

Aclasta infusions in general practice

A worked PDSA cycle for introducing zoledronic acid infusion as a practice service, building the clinical protocol, and meeting CPD requirements as a whole practice team.

AUTHOR

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CPD HOURS

Up to 9 hours

COMPOSITION

3h EA + 3h RP + 3h MO

MBS ITEMS

No dedicated infusion item

TIMELINE

3 to 6 months

What a Plan, Do, Study, Act (PDSA) gives your practice

CPD for the whole team

GPs meet a significant share of the 50-hour annual CPD requirement without leaving the practice. Submitted as a practice-based or group activity, hours log across EA, RP and MO. Nurses maintain their own CPD records and declare compliance at annual AHPRA registration. Practice managers count the activity toward AAPM certification.

GP retention

A practice that runs structured QI activities absorbs a substantial share of the 50-hour CPD obligation on behalf of its GPs. The GP gets CPD done within practice time on problems relevant to their clinical work. That benefit disappears if they leave.

Quality of care

Introducing a new infusion service forces a full review of pathology workflows, consent, vitamin D and renal function thresholds, and adverse-event protocols. A documented PDSA is ready-made evidence for RACGP accreditation (5th edition Standards).

Revenue

An in-house Aclasta infusion service captures patients who would otherwise go to a day infusion unit or hospital clinic. Practice bills an infusion fee plus associated consultations. Retention benefit is material: patients return annually for the infusion review.

Zoledronic acid (Aclasta) infusions in general practice

Osteoporosis is one of the most common chronic conditions in general practice, and the clinical endpoint that matters is a fragility fracture. Hip, vertebral and wrist fractures carry substantial morbidity, loss of independence and, in older patients, reduced life expectancy. Despite this, osteoporosis is underdiagnosed and under-treated in Australia, and many patients who meet PBS criteria for pharmacologic therapy are either on no treatment or on a regimen they struggle to maintain.

Treatment options sit on a spectrum. Oral bisphosphonates (alendronate, risedronate) remain first-line in most guidelines because of efficacy, cost and long-term safety data. Compliance is the main issue: weekly dosing, the upright-for-30-minutes requirement, and gastrointestinal side effects mean a proportion of patients discontinue within the first year. Denosumab (Prolia) is a six-monthly injection with good BMD outcomes but carries a rebound vertebral fracture risk if a dose is missed. Intravenous zoledronic acid is a once-yearly 15-minute infusion with the strongest fracture-prevention evidence in the bisphosphonate class and a clean compliance profile by design: once it is in, it is in.

ZOLEDRONIC ACID KEY FACTS

FACT	DETAIL
Regimen	5 mg in 100 mL, intravenous infusion, once yearly. Standard rate 30 minutes (45 minutes if creatinine clearance below 45 mL/min or patient over 70).
Fracture evidence	HORIZON Pivotal Fracture Trial: yearly infusion over 3 consecutive years reduces vertebral, hip and non-vertebral fractures compared with placebo.
ONJ risk at osteoporosis doses	Approximately 1 in 10,000 to 1 in 100,000 patient-years. Risk is materially higher at cancer doses and is not comparable. Patients routinely over-estimate the risk and under-estimate fracture risk.
PBS subsidised	Yes, for qualifying indications (see PBS criteria). No MBS item for the medication itself. There is no dedicated MBS infusion administration item for short-duration infusions in general practice.
Contraindications	Prior hypersensitivity to any bisphosphonate, current or recent uveitis, active dental problems likely to require invasive dental procedure within 3 months, hypocalcaemia, vitamin D below 50 nmol/L, dehydration, creatinine clearance below 35 mL/min.

