IX Congreso Nacional de ALZHEIMER
10, 11, 12 y 13 de noviembre de 2021
CERO OMISIONES CERO ALZHEIMER

COSTE EFECTIVIDAD DE LOS TRATAMIENTOS PARA LA ENFERMEDAD DE ALZHEIMER

Dr. Manuel Fernández Martínez
Responsable de la Unidad de Investigación en el centro OROITU. Getxo
Neurólogo en el Hospital Universitario de Cruces
Departamento de Neurociencias-UPV
BioCruces-Biobizkaia. Health Research Institute.

Conflictos de interés

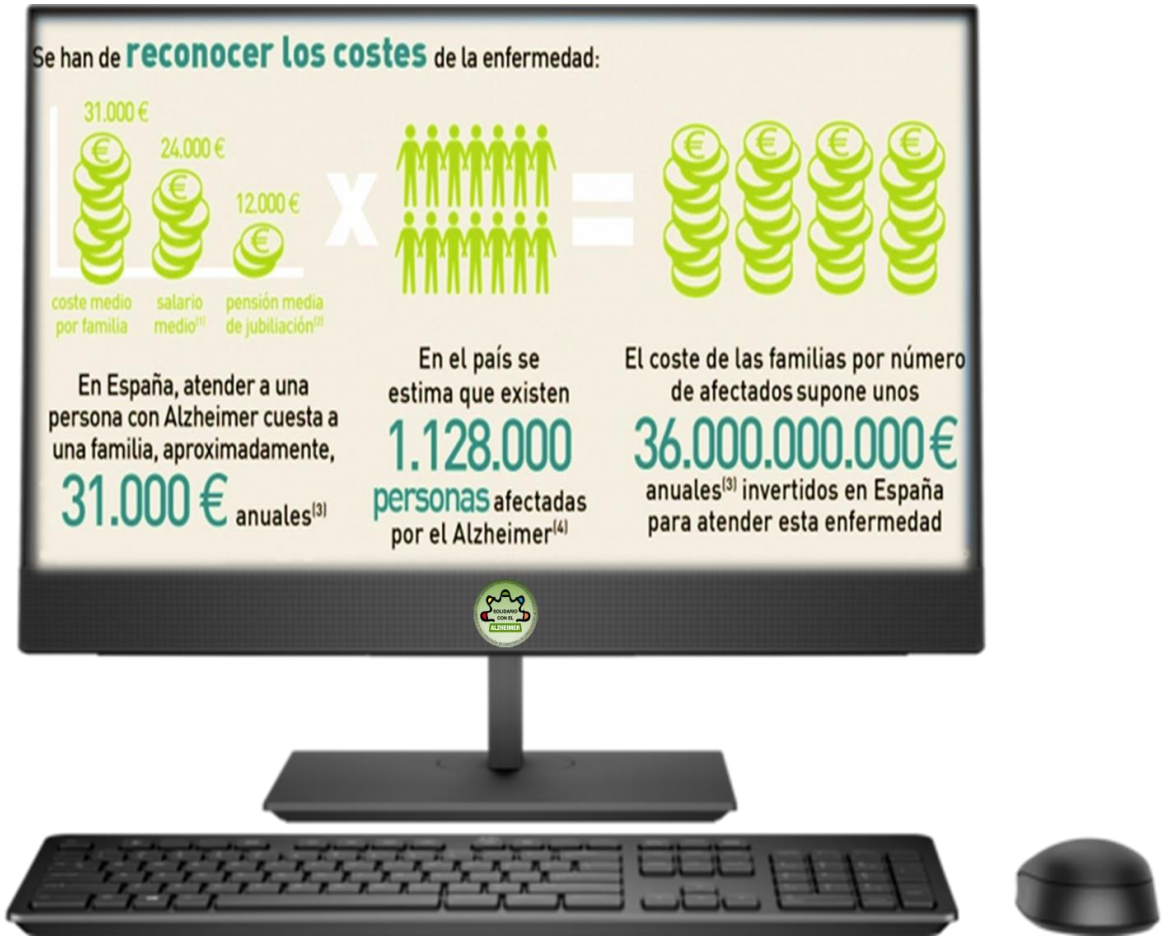
- **Asesoramiento y/o diseño de proyectos:**
  - **ACCEXIBLE:** Proyecto Piloto. Desarrollo de la herramienta para la detección y monitorización del deterioro cognitivo a través del análisis del habla.
  - **FUJIREBIO:** marcadores de deterioro cognitivo en LCR
  - **ENGLOBA.**
  - **Souvenaid**
- **Ensayos clínicos:**
  - **Anticuerpos monoclonales: Crenezumab y Gantenerumab de ROCHE, aducanumab de BIOGEN (estudios EMERGE y ENGAGE)**
  - **Vacunación activa- ARACLON**
  - **Inhibidores de β-secretasa:**
    - **MSD**
    - **JANSSEN**
    - **EISAI**
    - **LILLY**
  - **Farmacos antitau: tauriel**

La valoración económica de la salud en la Enfermedad de Alzheimer

ALEX TEN NAPEL
PORTRAIT PHOTOGRAPHY
las 10 fotos mas bellas con Alzheimer

DEMENCIA:

- LA 1ª CAUSA DE DISCAPACIDAD
- LA ENFERMEDAD CON MAYOR GRADO DE DEPENDENCIA
- GRAN IMPACTO ECONÓMICO



GBD 2016 Dementia Collaborators (2019) Global, regional, and national burden of Alzheimer's disease and other dementias, 1990-2016: A systematic analysis for the Global Burden of Disease Study 2016. Lancet Neurol 18, 88-106.

DEMENCIA:

- LA 1ª CAUSA DE DISCAPACIDAD
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VARIABLES QUE INFLUYEN EN EL GASTO DE LA DEMENCIA:

- Gravedad de la demencia
- Nivel de dependencia en las actividades cotidianas
- Comorbilidad
- Síntomas neuropsiquiátricos
- Signos extrapiramidales
- Nivel de estudios del cuidador, vinculo con el paciente y si esta en medio rural o urbano
- El empeoramiento de la función cognitiva y de las actividades de la vida diaria

Villarejo Galende A et al. Neurologia. 2021; 36(1)39-49

DEMENCIA:

- ❑ LA 1ª CAUSA DE DISCAPACIDAD
- ❑ LA ENFERMEDAD CON MAYOR GRADO DE DEPENDENCIA
- ❑ GRAN IMPACTO ECONÓMICO

GBD 2016 Dementia Collaborators (2019) Global, regional, and national burden of Alzheimer's disease and other dementias, 1990-2016: A systematic analysis for the Global Burden of Disease Study 2016. Lancet Neurol 18, 88-106.

- **Coste demencia leve** causada por Alzheimer **4.243$ vs 2.816$** en **deterioro cognitivo leve**.
- El principal factor de coste fue el **estado clínico cognitivo-funcional** del paciente y no el estado amiloide.
- Las diferencias se debieron principalmente a la creciente **necesidad de apoyo de los cuidadores**.

