



## **PERIPHERAL BLOOD DERIVED PLURIPOTENT STEM CELL TECHNOLOGY**

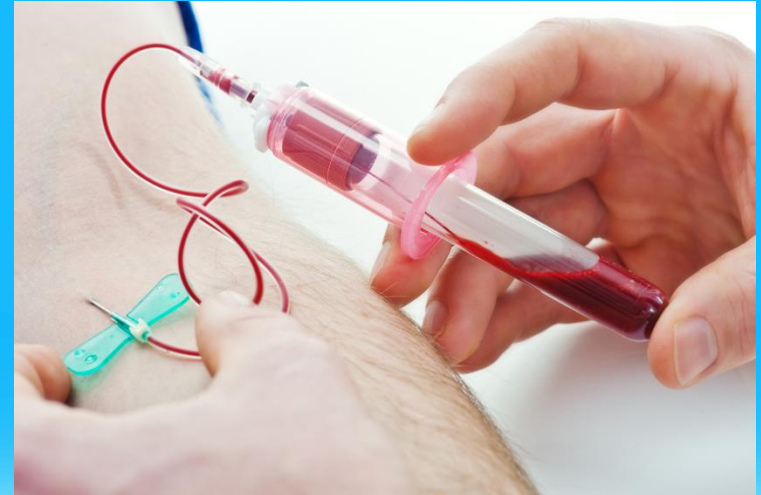
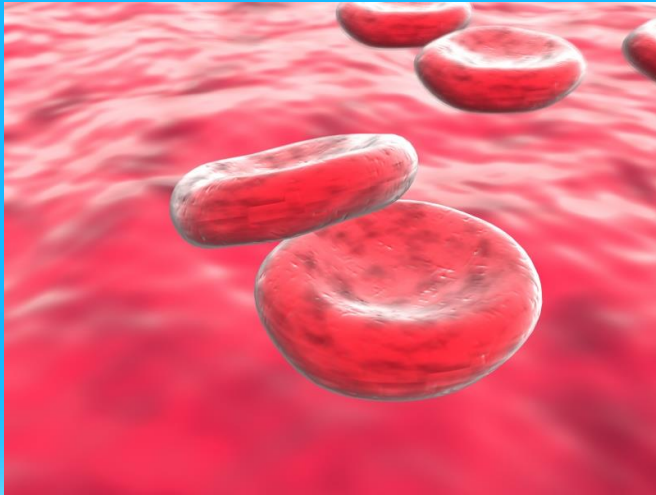
**"PBD-PSC TECHNOLOGY"**

**CASE STUDY:  
PSEUDOARTHROSIS**



## The Latest in Regenerative Medicine Technology

Novel pluripotent stem cells isolated from peripheral blood





Recently Tithon Biotech has discovered an isolated pluripotent stem cell contained in peripheral blood. This stem cell exhibits great potential in both regenerative and therapeutic procedures in humans. In each case these cells are re-delivered through a uniquely designed cell isolation processing device, employing a simple medical procedure commonly used in Platelet Rich Plasma ("PRP") therapies. There are hundreds of thousands of these cells per ml of plasma in the peripheral blood depending on age.



# PBSC-PRP KIT

For the harvesting of a combination of peripheral blood derived pluripotent stem cells and PRP



# PBSC-PRP KIT

Now we can combine the well-known and documented benefits of PRP, a concentration of platelets in plasma, containing many growth and healing factors, that initiate repair and attract the critical assistance of stem cells.



# ORTHOPAEDIC EFFECT

- The images are a compelling case of a post-traumatic, displaced (5mm) C-7 proximal SP Fx, which had failed to heal 9 months post trauma (pseudoarthrosis).



# ORTHOPAEDIC EFFECT

Pre-treatment  
(June, 2015)



Post-treatment  
(October, 2015)



- 4 months post-treatment of PBSC-PRP, the fracture is fully healed.

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As featured on previous slides, what is most surprising is the fact that the new bone formation had to fill a 5mm displaced gap.

If it had been a non-displaced fracture, one could make a case for a delayed spontaneously healed fracture.

In this case, that would be a difficult argument to support.

Similar cases have been observed, however, radiographically this one seems like a great visual way to show the osteoinductive properties of PBD-PSC's in the preparation.

For more information about this technology, please visit:

**[www.tithonbiotech.com](http://www.tithonbiotech.com)**

