PRP for Knee Osteoarthritis

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A simple guide to knee arthritis, imaging, platelet dose, image-guided PRP and what recovery may involve.

Key message: Knee osteoarthritis now has Level I evidence that PRP can reduce pain and improve function in appropriately selected patients. That does not mean every PRP product is equivalent, every patient responds, or lost cartilage is reliably regrown. Diagnosis, total platelet dose, product composition, accurate delivery and rehabilitation still matter.

What is knee osteoarthritis?

Knee osteoarthritis (OA) is a whole-joint condition. Cartilage loss is important, but pain can also relate to synovial inflammation, bone-marrow change, meniscal degeneration, osteophytes, altered alignment, ligament insufficiency and muscle weakness. The severity of changes on an X-ray or MRI does not

always match the severity of symptoms, so treatment decisions should combine imaging with function, examination and the patient's goals.

Can PRP help knee osteoarthritis?

There is now Level I evidence supporting a clinically useful role for PRP in symptomatic knee osteoarthritis. A 2025 systematic review of Level I randomised trials comparing PRP with hyaluronic acid included 26 trials and 1,650 knees and found significantly better pain and WOMAC outcomes with PRP at 6 and 12 months. A separate network meta-analysis of 48 Level I–II trials found PRP significantly improved pain and function compared with placebo. However, not every high-quality trial is positive: a 2025 placebo-controlled meta-analysis found benefit mainly at 3–6 months and not reliably at 12 months. The correct conclusion is therefore not that PRP works for every arthritic knee, but that there is high-level evidence for pain and functional benefit in selected patients, with substantial heterogeneity in product, dose and patient selection. [1–3]

Why platelet dose matters most clearly in the knee

Knee OA is also the condition in which the relationship between total platelet dose and outcome has been studied most clearly. Recent systematic reviews report better outcomes in trials delivering larger total platelet doses than in lower-dose studies. This does not mean that every knee requires the same number of platelets, or that more is always better. It does mean that "PRP" is not enough information. MBR Health measures the final PRP platelet concentration and records the injected volume so the delivered platelet dose can be understood rather than assumed. [4]

How is the confirmed?

At MBR Health we typically use MRI to provide the most comprehensive assessment of cartilage, marrow, menisci, ligaments, synovitis and other competing pain generators. Ultrasound can assess effusion, synovium and superficial structures. The purpose is to decide whether the main is truly the knee joint, or whether another structure needs treatment instead.

How is PRP delivered?

For intra-articular knee treatment, image guidance can confirm that the needle reaches the joint. Ultrasound is commonly suitable and avoids radiation. In more complex anatomy, previous surgery or when another is being treated at the same time, CT may be selected. A procedural image should always be retained as a record of final needle position.

What should I expect afterwards?

A temporary increase in aching, stiffness or swelling can occur during the first few days. Heavy is usually reduced initially, while gentle motion is maintained. Progressive strengthening, weight management where relevant, sleep, nutrition and rehabilitation remain part of the treatment—not optional extras. Improvement is usually assessed over weeks to months rather than the first few days.

When might PRP not be the right next step?

Severe deformity, major mechanical instability, an acutely locked knee, a displaced meniscal tear, advanced loss of function or symptoms that are clearly arising from another structure may require a different pathway. Some patients with end-stage OA are better served by orthopaedic assessment for joint replacement rather than repeated injections.

Frequently Asked Questions

How many knee PRP injections will I need?

There is no universal three-injection rule – the effect from one injection will often not be fully realised for several months so it is typically preferable to ascertain the outcome from the first injection before booking a second injection. The number should reflect diagnosis, disease severity, the PRP product and response. A pre-sold series is not recommended over a measured treatment plan.

Can PRP delay knee replacement?

Some patients obtain enough symptom and function improvement to defer surgery, but PRP cannot guarantee avoidance of knee replacement. The decision depends on symptoms, structure, function, age, goals and response to non-surgical treatment.

Is high-dose PRP always better?

