### Impact of vitamin D deficiency on prognosis of patients with novel coronavirus pneumonia (COVID-19)

<table>
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<tr>
<th>Registration number:</th>
<th>ChiCTR2000029732</th>
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<tr>
<td>Date of Last Refreshed on:</td>
<td>2020-02-12</td>
</tr>
<tr>
<td>Date of Registration:</td>
<td>2020-02-10</td>
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<td>Registration Status:</td>
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<tr>
<td>Public title:</td>
<td>Impact of vitamin D deficiency on prognosis of patients with novel coronavirus pneumonia (COVID-19)</td>
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<td>Scientific title:</td>
<td>Impact of vitamin D deficiency on prognosis of patients with novel coronavirus pneumonia (COVID-19)</td>
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</tbody>
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**Applicant:** Jun Guo  
**Study leader:** Jun Guo  
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**Study leader's telephone:** +86 15388178461  
**Applicant E-mail:** guojun@wchscu.cn  
**Study leader's E-mail:** guojun@wchscu.cn  
**Applicant address:** 37 Guoxue Lane, Wuhou District, Chengdu, Sichuan, China  
**Study leader's address:** 37 Guoxue Lane, Wuhou District, Chengdu, Sichuan, China  
**Applicant's institution:** West China Hospital, Sichuan University

**Approved by ethic committee:** Yes  
**Approved No. of ethic committee:** 2020年 第（128）号  
**Name of the ethic committee:** Clinical Trial Ethics Committee, West China Hospital of Sichuan University  
**Date of approved by ethic committee:**  
**Contact Name of the ethic committee:** Yurong Han, Yunyun Zhao  
**Contact Address of the ethic committee:** Room 412-413, Old 8th Teaching Building, West China Hospital, Sichuan University, 37 Guoxue Lane, Wuhou District, Chengdu, Sichuan, China  
**Contact phone of the ethic committee:**  
**Contact email of the ethic committee:**  

**Primary sponsor:** West China Hospital, Sichuan University  
**Primary sponsor's address:** 37 Guoxue Lane, Wuhou District, Chengdu, Sichuan, China  

**Secondary sponsor:**  
**Country:** China  
**Province:** Sichuan  
**City:** Chengdu  
**Institution:** West China Hospital, Sichuan University  
**Address:** 37 Guoxue Lane, Wuhou District

**Source(s) of funding:** Science and Technology Department of Sichuan Province  
**Target disease:** novel coronavirus pneumonia (COVID-19)
**Target disease code:**

**Study type:** Observational study

**Study phase:** 0

**Objectives of Study:** Relationship between serum vitamin D levels and clinical prognosis in patients with novel coronavirus pneumonia.

**Description for medicine or protocol of treatment in detail:**

**Study design:** Factorial

**Inclusion criteria:**
1. Aged >= 18 years. 2. Patients who meet the diagnostic criteria of suspected cases of pneumonia caused by novel coronavirus infection.

**Exclusion criteria:**
1. Patients without any clinical and chest imaging findings; 2. Supplementation with vitamin D or calcium within one week before admission 3. Patients with severe failure with chronic organ dysfunction; 4. Malignant tumors; diseases of the immune system; radiation and chemotherapy. 5. Pregnancy: The pregnancy test is positive for women of childbearing age; the breastfeeding women have not stopped breastfeeding.

**Study execute time:** From 2020-02-10 to 2020-04-10

<table>
<thead>
<tr>
<th>Interventions</th>
<th>Group: Vitamin D deficiency group</th>
<th>Sample size: 104</th>
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<tbody>
<tr>
<td>Intervention:</td>
<td>N/A</td>
<td>Intervention code:</td>
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<table>
<thead>
<tr>
<th>Interventions</th>
<th>Group: Vitamin D normal group</th>
<th>Sample size: 52</th>
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<tbody>
<tr>
<td>Intervention:</td>
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**Countries of recruitment and research settings:**

- **Country:** China
  - **Province:** Sichuan
  - **City:** Affiliated Hospital of North Sichuan Medical College (Tertiary hospital)

- **Country:** China
  - **Province:** Hubei
  - **City:** Zhongnan Hospital of Wuhan University (Tertiary hospital)

- **Country:** China
  - **Province:** Anhui
  - **City:** 2nd hospital of Wuhu City (Tertiary hospital)

- **Country:** China
  - **Province:** Sichuan
  - **City:** Central Hospital of Mianyang (Tertiary hospital)

**Outcomes:**

- **Outcome:** ROX index
  - **Type:** Primary indicator
  - **Measure time point of outcome:**

- **Outcome:** length of stay
  - **Type:** Secondary indicator
  - **Measure time point of outcome:**

- **Outcome:** the rate of transfer to critical ill patients
  - **Type:** Secondary indicator
  - **Measure time point of outcome:**

- **Outcome:** length of stay in ICU
  - **Type:** Secondary indicator
  - **Measure time point of outcome:**

- **Outcome:** 28-day mortality
  - **Type:** Secondary indicator
  - **Measure time point of outcome:**

- **Outcome:** complication
  - **Type:** Secondary indicator
  - **Measure time point of outcome:**

- **Outcome:** 28-day mortality
  - **Type:** Secondary indicator
  - **Measure time point of outcome:**

- **Outcome:** complication
  - **Type:** Secondary indicator
  - **Measure time point of outcome:**
Collecting sample(s) from participants:

<table>
<thead>
<tr>
<th>Sample Name</th>
<th>Tissue</th>
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<tbody>
<tr>
<td>Blood</td>
<td></td>
</tr>
</tbody>
</table>

Fate of sample: Destruction after use

Recruiting status: Not yet recruiting

Participant age:
- Min age:  years
- Max age:  years

Gender: Both

Randomization Procedure (please state who generates the random number sequence and by what method): Nil

Blinding: N/A

The time of sharing IPD: Within six months after the trial complete

The way of sharing IPD (include metadata and protocol, if use web-based public database, please provide the url): Private

Data collection and Management (A standard data collection and management system include a CRF and an electronic data capture):

Electronic collection and management system

Data Management Committee: Yes

Web page footer: