



# Unilateral Stance

## Module tutorial



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# 1. GENERAL

## 1.1. Description

**Unilateral Stance** is used to assess and compare balance between the two lower limbs in unipedal position.

## 1.2. Required accessories

StaticVR force platforms or MotionVR dynamic posturography platform, VR headset optional.

## 1.3. Patient setup

The software requires the patient to be standing on the platforms (StaticVR or MotionVR).

### Positioning the patient on the platform:

- Center the patient's feet on the force platform.
- The medial malleolus of each foot should be directly centered on the horizontal line of the platform.

The patient can choose to wear a VR headset in front of their eyes or not.

Recording of statokinesigrams during four successive unipedal stance sequences:

- Sequence 1: Standing on Right Foot / Eyes Open
- Sequence 2: Standing on Right Foot / Eyes Closed
- Sequence 3: Standing on Left Foot / Eyes Open
- Sequence 4: Standing on Left Foot / Eyes Closed



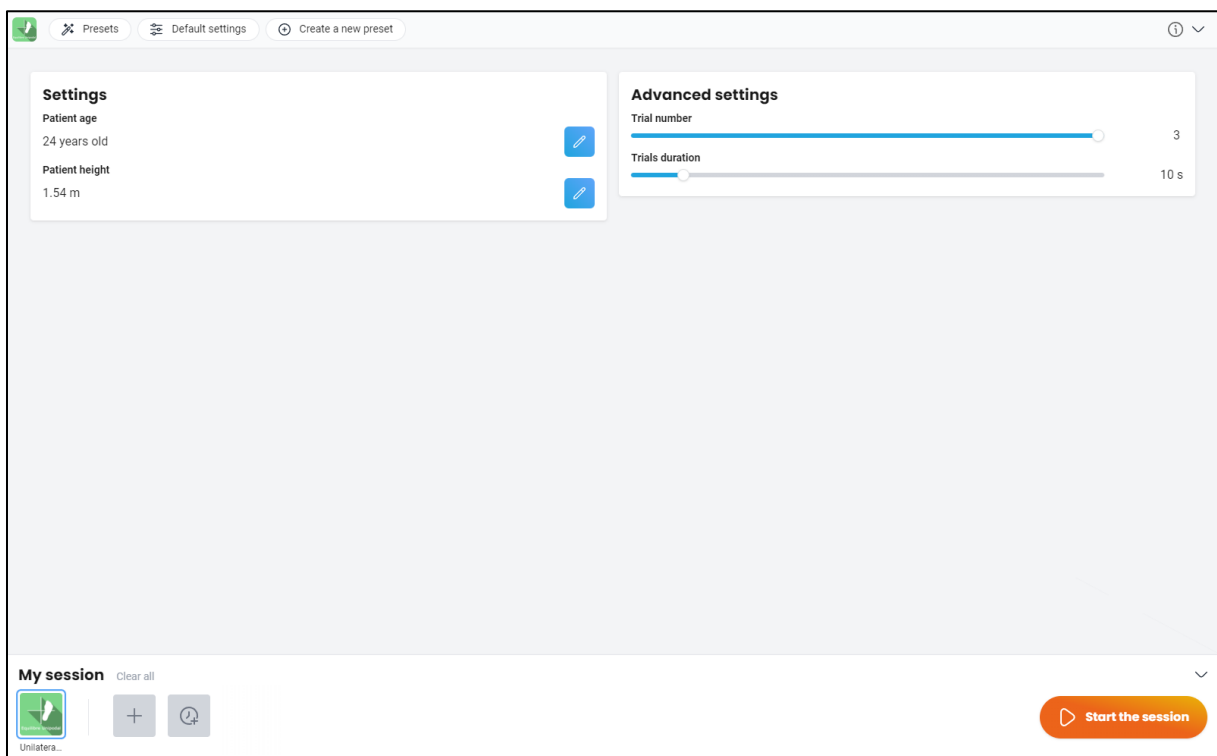
The patient is standing and places their hands on their waist. The weight-bearing foot is defined for each sequence. The other foot shall be lifted by bending the leg without it being in contact with the supporting leg.

When this unipedal position is adopted, the patient must try to maintain their balance as long as possible throughout the sequence, with their eyes either open or closed, depending on the instructions given.

For each sequence, the patient can perform up to three attempts.

## 2. Settings

### 2.1. Session settings



The software's variable settings are as follows:

#### 2.1.1. Settings

### Settings

Patient age  
24 years old 

Patient height  
1.54 m 


#### Patient age:

This information must be filled in for each patient. This value is used to compare the test results with a base of patients of the same age group. **If a value is not entered, the test results will be compared with a base of patients of a broader age group.**

Click on the pencil icon and fill in the patient's date of birth. The patient file is automatically updated.

