

KNEE PAIN PROTOCOL

TABLE OF CONTENTS

PNS PRE-TREATMENT PATIENT SURVEY	2
PNS CLINICAL SURVEY	10
PNS FOLLOW-UP PATIENT SURVEY (2w/4w/6w/60 days/6m/12m)	12
PNS FOLLOW-UP CLINICAL SURVEY (60 days/6m/12m)	20

PNS PRE-TREATMENT PATIENT SURVEY

Page 2 of 20

Knee Pre-Treatment Questionnaire is intended to help your practitioner better understand your current symptoms. Please answer all questions honestly and to the best of your ability. Similar surveys will be sent during your recovery to help measure and quantify your progress.

Age? *

 years

Gender? *

- ☐ Female
- ☐ Male
- ☐ Prefer not to answer

Race? *

Select one or more.

- | | |
|---|--|
| ☐ White | ☐ Black or African American |
| ☐ American Indian or Alaska Native | ☐ Native Hawaiian or Other Pacific Islander |
| ☐ Asian | ☐ Do not want to specify |

BODY MASS INDEX (BMI)

BMI is a physical measurement used to assess an individual's total amount of body fat. Please enter the height and weight below to calculate BMI.

Height must be provided in inches. For reference: 12 inches per foot (5ft = 60 inches).

Height? *

 inches

Weight? *

 lbs

VISUAL ANALOGUE SCALE (VAS)

VAS is a measurement instrument that measures the amount of pain you are experiencing. Scores range across a continuum from none to an extreme amount of pain. A higher score refers to greater pain.

Please indicate the level of pain that you feel on average during the day at the treated location. *



PNS PRE-TREATMENT PATIENT SURVEY

Page 3 of 20

KNEE OUTCOME SURVEY ACTIVITIES OF DAILY LIVING SCALE (KOS-ADLS)

KOS-ADLS patient-reported questionnaire used to assess symptoms and functional limitations in individuals with knee disorders. Answer every question by selecting the appropriate variant.

SYMPTOMS:

To what degree does each of the following symptoms affect your level of activity? *

Check one number on each line where:

- 0 = The symptom prevents me from all daily activity
- 1 = The symptom affects my activity severely
- 2 = The symptom affects my activity moderately
- 3 = The symptom affects my activity slightly
- 4 = I have the symptom, but it does not affect my activity
- 5 = I do not have the symptom

	0	1	2	3	4	5
Pain	☐	☐	☐	☐	☐	☐
Stiffness	☐	☐	☐	☐	☐	☐
Swelling	☐	☐	☐	☐	☐	☐
Giving way, buckling, or shifting of the knee	☐	☐	☐	☐	☐	☐
Weakness	☐	☐	☐	☐	☐	☐
Limping	☐	☐	☐	☐	☐	☐

FUNCTIONAL LIMITATIONS WITH ACTIVITIES OF DAILY LIVING:

How does your knee affect your ability to: *

Check one number on each line where:

- 0 = I am unable to
- 1 = Activity is very difficult
- 2 = Activity is fairly difficult
- 3 = Activity is somewhat difficult
- 4 = Activity is minimally difficult
- 5 = Activity is not difficult

PNS PRE-TREATMENT PATIENT SURVEY

Page 4 of 20

	0	1	2	3	4	5
Walk	☐	☐	☐	☐	☐	☐
Go up stairs	☐	☐	☐	☐	☐	☐
Go down stairs	☐	☐	☐	☐	☐	☐
Stand	☐	☐	☐	☐	☐	☐
Kneel on front of your knee	☐	☐	☐	☐	☐	☐
Squat	☐	☐	☐	☐	☐	☐
Sit with your knee bent	☐	☐	☐	☐	☐	☐
Rise from a chair	☐	☐	☐	☐	☐	☐

THE WESTERN ONTARIO AND MCMASTER UNIVERSITIES OSTEOARTHRITIS INDEX (WOMAC)

WOMAC is a questionnaire used to assess osteoarthritis of lower extremity. Subsections include: pain, stiffness, and physical functioning of the joints. Please select **ONLY** one variant that best describes your current condition.

