



# **MY CONNECTED THERAPY**

Therapeutic recommendations  
for using actiTENS



**SUBLIMED**

This guide of therapeutic recommendations is designed to support patients in their therapeutic education. For the treatment to be as effective as possible, it is recommended that you consult a healthcare professional for advice on how to position the electrodes.

The **actiTENS** device is a transcutaneous electrical nerve stimulator to be used to ease pain in people ages 22 and older.

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# PROGRAMS

actiTENS is operated through a smartphone app that allows you to choose from a wide number of stimulation programs and to save all the information recorded from the stimulation treatment sessions.

- P1 100Hz
- P2 80Hz
- P3 2Hz
- P4 Mixed
- P5 Sequential
- P6 HAN Stimulation
- P7 Burst 2Hz
- P8 Frequency modulation
- P9 Muscle stimulation
- P10 Massage
- P11 Rubbing
- P12 Sensitive areas treatment
- P13 Nausea



Download **actiTENS** application

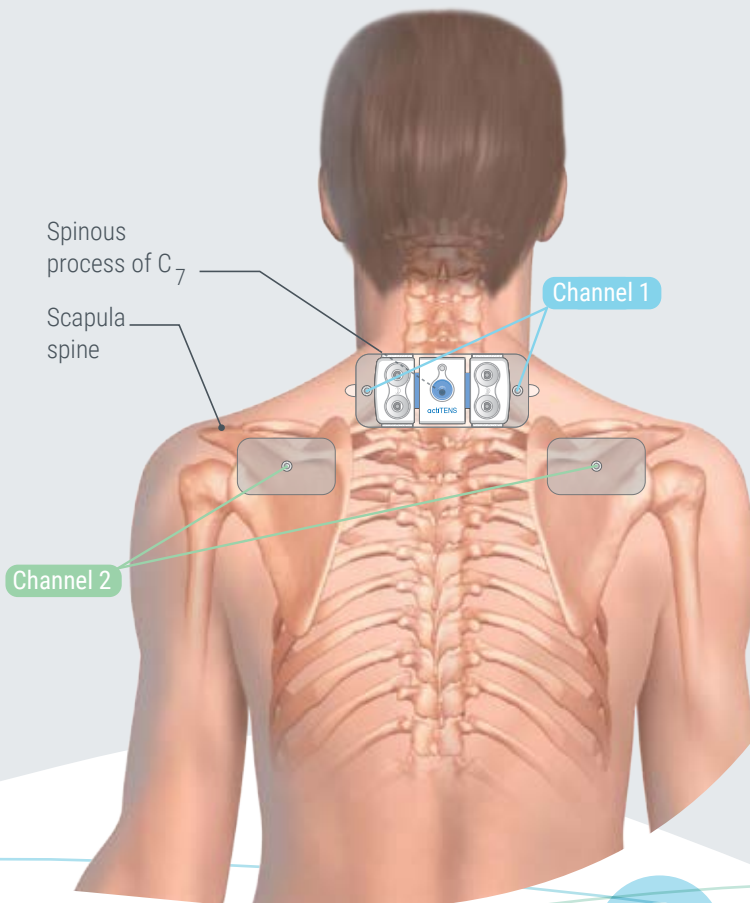




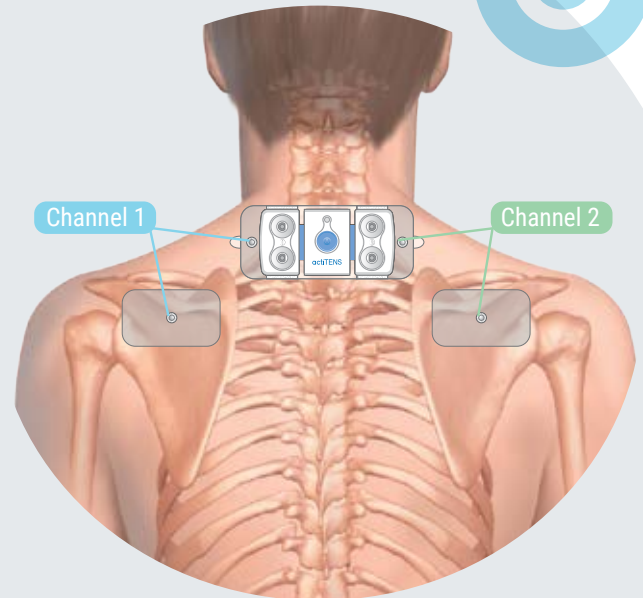
# CERVICALGIA

Cervicalgia is a term used to describe pain or significant discomfort in neck area. The bones of the neck form the cervical spine—this is the area extending from the first spinal vertebra through the seventh.\*

## 2 possible connections: Connection 1



## Connection 2



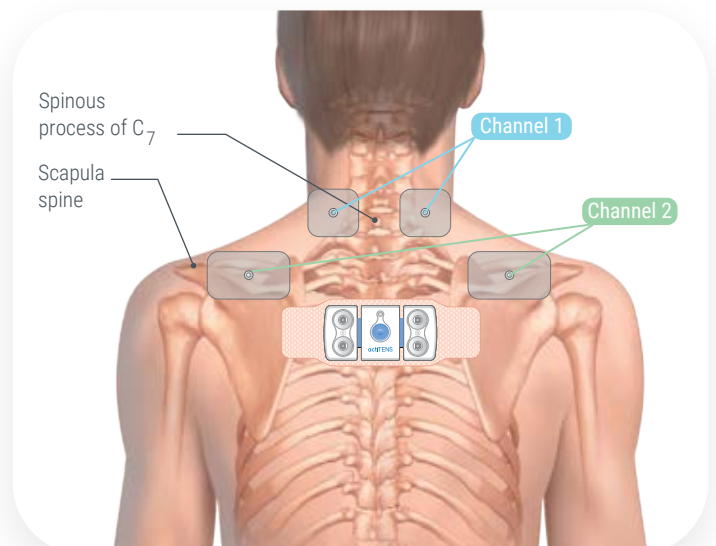
## Prescription

- 1 actiTENS (stimulator)
- 1 multisite electrode
- 2 electrodes 50x50 mm or 2 electrodes 50x90 mm
- 2x14 cm cables
- 2x40 cm cables

## Connected therapy

	Program	Duration of stimulation	Number of sessions
100 Hz / 80Hz	P1 P2	More than 30 min	As much as necessary
2Hz	P3	From 30 min to 2 h	1 to 3 times a day
Massage	P10	More than 30 min	As much as necessary

## Other positioning

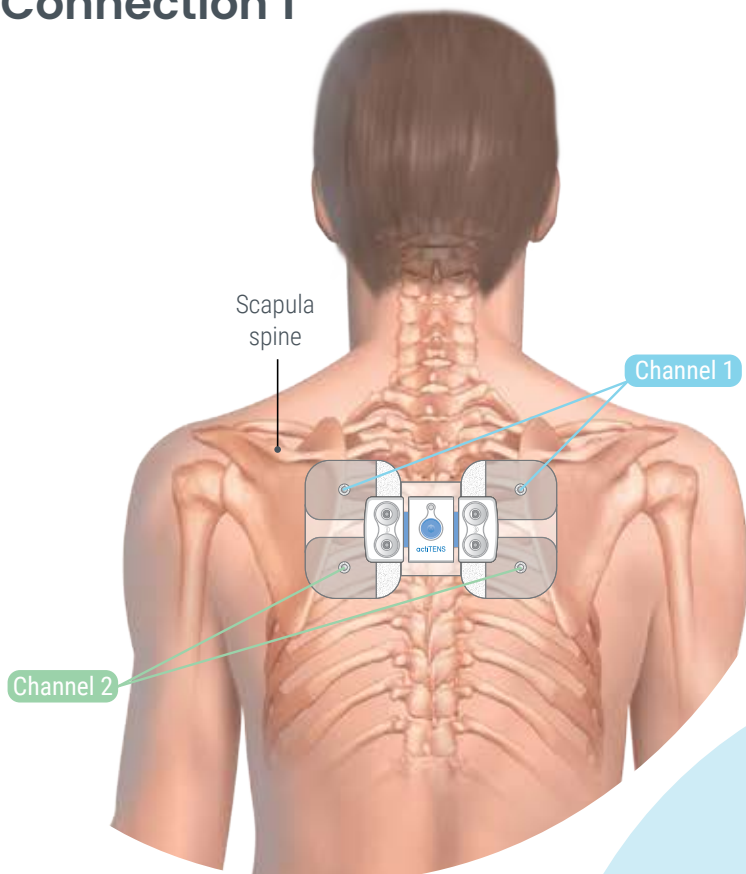


\*Source: [www.verywellhealth.com/cervicalgia-definition-296573](http://www.verywellhealth.com/cervicalgia-definition-296573)

