HUMANTRAK
MOVEMENT ANALYSIS SYSTEM

PROFILE ASSESSMENT
Simone Cristina Rancan
6th October, 2022

PROFILE INFORMATION

| NAME	Simone Cristina Rancan
ORGANISATION	On Morumbi Clinica Medica
DATE OF BIRTH	13th January, 1982
GENDER	Female
HEIGHT	167cm / 65in
WEIGHT	56kg / 123lb
AGE	40

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
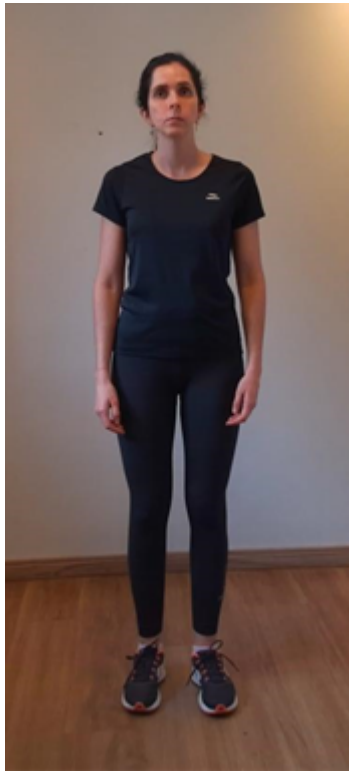
SIDETRAK POSTURAL DEVIATION
(SAGITTAL PLANE/SIDE VIEW)

-2.2cm
-2.7cm
+0.2cm
+0.9cm
+0.39cm

KEY RESULTS

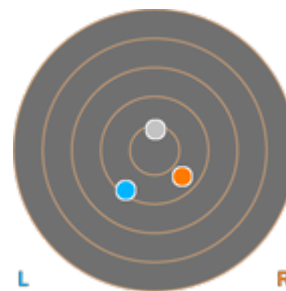|	
Neck lateral flexion	3.6° Right ▼
Trunk lateral flexion	0.9° Left ▼
Pelvis Lateral Tilt	1.6° Left ▼
Trunk Flexion	3.6° Posterior

SWAYTRAK MOVEMENT PATHS (KNEES AND CENTRE OF MASS)

L   R

PRACTITIONER COMMENTS
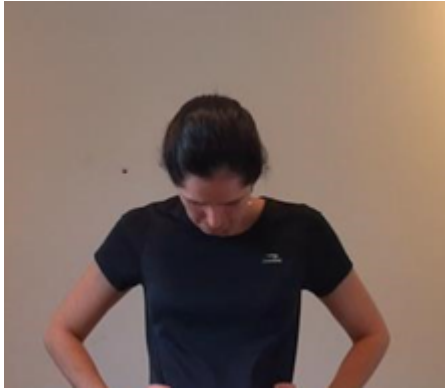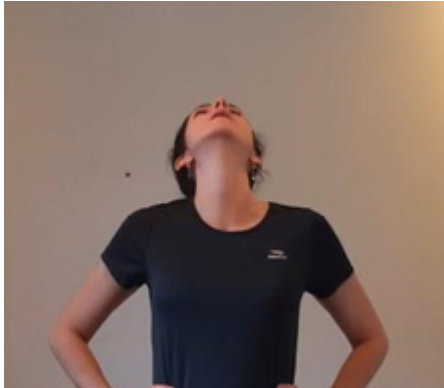
HUMANTRAK
MOVEMENT ANALYSIS SYSTEM

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°	25.8°	16.8°	42.6°
Trunk Flexion	4.8° Posterior	1.2° Posterior	11.1° Posterior	N/A
Trunk lateral flexion	0.1°	0.0° Left ▼	0.0° Right ▼	N/A

