Paricalcitol Intravenous for Adults

Who can administer

May be administered by registered competent doctor or nurse/midwife

Available preparations

Zemplar 5microgram in 1mL

Reconstitution

Already in solution

Draw up using a 5 micron filter needle

Infusion fluids

Not required

Methods of intravenous administration

- Give as a slow intravenous bolus **via haemodialysis access**

Dose in adults

Depends on baseline parathyroid hormone (PTH) levels and units used to express PTH levels (see table below):

Initial dose

PTH measured in pmol/l (see below for dose)	PTH measured in pg/ml (see below for dose)
Initial dose (micrograms)= baseline intact PTH (p**mol**/l) / 8	**Initial** dose (micrograms) = baseline intact PTH (p**g/ml**) / **80**

- The maximum frequency of administration is every **second day**
- The maximum dose safely administered in clinical studies was 40 micrograms.

Titration dose: suggested guidelines based on intact PTH (iPTH) below

Dosage adjustments should be made every 2 to 4 weeks	
iPTH level relative to baseline	**Paricalcitol dose adjustment**

Same or increased Decreased by LESS than 30%	Increase by 2 to 4 micrograms
Decreased by 30 to 60%	Maintain
Decreased by GREATER than 60% iPTH LESS than 15.9 pmol/l (150pg/ml)	Decrease by 2 to 4 micrograms

In patients with clinically significant hypercalcaemia, consider cessation or a reduction in dose of the paricalcitol (see SPC for further details).

Monitoring

Suggested monitoring during maintenance phase (below)

Parameter	Monitoring frequency
Calcium and phosphate	At least monthly
Serum intact PTH (iPTH)	Three monthly

During the titration phase monitoring may be required more frequently

Further information

- Contains ethanol (20% v/v) and propylene glycol (30% v/v) (consult with prescriber in high risk groups- eg people with alcoholism, liver disease, epilepsy). Caution if patients also receiving metronidazole [ref 1)]
- Zemplar brand only; avoid giving heparin via the same port as propylene glycol may neutralise its effect

Storage

No particular storage requirements

References

Zemplar SPC November 2024

1: Injectable Drugs guide, downloaded from Medicinescomplete 24th Feb 2026

Therapeutic classification

Synthetic, biologically active vitamin D analogue of calcitriol