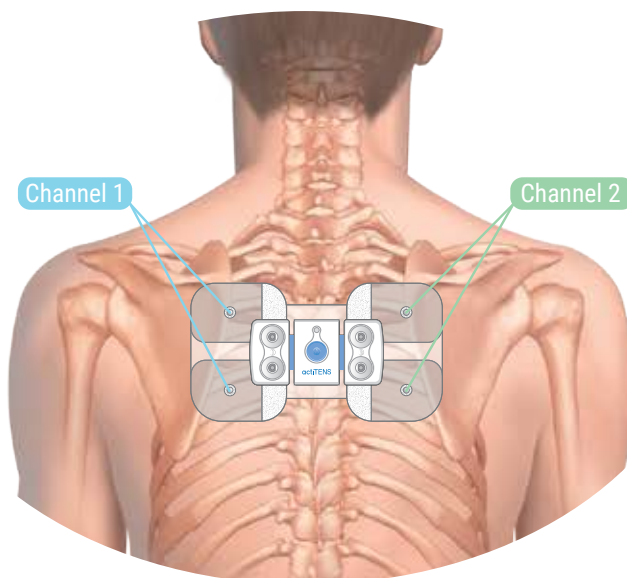
# DORSALGIA

Dorsalgia is all pain in the back, located at the level of the dorsal or thoracic spine. These ailments can be of static origin (posture) or functional (way of moving), and will create discomfort on a daily basis.\*

## 2 possible connections: Connection 1



## Connection 2



## Prescription

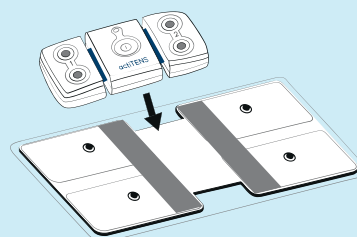
- 1 actiTENS (stimulator)
- 1 Low back electrode
- 4x14 cm cables

## Connected therapy

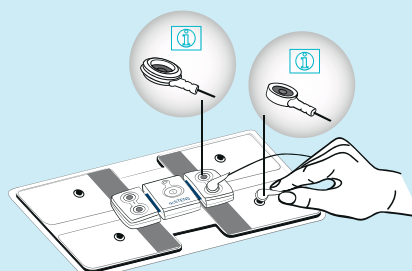
	Program	Duration of stimulation	Number of sessions
100 Hz / 80Hz	P1 P2	More than 30 min	As much as necessary
2Hz	P3	From 30 min to 2 h	1 to 3 times a day
Massage	P10	More than 30 min	As much as necessary

## Installing the electrode

1. Attach **actiTENS** to the low back electrode



2. Clip the 4 cables onto the low back electrode and the **actiTENS**



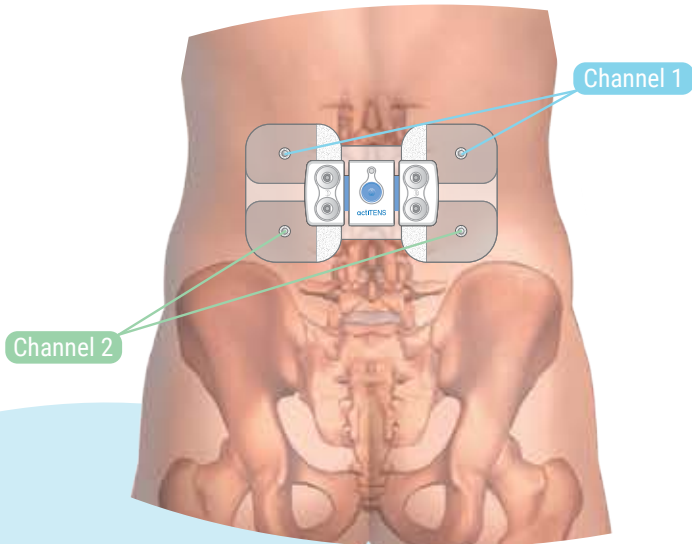
3. Stick the assembly to the area to be stimulated

\*Source: en.kineoparis.com/back-pain/

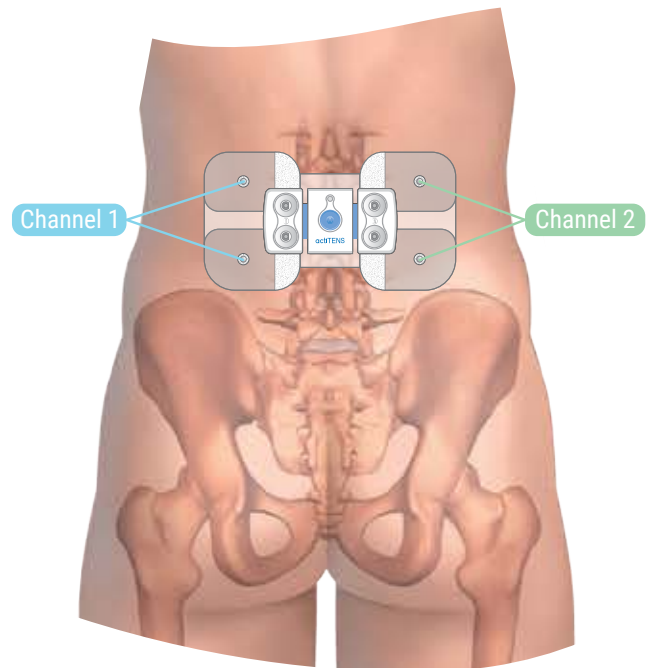
# LOW BACK PAIN

Low back pain (LBP) is defined as pain and discomfort, localised below the costal margin and above the inferior gluteal folds, with or without leg pain. nonspecific (common) low back pain is defined as low back pain not attributed to recognisable, known specific pathology (e.g. infection, tumour, osteoporosis...)\*

## 2 possible connections: Connection 1

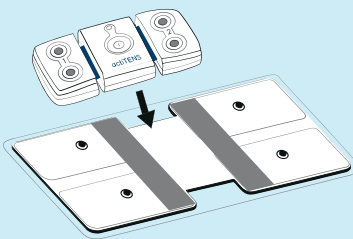


## Connection 2

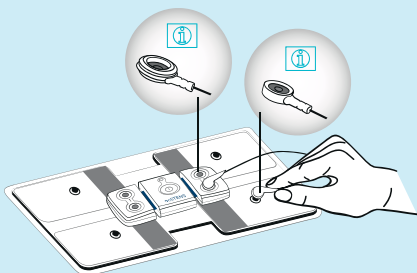


## Installing the electrode

1. Attach **actiTENS** to the low back electrode.



2. Clip the 4 cables onto the low back electrode and the **actiTENS**.



3. Stick the assembly to the area to be stimulated.

## Prescription

- 1 **actiTENS** (stimulator)
- 1 Low back electrode
- 4x14 cm cables

## Connected therapy



	Program	Duration of stimulation	Number of sessions
100 Hz / 80Hz	P1 P2	More than 30 min	As much as necessary
2Hz	P3	From 30 min to 2 h	1 to 3 times a day
Massage	P10	More than 30 min	As much as necessary

# LUMBOSCIATICA

Sciatica is pain along the sciatic nerve. It usually results from compression of lumbar nerve roots in the lower back. The nerves can also be compressed outside the vertebral column, in the pelvis or buttocks. L5-S1, L4-L5, and L3-L4 nerve roots are most often affected\*. Lumbosciatica defines the combination of low-back pain and sciatica.

