**Supplementary Material**

**Pubmed Search**

(“Cellular Senescence”[mh] OR “cell ageing”[tiab] OR “cellular ageing”[tiab] OR “cell aging”[tiab] OR “Senescence-Associated Secretory Phenotype”[tiab] OR “Senescence Associated Secretory Phenotype”[tiab] OR ("cellular"[tiab] AND "senescence"[tiab]) OR "cellular senescence"[tiab] OR "cell senescence"[tiab] OR “CD28 Antigens”[mh] OR “CD28”[tiab] OR “CD57 Antigens”[mh] OR “CD57”[tiab] OR “KLRG1 protein, human” [Supplementary Concept] OR “KLRG1”[tiab] OR “Immunosenescence”[mh] OR “Immunosenescence”[tiab]) AND ("exercise"[mh] OR "exercise"[tiab] OR "physical training"[tiab] OR "physical activity"[tiab]) NOT (Review [Publication Type] OR "Review Literature as Topic" [mh])

**Web of Science Search**

 (TS= ("Cellular Senescence") OR TS= ("cell ageing") OR TS=("cellular ageing") OR TS=("cell aging") OR TS=("Senescence-Associated Secretory Phenotype") OR TS=("Senescence Associated Secretory Phenotype") OR TS=("cellular senescence") OR TS=("cell senescence") OR TS=("cell senescence") OR TS=("CD28 antigens") OR TS=(“CD57 Antigens”) OR TS=(“KLRG1 protein, human”) OR TS=(“Immunosenescence”) OR AB= ("Cellular Senescence") OR AB= ("cell ageing") OR AB=("cellular ageing") OR AB=("cell aging") OR AB=("Senescence-Associated Secretory Phenotype") OR AB=("Senescence Associated Secretory Phenotype") OR AB=("cellular senescence") OR AB=("cell senescence") OR AB=("cell senescence") OR AB=("CD28 antigens") OR AB=(“CD57 Antigens”) OR AB=(“KLRG1 protein, human”) OR AB=(“Immunosenescence”)) AND (TS=("exercise") OR AB=("exercise") OR AB=(“physical activity") OR AB=("physical training") OR TI=("exercise") OR TI=(“physical activity") OR TI=("physical training")) AND LANGUAGE: (English) AND TYPE OF DOCUMENT: (Article)

**Embase Search**

(('cell aging'/exp OR 'cell aging':ab,ti OR 'Senescence Associated Secretory Phenotype'/exp OR ‘CD28 antigen’/exp OR ‘CD57 antigen’/exp OR ‘klrg1 protein’/exp OR ‘immunosenescence’/exp OR cd28:ab,ti OR cd57:ab,ti OR klrg1:ab,ti OR immunosenescence:ab,ti OR ‘cellular aging':ab,ti OR ‘Senescence-Associated Secretory Phenotype’:ab,ti OR “Senescence Associated Secretory Phenotype’:ab,ti OR (‘cellular’:ab,ti AND ‘senescence’:ab,ti) OR ‘cellular senescence’:ab,ti OR ‘cell senescence’:ab,ti)) AND ('kinesiotherapy'/exp OR 'exercise'/exp OR 'exercise':ab,ti OR 'physical activity':ab,ti OR 'physical training':ab,ti) AND ([article]/lim OR [article in press]/lim OR [data papers]/lim) AND 'human'/de

**Scopus Search**

(TITLE-ABS-KEY(“Cellular Senescence”) OR TITLE-ABS-KEY(“cell ageing”) OR TITLE-ABS-KEY(“cellular ageing”) OR TITLE-ABS-KEY(“cell aging”) OR TITLE-ABS-KEY(“Senescence-Associated Secretory Phenotype”) OR TITLE-ABS-KEY(“Senescence Associated Secretory Phenotype”) OR TITLE-ABS-KEY("cellular senescence") OR TITLE-ABS-KEY("cell senescence") OR TITLE-ABS-KEY(“CD28”) OR TITLE-ABS-KEY(“CD57”) OR TITLE-ABS-KEY(“KLRG1”) OR TITLE-ABS-KEY(“Immunosenescence”)) AND (TITLE-ABS-KEY("exercise") OR TITLE-ABS-KEY("physical activity") OR TITLE-ABS-KEY("physical training")) AND ( LIMIT-TO ( DOCTYPE , "ar" )) AND ( LANGUAGE ( DOCTYPE , "ar" ))

**Cochrane Search**

((“Cellular Senescence”):ti,ab,kw OR (“cell ageing”):ti,ab,kw OR (“cellular ageing”):ti,ab,kw OR (“cell aging”):ti,ab,kw OR (“Senescence-Associated Secretory Phenotype”):ti,ab,kw OR (“Senescence Associated Secretory Phenotype”):ti,ab,kw OR ("cell senescence"):ti,ab,kw OR ("CD28"):ti,ab,kw OR ("CD57"):ti,ab,kw OR ("KLRG1"):ti,ab,kw OR ("Immunosenescence"):ti,ab,kw) AND (("exercise"):ti,ab,kw OR ("physical training"):ti,ab,kw OR ("physical activity"):ti,ab,kw)