## ACL Reconstruction with Bone-Patellar Tendon-Bone (BTB) Allograft Rehabilitation Protocol

<table>
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<th>Phase</th>
<th>Weight-bearing</th>
<th>Brace</th>
<th>Range of Motion</th>
<th>Exercises</th>
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| **Phase 1**  
0-4 weeks | Full in brace<sup>a</sup> | **0-2 weeks:** Locked in full extension for ambulation and sleeping  
2-4 weeks: Unlocked for ambulation, remove for sleeping<sup>b</sup> | As tolerated 0-90° by 2 weeks | Heel slides, quadriceps/hamstring sets, patellar mobilization, calf (gastrocnemius/soleus) stretch  
SLR w/ brace in full extension until quadriceps strength prevents extension lag  
Side-lying hip/core |
| **Phase 2**  
4-12 weeks | Full, progressing to normal gait pattern | Discontinue at 4 weeks if quadriceps control is adequate (no extension lag) | Gain full and pain-free | Begin toe raises, closed chain quads, balance exercises, hamstring curls, stationary bike, step-ups, front and side planks, hip/glute/core |
| **Phase 3**  
12-16 weeks | Full with a normalized gait pattern | None | Full | Advance closed chain strengthening  
Progress proprioception activities  
Begin stair climber, elliptical at 8 weeks and running straight at 12 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<sup>b</sup> |
| **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 |

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<sup>a</sup>Modified with concomitantly performed meniscus repair/transplantation or articular cartilage procedure  
<sup>b</sup>Completion 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

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SLR – Straight-leg raise