# Clinical Trial Protocol
# Iranian Registry of Clinical Trials

17 Sep 2026

## A comparison study of single, repeated and diascopic Q-switched laser therapy in tattoo removal in patients who referred to Razi Hospital

## Protocol summary

**Study aim**
Investigate the efficacy and safety of single, repeated and diascopic Q-switched laser therapy in tattoo removal
**Design**
A non-randomized, single-arm, non-blinded
**Settings and conduct**
The study is conducted at Razi hospital.
**Participants/Inclusion and exclusion criteria**
Inclusion criterion: candidates for tattoo removal using Q-switched laser radiation. Exclusion criteria: 1- colorful or faded tattoo 2- scars in the tattooed skin or area immediately surrounding it 3- unstable mental status 4- active infection 5- Pregnancy or lactation 6- History of an uncontrolled serious disorder.
**Intervention groups**
All the participants receive Q-switched laser radiation for three consecutive sessions six weeks apart. The tattooed lesion is divided into three parts. A 1/3 of the tattooed skin is treated with single Q-switched laser radiation in each session. The other 1/3 is received two laser radiations, 15 min apart. Finally, the last 1/3 part is treated with single laser radiation under diascopy.
**Main outcome variables**
Fading of the tattooed lesion with each intervention; the incidence of side effects with each treatment

## General information

**Reason for update**
**Acronym**
**IRCT registration information**
IRCT registration number: **IRCT20180223038834N1**
Registration date: **2018-04-13, 1397/01/24**
Registration timing: **registered_while_recruiting**

Last update: **2018-04-13, 1397/01/24**
Update count: **0**
**Registration date**
2018-04-13, 1397/01/24

**Registrant information**
**Name**
Darya Khosravi
**Name of organization / entity**
**Country**
Iran (Islamic Republic of)
**Phone**
+98 21 5561 8989
**Email address**
dkhosravi@razi.tums.ac.ir

**Recruitment status**
**Recruitment complete**
**Funding source**

**Expected recruitment start date**
2017-03-21, 1396/01/01
**Expected recruitment end date**
2019-03-20, 1397/12/29
**Actual recruitment start date**
empty
**Actual recruitment end date**
empty
**Trial completion date**
empty

**Scientific title**
A comparison study of single, repeated and diascopic Q-switched laser therapy in tattoo removal in patients who referred to Razi Hospital

**Public title**
A comparison study of diascopic Q-switched laser therapy in tattoo removal
**Purpose**
Treatment
**Inclusion/Exclusion criteria**
**Inclusion criteria:**
candidates for tattoo removal using Q-switched laser radiation

**Exclusion criteria:**
Colorful or faded tattoo Scars in the tattooed skin or area immediately surrounding it Unstable mental status Active infection Pregnancy or lactation History of an uncontrolled serious disorder

**Age**
No age limit

**Gender**
Both

**Phase**
N/A

**Groups that have been masked**
*No information*

**Sample size**
Target sample size: **16**

**Randomization (investigator's opinion)**
N/A

**Randomization description**

**Blinding (investigator's opinion)**
Not blinded

**Blinding description**

**Placebo**
Not used

**Assignment**
Single

**Other design features**

## Secondary Ids

empty

## Ethics committees

**1**

**Ethics committee**

**Name of ethics committee**
Ethics committee of Tehran University of Medical Sciences

**Street address**
Faculty of Medicine, Tehran University of Medical Sciences, Poursina st.

**City**
Tehran

**Province**
Tehran

**Postal code**
1417613151

**Approval date**
2017-11-22, 1396/09/01

**Ethics committee reference number**
IR.TUMS.MEDICINE.REC.1396.3959

## Health conditions studied

**1**

**Description of health condition studied**
Tattoo pigmentation

**ICD-10 code**
L81.8

**ICD-10 code description**
Other specified disorders of pigmentation

## Primary outcomes

**1**

**Description**
The fading of the tattooed lesion

**Timepoint**
18 weeks

**Method of measurement**
Percentage of tattoo fading in close-up photographs taken before and after initiation of the interventions

## Secondary outcomes

**1**

**Description**
side-effects

**Timepoint**
18 weeks

**Method of measurement**
History and physical examination

## Intervention groups

**1**

**Description**
Intervention group: The tattooed lesion is divided into three parts. A 1/3 of the tattooed skin is treated with single Q-switched laser radiation in each session. The other 1/3 is received two laser radiations, 15 min apart. Finally, the last 1/3 part is treated with single laser radiation under diascopy.

