<table>
<thead>
<tr>
<th>Postoperative period</th>
<th>Bracing</th>
<th>Range of motion</th>
<th>Weightbearing</th>
<th>Exercises</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Day 1</strong></td>
<td>- Use knee immobilizer at 10-30° of knee flexion</td>
<td>- Obtain full passive extension (0°) out of immobilizer (essential)</td>
<td>- Protected weight bearing with crutches</td>
<td>1. Ankle pumps</td>
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<tr>
<td><strong>Day 7-13 (Week 2)</strong></td>
<td></td>
<td>- Continue passive extension to 0° - Active assisted knee flexion (Goal: 90° of flexion)</td>
<td>1-5</td>
<td>6. Knee extension with band (range: 90 → 70° knee flexion) 7. Static squats (bodyweight)</td>
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<tr>
<td><strong>Week 5-6</strong></td>
<td>- Achieve full extension - Active assisted knee flexion (Goal: 120° of flexion)</td>
<td>1-7</td>
<td>8. Hamstring curls with band (range: 45 → 90° knee flexion) 9. Half-squat (bodyweight, range: 30 to 90° knee flexion)</td>
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<td><strong>Week 7-8</strong></td>
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<td></td>
<td>3-9</td>
<td>10. Biking as tolerated to 30 minutes (low resistance) 11. Standing calf raises with/without support 12. Step-ups 2-4&quot;</td>
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<tr>
<td><strong>Week 9-12</strong></td>
<td>- Gait without bracing</td>
<td>- Achieve passive flexion to 140°</td>
<td>8-12</td>
<td>13. Knee extension with band (range: 90 → 30° knee flexion) 14. Step-ups 6-8&quot; 15. Quick walk</td>
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<td><strong>Week 15-16</strong></td>
<td></td>
<td></td>
<td>10-13, 16-20</td>
<td>21. Split squat 22. Lunge 23. Treadmill/Jogging (level surfaces only, straight line), 100m x 10</td>
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<td><strong>Week 17-20</strong></td>
<td></td>
<td>- Achieve near full flexion</td>
<td>13, 16-21</td>
<td>24. Jogging* 20 minutes at 10-12km/h, 2 sets 25. Balance drills*</td>
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<td><strong>Week 21-24</strong></td>
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<td></td>
<td>13, 16-21, 24, 25</td>
<td>26. Gait drills*</td>
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<tr>
<td>*<em>Week 25-28 (6 months---)<em>1</em></em></td>
<td></td>
<td></td>
<td>13, 16-21</td>
<td>27. Agility drills* 28. Landing drills*</td>
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<td><strong>Week 29 ---</strong></td>
<td></td>
<td></td>
<td>30. Return to sport skills on own at practice with minimal risk of re-injury*2</td>
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</table>

1. Quadriceps/thigh circumference should be within 1 cm of nonoperative side at 6 months.
2. No competitive or pivot sports until cleared by surgeon.
**Jogging in the park or athletic field**
- Before starting running drills, check if complete single leg sit-to-stand-to-sit sequence is achieved (single leg sit-to-stand test or chair stand test).
- Start slowly and progress to the next level only if there is no pain, swelling or instability.

  [Week 1]
  **Day 1:** Jogging (level surfaces only, straight line) 100m x 2
  Jogging 300-400m in a clockwise direction and 300-400m in a counter-clockwise direction
  **Day 2:** Jogging 500-600m in a clockwise direction and 500-600m in a counter-clockwise direction
  **Day 4:** Jogging 800m in a clockwise direction and 800m in a counter-clockwise direction
  **Day 6:** Jogging 1000m in a clockwise direction and 1000m in a counter-clockwise direction

  [Week 2~]
  Jogging 20 minutes at 10-12km/h, 1-2 sets

**Balance drills**
- Single leg balance, eyes closed
- Single leg balance, arms side-to-side
- Single leg balance, trunk flexion/extension
- Single leg balance, angular trunk flexion/extension
- Single leg balance, leg forward/side/back

**Gait drills**
- Side step
- Lunge walk
- Cross step
- Side step in mini squat position
- Forward zig-zag skater’s step
- Backward zig-zag skater’s step

**Agility drills**
- Figure 8’s
- Backward jog
- Acceleration/deceleration/sprints
- Shuttle runs
- Zig-zag running
- Ladder drill

**Landing drills**
- Step offs, both legs
- Step offs, single leg
- Box jump
- Leap & land (single leg jump → Pause and hold your balance in this partial squat position for 2-3 seconds)
- Jump stops (Perform three forward jumps, with both legs, then stop. Maintain good balance in a squat position for 3-4 seconds)
- Bounce jumps

**Note:**
(1) There may be slight variations in this protocol if there are limitations imposed from associated injuries such as meniscal tears, cartilage injuries, or other ligamentous injuries.
(2) This protocol must be individualized for optimal return to activity because an individual’s progress is variable.