Title: Effect of aromatase inhibitors on learning and memory and modulation of hippocampal dickkopf-1 and sclerostin in female mice

Authors: Saima Zameer, Divya Vohora

PII: S1734-1140(16)30342-5
DOI: http://dx.doi.org/doi:10.1016/j.pharep.2017.06.002
Reference: PHAREP 741

To appear in:

Received date: 5-11-2016
Revised date: 8-5-2017
Accepted date: 8-6-2017

Please cite this article as: Saima Zameer, Divya Vohora, Effect of aromatase inhibitors on learning and memory and modulation of hippocampal dickkopf-1 and sclerostin in female mice (2010), http://dx.doi.org/10.1016/j.pharep.2017.06.002

EFFECT OF AROMATASE INHIBITORS ON LEARNING AND MEMORY AND MODULATION OF HIPPOCAMPAL DICKKOPF-1 AND SCLEROSTIN IN FEMALE MICE

Saima Zameer and Divya Vohora*

Neurobehavioral Pharmacology Laboratory, Department of Pharmacology

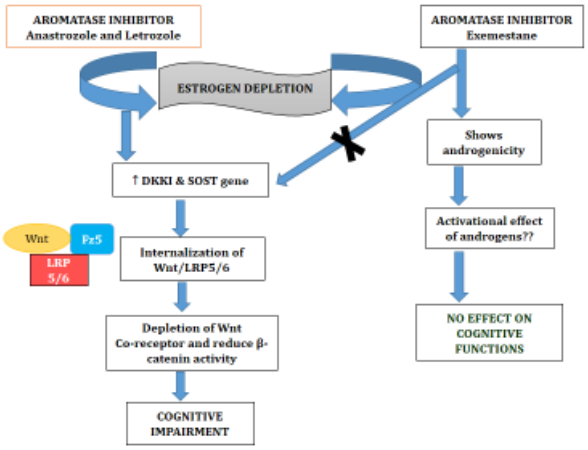
Faculty of Pharmacy, Jamia Hamdard (Hamdard University), New Delhi 110062, India

***Corresponding author: D. Vohora**

(Email: divyavohora@hotmail.com; dvohra@jamiahamdard.ac.in)

GRAPHICAL ABSTRACT: Hypothetical depiction of the various events that might have occurred following aromatase inhibitors in Swiss albino mice

This hypothetical depiction is representing the way in which depleted levels of estrogen due to action of aromatase inhibitors might have modulated the Wnt signaling pathway antagonists (DKK-1 and SOST) and in turn influenced cognitive functions. Letrozole more profoundly (than anastrazole) increased the DKK-1 and SOST levels in mouse hippocampus which in turn led to cognitive impairment while exemestane had no effect on cognitive functions (probably due to its androgenicity) though having inhibitory effect on estrogen levels.



<InlineImage1>