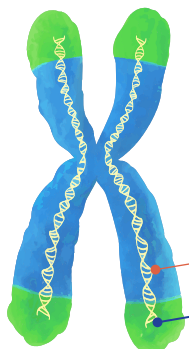


## What is a Telomere?

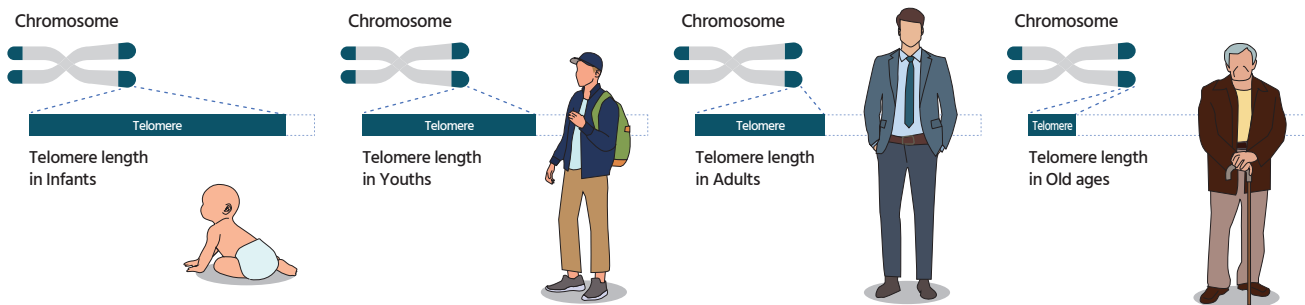


An objective indicator of biological age

Genetic materials  
Telomere

**Telomeres** are repetitive DNA sequences located at the ends of chromosomes. They act as protective caps, preventing the loss of genetic information and ensuring chromosomal stability during replication. It plays a crucial role in cellular aging and have been recognized as one of the key factors determining human lifespan.

## Telomere and Aging rate



With each cell division, telomeres naturally shorten, as they are not fully replicated. This shortening is a normal part of the aging process.

However, telomere length can be different even if in the same age because it shortens quickly or slowly depending on lifestyle such as eating, exercise, and environment.

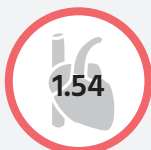
## Telomere and main diseases

If the telomere length is shorter than normal telomere of the same age, the risk of following disease can increase.

Myocardial Infarction



Cardiovascular Disease



Stroke



Type 2 Diabetes



Alzheimer's disease



Hypertension



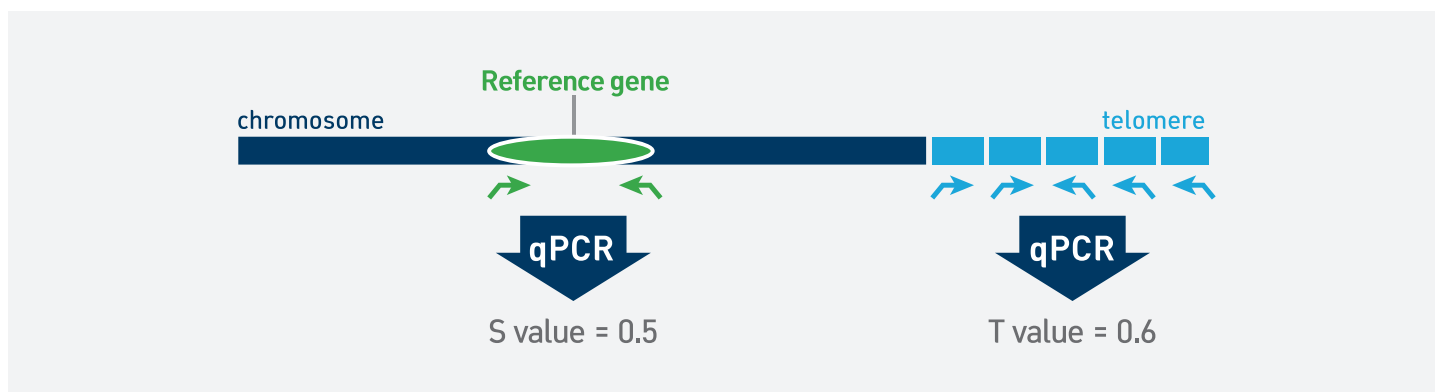
Osteoporosis



## How is the telomere length measured?

The telomere test uses a quantitative polymerase chain reaction (qPCR) method to quantify the amount of a reference gene and the amount of telomere, and measure the telomere length by calculating the telomere ratio to the reference gene.

Telomere length of reference gene [ 935 ] ± [ 45 ] kb  
\*reference DB can be updated.



## Service features

<b>Test</b>	Telorisk (Telomere test)	<b>Test Code</b>	OS099
<b>Specimen</b>	EDTA WB 3 ml	<b>TAT</b>	7 days
<b>Method</b>	Real-time PCR	<b>Sample storage</b>	Room temperature (Refrigerated is recommended)
<b>Test description</b>	This test measures the length of the examinee's telomere by calculating the ratio of the examinee's telomere length to the reference gene using the quantitative polymerase chain reaction (qPCR) method. The average length of telomeres gets shorter as they get older, and the length of telomeres shorten quickly or slowly depending on lifestyle such as eating, exercise and environment. The length of telomeres is known to be related to various diseases, and this test provides personalized information that can help health management by analyzing the results of existing research papers.		
<b>Caution &amp; Limitation</b>	<ul style="list-style-type: none"> <li>• Telomere length may vary slightly depending on the test method and test conditions.</li> <li>• The bias of the result is due to the value of the Telomere length of the reference gene used in each test.</li> <li>• The bio-age result of this test is calculated using internally constructed data of the age-specific population group, and the accumulated data is regularly updated.</li> <li>• Telomere test cannot be used to diagnose diseases or to determine actions related to the treatment of a disease.</li> </ul>		