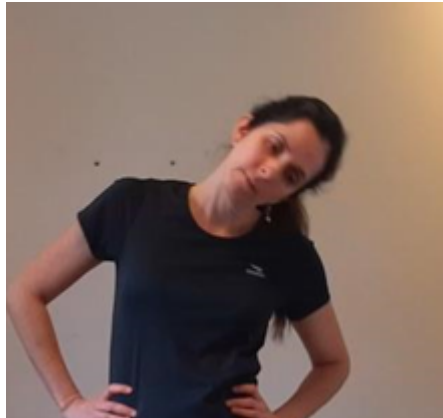## PRACTITIONER COMMENTS

HUMANTRAK
MOVEMENT ANALYSIS SYSTEM

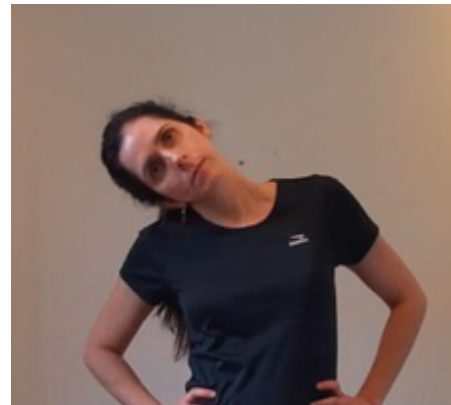# Cervical Spine Lateral Flexion
Range of Motion Assessment

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	34.2°	36.0°	+1.8°
Trunk Flexion	4.2° Posterior	3.1° Posterior	N/A
Trunk lateral flexion at Peak Flexion	10.6° Left ▼	8.8° Right ▼	+1.8°

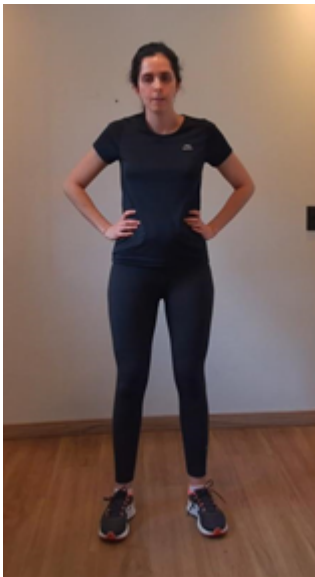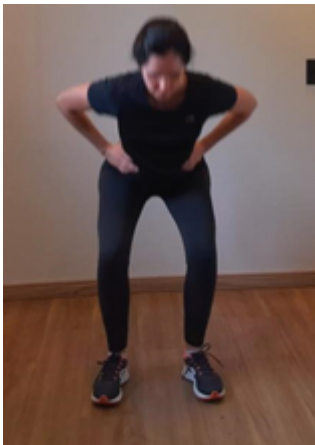## PRACTITIONER COMMENTS

HUMANTRAK
MOVEMENT ANALYSIS SYSTEM

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)	87.7°	85.9°	90.6°
Peak Knee Flexion (Right)	87.2°	84.3°	90.8°
Spine Tilt at Peak Knee Flexion	39.5° Anterior	43.1° Anterior	42.5° Anterior
Trunk lateral flexion at Peak Knee Flexion	1.7° Left ▼	3.1° Left ▼	3.3° Left ▼

PRACTITIONER COMMENTS

HUMANTRAK
MOVEMENT ANALYSIS SYSTEM

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)	99.9°	103.7°	105.9°
Peak Knee Flexion (Right)	97.3°	102.5°	102.4°
Trunk Flexion at Peak Knee Flexion	23.0° Anterior	22.7° Anterior	23.3° Anterior
Trunk lateral flexion at Peak Knee Flexion	2.4° Left ▼	1.1° Left ▼	0.8° Left ▼