Robinson, Rebecca L. et al. 'Costs of Early Stage Alzheimer's Disease in the United States: Cross-Sectional Analysis of a Prospective Cohort Study (GERAS-US)'. Journal of Alzheimer's Disease 75 (2020) 437–450

DEMENCIA:

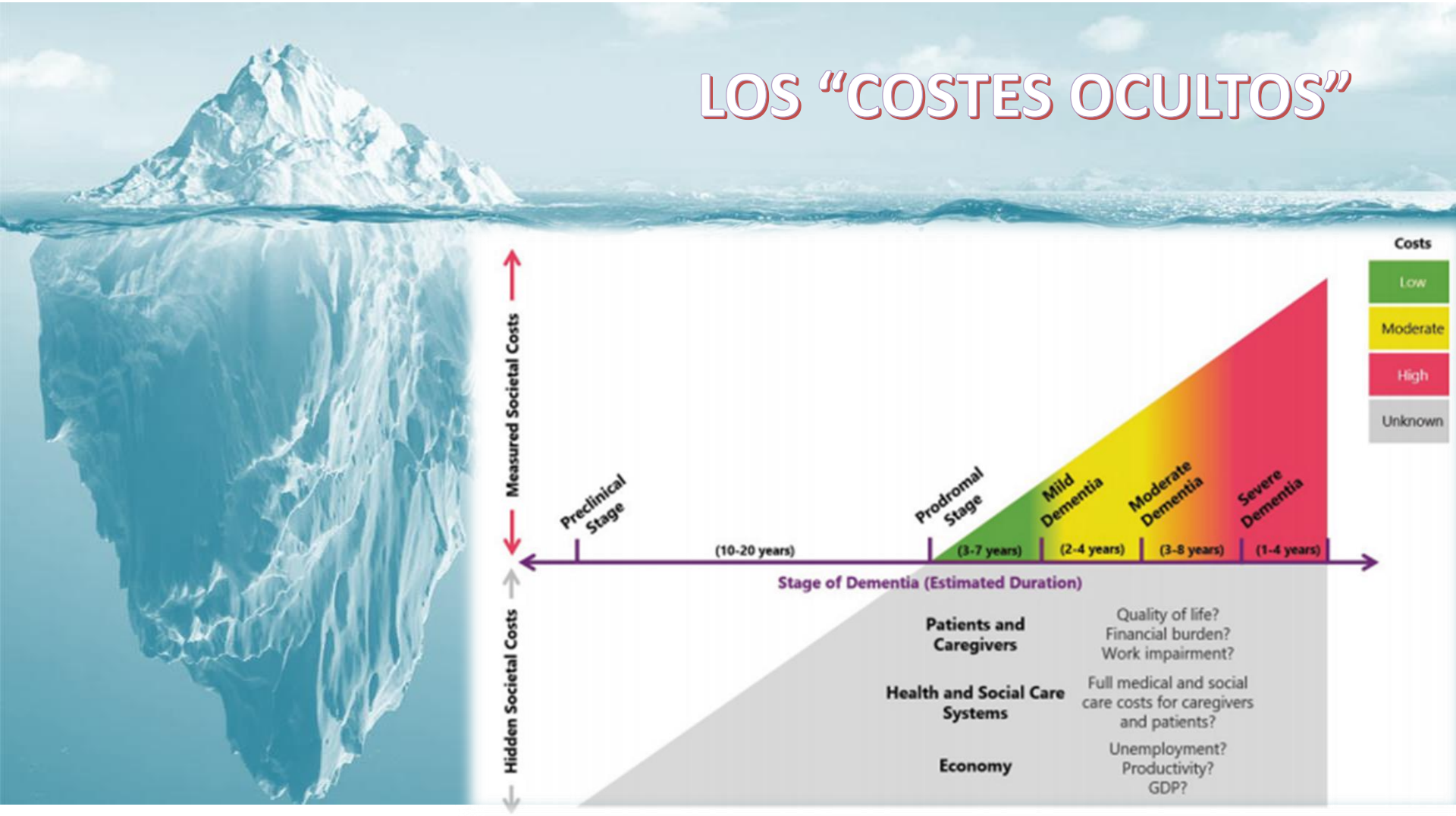
- LA 1ª CAUSA DE DISCAPACIDAD
- LA ENFERMEDAD CON MAYOR GRADO DE DEPENDENCIA
- GRAN IMPACTO ECONÓMICO

El 80% de los enfermos es cuidado por sus **familias, que asumen de media el 87% del coste total**, con la consiguiente sobrecarga y menoscabo de la salud y calidad de vida de los cuidadores de los pacientes, con una importante disminución de la calidad de vida y la supervivencia…. Es necesario desarrollar programas globales e incrementar los recursos enfocados a fomentar la **investigación, prevención, diagnóstico precoz, tratamiento multidimensional y abordaje multidisciplinario**, que permitan reducir la carga sanitaria, social y económica de la demencia"

Villarejo Galende A et al. Neurologia. 2021; 36(1)39-49

GBD 2016 Dementia Collaborators (2019) Global, regional, and national burden of Alzheimer's disease and other dementias, 1990-2016: A systematic analysis for the Global Burden of Disease Study 2016. Lancet Neurol 18, 88-106.

LOS "COSTES OCULTOS"



Youssef H. El-Hayek et al. "Tip of the Iceberg: Assessing the Global Socioeconomic Costs of Alzheimer's Disease and Related Dementias and Strategic Implications for Stakeholders". journal of Alzheimer's Disease 70 (2019) 323–341

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Evaluación Económica en Salud

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Evaluación Económica en Salud

"La Evaluación económica de las Intervenciones sanitarias aparece como una **metodología necesaria tanto para quien toma decisiones clínicas en la asistencia directa como para aquellos encargados de su planificación**……Sin embargo, y a pesar de las aparentes utilidades de la metodología de la evaluación económica, sus resultados no acaban de incorporarse de manera habitual a la toma de decisiones en la clínica, ni en las políticas sanitarias"

CIR ESP. 2012;90(9):545–547

CERO OMISIONES
CERO ALZHEIMER

La prueba del algodón

Ser EFECTIVO

Ser COSTE-EFECTIVO

NUTRICIA Souvenaid

Health Technology Assessment 2012; Vol. 16: No. 21
ISSN 1366-5278

The effectiveness and cost-effectiveness of donepezil, galantamine, rivastigmine and memantine for the treatment of Alzheimer's disease (review of Technology Appraisal No. 111): a systematic review and economic model

M Bond, G Rogers, J Peters, R Anderson,
M Hoyle, A Miners, T Moxham, S Davis,
P Thokala, A Wailoo, M Jeffreys and C Hyde

April 2012
10.3310/hta16210

Conclusions: The additional clinical effectiveness evidence identified continues to suggest clinical benefit from the AChEIs in alleviating AD symptoms, although there is debate about the magnitude of the effect. Although there is also new evidence on the effectiveness of memantine, it remains less supportive of this drug's use than the evidence for AChEIs. The conclusions concerning cost-effectiveness are quite different from the previous assessment. This is because both the changes in effectiveness and costs between drug use and non-drug use underlying the ICERs are very small. This leads to highly uncertain results, which are very sensitive to change

