Arcidiacono F, Anselmo P, Casale M, Zannori C, Ragusa M, Mancioli F, Marchetti G, Loreti F, Italiani M, Bracarda S, Maranzano E, Trippa F. STereotactic Ablative RadioTherapy in NEWly Diagnosed and Recurrent Locally Advanced Non-Small Cell Lung Cancer Patients Unfit for ConcurrEnt RAdio-Chemotherapy: Early Analysis of the START-NEW-ERA Non-Randomised Phase II Trial. Int J Radiat Oncol Biol Phys. 2023 Mar 15;115(4):886-896.

Highlights

- The aim of this single arm phase 2 trial (Clinical trials.gov NCT05291780) is to assess the local control (LC) and safety of SABR in patients with unresectable locally advanced non-small cell lung cancer (LA-NSCLC) unfit for concurrent chemo-radiation therapy (ChT-RT).
- Median prescribed dose was 45 Gy (range, 35-55) and 40 Gy (35-45) in 5 daily fractions to tumor and node/s, respectively
- The median follow-up time from treatment start was 38 months
- All patients obtained LC of the treated primary tumor and/or involved node/s with complete remission (CR), partial remission, and stable disease in 27 (54%), 20 (40%), and 3 (6%) cases, respectively.
- 19 (38%) responders had experienced Local recurrence (LR)
- Patients with LA-NSCLC treated with SABR combined with immunotherapy had optimal LC and promising OS in absence of ≥G3 toxicity.
- Our early outcomes would suggest the feasibility of using this approach in patients with LA-NSCLC unfit for concurrent ChT-RT.
- This trial could be the pioneer for the "start new era" in the management of unresectable LA-NSCLC.

Wang X, Bai H, Li R, Wang L, Zhang W, Liang J, Yuan Z. High versus standard radiation dose of definitive concurrent chemoradiotherapy for esophageal cancer: A systematic review and meta-analysis of randomized clinical trials. Radiother Oncol. 2023 Jan 13;180:109463.

Highlights

- All the studies included in this meta-analysis are randomized clinical trials (RCTs).
- Both traditional and modern radiotherapy techniques were analyzed and discussed, with emphasis on subgroup analysis of modern radiotherapy techniques.
- The standard dose group and the high-dose group were clearly defined. The former was 50 Gy or 50.4 Gy, and the latter was \geq 59.4 Gy.
- The overall quality of the included studies was high, and the pooled results are less heterogeneous and have no publication bias.

Meattini I, Palumbo I, Becherini C, Borghesi S, Cucciarelli F, Dicuonzo S, Fiorentino A, Spoto R, Poortmans P, Aristei C, Livi L. The Italian Association for Radiotherapy and Clinical Oncology (AIRO) position statements for postoperative breast cancer radiation therapy volume, dose, and fractionation. Radiol Med. 2022 Dec;127(12):1407-1411.

Highlights

- Hypofractionation is considered standard of care for all indication of external-beam
 postoperative breast cancer radiation therapy, regardless of the number and size of target
 volumes and breast reconstruction. Hypofractionation is standard of care both for invasive
 and ductal carcinoma in situ of the breast. There is no reason to prescribe irradiation
 schedules using more than 15–16 fractions.
- 50 Gy in 25 fractions is no longer considered being standard of care. It should be restricted to
 highly selected cases, such as concomitant chemoradiation and hyperthermia to enhance the
 radio-sensitisation effects of the combined systemic or local agents.
- 5-fraction whole breast and/or chest wall irradiation without reconstruction (26 Gy in 5 fractions) is considered standard of care. This schedule it is not to be considered experimental and should be considered the preferred option especially (but not exclusively) in patients fulfilling the inclusion criteria of the FAST-Forward trial.
- Moderate hypofractionation should be offered for regional nodal irradiation. Postmastectomy hypofractionated radiation therapy is non-inferior to and had similar toxicities to conventional fractionated radiation therapy in patients with high-risk breast cancer.
- Partial breast irradiation is standard of care in selected patients affected by early breast cancer. Especially (but not exclusively) in case of suitable features presence accordingly to the ESTRO-ACROP 2022 Consensus statements, partial breast irradiation should be preferred over whole breast irradiation.

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