<table>
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<tr>
<th>TIMELINE</th>
<th>GOALS</th>
<th>EXERCISES/METHODS</th>
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<tbody>
<tr>
<td>Early Post-operative-Day 1-week 4</td>
<td>+Control swelling, inflammation +Obtain terminal knee extension/hyperextension +Obtain SLR without lag +Initiate regaining knee flexion +Restore leg control</td>
<td>Extension: Heel prop, calf (with ext) and GENTLE hamstring and gastroc stretches, Quad sets (electrical stimulation prn), 3 way SLR with brace, superior patellar mobs Flexion: inferior patellar mobs, passive knee flexion(no activation of HS), wall slides, seated knee flexion stretches passively No open chain hamstring strengthening or isolated hamstring exercises Scar mobilization once incision is healed</td>
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<td>PCL:</td>
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<td>• Avoid posterior tibial sag, avoid tibial external rotation x 4 months. • Hold open chain hamstring exercise x 4 months.</td>
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<td><strong>Milestones to reach by end of week 2:</strong> Full knee extension SLR without quad lag</td>
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<td><strong>Weeks 4-10</strong> +Begin to normalize gait weeks 6-8 +Knee flexion 100-125 degrees +Normalized gait +Quad control with functional movements including step up/down, squat, partial lunge(not to exceed 60 degrees) Avoid posterior tibial sag, avoid tibial external rotation x 4 months. Hold open chain hamstring exercise x 4 months.</td>
<td><strong>Continue as above, avoid hip extension secondary to hamstring restrictions</strong> Ankle dorsiflexion and plantarflexion with manual resistance Week 8 Closed chain quad strengthening (squats, SAQs, TKEs, step ups and downs) Gait drills Balance drills with brace Hip and core strengthening Upper body circuit training or UBE</td>
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<td><strong>Week 8 can unlock the brace</strong></td>
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<td><strong>Milestones to reach by end of week 6:</strong> Normalized gait without assistive device (except PCL– PCL brace during gait until 6 months) Full knee extension ROM and flexion greater than 125° Min to no swelling</td>
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**BRACING**
- Full Ext x 4 weeks
- Progressive Increase to 90 from 4-8
- Full ROM by 8
- If PCL: Ossur PCL dynamic brace for 6 months after immobilizer instead of IROM

**ROM RESTRICTIONS**
- 0-90 for 6 weeks

**WEIGHT BEARING**
- NWB for 6 weeks
- 50% Week 7
- 75-100% week 8

**OTHER RESTRICTIONS AND KEY CONSIDERATIONS**
LCL: no varus stress 12 wks
MCL: no Valgus Stress 12 wks
PCL: ROM prone for 1st 2 weeks
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<td>Weeks 10-16</td>
<td>+Good single leg control  +Single leg stance&gt;30 seconds</td>
<td>Progression to multiplane quad strengthening and open chain exercises  Non-impact balance and proprioceptive drills  Stretching for patient specific muscle imbalances  Stationary bike</td>
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<td>Weeks 16-24</td>
<td>+Good dynamic neuromuscular control and no pain with multiplanar activities  +Initiation of impact activities when 80% strength is reached compared to uninvolved</td>
<td>Single leg mini squat (0-45), static squat holds with RNT/dynamic core training, triple flexion/extension (running prep) progressing toward full WB running, trampoline bounding, slideboard/fitter, plyometric progression  Low intensity plyometrics  Stairmaster  Alter G, straight line jogging</td>
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<td>Weeks 24+</td>
<td>+Sports specific progression and training  +Control when landing from sagittal, frontal, and transverse planes</td>
<td>Initiate running program gravity resisted (may begin at week 20)  Movement control exercises  Specific balance and proprioceptive drills</td>
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**SHOWERING**

1. May Shower day 1 after surgery
2. Must “waterproof” surgical site for 5 days after surgery
3. No submerging wounds for 4 weeks

**WOUND CARE**

1. Remove everything except steri strips the day after surgery
2. Place clean gauze or op-site on wounds daily for 5 days

**MEDICATIONS**

1. Pain medicine only as needed. Wean off as soon as possible
2. Don’t over-use NSAIDS
3. Aspirin 325mg daily for 1 month for DVT prophylaxis
## Pre-RTP Criteria before testing can commence

- Full AROM
- Resolution of pain
- No/Trace joint effusion present
- MMT grossly 5/5 strength in LE
- LEFS: ≥ 75/80 (95%)
- Lysholm Knee Rating: ≥ 95%
- 1RM SL Leg Press ≥ 90% contralateral side
- 1RM SL Hamstring Curl ≥ 90% contralateral side

| Lower Limb Symmetry Index (LSI): LSI % (mean score of 3 trials on injured limb/ mean score of 3 trials on uninjured limb) x 100 | SL Hop: ≥ 90%
|                                                                                                                     | SL Triple Hop: ≥ 90%
|                                                                                                                     | SL 6 meter Timed Hop: ≥ 90%
|                                                                                                                     | SL Cross-over Hop: ≥ 90%
|                                                                                                                     | Overall Score: ≥ 90%

| Vail Sports Tests:                                                                                                      | Passing Score ≥ 46/54 (85%)
|                                                                                                                      |

| Tuck Jump Assessment (TJA):                                                                                     | perfect score on the TJA or improvement of 20 percentage points from the initial score
|                                                                                                                   |

| Single Leg Squat: No Errors in Form (Errors listed right)                                                        | Arm strategy: removal of hand off the waist
|                                                                                                                     | Trunk alignment: leaning in any direction
|                                                                                                                     | Pelvis plane: loss of horizontal plane
|                                                                                                                     | Knee position: tibial tuberosity medial to second toe or tibial tuberosity medial to medial border of foot
|                                                                                                                     | Steady stance: subject stepped down on non-tested limb, or foot wavered from side-to-side
|                                                                                                                   |

| Modified Star Balance Excursion Test (Y Balance Test):                                                              | SEBT % = ((mean score of 3 trials in anterior distance + mean score of 3 trials in posterior lateral distance + mean score of 3 trials in posterior medial distance)/ leg length of stance limb) x 100. Passing Score ≥ 94%
|                                                                                                                   |

| Core Testing: (ongoing research): ≥ 90% of all standard timed tests:                                              | Right Single Leg Bridge: Men 95 seconds; Females 75 seconds
|                                                                                                                     | Left Single Leg Bridge: Men 99 seconds; Females 78 seconds
|                                                                                                                     | Flexor Endurance Test: Men 136 seconds; Females 134 seconds
|                                                                                                                     | Extensor Endurance Test: Males 160 seconds; Females 185 seconds
|                                                                                                                     | Lower Abdominal Muscle Testing: Males 5/5; Females ≥ 4/5
|                                                                                                                     | (75°=3/5, 60°=3+/5, 45°=4-/5, 30°=4/5, 15°=4+/5, 0°=5/5)

## RTP INSTRUCTIONS

RTP evaluation can progress throughout treatment as appropriate

## PRE-RTP

Complete all testing in Pre-RTP section. Only Continue on when able to pass

## SESSION 1

LSI, Vail Sports, TJA

## SESSION 2

Single leg squat, Y Balance, Core Testing