SYSTEMATIC REVIEW

Drugs 2012; 72 (6): 789-802
0012-6667/12/0006-0789/$55.55/0

Economic Evaluation of Treatment Options in Patients with Alzheimer's Disease

A Systematic Review of Cost-Effectiveness Analyses

Laura Pouryamout,[1] *Judith Dams,*[2] *Juergen Wasem,*[1] *Richard Dodel*[2] and *Anja Neumann*[1]

1 Institute of Health Care Management and Research, University of Duisburg-Essen, Essen, Germany
2 Department of Neurology, Philipps-University, Marburg, Germany

Conclusion: The seven identified publications included in this review indicate that treatment with CEIs or memantine seems to be reasonable in terms of clinical effects and costs for patients with AD. Depending on different hypotheses, assumptions and variables (e.g. time horizon, discount rates, initial number of patients in different states, etc.) in the sensitivity analyses, treatment with these drugs seems to be primarily a cost-effective strategy or even a cost-saving strategy. Nevertheless, the results generally are associated with a degree of uncertainty. The comparability of the results from the different economic evaluations is limited because of the different assumptions made.

RESEARCH ARTICLE

International Journal of Geriatric Psychiatry

Cost-effectiveness of donepezil and memantine in moderate to severe Alzheimer's disease (the DOMINO-AD trial)

Martin Knapp[1], Derek King[1], Renée Romeo[2], Jessica Adams[3], Ashley Baldwin[4], Clive Ballard[5], Sube Banerjee[6], Robert Barber[7], Peter Bentham[8], Richard G Brown[9], Alistair Burns[10], Tom Dening[11], David Findlay[12], Clive Holmes[13], Tony Johnson[14], Robert Jones[11,*], Cornelius Katona[15], James Lindesay[16], Ajay Macharouthu[17], Ian McKeith[18], Rupert McShane[19], John T O'Brien[20], Patrick P J Phillips[14], Bart Sheehan[21] and Robert Howard[22]

Conclusions: Robust evidence is now available to inform clinical decisions and commissioning strategies so as to improve patients' lives whilst making efficient use of available resources. Clinical guidelines for treating moderate/severe Alzheimer's disease, such as those issued by NICE in England and Wales, should be revisited.

Age and Ageing 2013; **42:** 14–20
doi: 10.1093/ageing/afs165
Published electronically 22 November 2012

SYSTEMATIC REVIEW

Evolution of the evidence on the effectiveness and cost-effectiveness of acetylcholinesterase inhibitors and memantine for Alzheimer's disease: systematic review and economic model†

CHRISTOPHER HYDE[1], JAIME PETERS[1], MARY BOND[1], GABRIEL ROGERS[1], MARTIN HOYLE[1], ROB ANDERSON[1], MIKE JEFFREYS[2], SARAH DAVIS[3], PRAVEEN THOKALA[3], TIFFANY MOXHAM[1]

[1]PCMD, University of Exeter, PenTAG, Veysey Building Salmon Pool Lane, Exeter, Devon EX2 4SG, UK
[2]Royal Devon and Exeter Foundation Trust, Exeter, Devon, UK
[3]ScHARR, University of Sheffield, Sheffield, UK

Address correspondence to: C. Hyde. Tel: (+44) 01392 726051; Fax: (+44) 01392 726056. Email: christopher.hyde@pcmd.ac.uk

Results: confidence about the size and statistical significance of the estimates of effect of galantamine, rivastigmine and memantine improved on function and global impact in particular. Cost-effectiveness also changed. For donepezil, galantamine and rivastigmine, the incremental cost per quality-adjusted life year (QALY) in 2004 was above £50,000; in 2010 the same drugs 'dominated' best supportive care (improved clinical outcome at reduced cost). This was primarily because of changes in the modelled costs of introducing the drugs. For memantine, the cost-effectiveness also improved from a range of £37–53,000 per QALY gained to a base-case of £32,000.
Conclusion: there has been a change in the evidence base between 2004 and 2010 consistent with the change in NICE guidance. Further evolution in cost-effectiveness estimates is possible particularly if there are changes in drug prices.

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Social-economic costs and quality of life of Alzheimer disease in the Canary Islands, Spain

Julio Lopez-Bastida, PhD; Pedro Serrano-Aguilar, PhD;
Lilisbeth Perestelo-Perez MPsych; and Juan Oliva-Moreno, PhD

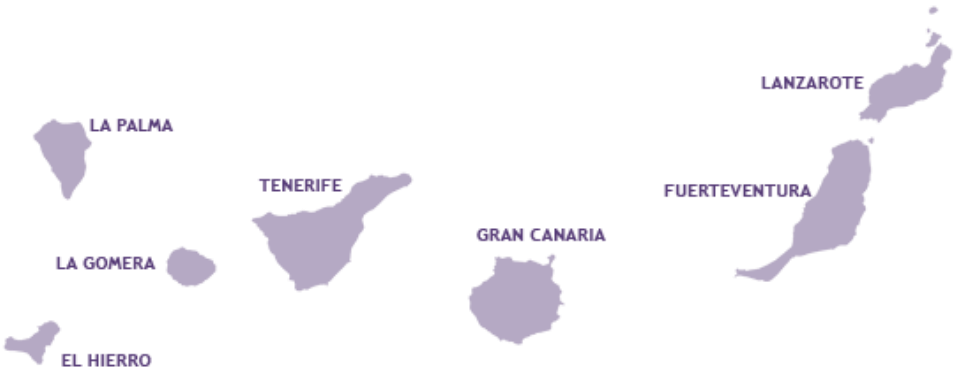
Abstract—*Objectives:* To examine the economic burden (direct and indirect costs) of Alzheimer disease (AD) and to analyze the impact on health-related quality of life (HRQOL) for patients with AD and caregivers in 2001 in the Canary Islands, Spain. *Methods:* Two hundred thirty-seven patients (61% of those contacted) were recruited from the Alzheimer's Disease Association in the Canary Islands. Demographic, health resources utilization, informal care, indirect costs, and quality of life data were collected from primary caregivers of patients as proxy respondents. HRQOL was measured for patients and caregivers with the generic questionnaire EQ-5D. *Results:* The average annual cost per patient with AD was €28,198 (US $36,144). The most important categories of costs were for informal care and drugs. Costs increased with cognitive impairment with an average annual cost of €14,956 (US $19,171) for mild, €25,562 (US $32,765) for moderate, and €41,669 (US $53,411) for severe patients. The total cost of patients with AD in Canary Islands was €259 (US $332) million. The HRQOL with the EQ-5D social tariff was 0.29 for patients and 0.67 for caregivers. The EQ-5D VAS (thermometer) score was 42 for patients and 62 for caregivers. *Conclusions:* Direct health care costs of AD represented 2.4% of the total public health care expenditure in the Canary Islands. Across all severity levels, we estimated a total annual cost of €10 (US $13) billion for AD patients older than 65 years in Spain. The degree of severity of the patients with AD substantially influenced the quality of life of the patients but not that of the caregivers.

