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## ORIGINAL RESEARCH TWO YEAR ACL REINJURY RATE OF 2.5%: OUTCOMES REPORT OF THE MEN IN A SECONDARY ACL INJURY PREVENTION PROGRAM (ACL-SPORTS)

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## ABSTRACT

**Background:** The Anterior Cruciate Ligament-Specialized Post-Operative Return to Sports (ACL-SPORTS) randomized control trial (RCT) examined an evidence-based secondary ACL injury prevention training program, involving progressive strengthening, agility training, and plyometrics. The RCT examined the benefit of the training program with and without a neuromuscular training technique called perturbation training.

*Hypothesis/Purpose:* The purpose of this study was to report the return to sport and second ACL injury incidence outcomes of the men in the ACL-SPORTS trial.

Study Design: Secondary analysis of a RCT

*Methods:* Forty cutting and pivoting sport male athletes participated in the ACL-SPORTS trial, return to sport testing, and in follow-up sessions at one and two years after ACL reconstruction. Variables of interest at one and two years were return to sport, return to preinjury level of sport, and second ACL injuries. Mean time to passing return to sport criteria, the number of athletes returning to sport and preinjury level of sport and the incidence proportion of second ACL injuries were calculated.

**Results:** Athletes passed return to sport criteria  $232 \pm 99$  days after ACLR. One year after ACL reconstruction 95% had returned to sport, 78% at their preinjury level. Two years after ACL reconstruction all athletes had returned to sport, 95% at their preinjury level and only one athlete had a second ACL injury.

*Conclusions:* The results of this study indicate that men in the ACL-SPORTS trial had much higher return to sport rates and much lower second ACL injury rates than those reported in the literature.

Level of Evidence: 1b

Key Words: Anterior cruciate ligament, sport, athletes, return to sport, second injury, rehabilitation

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