



**MATRIX ASSOCIATED CHONDROCYTE IMPLANTATION (MACI) –  
PATELLOFEMORAL WITH TUBERCLE OSTEOTOMY (TTO)**

Name: \_\_\_\_\_

Diagnosis: \_\_\_\_\_

Date of Surgery: \_\_\_\_\_

Frequency: 1 2 3 4 times / week      Duration: 1 2 3 4 5 6 Weeks

\_\_\_\_ Week 1 (Days 0-7)

- Toe touch weight bearing (TTWB) with brace in full extension while ambulating
- Brace locked in full extension when not performing below exercises (sleeping, resting, etc.)
- PROM and CPM (1-2 hours per day) 0-30 degrees only
- Isometric quad/hamstring/gluteal sets, ankle pumps

\_\_\_\_ Weeks 2-3 (Days 8-21)

- Increase weight bearing up to 50% with brace locked in full extension while ambulating
- PROM and CPM (1-2 hours/day) 0-45 degrees for week 2 (active heel slide with hamstring ok)
- PROM and CPM (1-2 hours/day) 0-60 degrees for week 3 (active heel slide with hamstring ok)
- Continue isometrics as above and add straight leg raise activities (hip ab/ad/flex/ext)

\_\_\_\_ Weeks 4-6:

- Increase weight bearing from 50% (week 4) to full weight bearing with brace locked (week 6)
- PROM 0-90 starting week 4 and progress to 0-125 by end of week 6 (active heel slide ok)
  - Utilize CPM as needed to achieve ROM goals but may otherwise discontinue
- Progress straight leg raise activities with resistance (i.e. ankle weights) and truck exercises

\_\_\_\_ Weeks 7-12:

- Unlock brace for weight bearing and d/c brace while ambulating when able
- Begin weighted knee flexion
  - May progress to gentle closed chain knee flexion exercises weeks 10-12
- Progress to AROM to full anatomic limits
- Eccentric hamstring exercises
- Advance to elliptical and stationary bike as tolerated

\_\_\_\_ Months 3-6+:

- Progress closed chain knee flexion exercises from above
- Advance to open chain knee flexion exercises (begin short arc open chain and progress as tolerated)
- Progress stationary/outdoor bike/rowing erg as tolerated
- Running progression program at 6 months

Signature \_\_\_\_\_

Date: \_\_\_\_\_