PAIN SUBSCALE

How much pain do you have while walking on a flat surface? *

☐ None

☐ Mild

☐ Moderate

☐ Severe

☐ Extreme

How much pain do you have while going up or down stairs? *

☐ None

☐ Mild

☐ Moderate

☐ Severe

☐ Extreme

PNS PRE-TREATMENT PATIENT SURVEY

Page 5 of 20

How much pain do you have at night while in bed? (pain that disturbs your sleep) *

- ☐ None
- ☐ Mild
- ☐ Moderate
- ☐ Severe
- ☐ Extreme

How much do you have while sitting or lying down? *

- ☐ None
- ☐ Mild
- ☐ Moderate
- ☐ Severe
- ☐ Extreme

How much do you have while standing upright? *

- ☐ None
- ☐ Mild
- ☐ Moderate
- ☐ Severe
- ☐ Extreme

How severe is your stiffness after sitting, lying down or resting later in the day? *

- ☐ None
- ☐ Mild
- ☐ Moderate
- ☐ Severe
- ☐ Extreme

PHYSICAL FUNCTION SUBSCALE

What degree of difficulty do you have descending stairs? *

- ☐ None
- ☐ Mild
- ☐ Moderate
- ☐ Severe
- ☐ Extreme

PNS PRE-TREATMENT PATIENT SURVEY

Page 6 of 20

What degree of difficulty do you have ascending stairs? *

- ☐ None
- ☐ Mild
- ☐ Moderate
- ☐ Severe
- ☐ Extreme

What degree of difficulty do you have rising from sitting? *

- ☐ None
- ☐ Mild
- ☐ Moderate
- ☐ Severe
- ☐ Extreme

What degree of difficulty do you have standing? *

- ☐ None
- ☐ Mild
- ☐ Moderate
- ☐ Severe
- ☐ Extreme

What degree of difficulty do you have bending to the floor? *

- ☐ None
- ☐ Mild
- ☐ Moderate
- ☐ Severe
- ☐ Extreme

What degree of difficulty do you have walking on a flat surface? *

- ☐ None
- ☐ Mild
- ☐ Moderate
- ☐ Severe
- ☐ Extreme

PNS PRE-TREATMENT PATIENT SURVEY

Page 7 of 20

What degree of difficulty do you have getting in or out of a car, or getting on or off a bus? *

