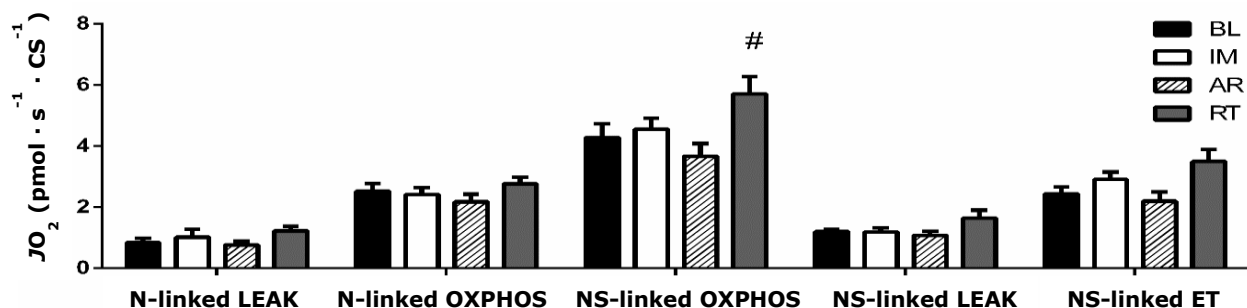


## Exercise recovery increases skeletal muscle H<sub>2</sub>O<sub>2</sub> emission and mitochondrial respiration capacity following two/weeks of limb immobilization

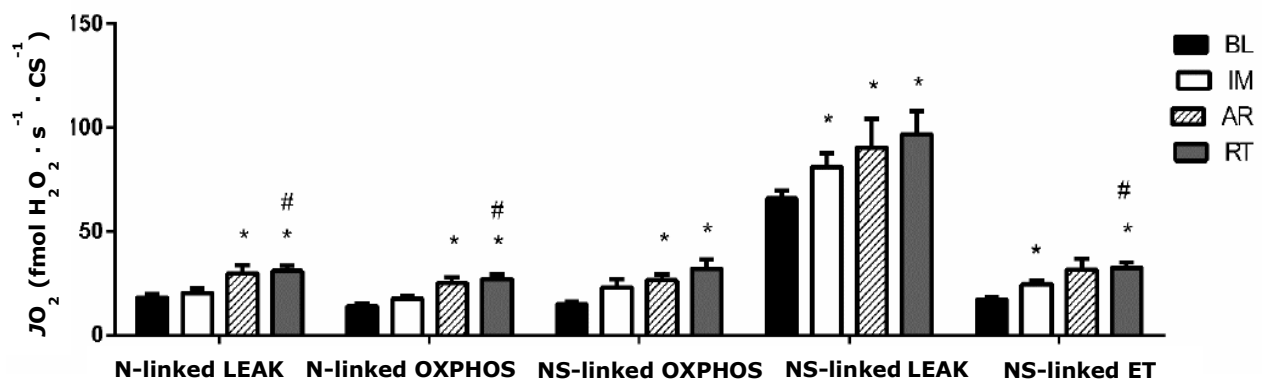
Free Radic Biol Med 124:447-453 (2018).



### Effect of post-ambulatory recovery and supervised resistance training on mitochondrial respiration for permeabilized human muscle fibres before and after limb immobilization



### An increase in the H<sub>2</sub>O<sub>2</sub> production was reported after suffering the immobilization of a limb and recovering the physical activity, suggesting a signalling role of ROS in human muscle remodelling



Fibres. BL: Baseline, IM: 2-weeks immobilization, AR: 2-weeks post ambulatory recovery, RT: 2-weeks of supervised resistance training. *N*=16 patients. Fibres were obtained from the *Vasus lateralis* and permeabilized with saponin before running the high-resolution Fluorescence Respirimetry assessment.

Reference: Pileggi CA, Hedges CP, D'Souza RF, Durainayagam BR, Markworth JF, Hickey AJR, Mitchell CJ, Cameron-Smith D (2018) Exercise recovery increases skeletal muscle H<sub>2</sub>O<sub>2</sub> emission and mitochondrial respiratory capacity following two-weeks of limb immobilization. Free Radic Biol Med 124:447-453.

Figures and texts slightly modified based on the recommendations of the COST Action MitoEAGLE CA15203. Doi:10.26124/mitofit:190001.v3