HUMANTRAK
MOVEMENT ANALYSIS SYSTEM

# PROFILE ASSESSMENT

## Bruno Dandrea Soares

28th September, 2023

## PROFILE INFORMATION

| NAME | Bruno Dandrea Soares |
|---|---|
| ORGANISATION | On Morumbi Clinica Medica |
| DATE OF BIRTH | 1st July, 1988 |
| GENDER | Male |
| HEIGHT | 171cm / 67in |
| WEIGHT | 81kg / 178lb |
| AGE | 35 |

# Standing Posture

**Posture and Stability Assessment**

Standing Posture is a baseline postural assessment that can provide insight into an individual's structural balance, alignment, and postural strategy.

## RESULTS

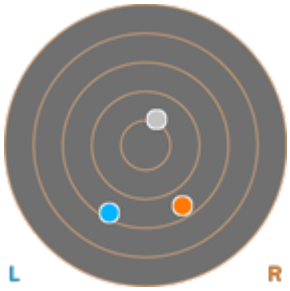
### BALANCE SNAPSHOT


### SIDETRAK POSTURAL DEVIATION (SAGITTAL PLANE/SIDE VIEW)


### KEY RESULTS

| | |
|---|---|
| Neck lateral flexion | 1.6° Right ▼ |
| Trunk lateral flexion | 0.5° Right ▼ |
| Pelvis Lateral Tilt | 0.0° Right ▼ |
| Trunk Flexion | 1.6° Posterior |

### SWAYTRAK MOVEMENT PATHS (KNEES AND CENTRE OF MASS)



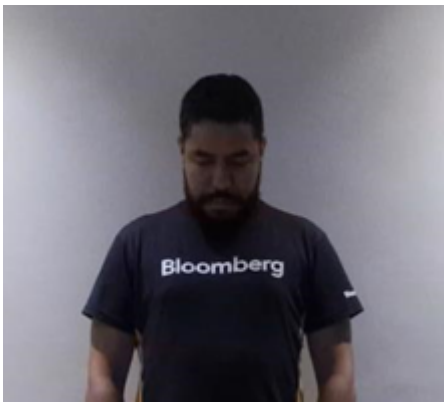
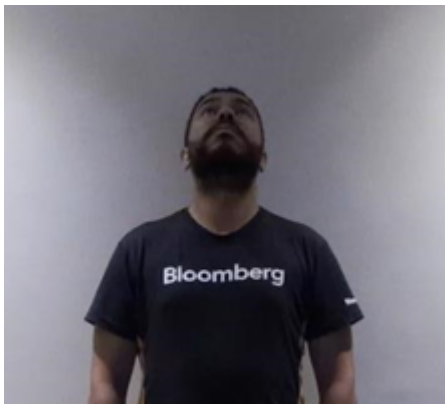

### PRACTITIONER COMMENTS


# Cervical Spine Flexion/Extension

**Range of Motion Assessment**

Cervical Spine Flexion (forward) / Extension (backwards) calculated by taking the inclination of the head relative to the line of the trunk in the sagittal plane (side view).

## RESULTS

| PEAK FLEXION SNAPSHOT | PEAK EXTENSION SNAPSHOT |
|---|---|
|  |  |

| KEY RESULTS | STARTING POSITION | PEAK FLEXION | PEAK EXTENSION | TOTAL RANGE |
|---|---|---|---|---|
| **Flexion/Extension** | 0.0° | 17.2° | 2.1° | 19.3° |
| **Trunk Flexion** | 8.6° **Posterior** | 5.3° **Posterior** | 7.7° **Posterior** | N/A |
| **Trunk lateral flexion** | 1.5° | 0.6° **Right** ▼ | 1.0° **Right** ▼ | N/A |

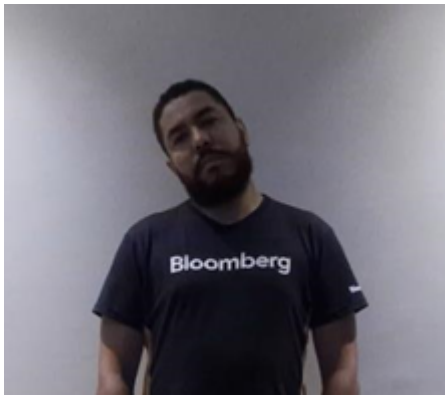
### PRACTITIONER COMMENTS


# Cervical Spine Lateral Flexion

**Range of Motion Assessment**

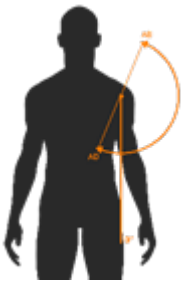
Cervical Spine Lateral Flexion (left and right) is calculated by taking the inclination of the head relative to the line of the trunk in the frontal plane (front view).

