

**TCTR ID : TCTR20230210007**

Overall Recruitment Status : Completed (Has Results)

**OTHER ID :**

Retrospective registration  
This protocol was registered after enrollment of the first participant.

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**Tracking Information**

First Submitted Date : 10 February 2023  
First Posted Date : 10 February 2023  
Last Update Posted Date : 10 February 2023

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**Title**

Public Title : Prognostic factors Associated with Early Recovery of Olfactory Dysfunction in COVID-19 patients  
Acronym : No Data  
Scientific Title : Prognostic factors Associated with Early Recovery of Olfactory Dysfunction in COVID-19 patients  
Sponsor ID/ IRB ID/ EC ID : 3061  
Registration Site : Thai Clinical Trials Registry  
URL : <https://www.thaiclinicaltrials.org/show/TCTR20230210007>  
Secondary ID : No Secondary ID

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**Ethics Review**

1. Board Approval : Submitted, approved  
Approval Number : COA.MURA2021/593  
Date of Approval : 21 July 2021  
Board Name : Human Research Ethics Committee  
Board Affiliation : Faculty of Medicine Ramathibodi Hospital, Mahidol University  
Board Contact : Business Phone : 6602012175 Ext. No Data  
Business Email : raec.mahidol@gmail.com  
Business Address : 270 Rama 6 Rd. Phayatai Ratchathewi Bangkok 10400

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**Sponsor**

Source(s) of Monetary or Material Supports : Faculty of Medicine, Ramathibodi Hospital, Mahidol University  
Study Primary Sponsor : Faculty of Medicine, Ramathibodi Hospital, Mahidol University  
Responsible Party : Name/Official Title : Faculty of Medicine, Ramathibodi Hospital, Mahidol University  
Organization : Faculty of Medicine, Ramathibodi Hospital, Mahidol University  
Phone : 022011701 Ext. No Data  
Email : raec.mahidol@gmail.com  
Study Secondary Sponsor : No Study Secondary Sponsor

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**Protocol Synopsis**

Protocol Synopsis : To find the prevalence of early olfactory dysfunction and factors associated with early olfactory recovery, the Median time to recovery of olfactory dysfunction in COVID-19 patients

**URL not available**

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**Health Conditions**

Health Condition(s) or Problem(s) Studied : COVID-19 patients with olfactory dysfunction  
Keywords : COVID-19, Delta strain, loss of smell, olfactory dysfunction, hyposmia, early recovery, prognostic factor

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**Eligibility**

Inclusion Criteria : 1. Age > 18years 2. Confirmed COVID-19 test identified through nasal swabs and positive reverse transcriptase polymerase chain reaction (RT-PCR) with new onset of smell dysfunction  
Gender : Both  
Age Limit : Minimum : 18 Years Maximum : N/A (No limit)  
Exclusion Criteria : 1. History of smell loss before COVID-19 era. 2. Previous history of rhinological diseases such as chronic rhinosinusitis, nasal tumor, anatomical abnormalities of the nose. 3. Previous neurosurgical,

otorhinolaryngological or maxillofacial surgery that cause alteration in sinonasal apparatus. 4. Pregnancy 5. Dementia, or other conditions associated with an inability to complete the evaluations. 6. The patients who refuse to enroll the study.

Accept Healthy Volunteers : No

**Status**

Overall Recruitment Status : Completed

Key Trial Dates Study Start Date (First enrollment) : 01 August 2021 Indicate Type : Actual

Completion Date (Last subject, Last visit) : 10 November 2021 Indicate Type : Actual

Study Completion Date : 08 December 2021 Indicate Type : Actual

**Design**

Study Type : Observational

Primary Purpose : Other

Number of Groups : 1

Study Endpoint Classification : N/A

Sample size

Planned sample size : 290

Actual sample size at study completion : 339

Observation Group 1

Group name : COVID-19 patients with olfactory dysfunction

Group Description : COVID-19 patients who confirm with RT-PCR with new onset of smell dysfunction which confirm with the smell test kit

**Outcome**

**Primary Outcome**

1. Outcome Name : prevalence of early olfactory recovery

Metric / Method of measurement : the complete improvement of ten in the VAS score of smell sensation on each specific odor in the first two weeks of follow-up

Time point : 2 weeks after first evaluation

**Secondary Outcome**

1. Outcome Name : 1. factors associated with early olfactory recovery 2. median time to complete recovery of smell loss

Metric / Method of measurement : 1. Odd ratio was used to find associated factors and early olfactory recovery 2. median time is the time participants reached the total smell score of four specific odors

Time point : 6 weeks after first evaluation

**Location**

**Section A : Central Contact**

Central Contact First Name : Pattraporn Middle Name : Last Name : Kreesaeng  
Degree : M.D. Phone : 0961492651 Ext. : No Data Email : pattrapornkreesag.fern@gmail.com

Central Contact Backup First Name : Kangsadarn Middle Name : Lastname : Tanjararak  
Degree : M.D. Phone : 0839166638 Ext. : No Data Email : kang006611@gmail.com

**Section B Facility Information and Contact**

1. Site Name : Ramathibodi hospital

City : Ratchathewi

State/Province : Bangkok

Postal Code : 10400

Country : Thailand

Recruitment Status : Completed

**Facility Contact** First Name : Pattraporn

Middle Name :

Last Name : Kreesaeng

Degree : M.D.