NEUROLOGY 2006;67:2186–2191

Table 2 *Mean annual cost per patient with AD (mild, moderate, and severe)*

	Mild (n = 47)	Moderate (n = 95)	Severe (n = 95)	Total (n = 237)
Direct health care costs, € ($)				
Hospital care	€40 (US $51)	€368 (US $472)	€1,146 (US $1,469)	€619 (US $793)
Medical visits (public)	€188 (US $241)	€189 (US $242)	€158 (US $203)	€176 (US $226)
Medical visits (private)	€64 (US $82)	€68 (US $87)	€77 (US $99)	€71 (US $91)
Drugs	€1,988 (US $2,548)	€2,046 (US $2,623)	€1,561 (US $2,001)	€1,836 (US $2,353)
Medical tests and examinations	€121 (US $155)	€141 (US $181)	€127 (US $163)	€131 (US $168)
Emergencies	€35 (US $45)	€60 (US $77)	€94 (US $120)	€68 (US $87)
Medical home care	€20 (US $26)	€52 (US $67)	€324 (US $415)	€157 (US $201)
Orthopedic devices	€46 (US $59)	€162 (US $208)	€389 (US $499)	€231 (US $296)
Health care transport	€45 (US $58)	€72 (US $92)	€61 (US $78)	€62 (US $79)
Day centers	€274 (US $351)	€352 (US $451)	€143 (US $183)	€250 (US $320)
Geriatric residences	€0 (US $0)	€87 (US $112)	€81 (US $104)	€67 (US $86)
Subtotal	€2,821 (US $3,616)	€3,597 (US $4,611)	€4,161 (US $5,334)	€3,668 (US $4,702)
Direct non–health care costs, € ($)				
Principal caregiver	€7,642 (US $9,796)	€14,887 (US $19,082)	€26,609 (US $34,107)	€16,723 (US $21,436)
Secondary caregiver	€3,206 (US $4,109)	€4,922 (US $6,309)	€7,354 (US $9,426)	€5,290 (US $6,781)
Voluntary service	€56 (US $72)	€280 (US $359)	€282 (US $361)	€234 (US $300)
Domestic cleaner (private)	€668 (US $856)	€1,045 (US $1,339)	€1,515 (US $1,942)	€1,159 (US $1,486)
Home support (social services)	€24 (US $31)	€220 (US $282)	€993 (US $1,273)	€496 (US $636)
Subtotal	€11,596 (US $14,864)	€21,354 (US $27,372)	€36,753 (US $47,110)	€23,902 (US $30,638)
Total, direct costs	€14,417 (US $18,480)	€24,951 (US $31,982)	€40,914 (US $52,444)	€27,570 (US $35,339)
Indirect costs, € ($)				
Early retirement (patient)	€539 (US $691)	€611 (US $783)	€755 (US $968)	€628 (US $805)
Subtotal	€539 (US $691)	€611 (US $783)	€755 (US $968)	€628 (US $805)
Total costs	€14,956 (US $19,171)	€25,562 (US $32,765)	€41,669 (US $53,411)	€28,198 (US $36,144)

AD = Alzheimer disease.



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NICE
National Institute for Health and Care Excellence

"NICE has never identified an ICER above which interventions should not be recommended and below which they should. However, in general, **interventions with an ICER of less than £20,000 per QALY gained are considered to be cost effective**.
Where advisory bodies consider that particular interventions with an ICER of less than £20,000 per QALY gained should not be provided by the NHS they should provide explicit reasons (for example that there are significant limitations to the generalisability of the evidence for effectiveness). Above a most plausible ICER of £20,000 per QALY gained, judgements about the acceptability of the intervention as an effective use of NHS resources will specifically take account of the following factors.
•The degree of certainty around the ICER. In particular, advisory bodies will be more cautious about recommending a technology when they are less certain about the ICERs presented in the cost-effectiveness analysis.
•The presence of strong reasons indicating that the assessment of the change in the quality of life is inadequately captured, and may therefore misrepresent, the health gain.
•When the intervention is an innovation that adds demonstrable and distinct substantial benefits that may not have been adequately captured in the measurement of health gain.
As the ICER of an intervention increases in the £20,000 to £30,000 range, an advisory body's judgement about its acceptability as an effective use of NHS resources should make explicit reference to the relevant factors considered above. Above a most plausible ICER of £30,000 per QALY gained, advisory bodies will need to make an increasingly stronger case for supporting the intervention as an effective use of NHS resources with respect to the factors considered above."

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Boletín Farmacoterapéutico de Castilla-La Mancha
sescam Servicio de Salud de Castilla-La Mancha

Vol. XV, N.º 2 *Año 2014*

EVALUACIÓN ECONÓMICA DE MEDICAMENTOS: PUNTOS A CONSIDERAR PARA NO PERDERSE

Fraga Fuentes MD, López Sánchez P, Andrés Navarro N, Valenzuela Gámez JC, Jerez Fernández E, Heredia Benito M
Servicio de Farmacia. Hospital General La Mancha Centro. Alcázar de San Juan (Ciudad Real)

Para la toma de decisiones, existen propuestas de valores de umbral de eficiencia en diferentes países aunque en la mayoría no están establecidos de manera formal. El umbral más citado y establecido oficialmente es el del NICE 20.000-30.000 £/AVAC. El NICE basa sus recomendaciones en el coste-efectividad de las tecnologías y determina si su uso es o no eficiente, teniendo en cuenta el beneficio en relación con lo que cuestan. La medida de beneficio es el AVAC.

Farm Hosp. 2013;**37(2)**:85-87

Farmacia HOSPITALARIA
ÓRGANO OFICIAL DE EXPRESIÓN CIENTÍFICA DE LA SOCIEDAD ESPAÑOLA DE FARMACIA HOSPITALARIA

EDITORIAL

Diez años de umbral coste-efectividad

E. Giménez[1*], J. Rovira[2], J. D. González[1] y R. Aguiar[3]

[1]*Economía de la Salud, Market Access e IRS. Antares Consulting Spain.* [2]*Universitat de Barcelona, Spain.* [3]*Health Economics. UK.*

Rev Esp Salud Pública 2015;89: 537-544. N.º 6 Noviembre-Diciembre 2015

COLABORACIÓN ESPECIAL

EVALUACIÓN ECONÓMICA BUSCA UMBRAL PARA APOYAR LA TOMA DE DECISIONES

Borja García-Lorenzo (1,2,3), Laura Vallejo-Torres (2,3), María del Mar Trujillo-Martín (1,2,3), Lilisbeth Perestelo-Pérez (2,3,5), Cristina Valcárcel-Nazco (1,2,3), Pedro Serrano Aguilar (2,3,5).

