

ACL Reconstruction with Bone-Patellar Tendon-Bone (BTB) Autograft and Meniscal Repair Inside-Out Rehabilitation Protocol

	Weight-bearing	Brace	Range of Motion	Exercises
Phase 1 0-2 weeks	Heel touch with crutches ^a	0-2 week: Locked in full extension for ambulation and sleeping Off for exercises and hygiene only	Gentle Passive 0-90° by 2 weeks	Calf pumps, patellar mobilization, quadriceps tightening sets and SLR in brace . No weight-bearing motion.
Phase 2 2-12 weeks	2-4 weeks: 50% weight bearing with brace unlocked 0-90° 4-8 weeks: Progress to full with brace unlocked 0-90° and discontinue brace at 6 weeks.	2-6 weeks: Unlocked 0-90° for ambulation, remove for sleeping ^b Discontinue at 6 weeks if quadriceps control is adequate (no extension lag)	Gain full and pain-free	Add side-lying hip and core, advance quad set and stretching ^a In brace: Addition of heel raises, total gym (closed chain), gait normalization, eccentric quads, eccentric hamstrings. Advance core work with hip, gluteal and core strengthening No weight-bearing with flexion >90° Begin toe raises, closed chain quads, balance exercises, hamstring curls, stationary bike, step-ups, front and side planks, hip/glute/core Begin Stationary Bike at 8 weeks
Phase 3 12-16 weeks	Full with a normalized gait pattern	None	Full	Advance closed chain strengthening Progress proprioception activities Elliptical at 12 weeks (low flexion angles) Running straight at 14-16 weeks when 8" step down is satisfactory
Phase 4 16 weeks – 6 months	Full	None	Full	16 weeks: Begin jumping 20 weeks: Advance running to sprinting, backward running, cutting, pivoting, changing direction, initiate plyometric program and sport-specific drills 22 weeks: Advance as tolerated FSA completed at 22 weeks ^b
Phase 5 6-12 months	Full	None	Full	Gradual return to sports participation after completion of functional sports assessment (FSA) Maintenance program based on FSA

SLR – Straight-leg raise

^aModified with concomitantly performed meniscus repair/transplantation or articular cartilage procedure

^bCompletion of FSA (Functional Sports Assessment) is not mandatory, but is recommended at approximately 22 wks post-op for competitive athletes returning to play after rehabilitation