**Category**
Treatment - Devices

## Recruitment centers

**1**

**Recruitment center**

**Name of recruitment center**
Skin Razi Hospital

**Full name of responsible person**
Darya Khosravi

**Street address**
Razi hospital, Razi Ave, Vahdate eslami Ave, Hafiz Street

**City**
Tehran

**Province**
Tehran

**Postal code**
1417613151

**Phone**
+98 21 5561 8989

**Email**

dkhosravi@razi.tums.ac.ir

## Sponsors / Funding sources

**1**

**Sponsor**

**Name of organization / entity**
Tehran University of Medical Sciences

**Full name of responsible person**
Dr. Shahin Akhound Zadeh

**Street address**
Research Vice-Chancellor, Room 205, First Floor, Education Building, Faculty of Medicine, Tehran University of Medical Sciences

**City**
Tehran

**Province**
Tehran

**Postal code**
1417613151

**Phone**
+98 21 6640 0917

**Email**
s.akhond@neda.net

**Web page address**

**Grant name**

**Grant code / Reference number**

**Is the source of funding the same sponsor organization/entity?**
Yes

**Title of funding source**
Tehran University of Medical Sciences

**Proportion provided by this source**
100

**Public or private sector**
Public

**Domestic or foreign origin**
Domestic

**Category of foreign source of funding**
*empty*

**Country of origin**

**Type of organization providing the funding**
Academic

## Person responsible for general inquiries

**Contact**

**Name of organization / entity**
Tehran University of Medical Sciences

**Full name of responsible person**
Darya Khosravi

**Position**
Resident

**Latest degree**
Medical doctor

**Other areas of specialty/work**
Dermatology

**Street address**
Razi hospital, Razi Ave, Vahdate eslami Ave, Hafiz Street

**City**
Teharn

**Province**
Tehran

**Postal code**
1417613151

**Phone**
+98 21 5561 8989

**Email**
dkhosravi@razi.tums.ac.ir

## Person responsible for scientific inquiries

**Contact**

**Name of organization / entity**
Tehran University of Medical Sciences

**Full name of responsible person**
Darya Khosravi

**Position**
Resident

**Latest degree**
Medical doctor

**Other areas of specialty/work**
Dermatology

**Street address**
Razi hospital, Razi Ave, Vahdate eslami Ave, Hafiz Street

**City**
Tehran

**Province**
Tehran

**Postal code**
1417613151

**Phone**
+98 21 5561 8989

**Email**
dkhosravi@razi.tums.ac.ir

## Person responsible for updating data

**Contact**

**Name of organization / entity**
Tehran University of Medical Sciences

**Full name of responsible person**
Darya Khosravi

**Position**
Resident

**Latest degree**
Medical doctor

**Other areas of specialty/work**
Dermatology

**Street address**
Razi hospital, Razi Ave, Vahdate eslami Ave, Hafiz Street

**City**
Tehran

**Province**
Tehran

**Postal code**
1417613151

**Phone**
+98 21 5561 8989

**Email**
dkhosravi@razi.tums.ac.ir

## Sharing plan

**Deidentified Individual Participant Data Set (IPD)**
Yes - There is a plan to make this available
**Study Protocol**
Yes - There is a plan to make this available
**Statistical Analysis Plan**
Yes - There is a plan to make this available
**Informed Consent Form**
Yes - There is a plan to make this available
**Clinical Study Report**
Yes - There is a plan to make this available
**Analytic Code**
Yes - There is a plan to make this available
**Data Dictionary**
Yes - There is a plan to make this available
**Title and more details about the data/document**
IPD collected for the primary outcome measure only
**When the data will become available and for how long**
starting 6 months after publication
**To whom data/document is available**
people working in academic institutions
**Under which criteria data/document could be used**
Scientific research
**From where data/document is obtainable**
Dr. Darya Khosravi
**What processes are involved for a request to access data/document**
The application is sent by official university email which should contain the recipient's information and the purpose of his/her request. After having verified the accuracy of the information, files would be sent.
**Comments**