## RESULTS

| PEAK LEFT LATERAL FLEXION | PEAK RIGHT LATERAL FLEXION |
|---|---|
|  |  |

| KEY RESULTS | PEAK FLEXION (LEFT) | PEAK FLEXION (RIGHT) | IMBALANCE |
|---|---|---|---|
| **Lateral Flexion** | 10.0° | 13.5° | +3.4° |
| **Trunk Flexion** | 7.8° **Posterior** | 8.0° **Posterior** | N/A |
| **Trunk lateral flexion** at Peak Flexion | 0.7° **Left** ▼ | 1.7° **Right** ▼ | +0.9° |

### PRACTITIONER COMMENTS

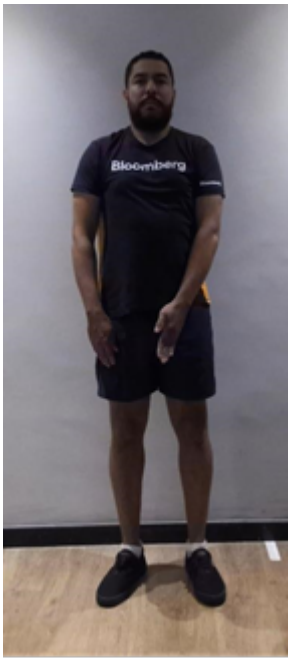
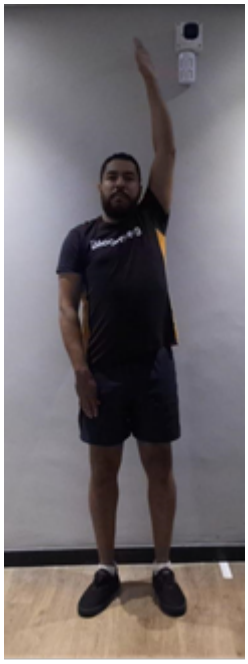
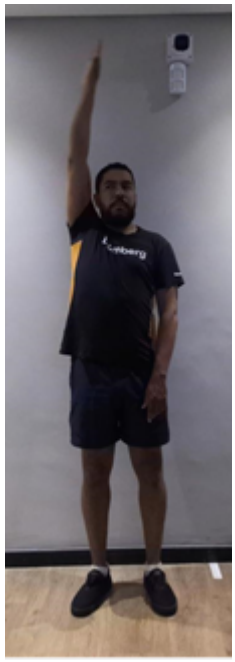


# Shoulder Adduction/Abduction

**Range of Motion Assessment**

Shoulder Adduction/Abduction is calculated by taking the angle created by the humerus (upper arm) relative to the line of the trunk in the frontal plane (front view).

## RESULTS

| PEAK ADDUCTION | | PEAK ABDUCTION | |
|---|---|---|---|
| LEFT | RIGHT | LEFT | RIGHT |
|  |  |  |  |

| KEY RESULTS | LEFT | RIGHT | IMBALANCE |
|---|---|---|---|
| **Shoulder Adduction** | 6.3° | 13.8° | +7.5° |
| **Shoulder Abduction** | 168.2° | 175.7° | +7.5° |
| **Trunk lateral flexion** at Peak Abduction | 3.5° Right ▼ | 1.2° Left ▼ | +2.2° |

PRACTITIONER COMMENTS ( LEFT )

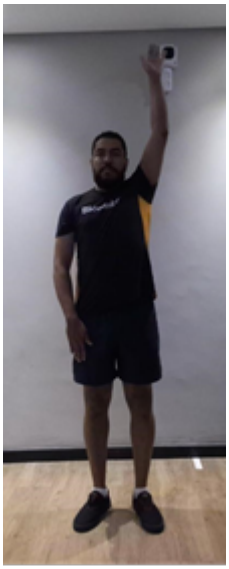
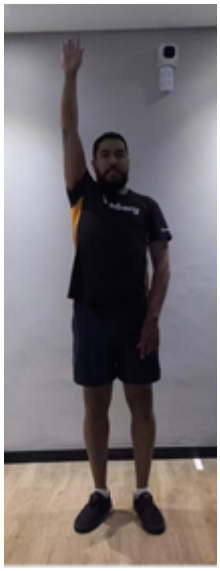
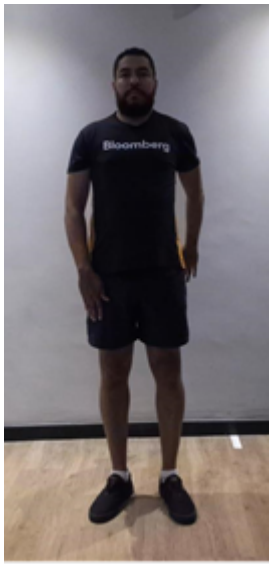
PRACTITIONER COMMENTS ( RIGHT )

# Shoulder Flexion/Extension

**Range of Motion Assessment**

Shoulder Flexion/Extension is calculated by taking the angle created by the humerus (upper arm) relative to the line of the trunk in the sagittal plane (side view).