Patient age

Birth date  
21/03/2000





#### Patient height:

This information must be filled in for each patient and is required to analyze the results. Click on the pencil icon and fill in the patient's height. The patient's file is automatically updated.

### 2.1.2. Advanced settings

### Advanced settings

Trial number  
 3

Trials duration  
 10 s

#### Trial number:

This is used to program the number of trials for each sequence by selecting the required number. The trial number is 3 by default, but it can be set from 1 to 3.

If the trial number is 2 or 3, the results are calculated based on the tests' average.

### Trial duration

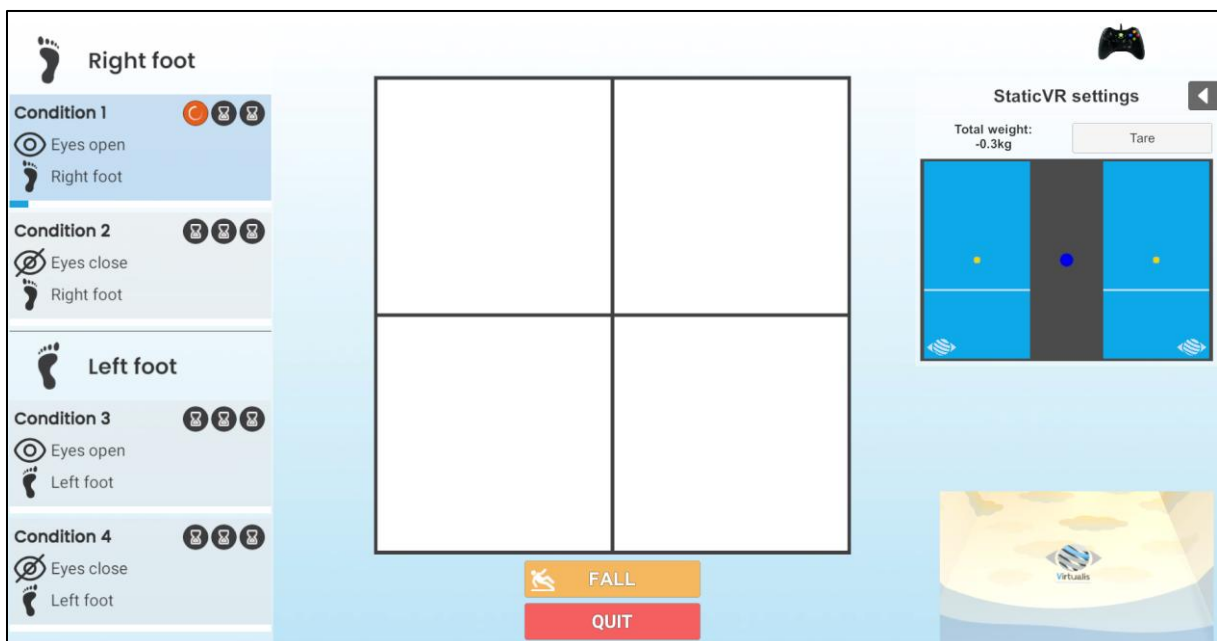
Trial duration can be set to a fixed time by entering the required value. The default value is 10 seconds per trial.


Value: 0 to 99 seconds.

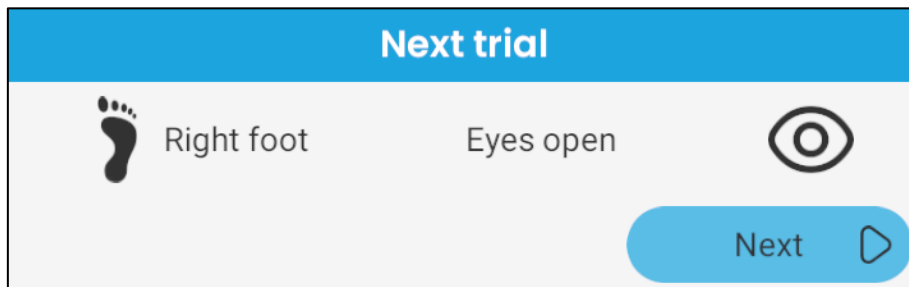
## 3. Module

### 3.1. Session

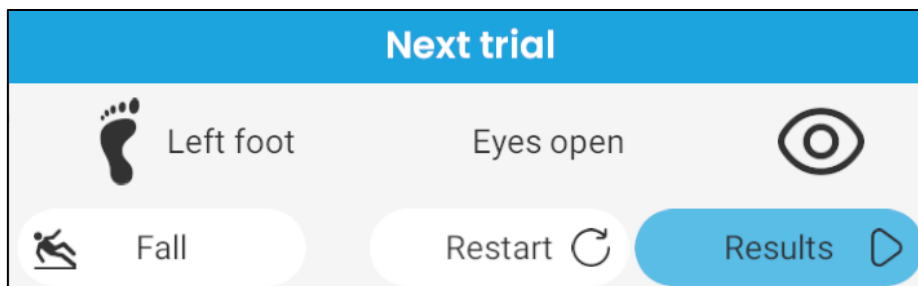
Once the presets have been selected, click on "**Start the session**" in the bottom right corner of the screen.



