TITLE: Enhancing Post-Injury Rehabilitation: A Focus on Prehabilitation for Athletes

**BACKGROUND:** In the United States, approximately 23.8% of high-school sports injuries necessitate surgery. Of these cases, 10% face re-injury, often resulting in extended time away from the sport. Additionally, recurrent injuries are more frequently treated surgically than new injuries. Athletes' specific need to return to their sport emphasizes the critical need for effective prehabilitation. If administered correctly, prehabilitation has the potential to provide athletes with the most efficient rehabilitation protocols, increasing the likelihood of a prompt return to their respective sports.

**PURPOSE:** This systematic review aims to assess evidence-based benefits of pre-surgery rehabilitation following an injury, with the overall goal of contributing to the enhancement of athletes' return-to-sport rates after undergoing surgical intervention.

**RESULTS:** All 17 studies analyzed in the systematic review concluded there were only neutral or positive effects in cases of prehabilitation administered to athletes or those who underwent similar injuries athletes are prone to. Prehabilitation can be considered a safe and evidence-based intervention that aims to increase return-to-sport and general recovery experiences, cut down on administrative burden and provide a patient with a more optimistic view of returning to their prior level of function.

**CONCLUSION:** No negative outcomes were identified, and multiple studies consistently demonstrated positive outcomes. This systematic review contends that prehabilitation stands as an important component in the comprehensive rehabilitation process for athletes.

**DISCUSSION:** Higher level evidence research needs to be done on whether prehabilitation is most effective when prescribed with specific parameters and if so, the details of what the parameters would entail. Future studies that have a majority sample size made up of athletes are needed to obtain data that may further support prehabilitation protocol(s) for athletes.