

Essential blood tests for transgender people on hormone therapy

Evaluate every 3 months in the first year and then 1-2 times per year thereafter

Feminising

Trans women

Transfeminine (incl. non-binary) individuals

Blood Tests

Target Ranges

Oestradiol (E2)

Oestradiol (pmol/L*): 370-730

Total testosterone (T)

Testosterone (nmol/L*): less than 1.7

If taking cyproterone or bicalutamide: liver (LFT)

If taking spironolactone: kidney (U&E) + potassium (morning sample)

Preferred Time to Test

Injection: just before next dose

Gel: few hours after application

Patch: day after change

Masculinising

Trans men

Transmasculine (incl. non-binary) individuals

Blood Tests and Monitoring

Target Ranges

Total testosterone (T)

Testosterone (nmol/L*): 14-24

Haematocrit (FBC)

Blood pressure + Lipids + HbA1c

Preferred Time to Test

Most injections: midway between doses

Undecanoate injection (exception): just before next dose

Gel: morning before applying or a few hours after application

*units differ in guidelines vs Irish labs (ng/dl vs nmol/l; pg/ml vs pmol/l)

Source: World Professional Association for Transgender Health (WPATH) Standards of Care Version 8, viewable at wpath.org/publications/soc8.

Why provide blood tests

Blood tests are essential healthcare for trans people undergoing gender-affirming hormone therapy. All primary care providers should support their trans patients by providing regular blood tests to monitor their hormone levels. Here's why:

To ensure the patient is on a suitable hormone dose: Given the potential harm associated with hormone levels that exceed expected ranges, comparing the patient's hormone levels with standard reference ranges is necessary to ensure they are receiving the correct dose.

To identify potential health risks and monitor for comorbidity: Blood tests can help reduce health risks by presenting them in results before they become serious, whereas unmonitored hormone therapy poses greater risks.

To adhere to international best practice in trans healthcare: Both the WPATH (2022) and Endocrine Society (2017) guidelines recommend regular laboratory monitoring of hormones as a standard practice.

Regular blood testing is essential to providing person-centred care and engaging in a harm reduction approach for trans people.

Disclaimer: This resource is intended as a general clinical aid. It does not replace professional judgement. Practitioners are responsible for ensuring they consult the most up-to-date clinical guidance, as reference ranges and recommendations may change over time.

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