Why zoledronic acid is particularly suited to general practice

- Annual recall fits the general practice workflow. Most practices already run annual recall systems for other conditions.
- The consent conversation is relationship-based. The GP who has known the patient for years is better placed to address the ONJ-versus-fracture risk conversation than a day infusion unit registrar.
- Medical governance is continuous. Pre-infusion pathology, creatinine clearance and vitamin D status are already in the practice record. The infusion sits inside, not outside, the patient's care.
- Patients avoid hospital day-unit travel, which is particularly relevant for older and rural patients.
- The nursing team develops a standard procedure once and applies it repeatedly. After the first cycle, each infusion takes a scheduled 45-minute nurse appointment with GP oversight.

The financial case for in-house infusion

Unlike cost-avoidance topics, Aclasta infusion is a revenue-generating service. There is no dedicated MBS item for short-duration infusions in general practice. In the worked example, the practice charges a \$250 infusion fee (no MBS item number) and a \$50 GP supervision fee (no item). For bulk billed patients, MBS rules prevent billing for a consultation and charging an infusion fee on top, so the practice bills the infusion fee as a private charge with no

associated MBS item. For private patients, the practice can bill a standard consultation item plus the infusion fee. Each practice will need to confirm its own fee structure and billing approach.

The service captures patients who would otherwise be sent to a day infusion unit or hospital clinic and builds a predictable annual patient cohort with high retention.

Why a PDSA rather than a straight protocol roll-out

Most practices that try to introduce Aclasta without a structured cycle underestimate the protocol work required to do it safely. Patient selection, pre-infusion pathology thresholds, renal function calculations, vitamin D correction, consent content, infusion rate, observation period, adverse-event pathway and recall logic all need agreement across the clinical team before the first infusion. A PDSA forces that agreement to be made explicit, documented and reviewed, which is exactly what the RACGP CPD program asks for and exactly what accreditation requires.

CPD hours from this PDSA

CATEGORY	FOCUS	HOURS
EA	Evidence review, bisphosphonate comparison, ONJ risk, clinical protocol development and team education sessions	3
RP	Pre-infusion pathology audit, creatinine clearance and vitamin D status review, outcome tracking across infusions	3
MO	PDSA cycle (plan, do, study, act with documented outcomes)	3
Total	All components when submitted as practice-based or group activity	9

Note on CPD requirements: The Medical Board of Australia (via AHPRA) requires all registered medical practitioners to complete 50 hours of CPD annually, including a minimum of 12.5 hours EA and a minimum of 25 hours combined RP and MO (with at least 5 hours of each). The RACGP currently classifies PDSAs under Measuring Outcomes. When submitted as a group or practice-based activity, each component can be logged to its correct category.

How this guide works

 Worked example from Dr Chris Mitchell's practice

 Your practice: fill in your own details

Each section includes the worked example followed by space for your practice to document its own process.



Dr Chris Mitchell AM

Dr Chris Mitchell AM, FAICD is co-founder of Medius Global and a Rural General Practitioner and Rural Generalist with more than 35 years of experience in Northern NSW. He is a Fellow of the Australian Institute of Company Directors and a Past President of the Royal Australian College of General Practitioners. He was previously Head of Adoption, Benefits and Change at the National eHealth Transition Authority (NEHTA). He has served on numerous health sector boards, including the RACGP, NPS MedicineWise, Therapeutic Guidelines Ltd, The Rural Doctors Network and North Coast GP Training. Chris was awarded Member of the Order of Australia (AM) in 2013 for services to general practice and received a Rural Doctors Network Rural Medical Service Award in 2025.

Important notes

- PBS authority requirements change periodically. Verify current PBS eligibility criteria against the Schedule of Pharmaceutical Benefits before prescribing zoledronic acid.
- There is no dedicated MBS item for short-duration infusions in general practice. Practices typically charge a private infusion fee. Verify current consultation item descriptors against MBS Online before billing.
- This guide summarises the clinical protocol developed for the worked example practices. Each practice must develop and approve its own protocol under its own medical governance. Do not adopt this protocol as-is.
- Clinical position statements and adverse-event incidence figures cited in this guide are sourced from UpToDate, the HORIZON trials and the Therapeutic Guidelines. Check the currency against the most recent editions before publishing your own practice protocol.
- The content in this guide is provided for general professional information only. It does not constitute clinical or legal advice.