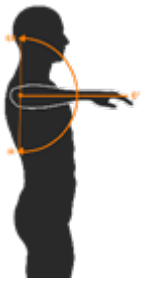
## RESULTS

| PEAK FLEXION | | PEAK EXTENSION | |
|---|---|---|---|
| LEFT | RIGHT | LEFT | RIGHT |
|  |  |  |  |

| KEY RESULTS | LEFT | RIGHT | IMBALANCE |
|---|---|---|---|
| **Shoulder Flexion** | 179.2° | 179.4° | +0.2° |
| **Shoulder Extension** | 43.6° | 43.7° | +0.1° |
| **Trunk lateral flexion** at Peak Flexion | 2.9° Right ▼ | 0.3° Left ▼ | +2.5° |

PRACTITIONER COMMENTS ( LEFT )

PRACTITIONER COMMENTS ( RIGHT )



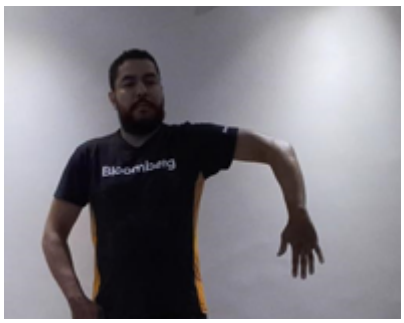
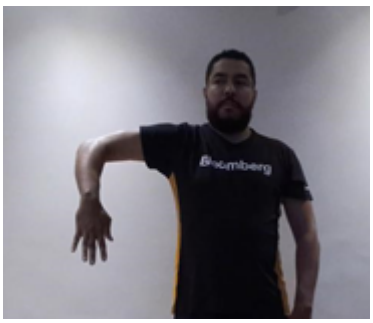
# Shoulder Internal/External Rotation

**Range of Motion Assessment**

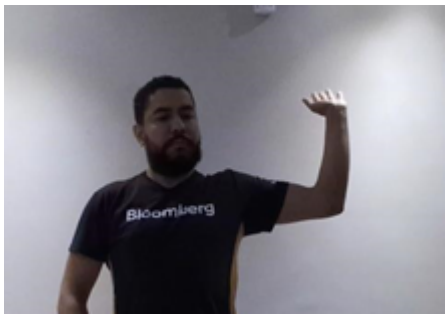
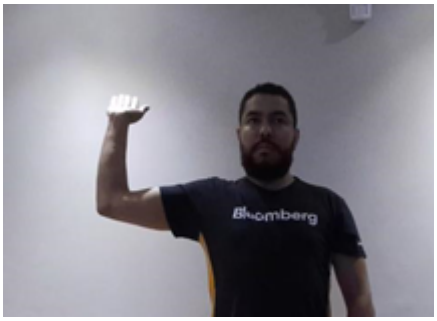
Shoulder Internal/External Rotation calculated by taking the angle created by the forearm relative to horizontal in the sagittal plane (side view).

## RESULTS

### PEAK INTERNAL ROTATION

| LEFT | RIGHT |
|---|---|
|  |  |

### PEAK EXTERNAL ROTATION

| LEFT | RIGHT |
|---|---|
|  |  |

| KEY RESULTS | LEFT | RIGHT | IMBALANCE |
|---|---|---|---|
| **Shoulder Internal Rotation** | 50.9° | 38.9° | +12.0° |
| **Shoulder External Rotation** | 91.2° | 97.1° | +6.0° |
| **Total ROM** | 142.1° | 136.0° | +6.1° |
| **Trunk lateral flexion** at Peak Internal Rotation | 2.6° Right ▼ | 0.3° Right ▼ | +2.3° |

PRACTITIONER COMMENTS ( LEFT )

PRACTITIONER COMMENTS ( RIGHT )

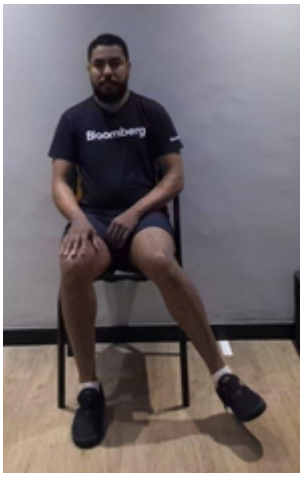
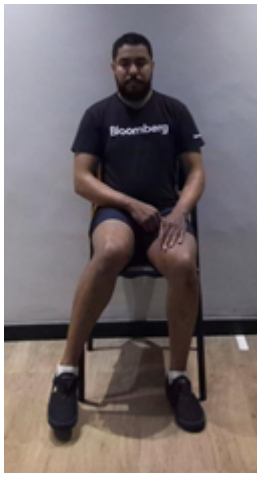
# Hip Internal/External Rotation

**Range of Motion Assessment**

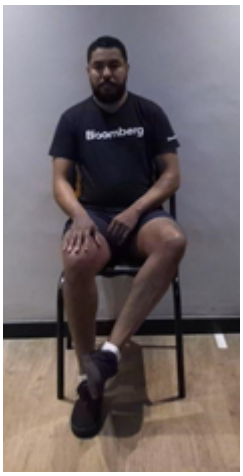
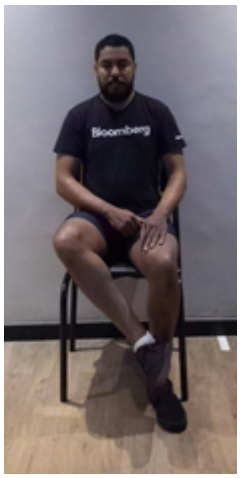
Hip Internal/External Rotation is calculated by taking the angle created by the tibia relative to vertical in the frontal plane (front view) while seated with 90˚ of hip flexion.

