

So, I would like to invite Dr. Kostaf Thalpatra who is a senior radiation oncologist from Mumbai for this talk.

So, well the topic is ablation to oligo residual sites plus immune checkpoint inhibitors, of survival of patients with advanced NSCLC.

These are the preliminary results of phase 2 booster trial which was presented in WCLC 2024.

This is actually not a radiation paper.

These are ablation papers, primarily used thermal ablation, but anyway there is there is local ablation here.

So, as we all know oligo residual disease is prevalent in immunotherapy with incidence

of above 20 percent and local thermal ablation's, excopal effect has been observed. Local ablation's also augment the efficacy of immunotherapy via multiple mechanisms listed here.

So, this particular study design it was a two-ist to one randomization.

So, initially administration of chemotherapy first land was, immuno was done with or without

chemotherapy and residual lesions were identified which were suitable for complete ablation.

Then there was a two-ist to one randomization to LIT that is local ablative therapy to

the residual sites and resumption of immunotherapy as compared to just maintenance of immunotherapy.

The primary endpoint was PFS, the secondary endpoints were OS, LRFS and safety of ablation.

These are the statistical analysis.

This particular presentation is interim analysis when half the patients have been enrolled.

So, that is cohort A, they finally analyze 42 patients and cohort B, they analyze 20

patients, there have been eight crossovers who have received ablation later.

These are the baseline characteristics which have been well matched.

Best response to immunotherapy prior to randomization, patients who received ablation, they had

80.9 percent had partial response and this is prior to ablation and 19 percent had stable disease.

Patient who did not receive ablation, 75 percent of the patients had partial response

and 25 percent patients had stable disease.

If we go through the PFS and OS with ablation and without ablation, the PFS and OS both

were statistically significant in favor of ablation as compared to patients who did not

receive ablation.

In subgroup analysis, various factors favored the ablation, I mean that is if the age was

less than 65 that was significant, the hazard ratio was less than 1.

Similarly, adenot and non-adenot histology, both the hazard ratio was less than 1.

Diameter of less than 3 centimeter, the hazard ratio was less than 1.

Keras, no mutation, the hazard ratio was less than 1.

This is the subgroup analysis of pathology positive versus negative.

So, patients with ablation who were pathology negative, patient with ablation who were pathology

positive, we can see the graphs and the patient with ablation who were pathology

negative,
they fared the best as compared to patients with ablation who were pathology
positive
or the patients without ablation.
Adverse event, most of the adverse events were grade 2, there was one grade 3
pneumothorax
that was in the ablation arm.
These were the number of patients of cryoblation and these were the number of
patients of thermal
ablation.
They also did a subgroup analysis and they found that the patients who received
cryoblation,
they fared better than the patients who received thermal ablation.
So, the take home messages are oligo residual disease are prevalent in patients
administered
with immunotherapy as first line treatment, ablation to the oligo residual disease
sites
associated with significantly improved BFS and OS.
Cryoblation may have better survival benefit than thermal ablation and
immunotherapy and
further larger scale trials are warranted to confirm the findings.
Thank you.