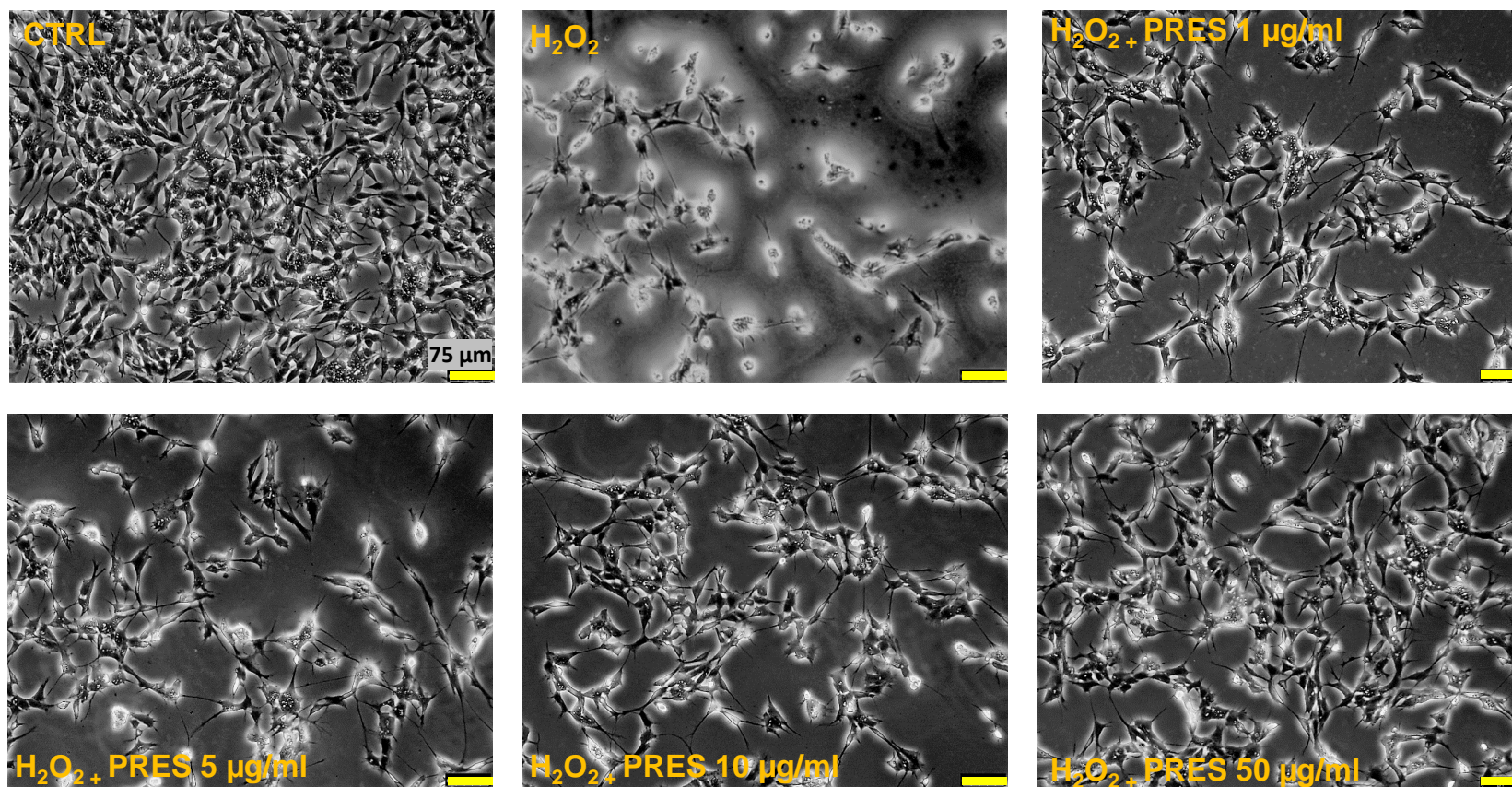


Olive leaves and hibiscus flowers extracts-based preparation protect brain from oxidative stress-induced injury

Chiaino Elda¹, Matteo Micucci², Sandro Cosconati³, Ettore Novellino⁴, Roberta Budriesi², Alberto Chiarini² and Maria Frosini^{1*}

Supporting Information

Figure S1. Effects of PRES on oxidative stress-induced cytotoxicity in SH-SY5Y cells. Phase-contrast microscope images: these highlighted a marked reduction in cell number accompanied by morphological changes (rounded bodies, shorter neurites, and smaller cell size, grade 2-3*) upon H₂O₂ treatment, which were gradually reverted with increasing PRES concentration. Controls (CTRL) represent untreated cells. Each photograph was representative of three independent observations (scale bar 75 μm).



*According to the USP 28 (United States Pharmacopeia edition 2005) grade scale for assessment of the cytotoxic potential of tested materials: grade 0 - no reactivity (discrete intracytoplasmic granules, no cell lysis); grade 1 - slight reactivity (no more than 20% of the cells are round, loosely attached and without intracytoplasmic granules; occasional lysed cells are present); grade 2 - mild reactivity (no more than 50 % of the cells are round and devoid of intracytoplasmic granules, no extensive cell lysis and empty areas between cells); grade 3 - moderate (up to 70% of cells are rounded or lysed); grade 4 - severe (nearly complete destruction of the cells)[13, 16].