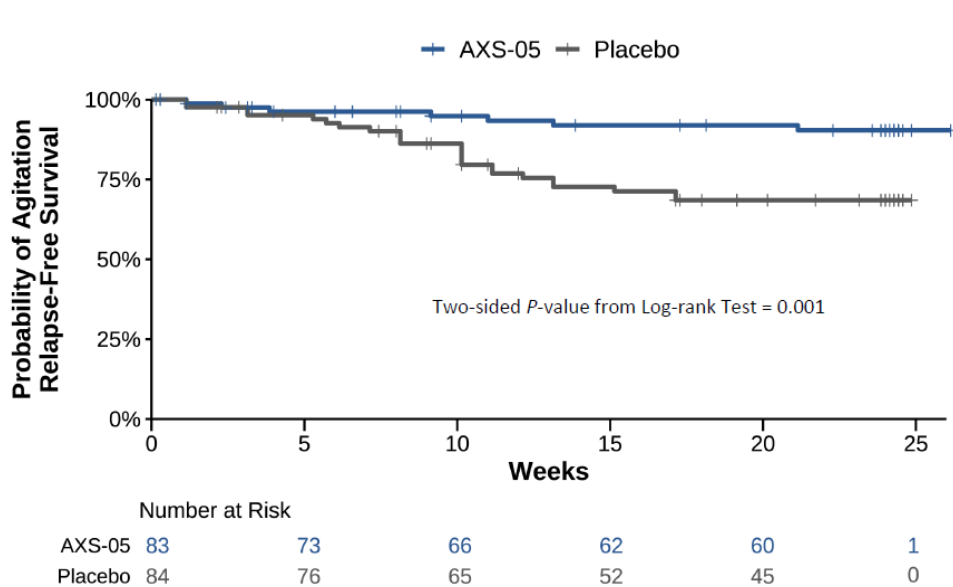


Figure 1. Kaplan-Meier Plot of Time from Randomization to Relapse of Agitation Symptoms



**Agitation relapse defined as:**

- ≥10-point increase (worsening) from randomization in the CMAI total score for 2 consecutive weeks or CMAI total score at assessment ≥ baseline<sup>a</sup> CMAI total score for 2 consecutive weeks
- Hospitalization for worsening AD agitation

- ACCORD-2 met its primary endpoint by significantly delaying the time to relapse of AD agitation with AXS-05 versus placebo (hazard ratio, 0.276)
- Risk of relapse was 3.6-fold less with AXS-05 compared to placebo

Hazard Ratio for Time to Relapse	
Hazard Ratio	0.276
(95% CI)	(0.119-0.641)

Figure 2. Relapse Prevention of AD Agitation

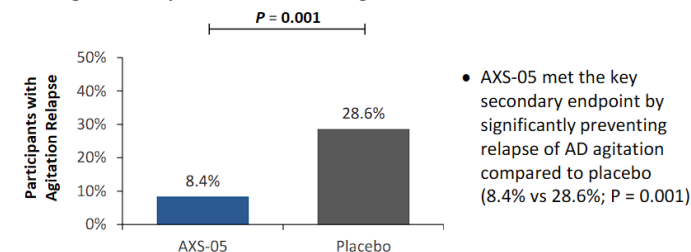
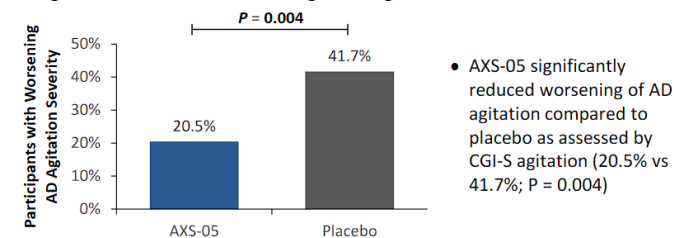


Figure 3. Prevention of Worsening of AD Agitation



<sup>a</sup>Baseline values are from the ADVANCE-2 trial from which participants in the ACCORD-2 trial were carried over. AD, Alzheimer's disease; CMAI, Cohen-Mansfield Agitation Inventory.



