

NOVEL THERAPIES IN OSTEOARTHRITIS CURRENT STATUS AND PERSPECTIVES

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Osteoarthritis (OA) remains a major contributor to disability worldwide, placing a significant burden on healthcare systems. Current treatment strategies predominantly focus on symptom management rather than halting or reversing disease progression, highlighting an urgent need for disease-modifying interventions. Recent advancements in drug discovery and regenerative medicine have increasingly shifted toward targeted OA therapies aimed at preventing, mitigating, and even reversing degenerative structural changes within the joint.

Among emerging regenerative approaches, orthobiologics such as platelet-rich plasma (PRP), bone marrow concentrate (BMC), and micro/nano-fractionated adipose tissue have demonstrated potential in enhancing joint repair and improving clinical outcomes. Additionally, several advanced therapy medicinal products (ATMPs) addressing cartilage defects have received regulatory approval in Europe, offering novel therapeutic avenues for OA management.

This presentation provides a critical analysis of the evolving OA treatment landscape, emphasizing the role of orthobiologics and ATMPs in disease prevention and structural repair. Furthermore, it explores the regulatory status, economic impact, and accessibility challenges associated with these advanced therapies within the European healthcare framework, highlighting opportunities for optimizing their clinical integration.