

A Coruña, December 2nd, 2019

Dear Editor,

We are really pleased to submit our manuscript entitled "**Autophagic Flux-Based Screening Assay for the Identification of Autophagy Modulators for Osteoarthritis**" as an Article.

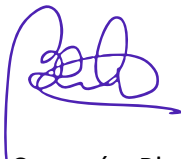
Rheumatology diseases, in particular Osteoarthritis have been the focus of our research for many years. Our multidisciplinary team has generated knowledge not only about molecular basis underlying disease but also on novel mechanistic and therapeutic hypothesis with translational potential.

Autophagy is a central mechanism to regulate homeostasis. Alterations of autophagy contribute to aging-related diseases. Phenotypic methods to identify regulators of autophagy could be used for the identification of novel therapeutics. Here, we develop a cell-based imaging screening workflow for monitoring autophagic flux by using LC3 as a reporter of autophagic flux (mCherry-EGFP-LC3B) in human chondrocytes. Physiologically relevant phenotypic approaches targeting hallmarks of aging can facilitate more effective drug discovery and drug development strategies for age-related musculoskeletal diseases.

On behalf of our research team, we thank you in advance and look forward to your editorial decision.

We declare that the material is original research that has not been previously published and has not been submitted for publication elsewhere while under consideration. We also declare no conflict of interest.

With our best regards,



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