**SAFETY CHECKLIST FOR TRANSCRANIAL MAGNETIC STIMULATION**

Patient Identification:

Present condition:

Past medical history:

Current medications:

**PATIENT PREFERENCE**

Transcranial Magnetic Stimulation has been explained to:

Patient Family Both

The patient and their family would like to proceed with the test: YES NO

The patient and their family would like to know the outcome of the test: YES NO

*(Please circle details)*

1. At the time of testing 2. At a later time *(specify plan)* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Comments:

**ABSOLUTE CONTRAINDICATIONS**

1. Does the patient have a cochlear implant? **YES NO**
2. Does the patient have a cortical stimulator? **YES NO**
3. Does the patient have a deep brain stimulator? **YES NO**
4. Does the patient have a ventriculoperitoneal shunt? **YES NO**
5. Does the patient have a skull defect related to their current admission? **YES NO**
6. Has the patient experienced a prior TMS-related serious adverse event? **YES NO**
7. Has the patient had a seizure in the last 12 months while taking **YES NO**
anti-epilepsy medication?
8. Has the patient experienced seizures related to their current admission? **YES NO***There can be uncertainty about whether a seizure has occurred, consult physician if in doubt*

**TMS is contraindicated if the answer to any of these questions is YES.**

**CONSIDERATIONS**

For any question with a YES answer, please provide details in the space below. These are not necessarily contraindications to TMS but discuss with team physician, for further discussion and a final decision if needed.

1. Does the patient have a history of epilepsy? **YES NO**

*Consider whether their epilepsy is well-controlled by medication. Anti-epileptic drugs reduce the risk of TMS-related seizure.
Also consider the severity, frequency, and recency of any seizure activity.*

*Practice notes:
TMS does not result in subclinical EEG abnormalities in healthy adults or patients.*

*There are two reports of subclinical EEG abnormalities following TMS in people with epilepsy.*

*The risk of seizure is very low, and estimated to be:*

*2/100,000 sessions for patients with no history of seizure or epilepsy*

*27/100,000 sessions for patients with a history of seizure or epilepsy*

2. Does the patient have intracranial implants, such as clips or stents, or skull plates? **YES NO**

*If the implant is MRI compatible then it is safe for TMS.*

3. Does the patient have any implanted electronics? **YES NO**

*If yes use spacers during TMS testing.*

*Practice notes:*

*TMS with figure-8-coils is considered safe in individuals with cardiac pacemakers, vagus nerve stimulation systems, and spinal cord stimulators if the TMS coil is not activated close to (< 10 cm) electronic components such as the implanted pulse generator located in the neck or torso. TMS can also be conducted safely in patients with implanted electrodes in the central and peripheral nervous system that are not connected to a stimulator.*

4. Has the patient ever had a skull fracture or brain surgery? **YES NO**

*Burr holes and other openings in the skull do not affect the field generated by TMS.*

*Practice notes:*

*Past skull fracture or brain surgery are not absolute contraindications, but ought to be considered by the physician and TMS operator.*

5. Is the patient pregnant? **YES NO**

*Practice notes*

*Single pulse TMS carries minimal risk in pregnancy. The primary risk to the foetus is a TMS-induced seizure in the mother. There are 12 published TMS studies that included 50 pregnant people, with no adverse effects on the foetus.*

6. Does the patient experience recurring headaches? **YES NO**

*There is a low risk of mild, transient headache after TMS.
This should be communicated to the patient if the answer is YES.*

7. Does the patient experience tinnitus or hyperacusis? **YES NO**

*Offer all patients hearing protection, particularly if they answer YES to this question.*

*TMS operators should also wear hearing protection.*

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| **THERAPIST TO COMPLETE**Screening completed by:  *Name and role:* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ *Signature:* *\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:*  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Additional measures necessary:   Spacers Hearing protection for participant |

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| **PHYSICIAN OR REGISTRAR TO COMPLETE**TMS approved for this patient YES NO  If no – reason: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  *Name and role:* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ *Signature:* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ *Date:*  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |