TCTR ID: TCTR20221024003 OTHER ID:

Overall Recruitment Status: Enrolling by invitation

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

Tracking Information

First Submitted Date: 22 October 2022

First Posted Date: 24 October 2022

Last Update Posted Date: 22 October 2022

Title

Public Title: The difference of infant's gut microbiome between cesarean delivery and vaginal delivery

Acronym: No Data

Scientific Title: The difference of infant's gut microbiome between cesarean delivery and vaginal delivery

Sponsor ID/ IRB ID/ EC ID: 2565URMS0847

Registration Site: Thai Clinical Trials Registry

URL: https://www.thaiclinicaltrials.org/show/TCTR20221024003

Secondary ID: No Secondary ID

Ethics Review

Board Approval : Submitted, approved
 Approval Number : SWUEC/E/M-029/2564
 Date of Approval : 05 November 2021

Board Name: Strategic Wisdom and Research Institute

Board Affiliation: Srinakharinwirot University, Thailand

Board Contact: Business Phone: 026495000 Ext. No Data

Business Email: ethics@g.swu.ac.th

Business Address: 114 Sukhumvit Rd. Kwaeng Klong Toei NUea, Khet Watthana, Bangkok, 10110

Sponsor

Source(s) of Monetary or Material Supports: Strategic Wisdom and Research Institute, Srinakharinwirot University

Study Primary Sponsor: Strategic Wisdom and Research Institute, Srinakharinwirot University

Responsible Party: Name/Official Title: Strategic Wisdom and Research Institute, Srinakharinwirot University

Organization: Srinakharinwirot University, Thailand

Phone: 026495000 Ext. No Data Email: nongpruksa.j@gmail.com

Study Secondary Sponsor: Fundamental Fund, National Research and Innovation Information System

Protocol Synopsis

Protocol Synopsis: To study the difference of infant's gut microbiome between cesarean delivery and vaginal delivery and the

factors that possibly involving in infant's gut microbiome in term healthy newborn delivered from 280

pregnant women.

URL not available

Health Conditions

Health Condition(s) or Problem(s) Studied: Infant gut microbiome

Keywords: microbiome, gut, infant, cesarean, vaginal delivery

Eligibility

Inclusion Criteria: 1. Term healthy newborn with normal vital signs and physical examination. 2. Delivered at HRH Maha

Chakri Sirindhorn Medical Center, Faculty of Medicine, Srinakharinwirot University, Thaialnd. 3. Delivered from pregnant women with no infection history. 4. Delivered from pregnant women not received antibiotic

treatment except for Cesarean empirical antibiotic prophylaxis.

Gender: Both

Age Limit: Minimum: N/A (No limit) Maximum: 48 Hours

Exclusion Criteria: 1. Infant's fecal specimen cannot be corrected within 48 hours after delivery

2. Infant diagnosed with gastrointestinal abnormalities, other structural abnormalities or genetic disease after

Indicate Type: Anticipated

delivery

3. Infant diagnosed with complications after delivery e.g., jaundice that need phototherapy or exchanged

transfusion, early neonatal sepsis

4. Infant received antibiotic within 48-72 hours after delivery before collecting the fecal specimen.

Accept Healthy Volunteers: Yes

Status

Overall Recruitment Status: Enrolling by invitation

Key Trial Dates Study Start Date (First enrollment): 24 April 2021 Indicate Type: Actual

Completion Date (Last subject, Last visit): 31 December

2022

Study Completion Date : 31 March 2023 Indicate Type : Anticipated

Design

Study Type: Observational

Primary Purpose: Basic Science

Number of Groups: 2

Study Endpoint Classification : N/A

Sample size

Planned sample size: 280

Actual sample size at study completion:

