Supplementary Information for

Neuroprotective Effects of Isoquercetin: An \textit{In Vitro} and \textit{In Vivo} Study

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\textbf{Fig.S1:} Showed the effect of isoquercetin and colchicine on the level of BDNF. Method as described in the material and method. Data shows mean ± SEM of 6 rats in each group. Significant difference represent as compared to colchicine control group rats. \textit{*}; P<0.05, \textit{**}; P<0.01, \textit{***}; P<0.001, BDNF; Brain-derived neurotrophic factor, IQ; Isoquercetin, and MM; Memantine.

\textbf{Fig.S2:} Showed the effect of isoquercetin and colchicine on the level of Aβ peptide. Method as described in the material and method. Data shows mean ± SEM of 6 rats in each group. Significant difference represent as compared to colchicine control group rats. \textit{*}; P<0.05, \textit{**}; P<0.01, \textit{***}; P<0.001, IQ; Isoquercetin, and MM; Memantine.

\textbf{Fig.S3:} Showed the effect of isoquercetin and colchicine on the level of AchE activity. Method as described in the material and method. Data shows mean ± SEM of 6 rats in each group. Significant difference represent as compared to colchicine control group rats. \textit{*}; P<0.05, \textit{**}; P<0.01, \textit{***}; P<0.001, IQ; Isoquercetin, and MM; Memantine.

\textbf{Fig.S4:} Showed the effect of isoquercetin and colchicine on the level of protein carbonyl. Method as described in the material and method. Data shows mean ± SEM of 6 rats in each group. Significant difference represent as compared to colchicine control group rats. \textit{*}; P<0.05, \textit{**}; P<0.01, \textit{***}; P<0.001, IQ; Isoquercetin, and MM; Memantine.
Fig. S5: Showed the effect of isoquercetin and colchicine on the level of pro-inflammatory cytokines. Method as described in the material and method. Data shows mean ± SEM of 6 rats in each group. Significant difference represent as compared to colchicine control group rats. *, P<0.05; **, P<0.01, ***, P<0.001, IL-1β; Interleukin-1β, TNF-α; Tumor necrosis factor-α, IL-6; Interleukin-6, IQ; Isoquercetin, and MM; Memantine.

Fig. S6: Showed the effect of isoquercetin and colchicine on the level of NF-κB. Method as described in the material and method. Data shows mean ± SEM of 6 rats in each group. Significant difference represent as compared to colchicine control group rats. **, P<0.01, ***, P<0.001, TNF-α; Tumor necrosis factor-α, IQ; Isoquercetin, and MM; Memantine.