Materials and Methods

Experimental animals:
- Male Wistar rats weighing about 90-100 g (30 days old)
- Reg.No:1412/a/11/CPCSEA IAEC
- Protocol No: I/IAEC/LCP/034/2013/15

Vascular Dementia:
- Vascular dementia (VaD) refers to a subtle, progressive decline in memory and cognitive functioning.
- The number of people living with dementia worldwide is currently estimated at 47.5 million and is projected to increase to 75.6 million by 2050. The number of cases of dementia are estimated to more than triple by 2050.

Hyperhomocysteinemia:
- Fisetin (25 mg/kg) in combination with Hesperidin (100 mg/kg) has shown significant neuroprotective effects in DL-Hcy treated rats.
- Photomicrographs of brain tissues in FST and HSP treated rats has precisely shown the significant attenuation of HHcy-induced neurotoxicity.
- Molecular docking studies also predicted best docking scores for FST and HSP which further supported our biochemical data.
- Thus, present study provides evidence that FST in combination with HSP can be used as therapeutic intervention for Hhcy-induced VaD and oxidative stress.

References