## Schéma posologique dans l'agitation de la MA

Axsome Therapeutics, press release April 30th 2026

- **J1:** 1 comprimé de 30 mg/105 mg 1 prise/jour le matin pendant 7 jours
- **J8:** 1 comprimé de 30 mg/105 mg 2 prises/jour, séparées d'au moins 8 heures
- **J15:** 1 comprimé de 45 mg/105 mg 2 prises/jour, séparées d'au moins 8 heures



# Climate change and the health of older adults in Europe: a call for a geriatric climate medicine framework

22 octobre 2025



Lozano-Montoya I, Ruiz-Huerta C, Gómez-Pavón FJ. Climate change and the health of older adults in Europe: a call for a geriatric climate medicine framework. Eur Geriatr Med. 2026 Feb;17(1):1-9.



## Contexte

- Réchauffement du climat européen x2 > global
- Menace pour la santé publique
  - Augmentation de la température
  - Evènements climatiques extrêmes
  - Altération de la qualité de l'air
  - Perturbation écologique
- Personnes âgées = population très vulnérable
- Pas de recommandations cliniques gériatriques



# Effets sur la santé des personnes âgées

## Vagues de chaleur

- Mortalité (Sud de l'Europe +++)
  - Femmes
  - > 80 ans
  - Fragilité
  - Pathologies sous-jacentes : cardiovasculaires, rénales, métaboliques
- Evènements cardiovasculaires
- Hospitalisations



# Effets sur la santé des personnes âgées

## Pollution de l'air

- Inhalation chronique de particules fines PM2.5
  - Mortalité cardiovasculaire et respiratoire
  - Fragilité
  - Déclin cognitif
  - Hospitalisations



## Effets sur la santé des personnes âgées

### Incendies de forêt

- Exposition à la chaleur, fumée, pollution de l'air (PM 2.5)
- Hospitalisations pour maladies cardiovasculaires ou respiratoires
- Exacerbations de BPCO
- Pathologies liées à la chaleur
- Déclin cognitif et fonctionnel (déplacements, isolement, rupture de parcours de soins)



# Effets sur la santé des personnes âgées

## Pathologies infectieuses

- Pathogènes par vecteur ou eau
  - Virus du Nil occidental
  - Dengue
  - Leishmaniose
  - Vibrions
  - Tique



# Effets sur la santé des personnes âgées

## Autres

- Inondations
  - Infections
  - Déclin cognitif et fonctionnel (déplacements, isolement, rupture de parcours de soins)
- Insécurité alimentaire et hydrique
- « Stress climatique » : AVC, confusion, SPCD



# France



## Escalating heat exposure and unsafe conditions for physical activity

France continues to experience sharp increases in heat exposure, particularly among older adults, infants, and people engaging in outdoor activities. The data highlight that heat is becoming a consistent and widespread threat to population health and productivity, with little sign of adaptation keeping pace. According to Santé publique France, the summer of 2024 ranked as the eighth hottest since 1900, with heatwaves affecting 43 départements and around 40% of the population for nearly five days on average. More than 17 000 emergency visits and an estimated 3 700 deaths were attributed to heat exposure.\*\*

### RECORD-BREAKING SUMMERS TEST RESILIENCE ACROSS FRANCE

Heatwaves have repeatedly challenged public-health systems, with multiple départements under prolonged heat alerts in recent years. The 2024 summer brought concurrent agricultural, health, and energy impacts. National surveillance during this period also showed that older adults accounted for more than half of heat-related emergency visits and three-quarters of heat-attributable deaths.\*\* This prompts renewed calls for urban greening, expanded early-warning systems, and occupational-safety adaptation plans. Sustained behavioural and infrastructural adaptation will be essential to reduce vulnerability as temperatures continue to rise.



In 2024, people in France were exposed to 12 heatwave days each, on average. Of these, 9 (75%) would not have been expected to occur without climate change. (Indicator 1.1.1)



In 2024, individuals in France were exposed to 149.9 hours per person of at least moderate heat stress risk during exercise, 127% higher than the 1990–1999 average. This can compromise safe outdoor activity and occupational performance. (Indicator 1.1.2)



In 2024, heat exposure resulted in a loss of 90 million potential labour hour, 111% more than in 1990–1999. The construction sector accounted for 47% of the losses in 2024. (Indicator 1.1.3)



France lost 86,280 hectares of tree cover in 2023, reducing natural cooling and shade, amplifying heat stress during extreme temperature events and increasing risks to health and ecosystems. (Indicator 3.4)

## Wildfire smoke and drought pressures on health

Climate-related hazards in France increasingly converge, with prolonged droughts amplifying wildfire risk and worsening air quality. While 2024 saw fewer wildfire exposure days, the long-term increase in smoke-related mortality and particulate concentrations reflects growing health threats under a warmer, drier climate. This points to greater health risks across large parts of France, especially in southern regions affected by recurrent summer fires.



