

Protocol ID: _____

Study Name: _____

Site: _____

Event Name: _____

Event Date: _____

Study Subject ID: _____

Interviewer Name: _____

Interview Date: _____

BLSA Knee Strength - Ver 1.2

Section Title: Eligibility

Instructions:

Eligibility

Date Completed

☐ Blank

Tester ID

INTRODUCTION and ELIGIBILITY ASSESSMENT: "This machine is a dynamometer (we call it the Biodex, after the manufacturer) and is used to measure strength in various muscle groups. In this session, we will measure the strength of the muscle groups in your upper legs using three sets of tests, that I'll describe as we get to them. Before starting, I will ask you a few questions to make sure it is safe for you to do this test."

Examiner Chart Review

1. Does the participant's BP obtained during PE exceed 220/115mmHg?

☐ Yes ☐ No ☐ Don't know Click to deselect entryIf YES, DO NOT TEST

Questions for Participant

3. Has a doctor ever told you that you had an aneurysm in the brain?

☐ Yes ☐ No ☐ Don't know Click to deselect entryIf YES, DO NOT TEST

4. Has a doctor told you that you had a cerebral hemorrhage in the last 6 months?

☐ Yes ☐ No ☐ Don't know Click to deselect entryIf YES, DO NOT TEST

4a. Have you had any low back pain in the past 3 months that limited your activity for one month?

☐ Yes ☐ No ☐ Don't know Click to deselect entryIf YES, DO NOT TEST

5. Have you had knee surgery on either leg?

☐ Yes ☐ No ☐ Don't know [Click to deselect entry](#)

5a. **If yes**, was the surgery on your right, left or both knees?

☐ Right ☐ Left ☐ Both ☐ Don't know

Type of surgery

5b. Right knee

☐ Joint
☐ Bone
☐ Ligament
☐ Meniscus
☐ Cartilage
☐ Knee cap
☐ Tendon
☐ Others
☐ Don't know

5c. Left knee

☐ Joint
☐ Bone
☐ Ligament
☐ Meniscus
☐ Cartilage
☐ Knee cap
☐ Tendon
☐ Others
☐ Don't know

6. Have you had an injury that made one leg weaker than the other

☐ Yes ☐ No ☐ Don't know [Click to deselect entry](#)

6a. **If yes**, which leg is stronger ☐ Right ☐ Left ☐ Don't know

7. Is it difficult to bend or straighten either of your knees fully due to pain, arthritis, injury or some other condition?

☐ Yes ☐ No ☐ Don't
know

Click to deselect
entry

7a. **If yes**, which knee?

☐ Right ☐ Left ☐ Both ☐ Don't
know

24. Do you have any pain in your knee, when you walk up or down stairs?

☐ Yes ☐ No ☐ Don't know Click to deselect entry

24a. Which knee

☐ Right
☐ Left
☐ Both
☐ Don't know

24b. How often do you have pain? ☐ Occassionally

☐ Weekly
☐ Daily
☐ Don't know

8. Which leg was tested at the participant's most recent BLSA visit in which Dynamometer testing was performed?

☐ Right
☐ Left
☐ Both
☐ Don't know
☐ First time

Pain

25. Do you have any pain now? ☐ Yes ☐ No ☐ Don't know Click to deselect entry

If Yes, rate the severity of pain you have now.

Low back pain ☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 Click to deselect entry

Right hip pain ☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 Click to deselect entry

Left hip pain ☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 Click to deselect entry

Right knee pain ☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 Click to deselect entry

Left knee pain ☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 Click to deselect entry

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Section Title: Right Leg**Instructions:**

Manual Positioning Settings: *Dynamometer settings used previously may be printed below. Please position the dynamometer exactly as before (if information is available). Refer to the operations manual for procedures on determining settings if no previous settings are available or changes are necessary. In this case enter (or overwrite) settings below:*

10a. Seat bottom depth (In)

10b. Lever arm (In)

10c. Limb weight (Nm)

Isometric Test: "For the last test you will be kicking out as hard as you can and holding that position for three seconds each time. The lever arm will be in a fixed positions and will not move. You will be doing this action three times for each of two test angles. There will be NO practice tests."

