HUMANTRAK
MOVEMENT ANALYSIS SYSTEM

PROFILE ASSESSMENT
William Leal
18th March, 2024

PROFILE INFORMATION

NAME	William Leal
ORGANISATION	On Morumbi Clinica Medica
DATE OF BIRTH	12th August, 1983
GENDER	Male
HEIGHT	180cm / 70in
WEIGHT	90kg / 198lb
AGE	40

HUMANTRAK
MOVEMENT ANALYSIS SYSTEM

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.
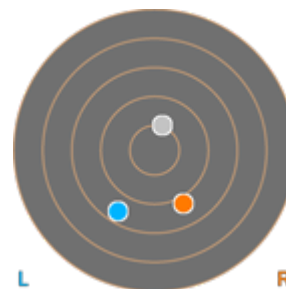
RESULTS

BALANCE SNAPSHOT

SIDETRAK POSTURAL DEVIATION
(SAGITTAL PLANE/SIDE VIEW)

6.7cm
4.2cm
.1cm
+1
-1.9cm

KEY RESULTS

Neck lateral flexion	2.4° Right ▼
Trunk lateral flexion	1.4° Right ▼
Pelvis Lateral Tilt	0.7° Right ▼
Trunk Flexion	2.4° Posterior

SWAYTRAK MOVEMENT PATHS (KNEES AND CENTRE OF MASS)

L   R

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 (LEFT)

SNAPSHOT – START OF TEST	CENTER OF MASS PATH

L   R

KEY METRICS	RESULTS
Ellipse Area	0.40 cm-2
COM Path Length	15.21 cm
Range – ML	2.18 cm
Range – AP	2.59 cm
Pelvis Lateral Tilt	9.3° Left ▼
Trunk lateral flexion	5.4° Left ▼

PRACTITIONER COMMENTS

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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	0.71 cm-2
COM Path Length	17.11 cm
Range – ML	2.38 cm
Range – AP	2.81 cm
Pelvis Lateral Tilt	7.1° Right ▼
Trunk lateral flexion	5.0° Right ▼

