2-Styrylchromones: Cytotoxicity and Modulation of Human Neutrophils' Oxidative Burst

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Supplementary Material

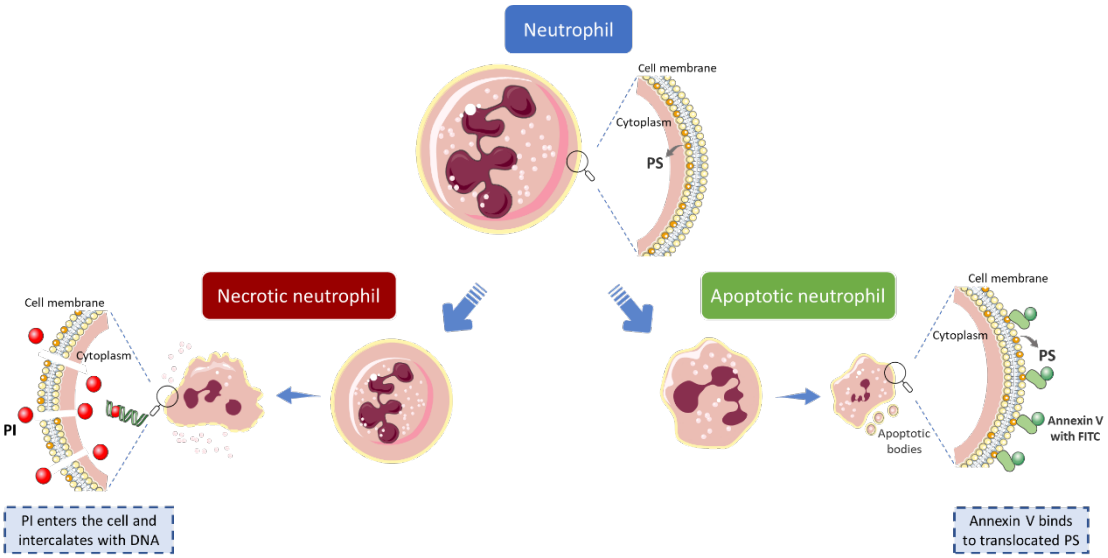

Figure S1. Annexin V / propidium iodide (PI) staining. During necrosis and after PI staining, this probe enters the necrotic cells whose membrane is already disintegrated and intercalates into the grooves of DNA, producing a red fluorescent adduct that can be detected by flow cytometry. In the apoptotic process changes in cell structure occur, phosphatidylserine (PS) translocates from the inner side of the membrane to the outer side, which allows annexin V [conjugated with a fluorescent label, fluorescein isothiocyanate (FITC)] to bind to these residues, and to detect apoptosis [13,15,16].

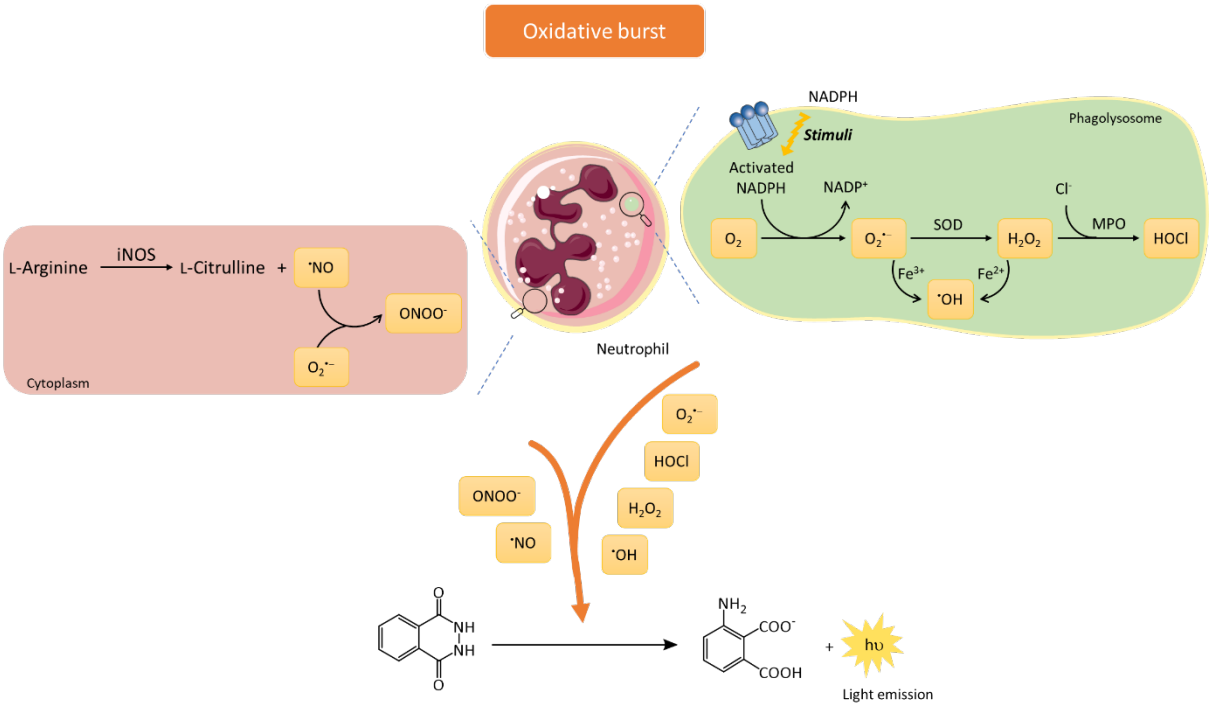

Figure S2. Luminol staining. This probe can diffuse across the cell membrane and detect extra- and intracellularly produced reactive species. In the presence of reactive species [superoxide anion radical ($O_2^{\bullet -}$), hydrogen peroxide (H_2O_2), hypochlorous acid (HOCl), hydroxyl radical ($^{\bullet}OH$), nitric oxide radical ($^{\bullet}NO$), peroxynitrite anion ($ONOO^-$)], luminol reacts with them, originating an energetically excited molecule, the aminophtalate, that when returning to the ground state emits light [9].