The PDSA cycle

Idea

Introduce Aclasta (zoledronic acid) infusions as a practice service. Review the current evidence base. Develop, pilot and approve a written clinical protocol that supports safe care, identifies suitable patients, manages pathology work-up and governs the infusion itself.

Plan

Map the current state: how many active patients have a diagnosis of osteoporosis, how many are on oral bisphosphonates, how many are on denosumab (Prolia), and how many are on no pharmacologic therapy. Identify the subgroup most likely to benefit from switching to zoledronic acid administered annually. Draft a clinical protocol and consent form. Agree on the doctor-led recall process. Train the nursing team on the infusion procedure and observations.

● WORKED EXAMPLE

The active patient list was searched on Best Practice for a diagnosis of osteoporosis. Doctors reviewed each record individually for suitability. Most patients already on oral bisphosphonates (alendronate, risedronate) had no strong case for change. The practical subgroup for switching was patients on no therapy and those on denosumab. Some clinicians in the practice view zoledronic acid as first-line, with better fracture-prevention evidence than denosumab and no evidence of increased ONJ risk at osteoporosis doses. UpToDate (January 2026) positions zoledronic acid as second-line behind oral bisphosphonates based on cost and long-term safety data. We preserved both positions in the team discussion and let each doctor make the call for each patient.

○ YOUR PRACTICE NUMBERS

MEASURE	COUNT
Active patients with a diagnosis of osteoporosis	
On oral bisphosphonates	
On denosumab (Prolia)	
On no pharmacologic therapy	
Candidates for Aclasta discussion	

Aims

- Aclasta is offered as a clinically appropriate option to identified suitable patients.
- A written clinical protocol governs patient selection, pathology, consent and administration.
- Pre-infusion bloods (U&E, calcium, magnesium, phosphate, 25-OH vitamin D) are completed and reviewed.
- Creatinine clearance (Cockcroft-Gault) is calculated before every infusion.
- Nursing staff follow a documented infusion checklist and observation schedule.
- Patient consent is informed, documented and signed before the first infusion.
- A recall system is in place for the annual dose.

Do: meeting and action schedule

WORKED EXAMPLE DATES

ACTIVITY	DATE
Planning meeting	23/09/2025
Clinical meeting (first)	[date]
Clinical meeting (second)	[date]
Review of infusion protocols	[date]
Draft protocol approved for use	[date]
Protocol reviewed in light of experience	[date]
Clinical meeting (final)	19/02/2026
Approval of final protocol	19/12/2026

YOUR PRACTICE: RECORD YOUR DATES

Planning meeting	
Clinical meeting (first)	
Review of draft protocol	
Nursing training and checklist walk-through	
First patient infusion	
Mid-cycle review of experience	
Final protocol sign-off	
RACGP portal upload	

Study: what to monitor

MEASURE	AUDIT 1	AUDIT 2	AUDIT 3
Patients identified as candidates for Aclasta			
Patients who had a decision conversation with their GP			
Patients who consented and proceeded			
Pre-infusion bloods completed and in range			
Infusions delivered without adverse event			
Patients recalled for annual dose			
Patients who declined after discussion			

What we learned

● WORKED EXAMPLE

A clear written protocol is essential. Without it, each infusion becomes a one-off negotiation between doctor, nurse and patient. With it, the nurse runs the infusion with confidence, and the doctor retains clinical governance.

Patients are more concerned about osteonecrosis of the jaw than about fracture risk, even though fractures are more common and have a greater impact on quality of life and life expectancy. Evidence-based reassurance on ONJ risk at osteoporosis doses (approximately 1 in 10,000 to 1 in 100,000 patient-years) is central to the consent conversation.

The evidence base is more contested than expected. UpToDate treats oral bisphosphonates as first-line. The view of some clinicians in the practice, supported by the HORIZON trial data, is that zoledronic acid has stronger fracture-prevention evidence. Reasonable doctors in the same practice reached different positions on the same patient. The protocol did not resolve this; it held space for the disagreement.

