# Identification of gene markers associated with prognosis for patients with prostate cancer

Submission date	<b>Recruitment status</b> No longer recruiting	[X] Prospectively registered		
30/11/2021		[] Protocol		
Registration date	Overall study status	[] Statistical analysis plan		
01/12/2021	Completed	[X] Results		
Last Edited 21/01/2025	<b>Condition category</b> Cancer	Individual participant data		

#### Plain English summary of protocol

Background and study aims

Prostate cancer is a public health priority in men and the impact of this disease will be more pronounced with the aging of the world's population. The aim of this study is to identify gene markers associated with the prognosis of prostate cancer to guide clinical practice.

Who can participate? Patients with prostate cancer in The Cancer Genome Atlas Program (TCGA) and Gene Expression Omnibus (GEO) databases.

What does the study involve?

The researchers will obtain data on prostate cancer from public databases to identify genes related to the prognosis of prostate cancer.

What are the possible benefits and risks of participating? There are no expected benefits or risks for the participants.

Where is the study run from? Sichuan University (China)

When is the study starting and how long is it expected to run for? November 2021 to December 2021

Who is funding the study?

- 1. National Natural Science Foundation of China (China)
- 2. Science and Technology Department of Sichuan Province (China)
- 3. Sichuan University (China)
- 4. Chengdu Science and Technology Bureau (China)
- 5. West China Hospital, Sichuan University (China)

Who is the main contact? Prof. Lu Yang wycleflue@163.com

# **Contact information**

**Type(s)** Scientific

**Contact name** Prof Lu Yang

#### **Contact details**

Department of Urology Institute of Urology West China Hospital Sichuan University Guoxue Xiang #37 Chengdu China 610041 +86 17781480258 wycleflue@163.com

# Additional identifiers

**EudraCT/CTIS number** Nil known

**IRAS number** 

**ClinicalTrials.gov number** Nil known

**Secondary identifying numbers** Nil known

## Study information

**Scientific Title** Prognostic biomarkers in prostate cancer identified through bioinformatic analysis

**Acronym** PBPCBA

**Study objectives** The prognosis of prostate cancer can be predicted by gene markers.

**Ethics approval required** Old ethics approval format

Ethics approval(s)

All data is derived from public databases, such as The Cancer Genome Atlas Program (TCGA) and Gene Expression Omnibus (GEO) databases. Thus, ethics approval is not required.

**Study design** Retrospective observational study

**Primary study design** Observational

**Secondary study design** Cross sectional study

**Study setting(s)** Other

**Study type(s)** Other

**Participant information sheet** Not applicable (retrospective study)

#### Health condition(s) or problem(s) studied

Prognostic markers of prostate cancer

#### Interventions

The Genematrix and clinical data of prostate cancer patients are extracted from the TCGA and GEO databases to compare tumor and normal tissue samples. Univariate and multivariate COX regression analysis is conducted to identify independent factors associated with biochemical recurrence and metastasis.

#### Intervention Type

Other

#### Primary outcome measure

Genes associated with biochemical recurrence, identified through bioinformatic analysis of data obtained from the TCGA and GEO database from 01/12/2021 to 05/12/2021

Secondary outcome measures

There are no secondary outcome measures

**Overall study start date** 30/11/2021

**Completion date** 10/12/2021

# Eligibility

Key inclusion criteria

Patients with prostate cancer in the TCGA and GEO databases

**Participant type(s)** Patient

**Age group** Adult

**Sex** Male

**Target number of participants** 1000

**Total final enrolment** 3000

**Key exclusion criteria** Patients without prognostic information in the TCGA and GEO databases

Date of first enrolment 01/12/2021

Date of final enrolment 05/12/2021

## Locations

**Countries of recruitment** China

**Study participating centre Sichuan University** West China Hospital Chengdu China 610041

## Sponsor information

**Organisation** Sichuan University

Sponsor details

Guoxue Xiang #37 Chengdu China 610041 +86 (0)28 85422451 fdcfenix@stu.scu.edu.cn

**Sponsor type** University/education

Website https://www.scu.edu.cn/

ROR https://ror.org/011ashp19

## Funder(s)

Funder type Hospital/treatment centre

**Funder Name** West China Hospital, Sichuan University

**Alternative Name(s)** West China Hospital, West China School of Medicine and West China Hospital, Sichuan University, WCH, WCSM/WCH

**Funding Body Type** Private sector organisation

**Funding Body Subtype** Other non-profit organizations

**Location** China

#### **Funder Name**

National Natural Science Foundation of China (Grant Nos. 81974099, 82170785, 81974098, 82170784)

#### Alternative Name(s)

Chinese National Science Foundation, Natural Science Foundation of China, National Science Foundation of China, NNSF of China, NSF of China, , National Nature Science Foundation of China, Guójiā Zìrán Kēxué Jījīn Wěiyuánhuì, NSFC, NNSF, NNSFC

#### Funding Body Type

Government organisation

#### Funding Body Subtype

National government

#### Location

China

**Funder Name** Department of Science and Technology of Sichuan Province (Grant Nos. 21GJHZ0246)

#### Alternative Name(s)

Sichuan Provincial Department of Science and Technology, Department of Science and Technology of Sichuan Province, Science & Technology Department of Sichuan Province, , SPDST

**Funding Body Type** Government organisation

Funding Body Subtype Local government

Location China

**Funder Name** Sichuan University (Grant No. 2017SCU04A17)

Alternative Name(s) , , Sichuan Union University, SCU

**Funding Body Type** Government organisation

**Funding Body Subtype** Universities (academic only)

**Location** China

**Funder Name** Chengdu Science and Technology Bureau (2019-YF05-00296-SN)

Alternative Name(s)

**Funding Body Type** Government organisation

#### Funding Body Subtype

Local government

#### Location

China

## **Results and Publications**

#### Publication and dissemination plan

Planned publication in a high-impact peer-reviewed journal

### Intention to publish date

20/04/2022

#### Individual participant data (IPD) sharing plan

All data is derived from the public database online, thus the IPD sharing statement is not applicable.

#### IPD sharing plan summary

Other

#### Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article		29/09/2022	06/01/2023	Yes	No
Results article		24/02/2022	06/01/2023	Yes	No
Results article		15/09/2022	06/01/2023	Yes	No
<u>Results article</u>		06/04/2022	06/01/2023	Yes	No
<u>Results article</u>		15/09/2022	06/01/2023	Yes	No
<u>Results article</u>		03/06/2022	06/01/2023	Yes	No
Results article		12/01/2022	06/01/2023	Yes	No
Results article		01/03/2023	21/01/2025	Yes	No
Results article		01/03/2023	21/01/2025	Yes	No