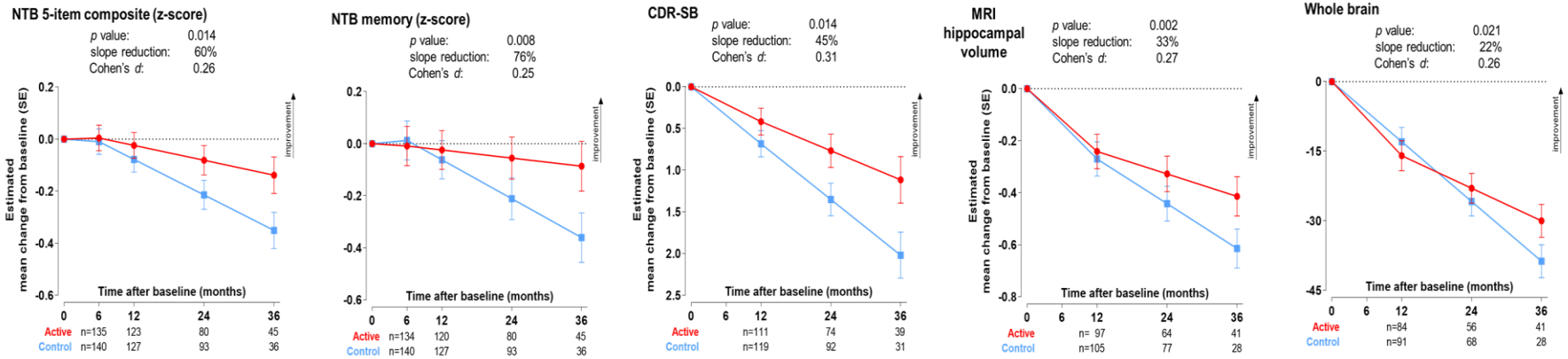
(1) Fundación Canaria de Investigación y Salud (FUNCANIS), Santa Cruz de Tenerife, España
(2) Red de Investigación en Servicios de Salud en Enfermedades Crónicas (REDISSEC). Madrid. España
(3) Centro de Investigaciones Biomédicas de Canarias (CIBICAN)., San Cristóbal de La Laguna. España
(4) Universidad de la Laguna. San Cristóbal de La Laguna. España.
(5) Servicio de Evaluación del Servicio Canario de la Salud (SESCS). Santa Cruz de Tenerife, España.

Este trabajo se realizó al amparo del convenio de colaboración suscrito por el Instituto de Salud Carlos III, organismo autónomo del Ministerio de Economía y Competitividad, y la Fundación Canaria de Investigación Sanitaria (FUNCANIS), en el marco del desarrollo de actividades de la Red Española de Agencias de Evaluación de Tecnologías Sanitarias y Prestaciones del Sistema Nacional de Salud, financiadas por el Ministerio de Sanidad, Servicios Sociales e Igualdad. Agradecemos la colaboración del proyecto IMBRAIN (FP7-REGPOT-2012-CT2012-31637-IMBRAIN), financiado por la Comisión Europea bajo el Séptimo Programa Marco (Capacities) y de la Red de Investigación en Servicios de Salud en Enfermedades Crónicas (REDISSEC).

Los autores del presente estudio declaran no tener conflicto de intereses en relación con su contenido.

El estudio LipiDiDiet es un ensayo clásico randomizado, doble ciego, controlado con placebo que investiga el efecto de un multinutriente **SOUVENAID®** en 311 personas con deterioro cognitivo leve debido a Enfermedad de Alzheimer

A lo largo de 3 años se han encontrado reducciones significativas comparado con controles en:



La intervención muestra un tamaño de efecto leve-moderado (d Cohen´s 0,25-0,31) similar a los tratamientos clínicamente relevantes de la EA

Los beneficios de esta intervención son mayores cuanto antes intervengamos y con un uso mantenido

Soininen *et al.* 2020 Alzheimer's & Dementia


Tipo de evaluación económica
Perspectiva de la Evaluación Económica
Horizonte temporal
Análisis de sensibilidad

1. **MINIMIZACIÓN DE COSTES:** Se comparan dos tratamientos con igual efecto terapéutico
2. **COSTE-EFECTIVIDAD:** Se miden efectos clínicos
3. **COSTE- BENEFICIO:** Se mide siempre el beneficio monetario
4. **Estudio COSTE-UTILIDAD:**

Unidades de medida de las utilidades es el QALY o AVAC, es decir, años ganados ajustados por calidad de vida, de modo que los QALYs combinan dos variables: cantidad de vida y calidad de vida.

health-related quality of life (HRQL)

Perspectiva social

de la Evaluación Económica es la que incluye la visión más completa

- **Costes directos sanitarios:** hospitalizaciones, visitas a urgencias, atención domiciliaria, visitas médicas (públicas y privadas), pruebas y exámenes médicos, uso de fármacos consumidos, uso de centros de día y residenciales.
- **Costes directos no sanitarios:** cuidado informal, cuidado formal
- **Costes indirectos:** jubilación anticipada
- **Costes de la intervención:** costes de Souvenaid anual y costes del diagnóstico clínico

CERO OMISIONES CERO ALZHEIMER

La prueba del algodón ✓

Mar *et al. Alzheimer's Research & Therapy* (2020) 12:166
https://doi.org/10.1186/s13195-020-00737-9

Alzheimer's Research & Therapy

RESEARCH Open Access

Economic evaluation of supplementing the diet with Souvenaid in patients with prodromal Alzheimer's disease

Javier Mar[1,2,3,4,5*], Ania Gorostiza[1,2], Oliver Ibarrondo[1,3], Igor Larrañaga[1,2], Arantzazu Arrospide[1,2,3,4], Pablo Martinez-Lage[6] and Myriam Soto-Gordoa[7]

1. Mar J, Gorostiza A, Ibarrondo O, Larrañaga I, Arrospide A, Martinez-Lage P, Soto-Gordoa M. Economic evaluation of supplementing the diet with Souvenaid in patients with prodromal Alzheimer's disease. Alzheimers Res Ther. 2020 Dec 11;12(1):166. doi: 10.1186

NUTRICIA Souvenaid®

CERO OMISIONES
CERO ALZHEIMER

LIPIDIDIET

health-related quality of life (HRQL)
cantidad de vida y calidad de vida.

