# Memory reconsolidation: a new treatment approach towards nicotine addiction.

Published: 16-10-2018 Last updated: 12-04-2024

Whether disrupting reconsolidation by a noradrenergic beta-blocker provides long-term relief from nicotine-addiction.

Ethical review	Approved WMO
Status	Recruitment stopped
Health condition type	Other condition
Study type	Interventional

# Summary

## ID

NL-OMON48641

**Source** ToetsingOnline

**Brief title** New treatment for smoking cessation.

# Condition

• Other condition

**Synonym** nicotine-addiction, smoking

#### **Health condition**

nicotine-verslaving

# Research involving

Human

## **Sponsors and support**

#### Primary sponsor: TNO Source(s) of monetary or material Support: TNO

## Intervention

Keyword: addiction, memory, reconsolidation, smoking

## **Outcome measures**

#### **Primary outcome**

Smokingstatus, as assessed by using an online smoking-diary.

#### Secondary outcome

- breath monoxide assessment;
- urine cotinine levels;
- questionnaires related to withdrawal symptoms.

# Study description

#### **Background summary**

Smoking is one of the leading causes of preventable death globally. Quitting before the age of 40 reduces the risk of dying from smoking-related diseases by nearly 90%. Given that existing therapies have limited long-term efficacy, there is a pressing need for innovation in the smoking cessation field.

#### **Study objective**

Whether disrupting reconsolidation by a noradrenergic beta-blocker provides long-term relief from nicotine-addiction.

#### Study design

Double-blind randomized placebo-controlled trial.

#### Intervention

Single reactivation session of smoking-related behavior followed by the

2 - Memory reconsolidation: a new treatment approach towards nicotine addiction. 16-06-2025

administration of 40 mg of the noradrenergic beta-blocker propranolol.

#### Study burden and risks

Participants are receiving a short treatment that is expected to diminish their nicotine-addictive behavior. Based on the SPC we expect that propranolol HCl will be well tolerated and do not anticipate any serious adverse events.

# Contacts

Public TNO

Utrechtseweg 48 Zeist 3704 HE NL **Scientific** TNO

Utrechtseweg 48 Zeist 3704 HE NL

# **Trial sites**

## **Listed location countries**

Netherlands

# **Eligibility criteria**

Age Adults (18-64 years) Elderly (65 years and older)

## **Inclusion criteria**

- aged between18 and 65 years;

- smoking 10 or more cigarettes per day for at least 12 months;

3 - Memory reconsolidation: a new treatment approach towards nicotine addiction. 16-06-2025

- written approval of participant's own general practitioner for participation.

# **Exclusion criteria**

- cardiovascular diseases or irregular heartbeat;
- hypotension or hypertension;
- pregnancy or breastfeeding;
- epilepsy;
- current state of asthma or COPD, which necessitates medication use.

# Study design

## Design

Study type:	Interventional
Intervention model:	Parallel
Allocation:	Randomized controlled trial
Masking:	Double blinded (masking used)
Control:	Placebo
Primary purpose:	Treatment

## Recruitment

NL	
Recruitment status:	Recruitment stopped
Start date (anticipated):	27-01-2020
Enrollment:	75
Туре:	Actual

## Medical products/devices used

Product type:	Medicine
Brand name:	te genereren door farmaceutisch bedrijf
Generic name:	propranolol hydrochloride
Registration:	Yes - NL outside intended use

# **Ethics review**

Approved WMO Date:	16-10-2018
Date.	10-10-2010
Application type:	First submission
Review commission:	METC Amsterdam UMC
Approved WMO	
Date:	28-08-2019
Application type:	First submission
Review commission:	METC Amsterdam UMC
Approved WMO	
Date:	18-11-2019
Application type:	Amendment
Review commission:	METC Amsterdam UMC

# **Study registrations**

# Followed up by the following (possibly more current) registration

No registrations found.

# Other (possibly less up-to-date) registrations in this register

No registrations found.

## In other registers

Register	ID
EudraCT	EUCTR2018-002829-33-NL
ССМО	NL66903.018.18