Femoral Osteochondral Allograft Protocol

	Phase I: weeks 0-2	Phase II: 3-6 weeks	Phase III: weeks 7-8	
Weight-Bearing and Immobilization	 TTWB only with crutches Brace locked in full extension while ambulating and sleeping Brace may be unlocked 0-90° when completing PROM exercises 	TTWB only with crutchesMay discontinue brace when comfortable	Advance weight-bearing by 25% per week until WBATGait training	
Aerobic	• None	• None	• None	
Range of Motion (ROM) and Strengthening	 PROM 0-90° (except as noted above while ambulating and sleeping) Isometric quad sets Patellar mobilization Straight-leg raises (with brace) Ankle pumps 	 Continue Phase I exercises PROM and AAROM as tolerated Tib/Fib joint mobilization Hamstring sets Gluteal sets Straight-leg raises (without brace) Side-lying hip and core strengthening 	Continue Phase II exercises	
Other	Modalities as needed to reduce pain/swelling and for muscle re-education Home Exercise Program (HEP) per discretion of Physical Therapist			
Goals	 Pain control Protection of tissue healing Minimize joint stiffness 	 Pain control Protection of tissue healing Regain full ROM Begin light muscle conditioning 	 Protection of tissue healing Achieve full ROM if not attained already Advancement of Phase II exercises 	

	Phase IV: weeks 9-12	Phase V: months 3-6	Phase VI: months 6+	
Weight-Bearing and Immobilization	Advance weight- bearing by 25% per week until WBATGait training	• WBAT		
Aerobic	• None	May begin biking, elliptical machine, and pool exercises (no impact or running exercise)	May begin walk-jog-run progression (Alter-G if available)	
Range of Motion (ROM) and Strengthening	 Continue Phase III exercises Begin closed-chain exercises Wall sits Shuttle Mini squats Toe raises Begin unilateral stance activities and balance training 	Continue Phase IV exercises Advance exercise as tolerated with focus on maximizing core, gluteal, quadriceps, and hamstring	 Continue Phase V exercises Transition to sport-specific training May begin plyometrics and dynamic loading exercises at 8 months 	
Other	Modalities as needed to reduce pain/swelling and for muscle re-education Home Exercise Program (HEP) per discretion of Physical Therapist			
Goals	WBATBegin closed-chain strengtheningBegin balance exercise	Progress strengtheningBegin aerobic exercise	 Progress aerobic exercise Advance to sport-specific and more dynamic activities as tolerated 	