From 2020–2024, an average of 44.6% of French land experienced at least one month of extreme drought per year, 148% higher than 1951–1960. (Indicator 1.2.2.) This illustrates a shift towards more severe and recurrent dry periods that degrade soil, ecosystems, and water security.



Wildfire-related fine particulate matter (PM<sub>2.5</sub>) caused an estimated 700 deaths per year on average between 2020–2024, which is a 55% increase from 2003–2012 levels. In 2024, 656 deaths were attributed to wildfire smoke, still 45% higher than the baseline, highlighting persistent health risks even in years with fewer fire events. (Indicator 1.2.1)

## Coastal warming and climate-sensitive infectious disease risk

Rising sea-surface temperatures and expanding pathogen habitats are heightening infectious-disease risks along France's extensive coastline. The warming trend in the Atlantic and Mediterranean waters supports the spread of *Vibrio* bacteria, posing growing public-health challenges for coastal residents and visitors.

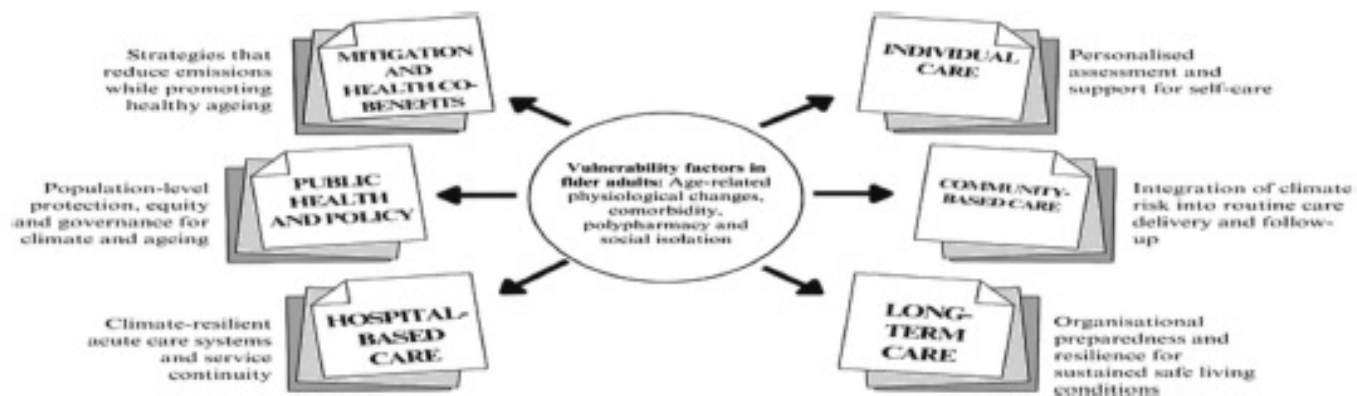


Average sea-surface temperatures around France reached 16.0 °C in 2022–2024, representing a 7.6% increase from the 1981–2010 baseline. In 2024, the seas were 1.0°C warmer than the historical average, intensifying risks of harmful algal blooms and bacterial proliferation. (Indicator 1.4)



In 2024, France saw an estimated 2,700 *Vibrio* cases, a 78% rise compared with 1990–1999. France also had a 384% increase in the coastal length exposed to *Vibrio* risk. These infections, often associated with warmer waters and shellfish consumption, underscore the growing intersection between ocean warming and health outcomes in France. (Indicator 1.3.6) In addition, France has seen a sharp rise in autochthonous arboviral infections transmitted by *Aedes albopictus*, including 729 chikungunya cases across 78 clusters in 2025.\*\*\*

# Rôle de la gériatrie



**Fig. 1** European geriatric climate medicine framework outlining seven strategic domains for integrating climate resilience into geriatric health systems, with a central focus on vulnerability factors in older adults