PRACTITIONER COMMENTS

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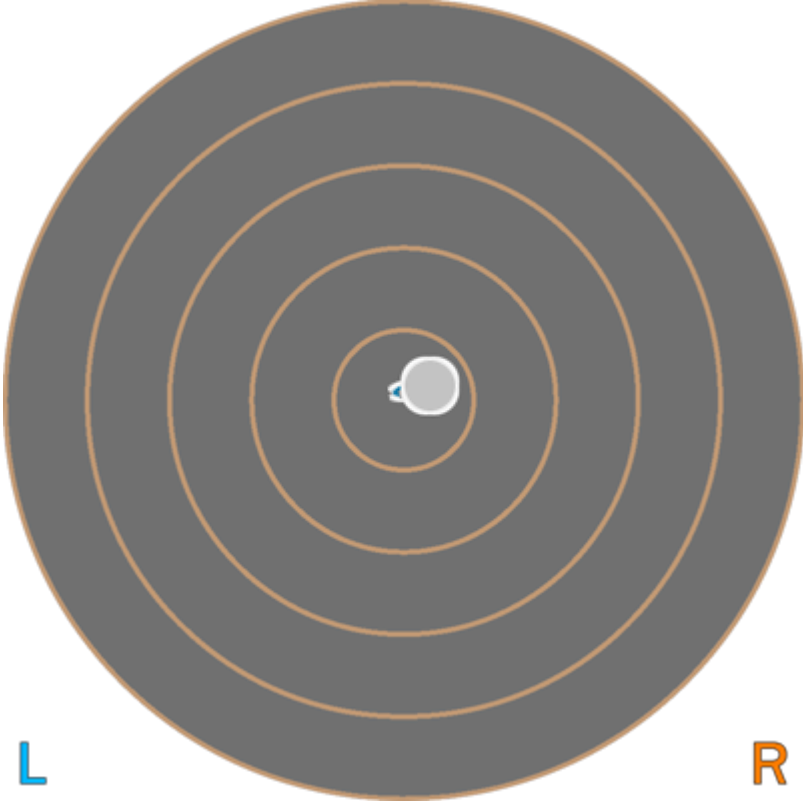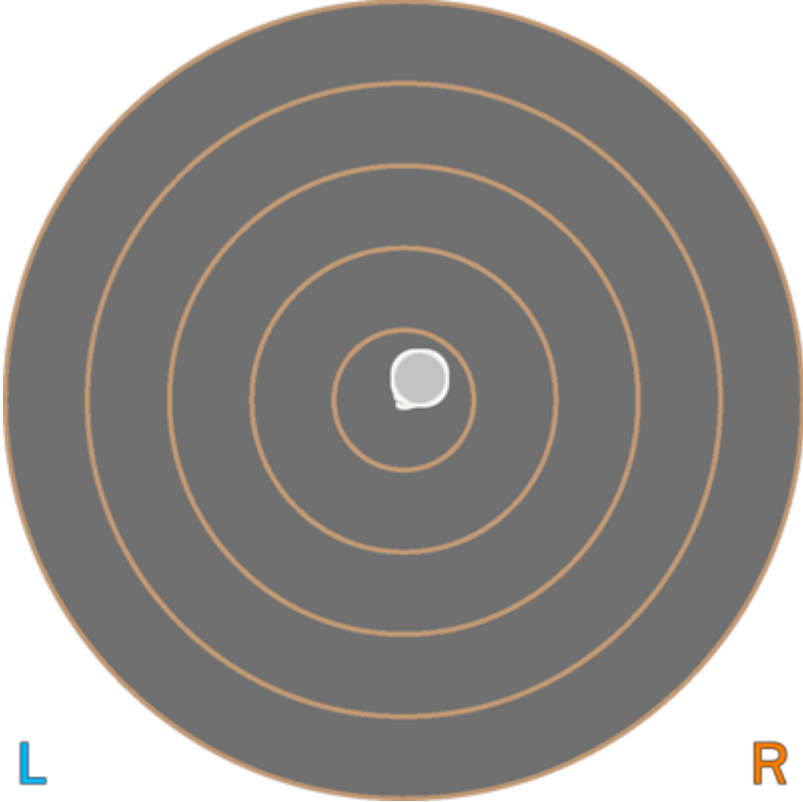# Tandem Stand
Balance Assessment

Standing balance over time is assessed with one foot directly in front of the other.

Eyes	Closed
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	1.05 cm-2
COM Path Length	20.34 cm
Range – ML	4.49 cm
Range – AP	2.03 cm
Pelvis Lateral Tilt	0.6° Right ▼
Trunk lateral flexion	0.8° Right ▼

PRACTITIONER COMMENTS

HUMANTRAK
MOVEMENT ANALYSIS SYSTEM

Tandem Stand
Balance Assessment

Standing balance over time is assessed with one foot directly in front of the other.

Eyes	Closed
Surface	Stable
Time	10.0 s

RESULTS

BALANCE RESULTS (RIGHT)

SNAPSHOT – START OF TEST	CENTER OF MASS PATH

L   R

KEY METRICS	RESULTS
Ellipse Area	0.51 cm-2
COM Path Length	17.38 cm
Range – ML	3.09 cm
Range – AP	2.78 cm
Pelvis Lateral Tilt	0.6° Right ▼
Trunk lateral flexion	1.5° Right ▼

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)	108.7°	117.5°	118.3°
Peak Knee Flexion (Right)	111.3°	118.4°	120.7°
Spine Tilt at Peak Knee Flexion	38.5° Anterior	37.1° Anterior	42.3° Anterior
Trunk lateral flexion at Peak Knee Flexion	3.7° Right ▼	0.9° Right ▼	1.6° Right ▼

PRACTITIONER COMMENTS

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30 Second Sit To Stand
Lower Body Dynamic Assessment

