

INPLASY PROTOCOL

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A meta-analysis of prognosis difference between adolescent and adult nasopharyngeal carcinoma

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Review question / Objective: Clinical trials for young patients with nasopharyngeal carcinoma are very limited. because of the rarity of nasopharyngeal carcinoma in young patients, oncologists are forced to follow treatment guidelines developed for adults for adolescent nasopharyngeal carcinoma patients. This study examines the differences in outcomes between adolescent and adult nasopharyngeal carcinoma patients treated with the same regimen and has clinical implications for the treatment of adolescent nasopharyngeal carcinoma patients. P : Patients with nasopharyngeal carcinoma. I : Adolescents. C : Adults. O : 5-year overall survival (OS). S : case-control study.

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INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 24 March 2022 and was last updated on 24 March 2022 (registration number INPLASY202230131).

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Conflicts of interest:
None declared.

INTRODUCTION

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young patients, oncologists are forced to follow treatment guidelines developed for adults for adolescent nasopharyngeal carcinoma patients. This study examines the differences in outcomes between adolescent and adult nasopharyngeal

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METHODS

Search strategy: (“Nasopharyngeal carcinoma” OR “Carcinoma, Nasopharyngeal” OR “Carcinomas, Nasopharyngeal” OR “Nasopharyngeal Carcinomas” OR “Nasopharyngeal Neoplasms” OR “Nasopharyngeal Cancer”) AND (“Adolescent” OR “Adolescents” OR “Adolescence” OR “Teens” OR “Teen” OR “Teenagers” OR “Teenager” OR “Youth” OR “Youths” OR “Adolescents, Female” OR “Adolescent, Female” OR “Female Adolescent” OR “Female Adolescents” OR “Adolescents, Male” OR “Adolescent, Male” OR “Male Adolescent” OR “Male Adolescents” OR “juvenile” OR “young”) AND (“Adult” OR “Adults”) AND (“prognosis” OR “Prognoses” OR “Prognostic Factors” OR “Prognostic Factor” OR “Factor, Prognostic” OR “Factors, Prognostic” OR “survival” OR “mortality” OR “Mortalities” OR “Case Fatality Rate” OR “Case Fatality Rates” OR “Rate, Case Fatality” OR “Rates, Case Fatality” OR “CFR Case Fatality Rate” OR “Crude Death Rate” OR “Crude Death Rates” OR “Death Rate, Crude” OR “Rate, Crude Death” OR “Crude Mortality Rate” OR “Crude Mortality Rates” OR “Mortality

Rate, Crude” OR “Rate, Crude Mortality” OR “Death Rate” OR “Death Rates” OR “Rate, Death” OR “Mortality Rate” OR “Mortality Rates” OR “Rate, Mortality” OR “Mortality, Excess” OR “Excess Mortality” OR “ Excess Mortalities” OR “Decline, Mortality” OR “Mortality Declines” OR “Mortality Decline” OR “Mortality Determinants” OR “Determinants, Mortality” OR “Determinant, Mortality” OR “Mortality Determinant” OR “Mortality, Differential” OR “Differential Mortality” OR “Differential Mortalities” OR “Age-Specific Death Rate” OR “Age-Specific Death Rates” OR “Death Rate, Age-Specific” OR “Rate, Age-Specific Death” OR “Age Specific Death Rate” OR “outcome” OR “outcomes”).

Participant or population: Patients with nasopharyngeal carcinoma.

Intervention: Adolescents.

Comparator: Adults.

Study designs to be included: case-control study.

Eligibility criteria: (1) Type of study in the literature: chart-controlled study; (2) study subjects were patients with pathologically confirmed nasopharyngeal carcinoma; (3) study objectives and study design protocols were the same or similar, with parallel controlled studies grouped into adolescent and adult groups; (4) study endpoint was overall survival (OS). Exclusion criteria: (1) duplicate studies based on the same cohort of patients; (2) meta-analyses, reviews, case reports, expert experience reports, and literature lacking full text; (3) studies with non-nasopharyngeal cancer patients; (4) insufficient information for calculating 5-year survival OS, relative risk (RR), and 95% confidence interval (95% CI); and (5) non-case-control studies.

Information sources: PubMed, Embase, Cochrane Library, CBM, CNKI, Wanfang, Cqvip database.

Main outcome(s): Overall survival (OS).

Data management: Endnote.

Quality assessment / Risk of bias analysis:
The Newcastle-Ottawa Scale, NOS.

Strategy of data synthesis: If the heterogeneity between studies was small ($I^2 < 50\%$), a fixed-effects model was used for analysis, and if the heterogeneity between studies was large ($I^2 > 50\%$), a random-effects model was selected to determine the combined effect size RR and 95% CI.

Subgroup analysis: Subgroup analysis according to patient gender, origin, and race.

Sensitivity analysis: After deleting any one of the papers, the results of the combined analysis of the remaining papers were not significantly different from those before the deletion.

Country(ies) involved: China.

Keywords: Nasopharyngeal carcinoma, Adolescent, Adult, prognosis.

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