# Rôle de la gériatrie

**Table 1** Recommendations to mitigate climate change impacts in older adults

Level of Care	Recommendation	Implementation Example
Community-based care	Incorporate climate-related risk into the clinical history	Include standardized questions in the electronic health record regarding housing conditions, access to air conditioning, social isolation and evacuation capacity
	Identify older adults at risk of dehydration (e.g., those without air conditioning or on diuretics) during routine home assessments	Measure indoor temperature. Use electronic health records to identify high-risk individuals for proactive follow-up
	Provide education to patients and caregivers on how to stay safe during periods of extreme heat	Distribute printed or digital materials outlining hydration strategies, cooling options and early signs of heat-related illness
	Maintain adequate hydration and review the use of medications that may increase vulnerability to dehydration	Conduct seasonal medication reviews, provide tailored advice on fluid intake during hot months
	Address climate-related mental health symptoms	Assess for sleep disturbances, anxiety, or cognitive decline potentially exacerbated by extreme heat and provide mental health support
Hospital-based care	Incorporate climate-sensitive screening into clinical protocols	Screen for signs of dehydration, orthostatic hypotension or confusion during triage (especially in patients with cognitive impairment)
	Review and adjust medications that may increase the risk of heat-related illness	Temporarily modify or suspend diuretics, anticholinergics or other high-risk drugs during heatwaves
	Adjust healthcare delivery practices to minimize exposure during extreme events	Prioritize telemedicine and home visits for frail patients
	Prioritize reusable medical equipment and sustainable service contracts	Select suppliers that meet energy efficiency criteria in cleaning, laundry and waste management
Long-term care	Establish protocols for managing heat emergencies	Develop institutional action plans, including temperature monitoring, hydration rounds and adjusted activity schedules
	Train staff in recognizing heat-related illness	Include mandatory training modules on heat stress in annual education plans
	Promote awareness of the need for heat-resilient housing	Recommend funding applications for passive cooling interventions (e.g., external shading and improved ventilation)
	Include environmental risk factors in routine geriatric assessments	Add specific questions on thermal comfort and structural housing quality



# Un sujet brûlant !

Electronic supplementary material:  
The online version of this article contains supplementary

© 2024 The Author(s)

Climate change  
assessment of t  
hazards on older

Wood et al. *Environmental Health* (2024) 23:35  
<https://doi.org/10.1186/s12940-024-01075-1>

## RESEARCH

### Exposure to ambient air pollution and cognitive function in English Longitudinal Study of Ageing: a natural experiment in nature medicine

Dylan Wood<sup>1,2,3\*</sup>, Dimitris Evangelopoulos<sup>1,2,3</sup>,  
Panayotes Demakakos<sup>4</sup> and Klea Katsouyanni

*Age and Ageing* 2022, **51**: 1–3  
<https://doi.org/10.1093/ageing/afab199>  
Published electronically 13 October 2021



## COMMENTARY

### Geriatric medicine in the era of climate change

BETHAN DAVIES<sup>1</sup>, MAHMOOD F. BHUTTA<sup>2</sup>

## Synthèse

*Geriatr Psychol Neuropsychiatr Vieil* 2026 ; 24 (1) : 15-29.

### Impact du changement climatique et de la pollution sur la santé globale de nos aînés

*Impact of climate change and pollution on the global health  
of older adults*

BASTIEN GENET<sup>1</sup>  
REBECCA BONNETAIN<sup>1</sup>

**Résumé.** Introduction. Le changement climatique et la pollution représentent des enjeux majeurs de santé publique, particulièrement pour nos aînés vulnérables par leur polymorbidité, isolement et précarité. Dans une perspective de santé globale où la santé

Scott W. Delaney, ScD, JD, MPH; Angela Stegmüller, MS; Daniel Mork, PhD; Lauren Mock, MS; Michelle L. Bell, PhD; Thomas M. Gill, MD; Danielle Braun, PhD; Antonella Zanobetti, PhD

## Article

### The exposome of healthy and accelerated aging across 40 countries

Received: 25 April 2023  
Accepted: 24 March 2024

Giacomo Falchetta<sup>1,2,3</sup>, Enrica De Cian<sup>1,2,4</sup>, Ian Sue Wing<sup>5</sup> & Deborah Carr<sup>6</sup>



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l neurological conditions in  
analysis

urt<sup>a</sup>, Yimeng Song<sup>a</sup>, Ji-Young Son<sup>a</sup>,  
ok Kim<sup>c</sup>, Hayon Michelle Choi<sup>d</sup>,  
;<sup>b</sup>, Nicole C. Deziel<sup>b</sup>,

## CLIMATE CHANGE AND HEALTH tion Among Older Persons related Dementias



<https://doi.org/10.1038/s41591-025-03808-2>

<https://doi.org/10.1038/s41467-024-47197-5>

asure of



Société Francophone de Psychogériatrie  
et de Psychiatrie de la Personne Âgée

**Merci !**

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