## Neuropathic pain in the path of the sciatica

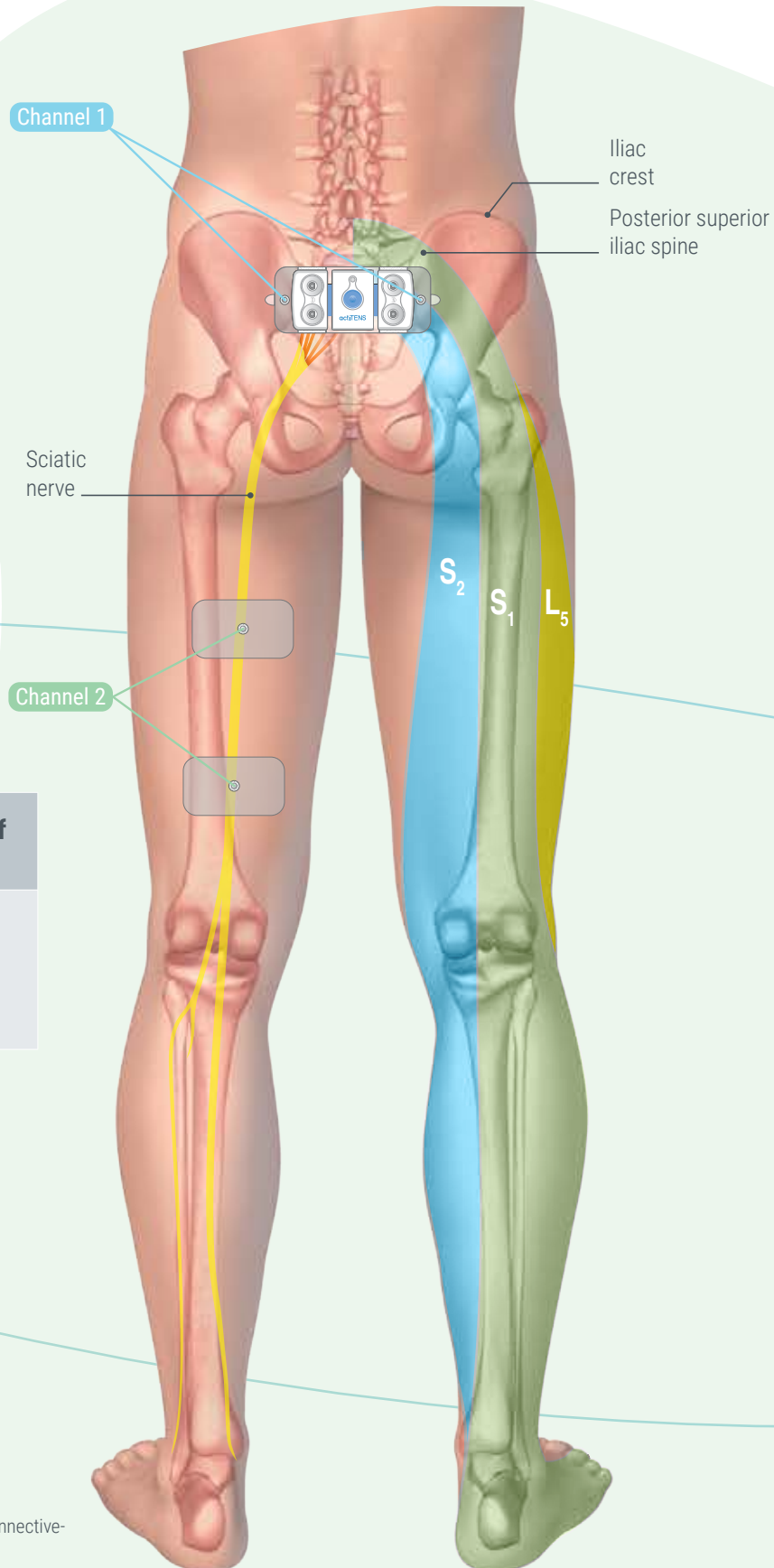


### Prescription

- 1 actiTENS (stimulator)
- 1 multisite electrode
- 2 electrodes 50x90 mm
- 2x14 cm cables
- 2x70 cm cables

### Connected therapy

	Program	Duration of stimulation	Number of sessions
100 Hz / 80Hz	P1 P2	More than 30 min	As much as necessary



\*Source: [www.msmanuals.com/en-au/professional/musculoskeletal-and-connective-tissue-disorders/neck-and-back-pain/sciatica?query=SCIATICA](http://www.msmanuals.com/en-au/professional/musculoskeletal-and-connective-tissue-disorders/neck-and-back-pain/sciatica?query=SCIATICA)



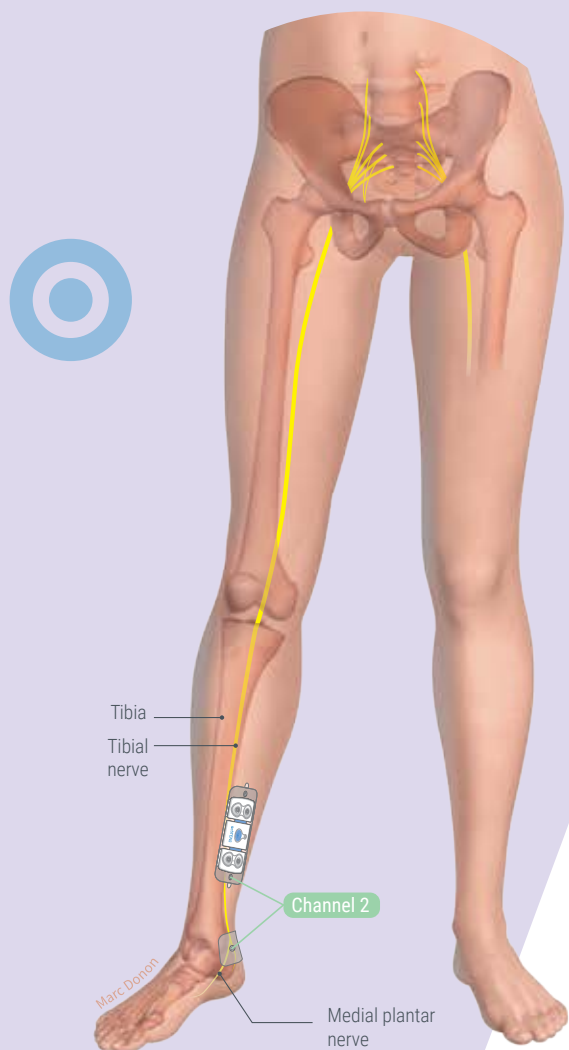
# ENDOMETRIOSIS

Endometriosis is a common gynaecological disease affecting one in ten women. It is defined by the presence of tissue similar to the uterine mucosa outside the uterus. The endometrial cells (which make up the lining of the uterine mucosa) will implant themselves at a distance from the uterus and, under the effect of hormonal stimulation during each cycle, proliferate on neighbouring organs (peritoneum, ovary, fallopian tube, intestine, bladder, ureter, diaphragm, etc.)<sup>1</sup>.

## Stimulation of the posterior tibial nerve\*



Bladder, vaginal pain and pelvic pain



\* A single channel is used for this stimulation, either channel 1 or 2, depending on the positioning of actiTENS.

## Prescription

- 1 actiTENS (stimulator)
- 1 multisite electrode
- 1 electrodes 50x50 mm
- 2x14 cm cables

## Connected therapy

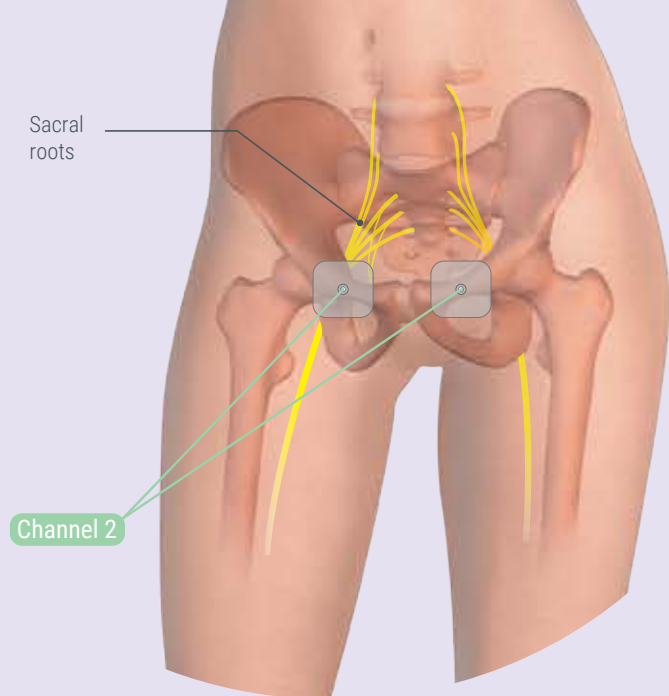
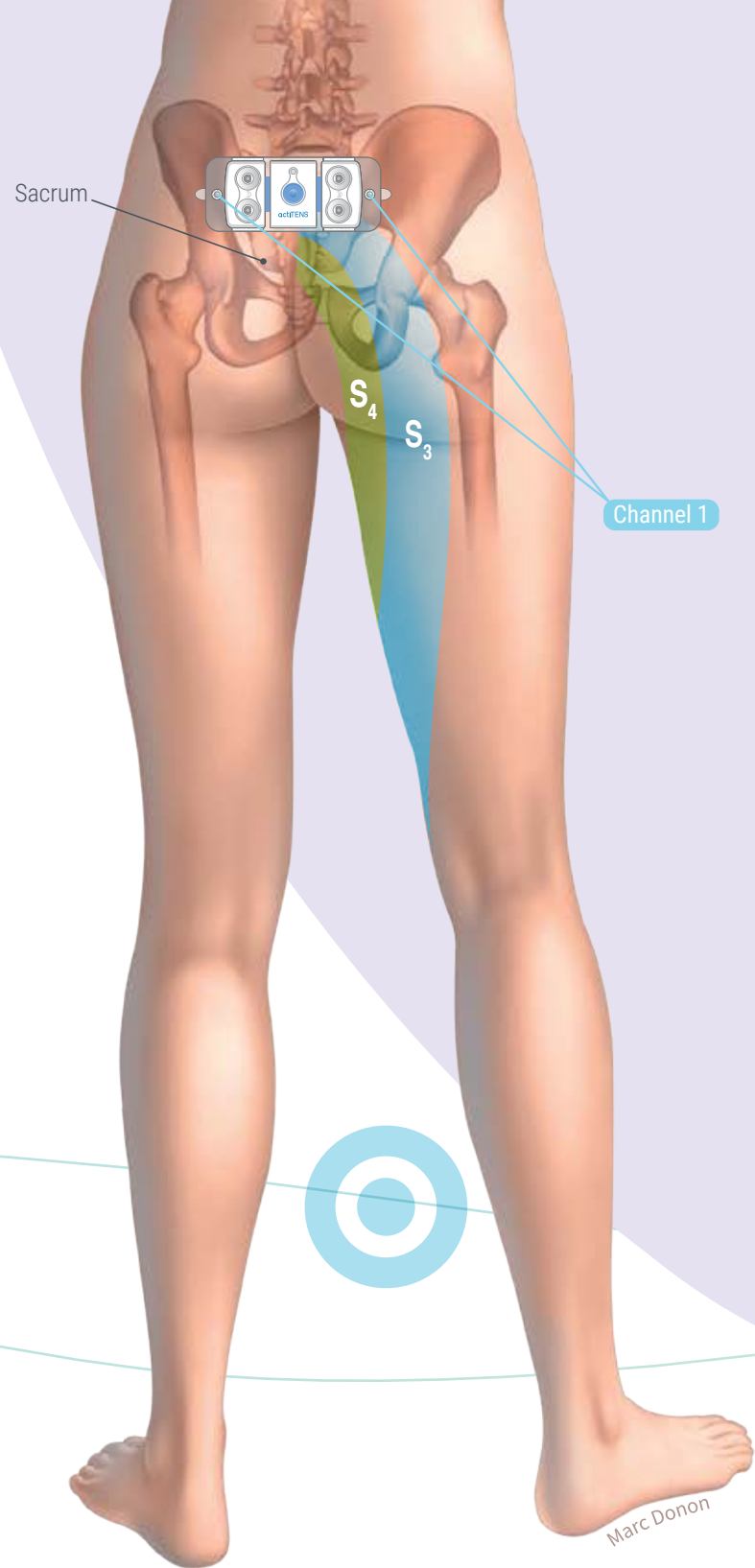
	Program	Duration of stimulation	Number of sessions
100 Hz / 80Hz	P1 P2	More than 30 min	As much as necessary
2Hz	P3	From 30 min to 2 h	1 to 3 times a day

