Thank you Dr. Shamsha. Good morning everybody and welcome to the first panel discussion
of the session. I would like to call all the panelists to the CH please. Dr. Anita Kumar
is your nutrition Mumbai. Please come and join us all the panelists. Dr. Aasya Segal.
Dr. Renita Kastini-Grom. Clinical scientist. Dr. Sharath Kumar clinical scientist again from
Bangalore. Dr. Ajita Kulkarni. Senior physiotherapist, TmH. Then Dr. Manjusha Wiggle. Professor and head occupation therapy. Dr.
Purbi Mahajan senior dietitian TmH. Dr. Lehika. Senior psycho-oncologist TmH. Dr. Ankita. Physotherapist, TmH.
Dr. Aloe Guell. Associate professor and head, HBCH. Please come and join us. Thank you so much. So this is actually case discussion. So we would like to keep it as interactive as possible. So we would like to keep it as
possible. And I will just start with the case. This is an 83 year old lady who is hypertensive but she does not have any history of any addictions. And she presented with a history of one month, history of dry
curve and neck pain. She also gave a history of fracture of the ulna and plating was done for her two months path. So this is a pet CT of the patient which was done on the
outside and it showed a lower lower lower mass with superior segment segmented obstruction. 3 x 3.2 centimeters with enlarged
media channel lymph nodes, largest measuring 1.8 x 1.4 centimeter with multiple bone light occlusions in the iliac, bone asium, femur, sternum and vertebra.
MRI, cervical spine showing multiple marrow lesions in the cervical, dorsal, lumbus, echospine and bilateral hip. MRI brain which was done, it showed restricted diffusion with a likely acute lacunar in fact. And apart from that, marrow altered marrow signals in C1C2 vertebra and associated soft tissue showing
and metastasis. This is CT guide papci showing model, differentiated at no carcinoma, EGFR, ALP negative, 2DACO was ok, EF of 60% and GFR which was done by Gates method that showed 64 ml per minute. So the diagnosis, it is 3 year old lady, PS2 with CT2 and 2 M1C at no carcinoma of the lung.
So here the question is and the patient was discussed in the multidisciplinary team and she was seen in the medical oncology clinic and then she was referred to
as for the geriatric assessment. So I will just briefly tell about the geriatric assessment. We start with the frailty assessment.
So, raw cut frailty scale, it showed 5 by 10 score, that is mildly frail and G8 was against screening tools showing 10 and 4 respectively again abnormal. And
geriatric syndrome, she had history of falls along with fracture. Apart from that, no other syndrome was there and vision, her distant vision was affected
and her hearing was ok. Edmonton scale, she had issues with appetite and she had, I mean feeling of wellbeing was also 8 by 10.
The general history, she is married, she is an illiterate lady, homemaker from Gujarat and so she was staying here with her relatives in Mumbai and her primary caretaker was her son.
And supemetrically, her height weight BMI was 21.5, nutrition she had 3% weight loss in 5 months and MNA was only 20 and midam circumference,
circumference was 24 and 28 centimeters. This is the MNA that we are doing over in our clinic. Function was assessed with ADL and IADL.
ADL was 6 by 6 which is good. She was doing all the activities, all her routine daily activities on her own, but IADL was severely affected, only 2 by 8.
So, restricted most of the activities at home and outside. This is a functional assessment, ADL, IADL falls 1 and TUG, 12.3, in our clinic, the cut-off is taken as 10.
So, this is abnormal for her. Cognition, MMS is 24 by 30, that is borderline. Comogoritize, she has CCI1 and CRSG2 means she has only hypertension, scomeogoritine and the medications that she was taking, she was taking pantoprazol, folic acid and for the pain, tremital paracetamol and for her

hypertension, tell me certain, amylodipin.
So, in that we have tremital as a PIM, but there was no drug interaction and psychology wise, she was a bit borderline depression, was their GDS borderline elevated and GAD was also, that is anxiety scale was also high.
Social support, she lives with a family, 4 caregivers and VR is 0, that is the social support scale that we are using.
So, that is okay, she has good social support and caregiver burden scale is 16, which is again okay.
So, at this point, I would like to ask, are, we will start with our pharmacologist.
So, here just we will start with Renita.
So, here this PIM, this patient is having a PIM, that is the streme at all, but it is essential for her pain management over here.
So, first of all, what all do you think, what are the, you know, like we have so many skills to check the PIM, so which would be the most suitable scale and why.
And this PIM that is recorded, so should it be considered or what should be done for that.