Two-yearly dosing has reasonable supporting evidence despite annual being the standard on the packaging. The practice did not adopt 2-yearly dosing as protocol, but flagged it as a conversation some patients may raise.

Targeting is harder than expected. Patients on oral bisphosphonates have little cause for change. The working cohort is patients on no therapy or on denosumab.

What worked best for us was a recall appointment with the patient's usual GP. The GP arranges the required investigations, reviews results, and confirms Aclasta is appropriate. A separate infusion date is then scheduled with the nurse. For bulk billed patients, MBS rules prevent billing for a consultation and charging an infusion fee, so we chose to bill an infusion fee of \$250 without an item number, plus a \$50 GP supervision fee (no item).

YOUR PRACTICE: RECORD YOUR LEARNINGS

Zoledronic acid administration criteria

Reference (from LHMC clinical protocol)

STATUS	CRITERIA
Red: unacceptable for administration	Previous hypersensitivity to any bisphosphonate. Current or recent uveitis. Active dental problems likely to require invasive dental procedure within 3 months. Hypocalcaemia. Vitamin D below 50 nmol/L. Dehydration. Creatinine clearance below 35 mL/min. Patient unable to access zoledronic acid on PBS or other subsidised source.
Orange: requires discussion	Administration less frequently than 12-monthly. Patients being treated for hypercalcaemia may need pre and post-infusion hydration with normal saline 0.9%.
Green: accepted for administration	Medical condition assessed as stable. Clear diagnosis and prognosis, low risk of deterioration. Referrer has discussed risks and benefits. Patient meets at least one PBS eligibility criterion (see PBS criteria section).

PBS eligibility criteria for zoledronic acid

- Confirmed osteoporosis in postmenopausal women and men aged over 70 with BMD T-score minus 3.0 or less
- Patients over 50 who have had a minimal-trauma fracture, with or without BMD abnormality
- Receiving steroids at more than 7.5 mg per day for more than 3 months, with T-score minus 1.5 or less
- Confirmed Paget's disease of bone with clinically active disease (bone turnover abnormalities, bone pain, fractures)
- Prevention of skeletal-related events in palliative patients
- Hypercalcaemia of malignancy

PBS authority requirements change periodically. Verify current eligibility criteria against the Schedule of Pharmaceutical Benefits before prescribing.

Act: what to change and embed

● WORKED EXAMPLE

Aclasta is now available for infusion at our clinics. The approved clinical protocol and nursing checklist govern every infusion. A Best Practice shortcut (ACLASTADR) documents the decision conversation and pre-infusion checklist in one place. Recalls are booked at the time of infusion for the next annual dose.

○ YOUR PRACTICE: CHANGES TO EMBED

Best Practice documentation shortcut

ACLASTADR

Aclasta infusion discussed with patient.

- No history of hypersensitivity reaction to any bisphosphonate.
- No history of current or recent uveitis.
- No active dental problems likely to require an invasive dental procedure within the next 3 months.
- Osteonecrosis of the jaw (ONJ) discussed. At osteoporosis doses, ONJ risk is approximately 1 in 10,000 to 1 in 100,000 patient-years. Risk is higher at cancer doses and is not comparable.
- Vitamin D above 50 nmol/L.
- Creatinine clearance above 35 mL/min.
- Serum calcium corrected for albumin in normal range (2.10 to 2.60).
- Usual bloods: U&E, calcium, magnesium, phosphate, vitamin D.
- Transient flu-like symptoms possible, especially after first dose. Paracetamol before and for several days after the infusion reduces severity.
- Hydration advice: 2 glasses of water before the infusion, 6 to 8 glasses over the following 24 hours.
- No known effect on driving, but arranging a driver home is sensible.
- Consent provided. Consumer medicines information provided.