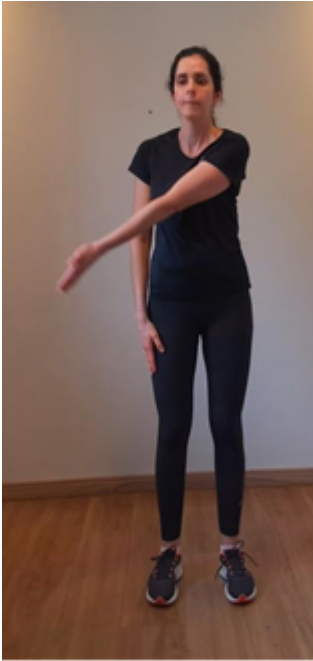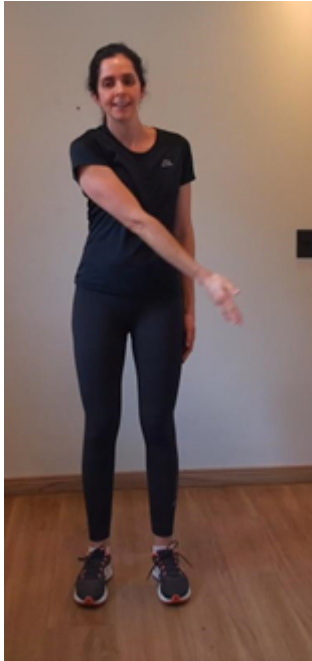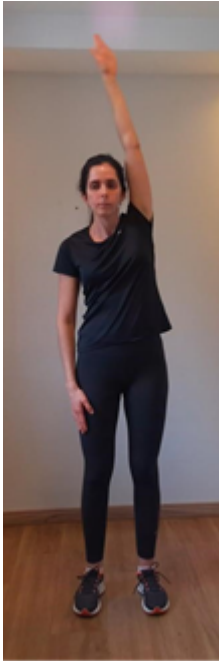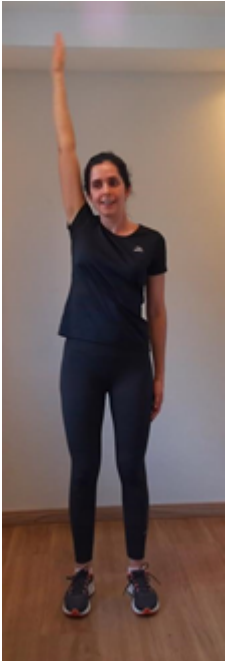## PRACTITIONER COMMENTS

HUMANTRAK
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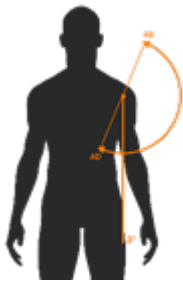
Shoulder Adduction/Abduction
Range of Motion Assessment

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	51.4°	40.8°	+10.6°
Shoulder Abduction	191.5°	176.5°	+15.0°
Trunk lateral flexion at Peak Abduction	5.0° Right ▼	3.5° Left ▼	+1.5°

PRACTITIONER COMMENTS (LEFT)

PRACTITIONER COMMENTS (RIGHT)
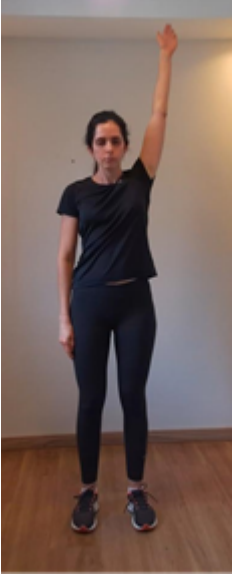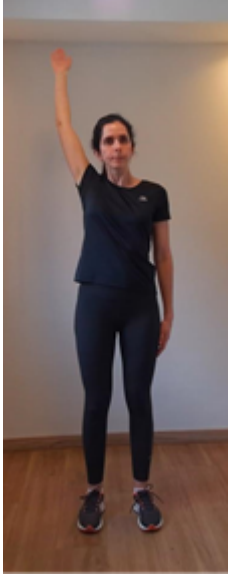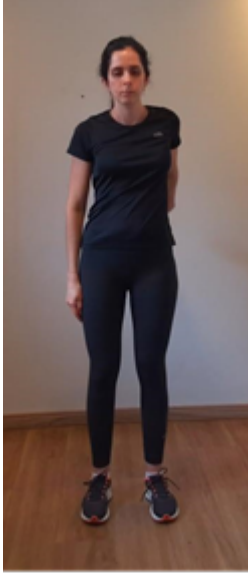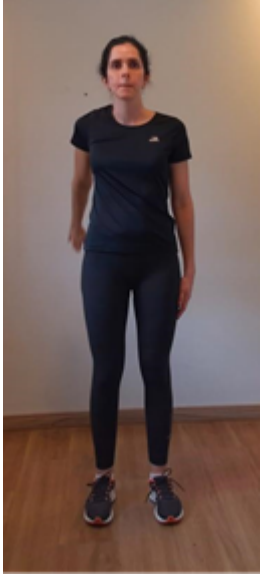
HUMANTRAK
MOVEMENT ANALYSIS SYSTEM

