

INPLASY PROTOCOL

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None declared.

Micro-RNA predict response to systemic treatments in meta-static renal cell carcinoma patients: results from a systematic review of the literature

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Review question / Objective: This review aims to offer an overview of the current evolution in the screening of circulating miRNAs as predictors of therapeutic response in patients with mRCC under-going systemic or local treatment and to evaluate their potential for patient identification and stratification.

Condition being studied: Metastatic renal cell carcinoma.

Eligibility criteria: Only studies that compared patients based on miRNA expression (plasmatic, exosomal and urinary) were deemed eligible. The main outcomes of interest were treatment response and overall survival (OS). For studies presenting scores or prognostic models the accuracy reported as Area under the curve (AUC) or C-index, was also considered.

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 15 April 2022 and was last updated on 15 April 2022 (registration number INPLASY202240086).

INTRODUCTION

Review question / Objective: This review aims to offer an overview of the current evolution in the screening of circulating miRNAs as predictors of therapeutic response in patients with mRCC under-

going systemic or local treatment and to evaluate their potential for patient identification and stratification.

Condition being studied: Metastatic renal cell carcinoma.

METHODS

Participant or population: Patients with metastatic renal cell carcinoma.

Intervention: Systemic treatment (TKI or immunotherapy).

Comparator: Patients stratified according to the miRNA expression.

Study designs to be included: Any (excluded review of the literature, letters or case reports).

Eligibility criteria: Only studies that compared patients based on miRNA expression (plasmatic, exosomal and urinary) were deemed eligible. The main outcomes of interest were treatment response and overall survival (OS). For studies presenting scores or prognostic models the accuracy reported as Area under the curve (AUC) or C-index, was also considered.

Information sources: PubMed (MEDLINE).

Main outcome(s): Overall survival; Response rate.

Quality assessment / Risk of bias analysis: Quality assessment is not mandatory and will be performed based on scales for observational studies.

Strategy of data synthesis: Narrative review.

Subgroup analysis: No pre-specified subgroup analysis will be performed.

Sensitivity analysis: No pre-specified sensitivity analysis will be performed.

Country(ies) involved: Italy.

Keywords: advanced renal cell carcinoma (mRCC); metastatic; immunotherapy; thyroxine-kinase inhibitor; miRNA; plasmatic; urinary; exosomal; liquid biopsy.

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