

# INPLASY

## The role of microRNA in schizophrenia: a systematic review

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### ADMINISTRATIVE INFORMATION

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**Review Stage at time of this submission** - Completed but not published.

**Conflicts of interest** - None declared.

**INPLASY registration number:** INPLASY202460079

**Amendments** - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 21 June 2024 and was last updated on 21 June 2024.

### INTRODUCTION

**Review question / Objective** The objective of this research was to review the miRNAs that have been discovered in schizophrenia and how they are dysregulated within tissues. Additionally, the study aimed to emphasize the potential of specific miRNAs as diagnostic tools for schizophrenia. The analysis also delves into the potential contribution of dysregulated miRNAs to the development of schizophrenia.

**Condition being studied** The primary symptoms of schizophrenia encompass the emergence of hallucinations, delusions, disorganized thinking, and abnormal behavior, with certain individuals also exhibiting aggressive and suicidal tendencies.

### METHODS

**Participant or population** The participants in the study comprised individuals with first-episode schizophrenia, refractory schizophrenia, early-onset schizophrenia, adults with schizophrenia, and healthy controls.

**Intervention** The use of antipsychotic medications can alleviate symptoms in patients with schizophrenia. Current treatments for schizophrenia include medications such as risperidone and clozapine. Symptoms of schizophrenia patients will be alleviated after receiving drug treatment.

**Comparator** Studies that do not incorporate a comparison group or condition.

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**Study designs to be included** The study encompasses reviews and experimental articles related to schizophrenia and miRNAs.

**Eligibility criteria** None.

**Information sources** An electronic search was performed in the PubMed database.

**Main outcome(s)** The article summarizes the miRNAs that are abnormally expressed in individuals with schizophrenia and identifies specific miRNAs as potential diagnostic markers for the disorder. The literature search was conducted within two weeks, and the inclusion and exclusion criteria were established over two days. Subsequently, literature screening was completed after two weeks, followed by summarization and thesis writing.

**Quality assessment / Risk of bias analysis** The articles included pertinent analyses on schizophrenia and miRNAs, excluding those lacking abstracts and those only tangentially related to the primary focus of the paper.

**Strategy of data synthesis** The data were derived from reviewing the results and conclusions in the literature and organizing them into categories.

**Subgroup analysis** None.

**Sensitivity analysis** None.

**Language restriction** English.

**Country(ies) involved** China.

**Keywords** microRNA; schizophrenia; etiology; biomarker.

#### **Contributions of each author**

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