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	193.6°	195.5°	+1.9°
Shoulder Extension	52.8°	59.1°	+6.3°
Trunk lateral flexion at Peak Flexion	2.5° Right ▼	1.3° Left ▼	+1.2°

PRACTITIONER COMMENTS (LEFT)

PRACTITIONER COMMENTS (RIGHT)

HUMANTRAK
MOVEMENT ANALYSIS SYSTEM
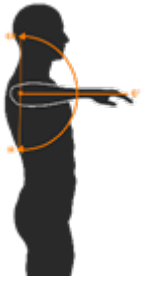
Shoulder Internal/External Rotation
Range of Motion Assessment

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

RESULTS

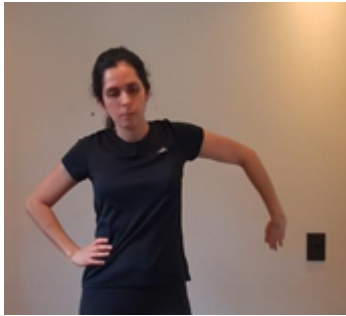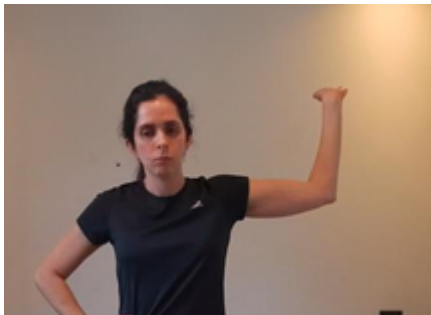| PEAK INTERNAL ROTATION	
LEFT	RIGHT

PEAK EXTERNAL ROTATION	
LEFT	RIGHT

KEY RESULTS	LEFT	RIGHT	IMBALANCE
Shoulder Internal Rotation	94.0°	62.1°	+31.9°
Shoulder External Rotation	84.7°	98.0°	+13.3°
Total ROM	178.7°	160.1°	+18.7°
Trunk lateral flexion at Peak Internal Rotation	1.0° Right ▼	0.9° Left ▼	+0.1°

PRACTITIONER COMMENTS (LEFT)

PRACTITIONER COMMENTS (RIGHT)