## RESULTS

### PEAK INTERNAL ROTATION

| LEFT | RIGHT |
|---|---|
|  |  |

### PEAK EXTERNAL ROTATION

| LEFT | RIGHT |
|---|---|
|  |  |

| KEY RESULTS | LEFT | RIGHT | IMBALANCE |
|---|---|---|---|
| Peak Internal Rotation | 25.8° | 14.1° | +11.7° |
| Peak External Rotation | 38.3° | 40.7° | +2.4° |
| Total ROM | 64.1° | 54.7° | +9.3° |

PRACTITIONER COMMENTS ( LEFT )

PRACTITIONER COMMENTS ( RIGHT )

# Single Leg Stand

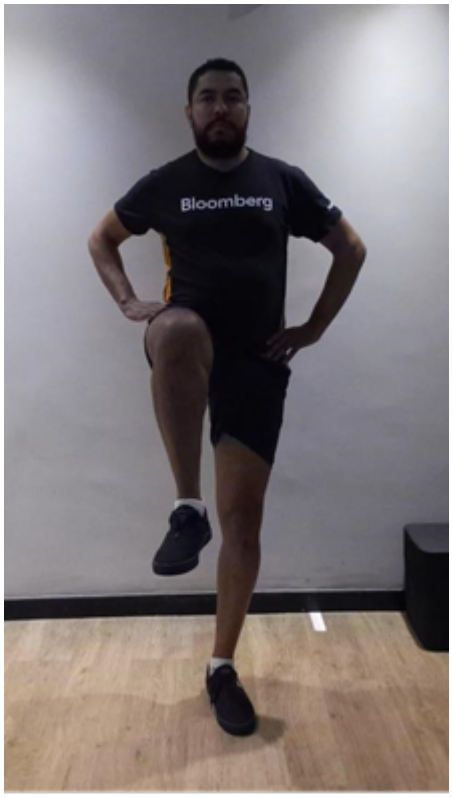
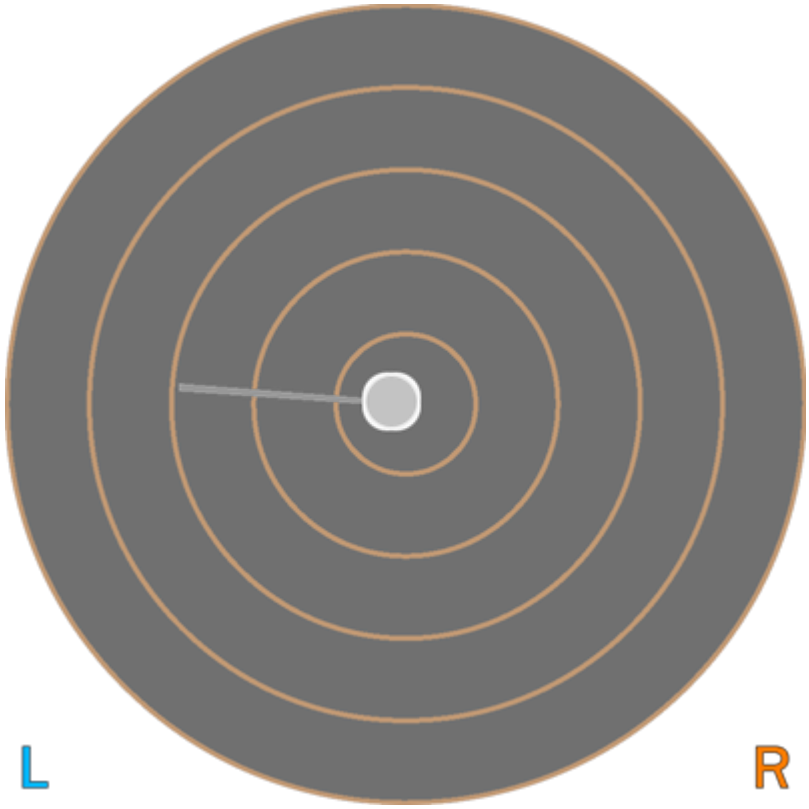
**Balance Assessment**

Standing balance over time is assessed while standing on one leg.

| | |
|---|---|
| **Eyes** | Open |
| **Surface** | Stable |
| **Time** | 10.0 s |

## RESULTS

### BALANCE RESULTS (LEFT)

| SNAPSHOT – START OF TEST | CENTER OF MASS PATH |
|---|---|
|  |  |



| KEY METRICS | RESULTS |
|---|---|
| Ellipse Area | 0.34 cm-2 |
| COM Path Length | 11.97 cm |
| Range – ML | 1.61 cm |
| Range – AP | 1.67 cm |
| Pelvis Lateral Tilt | 5.4° Left ▼ |
| Trunk lateral flexion | 1.4° Left ▼ |

