## Accepted Manuscript

Title: The countermovement jump to monitor neuromuscular status: a meta-analysis

Author: João Gustavo Claudino John Cronin Bruno Mezêncio Daniel Travis McMaster Michael McGuigan Valmor Tricoli Alberto Carlos Amadio Julio Cerca Serrão



PII:	\$1440-2440(16)30154-2
DOI:	http://dx.doi.org/doi:10.1016/j.jsams.2016.08.011
Reference:	JSAMS 1371
To appear in:	Journal of Science and Medicine in Sport
Received date:	29-1-2016
Revised date:	18-7-2016
Accepted date:	18-8-2016

Please cite this article as: {http://dx.doi.org/

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

## ACCEPTED MANUSCRIPT

<AT>The countermovement jump to monitor neuromuscular status: a meta-analysis <AU>João Gustavo Claudino<sup>a,b\*</sup> ##Email##claudinojgo@usp.br##/Email##, John Cronin<sup>b,c</sup>, Bruno Mezêncio<sup>a</sup>, Daniel Travis McMaster<sup>b</sup>, Michael McGuigan<sup>b,c</sup>, Valmor Tricoli<sup>d</sup>, Alberto Carlos Amadio<sup>a</sup>, Julio Cerca Serrão<sup>a</sup>

<AFF><sup>a</sup>University of São Paulo, School of Physical Education and Sport - Laboratory of Biomechanics, Brazil

<AFF><sup>b</sup>Auckland University of Technology, Sport Performance Research Institute New Zealand

<AFF><sup>c</sup>Edith Cowan University, School of Exercise and Health Sciences, Australia <AFF><sup>d</sup>University of São Paulo, School of Physical Education and Sport - Laboratory of Adaptations to Strength Training, Brazil

<AFF><sup>a</sup>Address: 65 Professor Melo Moraes Avenue, Cidade Universitária, São Paulo – SP, 05508-030. Brazil. Phone number: +55 (11) 3091-3184.

<AFF><sup>b</sup>Address: 17 Antares Place Mairangi Bay, North Shore City, Private Bag 92006 Auckland 1020. New Zealand. Phone number: 921 9999 ext 7580.

<AFF><sup>c</sup>Address: 19 Joondalup Campus, Building, Room 19, 118 Mount Lawley Campus, Building 13.148 270 Joondalup Drive Joondalup WA 6027. Australia. Phone number: 134 ECU (134 328).

<AFF><sup>d</sup>Address: 65 Professor Melo Moraes Avenue, Cidade Universitária, São Paulo – SP, 05508-030. Brazil. Phone number: +55 (11) 3091-8796

<PA>\*Corresponding author at: Address: Professor Melo Moraes Avenue 65, Cidade

Universitária, São Paulo - SP, Brazil. 05508-030. Tel.: +55 (11) 3091-3184.

## <ABS-HEAD>Abstract

<ABS-P><ST>Objectives</ST> The primary objective of this meta-analysis was to compare

countermovement jump (CMJ) performance in studies that reported the highest value as

opposed to average value for the purposes of monitoring neuromuscular status (i.e. fatigue

and supercompensation). The secondary aim was to determine the sensitivity of the dependent

variables.

<ABS-P><ST>Methods</ST> The meta-analysis was conducted on the highest or average of a number of CMJ variables. Multiple literature searches were undertaken in Pubmed, Scopus, and Web of Science to identify articles utilizing CMJ to monitor training status. Effect sizes (ES) with 95% confidence interval (95% CI) were calculated using the mean and standard deviation of the pre- and post-testing data. The coefficient of variation (CV) with 95% CI was also calculated to assess the level of instability of each variable. Heterogeneity was assessed using a random-effects model. Download English Version:

## https://daneshyari.com/en/article/5574040

Download Persian Version:

https://daneshyari.com/article/5574040

Daneshyari.com