HUMANTRAK
MOVEMENT ANALYSIS SYSTEM

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

L   R
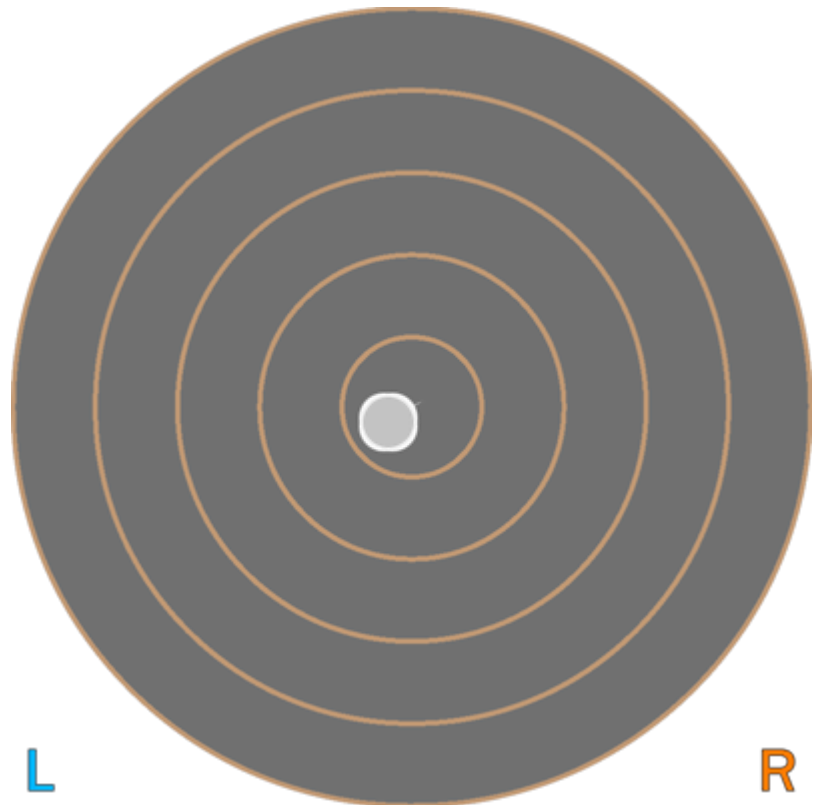
KEY METRICS	RESULTS
Ellipse Area	0.58 cm-2
COM Path Length	16.83 cm
Range – ML	1.90 cm
Range – AP	2.24 cm
Pelvis Lateral Tilt	7.2° Left ▼
Trunk lateral flexion	3.2° Left ▼

PRACTITIONER COMMENTS

HUMANTRAK
MOVEMENT ANALYSIS SYSTEM

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
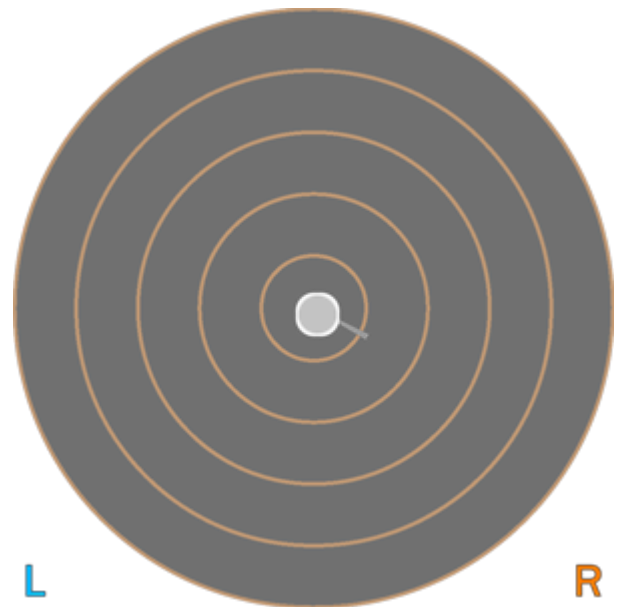
KEY METRICS	RESULTS
Ellipse Area	0.31 cm-2
COM Path Length	17.84 cm
Range – ML	1.57 cm
Range – AP	2.07 cm
Pelvis Lateral Tilt	9.9° Right ▼
Trunk lateral flexion	5.3° Right ▼

PRACTITIONER COMMENTS

HUMANTRAK
MOVEMENT ANALYSIS SYSTEM

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	22.35 cm	
Peak Spine Tilt after landing	36.7° Anterior	
Peak Lateral Spine Tilt after landing	4.4° Left	
Peak Lateral Pelvic Tilt after landing	3.3° Right	

KEY METRICS (LEGS)