PRACTITIONER COMMENTS

# Single Leg Stand

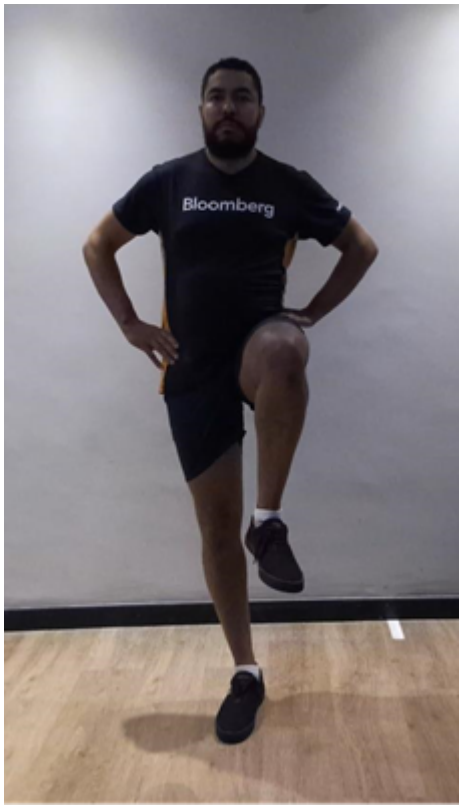
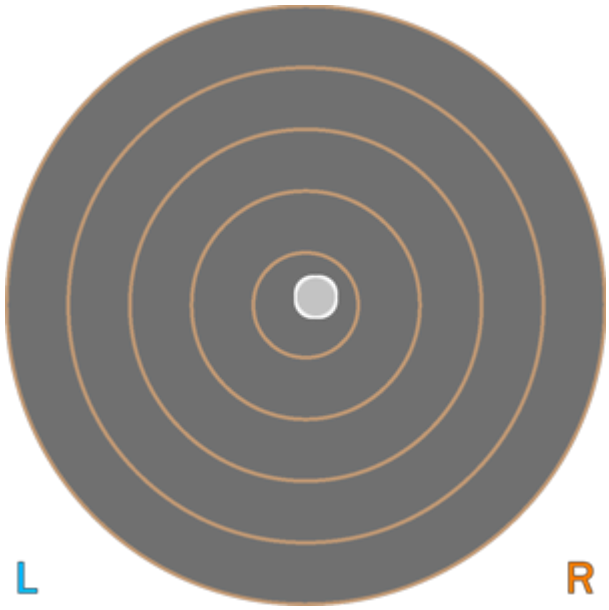
**Balance Assessment**

Standing balance over time is assessed while standing on one leg.

| | |
|---|---|
| **Eyes** | Open |
| **Surface** | Stable |
| **Time** | 10.0 s |

## RESULTS

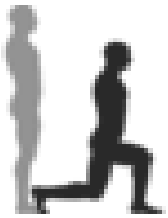
### BALANCE RESULTS (RIGHT)

| SNAPSHOT – START OF TEST | CENTER OF MASS PATH |
|---|---|
|  |  |



| KEY METRICS | RESULTS |
|---|---|
| Ellipse Area | 1.54 cm-2 |
| COM Path Length | 26.41 cm |
| Range – ML | 2.03 cm |
| Range – AP | 1.54 cm |
| Pelvis Lateral Tilt | 2.9° Right ▼ |
| Trunk lateral flexion | 0.5° Right ▼ |

PRACTITIONER COMMENTS



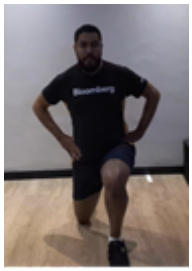
# Lunge

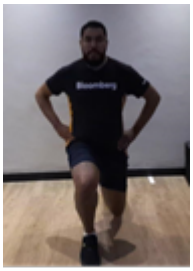
**Lower Body Dynamic Assessment**

The Lunge assesses the strength and range of motion of the knees and hips.

## RESULTS

| PEAK KNEE FLEXION | |
|---|---|
| LEFT | RIGHT |

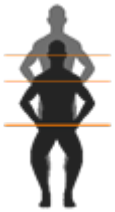




| KEY METRICS | LEFT LEG | RIGHT LEG | ASYMMETRY |
|---|---|---|---|
| Peak Hip Flexion | 59.8° | 62.3° | 4% |
| Peak Knee Flexion | 101.5° | 106.2° | 4.4% |
| Peak Spine Lateral Tilt | 3.4° **Posterior** | 0.2° **Posterior** | N/A |
| Peak Pelvic Lateral Tilt | 6.6° **Right** | 4.3° **Right** | N/A |

PRACTITIONER COMMENTS ( LEFT )

PRACTITIONER COMMENTS ( RIGHT )

