Patent Search

Invention Title	OPTIMIZING TREATMENT SEQUENCING: IMPACT OF RADIOTHERAPY AND IMMUNOTHERAPY ON PNEUMONITIS RATES IN LUNG CANCER PATIENTS
Publication Number	10/2024
Publication Date	08/03/2024
Publication Type	INA
Application Number	202441011244
Application Filing Date	18/02/2024
Priority Number	
Priority Country	
Priority Date	
Field Of Invention	BIO-MEDICAL ENGINEERING
Classification (IPC)	A61B5/05, A61N5/00, G01N33/574, G16H10/00, G16H20/10, G16H50/20

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Abstract:

The present invention relates to a method for optimizing the sequencing of radiotherapy and immunotherapy in the treatment of lung cancer to reduce pneumonitis rates. Pneumonitis, an inflammation of lung tissue, is a common complication in cancer patients undergoing these treatments. The proposed method involves a systematic approach, including patient assessment, customized treatment planning, and strategic integration of radiotherapy and immunotherapy. By carefully coordinating the timing, dosage, and sequence of treatments, the invention aims to minimize pneumonitis risk while maximizing therapeutic efficacy. The method is adaptable to various patient profiles and disease stages, emphasizing continuous monitoring and iterative improvement based on empirical data. This novel approach not only sets a new standard of care in lung cancer treatment but also contributes to the broader field of oncology by addressing a critical challenge in combined radiotherapy and immunotherapy.

Complete Specification

Description:The embodiments of the present invention relates to the field of medical treatments, specifically to methods and protocols for optimizing the sequencing of radiotherapy and immunotherapy in the treatment of lung cancer. More particularly, the invention addresses the challenge of pneumonitis rates in lung cancer patients undergoing combined radiotherapy and immunotherapy. Pneumonitis, characterized by inflammation of lung tissue, is a known complication in cancer patients undergoing these treatments. The disclosed invention focuses on a novel approach to minimize pneumonitis rates by strategically sequencing and coordinating the administration of radiotherapy and immunotherapy. The proposed methods aim to enhance the overall efficacy of lung cancer treatment while minimizing the risk of treatment-related pneumonitis.

BACKGROUND OF THE INVENTION

The following description of related art is intended to provide background information pertaining to the field of the disclosure. This section may include certain aspects of the art that may be related to various features of the present disclosure. However, it should be appreciated that this section be used only to enhance the understanding of the reader with respect to the present disclosure, and not as admissions of prior art.

Lung cancer remains a formidable health challenge globally, necessitating continual advancements in treatment modalities to improve patient outcomes. Conventional treatments include radiotherapy and immunotherapy, both of which have demonstrated efficacy in managing lung cancer. However, the combined administration of these therapies presents challenges, particularly in the form of pneumonitis—a known inflammatory response affecting lung tissue

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