Cohorte Española: 100K PACIENTES

Horizonte temporal: VIDA DEL PACIENTE

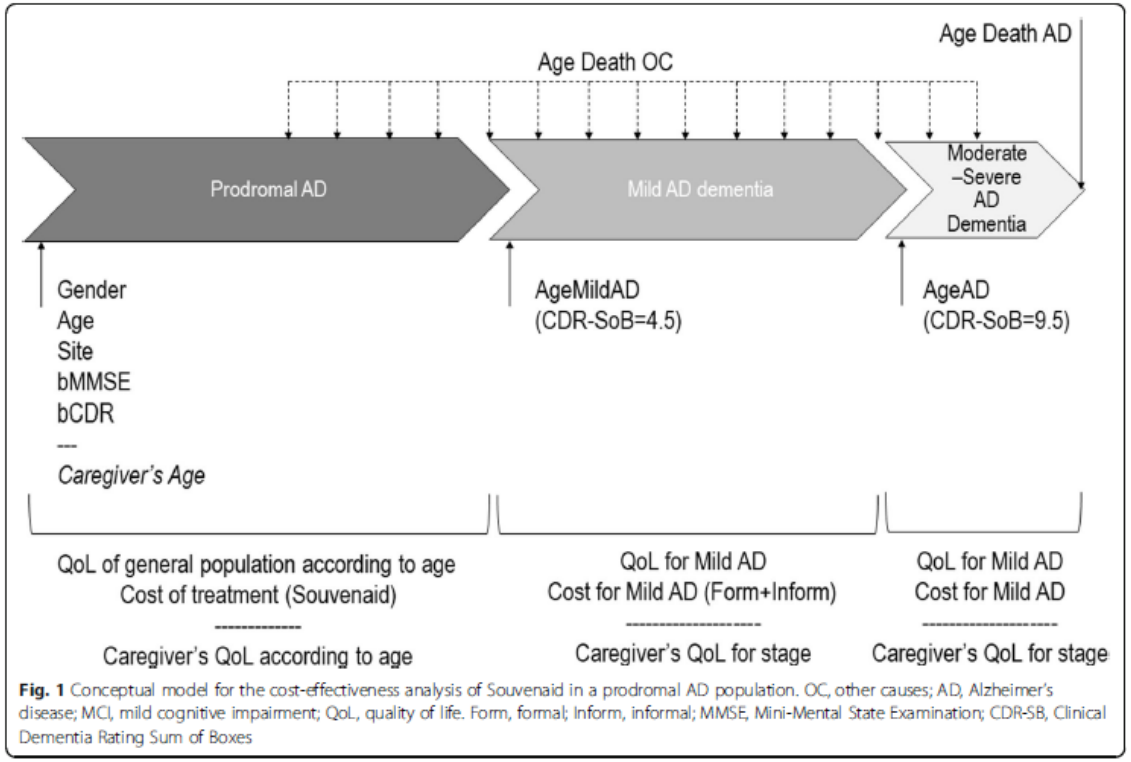
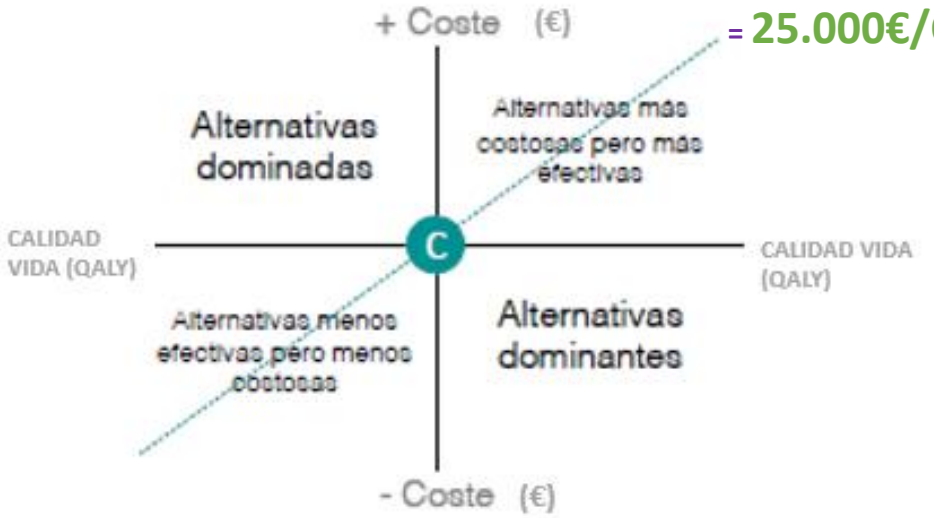


Fig. 1 Conceptual model for the cost-effectiveness analysis of Souvenaid in a prodromal AD population. OC, other causes; AD, Alzheimer's disease; MCI, mild cognitive impairment; QoL, quality of life. Form, formal; Inform, informal; MMSE, Mini-Mental State Examination; CDR-SB, Clinical Dementia Rating Sum of Boxes

1. Mar J, Gorostiza A, Ibarrondo O, Larrañaga I, Arrospide A, Martinez-Lage P, Soto-Gordoa M. Economic evaluation of supplementing the diet with Souvenaid in patients with prodromal Alzheimer's disease. Alzheimers Res Ther. 2020 Dec 11;12(1):166. doi: 10.1186

NUTRICIA Souvenaid®

Umbral COSTE-UTILIDAD



Umbral coste-utilidad en España

= 25.000€/QALY

$$ICUR = \frac{\text{Costes en tto con Souvenaid®} - \text{Costes en tto con placebo}}{\text{QALY en tto con Souvenaid®} - \text{QALY en tto con placebo}} = €/QALY$$

1. Mar J, Gorostiza A, Ibarrondo O, Larrañaga I, Arrospide A, Martinez-Lage P, Soto-Gordoa M. Economic evaluation of supplementing the diet with Souvenaid in patients with prodromal Alzheimer's disease. Alzheimers Res Ther. 2020 Dec 11;12(1):166. doi: 10.1186

TODOS ESCENARIOS ESTUDIADOS SON COST EFFECTIVE

Table 4 Cost and effectiveness of using Souvenaid under different scenarios

Scenario	Perspective	Treatment indication	Diagnostic test costs	Δ Costs (€)	Δ Effects (QALY)	ICUR (€/QALY)
Baseline	Societal	Only MCI	Included	2633	0.12	22,743
1	Societal	Only MCI	Not included	−394	0.12	Dominant
2	Societal	MCI and mild AD	Included	7803	0.32	24,392
3	Societal	MCI and mild AD	Not included	4296	0.36	12,076

Societal perspective: includes formal costs, informal costs and caregiver quality of life
QALY quality-adjusted life year, *ICUR* incremental cost-utility ratio, *MCI* mild cognitive impairment, *AD* Alzheimer's disease

NICE National Institute for Health and Care Excellence
COST EFFECTIVE

Umbral COSTE-UTILIDAD
25.000€/QALY

1. Mar J, Gorostiza A, Ibarrondo O, Larrañaga I, Arrospide A, Martinez-Lage P, Soto-Gordoa M. Economic evaluation of supplementing the diet with Souvenaid in patients with prodromal Alzheimer's disease. Alzheimers Res Ther. 2020 Dec 11;12(1):166. doi: 10.1186

NUTRICIA Souvenaid®

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Análisis de sensibilidad

Table 2 Parameters modified in the univariate sensitivity analysis

	Min	Base case	Max	Unit
Annual Souvenaid cost	1000	1200	1400	€/year
Cut-off for mild AD	4	4.5	5	CDR-SB
Cost of mild AD	19,758	14,956	16,166	€/year
Cost of moderate AD	44,409	40,372	36,335	€/year
Cut-off for moderate AD	9	9.5	10	CDR-SB
Moderate AD quality of life	0.23	0.21	0.19	Utility
Mild AD quality of life	0.57	0.52	0.47	Utility
Test cost	2700	2900	3100	€