Observation Group 1

Group name: Vaginal delivery

Group Description: Infants delivered by vaginal delivery

Observation Group 2

Group name: Cesarean delivery

Group Description : Infants delivered by cesarean delivery

Outcome

Primary Outcome

1. Outcome Name: Alpha diversity

 $Metric \ / \ Method \ of \ measurement: \ \ QIMME$

Time point: After complete sample collection

2. Outcome Name: Difference of gut microbiomes

 $Metric \ / \ Method \ of \ measurement: \ \ Non-parametric \ t\text{-}test$

Time point: After complete sample collection

Secondary Outcome

1. Outcome Name: Gravida

Metric / Method of measurement: Record form

Time point: 1 year

2. Outcome Name: Parity

Metric / Method of measurement: Record form

Time point: 1 year

3. Outcome Name: Abortion

Metric / Method of measurement: Record form

Time point: 1 year

4. Outcome Name: Gestational age

Metric / Method of measurement: Record form

Time point: 1 year

5. Outcome Name: Ethnic

Metric / Method of measurement: Record form

Time point: 1 year

6. Outcome Name: Income

Metric / Method of measurement: Record form

Time point: 1 year

7. Outcome Name: Religion

Metric / Method of measurement: Record form

Time point: 1 year

8. Outcome Name: BMI

Metric / Method of measurement: Record form

Time point: 1 year

9. Outcome Name: ANC risk

Metric / Method of measurement: Record form

Time point: 1 year

10. Outcome Name: Medications

Metric / Method of measurement: Record form

Time point: 1 years

11. Outcome Name: Underlying disease

Metric / Method of measurement: Record form

Time point: 1 year

12. Outcome Name: Route of delivery

Metric / Method of measurement: Record form

Time point: 1 year

13. Outcome Name: Intrapartum complications

Metric / Method of measurement: Record form

Time point: 1 year

14. Outcome Name: Postpartum complications

 $Metric \ / \ Method \ of \ measurement: \ Record \ form$

Time point: 1 year

15. Outcome Name: Infant sex

Metric / Method of measurement: Record form

Time point: 1 year

16. Outcome Name: Birth body weight

 $Metric \ / \ Method \ of \ measurement: \ Record \ form$

Time point: 1 year

17. Outcome Name: APGAR score

 $Metric \, / \, Method \, of \, measurement: \, \, \, Record \, form \,$

Time point: 1 year

Location

Section A: Central Contact

Central Contact First Name : Nichapat Middle Name : Last Name : Pahirah

 $Degree: Phone: 037395085 \ Ext.: 60811 \\ Email: anoonp@gmail.com$

Central Contact Backup First Name: Wipada Middle Name: Lastname: Lastname: Lastname

Degree: Phone: 037395085 Ext.: 60811 Email: wipada@g.swu.ac.th

Section B Facility Information and Contact

1. Site Name: HRH Maha Chakri Sirindhorn Medical Center

City: Ongkharak State/Province: Nakornnayok Postal Code: 26120

Country: Thailand Recruitment Status: Recruiting

Facility Contact First Name : Nichapat Middle Name : Last Name : Pahirah

 $Degree: Phone: 037395085 \ Ext.: 60811 Email: anoonp@gmail.com$

Facility Contact Backup First Name : Wipada Middle Name : Last Nam

 $\label{eq:phone:o26495000} Degree: Phone: 026495000 \ Ext.: No \ Data \qquad Email: wipada@g.swu.ac.th$

Investigator Name : First Name : Nichapat Middle Name : Last Name : Pahirah

Degree: Role: Principal Investigator

Section C : Contact for Public Queries (Responsible Person)

First Name : Nichapat Middle Name : Last Name : Pahirah

Degree: No Data Phone: 037395085 Ext.: 60811 Email: anoonp@gmail.com

Postal Address: 62 Moo 7 Ongkharak Ongkharak

State/Province: Nakhonnayok Postal Code: 26120

Country : Thailand Official Role : Study Principal Investigator Organization Affiliation : Faculty of Medicine, Srinakharinwirot University

Section D : Contact for Scientific Queries (Responsible Person)

First Name : Nichapat Middle Name : Last Name : Pahirah

Degree: No Data Phone: 037395085 Ext.: 60811 Email: anoonp@gmail.com

Postal Address: 62 Moo 7 Ongkharak Ongkharak

State/Province: Nakhonnayok Postal Code: 26120

Country : Thailand Official Role : Study Principal Investigator Organization Affiliation : Faculty of Medicine, Srinakharinwirot University

Deidentified Individual Participant-level Data Sharing

Plan to share IPD: No

Reason: Need consensus from colleagues

Publication from this study

MEDLINE Identifier: No Data

URL link to full text publication : $\,$ No $\,$ Data