

**TEST ID:** Telomere Length Testing

**DESCRIPTION:** Testing of the average telomere length in lymphocytes

## **CLINICAL USE**

Telomere shortening is associated with ageing, mortality and age related diseases. Shorter telomeres have been linked to cardiovascular disease, some cancers, osteoporosis, dementia, diabetes, and other chronic degenerative diseases of aging conditions.

The test is designed for anyone interested in optimal health, age management and in knowing their telomere length as it relates to being within or outside the normal reference range for their chronological age.

## **SPECIMEN INFORMATION**

### COLLECTION

Whole blood in sodium citrate tube.

### SPECIMEN STABILITY

Must be received within 24 hrs (optimal) to 48 hrs of collection.

#### REJECTION CRITERIA

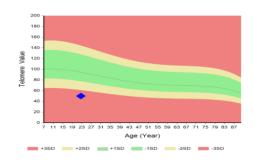
Blood sample is over 48 hours old; hemolyzed, icteric, and lipemic specimens; improper anticoagulant or no anticoagulant used.

### **METHOD**

Quantitative real-time PCR (qPCR)

## **RESULT INTERPRETATION**

Results reported as Telomere Value that is compared to the range of values found to be present in the population of the same age group. Graphic version of the result presentation allows for easier understanding and analysis. Results within the green area (±1SD) and yellow area (±2SD) of the graph are considered to be within normal range. Results in the red area are considered to be outside of the normal range.



# **REFERENCES**

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<sup>3.</sup> Folate Deficiency Induces Dysfunctional Long and Short Telomeres; Both States Are Associated with Hypomethylation and DNA Damage in Human WIL2-NS Cells. Bull CF, Mayrhofer G, O'-Callaghan NJ, Au AY, Pickett HA, Low GK, Zeegers D, Hande MP, Fenech MF. Cancer Prev Res (Phila). 2014 Jan;7(1):128-38. doi: 10.1158/1940-6207.CAPR-13-0264. Epub 2013 Nov 19.
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<sup>10.1371/</sup>journal.pone.0087348. eCollection 2014. The Relationship between Inflammatory Biomarkers and Telomere Length in an Occupational Prospective Cohort Study. Wong JY1, De Vivo I2, Lin X3, Fang SC4, Christiani DC5.

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