

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

09 Jun 2026

### Effect of probiotic (Lactobacillus sporogenesis) in reducing PELD score in pediatric cholestatic liver disease: Randomized double blinded clinical trial

#### Protocol summary

##### Study aim

Effect of probiotic (Lactobacillus sporogenesis) in reducing PELD score in pediatric cholestatic liver disease: Randomized double blinded clinical trial

##### Design

The convince sampling method is goal-based. In this way, the researcher is present at the site during the study and starts sampling from the referring patients in an accessible way to get the total sample size. Randomization method: permutation block design or quadruple blocks will be used

##### Settings and conduct

Children with cirrhosis who refer to Shiraz pediatric liver Cirrhosis Cohort Center located in Motahhari clinic

##### Participants/Inclusion and exclusion criteria

Cirrhotic children who referred to Motahhari clinic in Shiraz. inclusion criteria: age 1-12 years. cholestatic liver disease. signed informed consent Exclusion criteria: Taking antibiotics for four weeks before the study, history of gastrointestinal bleeding or SBP over the past two months, active microbial infection, taking immunosuppressive drugs or Immunosuppressed patients, renal failure (more creatinine From 1.5 mg / dl, serum potassium <3.0 or> 5.5 meq / dl), people with a history of allergies

##### Intervention groups

Lactobacillus sporogenesis probiotic is given in drops for 1 month (5 drops per day in 2 intervals) to treatment group.

##### Main outcome variables

PELD score: age, total Bili, Alb, INR, History of growth failure

#### General information

##### Reason for update

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT20200628047940N1**  
Registration date: **2020-07-21, 1399/04/31**  
Registration timing: **prospective**

Last update: **2020-07-21, 1399/04/31**

Update count: **0**

##### Registration date

2020-07-21, 1399/04/31

##### Registrant information

###### Name

Nasrin Motazedian

###### Name of organization / entity

###### Country

Iran (Islamic Republic of)

###### Phone

+98 71 3628 1529

###### Email address

nmotazedi@sums.ac.ir

##### Recruitment status

**Recruitment complete**

##### Funding source

##### Expected recruitment start date

2020-08-05, 1399/05/15

##### Expected recruitment end date

2021-01-04, 1399/10/15

##### Actual recruitment start date

empty

##### Actual recruitment end date

empty

##### Trial completion date

empty

##### Scientific title

Effect of probiotic (Lactobacillus sporogenesis) in

reducing PELD score in pediatric cholestatic liver disease:Randomized double blinded clinical trial

#### Public title

Effect of probiotic in pediatric cholestatic liver disease

#### Purpose

Treatment

#### Inclusion/Exclusion criteria

##### Inclusion criteria:

age1-12 cholestatic liver failure informed consent

##### Exclusion criteria:

Taking antibiotics for four weeks before the study  
Active microbial infection  
History of gastrointestinal bleeding over the past two months  
History of SBP over the past two months  
Taking immunosuppressive drugs  
Immunosuppressed patients  
Renal failure ( creatinine> 1.5 mg) Electronic imbalance (serum sodium <130 or> 150 meq / dl, serum potassium <3.0 or> 5.5 meq / dl)  
History of Allergies

#### Age

From **1 year** old to **12 years** old

#### Gender

Both

#### Phase

3

#### Groups that have been masked

- Participant
- Care provider
- Investigator
- Outcome assessor

#### Sample size

Target sample size: **120**

#### Randomization (investigator's opinion)

Randomized

#### Randomization description

The convince sampling method is goal-based. In this way, the researcher is present at the site during the study and starts sampling from the referring patients in an accessible way to get the total sample size.  
Randomization method: permutation block design or quadruple blocks will be used

#### Blinding (investigator's opinion)

Double blinded

#### Blinding description

The physician will examine the patient and evaluate the laboratory tests under blinded conditions.The case and control groups are also unaware of the nature of the drops (probiotic, and placebo).