	LEFT LEG	RIGHT LEG	ASYMMETRY
Peak Hip Flexion after landing	106.5°	105.4°	1.1%
Peak Knee Flexion after landing	106.0°	105.2°	0.7%
Peak Knee Valgus/Varus after landing	72.3° Varus	47.9° Varus	33.8%

PRACTITIONER COMMENTS

valgo dinamico joelho direito

HUMANTRAK
MOVEMENT ANALYSIS SYSTEM
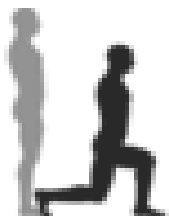
Lunge
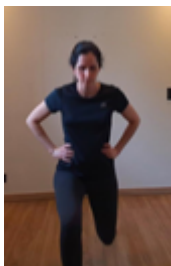**Lower Body Dynamic Assessment**

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

RESULTS

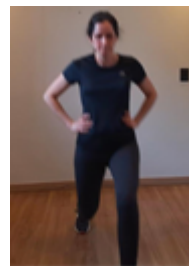| PEAK KNEE FLEXION	
LEFT	RIGHT

KEY METRICS	LEFT LEG	RIGHT LEG	ASYMMETRY
Peak Hip Flexion	12.7°	17.1°	25.7%
Peak Knee Flexion	62.2°	58.8°	5.5%
Peak Spine Lateral Tilt	0.4° Posterior	0.5° Posterior	N/A
Peak Pelvic Lateral Tilt	2.3° Left	1.9° Left	N/A

PRACTITIONER COMMENTS (LEFT)

PRACTITIONER COMMENTS (RIGHT)

HUMANTRAK
MOVEMENT ANALYSIS SYSTEM

Drop Jump

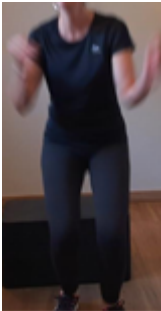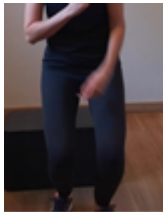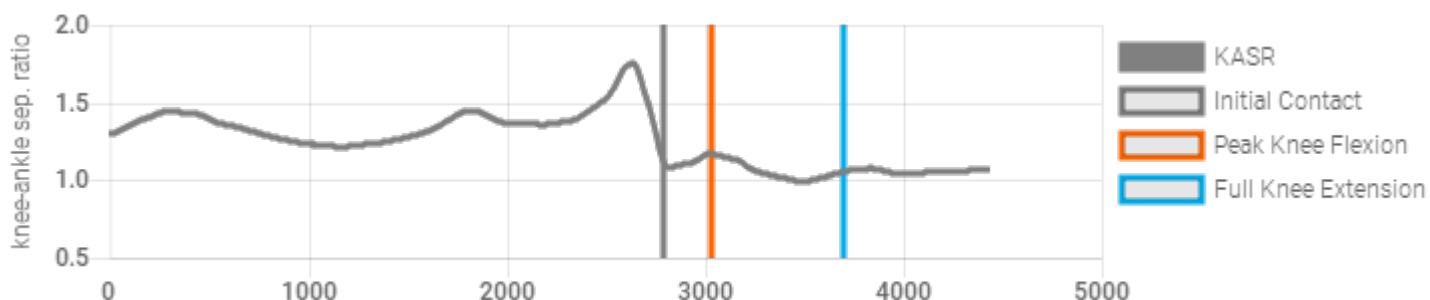**Lower Body Dynamic Assessment**

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	167.0 cm

RESULTS

PHASE	Initial Contact	Peak Knee Flexion
SNAPSHOTS		

Result		
Knee-Ankle Separation Ratio	1.1	1.2
Hip Flexion (Left)	43.8°	53.7°
Hip Flexion (Right)	40.5°	51.6°
Knee Flexion (Left)	61.1°	87.3°
Knee Flexion (Right)	58.5°	92.7°

