

Materials List for:

# A Quantitative Sensory Testing Paradigm to Obtain Measures of Pain Processing in Patients Undergoing Breast Cancer Surgery

Noud van Helmond<sup>1</sup>, Hans Timmerman<sup>1</sup>, Søren S. Olesen<sup>2</sup>, Asbjørn M. Drewes<sup>2</sup>, Joris Kleinhans<sup>3</sup>, Oliver H. Wilder-Smith<sup>1</sup>, Kris C. Vissers<sup>1</sup>, Monique A. Steegers<sup>1</sup>

<sup>1</sup>Department of Anesthesiology, Pain, and Palliative Medicine, Radboud University Medical Center

<sup>2</sup>Mech-Sense, Department of Gastroenterology & Hepatology, Aalborg University Hospital

<sup>3</sup>Medical Technology & Clinical Physics, Radboud University Medical Center

Correspondence to: Noud van Helmond at [Noud.vanHelmond@radboudumc.nl](mailto:Noud.vanHelmond@radboudumc.nl)

URL: <https://www.jove.com/video/56918>

DOI: [doi:10.3791/56918](https://doi.org/10.3791/56918)

## Materials

Name	Company	Catalog Number	Comments
Bed	N/A	N/A	Any type of hospital bed or medical exam table
Desk	N/A	N/A	Any type of commercially available desk
Office chair	N/A	N/A	Any type of commercially available office chair
Force FPX 50 Pressure algometer	Wagner Instruments, Greenwich, CT, USA	N/A	Pressure algometer with a 1.0 cm <sup>2</sup> circular tip to deliver pressure to perform pressure pain threshold measurements
Desktop computer	N/A	N/A	Any type of commercially available Windows computer to run QST-IV Stimulus Manager software on to control the QST-IV stimulator
QST-IV Stimulus Manager	Embedded Control BV, Ruurlo, the Netherlands	N/A	Software to control the settings of QST-IV electrical stimulator
QST-IV Electrical Stimulator	Embedded Control BV, Ruurlo, the Netherlands	N/A	Electrical quantitative sensory testing device with a patient operated switch. Device used to deliver electrical current to perform the electrical threshold measurements
VAS Slider	Embedded Control BV, Ruurlo, the Netherlands	N/A	The VAS slider consists of a box with a mobile lever on a horizontal bar that represents the VAS and is connected to the QST-IV.
Kendall H34SG 50 x 45 mm	Covidien, Mansfield, USA	N/A	Self-adhesive skin electrodes to apply to the measurement points on the skin to deliver electrical stimulation
Crushed Ice	N/A	N/A	Ice generated by ice machine to cool water sufficiently for the cold pressor test
Bucket	N/A	N/A	Any type of commercially available 10 L bucket
Surgical skin marker	Covidien, Mansfield, USA	N/A	Any type of commercially available surgical skin marker
Stopwatch	N/A	N/A	Any type of commercially available stopwatch
Measurement form	N/A	N/A	Score form provided in the manuscript

Pencil	N/A	N/A	Any type of commercially available pencil
Thermometer	N/A	N/A	Thermometer to measure water temperature of ice water
Ruler	N/A	N/A	Any type of commercially available ruler