

## Patellofemoral Cartilage Allograft

	<b>Phase I: 0 - 2 weeks</b>	<b>Phase II: 3 - 8 weeks</b>	<b>Phase III: 9 - 12 weeks</b>
Weight-Bearing and Immobilization	<ul style="list-style-type: none"> <li>• TTWB with crutches and brace locked in full extension</li> <li>• Brace locked in full extension when sleeping</li> <li>• Brace may be unlocked while sitting according to motion parameters below</li> </ul>	<ul style="list-style-type: none"> <li>• WBAT with with brace locked in full extension when ambulating</li> <li>• Brace may be unlocked while sitting according to motion parameters below</li> </ul>	<ul style="list-style-type: none"> <li>• WBAT</li> <li>• Discontinue brace when no extension lag and quadriceps strength adequate for ambulation</li> </ul>
Aerobic	<ul style="list-style-type: none"> <li>• None</li> </ul>	<ul style="list-style-type: none"> <li>• None</li> </ul>	<ul style="list-style-type: none"> <li>• Stationary bike for ROM (low resistance)</li> </ul>
Range of Motion (ROM) and Strengthening	<ul style="list-style-type: none"> <li>• ROM: 0 - 30°</li> <li>• Isometric quad sets</li> <li>• Straight-leg raises</li> <li>• Ankle pumps</li> </ul>	<ul style="list-style-type: none"> <li>• Continue Phase I exercises</li> <li>• Progress ROM as follows:               <ul style="list-style-type: none"> <li>▸ Weeks 3-4: 0 - 60°</li> <li>▸ Weeks 5-6: 0 - 90°</li> <li>▸ Weeks 7-8: 0 - 110°</li> </ul> </li> <li>• Clamshells</li> <li>• Hamstring isometrics</li> </ul>	<ul style="list-style-type: none"> <li>• Continue Phase II exercises</li> <li>• Progress PROM / AAROM / AROM to achieve full motion</li> <li>• Squats at 0 - 60°</li> <li>• Wall sits 0 - 60°</li> <li>• Lunges at 0 - 60°</li> <li>• Closed chain terminal extension exercises at 0 - 30°</li> <li>• Calf raises</li> <li>• Weight-shifts and balance</li> <li>• Bridging progression</li> <li>• Begin stepping program               <ul style="list-style-type: none"> <li>▸ step ups</li> <li>▸ step downs</li> <li>▸ lateral step downs</li> </ul> </li> </ul>
Goals	<ul style="list-style-type: none"> <li>• Pain control</li> <li>• Protect tissue healing</li> </ul>	<ul style="list-style-type: none"> <li>• Pain control</li> <li>• Protect tissue healing</li> <li>• Progress ROM</li> </ul>	<ul style="list-style-type: none"> <li>• Gait Training</li> <li>• Achieve full ROM</li> <li>• Balance</li> <li>• Early strengthening</li> </ul>

	<b>Phase IV: 12 - 36 weeks</b>	<b>Phase V: &gt;6 months</b>
Weight-Bearing and Immobilization	<ul style="list-style-type: none"> <li>• WBAT</li> </ul>	<ul style="list-style-type: none"> <li>• WBAT</li> </ul>
Aerobic	<ul style="list-style-type: none"> <li>• Stationary bike progression</li> <li>• Elliptical machine</li> <li>• Begin walk-jog program as tolerated</li> </ul>	<ul style="list-style-type: none"> <li>• Advance as tolerated</li> </ul>
Range of Motion (ROM) and Strengthening	<ul style="list-style-type: none"> <li>• Continue Phase III exercises</li> <li>• Progress strengthening and open chain exercises</li> <li>• Squats to 100°</li> <li>• Single-leg squats</li> <li>• Progress core muscle strengthening</li> <li>• Progress gluteal muscle strengthening</li> <li>• Progress low-impact exercises</li> </ul>	<ul style="list-style-type: none"> <li>• Continue Phase IV exercises</li> <li>• At 9 months, may begin sport-specific agility and training exercises</li> <li>• At 12 months, may return to competitive sports as tolerated</li> </ul>
Goals	<ul style="list-style-type: none"> <li>• Progress aerobic activity</li> <li>• Progress strengthening exercises</li> </ul>	<ul style="list-style-type: none"> <li>• Progress aerobic activity</li> <li>• Progress strengthening exercises</li> <li>• Return to sport-specific activity</li> </ul>