The GLSM ACL Reconstruction Rehabilitation Program is an evidence-based and soft tissue healing dependent program which allows patients to progress to vocational and sports-related activities as quickly and safely as possible. Individual variations will occur depending on surgical details and patient response to treatment. Not all patients will use a post-op brace. If a *meniscus repair* is performed in conjunction with the ACL repair, follow the meniscus repair program for weeks 0-3. Contact us at 1-800-362-9567 ext. 58600 if you have questions or concerns.

<table>
<thead>
<tr>
<th>Phase I: 0-6 weeks</th>
<th>Phase II: 6-12 weeks</th>
<th>Phase III: 12 weeks+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brace: 0-1wks: 0-90, 1+wks Full ROM 4-6 wks D/C brace if given</td>
<td>Brace: As needed</td>
<td>Brace: Functional brace for certain activities</td>
</tr>
<tr>
<td>ROM: Emphasis on ext initially 0-2 wks 0-90 2-3 wks 0-110 3-4 wks 0-120 6+wks Full ROM</td>
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<tr>
<td>WB: 0-1 + wks WBAT using crutches with brace locked at 0 1-3 wks D/C crutches when full ext ROM, good quad control</td>
<td>WB: No restrictions</td>
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<tr>
<td><strong>Modalities:</strong> Cryotherapy 4x/day IFC for pain/effusion NMES quads / hams</td>
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<td>RX: Recommendations:</td>
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<td>If hams graft, no hams curls. Wk 5 start isometrics, wk 6 isotonics Sapega-McClure technique: 1. Active Warm-up: Bike ROM 2. Heat in stretch: Prone hang 1&lt;sup&gt;st&lt;/sup&gt;TERT=Total End Range Time 3. Mobilizations / ROM: Pat mobs /Scarf tissue massage Knee ext / flex stretches 4. Therapeutic exercises: Flexibility exercises Biofeedback QS, SLR Hip 4 way SLR M-cl quads/hams 30, 60, 90 Hamstring curls 0-90 4 wks OKC knee ext 30-90 CKC exercises = heel raises, 2 wks leg press, step-ups, step-downs, mini-squats 3 wks partial lunges front and lateral, lateral step-overs 4 wks Elliptical Runner 5 wks Stairmaster, Euroglide Balance/Proprioception Perturbation training Core stability, CV conditioning 5. Ice in stretch (2&lt;sup&gt;nd&lt;/sup&gt; TERT) 6. HEP for 3&lt;sup&gt;rd&lt;/sup&gt; TERT</td>
<td>If hams graft, no hams curls. Wk 5 start isometrics, wk 6 isotonics Sapega-McClure technique if needed (see previous) Pat mobs/ Scar tissue massage Prone hang Knee ext / flexion stretches Flexibility exercises Bike with resistance Elliptical Runner / Stairmaster Biofeedback Total Leg Strengthening Hip strengthening Heel raises Hamstrings isotonics 0-90 Quadriceps isotonics 30-90 CKC exercises - leg press, step-ups/downs, squats, heel raises, lunges to 90 knee flex Balance/Proprioception Perturbation training 8 wks Sub-max impact activities, Isokinetic knee ext/flex 30-90 Core stability, CV conditioning 8-10 wks Progress to independent strengthening program with monthly rechecks if good ROM and muscle control</td>
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<td>Updated 11/03</td>
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</tbody>
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**Return to Work/Sport**

No pain or effusion Full ROM Isokinetic Strength- 90% Functional Tests - 90% MD approval Return to Sports 4-6 months
ACL Reconstruction References


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Martinek MV, Friederich NF. To brace or not to brace? How effective are knee braces in rehabilitation. Orthopade, 1996; 28(6): 565-570

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Mikkelsen C, Werner S, Eriksson E. Closed kinetic chain alone compared to combined open and CKC exercises for quads strengthening after ACL reconstruction with respect to return to sports: a prospective matched follow-up study. Knee Sur, Sports Trau, Arthr, 2000; 8: 337-42


Risberg MA, Mork M, Jenssen HK, Holm I. Design and implementation of a neuromuscular training program following ACL reconstruction. J of Ortho and Sports Phy Ther, 2001; 31: 620-31

Sapega AA, Quedenfeld TC. Biophysical factors in range of motion exercises. Physician and Sports Medicine, 1981; 9: 57-65


