

## CONSENT FORM - Clinical, Research and Financial **Magnetic Stimulation Consent Form (V1.4)** **Pioneer Health Chronic Pain Service**

Patient Name: \_\_\_\_\_

Patient DOB: \_\_\_\_\_

Patient Address: \_\_\_\_\_

Patient Phone No: \_\_\_\_\_

Type of pain for treatment with magnetic stimulation: \_\_\_\_\_

### **The role of magnetic stimulation in chronic pain:**

Magnetic stimulation refers to stimulation of nerve cells (neurones) in the brain and peripheral nerves. If the magnetic stimulation is of the brain, it is referred to as Transcranial Magnetic Stimulation or TMS. If the magnetic stimulation is directed at nerves and muscles in areas of the body other than the brain, it is referred to as Peripheral Magnetic Stimulation or PMS.

TMS works by generating powerful magnetic pulses that reach through the bone of the skull to stimulate parts of the brain. By targeting different parts of the brain TMS can treat a variety of psychiatric and neurological conditions. Depending on the frequency of the magnetic pulse TMS can either stimulate or inhibit nerve cells and neural circuits. There is strong evidence that TMS is effective in treatment of depression and other psychiatric conditions, and increasing evidence that TMS is effective for neurological conditions such as Parkinson's disease, tinnitus, and various chronic pain conditions.

### **How is magnetic stimulation used to treat chronic pain:**

To treat chronic pain, we utilize TMS (stimulation to the brain) or PMS (stimulation to the painful body part). To achieve the best analgesic effect we often use both TMS and PMS in combination. Patients routinely receive TMS followed by PMS in the same session to treat both the central and peripheral part of the pain system. There is some evidence that both PMS and TMS can modulate the areas of the brain responsible for pain perception.

TMS for pain may utilize a variety of brain targets and stimulation frequencies. Dorsolateral prefrontal cortex (DLPFC), Supplementary Motor Area (SMA) and Motor Strip (M1) are all targets that have been successfully used to treat chronic pain in published research. Your doctor will advise you which particular target and frequency are recommended for your particular pain presentation.

PMS for chronic pain involves applying the coil that generates the magnetic impulses directly to your body, usually to the area of maximal pain. For PMS we use an inhibitory frequency of magnetic pulses called

continuous theta burst stimulation or cTBS. This captures peripheral nerve circuits, particularly proprioception circuits and is effective in giving pain relief.

**Please note:**

It is important for patients to understand that while they are likely to experience good initial pain relief after PMS, that this effect is usually not sustained initially. For most patients their pain gradually returns after a few hours. Following a series of TMS/PMS treatments the pain relief effect is usually more sustained, and for some patients can last for months or longer. This is why a series of 6 to 12 TMS/PMS sessions are recommended. Some patients will find that their pain recurs some months after the TMS/PMS sessions. In this case a few retreatment sessions spaced throughout the year can be used to manage the chronic pain condition.

Patients may opt to have PMS only without TMS. However for best long term results we usually recommend a combined treatment of TMS and PMS for chronic pain.

**Adverse effects of magnetic stimulation:**

Transcranial Magnetic Stimulation (TMS) and Peripheral Magnetic Stimulation (PMS) are safe and have few side effects.

**Common adverse effects of TMS treatment are as follows:**

- Headache
- Scalp discomfort
- Tingling, facial muscle twitching
- Noise related discomfort (patients are offered ear plugs during neuromodulation therapy)

**Rare adverse effects of TMS are as follows:**

- Seizure (the chance of seizure is one in 30 thousand, which is lower than the seizure rate for patients treated with antidepressants.)  
*Please note that in the unlikely event that you do experience a seizure during treatment, this will affect your fitness to drive.*
- Syncope (fainting)
- Mood elevation (elevated mood tends to settle on cessation of treatment)

Unlike electroconvulsive therapy (ECT) TMS causes NO adverse cognitive effects such as memory loss.

PMS has few side effects but is not applied close to the heart or metallic implants. Titanium or MRI safe implants are safe for both TMS and PMS.

**Cost of magnetic stimulation:**

In Australia, TMS is only covered by Medicare for treatment resistant depression. Unfortunately, there is no Medicare support for the use of magnetic stimulation for the treatment of chronic pain. This means that chronic pain patients wishing to access this treatment will need to pay privately for magnetic stimulation treatment with no Medicare rebate being available. At the time of writing there are no private health insurers that will cover the cost of magnetic stimulation for chronic pain, though we encourage you to petition your private health insurers to change this. Please remember that for most chronic pain conditions 3 treatments per week over 1 to 4 weeks (or 3 to 12 sessions) are recommended. **The usual cost of the combined**



**TMS/PMS treatment is \$100 per session, so the cost of your chronic pain treatment package would be \$300 to \$1,200 depending on how many sessions you undertake. If you are in financial hardship, please discuss this with the treating TMS doctor.**

**Please be aware that the magnetic stimulation fee is not refundable.**

**If you require future maintenance magnetic stimulation therapy or a further treatment cycle, a separate fee will apply.**

**Please note, if you are having private TMS you may potentially be excluded from future Medicare rebatable TMS treatment for depression under current Medicare regulations.**

**Your magnetic stimulation treatment cycle quote:**

**Your number of magnetic stimulation treatments covered by this quote:**

### **Patient Consent**

**I consent to be involved in the Pioneer Health TMS research project. (Your data would be used for the purposes of research, publications and case reports in a de-identified manner):**

**Yes**

**No**

I verify that I have read and understood the above information and that I have had sufficient opportunity to discuss my magnetic stimulation therapy with the doctor.

I verify that I have understood the cost of my magnetic stimulation treatment cycle, and that I have agreed to pay the full quoted treatment cycle fee. I understand that non-payment of the quoted fee will result in cessation of the magnetic stimulation therapy. I also understand that the treatment cycle fee is non-refundable.

**Patient's Name:** \_\_\_\_\_

**Patient Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Doctor's Name:** \_\_\_\_\_

**Doctor's Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_