

Position Statement

IMMUNOGLOBULIN ADJUSTED BODY WEIGHT DOSING

Endorsed by the National Immunoglobulin Governance Advisory Committee May 2026

Background

The amount of immunoglobulin (Ig) prescribed for a patient varies according to the clinical indication and patient characteristics, including body weight, and is set out in the *Criteria for the clinical use of immunoglobulin in Australia* (the Criteria). When prescribing Ig, clinicians should aim to use the lowest dose that achieves the appropriate clinical outcome for each patient. This approach supports stewardship of the limited plasma derived medical product supply and may reduce the risk of dose-related adverse effects.

Evidence base

Evidence indicates that Ig distributes predominantly within the intravascular and extracellular fluid compartments, with minimal distribution into adipose tissue. As a result, dosing based solely on actual body weight (ABW) in overweight or obese patients may overestimate clinical requirements without improving outcomes. The use of adjusted body weight dosing informs dosing that better reflects pharmacokinetic principles and supports clinically appropriate dosing in selected adult populations.

Position statement

Patients accessing Ig through Australia's national blood arrangements should receive adjusted body weight dosing unless there is a clinical reason not to do so. The National Blood Authority (NBA) does not recommend this approach for patient groups outlined in the exclusions and safeguards section below.

From 1 July 2026, adjusted body weight dosing will be the mandated default in BloodSTAR, Australia's online system for accessing government-funded Ig products. If there is a clinical reason not to use adjusted body weight dosing, the clinician should select the appropriate option in BloodSTAR and provide a clinical justification in the authorisation request.

BloodSTAR calculator

Using adjusted body weight dosing, the BloodSTAR calculator applies 2 calculations to generate a dose-determining weight (DDW) for clinical use. This DDW is then applied to the requested dose per kilogram in BloodSTAR.

Calculation 1 – Ideal Body Weight (IBW) (kg) (Devine formula):

- $IBW \text{ (males)} = 50 + [2.3 \times (\text{height in inches} - 60)]$
- $IBW \text{ (females)} = 45.5 + [2.3 \times (\text{height in inches} - 60)]$

Patient height entered in centimetres is converted to inches for the calculation.

Calculation 2 – Dose-Determining Weight (kg):

- $DDW = IBW + 0.4 \times (ABW - IBW)$



Exclusions and safeguards

The NBA does not recommend application of the adjusted body weight dosing calculator for patients who:

- Are aged less than 18 years
- Are less than 152 cm in height
- Are pregnant
- Have an actual body weight that is lower than their ideal body weight.

Clinical judgement should always be applied, and maintenance dosing should be adjusted according to clinical response and ongoing monitoring.

References

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4. Heidari et al (2024), Optimal Weight-based Dosing of Intravenous Immunoglobulin (IVIg) among Overweight and Obese Patients, *Current Drug Therapy*, 2024, 19(4), 385-393
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