AD Alzheimer's disease, *CDR-SB* Clinical Dementia Rating Sum of Boxes

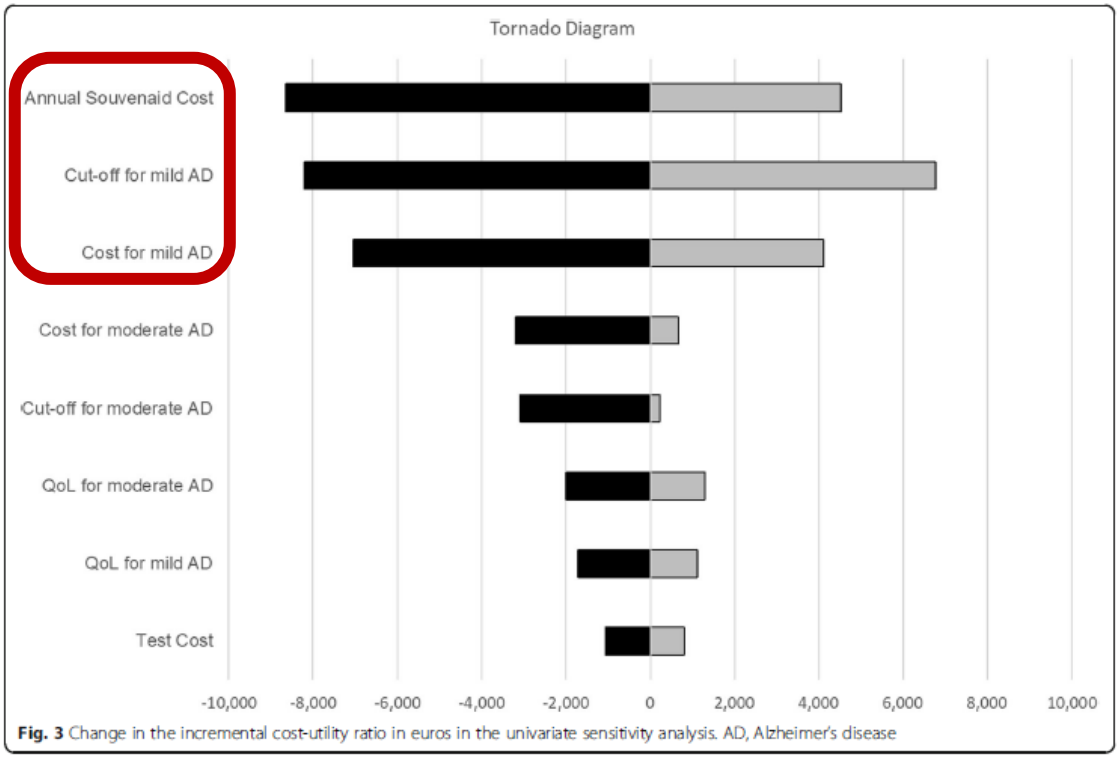

Fig. 3 Change in the incremental cost-utility ratio in euros in the univariate sensitivity analysis. AD, Alzheimer's disease

1. Mar J, Gorostiza A, Ibarrondo O, Larrañaga I, Arrospide A, Martinez-Lage P, Soto-Gordoa M. Economic evaluation of supplementing the diet with Souvenaid in patients with prodromal Alzheimer's disease. Alzheimers Res Ther. 2020 Dec 11;12(1):166. doi: 10.1186

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CMRO
Current Medical Research & Opinion

Clinical and cost implications of amyloid beta detection with amyloid beta positron emission tomography imaging in early Alzheimer's disease – the case of florbetapir

John Hornberger [1] [2], Jay Bae [3], Ian Watson [3], Joe Johnston [3], Michael Happich [4]

Hornberger J, Bae J, Watson I, Johnston J, Happich M. Clinical and cost implications of amyloid beta detection with amyloid beta positron emission tomography imaging in early Alzheimer's disease - the case of florbetapir. Curr Med Res Opin. 2017 Apr;33(4):675-685. doi: 10.1080/03007995.2016.1277197. Epub 2017 Jan 24. PMID: 28035842.

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ICER

INSTITUTE FOR CLINICAL AND ECONOMIC REVIEW

In Revised Evidence Report, ICER Confirms Judgment That Evidence is Insufficient to Demonstrate Net Health Benefit of Aducanumab for Patients with Alzheimer's Disease

— Accepting the uncertainty associated with the positive estimate obtained from pooled data from both pivotal trials, the revised report finds the price range needed to reach standard cost-effectiveness thresholds is $3,000-$8,400, representing an 85%-95% discount from the announced list price —

JPAD The Journal of Prevention of Alzheimer's Disease

Cost-Effectiveness of Dementia Prevention Interventions

I. McRae[1], L. Zheng[2,4], S. Bourke[3], N. Cherbuin[1], K.J. Anstey[2,4]

1. Centre for Research on Ageing Health and Wellbeing, Research School of Population Health, The Australian National University, Canberra, ACT, Australia; 2. Neuroscience Research Australia, Margarete Ainsworth Building, Barker Street, Randwick, Sydney NSW, Australia; 3. Department of Health Services Research and Policy, Research School of Population Health, The Australian National University, Canberra, ACT, Australia; 4. Ageing Futures Institute, School of Psychology, University of New South Wales, Sydney, NSW, Australia

Abstract

BACKGROUND: Assessment of cost-effectiveness of interventions to address modifiable risk factors associated with dementia requires estimates of long-term impacts of these interventions which are rarely directly available and must be estimated using a range of assumptions.

OBJECTIVES: To test the cost-effectiveness of dementia prevention measures using a methodology which transparently addresses the many assumptions required to use data from short-term studies, and which readily incorporates sensitivity analyses.

DESIGN: We explore an approach to estimating cost-effective prices which uses aggregate data including estimated lifetime costs of dementia, both financial and quality of life, and incorporates a range of assumptions regarding sustainability of short- term gains and other parameters.

SETTING: The approach is addressed in the context of the theoretical reduction in a range of risk factors, and in the context of a specific small-scale trial of an internet-based intervention augmented with diet and physical activity consultations.

MEASUREMENTS: The principal outcomes were prices per unit of interventions at which interventions were cost-effective or cost-saving.

RESULTS: Taking a societal perspective, a notional intervention reducing a range of dementia risk-factors by 5% was cost-effective at $A460 per person with higher risk groups at $2,148 per person. The on-line program costing $825 per person was cost-effective at $1,850 per person even if program effect diminished by 75% over time.

CONCLUSIONS: Interventions to address risk factors for dementia are likely to be cost-effective if appropriately designed, but confirmation of this conclusion requires longer term follow-up of trials to measure the impact and sustainability of short-term gains.

