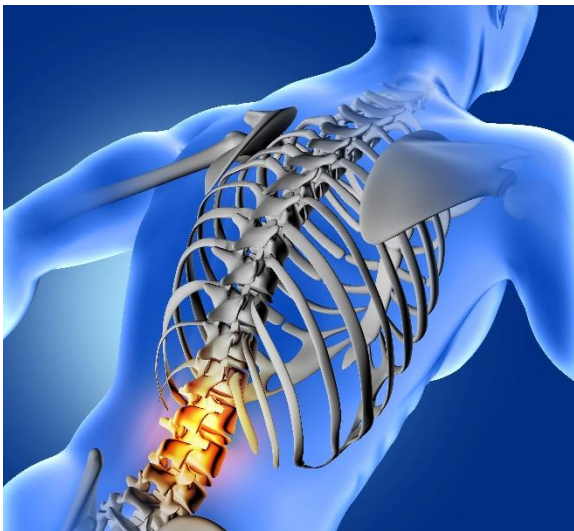


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## SYSTEM AND METHOD FOR REAL-TIME MONITORING PROGRESSION OF LOW BACK PAIN REHABILITATION



### ▶ MORE INFORMATION

#### MEGA-TREND

- Healthcare, Wellness and Well Being (HWW)

#### TECHNOLOGY READINESS LEVEL (TRL)

- TRL 6

#### PATENT/ GRANTED NUMBER

- PI 2020003417

### ▶ TECHNOLOGY OVERVIEW

The present invention discloses a system and a method for monitoring a progression of low back pain rehabilitation in a real-time manner. The system comprises a wearable electromyography, EMG, assembly comprising a plurality of detection electrodes deployed on erector spinae muscles at a lumbar region of vertebrae L4 and L5, a signal detection module, an acquisition and transmission module and an inertia measurement module, and a monitoring and reporting unit deployed on a computing device configured for generating a progression report including a rate of improvement or deterioration associated with the progression of low back rehabilitation of a subject.

The monitoring and reporting unit determines, based on digital EMG signal, a flexion relaxation ratio, FRR, and an extension relaxation ratio, ERR, associated with the said erector spinae muscles, and compares the same against that of a historical data to determine the said rate of improvement or deterioration.

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## CONTACT US!

Dr. Lee Ching Shya

UMCIE Business Officer

Email: [leecs@um.edu.my](mailto:leecs@um.edu.my)

Phone: +603 – 7967 7351 / 7352