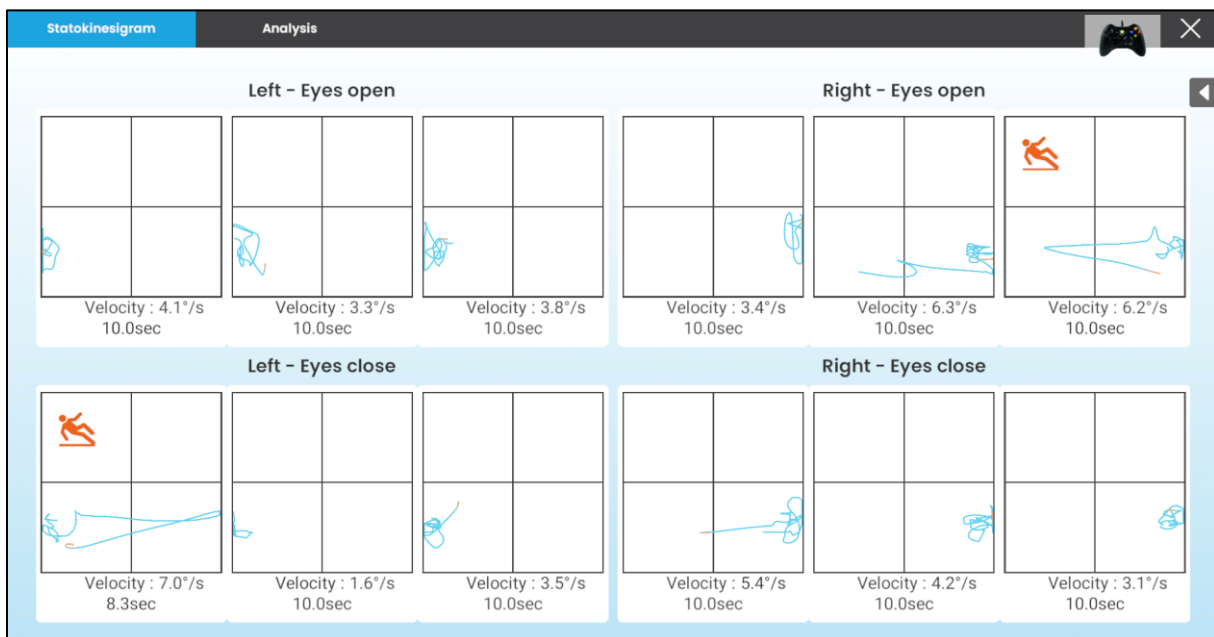
- During the recording of each trial, an orange light comes on and flashes; it turns blue once the recording has finished.  
The trial can be interrupted if the patient has fallen or put their other foot back on the ground, using the  **Fall** button at the bottom of the screen.
- At the end of each trial, a window of this type opens (here for condition 1) giving the user the opportunity to indicate a fall if applicable or to restart the trial before moving on to the next trial.

