## Biologic Disease-Modifying Antirheumatic Drugs survival and safety in Late-onset axial Spondyloarthritis – data from a Portuguese Registry

## **RESEARCH TEAM**

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## **ABTRACT**

**Rationale:** Axial spondyloarthritis (axSpA) symptoms usually begin before 45 years old, but due to longer duration of life expectancy and improved health services, late-onset axSpA (Lo-axSpA) is being more recognized. Previous studies have shown different clinical characteristics, however data regarding safety or efficacy of biological Disease-Modifying Drugs (bDMARDs) in Lo-axSpA are scarce and it seems important to us to understand if bDMARD efficacy is influenced by Lo-axSpA, or by the age of treatment onset.

**Aim:** To evaluate drug survival and safety of bDMARDs treatment in Lo-axSpA patients in comparison to those with early-axSpA (E-axSpA).

**Methods:** Retrospective multicentre national cohort study, with patients with a diagnose of axSpA, registered in Reuma.pt, the Portuguese registry of patients with rheumatic and musculoskeletal diseases.

Analysis plan: Patients will be divided into 2 groups based on their age at symptom onset: E-axSpA (age <45 years); and Lo-axSpA (age ≥45 years), accordingly to the Assessment of Spondyloarthritis International Society (ASAS) classification criteria. Generalized linear mixed models will be used to evaluate the group differences in BASDAI, ASDAS-CRP and ASDAS-ESR, and BASFI. Drug survival will be calculated as time in months from initiation of bDMARD until discontinuation/switch. Log-rank test will be used to calculate persistence rate in biologic treatment.

**Expected results:** We expect to evaluate the response to bDMARDs in Lo-axSpA patients to understand if it is a different entity, with the need of a customized management.

**Ethics:** The study will be conducted according to the principles of the Declaration of Helsinki and the International Guidelines for Ethical Review of Epidemiological Studies.