

G.7 Cholinesterase inhibitors and memantine for dementia

G.7.1 Cholinesterase inhibitors and memantine for people living with Alzheimer's disease

- Who should start and review the following pharmacological interventions: (donepezil, galantamine, rivastigmine, memantine) for people with Alzheimer's disease and how should a review be carried out?

Prescribing donepezil

Quality assessment						No of patients		Effect size (95% CI)	Quality
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Geriatric Psychiatrist (GERO)	Primary care physician (MED)		
Clinical outcome (including cognitive, functional & behavioural ability)									
Outcome 1: Mean Clinical Dementia Rating (CDR) scores at 1 year follow up									
Aupperle (2000)	Retrospective cohort study	Very serious ¹	N/A	Not serious	Not serious	26	31	MD 0.70 (0.36, 1.04)	Low
Concordance & compliance									
Outcome 1: Provider practices- prescription of donepezil at 1 year follow up									
Aupperle (2000)	Retrospective cohort	Very serious ¹	N/A	Not serious	Not serious	20/26	11/31	RR 0.46 (0.27, 0.78)	Low
Access to health and social care support									
Outcome 1: Service usage (past 6 months): Number of people receiving hospitalisation									
Aupperle (2000)	Retrospective cohort study	Very serious ¹	N/A	Not serious	Serious ²	4/26	12/31	RR 2.52 (0.92, 6.87)	Very low
Outcome 2: Service usage (past 6 months): Number of people receiving home health aide									
Aupperle (2000)	Retrospective cohort study	Very serious ¹	N/A	Not serious	Serious ²	5/26	14/31	RR 2.35 (0.98, 5.65)	Very low
Outcome 3: Service usage (past 6 months): Number of people attending dementia day program									

Quality assessment						No of patients		Effect size (95% CI)	Quality
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Geriatric Psychiatrist (GERO)	Primary care physician (MED)		
Aupperle (2000)	Retrospective cohort study	Very serious ¹	N/A	Not serious	Very serious ³	7/26	5/31	RR 0.60 (0.22, 1.67)	Very low
Patient and carer experience and satisfaction									
Outcome 1: Carer distress rating (Zarit Burden Interview) at 1 year follow up									
Aupperle (2000)	Retrospective cohort study	Very serious ¹	N/A	Not serious	Serious ⁴	26	31	MD 2.40 (-4.16, 8.96)	Very low
<ol style="list-style-type: none"> 1. Included study at high risk of bias 2. 95% CI crosses one line of a defined MID interval 3. 95% CI crosses two lines of a defined MID interval 4. Non-significant result 									

Reviewing donepezil

Quality assessment						No of patients		Effect size (95% CI)	Quality
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Not receiving advisory service (Non DOCS)	Receiving advisory service (DOCS)		
Concordance & compliance									
Outcome 1: Medication persistence rate: Mean duration of donepezil treatment									
Watanabe (2012)	Before and after study	Very serious ¹	N/A	Very serious ²	Not serious	59	52	MD 130.4 (58.02, 202.8)	Very low

Quality assessment						No of patients		Effect size (95% CI)	Quality
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Not receiving advisory service (Non DOCS)	Receiving advisory service (DOCS)		
Outcome 2: Medication persistence rate: Use of donepezil at 1 year follow up									
Watanabe (2012)	Before and after study	Very serious ¹	N/A	Very serious ²	Serious ³	29/59	38/52	RR 1.49 (1.09, 2.02)	Very low
Patient and carer experience and satisfaction									
Outcome 1: Average level of carer understanding at 4 week follow up									
Watanabe (2012)	Before and after study	Very serious ¹	N/A	Very serious ²	Not serious	26	31	MD 3.20 (2.70, 3.70)	Very low
<ol style="list-style-type: none"> Downgraded due to observational study. Short follow up period (4 weeks) for outcomes, validation of scale used for survey of understanding not clearly reported Non UK setting and indirect setting for advisory consultation service 95% CI crosses one line of a defined MID interval 									