Aclasta Infusion Advice (patient-facing shortcut)

The following text is used as part of the Best Practice shortcut to generate the patient advice and consent documentation at the point of care:

- Advised to take paracetamol prior to infusion appointment and to continue taking paracetamol regularly for up to three days after the infusion.
- Advised to have 2 glasses of water prior to the infusion and to continue having 6 to 8 glasses over the 24 hours following the infusion.
- Advised of \$250 infusion fee for this procedure and that no Medicare rebate applies.
- Confirmed no allergy to zoledronic acid or any other bisphosphonate.
- Aclasta is not appropriate in pregnancy or breastfeeding.
- Confirmed no previous bisphosphonate infusion in the past 12 months.
- Confirmed not undergoing dental treatment or due to have dental surgery in the near future.
- Kidney function, calcium and vitamin D reviewed.
- Common side effects include: short-lasting fever sometimes with flu-like symptoms, headache, chills, pain or aching in the muscles or joints; some irritation, redness, swelling or pain at the injection site; nausea, loss of appetite, vomiting or diarrhoea; dry mouth, sore throat; lack of energy, tiredness, weakness.
- Rare, more serious side effects include: osteonecrosis of the jaw; worsening kidney function; heart palpitations which may or may not be accompanied by breathlessness; unusual fracture of the thigh bone; eye inflammation.
- The infusion of zoledronic acid 5 mg/100 mL will be undertaken via intravenous access over 30 to 45 minutes. Vital sign observations will be taken prior to, immediately post and up to 30 minutes after the infusion.
- Inform the GP or nursing staff of signs of allergy during the infusion such as difficulty breathing, tightness in the chest, swelling of face, tongue, throat or lips, itching or rash on skin, or pain at the infusion site.
- You may require someone to drive you home after the infusion.

Submitting for CPD hours

Log this PDSA via myCPD or your preferred CPD portal as a group or practice-based activity. Record time as you go and document discussions in meeting minutes for AHPRA requirements. The hours breakdown is set out in the CPD hours from this PDSA table earlier in this guide.

Using the GP-led Activity form, one GP can record the activity for multiple GPs on their behalf. Nurses log separately via AHPRA and the NMBA. Practice managers count the activity toward AAPM certification requirements.

TIMING TIP

Check where you sit in the triennium before logging hours. If the project spans two triennium periods, start the new submission from the date the new triennium begins. Do not log hours to a period where you have already met your requirements.

Doctors involved

DOCTOR'S NAME	QI AND CPD NUMBER

Resources

- Therapeutic Guidelines: Antiresorptive drugs for osteoporosis (current edition)
- UpToDate: Bisphosphonate therapy for the treatment of osteoporosis (current edition)
- Zoledronic acid product information: Therapeutic Goods Administration, ebs.tga.gov.au
- Services Australia: PBS zoledronic acid item listing and authority requirements
- Royal Australian and New Zealand Bone and Mineral Society (ANZBMS): osteoporosis treatment position statements
- MBS Online (mbsonline.gov.au) for current consultation item descriptors and fees
- HORIZON Pivotal Fracture Trial and HORIZON Recurrent Fracture Trial (primary evidence base for zoledronic acid fracture prevention)
- American Association of Oral and Maxillofacial Surgeons: position paper on medication-related osteonecrosis of the jaw

Running a PDSA in your practice?

Medius Global helps GP practice owners strengthen operations, meet compliance requirements and build a practice that attracts and retains GPs. Structured quality improvement is one of the most effective ways to deliver CPD to your team within the practice, reduce individual compliance burden, and demonstrate to prospective GPs that your practice invests in professional development.

Whether you are three years from exit or building for the long term, we can help you implement PDSA cycles, clinical audits and practice-level QI programs that meet CPD, accreditation and PIP QI requirements.

Book a consultation

Background and reference

This section contains the educational and clinical background material that supports the PDSA. It forms part of the Educational Activities (EA) component of the CPD hours. Review and discussion of this material with your practice team contributes to the 3 EA hours.