#### Placebo

Used

#### Assignment

Parallel

#### Other design features

#### Secondary Ids

empty

#### Ethics committees

#### 1

#### Ethics committee

##### Name of ethics committee

Ethics Committee of Shiraz University of Medical Sciences

##### Street address

Ethics Committee, Shiraz University of Medical Sciences, Zand Street, Beside Helal Ahmar, Shiraz, Iran

##### City

Shiraz

##### Province

Fars

##### Postal code

71348-14336

##### Approval date

2020-06-02, 1399/03/13

##### Ethics committee reference number

IR.SUMS.REC.1399.277

#### Health conditions studied

#### 1

##### Description of health condition studied

Cholestatic liver disease in children

##### ICD-10 code

##### ICD-10 code description

#### Primary outcomes

#### 1

##### Description

Change in Pediatric End-Stage Liver Disease (PELD) score

##### Timepoint

The results of Lab test for calculation of Pediatric End-Stage Liver Disease (PELD) score will be evaluated one month, three months after finishing the intervention.

##### Method of measurement

Pediatric End-Stage Liver Disease (PELD) Score =  $0.480 \times \text{Loge}(\text{bilirubin mg/dL}) + 1.857 \times \text{Loge}(\text{INR}) - 0.687 \times \text{Loge}(\text{albumin g/dL}) + 0.436$  (if the patient is less than 1 year old) + 0.667 if the patient has growth failure (< -2 Standard deviation). Then multiply the score by 10 and round to the nearest whole number.

#### Secondary outcomes

#### 1

##### Description

Improvement in growth and development

##### Timepoint

Three months after finishing the study

##### Method of measurement

Measuring weight by scale and height by stadiometer

#### Intervention groups

## 1

### Description

Intervention group: The treatment group will be received Lactobacillus sporogenesis probiotic is given in drops for 1 month (5 drops per day in two intervals)

### Category

Treatment - Drugs

## 2

### Description

Control group: placebo drops is given in drops for 1 month (5 drops per day in two intervals) to control group

### Category

Placebo

## Recruitment centers

## 1

### Recruitment center

#### Name of recruitment center

Shiraz Transplant Research Center

#### Full name of responsible person

Nasrin Motazedian

#### Street address

Seventh floor, Transplant Research Center, Research Tower, Mollasadra St., Khalili Ave., Shiraz, IR Iran.

#### City

Shiraz

#### Province

Fars

#### Postal code

7193711351

#### Phone

+98 71 3628 1529

#### Email

motazediann@yahoo.com

## Sponsors / Funding sources

## 1

### Sponsor

#### Name of organization / entity

Shiraz University of Medical Sciences

#### Full name of responsible person

Nasrin Motazedian

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Seventh floor, Transplant Research Center, Research Tower, Mollasadra St., Khalili Ave., Shiraz, IR Iran.

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### Grant name

### Grant code / Reference number

### Is the source of funding the same sponsor organization/entity?

No

### Title of funding source

Vice chancellor for research, Shiraz University of Medical Sciences

### Proportion provided by this source

60

### 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

Shiraz University of Medical Sciences

#### Full name of responsible person

Nasrin Motazedian

#### Position

Assistant professor

#### Latest degree

Specialist

#### Other areas of specialty/work

Public Health/Community Medicine

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## Person responsible for scientific inquiries

### Contact

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Shiraz University of Medical Sciences

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**Person responsible for updating data**

**Contact**

**Name of organization / entity**

Shiraz University of Medical Sciences

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Assistant professor

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**Sharing plan**

**Deidentified Individual Participant Data Set (IPD)**

No - There is not a plan to make this available

**Justification/reason for indecision/not sharing IPD**

The patients selected by convince sampling

**Study Protocol**

No - There is not a plan to make this available

**Statistical Analysis Plan**

No - There is not 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**

No - There is not a plan to make this available

**Data Dictionary**

No - There is not a plan to make this available

**Title and more details about the data/document**

gender age underlying disease drugs INR AST ALT growth and development chart

**When the data will become available and for how long**

1400

**To whom data/document is available**

Pediatrics transplant surgeon /Pediatrics gastroenterologist

**Under which criteria data/document could be used**

Privacy and Ownership of the principal investigator

**From where data/document is obtainable**

Seventh floor, Transplant Research Center, Research Tower, Mollasadra St., Khalili Ave., Shiraz, IR Iran.

**What processes are involved for a request to access data/document**

Request by e- mail and present to sign agreement

**Comments**