Appendix 1: Search strategy for relevant articles on the management of severe Alzheimer disease*

Literature search

A comprehensive electronic search of the MEDLINE and EMBASE databases was conducted by an information specialist for English-language articles published from January 1996 to December 2005. The following primary search terms were used: "dementia" OR "Alzheimer's disease" AND "severe" AND "therapy" OR "treatment." Secondary search terms were as follows (listed alphabetically): "affective disorder," "aggression," "agitation," "anticonvulsants," "antidepressants," "anti-inflammatory drugs," "antioxidants," "antipsychotics," "anxiety," "anxiolytics," "behaviour," "benzodiazepines," "caregiver," "cholinesterase inhibitors," "counselling," "depression," "disinhibition," "education," "environment," "ginkgo," "hormones," "hypnotics," "memantine," "metabolic enhancers," "neurotropics," "rehabilitation," "selective serotonin reuptake inhibitors" OR "sleep."

Data analysis and synthesis

A total of 940 articles were identified. Of these, 102 were eliminated after examination of the title. The titles, authors and abstracts of the remaining 838 articles were distributed to all of the working group members. Thirty-four articles were judged to be of at least good or fair quality and were used to generate the 17 recommendations.

The draft recommendations developed by the working group members and a first draft of the background paper were distributed by the chair to all working group members for review, discussion and modification. After this process, the background paper with recommendations was submitted to the steering committee for posting on the website of the Third Canadian Consensus Conference on the Diagnosis and Treatment of Dementia. Feedback received was discussed by the working group, and final modifications were made to the recommendations before their presentation at the consensus meeting on Mar. 10, 2006. All of the recommendations presented in this article achieved consensus (80% plus approval by participants of the consensus conference).

The quality of the literature (levels of evidence) was graded using the following system adapted from Canadian Task Force on Preventive Health Care:

I   Evidence from at least one properly randomized controlled trial.

II-1   Evidence from well-designed controlled trials without randomization.

II-2   Evidence from well-designed cohort or case–control analytic studies, preferably from more than one centre or research group.

II-3   Evidence from comparisons between times or places with or without the intervention. Dramatic results in uncontrolled experiments are included in this category.

III   Opinions of respected authorities, based on clinical experience, descriptive studies or reports of expert committees.

The strength of the recommendations (grade of recommendation) was graded using the following system adapted from the Canadian Task Force on Preventive Health Care:

A   There is good evidence to support this manoeuvre.

B   There is fair evidence to support this manoeuvre.

C   The existing published evidence is either conflicting or insufficient and does not allow one to recommend for or against this manoeuvre; however, a recommendation may be made on other grounds.

D   There is fair evidence to recommend against this manoeuvre.

E   There is good evidence to recommend against this manoeuvre.

Subsequent to the conference, a further 12 articles published between January 2006 and March 2008 were identified. The new studies strengthened the recommendations and did not materially affect the number or nature of the original guidelines.

*The literature search was used to generate evidence on which the recommendations from the Third Canadian Consensus Conference on the Diagnosis and Treatment of Dementia were based.