# Evidence Review Summary

**Autologous Platelet Rich Plasma or whole blood injections for epicondylitis**

**Key messages**

This review identified two studies evaluating the effect of Platelet Rich Plasma (PRP) and one evaluating autologous whole blood (AWB) against placebo in patients with epicondylitis.

Although it would appear that at three months PRP and AWB is no more effective than placebo with regards to pain and functional outcomes, the evidence is insufficient to confirm this.

The evidence in support of the long-term effectiveness of PRP is low quality. No evidence has evaluated the long-term effectiveness of AWB.

No significant adverse events were associated with PRP or AWB.

Further high quality research is needed to demonstrate the effectiveness of PRP or AWB in epicondylitis.

**Purpose**

The Transport Accident Commission (TAC) and Victorian WorkCover Authority (VWA) requested a review of the evidence to determine whether PRP or AWB is an effective treatment compared to placebo in patients with epicondylitis. In this review placebo was thought to be the most appropriate comparator given that the effect and safety of other interventions such as corticosteroids is uncertain.

This report sought to answer the following questions:

* What is the effectiveness of autologous PRP/AWB injections on persistent pain from epicondylitis?
* What is the effect of autologous PRP/AWB injections on pain, function, quality of life, return to work, medication use and healthcare utilisation in people suffering from persistent pain from epicondylitis?
* Are there any potential risks or harms from the use of autologous PRP/AWB injections when used in epicondylitis?

**Rationale**

To ensure funding decisions made regarding PRP and AWB injections are evidence-based and in the best interests of injured Victorians.

New research relevant to PRP injections is regularly being published. This review is important for VWA/TAC as it provides an independent, thorough search and quality assessment of the peer-reviewed literature in this area. This can then be used to support funding decisions regarding this treatment. It can also be repeated in the future to incorporate new evidence as it arises.

**Methods**

Systematic review methods were used. A comprehensive search of Medline, Embase, the Cochrane Library, All EBM, and CINAHL was undertaken in April 2014 to identify relevant research. Reference lists of included studies were also scanned to identify relevant references.

Studies identified by the searches were screened for inclusion. In this review studies were only included if they were systematic reviews, randomized controlled trails or controlled clinical trials that investigated the effects of PRP or AWB compared with placebo in patients with epicondylitis. Studies that met the selection criteria were reviewed to identify the most up-to-date and comprehensive source of evidence, which was then critically appraised to determine whether it was of high quality.

**Research findings and implications**

There is insufficient evidence to validate the use of PRP or AWB in clinical practice in patients with epicondylitis. Based on this evidence the TAC and VWA may need to consider whether it is feasible to fund these procedures.

Report no: H-E-14-115.1 RR1

Date: 15 August 2014

ISCRR is a joint initiative of the Victorian WorkCover Authority, the Transport Accident Commission and Monash University. The opinions, findings and conclusions expressed in this publication are those of the authors and not necessarily those of Monash University or ISCRR**.**