Review
Role of stem cells in spondyloarthritis: Pathogenesis, treatment and complications

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A B S T R A C T
Spondyloarthritides (SpA) is a family of interrelated inflammatory arthritis that includes ankylosing
spondylitis (AS), psoriatic arthritis, reactive arthritis, arthritis related to inflammatory bowel disease
and undifferentiated SpA. The classification, epidemiology, pathogenesis and treatment of SpA have been
extensively reviewed in the published literature. Reviewers on the use of stem cells in various autoimmune
diseases in general are also common. However, a review on the role of stem cells in SpA is currently
lacking. This review focuses on the involvement of stem cells in the pathogenesis of SpA and the application
of different types of stem cells in the treatment of SpA. It also addresses some of the complications which
may arise as a result of the use of stem cells in the treatment of SpA.
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1. Introduction

Spondyloarthritis or spondyloarthropathy (SpA) is a family of inflammatory arthritis including the prototype
ankylosing spondylitis (AS) and several related diseases, namely, psoriatic arthritis, reactive arthritis, arthritis
related to inflammatory bowel disease (enteropathic arthritis) and undifferentiated SpA. These

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reserved.
Evolution of the total number of citations and journal's self-citations received by a journal's published documents during the three previous years.

Cites per Document vs. External Cites per Document

Evolution of the number of total cites per document and external cites per document (i.e. journal self-citations removed) received by a journal's published documents during the three previous years.

Cites per Document in 2, 3 and 4 years windows

Evolution of Citations per Document to a journal's published documents during the two, three and four previous years. The two years line is equivalent to journal impact factor ** (Thomson Reuters) metric.

International Collaboration
International Collaboration accounts for the articles that have been produced by researchers from several countries. The chart shows the ratio of a journal's documents signed by researchers from more than one country.

Journal's Citable vs. Non Citable Documents

Not every article in a journal is considered primary research and therefore "citable", this chart shows the ratio of a journal's articles including substantial research (research articles, conference papers and reviews) in three year windows.

Journal's Cited vs. Uncited Documents

Ratio of a journal's items, grouped in three years windows, that have been cited at least once vs. those not cited during the following year.