## Positioning the electrodes



1- Source : <https://www.who.int/news-room/fact-sheets/detail/endometriosis>





## Stimulation of sacral roots

Pelvic pain, bladder and dysmenorrhoea

### Prescription

- 1 actiTENS (stimulator)
- 1 multisite electrode
- 2 electrodes 50x50 mm
- 2x14 cm cables
- 2x70 cm cables

### Connected therapy

	Program	Duration of stimulation	Number of sessions
100 Hz / 80Hz	P1 P2	More than 30 min	As much as necessary
2Hz	P3	From 30 min to 2 h	1 to 3 times a day
Other options	P10 P11 P12	More than 30 min	2 times a day
EMS Mode	P9	More than 30 min	As much as necessary

## 2 possible stimulation options:

- **Option 1:** Multisite electrode on the sacral roots in the lower back with 2 electrodes on the abdominal wall in the painful area.
- **Option 2:** multisite electrode alone on the sacral roots in the lower back.

# ENDOMETRIOSIS

## Stimulation of abdominal muscles

### Abdominal pain

#### Mechanism of action

Endometriosis causes a number of digestive disorders, the most common of which are alternating diarrhoea and constipation, pain during defecation and obstruction (bloating)\*.

To relieve these pains, 4 electrodes can be positioned to strengthen the abdominal belt (rectus abdominis and transverse abdominis) and stimulate the muscles of the digestive system.

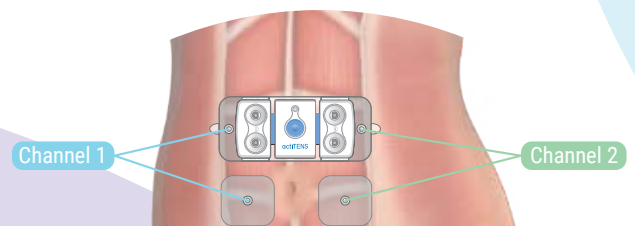
\*Source: [www.endofrance.org/la-maladie-endometriose/symptomes-endometriose/troubles-digestifs/](http://www.endofrance.org/la-maladie-endometriose/symptomes-endometriose/troubles-digestifs/)

### Prescription

- 1 actiTENS (stimulator)
- 1 multisite electrode
- 2 electrodes 50x50 mm
- 2x14 cm cables
- 2x40 cm cables

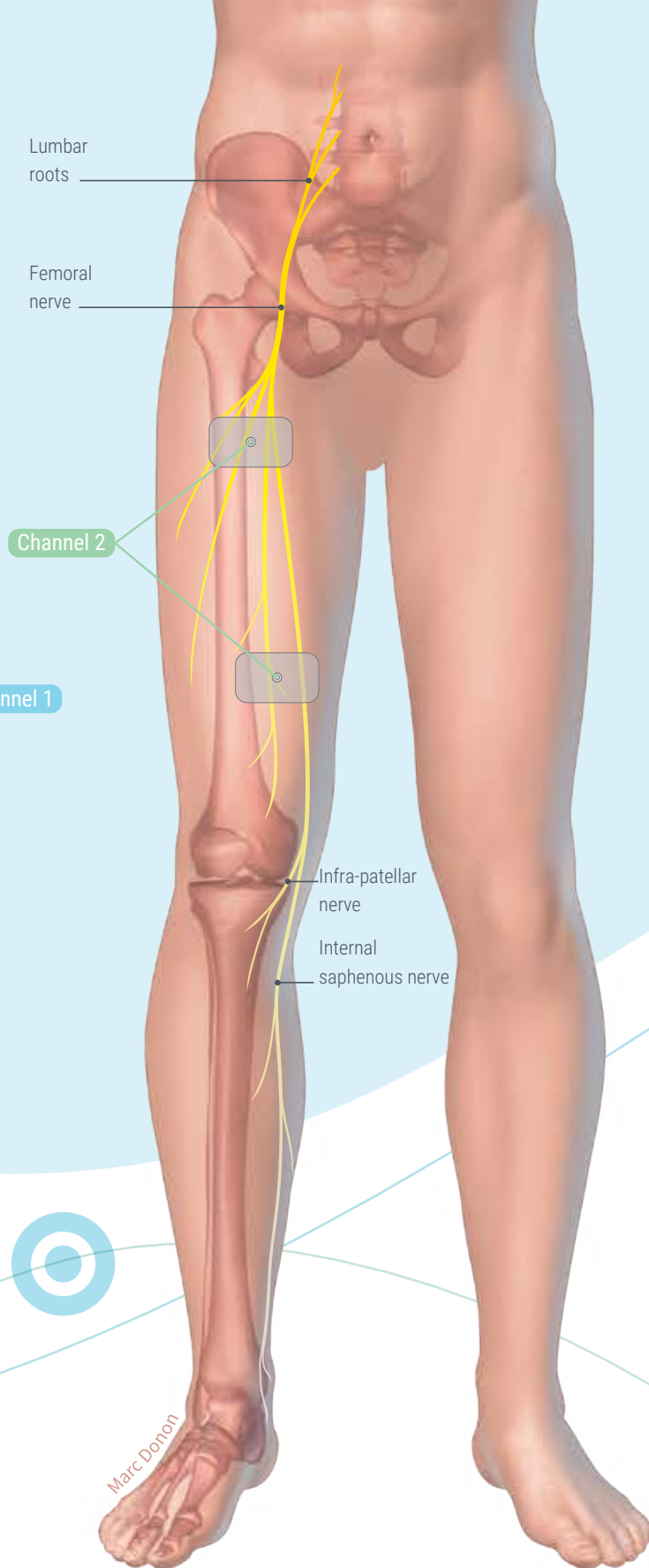
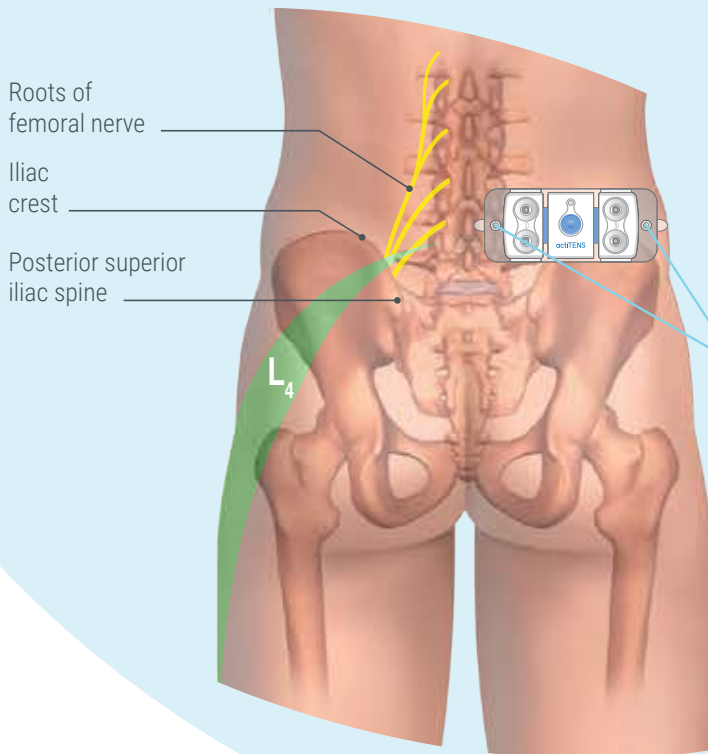
### Connected therapy

	Program	Duration of stimulation	Number of sessions
100Hz / 80Hz	P1 P2	More than 30 min	As much as necessary
Other options	P10 P11 P12	More than 30 min	2 times a day
EMS Mode	P9	More than 30 min	As much as necessary



# CRURALGIA

Cruralgia or crural neuralgia is pain of the anterior aspect of the lower limb, caused by irritation or compression of the crural nerve arising from the L2, L3 or L4 nerve roots\*.