30 Second Sit To Stand is an assessment that provides information on function leg power and strength of participants.
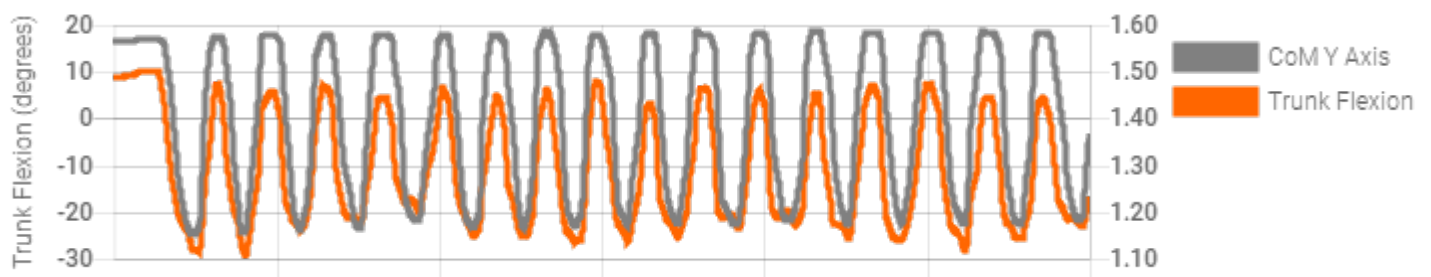
RESULTS

KEY RESULTS	OVERALL
Successful Repetitions	16
Peak Knee Extension	L 4.3° R 7.8°
Knee Displacement	L 13.5 cm R 14.1 cm
Peak Lateral Trunk Flexion	2.8° Right ▼

SNAPSHOTS					
START	1st REP: PEAK TRUNK FLEXION	Q1 REP: PEAK TRUNK FLEXION	MEDIAN REP: PEAK TRUNK FLEXION	Q3 REP: PEAK TRUNK FLEXION	LAST REP: PEAK TRUNK FLEXION

KEY METRICS	1st REP	Q1 REP	MEDIAN REP	Q3 REP	LAST REP
Knee-Ankle Separation Ratio	1.2	1.3	1.2	1.2	1.2
Lateral Trunk Flexion	1.1° Right ▼	2.1° Right ▼	1.5° Right ▼	1.2° Right ▼	0.8° Right ▼
Knee Flexion	L 72.9° R 75.0°	L 89.1° R 91.0°	L 76.4° R 78.5°	L 72.1° R 72.9°	L 74.0° R 76.7°
Hip Flexion	L 66.4° R 64.5°	L 88.6° R 85.1°	L 72.7° R 70.5°	L 66.3° R 63.4°	L 70.7° R 68.2°
Trunk Flexion	1.1° Posterior	2.1° Posterior	1.5° Posterior	1.2° Posterior	0.8° Posterior

HUMANTRAK
MOVEMENT ANALYSIS SYSTEM

HUMANTRAK
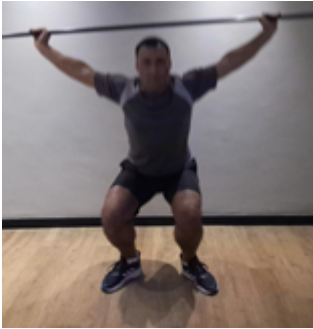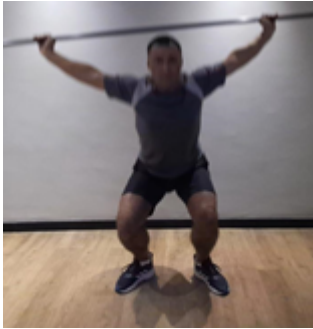MOVEMENT ANALYSIS SYSTEM

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)	116.2°	111.1°	108.9°
Peak Knee Flexion (Right)	116.2°	113.4°	108.9°
Trunk Flexion at Peak Knee Flexion	24.0° Anterior	28.5° Anterior	24.6° Anterior
Trunk lateral flexion at Peak Knee Flexion	1.9° Right ▼	2.3° Right ▼	3.2° Right ▼

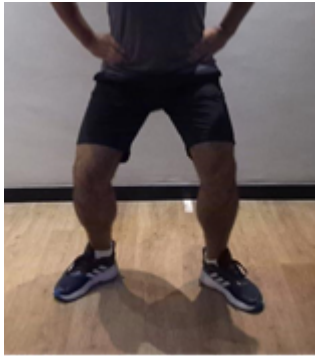## PRACTITIONER COMMENTS

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	37.52 cm	
Peak Spine Tilt after landing	24.3° **Anterior**	
Peak Lateral Spine Tilt after landing	1.5° **Right**	
Peak Lateral Pelvic Tilt after landing	4.2° **Right**	

