

Reference ranges of lymphocyte subsets in non-frail older adults

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Abstract

Aging is associated with progressive changes in several key physiological systems including the immune system, which is continuously remodeled over the life course, a process known as immunosenescence. Nevertheless, reference ranges currently used for immunological biomarkers do not specifically differentiate the older adults group. Thus, the aim of this study was to establish reference ranges for lymphocyte subsets in non-frail older individuals, and to determine the influence of certain physiological or lifestyle factors. Percentage of the lymphocyte subpopulations were analyzed in peripheral blood from 144 older subjects (aged 65–95) by flow cytometry, and reference ranges were calculated. The individual status as non-frail or pre-frail did not affect the immunological parameters, but a clear influence of age and gender was observed for some of them. Results obtained will serve as a basis to determine the usefulness of lymphocyte subsets as immunological biomarkers of frailty.

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