## Prescription

- 1 actiTENS (stimulator)
- 1 multisite electrode
- 2 electrodes 50x90 mm
- 2x14 cm cables
- 2x70 cm cables or 2x1 m cables

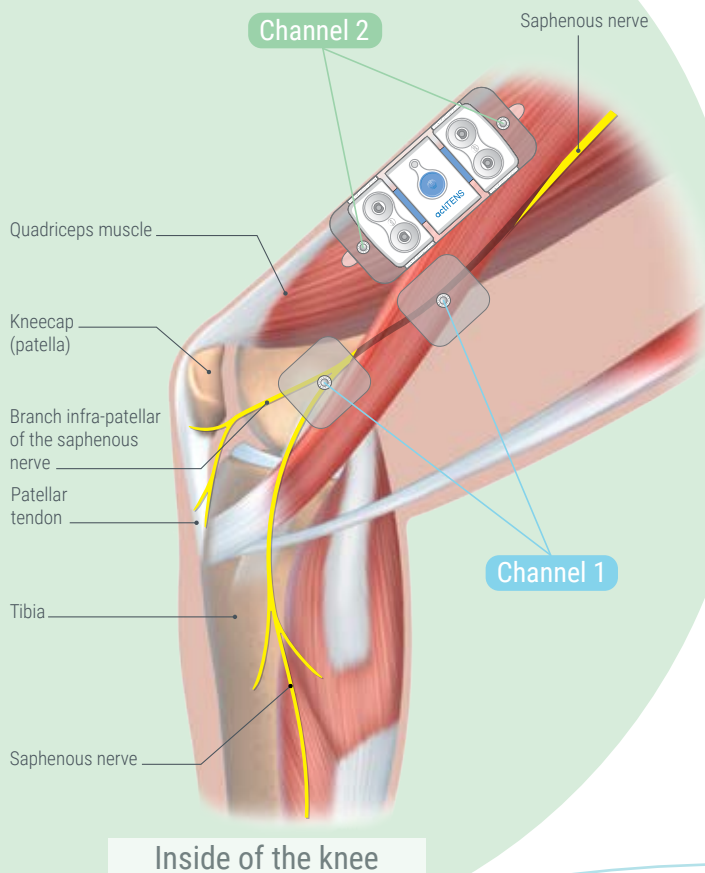
## Connected therapy

	Program	Duration of stimulation	Number of sessions
100 Hz / 80Hz	P1 P2	More than 30 min	As much as necessary

\*Source: [www.institutdurachis.com/pathologies-rachis/rachis-lombaire/cruralgie-def/](http://www.institutdurachis.com/pathologies-rachis/rachis-lombaire/cruralgie-def/)

# KNEE OSTEOARTHRITIS (KOA)

Osteoarthritis of the knee, or gonarthrosis, is the wearing away and destruction of articular cartilage in various areas of the knee joint. The ligaments become hyperlax and the joint less stable, with local pain in the ligaments and tendons\*.



## Prescription

- 1 actiTENS (stimulator)
- 1 multisite electrode
- 2 electrodes 50x50 mm
- 2x14 cm cables
- 2x40 cm cables

## Connected therapy

	Program	Duration of stimulation	Number of sessions
Mixte	P4	From 30 min to 2 h	As much as necessary

## Our clinical Study:

Find out why **actiTENS** is a relevant alternative to weak opioids for the knee osteoarthritis.

In this study, **actiTENS** showed significant superiority in reducing pain and enhancing quality of life compared to weak opioids. Furthermore, **actiTENS** was better tolerated than weak opioids.

E. Maheu et al. – **Therapeutic Advances in Musculoskeletal Disease**, volume 14 - 18th January 2022: [doi.Org/10.1016/J.Joca.2021.02.544](https://doi.org/10.1016/J.Joca.2021.02.544)

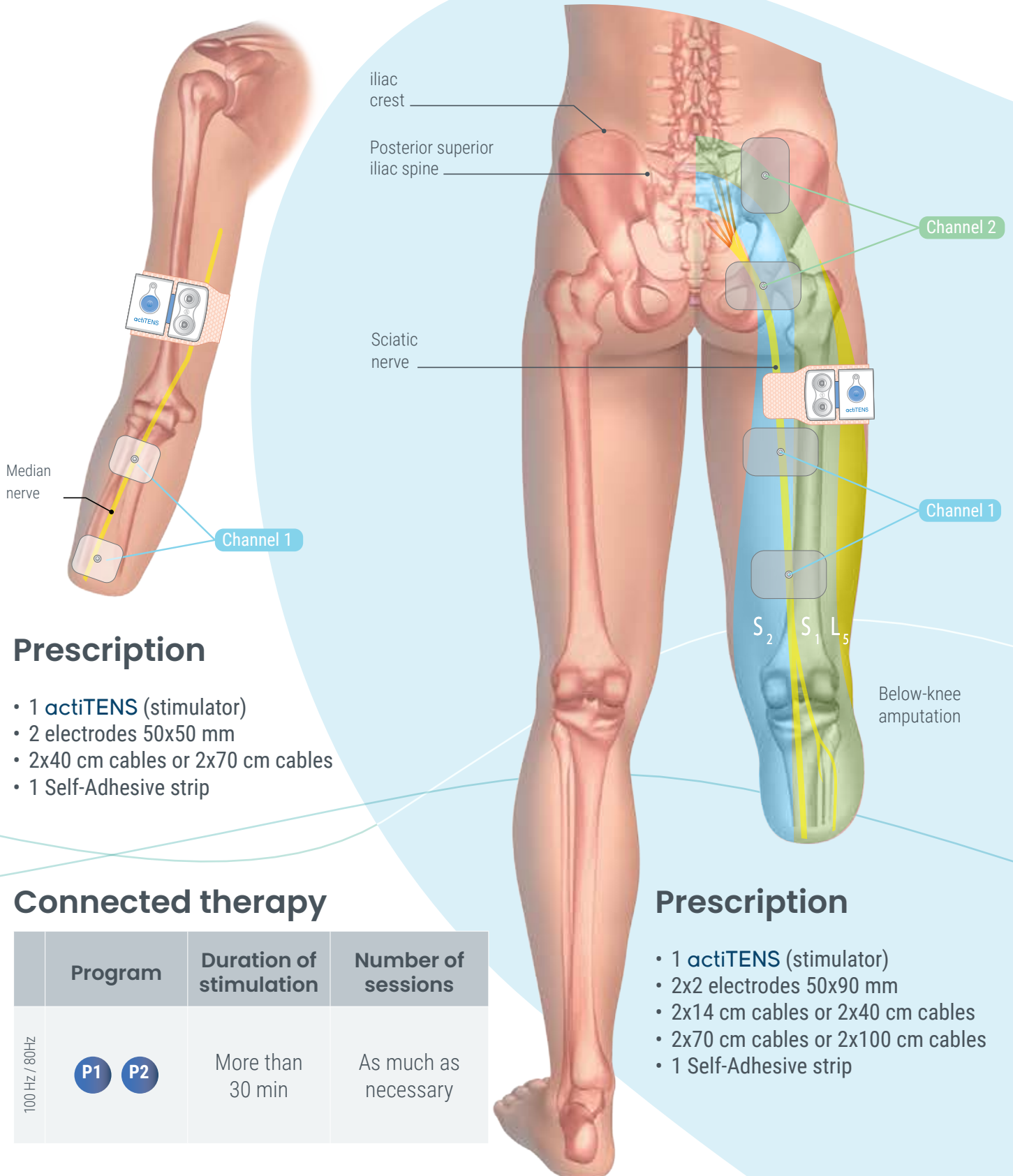
\*Source: [www.ncbi.nlm.nih.gov/books/NBK507884/](https://www.ncbi.nlm.nih.gov/books/NBK507884/)





# POST-AMPUTATION NEUROPATHIC PAINS

More than 70% of amputees experience post-amputation pain in the residual limb, which can seriously limit function, impair quality of life and significantly interfere with rehabilitation. This neuropathic pain is the result of nerve damage due to injury or rupture of the nerves during amputation.\*



## Prescription

- 1 actiTENS (stimulator)
- 2 electrodes 50x50 mm
- 2x40 cm cables or 2x70 cm cables
- 1 Self-Adhesive strip

## Connected therapy

	Program	Duration of stimulation	Number of sessions
100 Hz / 80Hz	P1 P2	More than 30 min	As much as necessary

## Prescription

- 1 actiTENS (stimulator)
- 2x2 electrodes 50x90 mm
- 2x14 cm cables or 2x40 cm cables
- 2x70 cm cables or 2x100 cm cables
- 1 Self-Adhesive strip

\*Source: [www.msmanuals.com/professional/special-subjects/limb-prosthetics/pain-in-the-residual-limb](http://www.msmanuals.com/professional/special-subjects/limb-prosthetics/pain-in-the-residual-limb)

