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INPLASY

Artificial intelligence performance in maxillary canine impaction: Systematic review

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ADMINISTRATIVE INFORMATION

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Review Stage at time of this submission - The review has not yet started.

Conflicts of interest - None declared.

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Amendments - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 31 May 2025 and was last updated on 31 May 2025.

INTRODUCTION

Review question / Objective What is the performance and usefulness of using artificial intelligence in the maxillary canine impaction?

Condition being studied The impacted canines adults >18 years old.

METHODS

Participant or population Patients who have impacted maxillary canine.

Intervention Artificial intelligence.

Comparator Other diagnostic methods like human observers.

Study designs to be included Original studies.

Eligibility criteria Studies indicating the use of artificial intelligence in the diagnosis, treatment or prediction of treatment difficulties in subjects with impacted maxillary canine impaction patients reporting patients older than 18 years old.

Information sources Pubmed, Scopus, Web of Science and google scholar.

Main outcome(s) Diagnostic accuracy, impaction prediction of maxillary canine impaction.

Quality assessment / Risk of bias analysis The quality assessment performed using the checklist tool of Jonna Brigg Institute.

Strategy of data synthesis Data will be imported in the working table based on predefined critera.

Subgroup analysis No subgroup analysis.

Sensitivity analysis In term of sensitivity, QUADAS 2 tool could be used.

Country(ies) involved Saudi Arabia.

Keywords Tooth impaction, maxillary canine impaction, tooth impaction, cuspid, artificial intelligence.

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