# Increasing the dose of nicotine replacement treatment to individual needs

Submission date	Recruitment status	Prospectively registered	
16/03/2017 Registration date	No longer recruiting Overall study status	[] Protocol	
		Statistical analysis plan	
18/05/2017	Completed	[X] Results	
Last Edited 06/08/2019	<b>Condition category</b> Mental and Behavioural Disorders	Individual participant data	

## Plain English summary of protocol

Background and study aims

Nicotine replacement treatment (NRT) is widely used to help people quit smoking, but it's not effective for everyone. This may be, in part, because many smokers receive less nicotine from NRT than smoking. There is some evidence that higher dosing and the use of NRT before actually quitting smoking may help. This is because nicotine from NRT may weaken the association between smoking behaviour and the nicotine reward from cigarettes, and in turn reduce the desire to smoke. A potentially promising approach would be to increase the NRT dose before quitting, with the aim of achieving nicotine levels which make smoking unrewarding or even unpleasant. The aim of this study is to examine the acceptability, safety, and potential efficacy of an personalized program which increases NRT (iNRT) dosing to help people quit smoking.

#### Who can participate?

Adult smokers who want to quit and are willing to use nicotine patches.

#### What does the study involve?

All participants are given nicotine patches to use for four weeks before their target quit date and for four weeks afterwards. In the four weeks before they quit, the dose of nicotine patches is increased every week if the smoker does not report any side effects, such as feeling sick. The maximum dose given can be up to 84mg/day. Over the four weeks after the quit date, the patch dose is reduced to standard levels (21mg/day). The number of participants who progress through each stage of the dosing schedule are recorded as well as those who are sticking to the treatment. In addition, participants are interviewed about changes in smoking rate and enjoyment of smoking, withdrawal symptoms, and the quit rate at 4 weeks after the target quit date.

What are the possible benefits and risks of participating?

Participants may benefit from being able to successfully quit smoking. there are no notable risks involved with participating. If participants experience any severe side effects from the nicotine patch, they will be asked to either stop altogether or reduce the dose.

Where is the study run from? Emphysema Foundation (Argentina) When is the study starting and how long is it expected to run for? December 2016 to August 2018

Who is funding the study? Global Research Awards for Nicotine Dependence (UK)

Who is the main contact?1. Dr Dunja Przulj (scientific)2. Dr Luis Wehbe (scientific)

## **Contact information**

**Type(s)** Scientific

**Contact name** Dr Dunja Przulj

#### **Contact details**

Health and Lifestyle Research Unit Queen Mary University of London 2 Stayner's Road London United Kingdom E1 4AH

**Type(s)** Scientific

**Contact name** Dr Luis Wehbe

#### **Contact details**

Carlos Alvear 3345, Mar del Plata, Buenos Aires Argentina CP7600

## Additional identifiers

EudraCT/CTIS number

**IRAS number** 

ClinicalTrials.gov number

**Secondary identifying numbers** Version 1.1 10 Oct 2016

## Study information

#### Scientific Title

Increasing the dose of Nicotine Replacement Treatment to individual needs: A pilot study

#### Acronym

iNRT

#### **Study objectives**

The aim of this study is to examine the feasibility and acceptability of increasing the dose of nicotine patches used prior to a smokers target quit date (TQD) in order to establish what proportion of smokers are likely to progress to different levels of dose increase and what, if any, side effects they may report.

#### Ethics approval required

Old ethics approval format

#### Ethics approval(s)

Joint Commission on Health Research (Comisión Conjunta de Investigación en Salud- CCIS), Beunos Aires, Argentina, 24/01/2017, ref: 2919/1419/2016

#### Study design

Open-label single-site non-randomised pilot study

**Primary study design** Interventional

#### Secondary study design

Non randomised study

## Study setting(s)

Other

#### **Study type(s)** Treatment

#### Participant information sheet

Not available in web format, please use the contact details below to request a patient information sheet

#### Health condition(s) or problem(s) studied

Smoking cessation

#### Interventions

Smokers wanting to give up will be given nicotine patches to use for 4 weeks prior to their target quit day and for 4 weeks during their quit attempt. In the four weeks prior to their target quit day, the dose of nicotine patches will increase each week if the smoker does not report any reaction to it (e.g. nausea). The maximum dose used could be up to 84mg/day (i.e. the

participant would wear 4 patches a day). Over the 4 weeks after the quit day, the patch dose will be reduced to standard levels (21mg/day, i.e. 1 patch per day). The total duration of the intervention is 8 weeks. There is no further follow-up of participants after this.

#### Intervention Type

Drug

**Phase** Not Applicable

#### Drug/device/biological/vaccine name(s)

21mg/24hr Nicotine Transdermal Patch

#### Primary outcome measure

Feasibility of the intervention is assessed by recording the proportion of participants who progress through each stage of increased dosage (42mg, 63mg and 84mg) over the four weeks prior to their Target Quit Day.

#### Secondary outcome measures

1. Adherence to treatment will be assessed by examining the frequency of patch use over the 8 weeks and the number of participants who stop using their patches over the 8 weeks 2. Acceptability and helpfulness of the intervention will be measured by asking participants to rate (1-5) how helpful they found their patch over the last week, at each session; and by looking at the frequency of any adverse effects and their intensity

3. Potential efficacy of the intervention will be measured by examining validated abstinence rates at the end of the 8 weeks, changes in carbon monoxide readings, cigarette consumption, enjoyment of smoking and withdrawal symptoms over the first 4 weeks prior to the TQD; and changes in withdrawal symptoms over the 8 weeks

## Overall study start date

14/12/2016

**Completion date** 

31/08/2018

# Eligibility

#### Key inclusion criteria

1. Aged 18-65 years of age

- 2. Daily smoker
- 3. Seeking treatment to quit smoking and willing to use nicotine patches

**Participant type(s)** Healthy volunteer

**Age group** Adult

**Lower age limit** 18 Years **Upper age limit** 65 Years

**Sex** Both

**Target number of participants** 50

Total final enrolment

50

#### Key exclusion criteria

- 1. Pregnant/breastfeeding or planning to conceive in the next 3 months
- 2. Previous adverse reaction to the nicotine patch
- 3. Serious medical condition including, cancer and psychiatric illness
- 4. History of Myocardial infarction
- 5. Cannot read, write or understand Spanish
- 6. Current involvement in other interventional research

Date of first enrolment

01/04/2017

Date of final enrolment 31/07/2017

## Locations

**Countries of recruitment** Argentina

**Study participating centre Emphysema Foundation (Fundación Enfisema)** Carlos Alvear 3345 Mar del Plata Buenos Aires Argentina CP7600

## Sponsor information

**Organisation** Fundación Enfisema

Sponsor details

Carlos Alvear 3345, Mar del Plata Buenos Aires Argentina CP7600

**Sponsor type** Other

## Funder(s)

**Funder type** Research organisation

**Funder Name** Global Research Awards for Nicotine Dependence (GRAND)

## **Results and Publications**

#### **Publication and dissemination plan** Planned publication in a high-impact peer reviewed journal

Intention to publish date

31/08/2019

#### Individual participant data (IPD) sharing plan

The datasets generated during and/or analysed during the current study are/will be available upon request from Dr Dunja Przulj, d.przulj@qmul.ac.uk

#### IPD sharing plan summary

Available on request

Study outputs					
Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	01/03/2019	06/08/2019	Yes	No