## Patellar and Trochlea Microfracture Rehabilitation Protocol Austin V. Stone MD, PhD

|                           | Weight-bearing  | Brace   | Range of Motion                        | Exercises   |
|---------------------------|-----------------|---|--|---|
| Phase 1<br>0-6 weeks      | Full with brace | <b>0-2 weeks:</b> Locked in full extension at all times   | CPM 6 hrs/day;<br>begin 0-30° and      | Calf pumps, quadriceps tightening sets and SLR <b>in brace</b>  |
|                           |                 | Off for hygiene and home exercise only  | 2-4 weeks: 0-60°<br>daily as tolerated | <b>2-6 weeks</b> : Add side-lying hip and core, patellar mobilization, advance quadriceps and hamstring sets                      |
|                           |                 | Unlocked after 2 weeks<br>and transition out of brace<br>when able to perform<br>straight leg raise | 4-6 weeks: 0-90°                       |   |
| Phase 2<br>6-8 weeks      | Full            | None  | Full                                   | Advance core work with hip, gluteal and core strengthening  |
| Phase 3<br>8-12 weeks     | Full            | None  | Full                                   | Gait normalization with closed chain activities: wall sits, shuttle, mini-squats, toe raises.                                     |
|                           |                 |   |  | Advance core work with hip, gluteal and core strengthening  |
|                           |                 |   |  | Begin unilateral stance activities and balance training   |
| Phase 4<br>3-6 months     | Full            | None  | Full                                   | Progress Phase III exercises and<br>functional activities: walking<br>lunges, planks, bridges, Swiss<br>ball, half-Bosu exercises |
|                           |                 |   |  | Advance core work with hip, gluteal and core strengthening May advance to bike, elliptical, pool as tolerated.                    |
| Phase 5<br>6-12<br>months | Full            | None  | Full                                   | Advance non-impact activity.  |
|                           |                 |   |  | No running, jumping, pivoting, or sports participation unless cleared by MD (after 8 months)                                      |

CPM - continuous passive motion machine; SLR - Straight-leg raise;