

# INPLASY PROTOCOL

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**Support:** 2800.

**Review Stage at time of this submission:** Preliminary searches.

**Conflicts of interest:**  
None declared.

## Association between cerebral small diseases and the risk of Parkinson disease: a systematic review and meta analysis

Liu, L<sup>1</sup>; Cai, Z<sup>2</sup>.

**Review question / Objective:** The purpose of this study is to investigate the risk of Parkinson disease in patients with cerebral small vessel disease (encephalatrophywhite, matter hypersignal, Cerebral microbleeds, lacunar infarction, enlarged perivascular space). The study type is cohort study.

**Condition being studied:** The researchers have professional research literacy, and the experiment is well equipped. The British Parkinson's disease association brain bank clinical diagnostic standard is an internationally commonly used diagnostic standard.

**Information sources:** Pubmed, Embase, Web of science, Cochrane, CNKI, VIP, Wanfang.

**INPLASY registration number:** This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 21 August 2021 and was last updated on 21 August 2021 (registration number INPLASY202180083).

### INTRODUCTION

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## METHODS

**Participant or population:** Patients with cerebral small vessel disease and patients with non-cerebral small vessel disease.

**Intervention:** No intervention.

**Comparator:** Patients with non-cerebral small vessel disease.

**Study designs to be included:** Cohort study.

**Eligibility criteria:** The diagnosis of small vessel disease mainly depends on imaging diagnosis.

**Information sources:** Pubmed, Embase, Web of science, Cochrane, CNKI, VIP, Wanfang.

**Main outcome(s):** Prevalence of parkinson disease in patients with cerebral small vessel disease, and prevalence of parkinson disease in patients with cerebral small vessel disease.

**Quality assessment / Risk of bias analysis:** Newcastle-Ottawa Scale (NOS).

**Strategy of data synthesis:** Use Stata to analysis.

**Subgroup analysis:** subgroup analysis was performed according to the classification of cerebral small vessel diseases (encephalatrophy, white matter hypersignal, Cerebal microbleeds, lacunar infarction, enlarged perivascular space).

**Sensitivity analysis:** The sensitivity analysis is carried out in STATA software, and the sensitivity of the article is reflected by deleting one article ,and then analyze the changes of effect size.

**Country(ies) involved:** China.

**Keywords:** parkinson disease (PD) cerebral small vessel disease (CSVD) encephalatrophy, white matter hypersignal, Cerebal microbleeds, lacunar infarction, enlarged perivascular space.

## Contributions of each author:

Author 1 - Liushu Liu.

Author 2 - Zhiyou Cai.