PRACTITIONER COMMENTS

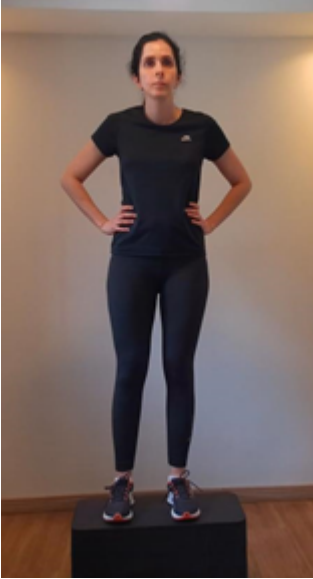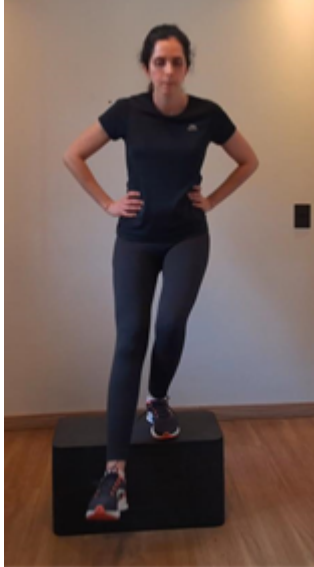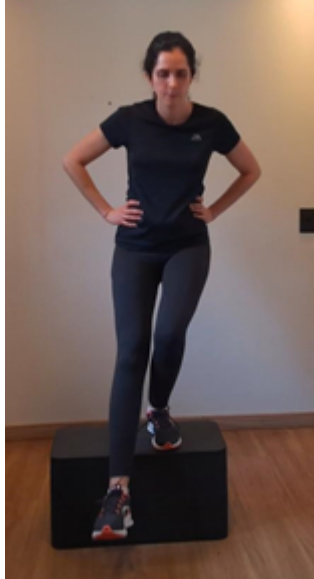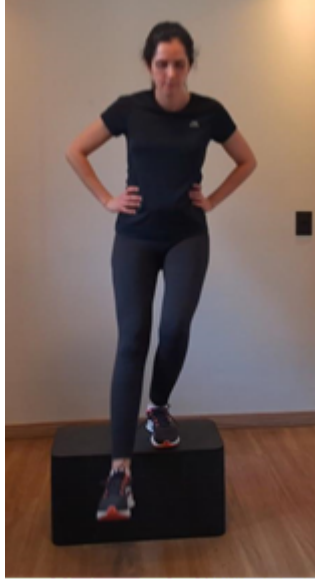anteriorizacao de tronco na queda