13a. Was right leg tested ☐ Yes ☐ No Click to deselect entry13b. Trials attempted at 120 degrees? ☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4+ Click to deselect entry13c. Trials attempted at 140 degrees? ☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4+ Click to deselect entryReason Test Terminated ☐ Requested by Participant ☐ Tester's decision Click to deselect entry13d. Reason not done: ☐ Ineligible ☐ Refused ☐ Technical ☐ No Tester ☐ Time ☐ Don't know Click to deselect entry

Concentric/Concentric Test: "For this test you will be moving with the machine, kicking out as hard as you can until the machine

stops and then, when I tell you to start, pulling back in as hard as you can with the machine the entire way back to the starting position. You will be doing this action three times for each of two test speeds, one slow and one fast We will start with a few practice tests first."

11a. Was right leg tested ☐ Yes ☐ No [Click to deselect entry](#)

11c. Trials attempted at 180 degrees? ☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4+ [Click to deselect entry](#)

Reason Test Terminated ☐ Requested by Participant ☐ Tester's decision [Click to deselect entry](#)

11b. Trials attempted at 30 degrees? ☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4+ [Click to deselect entry](#)

Reason Test Terminated ☐ Requested by Participant ☐ Tester's decision [Click to deselect entry](#)

11d. Reason not done: ☐ Ineligible ☐ Refused ☐ Technical ☐ No Tester ☐ Time ☐ Don't know [Click to deselect entry](#)

Right Leg Comments:

Protocol ID: _____

Study Subject ID: _____

Study Name: _____

Interviewer Name: _____

Site: _____

Interview Date: _____

Event Name: _____

Event Date: _____

Section Title: Left Leg**Instructions:**

Manual Positioning Settings: *Dynamometer settings used previously may be printed below. Please position the dynamometer exactly as before (if information is available). Refer to the operations manual for procedures on determining settings if no previous settings are available or changes are necessary. In this case enter (or overwrite) settings below:*

20a. Seat bottom depth (In)

20b. Lever arm (In)

20c. Limb weight (Nm)

Isometric Test: "For the last test you will be kicking out as hard as you can and holding that position for three seconds each time. The lever arm will be in a fixed positions and will not move. You will be doing this action three times for each of two test angles. There will be NO practice tests."

23a. Was left leg tested ☐ Yes ☐ No Click to deselect entry23b. Trials attempted at 120 degrees? ☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4+ Click to deselect entry23c. Trials attempted at 140 degrees? ☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4+ Click to deselect entryReason Test Terminated ☐ Requested by Participant ☐ Tester's decision Click to deselect entry23d. Reason not done: ☐ Ineligible ☐ Refused ☐ Technical ☐ No Tester ☐ Time ☐ Don't know Click to deselect entry

Concentric/Concentric Test: "For this test you will be moving with the machine, kicking out as hard as you can until the machine

stops and then, when I tell you to start, pulling back in as hard as you can with the machine the entire way back to the starting position. You will be doing this action three times for each of two test speeds, one slow and one fast We will start with a few practice tests first."

21a. Was left leg tested ☒ Yes ☐ No [Click to deselect entry](#)

21c. Trials attempted at 180 degrees? ☐ 0 ☐ 1 ☐ 2 ☐ 3 ☒ 4+ [Click to deselect entry](#)

Reason Test Terminated ☐ Requested by Participant ☐ Tester's decision [Click to deselect entry](#)

21b. Trials attempted at 30 degrees? ☐ 0 ☐ 1 ☐ 2 ☐ 3 ☒ 4+ [Click to deselect entry](#)

Reason Test Terminated ☐ Requested by Participant ☐ Tester's decision [Click to deselect entry](#)

21d. Reason not done: ☐ Ineligible ☐ Refused ☐ Technical ☐ No Tester ☐ Time ☐ Don't know [Click to deselect entry](#)

Left Leg Comments: