

WA chases tennis elbow breakthrough

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WA was leading the world with the launch of the first human trial of tendon regeneration for tennis elbow, a local biotechnology company said.

Orthocell chief executive Paul Anderson said the trial was a milestone for tendon regeneration technology.

"This clinical trial to the best of our knowledge is going to be the first globally," he said.

"It's huge and it really demonstrates the knowledge base that we have here in Western Australia to be able to take cellular therapies from the bench to the bedside."

Mr Anderson said the locally developed technology would meet a big need internationally for treatment of tendon injuries.

Tendon injuries were particularly common in shoulders, ankles, knee joints and elbows.

"The market for tendon regeneration technology is massive, with referrals for musculoskeletal injuries second only to back pain globally," Mr Anderson said this week.

About 15,000 surgeries on tendon damage in the shoulder and about 8000 operations on Achilles heel tendons were carried out each year in Australia, he said.

The injuries were usually treated by surgery or other methods, including corticosteroid injections, but existing treatments did not



Cutting edge: Orthocell's Michelle Olsen in the lab. Picture: Michael Wilson

address the underlying cause of tendon breakdown, Mr Anderson said.

But he said Orthocell's technology aimed to regenerate the tendon rather than repair it, returning the tendon to a pre-injury, healthy state.

Invented by UWA Professor Ming Hao-Zheng, the process involves harvesting a piece of healthy tissue from the patient's body under local anaesthetic at a site different from the location of injury.

The extracted tissue is expanded in the lab and then injected into the damaged area.

Conducted in collaboration with Murdoch University, the first phase of clinical trials will determine the safety of the technology for treating recalcitrant tennis elbow.

Phase two will look at the outcomes and success of regeneration. The process will then be applied to tendon injury in other areas of the body. Orthocell is recruiting patients for the trial from the public hospital waiting list.