

# INPLASY PROTOCOL

To cite: Manosroi et al.  
Predictive factors of clinical  
cure after adrenalectomy in  
primary aldosteronism. Inplasy  
protocol 202240129. doi:  
10.37766/inplasy2022.4.0129

Received: 21 April 2022

Published: 21 April 2022

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**Support:** No funding support.

**Review Stage at time of this  
submission:** Piloting of the  
study selection process.

**Conflicts of interest:**  
None declared.

## Predictive factors of clinical cure after adrenalectomy in primary aldosteronism

Manosroi, WM; Atthakomol, PA; Phinyo, PP; Inthaphan, PI<sup>4</sup>.

**Review question / Objective:** Are there any predictive factors that could help predict clinical cure after adrenalectomy in primary aldosteronism patients?

**Eligibility criteria:** Inclusion criteria for articles were as follows: 1) observational (non-randomized) studies that included adult PA patients; 2) studies that report the predictive factors of complete clinical success versus partial plus no clinical success or complete plus partial clinical success versus no clinical success after unilateral adrenalectomy. The predictive factors can be reported as either adjusted odds ratio (OR) or unadjusted OR or crude data; 3) studies should demonstrate the number of patients of both complete clinical success and partial or no clinical success after unilateral adrenalectomy; 4) standard diagnostic and/or confirmation criteria should be employed to diagnose and confirm PA (15), 5) the definitions of clinical success or non-success should be mentioned clearly in the articles, and 6) studies should have adequate information, in accordance with the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) statement.

**INPLASY registration number:** This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 21 April 2022 and was last updated on 21 April 2022 (registration number INPLASY202240129).

### INTRODUCTION

**Review question / Objective:** Are there any predictive factors that could help predict clinical cure after adrenalectomy in primary aldosteronism patients?

**Rationale:** Unilateral adrenalectomy is the mainstay of treatment for unilateral primary aldosteronism (PA). This meta-analysis aimed to systematically analysed the predictors of clinical success after unilateral adrenalectomy in PA.

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**Condition being studied:** Primary aldosteronism.

## METHODS

**Search strategy:** A search was performed using PubMed/Medline, Scopus, Embase and Web of Science from their inception to February 2022. Observational studies in adults PA patients which reported the predictors of clinical success after unilateral adrenalectomy were included.

**Participant or population:** Primary aldosteronism patients who undergone adrenalectomy.

**Intervention:** Adrenalectomy.

**Comparator:** Patients who were clinical cure and no clinical cure.

**Study designs to be included:** Observational study (cohort, case-control, cross-sectional).

**Eligibility criteria:** Inclusion criteria for articles were as follows: 1) observational (non-randomized) studies that included adult PA patients; 2) studies that report the predictive factors of complete clinical success versus partial plus no clinical success or complete plus partial clinical success versus no clinical success after unilateral adrenalectomy. The predictive factors can be reported as either adjusted odds ratio (OR) or unadjusted OR or crude data; 3) studies should demonstrate the number of patients of both complete clinical success and partial or no clinical success after unilateral adrenalectomy; 4) standard diagnostic and/or confirmation criteria should be employed to diagnose and confirm PA (15), 5) the definitions of clinical success or non-success should be mentioned clearly in the articles, and 6) studies should have adequate information, in accordance with the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) statement.

**Information sources:** PubMed/Medline, Scopus, Embase and Web of Science.

**Main outcome(s):** Clinical success and non-clinical success.

**Quality assessment / Risk of bias analysis:** The Newcastle-Ottawa scale (NOS) for cohort study was used to assess risk of bias.

**Strategy of data synthesis:** The meta-analysis was performed using the STATA program version 16.0. (StataCorp, College Station, TX, USA). For primary analysis, adjusted odds ratio of predictive factors of clinical success reported in each study was used to calculate pooled adjusted OR by random effect model. For secondary analysis, pooled standardized mean differences (SMD) were calculated for crude continuous data and pooled OR for crude binary data.

**Subgroup analysis:** Subgroup analysis will be performed by studies which had performed adrenal venous sampling and studies which did not perform adrenal venous sampling.

**Sensitivity analysis:** None.

**Language:** English.

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

**Keywords:** primary aldosteronism, adrenalectomy, clinical success, predictive factors.

### Contributions of each author:

Author 1 - Worapaka Manosroi.

Author 2 - Pichitchai Atthakomol.

Author 3 - Piti Inthaphan.

Author 4 - Phichayut Phinyo.