**WE CLAIM:**

1. Use of a pure 5-$HT_6$ receptor antagonist compound, 1-[(2-Bromophenyl)sulfonyl]-5-methoxy-3-[(4-methyl-1-piperazinyl)methyl]-1H-indole or a pharmaceutically acceptable salt thereof, in the manufacture of a medicament for the treatment of dementia due to menopause, senile dementia, vascular dementia, chemotherapy-induced cognitive impairment and behavioral changes in dementia.

2. The use as claimed in claim 1, wherein the pharmaceutically acceptable salts of 1-[(2-Bromophenyl)sulfonyl]-5-methoxy-3-[(4-methyl-1-piperazinyl)methyl]-1H-indole are selected from mesylate salt, hydrochloride salt, oxalate salt, succinate and tartrate salt.

3. The use as claimed in claim 1 and claim 2, wherein the pharmaceutically acceptable salt of 1-[(2-Bromophenyl)sulfonyl]-5-methoxy-3-[(4-methyl-1-piperazinyl)methyl]-1H-indole is 1-[(2-Bromophenyl)sulfonyl]-5-methoxy-3-[(4-methyl-1-piperazinyl)methyl]-1H-indoledimesylate monohydrate.

4. The use as claimed in claim 1, wherein the medicament is for the treatment of dementia due to menopause.

5. The use as claimed in claim 1, wherein the medicament is for the treatment of senile dementia.

6. The use as claimed in claim 1, wherein the medicament is for the treatment of vascular dementia.

7. The use as claimed in claim 1, wherein the medicament is for the treatment of chemotherapy-induced cognitive impairments.

8. The use as claimed in claim 1, wherein the medicament is for the treatment of behavioral changes in dementia.

9. The use as claimed in claim 1 and claim 8, wherein the behavioral changes in dementia are selected from agitation, aggression, depression, anxiety, psychosis, disinhibition and/or sleep disturbances.

10. The use as claimed in claim 8 and claim 9, wherein the behavioral changes in dementia are selected from aggression in dementia, agitation in dementia and anxiety in dementia.

11. The use as claimed in claims 8 to 10, wherein the behavioral changes in dementia are selected from aggression in Alzheimer's disease, agitation in Alzheimer's disease, anxiety in Alzheimer's disease, aggression in Parkinson's disease, agitation in Parkinson's disease and anxiety in Parkinson's disease.

12. Use of a pharmaceutical composition comprising a pure 5-$HT_6$ receptor antagonist as claimed in any one of the claims 1 to 3 and pharmaceutically acceptable excipients or combination thereof, in the manufacture of a medicament for the treatment of dementia due to menopause, senile dementia, vascular dementia, chemotherapy-induced cognitive impairment and behavioral changes in dementia.

13. The use as claimed in claim 12, wherein the medicament is to be administered to the patient by oral, nasal, local, dermal or parenteral routes.

14. The use as claimed in claim 12 and claim 13 wherein the medicament is to be administered to the patient one to three times per day, one to three times per week or one to three times per month.