Next speaker is Dr. Anu Toshniwal from Morangabad and he will be talking to us on circulating
tumor DNA guided de-escalation targeted therapy for advanced NSCLC.
Over to you Anu.
Thank you.
Adoncet, I thank organizers for inviting me to give this talk.
My topic is circulating tumor DNA guided de-escalation of targeted therapy for advanced NSCLC.
It is a non-randomized controlled trial.
This is based upon our JAMA oncology paper published in June 13, 2024 by this Chinese
group.
What is the importance of this study is that until now what we do is we do uninterpret
targeted therapy until this is progression or intolerable toxic effects are there for
NSCLC which patients having driver gene variations.
However, this is costly.
Patient has to continue treatment in progression and toxicity.
Drug resistance becomes inevitable in these cases.
The objective of this study was to assess the clinical feasibility of adaptive de-escalation
of decay treatment guided by circulating tumor DNA for achieving computer mission after local
consolidated therapy in patients with advanced NSCLC.
In setting and participants of this study, so this was a prospective non-randomized controlled
trial which was conducted at a single center from June 3, 2020 to July 19, 2020, 22, included
60 patients with advanced NSCLC, with driver variations without radiologically detectable
disease after TKI and LCT.
The median range of follow-up time was 19.2 months.
Data analysis was conducted after the closure in overall period of one year.
The intervention was the situation of TKI treatment after initially patient was treated
with TKI and underwent an NSCLC and after which there was no radiologically detectable
disease and follow-up every 3 months.
What also was required was that the CEA and the CT DNA has to be negative.
When treatment was restarted in patients who had either resist defined radiological
progression or had detectable CT DNA or had elevated CEA which were manifested first,
treatment was restarted and patient was put on surveillance in patients who were controlled
in observation.
So, main outcome and measure was PFS.
Secondary points included objective response rate, time to next treatment and overall survival.
Now, this is the chart which shows what actually happened.
So, what they did is they screened 13 patients, 73 patients, 13 were excluded, 60 were enrolled.
Here, they were actually initially treated followed by LCT.
Here, after treating, there was no radiologically detectable disease.
CT DNA was negative, CE was negative.
So, out of this, 14 patients were just kept on observation.
Out of 60, 46 were retreated because either they had positive CT DNA or elevated CEA.
This was the group B and group C was wherever there was radiologically confirmed

progression
of disease.
Now, baseline demographic and clean characteristics of these study patients were like stage 3
and stage 4 were included, smokers were included, all patients for adenocarcinoma, it was not
squamous were not included in this study.
The majority of these patients had EGA for mutation, all can cross-contributed very less, other mutations were not included, the target drug pair initially treated and on
progression which was treated was this and the patient which had organ with metastatic
as baseline was 1, 2, majority were 1 and when brain made patients were included and surgery
was the main intervention in LCT.
Here, that meant the factor in when we analyze this study.
So, what happened is, here initially these patients were treated, here since there was
no radiologically evidence of disease and there was no serological evidence or the molecular
evidence of DNA evidence of active disease, patients were discontinued treatment.
These patients with bridge color, they had treatment breaks, these are, this is the priority
of the TK treatment and these patients were retreated and arrow shows that patient treatment
is ongoing and patient without arrow, the bars which are without arrow, they are all
kept again on observation and here multiple times, they were taken off on the TK.
So, coming to the results of the total study sample of 60 participants, median PF was 18.4
months and total treatment break duration was 9.1 months which was median.
What is interesting is 14 patients who were kept on observation, they had treatment break
duration of 20.3 months.
So, median they were not treated for 20.3 months who did not have any radiological, serological
or circulating DNA positivity after initial treatment.
13 patients who had either sological relapse in detected, detectable CT DNA or CA, here
after starting treatment, they had a median PF of 20.2 months and they enjoyed a treatment
break free duration of 8.8 months.
The group C which had 15 patients who underwent treatment with TKI had a PFS of only 5.5 months
after the radiological permission of disease.
For 27 patients, those included 12 in group B and 25 in group C who had experienced progressive
disease, TK treatment response rate was 96% and the median time to next treatment was
29.3 months, the data for oral survival is immature.
12 out of 24 patients who achieved sufficient tumor regression, opted to discontinue treatment
in this group of patients.
In group B, CT DNA was undetectable in 96% of patients, that is 25-26 after 3 months
of radiative with priority K and CA reached a normal level of 3 out of 5 patients.
Two other patients exhibited degree CA levels that persisted after a normal range.
For patients who received TKI retreatment, the toxicities were great, one in grade 2,

no major concerns were there after retreading.
So this is the diagram issues group P enjoyed up almost their enjoying a PFS treatment free
in 12 of 20.3 months.
Group B, somewhere here, PFS of 20.2 months and her radiological population had only PFS
of 5.5 months.
And metastatic pattern after relapse was that program 9 had developed in the etherics meds,
41% had developed extrocytic metastasis and 7-dollar both.
Additionally, 3 patients had growing oligomatostatic nodules in lung and are meant to second-way
recession per the decision of multisubidium and one other patient received rib-redethropy
locally.
Of the 27% who had progressed, 12 eventually experienced progression while receiving treatment
with priority K and were instructed by the physician to treatment in the form of chemotherapy,
7 received third generation, 4 received chemotherapy, 1 received air low plus payer.
To conclude, the findings of this non-randomized controlled trial suggest that this is adaptive
DS-calation T-cast strategy for patients when NSCLC is feasible in those with no lesions
after LCT and a negative CTDN and CED test.
This might provide a DS-calation treatment strategy guided by CTDN for the subset of
patients with advanced NSCLC.
Thank you.
So thank you very much, Dr. Anub.