Phone : 0961492651 Ext. : No Data

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**Facility Contact Backup** First Name : Kangsadarn

Middle Name :

Last Name : Tanjararak

Degree : M.D.

Phone : 0839166638 Ext. : No Data

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**Investigator Name** First Name : Pattaporn Middle Name : Last Name : Kreesaeng  
Degree : M.D. Role : Principal Investigator

**Section C : Contact for Public Queries (Responsible Person)**

First Name : Pattaporn Middle Name : Last Name : Kreesaeng  
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State/Province : Bangkok Postal Code : 10400  
Country : Thailand Official Role : Study Principal Investigator  
Organization Affiliation : Faculty of Medicine, Ramathibodi Hospital, Mahidol University

**Section D : Contact for Scientific Queries (Responsible Person)**

First Name : Pattaporn Middle Name : Last Name : Kreesaeng  
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Postal Address : 270 Rama 6 Rd. Phayathai Ratchathewi  
State/Province : Bangkok Postal Code : 10400  
Country : Thailand Official Role : Study Principal Investigator  
Organization Affiliation : Faculty of Medicine, Ramathibodi Hospital, Mahidol University

**Summary Results**

Date of posting of results summaries : 01 July 2022

Date of first journal publication of results : Not yet published

**Baseline Characteristics :** Three hundred forty-eight participants enrolled in the study, 8 patients lost to follow-up, and 1 patient died from COVID-19 respiratory failure; thus, 339 completed the outcome measurements through the follow-up periods. Of 339, there were 120 males (35.4%), the mean age was 39.9+13.5 years, and the average BMI was 24.2+4.5. Most participants did not have a history of previous or current smoking (75.2%). During the period of the study, 92 participants (27.1%) received a complete vaccination (2 shots), 145 (42.8%) received partial vaccination (1 shot), and 102 (30.1%) had no vaccination. There were 42 participants (12.4%) who had allergic rhinitis, 9 (2.7%) had lower respiratory diseases, 37 (10.9%) had hypertension, and 16 (4.7%) had diabetes. Only 8 participants (2.4%) had used intranasal or inhaled corticosteroids. The median duration of olfactory dysfunction was 0 days (IQR: 0.0, 2.0). Some participants reported concomitant symptoms other than olfactory dysfunction, including 245 (72.3%) had a fever, 302 (89.1%) had URI symptoms, 181 (53.4%) had fatigue symptoms, and 136 (40.1%) had taste alteration. One hundred forty participants (41.3%) received anti-viral drugs, and 43 (12.7%) received systemic corticosteroids as a part of COVID-19 treatment. Thirty-four participants developed COVID-19 pneumonia, and 12 (3.5%) needed oxygen therapy.

**Participant Flow :** The seven disposable smell test kits were delivered to 348 participants who met the eligible criteria. Each smell test kit had four specific odors, including orange, coffee, jasmine, and fish sauce, in a 5-mL amber glass bottle sealed with plastic wrap to maintain odorant. The odors used in the study were culturally recognized, and the concentrations were identical to a previous study investigating odor identification in the local normosmia population. All participants received a quick response code to scan the instructional video for odor testing. The visual analog scale of smell sensation of the four specific odors was collected via the telephone at baseline and every week until six weeks follow-up. loss follow-up 8 participants died from COVID-19 pneumonia 1 participants total analysis participants are 339

**Adverse events :** no

**Outcome Measures :** - the primary outcome was the prevalence of early olfactory recovery. The early recovery of smell loss was defined as the complete improvement of ten in the VAS score of smell sensation on each specific odor in the first two weeks of follow-up. The authors determined the cut of two weeks as an early recovery of olfactory dysfunction. - secondary outcomes were the analysis of factors associated with the early olfactory recovery and the median time to complete recovery of smell loss evaluated by the time participants reached the total smell score of four specific odors

**Brief Summary of Results :** The median time to olfactory recovery is two weeks, and patients with no allergic rhinitis, concomitant URI symptoms, taste alteration, developed pneumonia, and higher BMI have a better prognosis for improving smell loss in the earlier period.

**Deidentified Individual Participant-level Data Sharing**

Plan to share IPD : Yes

Plan description : sharing 1 year after publication for a period of 2 years

**Publication from this study**

MEDLINE Identifier : No Data

URL link to full text publication : No Data

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