

INPLASY PROTOCOL

To cite: Zhong. Non-coding RNAs in Kawasaki disease: a systematic review and metaanalysis. Inplasy protocol 202270010. doi: 10.37766/inplasy2022.7.0010

Received: 03 July 2022

Published: 03 July 2022

Corresponding author:
zhong xiaoling

zhongxl2013@lzu.edu.cn

Author Affiliation:
Pediatric department of
infection, West China Second
Hospital, Sichuan University.

Support: None.

**Review Stage at time of this
submission:** Formal screening
of search results against
eligibility criteria.

Conflicts of interest:
None declared.

Non-coding RNAs in Kawasaki disease: a systematic review and metaanalysis

Zhong XL¹.

Review question / Objective: We performed a systematic review and meta analysis to investigate the diagnostic value of ncRNAs in KD patients.

Condition being studied: In recent years, a lot of studies have paid attention to the relationship between ncRNAs and Kawasaki disease(KD). Studies suggested that non-coding RNAs (ncRNAs) were associated with the occurrence and development of KD.A previous meta analysis demonstrated that miRNAs may be used as potential novel biomarkers for the diagnosis of KD in children, especially, to distinguish KD from other febrile diseases.

Information sources: PubMed, EMBASE, the Cochrane Library, Web of Science, China National Knowledge Infrastructure, VIP, China Biology Medicine disc databases, and Wanfang database.

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 03 July 2022 and was last updated on 03 July 2022 (registration number INPLASY202270010).

INTRODUCTION

Review question / Objective: We performed a systematic review and meta analysis to investigate the diagnostic value of ncRNAs in KD patients.

Condition being studied: In recent years, a lot of studies have paid attention to the relationship between ncRNAs and Kawasaki disease(KD). Studies suggested that non-coding RNAs (ncRNAs) were associated with the occurrence and development of KD.A previous meta

analysis demonstrated that miRNAs may be used as potential novel biomarkers for the diagnosis of KD in children, especially, to distinguish KD from other febrile diseases.

METHODS

Participant or population: Kawasaki disease.

Intervention: None.

Comparator: ncRNA.

Study designs to be included: Diagnosis test study.

Eligibility criteria: (1) all KD human subjects were confirmed by KD diagnosis criteria; (2) providing sufficient data to tabulate 2×2 table for this diagnostic meta-analysis; (3) all studies had non-KD subjects as the control group, either healthy or febrile controls; (4) all specimens were obtained during the acute phase of KD before treatment.

Information sources: PubMed, EMBASE, the Cochrane Library, Web of Science, China National Knowledge Infrastructure, VIP, China Biology Medicine disc databases, and Wanfang database

Main outcome(s): In total, we retrieved 386 articles. Additionally, 2 literature were found from the screening of the references of the eligible articles. Of these, 156 articles were removed as duplication. Then, after screening the abstracts or titles, 203 studies were excluded. Next, full texts of the 29 remaining articles were examined for eligibility. Finally, 24 articles containing 35 studies were included in this systematic review/meta analysis.

Quality assessment / Risk of bias analysis: The QUADAS-2 assessment of included studies showed most of the studies (>80%) had a low to moderate risk of bias.

Strategy of data synthesis: All analysis were performed using the Stata 12.0 software (version 12, College Station, TX)

and the Review Manager Version 5.4 in this meta-analysis.

Subgroup analysis: Not conducted.

Sensitivity analysis: Not conducted.

Country(ies) involved: China.

Keywords: Non-coding RNA , microRNA, Long non-coding RNA , circRNA, diagnosis, Kawasaki disease, meta-analysis.

Contributions of each author:

Author 1 - Zhong Xiaoling.