



Assessment Report

PATIENT DETAILS

Name **Mark Bakker**
Gender **Male**
Age **41 years**
Date of birth **04-09-1984**

TEST DETAILS

Test Date **11-06-2026**
Report date **14-06-2026**
Location **Rotterdam Centrum**
Laboratory **Star-SHL**

OVERALL ASSESSMENT

Your total testosterone of 16.8 nmol/L sits in the middle of the reference range. On that number alone you would have no abnormality at all. Your free testosterone, however, is low (0.21 nmol/L) and your SHBG is raised (62 nmol/L) — and those two belong together.

SHBG binds testosterone in the blood. What is bound is not available to your tissues. With a raised SHBG the total can therefore look normal while the working fraction falls short. That is exactly the pattern here, and it is why this panel measures both.

KEY FINDINGS

Free testosterone low (0.21 nmol/L)

ATTENTION

Below the 0.25 lower limit. This is the fraction actually available to muscle, bone and the central nervous system. Reduced energy, loss of libido and difficulty maintaining muscle are the symptoms that fit.

SHBG raised (62 nmol/L)

ATTENTION

Above the 54 upper limit. This explains the gap between your normal total and your low free testosterone. SHBG rises with thyroid overactivity, liver disease, markedly low body weight and with age.

LH and FSH normal — the signalling works

GOOD

LH 4.2 U/L and FSH 3.8 U/L are within range, so the pituitary is driving the testes normally. That rules out a primary pituitary problem and makes the picture more benign.

Hematocrit and PSA are fine

GOOD

Hematocrit 0.46 L/L and PSA 0.8 µg/L. These are the standard safety checks before any testosterone treatment, and both are normal.

DETAILED ANALYSIS

Hormones

ATTENTION

The core picture is a normal total testosterone (16.8 nmol/L) alongside a low free testosterone (0.21 nmol/L) and a raised SHBG (62 nmol/L).

Roughly two per cent of the testosterone in your blood circulates freely; the rest is bound to SHBG and albumin. Only the free and weakly albumin-bound fractions are biologically active. A raised SHBG shifts that balance, which makes the total read more favourably than the situation warrants.

LH and FSH are normal, meaning the signal from the pituitary is intact. Your estradiol of 98 pmol/L is likewise normal and consistent with these testosterone values.

Hematology

NORMAL

Your hematocrit is 0.46 L/L, within range. This is the most important safety value in testosterone therapy, which can raise it and thicken the blood. The starting point here is favourable.

Tumor Markers

NORMAL

Your PSA is 0.8 µg/L, well below the 3.0 limit. PSA is checked before and during testosterone treatment. This value calls for no further investigation.

RECOMMENDATIONS

1 Find the cause of the raised SHBG first

A raised SHBG is a finding, not a diagnosis. Have thyroid function (TSH and free T4) and liver values measured before treatment is discussed. Where a cause is identifiable, addressing it often resolves the free testosterone on its own.

2 Repeat the test fasting and before 10am

Testosterone follows a clear daily rhythm, peaking in the early morning. A single abnormal reading is never enough to base treatment on. Repeat the measurement on a second morning, fasting, before 10am.

3 Discuss the result with your GP or an andrologist

Testosterone therapy is a long-term treatment with its own risks and with consequences for fertility. This result is a reason for a conversation, not for starting on your own.

NEXT STEPS

Have the test repeated on a second morning, together with TSH, free T4 and liver values. With those results in hand it will be clear whether the raised SHBG has an identifiable cause.

Then contact your GP. This report does not replace a consultation and is not on its own an indication for treatment.