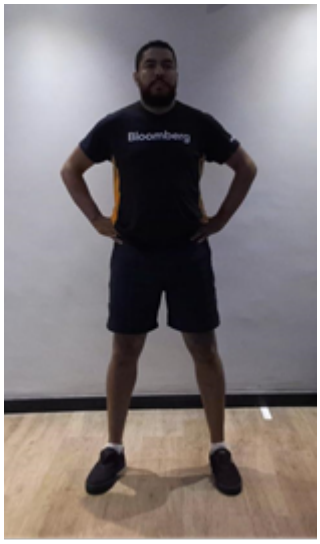
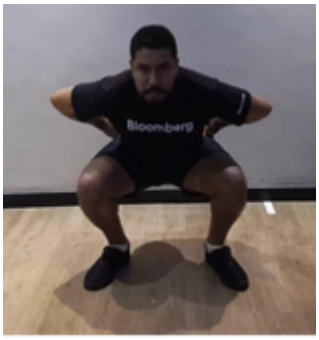
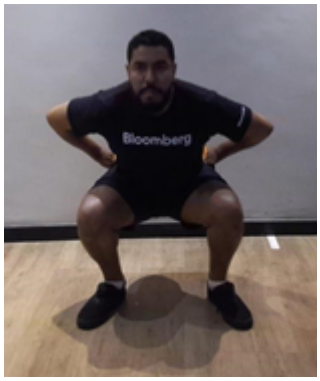
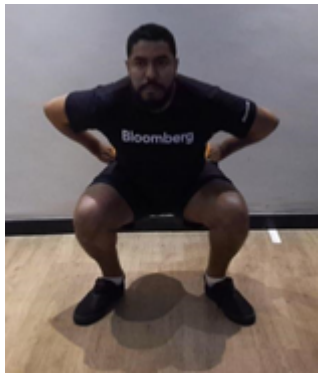


# Squat

**Lower Body Dynamic Assessment**

Squat is a dynamic movement assessment providing insight into an individual's balance, stability, flexibility, and strength.

## RESULTS

| SNAPSHOTS | | | |
|---|---|---|---|
| START | REP 1: PEAK KNEE FLEXION | REP 2: PEAK KNEE FLEXION | REP 3: PEAK KNEE FLEXION |
|  |  |  |  |

| KEY RESULTS | REP 1 | REP 2 | REP 3 |
|---|---|---|---|
| Peak Knee Flexion ( Left ) | 141.2° | 137.9° | 140.1° |
| Peak Knee Flexion ( Right ) | 142.1° | 138.8° | 141.0° |
| Spine Tilt at Peak Knee Flexion | 37.9° Anterior | 32.6° Anterior | 32.6° Anterior |
| Trunk lateral flexion at Peak Knee Flexion | 3.8° Right ▼ | 2.5° Right ▼ | 3.7° Right ▼ |

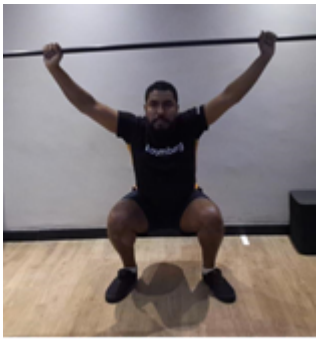
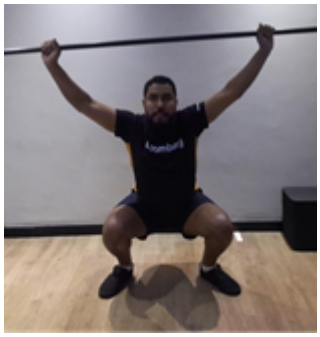
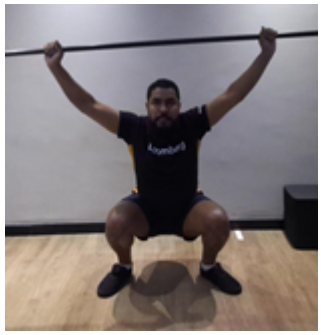
### PRACTITIONER COMMENTS

# Overhead Squat

**Lower Body Dynamic Assessment**

Overhead squat is a dynamic movement assessment providing insight into an individual's balance, stability, flexibility, and strength.

## RESULTS

| SNAPSHOTS | | | |
|---|---|---|---|
| START | REP 1: PEAK KNEE FLEXION | REP 2: PEAK KNEE FLEXION | REP 3: PEAK KNEE FLEXION |
|  |  |  |  |

| KEY RESULTS | REP 1 | REP 2 | REP 3 |
|---|---|---|---|
| Peak Knee Flexion ( Left ) | 140.5° | 141.0° | 146.3° |
| Peak Knee Flexion ( Right ) | 143.6° | 140.9° | 143.0° |
| Trunk Flexion at Peak Knee Flexion | 19.3° Anterior | 17.5° Anterior | 13.8° Anterior |
| Trunk lateral flexion at Peak Knee Flexion | 3.5° Right ▼ | 2.8° Right ▼ | 4.5° Right ▼ |

### PRACTITIONER COMMENTS

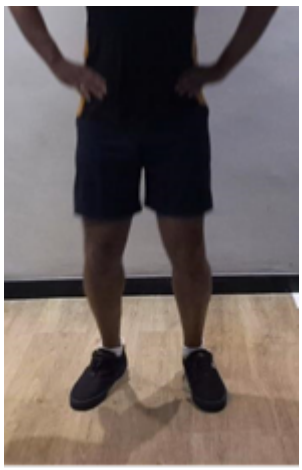
# Countermovement Jump

**Lower Body Dynamic Assessment**

The Countermovement Jump assesses the landing posture during an explosive dynamic exercise.