Dose appears important in knee OA, but the optimal dose is not identical for every patient and the biology, cellular composition, injection accuracy and rehabilitation also matter.

Important: New severe swelling, fever, inability to bear weight after a new injury, a locked knee or rapidly worsening symptoms require medical review rather than routine PRP planning.

Related MBR Health resources

- PRP
- Joint Pain & Osteoarthritis
- 3T MRI
- Ultrasound
- Why Platelet Dose Matters
- Why Image-Guided PRP Matters
- PRP Aftercare

Related Patient Guides

Explore the complete MBR Health condition-specific PRP patient-guide series:

- **PG8000 – PRP for Knee Osteoarthritis (this guide)**
- PG8001 – PRP for Hip Osteoarthritis
- PG8002 – PRP for Shoulder Tendon and Rotator Cuff Problems
- PG8003 – PRP for Tennis Elbow and Golfer's Elbow
- PG8004 – PRP for Achilles Tendinopathy
- PG8005 – PRP for Plantar Fasciitis
- PG8006 – PRP for Gluteal Tendinopathy and Greater Trochanteric Pain
- PG8007 – PRP for Hamstring, Adductor and Tendon Injuries
- PG8008 – PRP for Ligament Injuries
- PG8009 – PRP for Meniscus and Cartilage-Related Knee Pain
- PG8010 – PRP for Sacroiliac Joint Pain
- PG8011 – PRP for Facet Joint Pain
- PG8012 – PRP for Disc-Related Back Pain
- PG8013 – PRP for Neck Pain and Cervical Spine Conditions

- PG8014 – PRP for Foot and Ankle Pain

For other FAQs, please visit the MBR Health FAQs page.

References

[1] Bagheri K, Shekhar A, Kwok E, Dungy D, Stewart SL, Jamali AA. Platelet rich plasma compared to viscosupplementation in the treatment of knee osteoarthritis: a systematic review and meta-analysis of randomised controlled trials with 6 month and 12 month follow-up. J Exp Orthop. 2025;12(3):e70335. doi:10.1002/jeo2.70335.

[2] Jawanda H, Khan ZA, Warrier AA, et al. Platelet-Rich Plasma, Bone Marrow Aspirate Concentrate, and Hyaluronic Acid Injections Outperform Corticosteroids in Pain and Function Scores at a Minimum of 6 Months as Intra-Articular Injections for Knee Osteoarthritis: A Systematic Review and Network Meta-analysis. Arthroscopy. 2024;40(5):1623-1636.e1. doi:10.1016/j.arthro.2024.01.037.

[3] Auroux M, Debionne T, Mainbourg S, Chapurlat R. Efficacy of intra-articular platelet-rich plasma compared with placebo in knee osteoarthritis: a systematic review and meta-analysis. Joint Bone Spine. 2025;92(6):105947. doi:10.1016/j.jbspin.2025.105947.

[4] Berrigan WA, Bailowitz Z, Park A, et al. A Greater Platelet Dose May Yield Better Clinical Outcomes for Platelet-Rich Plasma in the Treatment of Knee Osteoarthritis: A Systematic Review. Arthroscopy. 2025;41(3):809-817.e2. doi:10.1016/j.arthro.2024.03.018.

Looking for the Best Knee PRP or Advanced Knee Arthritis Treatment on the Gold Coast?

Patients searching for the best PRP for knee osteoarthritis on the Gold Coast—or comparing advanced regenerative knee treatment in Brisbane and the Gold Coast—should look beyond the label “PRP”. MBR Health in Mermaid Beach combines specialist radiologist-led assessment, 3T MRI, Spectral CT and ultrasound with measured platelet dose and image-guided delivery. The aim is a precision knee pathway: define the pain generator, select the treatment intentionally, document where it was delivered and measure whether it worked.

General information only. PRP suitability, medication changes, dosing, procedure choice and rehabilitation require individual clinical assessment. Evidence and regulatory requirements continue to evolve.

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