

## ROIDCheck: Wave 2 Extra harm reduction information

### About ROIDCheck

ROIDCheck is a project led by researchers at Griffith University in collaboration with Hi-Ground and CheQpoint. The project aims to develop methods to analyse the contents of performance and image enhancing drugs (PIEDs). [Find out more here.](#)

We thank the community for their continued support of this trial program. Without your assistance this would not have been possible. The ROIDCheck project will stop collecting samples for 2024 on 18 October 2024. Until then, you can drop samples at CheQpoint (Gold Coast or Brisbane) during opening hours.

### Injectable samples

Testosterone has been used for nearly 60 years in substitution therapy for conditions like low testosterone. **Injectable testosterone esters**, such as enanthate and cypionate, are a common option. These esters are designed to release testosterone into the bloodstream at different rates.<sup>1</sup> **Testosterone samples that contain a different ester than expected** can impact injection frequency.

For example, Testosterone Cypionate has a slightly longer half-life (5 days) compared to Testosterone Enanthate (4.5 days), which means you may need longer intervals between injections.<sup>2,3</sup> Similarly, if your sample is an underdosed version of Testosterone Enanthate (e.g. mislabelled as Sustanon), you will need to adjust your dosage calculations to match both the concentration and the difference in half-life.

For users of injectable testosterone, **higher-than-normal testosterone levels** (also called "supraphysiological levels") can result in serious side effects. Studies have shown testosterone use increases red blood cell count (measured as 'haematocrit'): in one study 10% of patients using 100-200 mg per week of testosterone cypionate saw their haematocrit rise above 54%<sup>4</sup>, and another study observed a 6.4% increase with testosterone enanthate use.<sup>5</sup> Increased red blood cell counts raises the risk of blood clots and other cardiovascular problems. Monitoring blood pressure and blood cell levels is therefore crucial.

## Oral samples

Common oral anabolic steroids like **methandienone** and **oxymetholone** are associated with liver damage.<sup>6</sup> These compounds are part of the **17 $\alpha$ -alkylated AAS** family, which is known for being particularly harmful to the liver. **Long-term or high-dose use** has been linked to liver cysts, jaundice, and even liver cancer.<sup>7,8</sup> When dealing with oral steroid samples, especially if they are a **mixture of substances** (like methandienone and oxymetholone in the same sample), it's important to **regularly monitor liver function**. Since oral AAS are known for hepatotoxicity, liver function tests should be done regularly to catch any early signs of liver damage.

## Adjusting dose

For **underdosed samples**, it's crucial to reconsider your dosage. Avoid increasing your intake without recalculating based on the actual concentration found in the sample. Simply injecting more without adjusting could lead to overdosing. Similarly, with **overdosed samples**, be sure to adjust your dosage to align with the actual concentration to avoid unintended side effects. Prioritise safety by recalculating dose based on verified test results.

Here are two worked examples:

*Example 1: Tim wants to use 400mg per week of Drostanolone Enanthate, but has an overdosed sample.*

He expected his sample to contain a concentration of **200mg/mL** but it was overdosed with a detected concentration of **257 mg/mL**. He would typically inject **2mL** per dose. He would adjust his dose to about 1.56 mL to achieve his desired weekly intake.

$$\begin{aligned} 200\text{mg/mL} \div 257 \text{ mg/mL} &= 0.78 \\ 0.78 \times 2\text{mL} &= 1.56\text{mL} \end{aligned}$$

*Example 2: Tim wants to use 200mg per week of Nandrolone Phenylpropionate, but has an underdosed sample.*

He expected a concentration of **100mg/mL** but it was underdosed with a detected concentration of **87mg/mL**. He would typically inject **2mL** per dose. To reach his week target of 200mg, he would inject around 2.30mL.

$$\begin{aligned} 100\text{mg/mL} \div 87\text{mg/mL} &= 1.15 \\ 1.15 \times 2\text{mL} &= 2.30\text{mL} \end{aligned}$$

## Sources

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