ABSTRACT
Charles University in Prague
Faculty of Pharmacy in Hradec Králové
Department of Biophysics and Physical Chemistry

Candidate: Štěpánka Řeháková
Supervisor: doc. RNDr. Petr Klemera, CSc.
Title of diploma thesis: Methods of measurement and evaluation of biological age

The theoretical part of this thesis deals with theories of aging, the concept of biological age, biomarkers of aging and the evaluation of various methods of determining of the biological age of people. Real data are evaluated in the practical part by using the program BIOLVEK. Simulated data with different selected parameters, generated and evaluated by program BIOLVEK, verify some characteristics of the methodology resulting from the theory. It is mainly about to assess the real possibility of estimating of the true variability of differences between biological and chronological age and about to what extent the inaccuracies of the estimate affect the error of estimate of biological age.

Key words: biological age, biomarkers, estimation of biological age, aging