# **SUPPLEMENTAL FILE D: Manual Therapy Mobilization Techniques**

Note: All subjects have provided their consent to appear in the figures.



#### **Clinician Position:**

Standing next to the patient, on the side of the hip to be treated. Hands over ilium

#### **Technique Description:**

Apply a lateral glide as the patient leans forward into extension.



#### **Clinician Position:**

Standing next to patient, one hand on lateral hip and the other on distal thigh **Technique Description:** 

Apply a lateral glide as the patient's hip moves into internal rotation (passive and active)



#### **Clinician Position:**

Standing at side of involved hip **Technique Description:** 

Have patient rock forward and back (into loaded hip flexion) while a lateral glide force is imparted



### **Clinician Position:**

Stand facing the patient, Place a hand over each iliac crest of the patient. Use your thigh to block and stabilize the leg.

## **Technique Description:**

Patient's knee on the side to be mobilized down and opposite hip up to put their foot flat on the table. Gently rotate the pelvis in towards you to provide a loaded internal rotation force to the left hip



### **Clinician Position:**

Standing facing patient's involved hip **Technique Description**:

Maintaining the thigh perpendicular to the table, introduce hip external rotation until pain and/or resistance is perceived. Apply a distraction force by moving your hips/buttocks posteriorly. After mobilizing for 10-20 seconds, move the hip into further external rotation to engage the new restrictive barrier and repeat process.



#### **Clinician Position:**

Standing at foot of patient, both hands around the ankle with elbows locked.

#### **Technique Description:**

Grasp the patient's ankle with both hands just above the malleoli. Position the hip in slight flexion and abduction

Apply a distraction force to the hip by shifting your weight to your back foot and pulling with both arm. The technique may be performed as a graded mobilization into resistance or as a high-velocity thrust at end range. Progress the technique by positioning the hip in further abduction and internal rotation prior to performing the mobilization or thrust manipulation