# CARPAL TUNNEL AND NEUROPATHIC ELBOW PAIN

**Carpal tunnel syndrome** is the compression of the median nerve in the wrist.

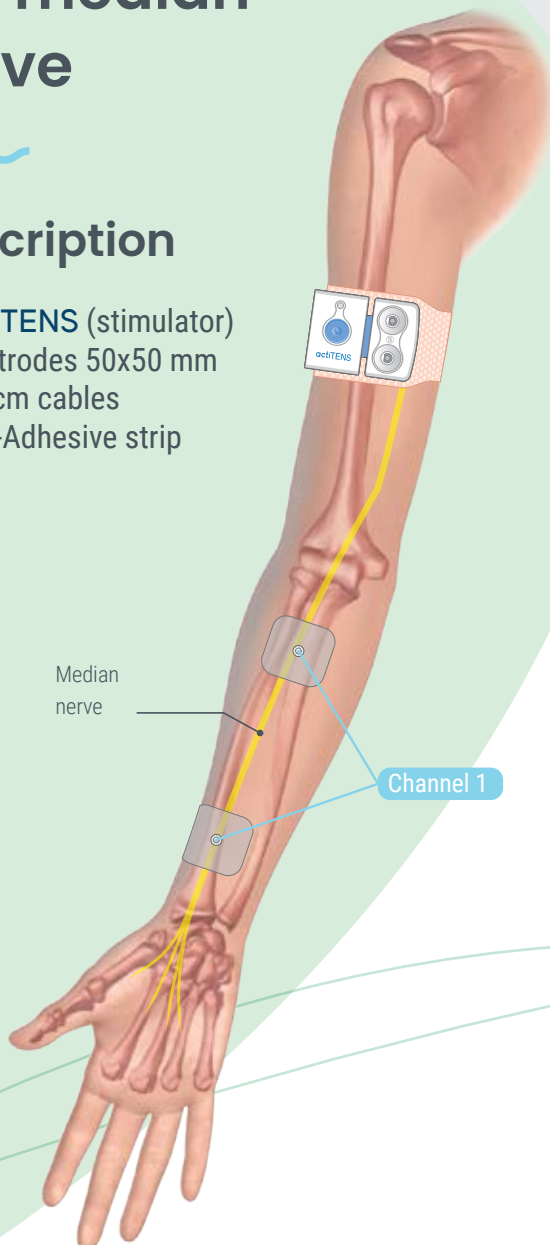
**Ulnar neuropathy** results from compression or traction of the ulnar nerve at the elbow.

**Radial tunnel syndrome** is a disorder caused by compression of a branch of the radial nerve in the forearm, posterior arm or elbow\*.

## Stimulation of the median nerve

### Prescription

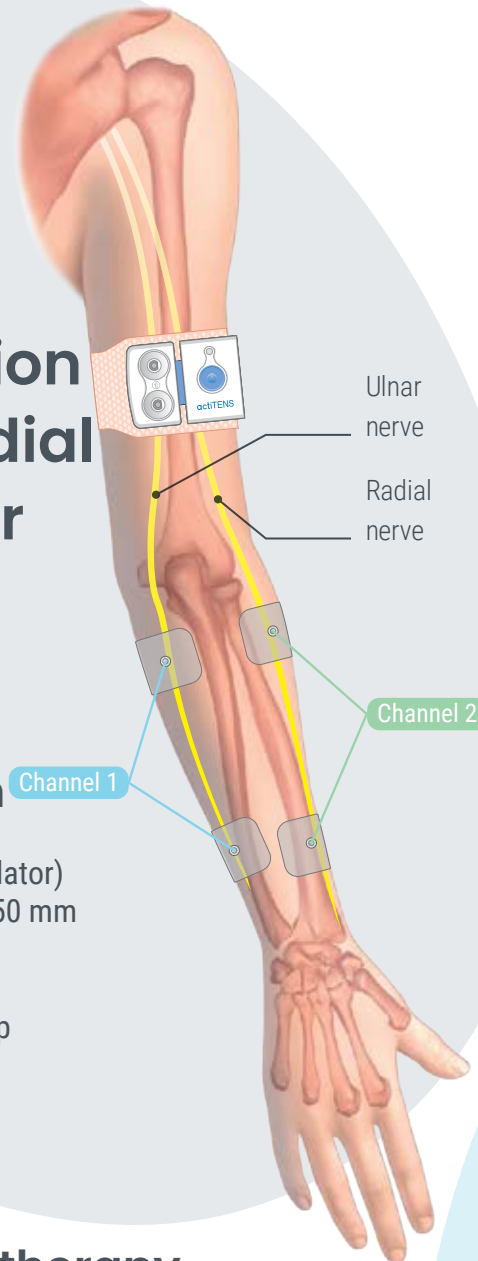
- 1 actiTENS (stimulator)
- 2 electrodes 50x50 mm
- 2x40 cm cables
- 1 Self-Adhesive strip



## Stimulation of the radial and ulnar nerves

### Prescription

- 1 actiTENS (stimulator)
- 2x2 electrodes 50x50 mm
- 2x40 cm cables
- 2x14 cm cables
- 1 Self-Adhesive strip



## Connected therapy

	Program	Duration of stimulation	Number of sessions
100 Hz / 80Hz	P1 P2	More than 30 min	As much as necessary

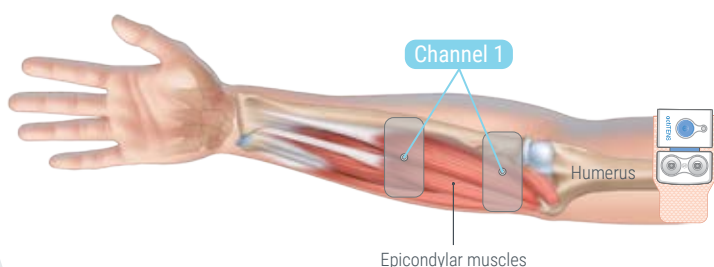
\*Source: [www.ncbi.nlm.nih.gov/pmc/articles/PMC4318466/](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4318466/)

# ELBOW MUSCLE PAIN

## Prescription

- 1 actiTENS (stimulator)
- 2 electrodes 50x90 mm
- 2x14 cm cables ou 2x40 cm cables
- 1 Self-Adhesive strip

## Epitrochleitis



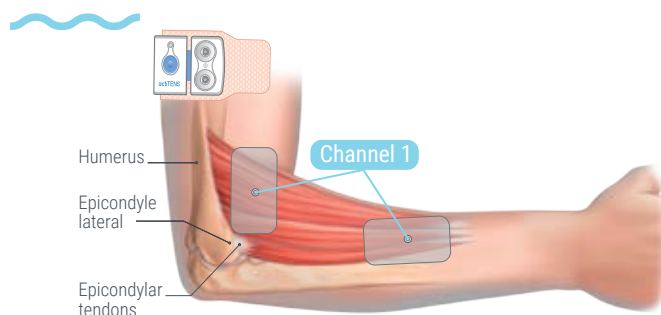
Epitrochleitis, also known as "Golfer's Elbow", is an inflammation of the flexor pronator muscles in the epicondyle of the elbow<sup>1</sup>.

- 1- Source: [www.ncbi.nlm.nih.gov/pmc/articles/PMC4318466/](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4318466/)  
 2- Source: [www.ncbi.nlm.nih.gov/pmc/articles/PMC5367546/](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC5367546/)

## Connected therapy

	Program	Duration of stimulation	Number of sessions
2Hz	P3	From 30 min to 2 h	Maximum 3 times per day depending on patient's experience and the duration of the after-effect

## Epicondylitis



Epicondylitis, also known as "tennis elbow", results from inflammation and micro-tearing of the fibres of the extensor tendons of the forearm<sup>2</sup>.

# FIBROMYALGIA

Fibromyalgia is a common, poorly understood, non-articular condition characterised by constant (sometimes severe) pain generalized muscle pain in areas around tendon insertions and adjacent soft tissues; muscle stiffness; mental cloudiness; poor sleep; and various other somatic symptoms. The diagnosis is clinical. **The treatment is very variable according to the nature of the patient's pathology and it is recommended to adapt it in consultation<sup>3</sup>.**

## Connected therapy

	Program	Duration of stimulation	Number of sessions	Positionnement des électrodes
100 Hz / 80Hz	P1 P2	More than 30 min	As much as necessary	On the nerve zone upstream the painful area
2Hz	P3	From 30 min to 2 h	1 to 3 times a day	On the most tense muscles or the largest in the area concerned

3- Sources : [msdmanuals.com](http://msdmanuals.com) - [cochrane.org](http://cochrane.org) - [ameli.fr](http://ameli.fr) - [Inserm](http://Inserm) - [sfetd-douleur.org](http://sfetd-douleur.org) - [campus-cerimes.fr](http://campus-cerimes.fr) - [institut-main.fr](http://institut-main.fr)

# NAUSEA

Nausea and vomiting are common gastrointestinal complaints that can be triggered by diverse emetic stimuli through central and/or peripheral nervous systems<sup>1</sup>.

TENS has proven its effectiveness in managing nausea and vomiting across various clinical contexts<sup>2</sup> through targeted stimulation of the PC6 acupuncture point.