- ☐ None
- ☐ Mild
- ☐ Moderate
- ☐ Severe
- ☐ Extreme

What degree of difficulty do you have going shopping? *

- ☐ None
- ☐ Mild
- ☐ Moderate
- ☐ Severe
- ☐ Extreme

What degree of difficulty do you have putting on socks or stockings? *

- ☐ None
- ☐ Mild
- ☐ Moderate
- ☐ Severe
- ☐ Extreme

What degree of difficulty do you have rising from bed? *

- ☐ None
- ☐ Mild
- ☐ Moderate
- ☐ Severe
- ☐ Extreme

What degree of difficulty do you have taking off socks or stockings? *

- ☐ None
- ☐ Mild
- ☐ Moderate
- ☐ Severe
- ☐ Extreme

PNS PRE-TREATMENT PATIENT SURVEY

Page 8 of 20

What degree of difficulty do you have lying in bed? *

- ☐ None
- ☐ Mild
- ☐ Moderate
- ☐ Severe
- ☐ Extreme

What degree of difficulty do you have getting in or out of a bath? *

- ☐ None
- ☐ Mild
- ☐ Moderate
- ☐ Severe
- ☐ Extreme

What degree of difficulty do you have sitting? *

- ☐ None
- ☐ Mild
- ☐ Moderate
- ☐ Severe
- ☐ Extreme

What degree of difficulty do you have getting on or off the toilet? *

- ☐ None
- ☐ Mild
- ☐ Moderate
- ☐ Severe
- ☐ Extreme

What degree of difficulty do you have undertaking heavy domestic duties? *

- ☐ None
- ☐ Mild
- ☐ Moderate
- ☐ Severe
- ☐ Extreme

PNS PRE-TREATMENT PATIENT SURVEY

Page 9 of 20

What degree of difficulty do you have undertaking light domestic duties? *

- ☐ None
- ☐ Mild
- ☐ Moderate
- ☐ Severe
- ☐ Extreme



Knee:

- ☐ Left
- ☐ Right

Primary pain location:

- ☐ Medial
- ☐ Lateral
- ☐ Anterior/patellar
- ☐ Diffuse/non-specific

Primary pain diagnosis:

- ☐ Osteoarthritis (OA)
- ☐ Chronic post-TKA pain
- ☐ Neuropathic pain (specify below)
- ☐ Other (specify)

Mark all conservative treatments the patient has failed (no satisfactory relief):

- ☐ Physical therapy
- ☐ Corticosteroid injection(s)
- ☐ Viscosupplementation (HA)
- ☐ Radiofrequency ablation (RFA)

Diagnostic nerve block:

- ☐ Positive trial ($\geq 50\%$ relief)
- ☐ Negative trial
- ☐ Not performed

Average daily opioid consumption:

Morphine Milligram
Equivalents per day (MME)

PNS system used:

- ☐ Bioventus StimTrial
- ☐ SPR Therapeutics SPRINT
- ☐ Nalu Trial System

Target nerve(s) for stimulation:

- ☐ Superior medial genicular nerve (SMGN)
- ☐ Superior lateral genicular nerve (SLGN)
- ☐ Inferior medial genicular nerve (IMGN)
- ☐ Saphenous nerve
- ☐ Other

Number of leads implanted:

leads

Image guidance?

☐ Fluoroscopy

☐ Ultrasound

☐ Other

☐ None

Intra-procedural paresthesia coverage:

☐ Complete (covers entire painful area)

☐ Partial

☐ Inadequate

Patient activity/movement restrictions post-implant:

☐ Minimal (1-3 Days)

☐ Standard (7 Days)

☐ Extended (14+ Days)

Planned implant removal date:

MM/DD/YYYY



Does the patient have any of the following?

☐ Active infection

☐ Implanted cardiac device (pacemaker/defibrillator)

☐ Uncorrected bleeding disorder/anticoagulation

What is the patient's primary goal (e.g., walk 1 block, return to golf, stop pain meds)?

PNS FOLLOW-UP PATIENT SURVEY

Page 12 of 20

Repeated at: (2w / 4w / 6w / 60 days (end of treatment) / 6m / 12m)

Please fill out the Knee Treatment Questionnaire 2 Weeks. The following questions will help your doctor measure and quantify your progress.

BODY MASS INDEX (BMI)

BMI is a physical measurement used to assess an individual's total amount of body fat. Please enter the height and weight below to calculate BMI.

Height must be provided in inches. For reference: 12 inches per foot (5ft = 60 inches).

Height? *

inches

Weight? *

lbs

VISUAL ANALOGUE SCALE (VAS)

VAS is a measurement instrument that measures the amount of pain you are experiencing. Scores range across a continuum from none to an extreme amount of pain. A higher score refers to greater pain.

Please indicate the level of pain that you feel on average during the day at the treated location. *

No pain 0 1 2 3 4 5 6 7 8 9 10 Unbearable pain

KNEE OUTCOME SURVEY ACTIVITIES OF DAILY LIVING SCALE (KOS-ADLS)

KOS-ADLS patient-reported questionnaire used to assess symptoms and functional limitations in individuals with knee disorders. Answer every question by selecting the appropriate variant.