Choice of bisphosphonate: current position

Oral bisphosphonates are the most commonly prescribed first-line pharmacologic therapy for osteoporosis in most Australian and international guidelines. The rationale is efficacy, favourable cost and long-term safety data. Alendronate is usually suggested as the initial oral agent, with risedronate as a reasonable alternative.

Intravenous zoledronic acid is suggested for patients with contraindications or intolerance to oral bisphosphonates, including oesophageal disorders, an inability to remain upright for 30 to 60 minutes after a dose, or gastrointestinal intolerance. It is also a reasonable choice for patients already on denosumab who wish to consolidate therapy or step down.

Oral and intravenous bisphosphonates should not be used routinely in patients with chronic kidney disease and eGFR below 30 to 35 mL/min/1.73 m².

Zoledronic acid: dosing and duration

Once-yearly 15 minute intravenous infusion. In the HORIZON trials, yearly infusion over 3 consecutive years compared with placebo reduced the risk of vertebral fracture, hip fracture and non-vertebral fracture.

The majority of patients who receive zoledronic acid once yearly for 3 years do not require subsequent infusions for at least the next 3 years. For patients at high ongoing fracture risk (existing vertebral fracture, femoral neck BMD T-score below minus 2.5 after an initial course), continuing yearly infusion beyond 3 years may provide further benefit, weighed against the potential risks of long-term therapy.

There is reasonable evidence for 2-yearly dosing as an alternative to annual dosing once the initial course is complete. This is not on the standard packaging advice but has support in the literature and may be a conversation some patients raise.

Adverse effects and safety precautions

Kidney function

Isolated reports of impaired kidney function and acute kidney injury after zoledronic acid administration, particularly in patients with multiple myeloma and rarely in those treated for osteoporosis and those on concurrent diuretic therapy. May relate to infusion administered too rapidly. Measure serum creatinine before every infusion. Ensure adequate hydration.

Infuse over at least 15 minutes (30 minutes is standard in general practice; 45 minutes if creatinine clearance is below 45 mL/min or the patient is over 70). Zoledronic acid is not recommended if creatinine clearance is 35 mL/min or below.

Flu-like symptoms

Transient flu-like symptoms are the most common adverse effect, most often after the first dose and less likely on subsequent doses. Paracetamol before and for several days after the infusion reduces severity. Longer infusion times (45 to 60 minutes) reduce incidence.

Hypocalcaemia

Intravenous bisphosphonates can cause hypocalcaemia, particularly in patients with vitamin D deficiency, chronic kidney disease or a malabsorption disorder. Correct vitamin D deficiency (25-OH vitamin D above 50 nmol/L) and hypocalcaemia before infusion.

Osteonecrosis of the jaw

Osteonecrosis of the jaw (ONJ) is a rare complication of bisphosphonate therapy, associated with pain, swelling, exposed bone, local infection and pathologic fracture of the jaw. Most cases have been in patients treated with high-dose intravenous bisphosphonates for cancer or multiple myeloma.

At osteoporosis doses, the risk is approximately 1 in 10,000 to 1 in 100,000 patient-years. Risk factors include intravenous administration, cancer and anticancer therapy, dose and duration, dental extractions or implants, poorly fitting dentures, glucocorticoids, smoking, diabetes and pre-existing dental disease.

If a dental implant or extraction is planned, consider delaying bisphosphonate therapy for a few months until healing is complete. For patients already on bisphosphonates, the evidence does not support routinely discontinuing therapy before dentoalveolar surgery for osteoporosis indications. The American Association of Oral and Maxillofacial Surgeons position paper is the most cited source on this management question.

Uveitis and other eye inflammation

Rare but recognised. Current or recent uveitis is a contraindication to further bisphosphonate therapy.

Clinical protocol (summary)

A summary of the clinical protocol used at Lennox Head and Epiq Medical Centres. Practices developing their own protocol should adapt rather than copy.