HUMANTRAK
MOVEMENT ANALYSIS SYSTEM

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.
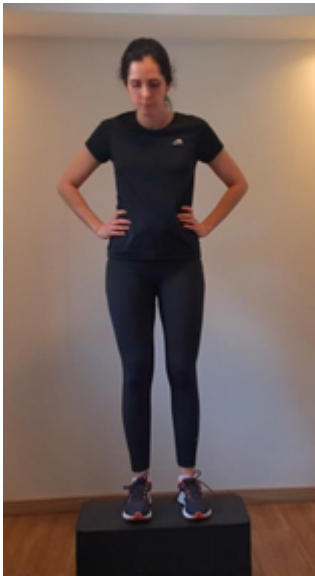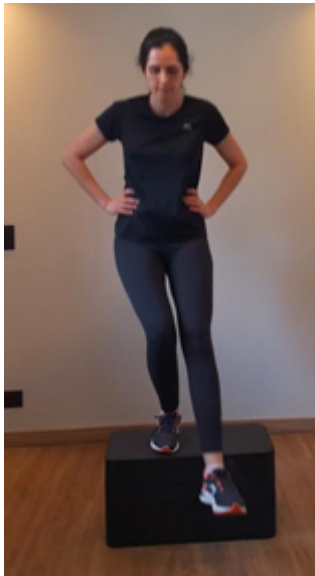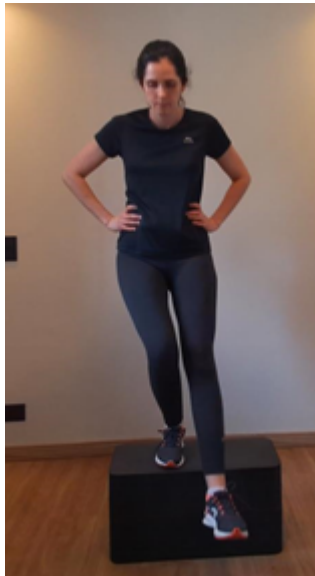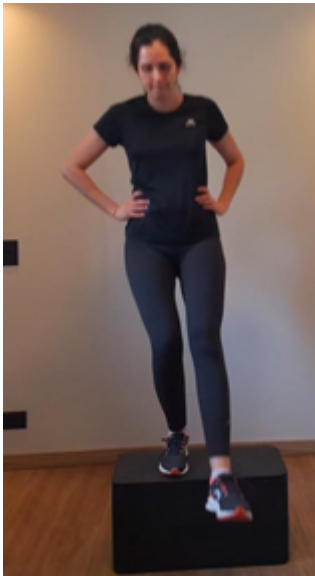
RESULTS

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	90.5°	91.3°	88.8°
Knee Displacement (total)	9.8 cm	4.3 cm	6.6 cm
Peak Knee Valgus	5° **Valgus**	1.9° **Valgus**	3.6° **Valgus**
Peak Knee Varus	3.3° **Varus**	5.3° **Varus**	2.6° **Varus**
Trunk lateral flexion at Peak Knee Flexion	3.0° Left ▼	4.5° Left ▼	3.1° Left ▼

PRACTITIONER COMMENTS

HUMANTRAK
MOVEMENT ANALYSIS SYSTEM

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	78.3°	75.9°	72.2°
Knee Displacement (total)	12.6 cm	8.5 cm	4.8 cm
Peak Knee Valgus	14.1° **Valgus**	13.2° **Valgus**	8.9° **Valgus**
Peak Knee Varus	0.6° **Varus**	0.0°	0.1° **Varus**
Trunk lateral flexion at Peak Knee Flexion	1.1° Right ▼	1.0° Right ▼	3.0° Right ▼

PRACTITIONER COMMENTS

HUMANTRAK
MOVEMENT ANALYSIS SYSTEM

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

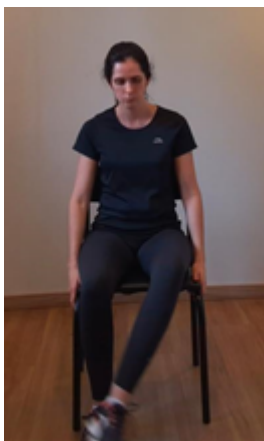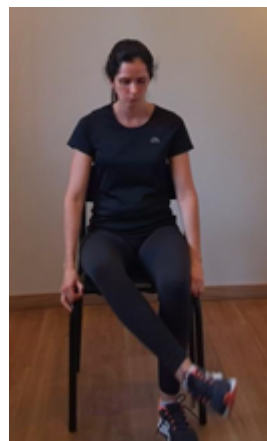| PEAK INTERNAL ROTATION	
LEFT	RIGHT

PEAK EXTERNAL ROTATION	
LEFT	RIGHT

KEY RESULTS	LEFT	RIGHT	IMBALANCE
Peak Internal Rotation	41.9°	34.6°	+7.3°
Peak External Rotation	46.0°	61.1°	+15.1°
Total ROM	87.9°	95.7°	+7.8°

PRACTITIONER COMMENTS (LEFT)

PRACTITIONER COMMENTS (RIGHT)

HUMANTRAK MOVEMENT ANALYSIS SYSTEM