SYMPTOMS:

To what degree does each of the following symptoms affect your level of activity? *

Check one number on each line where:

0 = The symptom prevents me from all daily activity

1 = The symptom affects my activity severely

2 = The symptom affects my activity moderately

3 = The symptom affects my activity slightly

4 = I have the symptom, but it does not affect my activity

5 = I do not have the symptom

PNS FOLLOW-UP PATIENT SURVEY

Page 13 of 20

Repeated at: (2w / 4w / 6w / 60 days (end of treatment) / 6m / 12m)

	0	1	2	3	4	5
Pain	☐	☐	☐	☐	☐	☐
Stiffness	☐	☐	☐	☐	☐	☐
Swelling	☐	☐	☐	☐	☐	☐
Giving way, buckling, or shifting of the knee	☐	☐	☐	☐	☐	☐
Weakness	☐	☐	☐	☐	☐	☐
Limping	☐	☐	☐	☐	☐	☐

FUNCTIONAL LIMITATIONS WITH ACTIVITIES OF DAILY LIVING:

How does your knee affect your ability to: *
Check one number on each line where:

0 = I am unable to
1 = Activity is very difficult
2 = Activity is fairly difficult
3 = Activity is somewhat difficult
4 = Activity is minimally difficult
5 = Activity is not difficult

	0	1	2	3	4	5
Walk	☐	☐	☐	☐	☐	☐
Go up stairs	☐	☐	☐	☐	☐	☐
Go down stairs	☐	☐	☐	☐	☐	☐
Stand	☐	☐	☐	☐	☐	☐
Kneel on front of your knee	☐	☐	☐	☐	☐	☐
Squat	☐	☐	☐	☐	☐	☐
Sit with your knee bent	☐	☐	☐	☐	☐	☐
Rise from a chair	☐	☐	☐	☐	☐	☐

Repeated at: (2w / 4w / 6w / 60 days (end of treatment) / 6m / 12m)

THE WESTERN ONTARIO AND MCMASTER UNIVERSITIES OSTEOARTHRITIS INDEX (WOMAC)

WOMAC is a questionnaire used to assess osteoarthritis of lower extremity. Subsections include: pain, stiffness, and physical functioning of the joints. Please select ONLY one variant that best describes your current condition.

PAIN SUBSCALE

How much pain do you have while walking on a flat surface? *

- ☐ None
- ☐ Mild
- ☐ Moderate
- ☐ Severe
- ☐ Extreme

How much pain do you have while going up or down stairs? *

- ☐ None
- ☐ Mild
- ☐ Moderate
- ☐ Severe
- ☐ Extreme

How much pain do you have at night while in bed? (pain that disturbs your sleep) *

- ☐ None
- ☐ Mild
- ☐ Moderate
- ☐ Severe
- ☐ Extreme

How much do you have while sitting or lying down? *

- ☐ None
- ☐ Mild
- ☐ Moderate
- ☐ Severe
- ☐ Extreme

Repeated at: (2w / 4w / 6w / 60 days (end of treatment) / 6m / 12m)

How much do you have while standing upright? *

- ☐ None
- ☐ Mild
- ☐ Moderate
- ☐ Severe
- ☐ Extreme

STIFFNESS SUBSCALE

How severe is your stiffness after you first awakening in the morning? *

- ☐ None
- ☐ Mild
- ☐ Moderate
- ☐ Severe
- ☐ Extreme

How severe is your stiffness after sitting, lying down or resting later in the day? *

- ☐ None
- ☐ Mild
- ☐ Moderate
- ☐ Severe
- ☐ Extreme

PHYSICAL FUNCTION SUBSCALE

What degree of difficulty do you have descending stairs? *

- ☐ None
- ☐ Mild
- ☐ Moderate
- ☐ Severe
- ☐ Extreme

What degree of difficulty do you have ascending stairs? *

- ☐ None
- ☐ Mild
- ☐ Moderate
- ☐ Severe
- ☐ Extreme

Repeated at: (2w / 4w / 6w / 60 days (end of treatment) / 6m / 12m)