The PC6 acupoint is located on the palmar side of the wrist two inches above the transverse crease of the wrist, between the tendons of palmaris longus and flexor carpi radialis.

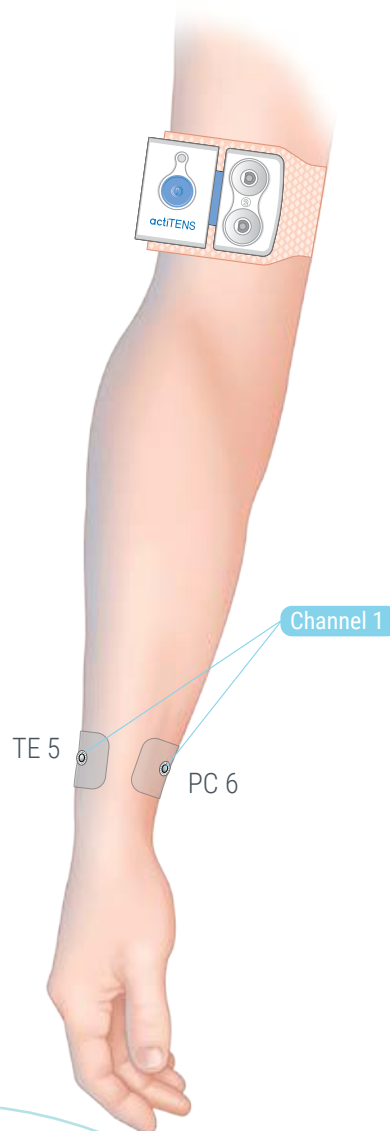
An easy way to find the point is to place three fingers across your wrist starting at the wrist crease; then, look at the point where this line crosses between the two tendons<sup>3</sup>.

## Prescription

- 1 actiTENS (stimulator)
- 2 electrodes 50x50 mm
- 2x40 cm cables
- 1 Self-Adhesive strip

## Connected therapy

	Program	Duration of stimulation	Number of sessions
Nausea	P13	30 min	1 to 3 times a day



### Source:

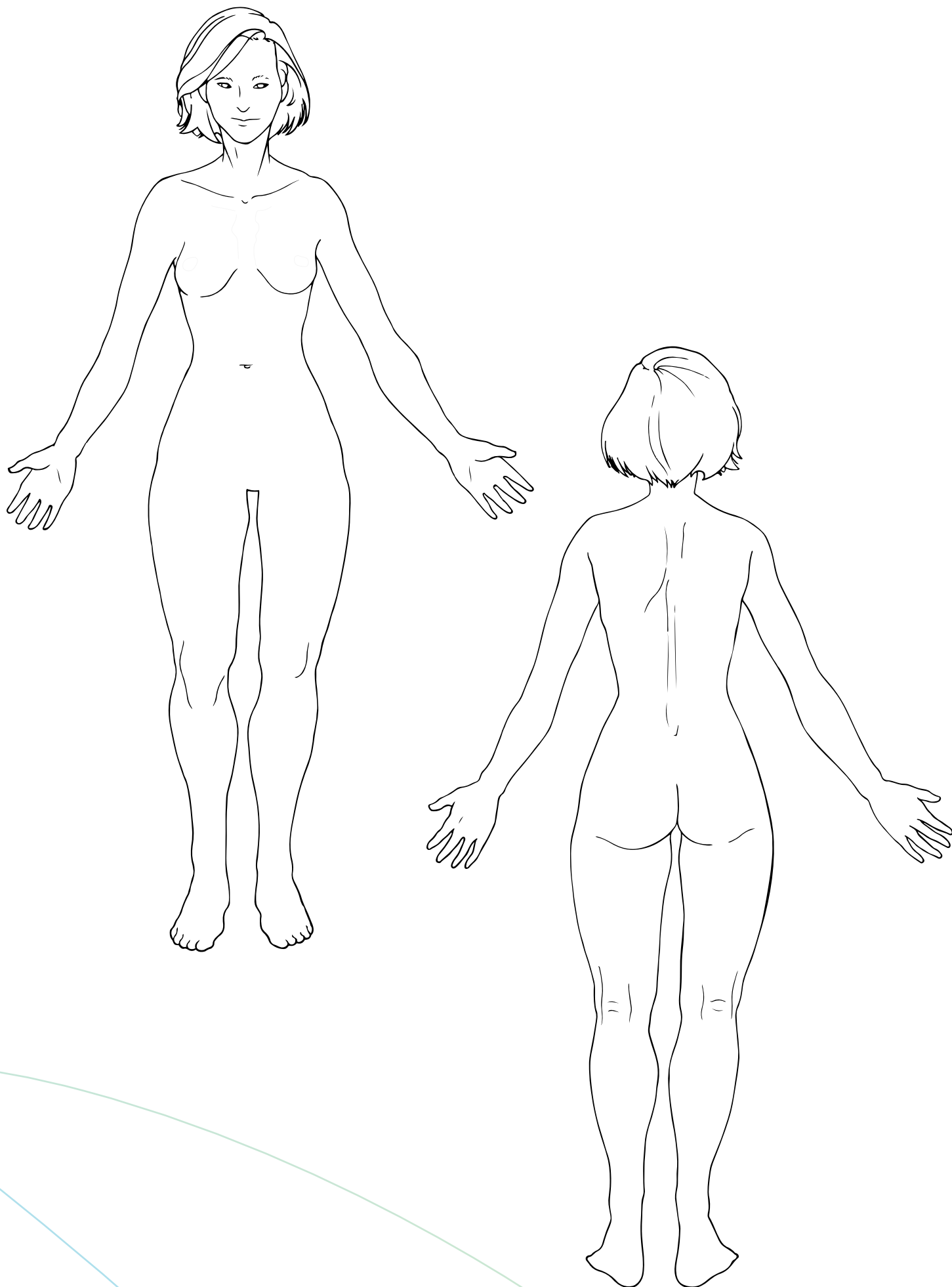
1- <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8198651/>

2- <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4679372/> & <https://pubmed.ncbi.nlm.nih.gov/2027146/>

