Agents in Development for Dementia Syndromes in Japan
Summary and Table

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Adis Comment

All drugs appearing in the Adis Profile Summary table have been selected based on information contained in R&D Insight™, a proprietary product of Adis International. As the emphasis of Drugs in R&D is on the clinical potential of new drugs, selection of agents for full profile is based on the extensiveness of available data. Information on all drugs in clinical development, as identified from R&D Insight™, is included in the summary table. Information and/or profiles of agents in preclinical development may be included as appropriate.

The accompanying Profile Table contains the agents identified from Adis International’s R&D Insight™ database which are in clinical development for the treatment of dementia syndromes in Japan and for which a Japanese company was the originator. The features and properties of these agents are listed in the table according to their phase of development. Full profiles are provided for those drugs that are in preregistration or phase III of development.

The agents are cited as being in development for a variety of dementia syndromes, including Alzheimer’s disease, vascular dementia and the more general indications of cognitive disorders, dementia and senile dementia.

Dementia syndromes are more common in older individuals. Indeed, age is a specific risk factor for Alzheimer’s disease, with, according to one US study, as many as 10% of all elderly people >65 years and 48% of those >85 years having the disorder.[1] In addition, many industrialised countries are facing an increase in the proportion of elderly patients in their populations and, hence, a likely increase in the number of individuals with age-related disorders such as dementia. However, in Japan, the situation is magnified. As a result of a declining birth rate and increased longevity, the Japanese population is likely to become one of the oldest in the world. In 1990, 12% of the population were aged over 65 years and 4.8% over 75 years. By the year 2000, these figures are expected to reach 17% and 6.9%, respectively, and by 2020 to be 25.5% and 12.5%, respectively.[2] These facts, together with the costly nature of dementia syndromes (to affected individuals, their family members, society as a whole and the healthcare system specifically), have meant that increasing attention is being paid to these syndromes.

Of the agents listed in the Profile Table, 5 (fascoracetam, MKC 231, SM 10888, TAK 147 and YM 796) have effects on the cholinergic system, where they act as cholinergic receptor agonists, choline uptake enhancers or cholinesterase inhibitors. The targeting of this neurotransmitter system is not surprising given the hypothesis that cholinergic deficits are involved in the aetiology of Alzheimer’s disease.

There are also data to suggest that neuropeptides are involved in learning and memory processes and, in line with this hypothesis, thyrotopin-releasing
hormone agonists and prolyl endopeptidase inhibitors are being investigated. Damage induced by free radicals may be involved in the aetiology of dementia and lipid peroxidase inhibitors such as OPC 14117 may provide neuroprotection.

At present, nefiracetam, sufoxazine (preregistration), azetirelin, perospirone, fasoracetam and TJ 960 (phase III) are furthest along the development path for dementia syndromes. It can be hoped that one or all of the agents will reach the market in the near future, and provide treatment options for these devastating disorders.

References