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(54) Title: COMPOSITIONS FOR THE ELIMINATION OF SENESCENT CELLS

(57) Abstract: The invention relates to a composition comprising one or more inhibitors capable of inhibiting at least two of cyclooxygenase-1 (COX-1), cyclooxygenase-2 (COX-2) and lipoxygenase or a composition comprising one or more inhibitors capable of inhibiting an enzyme with arachidonate-Co A ligase activity, specifically long-chain-fatty-acid-Co A ligase (ACSL) 1, ACSL3, ACSL4, ACSL5, ACSL6, SLC27A2 or ACSBG2, or a combination thereof for use in selectively eliminating senescent cells. The invention further relates to an in vitro method of identifying senescent cells in a subject and to a method of identifying candidate compounds for the selective elimination of senescent cells.