Pathology work-up (before first infusion)

- U&E, calcium, magnesium, phosphate, 25-OH vitamin D
- Creatinine clearance calculated using the Cockcroft-Gault formula before every dose

Pre-infusion safety thresholds

- Vitamin D above 50 nmol/L
- Corrected calcium in the normal range (2.10 to 2.60 mmol/L)
- eGFR above 35 mL/min/1.73 m²
- Patient well hydrated

Infusion rate

Standard rate is 100 mL over 30 minutes (gravity-fed giving set, drop factor 20, approximately 66 drops per minute). If creatinine clearance is below 45 mL/min or the patient is over 70, infuse 100 mL over 45 minutes (approximately 48 drops per minute).

Post-infusion care

- Paracetamol 1 g four times daily, or Panadol Osteo three times daily, for three days post-infusion to reduce flu-like symptoms
- 2 glasses of water before the infusion, 6 to 8 glasses over the 24 hours following
- Observations (BP, pulse, temperature, respiratory rate, SpO₂) prior to infusion, immediately post-infusion, and before the patient leaves
- Observation period of up to 30 minutes post-infusion for adverse reactions

Medical governance

The patient must have access to medical governance support for the duration of the infusion. Primary medical governance is provided by the referring specialist, the credentialed GP or the practice medical staff. The emergency department is not the primary escalation point unless the situation is an emergency.

Discharge and follow-up

- Ensure the patient has a follow-up appointment booked with their usual GP
- Discharge summary highlights key clinical concerns or risks to hand over
- Recall set for the annual review and next infusion

Nursing checklist (summary)

Pre-infusion, in the chair:

- GP consultation complete and GPCCMP in place where applicable
- Recent pathology checked and marked as given
- Diuretic and NSAID use discussed with GP
- Patient not pregnant or breastfeeding
- No allergy to zoledronic acid or other bisphosphonates
- No scheduled tooth extraction
- Consumer Medicines Information read, questions directed to GP
- Paracetamol regimen understood

- Hydration advice confirmed
- Zoledronic Acid Infusion Consent Form signed
- Baseline observations recorded
- IV access established (20G preferred), flushed with 10 mL saline, secured with IVC dressing
- Aclasta expiry checked, giving set primed, secured to cannula

Post-infusion:

- Observations repeated immediately post-infusion
- Cannula flushed with 20 mL saline and removed
- Observation period up to 30 minutes
- Observations repeated before the patient leaves

If an adverse reaction occurs, stop the infusion, notify the GP immediately, take a full set of observations and monitor closely.

Patient consent: what is covered

- Information about zoledronic acid has been provided, read and understood
- Opportunity to discuss the procedure and ask questions of the GP
- Paracetamol before and for 24 to 48 hours after the infusion
- Hydration before and after the infusion
- Awareness that an infusion fee is billed
- Confirmation of no bisphosphonate allergy, no current pregnancy or breastfeeding, no prior bisphosphonate infusion in the past 12 months, and no current or planned dental surgery
- Awareness of common side effects (flu-like symptoms, injection site reaction, gastrointestinal symptoms, fatigue)
- Awareness of rare but serious side effects (ONJ, impaired kidney function, cardiac palpitations, atypical femur fracture, eye inflammation)
- Understanding the procedure and observation schedule
- Consent to first aid, resuscitation and ambulance escalation if required

Annual CPD requirements

Under the Medical Board of Australia registration standard, all GPs must complete 50 hours of CPD annually:

- Minimum 12.5 hours of Educational Activities (EA)
- Minimum 25 hours combined Reviewing Performance (RP) and Measuring Outcomes (MO), including at least 5 hours of RP and 5 hours of MO. The remaining 15 hours can be completed in either RP or MO.
- Remaining 12.5 hours flexible across any category

PDSA cycles are classified under Measuring Outcomes. When a PDSA is run as a practice-based project, the associated education sessions qualify as EA and the data extraction and audit components qualify as RP. Submit each component separately under its correct category via myCPD or your preferred portal as a group or practice-based activity.

Using the GP-led Activity form, one GP can record the activity for multiple GPs on their behalf.