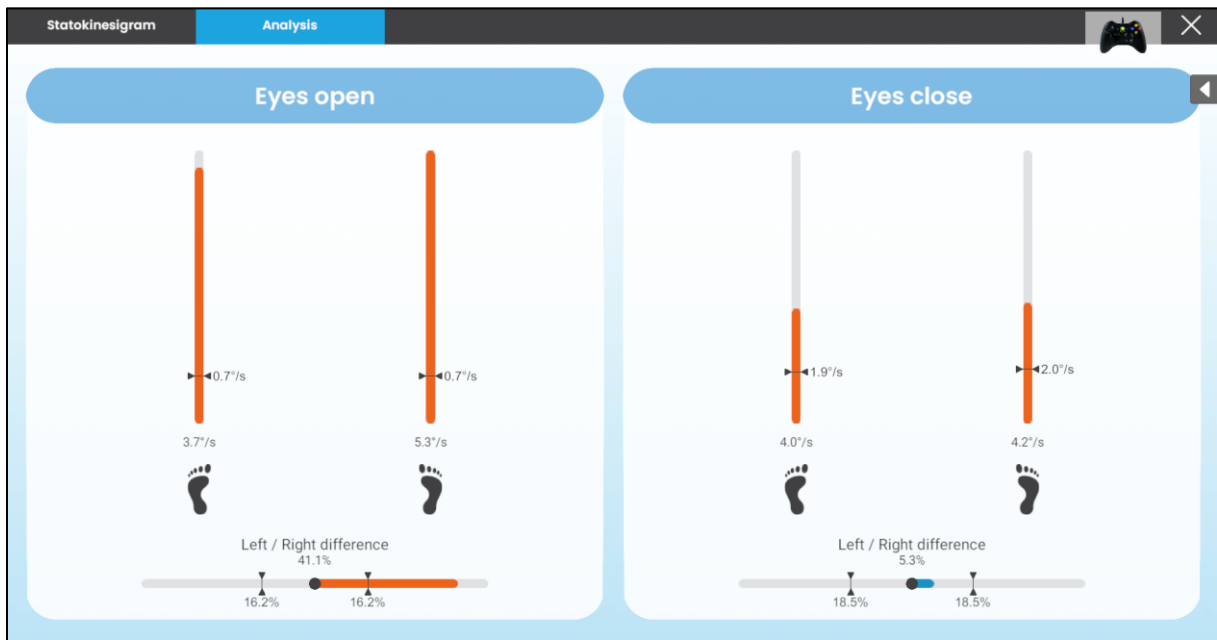


- Once the tests are completed, click on the “Results” button to display each condition’s statokinesigram and the results’ analyses.



**Results:**

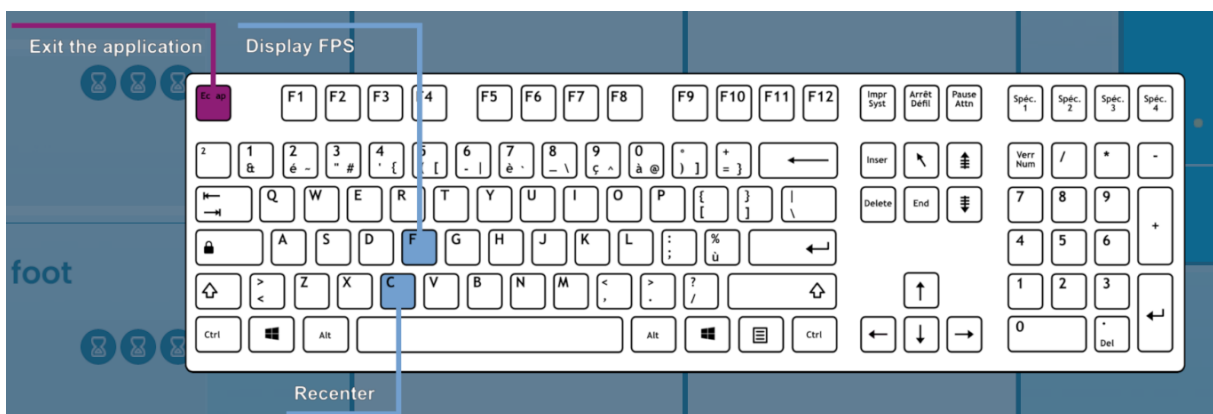




- Once the statokinesigrams and the analyses have been displayed, the software closes, and you can access the results. They are only available once all tests have been completed.

### 3.2. Shortcuts

During the session, the shortcut list is found by clicking on the Xbox controller icon in the upper right corner of the screen.





### 3.3. Results

Once the session is over, you can view the results.

#### 3.3.1. Summarized results

By default, the results are as follows:

The velocity of each test condition (condition 1 to 4, test 1 to 3 maximum) is displayed.

- Velocity condition 1 trial 1
- Velocity condition 1 trial 2
- Velocity condition 1 trial 3
- Velocity condition 2 trial 1
- Velocity condition 2 trial 2
- Velocity condition 2 trial 3



- Velocity condition 3 trial 1
- Velocity condition 3 trial 2
- Velocity condition 3 trial 3
- Velocity condition 4 trial 1
- Velocity condition 4 trial 2
- Velocity condition 4 trial 3
- Mean left feet, eyes opened
- Mean right feet, eyes opened
- Mean left feet, eyes closed
- Mean right feet, eyes closed
- % difference, eyes opened
- % difference, eyes closed

### 3.3.2. Graphs and report

To find the detailed results and to generate a report, click on the histogram icon.

Session details  
15/05/2025 17:05

Unilateral Stance

Parameters Results Notes

Name	Result
Velocity condition 1 trial 1	4.70 °/s
Velocity condition 2 trial 1	0.90 °/s
Velocity condition 3 trial 1	0.60 °/s
Velocity condition 4 trial 1	1.50 °/s
Mean left feet, eyes opened	0.60 °/s
Mean right feet, eyes opened	4.70 °/s
Mean left feet, eyes closed	1.50 °/s
Mean right feet, eyes closed	0.90 °/s
% difference, eyes opened	623.90 %
% difference, eyes closed	-35.30 %