TEST RESULTS

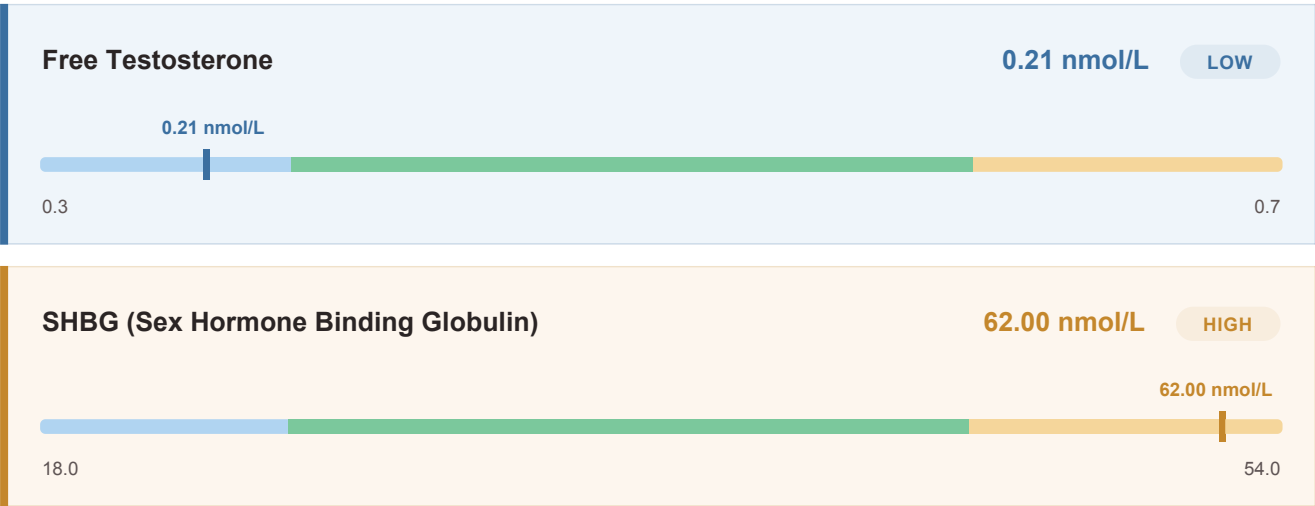
Results Overview

8 results tested

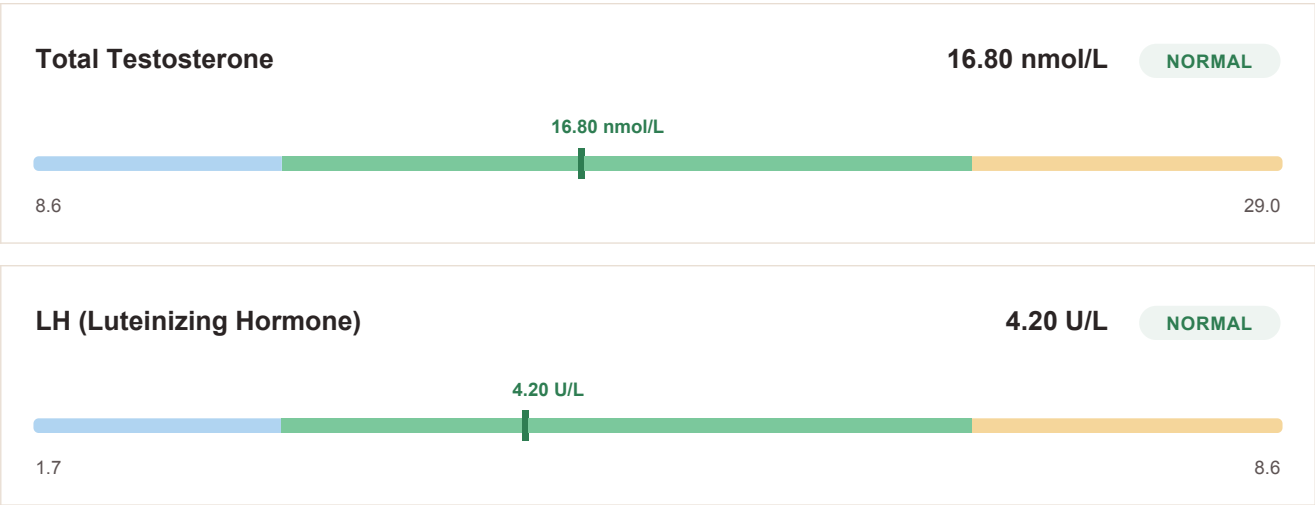
2 of 8 results outside reference range

MARKER	RESULT	REFERENCE	ASSESSMENT
Free Testosterone	0.21 nmol/L	0.25 - 0.72 nmol/L	LOW
SHBG (Sex Hormone Binding Globulin)	62.00 nmol/L	18.00 - 54.00 nmol/L	HIGH

Points of attention (2)



Within reference (6)



FSH (Follicle Stimulating Hormone)

3.80 U/L

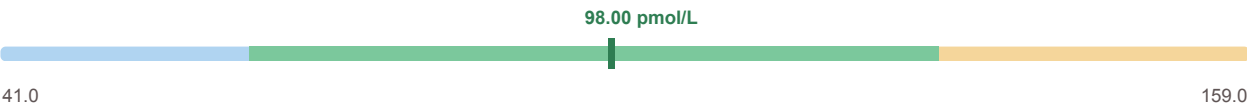
NORMAL



Estradiol (E2)

98.00 pmol/L

NORMAL



Hematocrit

0.46 L/L

NORMAL



PSA (Prostate-Specific Antigen)

0.80 µg/L

NORMAL



SAMPLE REPORT — FICTIONAL VALUES FOR A PERSON WHO DOES NOT EXIST. NOT MEDICAL ADVICE.

DISCLAIMER

This report was prepared by a BIG-registered doctor. It does not replace a personal medical consultation. Always consult your general practitioner if you have questions.

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