KEY METRICS   (LEGS)

	LEFT LEG	RIGHT LEG	ASYMMETRY
Peak Hip Flexion after landing	68.2°	66.1°	3.1%
Peak Knee Flexion after landing	78.1°	79.3°	1.6%
Peak Knee Valgus/Varus after landing	23.3° **Varus**	35.6° **Varus**	34.6%

PRACTITIONER COMMENTS

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MOVEMENT ANALYSIS SYSTEM
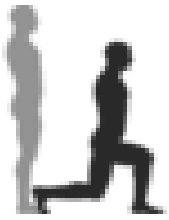
Lunge
Lower Body Dynamic Assessment

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	60.5°	65.2°	7.3%
Peak Knee Flexion	84.2°	91.2°	7.7%
Peak Spine Lateral Tilt	1.6° Posterior	2.6° Anterior	N/A
Peak Pelvic Lateral Tilt	1.4° Right	1.4° Right	N/A

PRACTITIONER COMMENTS (LEFT)

PRACTITIONER COMMENTS (RIGHT)

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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	0.9	1.4
Hip Flexion (Left)	39.0°	98.1°
Hip Flexion (Right)	28.7°	96.5°
Knee Flexion (Left)	50.0°	104.6°
Knee Flexion (Right)	39.6°	112.7°

PRACTITIONER COMMENTS

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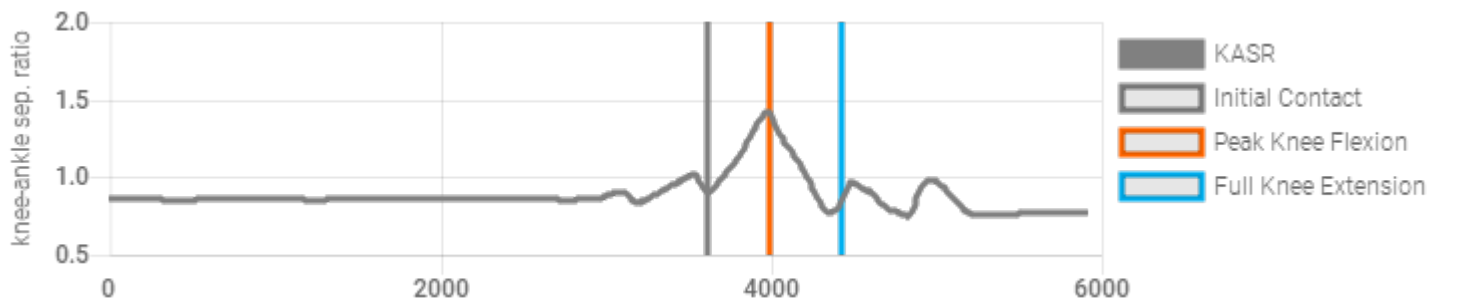
Single Leg Squat
Lower Body Dynamic Assessment

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	87.5°	88.0°	91.4°
Knee Displacement (total)	15.8 cm	18.8 cm	19.0 cm
Peak Knee Valgus	0.0°	3.7° **Valgus**	5.8° **Valgus**
Peak Knee Varus	13.7° **Varus**	1.7° **Varus**	2.4° **Varus**
Trunk lateral flexion at Peak Knee Flexion	11.1° Left ▼	0.9° Right ▼	1.4° Left ▼

PRACTITIONER COMMENTS

HUMANTRAK
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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	91.1°	96.8°	98.1°
Knee Displacement (total)	38.8 cm	15.7 cm	22.1 cm
Peak Knee Valgus	4.6° **Valgus**	12.1° **Valgus**	1.9° **Valgus**
Peak Knee Varus	30.9° **Varus**	1.9° **Varus**	13.4° **Varus**
Trunk lateral flexion at Peak Knee Flexion	18.3° **Right** ▼	5.4° **Right** ▼	14.3° **Right** ▼

PRACTITIONER COMMENTS

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