NATIONAL INSTITUTE FOR CLINICAL EXCELLENCE

Health Technology Appraisal

New pharmaceutical treatments for non-Alzheimer dementias

Final scope

Objective: "To appraise the clinical and cost-effectiveness of medications which are licensed, at the time NICE prepares its appraisal consultation document, for treatment of vascular dementia and other non-Alzheimer dementias, including memantine (Ebixa) and cholinesterase inhibitors[1]."

Background: Approximately 700,000 people in the UK have dementia. This represents 5% of the total population aged 65 and over, and 20% of the population aged 80 and over.

Dementia is a chronic progressive mental disorder in which there is disturbance of multiple higher cortical functions, including memory, thinking, orientation, comprehension, calculation, learning capacity, language, and judgement. Cognitive impairments are commonly accompanied, and occasionally preceded, by deterioration in emotional control, social behaviour, or motivation.

Alzheimer's disease (AD) is the most common form of dementia accounting for approximately 55% of people with dementia, other subtypes of dementia being vascular dementia (20%), dementia with Lewy bodies (DLB - 15%), fronto-temporal dementia including Pick's disease (5%) and other dementias (5%)[2]. Some patients have dementia resulting from than one cause (mixed dementia).

Conditions or diseases that cause irreversible dementia, especially in older people, include AD, DLB (including dementia associated with Parkinson's disease) and VaD (vascular dementia, previously called multi-infarct dementia (MID).

Other less common causes of dementia include Huntington's disease, fronto-temporal dementia (including Pick's disease), Creutzfeldt-Jakob disease, Binswanger's disease, and AIDS.

Progression of dementia is characterised by a worsening in the domains of cognition, functional ability (e.g. activities of daily living), and behaviour and mood. Changes in one or more of these domains and their effect upon the patient and their carers'

[1] The Department of Health remit to the Institute is "In parallel with the planned review of guidance on treatment of Alzheimer's disease, to appraise the clinical and cost effectiveness of medicines which are licensed, at the time NICE prepares its appraisal consultation document, for treatment of vascular dementia and other non-Alzheimer dementia, including memantine (Ebixa) and cholinesterase inhibitors. The comparison should be between drug therapy (in combination with supportive care) and current treatment alternatives (including best supportive care alone)."

[2] The Alzheimer's Society

wellbeing provide the basis for diagnosis, assessing severity and progression of the syndrome.

The mainstay of non-pharmacological treatment is social support and assistance with day-to-day activities. These include: information and education, carer support groups, community dementia team, including home nursing and personal care, community services such as meals-on-wheels, sitter service, day centre, respite care and care homes.

The technologies: Donepezil and galantamine are cholinesterase inhibitors, and raise the concentration of acetylcholine at sites of neurotransmission. Galantamine also enhances the action of acetylcholine on nicotinic receptors. Both of these drugs currently have marketing authorisation for use in the treatment of Alzheimer's disease, but they are not currently licensed for use in non Alzheimer's dementias. However, trials in non-Alzheimer's dementia are currently being undertaken.

Intervention(s)	Donepezil and galantamine
Population(s)	People with vascular (multi-infarct) dementia, dementia with Lewy bodies, including Parkinson's dementia, or any other non-Alzheimer dementia for which there is robust clinical evidence of efficacy. People with mixed dementia whose predominant dementia is considered to be non-AD.
Current standard treatments (comparators)	• Pharmacological (e.g. aspirin or a hypertensive drug) • Management without donepezil or galantamine
Other considerations	Outcomes include: • Health-related quality of life of patients and carers (analyses should be carried out separately for patients alone, and for patients and carers combined) • Ability to remain independent • Likelihood of admission to residential/nursing care • Survival • Long-term management of patients with

	regard to a) the proportion of patients on long term treatment, b) switching between drugs, c) stopping treatment. • Adverse events If evidence allows considerations should be given to: • Comparisons between interventional drugs, or combinations of interventional drugs (including aspirin, or a hypertensive drug with a cholinesterase inhibitor). • The effectiveness and cost effectiveness of drugs for specific types of dementia, and different severities of dementia. This appraisal will not consider anti-psychotic treatments Costs will be considered from an NHS / Personal Social Services perspective. Ideally, cost-effectiveness of treatments considered should be expressed in terms of an incremental cost per QALY. Drugs will only be considered by the Appraisal Committee if they have received marketing authorisation by the mid-August 2004.
Related and On-going Appraisals	• Current guidance-– Donepezil, rivastigmine and galantamine for the treatment of Alzheimer's disease (Technology Appraisal 19). Issued January 2001. • On-going review of the current guidance (expecte publication date – spring/summer 2005). • Dementia: management of dementia, including use of antipsychotic medication in older people. (Clinical Guideline). Commissioned and under development for publication in December 2006.