I think we have done a study where there were 5 scales that we had identified, that routinely analyze and pick out potentially inappropriate medication.
And otherwise it is cumbersome to go through each of those scales, but while we did the study, we found out that from all of the medications that we were charting out for patients,
we rooted out an SPV value and said this is the gold standard, and then we measured each of those tools to pick out what scale would pick best.
Now, there were some scales that were overestimating, because we are looking at those scales that are developed globally, right, which not may necessarily pick out, you know, the medications based on, for Indian population.
So, once we chartered each of those and we compared, we found out there was one scale, which was the EU 7 scale that was properly identifying, potentially inappropriate medication.
And that scale was giving us the right recommendations as well.
So, there were other lists that would say that this is potentially inappropriate, but there was the EU 7 scale that would say that this is potentially inappropriate.
If the renal function is compromised, and if such, what is the recommendation that's given and what is the guidance there.
So, I think to answer that question, I'd say we'd probably look at the EU 7 scale, and looking at this case, particularly, we're saying, Tramadol is a potentially inappropriate medication.
But the risk that we'd see is for maybe hyponatremia or SIDH.
But obviously, seeing the patient's creatinine clearance is 64, is from what I see the GFR.
And we consider that a pain is that of four modulates.
So, I think we continue, you know, monitoring the patient for any other concerns, but otherwise, I think no other, you know, I think any other recommendation from our end that we see that this is potentially inappropriate, but considering other factors, we continue.
So, anything you want to add, Dr. Sharath?
Yeah, I mean, like Anita mentioned, the U7 will be the best scale in the Indian population as well, because we don't have a particular scale or a consensus that has been done with the Indian oncologists to see.
But on what basis are you saying that U7 is better?
Yeah, so we commonly use ages, beers.
Beer scale, yeah.
Yeah, that's published last year.
So, that was, I mean, like I was mentioning, there was no Indian study that was done.
There was no consensus between the Indian oncologists to say with scale or which medications are PIM.
So, it's best to use whichever we have in hand, and U7 is very sensitive to pick up PIM.

And also, I see pantoprozole here, maybe if the patient is taking more than eight weeks of this particular drug, maybe that can also act as a PIM, because if you're not, you're not going to be able to do it.
Because it can cause clastridym-difficult infections or lead to osteoporosis taken for a longer time.
So, other medications, dumparadins are good drug rather than metacolopromide to be taken.
So, I think that's a good, I mean, the medication list is taken care of, yeah.
Thank you.
I think from Jariya, at the point of view, you're right.
It is the Bier's criteria that is commonly used.
Maybe from oncology point of view, we use the U7.
So, we started using Bier's and started the clinic.
And then, as it evolved, with the clinical compasses, an integral part of our study, right?
So, we started using Bier's.
I've put it in the SDSS, by Bier's, by EU7, by DocStar, and the world of the courtroom, you try to...
So, it's just a quote.
And then Vikram has done some statistical analysis and seen what was the most correlated.
It had the least variation, and that was the use.
That study is in public comment that has been done.
So, therefore EU7, but the after-neganne has been going on for the last eight years,
and we are all used to Bier.
So, we have continued using Bier's, but I agree that we should actually change over.
Moving on.
So, then fatigue also was SS for the patient, which was there, 4 by 10.
And Moptimorbaj, again, two scales, which we do to check for fatigue,
and if they need help to do the activities, which was also severely affected.
And car school for predicting toxicity, it had, that was intermediate risk.
Patient expectations, she did not know about the diagnosis, she didn't know the intent,
but she wanted symptom relief.
So, from this, if we summarize, it is...
Patient is a very frail patient with vulnerabilities in domains of nutrition, function, fatigue, psychology, PIM, and polypharmacy.
And she's predicted to be at intermediate risk of developing great 3-foot oxidities.
So, at this point, I would like to ask Dr. Ilow that what treatment would you recommend for her?
After seeing the geriatric assessment part that she's frail,
and she's having issues with function, nutrition, almost a lot of domains.
So, what way would you proceed with the treatment?
So, it's a run-off of milk case, which we get in our OPDs,
and as you have very rightly mentioned that we need to...
One way of taking a listen, we need to look at the patient's expectations also.
As you have clearly said that they want a symptomatically relief,
she definitely failed.
And the car school is intermediate.
We see that thing, and polypharmacy is totally out,
but I will give a single chemotherapy.
Yes, I will first send her for nutrition, I will...