## RESULTS

**PEAK KNEE FLEXION**
after landing



| KEY METRICS (TORSO) | | | |
|---|---|---|---|
| **Jump Height** | 33.70 cm | | |
| **Peak Spine Tilt** after landing | 0.9° **Posterior** | | |
| **Peak Lateral Spine Tilt** after landing | 0.8° **Right** | | |
| **Peak Lateral Pelvic Tilt** after landing | 1.5° **Right** | | |
| **KEY METRICS (LEGS)** | **LEFT LEG** | **RIGHT LEG** | **ASYMMETRY** |
| **Peak Hip Flexion** after landing | 21.3° | 19.6° | 7.9% |
| **Peak Knee Flexion** after landing | 51.7° | 51.9° | 0.3% |
| **Peak Knee Valgus/Varus** after landing | 7.4° **Varus** | 8.4° **Varus** | 11.8% |

### PRACTITIONER COMMENTS

# Drop Jump

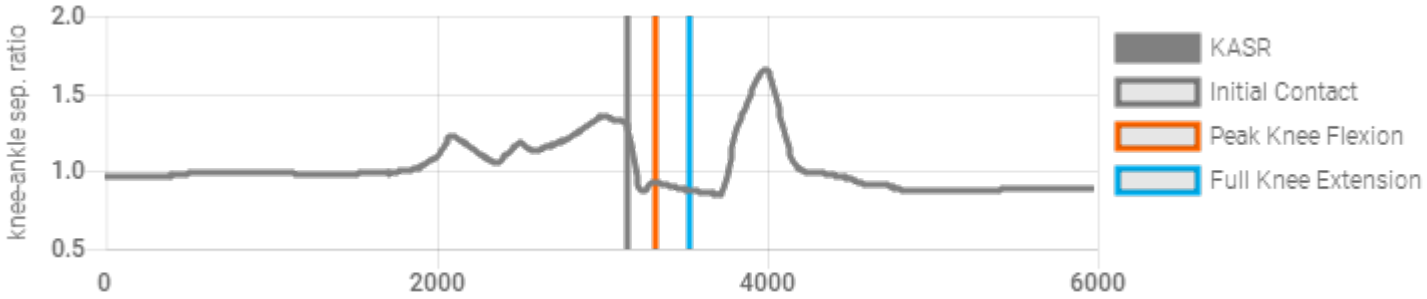
**Lower Body Dynamic Assessment**

Drop Jump is used to assess coordination, balance, joint stability and power, requiring the patient to drop from a box or platform and transition from landing into an explosive jump .

**Height** unspecified

## RESULTS

| PHASE | Initial Contact | Peak Knee Flexion |
|---|---|---|
| SNAPSHOTS |  |  |
| **Result** | | |
| Knee-Ankle Separation Ratio | 1.3 | 0.9 |
| Hip Flexion ( Left ) | 55.7° | 0.2° |
| Hip Flexion ( Right ) | 51.5° | 3.5° |
| Knee Flexion ( Left ) | 72.0° | 12.2° |
| Knee Flexion ( Right ) | 71.3° | 9.3° |




## PRACTITIONER COMMENTS

# Single Leg Squat

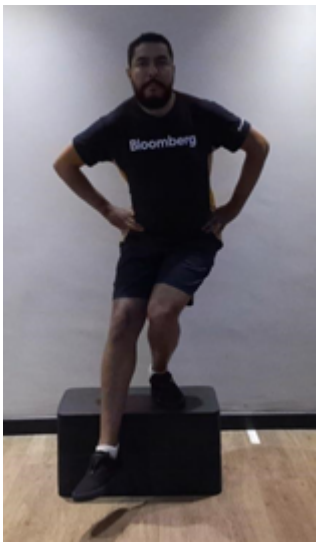
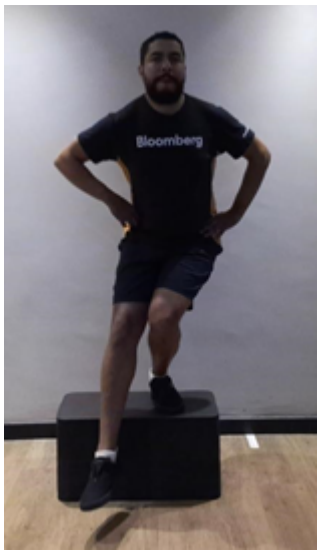
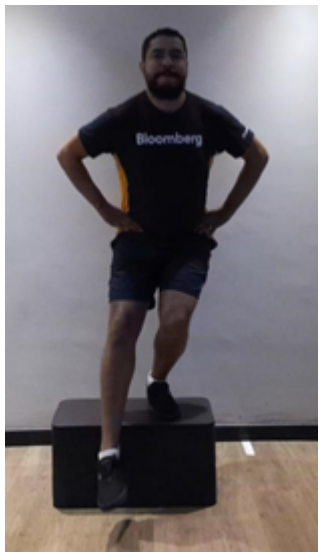
**Lower Body Dynamic Assessment**

Single Leg Squat is a dynamic movement assessment that provides insight into an individual's balance, stability, flexibility, and strength.