What degree of difficulty do you have rising from sitting? *

- ☐ None
- ☐ Mild
- ☐ Moderate
- ☐ Severe
- ☐ Extreme

What degree of difficulty do you have standing? *

- ☐ None
- ☐ Mild
- ☐ Moderate
- ☐ Severe
- ☐ Extreme

What degree of difficulty do you have bending to the floor? *

- ☐ None
- ☐ Mild
- ☐ Moderate
- ☐ Severe
- ☐ Extreme

What degree of difficulty do you have walking on a flat surface? *

- ☐ None
- ☐ Mild
- ☐ Moderate
- ☐ Severe
- ☐ Extreme

What degree of difficulty do you have getting in or out of a car, or getting on or off a bus? *

- ☐ None
- ☐ Mild
- ☐ Moderate
- ☐ Severe
- ☐ Extreme

Repeated at: (2w / 4w / 6w / 60 days (end of treatment) / 6m / 12m)

What degree of difficulty do you have going shopping? *

- ☐ None
- ☐ Mild
- ☐ Moderate
- ☐ Severe
- ☐ Extreme

What degree of difficulty do you have putting on socks or stockings? *

- ☐ None
- ☐ Mild
- ☐ Moderate
- ☐ Severe
- ☐ Extreme

What degree of difficulty do you have rising from bed? *

- ☐ None
- ☐ Mild
- ☐ Moderate
- ☐ Severe
- ☐ Extreme

What degree of difficulty do you have taking off socks or stockings? *

- ☐ None
- ☐ Mild
- ☐ Moderate
- ☐ Severe
- ☐ Extreme

What degree of difficulty do you have lying in bed? *

- ☐ None
- ☐ Mild
- ☐ Moderate
- ☐ Severe
- ☐ Extreme

Repeated at: (2w / 4w / 6w / 60 days (end of treatment) / 6m / 12m)

What degree of difficulty do you have getting in or out of a bath? *

- ☐ None
- ☐ Mild
- ☐ Moderate
- ☐ Severe
- ☐ Extreme

What degree of difficulty do you have sitting? *

- ☐ None
- ☐ Mild
- ☐ Moderate
- ☐ Severe
- ☐ Extreme

What degree of difficulty do you have getting on or off the toilet? *

- ☐ None
- ☐ Mild
- ☐ Moderate
- ☐ Severe
- ☐ Extreme

What degree of difficulty do you have undertaking heavy domestic duties? *

- ☐ None
- ☐ Mild
- ☐ Moderate
- ☐ Severe
- ☐ Extreme

What degree of difficulty do you have undertaking light domestic duties? *

- ☐ None
- ☐ Mild
- ☐ Moderate
- ☐ Severe
- ☐ Extreme

Repeated at: (2w / 4w / 6w / 60 days (end of treatment) / 6m / 12m)

PATIENTS' GLOBAL IMPRESSION OF CHANGE (PGIC) SCALE

The self-report measure Patient Global Impression of Change (PGIC) reflects a patient's belief about the efficacy of treatment. To rate the overall improvement, please answer the following question by choosing only ONE option.

Since beginning treatment at this clinic, how would you describe the change of your overall status, related to your painful condition? *

- ☐ Very much improved
- ☐ Much improved
- ☐ Minimally improved
- ☐ No change
- ☐ Minimally worse
- ☐ Much worse
- ☐ Very much worse

Repeated at: **60 days** (end of treatment) / **6m / 12m**

Average daily opioid consumption:

Morphine Milligram
Equivalents per day (MME)

Did the patient achieve their primary goal?

- ☐ Yes
☐ No

Removal date:

MM/DD/YYYY



Based on the patient's self-report, did the patient achieve $\geq 50\%$ overall pain relief from their baseline score?

- ☐ Yes
☐ No