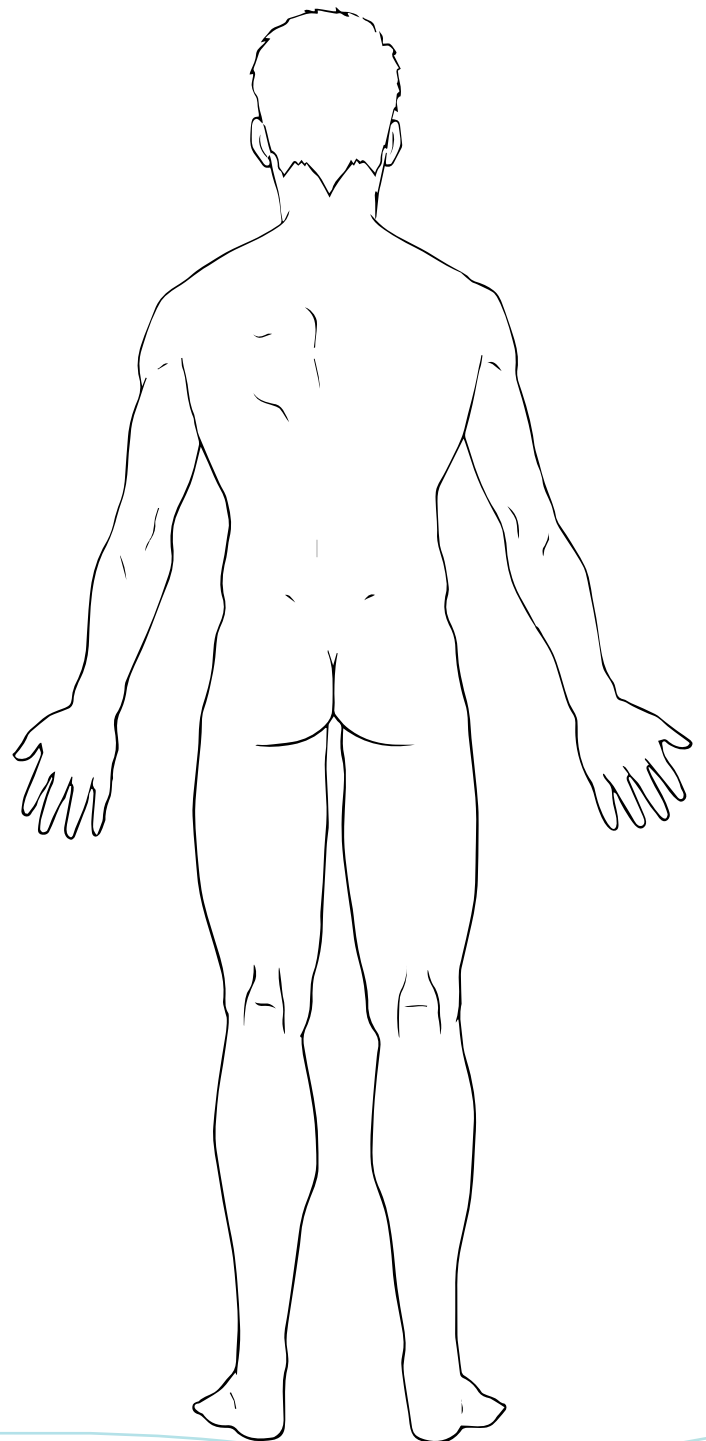
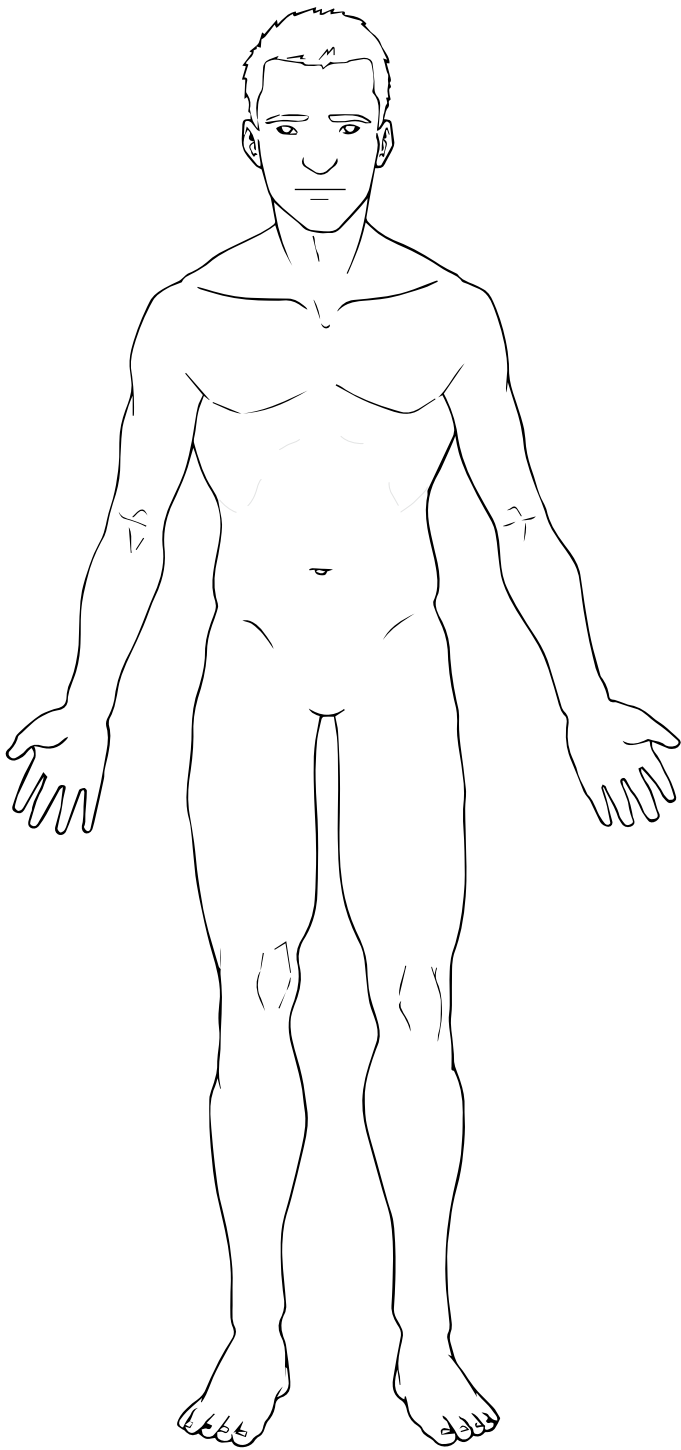
3- [https://www.researchgate.net/publication/334789239\\_Effect\\_of\\_acupressure\\_in\\_Pericardium\\_6\\_acupoint\\_on\\_nausea\\_and\\_vomiting\\_after\\_general\\_surgery](https://www.researchgate.net/publication/334789239_Effect_of_acupressure_in_Pericardium_6_acupoint_on_nausea_and_vomiting_after_general_surgery)

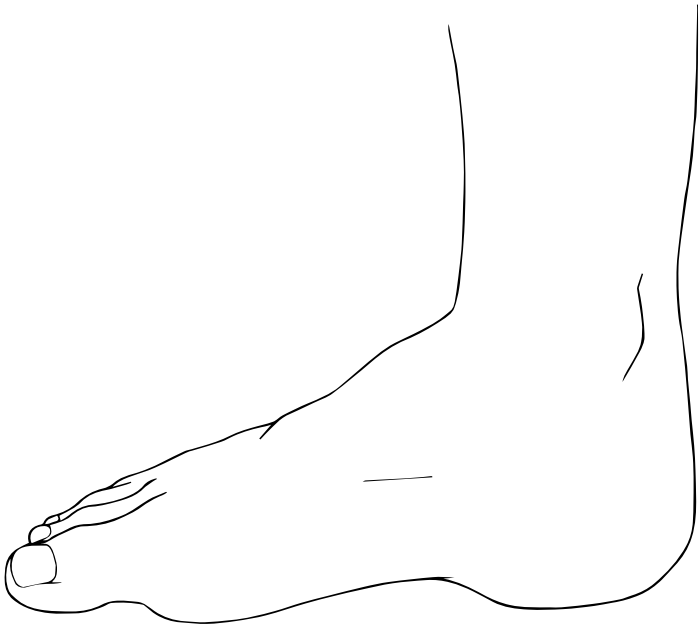
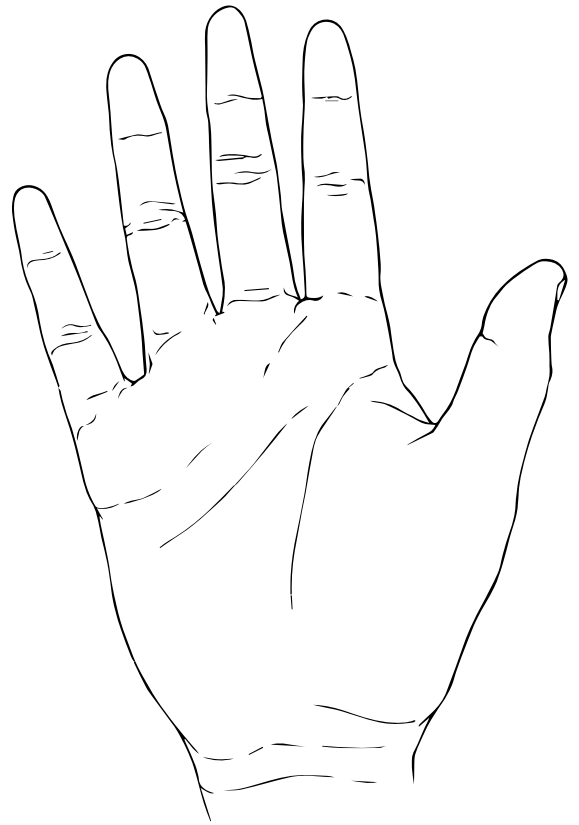
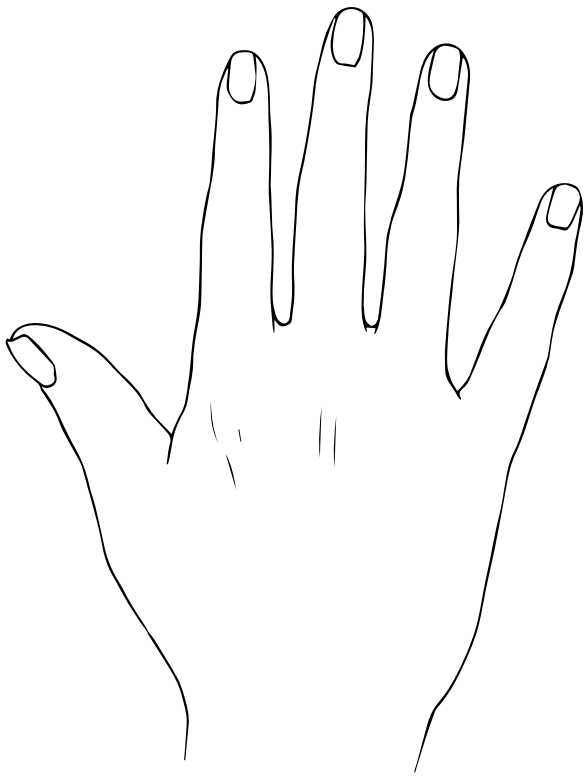


# ELECTRODE PLACEMENT



# ELECTRODE PLACEMENT







## Download the actiTENS application



# DO YOU NEED HELP?



+1 (865) 748-8562



+33 (0) 4 76 37 17 58\*



[contactUS@sublimed-technologies.com](mailto:contactUS@sublimed-technologies.com)

\*Our customer service is available Monday to Friday from 8.30 am to 6 pm French time.

Help videos are available on our social networks: [@sublimed-actiTENS](#).



[www.sublimed-technologies.com](http://www.sublimed-technologies.com)



actiTENS® has been cleared by the FDA (510k: K202159) in December 2020.  
actiTENS® is a medical device subject to contraindications.  
Please carefully read the actiTENS® manual before use.

The electrodes manufactured by GMDASZ Manufacturing Co., Ltd have been cleared by the FDA (510(k) K160138).