## RESULTS

### LEFT LEG

SNAPSHOTS

| START | REP 1: PEAK KNEE FLEXION | REP 2: PEAK KNEE FLEXION | REP 3: PEAK KNEE FLEXION |
|---|---|---|---|
|  |  |  |  |

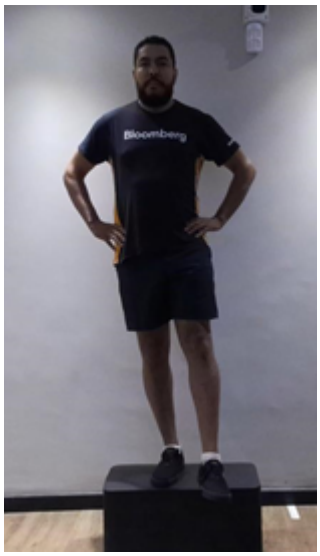
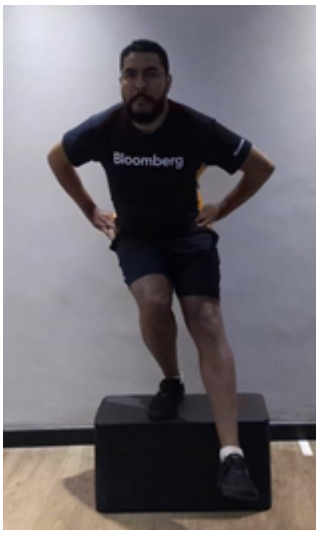
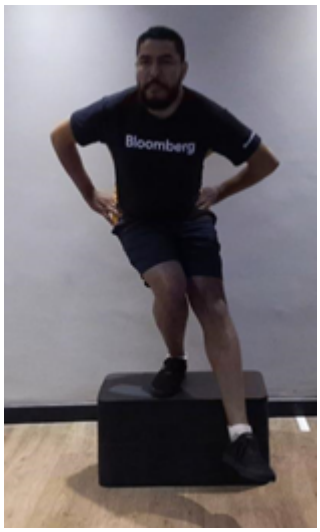
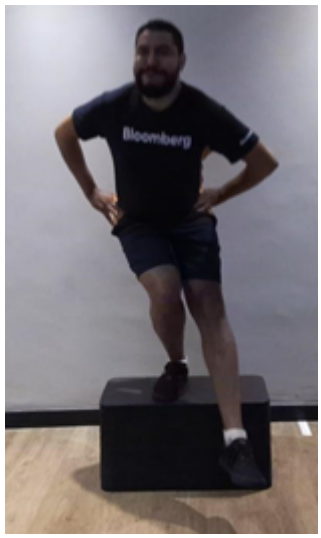
| KEY RESULTS | REP 1 | REP 2 | REP 3 |
|---|---|---|---|
| **Peak Knee Flexion** | 101.9° | 101.5° | 101.9° |
| **Knee Displacement (total)** | 14.5 cm | 15.7 cm | 17.4 cm |
| **Peak Knee Valgus** | 30.5° **Valgus** | 22.9° **Valgus** | 0.0° |
| **Peak Knee Varus** | 1.1° **Varus** | 6.5° **Varus** | 8.8° **Varus** |
| **Trunk lateral flexion** at Peak Knee Flexion | 3.5° Right ▼ | 0.1° Left ▼ | 2.2° Left ▼ |

### PRACTITIONER COMMENTS

# RESULTS

## RIGHT LEG

### SNAPSHOTS

| START | REP 1: PEAK KNEE FLEXION | REP 2: PEAK KNEE FLEXION | REP 3: PEAK KNEE FLEXION |
|---|---|---|---|
|  |  |  |  |

| KEY RESULTS | REP 1 | REP 2 | REP 3 |
|---|---|---|---|
| **Peak Knee Flexion** | 102.1° | 109.9° | 109.7° |
| **Knee Displacement (total)** | 12.8 cm | 14.3 cm | 12.6 cm |
| **Peak Knee Valgus** | 13.4° **Valgus** | 28.5° **Valgus** | 20.5° **Valgus** |
| **Peak Knee Varus** | 3.7° **Varus** | 1.4° **Varus** | 0.0° |
| **Trunk lateral flexion** at Peak Knee Flexion | 4.6° **Right ▼** | 2.0° **Right ▼** | 2.7° **Right ▼** |

### PRACTITIONER COMMENTS