INPLASY PROTOCOL

To cite: Chen et al. Percutaneous local tumor ablation versus Stereotactic body radiotherapy for early-stage non-small cell lung cancer: a systematic review and meta-analysis. Inplasy protocol 202160099. doi: 10.37766/inplasy2021.6.0099

Received: 26 June 2021

Published: 26 June 2021

Corresponding author:
Dongjie Chen

chendongj@sysucc.org.cn

Author Affiliation:
Department of Radiation Oncology, National Cancer Center/National Clinical Research Center for Cancer/Cancer Hospital & Shenzhen Hospital, Chinese Academy of Medical Sciences and Peking Union Medical College, Shenzhen, China.

Support: **None.**

Review Stage at time of this submission: **Preliminary searches.**

Conflicts of interest:
None declared.

Percutaneous local tumor ablation versus Stereotactic body radiotherapy for early-stage non-small cell lung cancer: a systematic review and meta-analysis

Chen, D[1]; Zhao, M[2]; Xiang, X[3].

Review question / Objective: **To compare the efficacy and safety of percutaneous local tumor ablation with stereotactic body radiotherapy (SBRT) for early-stage non-small cell lung cancer (NSCLC).**
Condition being studied: **Early-stage non-small cell lung cancer.**
Eligibility criteria: **(1) studies including patients with early-stage primary NSCLC conformed by pathology, (2) studies including LTA and SBRT groups. (3) hazard ratio (HR) and corresponding 95% confidence interval (CI) can be obtained directly or indirectly by calculation.**

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 26 June 2021 and was last updated on 26 June 2021 (registration number INPLASY202160099).

INTRODUCTION

Review question / Objective: **To compare the efficacy and safety of percutaneous local tumor ablation with stereotactic body radiotherapy (SBRT) for early-stage non-small cell lung cancer (NSCLC).**

Condition being studied: **Early-stage non-small cell lung cancer.**

METHODS

Participant or population: patients with early-stage primary NSCLC will be included.

Intervention: Patients were treated with SBRT or LTA.

Comparator: Stereotactic body radiotherapy.

Study designs to be included: Prospective or reprospective controled studies were included.

Eligibility criteria: (1) studies including patients with early-stage primary NSCLC conformed by pathology, (2) studies including LTA and SBRT groups. (3) hazard ratio (HR) and corresponding 95% confidence interval (CI) can be obtained directly or indirectly by calculation.

Information sources: Pubmed, Embase, Cochrane library, Ovid, Google scholar.

Main outcome(s): overall survival (OS, from the beginning of treatment to death or the last follow up), progress free survival(PFS), and adverse effects.

Quality assessment / Risk of bias analysis: Newcastle-Ottawa Scale will be used to assess the quality of included studies. Funnel plots will be used to assess publication bias.

Strategy of data synthesis: The meta-analysis was performed using RevMan Version 5.3. v2 test and I^2 statistics was used to assess heterogeneity, which p >0.10 and I^2<25% indicated no heterogeneity . The random-effects model was utilized to access the effect size If the hypothesis of homogeneity was rejected. Correspondingly , the fixed-effects model was used assessing studies without significant heterogeneity.

Subgroup analysis: Subgroup analysis of overall survival/PFS for different tumor size

Subgroup analysis of overall survival/PFS for different pathology.

Sensitivity analysis: Sensitivity analysis will be conducted be analyze if subgroup analysis could not tell about the homogeneity.

Language: English.

Country(ies) involved: China.

Keywords: early-stage NSCLC, SBRT, LTA.

Contributions of each author:
Author 1 - Dongjie Chen.
Email: chendongj@sysucc.org.cn
Author 2 - Man Zhao.
Email: 875152842@qq.com
Author 3 - Xiaoyong Xiang.
Email: 772041812@qq.com