McRae, I., Zheng, L., Bourke, S. et al. Cost-Effectiveness of Dementia Prevention Interventions. J Prev Alzheimers Dis 8, 210–217 (2021). https://doi.org/10.14283/jpad.2020.71

OTRAS APROXIMACIONES

FINGER, INTERVENCIÓN

- Multidomain Interventions to Prevent Cognitive Impairment, Alzheimer's Disease, and Dementia: From FINGER to World-Wide FINGERS

Modifiable risk factors of dementia and AD include lifestyle-related factors, vascular and metabolic disorders, and psychosocial factors.

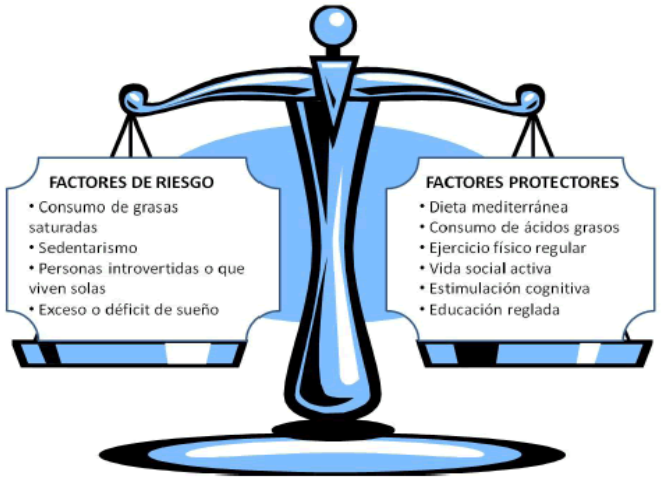
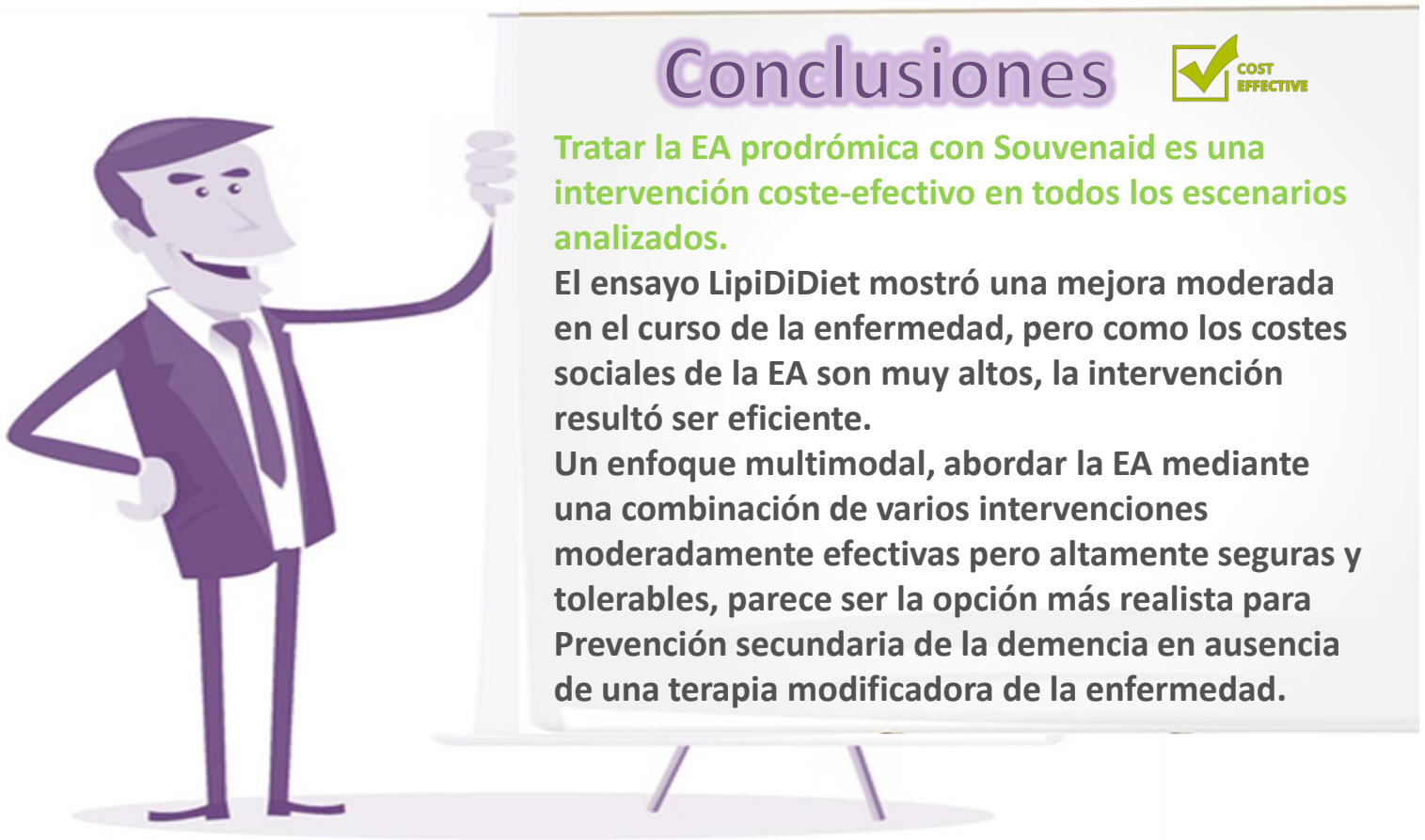


FIGURA 2. Representación de los hábitos del estilo de vida que actúan como factores de riesgo y los que actúan como factores protectores demostrados para la evolución a demencia.



Conclusiones

COST EFFECTIVE

Tratar la EA prodrómica con Souvenaid es una intervención coste-efectivo en todos los escenarios analizados.

El ensayo LipiDiDiet mostró una mejora moderada en el curso de la enfermedad, pero como los costes sociales de la EA son muy altos, la intervención resultó ser eficiente.

Un enfoque multimodal, abordar la EA mediante una combinación de varios intervenciones moderadamente efectivas pero altamente seguras y tolerables, parece ser la opción más realista para Prevención secundaria de la demencia en ausencia de una terapia modificadora de la enfermedad.

1. Mar J, Gorostiza A, Ibarrondo O, Larrañaga I, Arrospide A, Martinez-Lage P, Soto-Gordoa M. Economic evaluation of supplementing the diet with Souvenaid in patients with prodromal Alzheimer's disease. Alzheimers Res Ther. 2020 Dec 11;12(1):166. doi: 10.1186

- La enfermedad de Alzheimer tiene un **GRAN IMPACTO ECONÓMICO**
- **87% SOPORTADO POR LA FAMILIA**
- Aumenta con el avance de la **CLÍNICA DE LA ENFERMEDAD:** cognitivamente y funcionalmente
- **SOUVENAID ES UNA TERAPIA COSTE EFECTIVA**
- Hoy en día La **PREVENCIÓN 1ª y 2ª** es la alternativa más razonable en estos momentos