First, we have her first rehabilitation done for one week or so,
and we reassess him.
What best I can give is a lower dose single chemotherapy, plus my next chemotherapy,

and I will assess her every week in that cycle to assess her toxicities
and compliance with her treatment, and then I will take a call.
Okay, and this car school, are you doing it in your place?
Not really.
Okay.
But we are planning to start some of these with a screening tool,
not really in the application.
Okay. Thank you.
Sorry.
Is there anything else?
So, our occupation therapist, Dr. Manjeshamam,
how would you like to manage this case?
Overall, what would you like to do for this patient?
See, as an occupational therapist, my primary aim would be to maintain her
functional status.
So, what I understand, ideally she is independent,
ideally she is affected.
Yeah, she is affected.
But then understanding or reading the scale will make me understand
in which activity she is not able to function.
So, activity analysis is important for me,
and accordingly simulated activity training will be initiated for her.
But at the same time, my concern will be she gives history of fall.
So, to understand what was the history behind fall?
So, was it the balance issue or there are architectural barriers
or Kuchakaragya Thakayamwatha that needs to be assessed?
Sure, she was feeling a bit dizzy and she slipped in the washroom and fell down.
Okay, but then considering her frailty factor also here,
I would suggest an assistive technology to be incorporated.
So, maybe, and it's read that she declined or she's not comfortable
or she refuses to use as your aid.
I think, a cane.
So, maybe a cane evaluation or prescribing a walker
than the type of the walker would be recommended to her
so that her functional, whatever she is functionally independent
that has to be maintained and gradually we will work towards improving her
functional status.
That is a concern.
That will be targeted.
Following which for the fatigue management.
So, considering the fatigue aspect, she is scored four on NRS
and that is, that suggests that she's got moderate fatigue
and we need to take into consideration the fatigue aspect.
So, when I encourage her to participate or maintain her functional status,
I would be trying to understand what is making her go tired.
So, energy conservation, work simplification,
activity analysis will help me understand and following that,
energy conservation and work simplification techniques will be incorporated to her
so that she is functional.
So, energy conservation and work simplification,
meaning the activity she's involved in or which I recommend her to do it,
I will break those activities into part and I will pace out the activities.
So, she's efficiently able to do it and this will help me address her psychological
aspect
that is the depression and the anxiety what she has.
So, that will also, because the moment you are functionally independent,
you are able to do your activities yourself,
your anxiety or depression, whatever goes down, you don't realize you are getting
affected

or you are being treated for a disease which,
and in her case, she's not aware of the condition or she just wants the symptom relief,
may be counseling to encourage her participation in continuity of her functional activities
will be important for me and...
And basically, she also had the shortness of breath that was a presenting complaint.
So, with that, will there be anything, any other activities that you would be able to recommend
or you will have issues...
So, energy conservation and work simplification is the best,
but to address that, Disney factory especially,
the breathing exercises first, breathing is one which will help to lower the rate of the breathing
and I think...
Then improve the functional function in that which everything will go on simultaneously.
Correct.
And positioning while she's lying down, while she's sitting up, it should be propped
so that the Disney factory can be managed.
Okay.
So, in-depth OT evaluation again has to be carried out.
This is the preliminary findings which will help us guide our rehab,
but then probably few more things we need to understand from the patient to plan OT rehab.
Thank you so much.
Next, will move on to Dr. Poulby.
How would you manage the nutrition for this patient?
What do you think would be the calorie requirement or how would you...
Because her appetite is also very poor.
So, what would you prescribe for her in that way?
And another thing is that, will your diet plan, which you are making, will it change pre-during and post-cheam?
Will there be any changes in that?
Yes, of course.
Well, the overall management will be...
The first will be a nutrition screening.
So, in the nutrition screening, as we can see, we have already done the M&A.
So, the screening score, if you go to see, is again, the patient is at risk of malnutrition,
even in the screening itself, because the first six questions of M&A tells us the screening score, which is there.
And if it is less than seven, we have to go ahead.
And the total score is also the patient is vulnerable, because the patient is at risk of malnutrition, which is there.
So, apart from the ones the screening is done, I'll learn with this, I will also...
I have to take her 24-hour recall, that is for the diet, which is there, counting the logistics, because most of our patients, they stay outside.
So, as rightly, this patient was staying with the relatives.
So, I have to see what are the resources available to plan the diet, individualized diet, which is there.
And looking at the history, she had hypertension, as well as...
There was a fracture too.
So, it was just two months.
So, the recovery phase is there, her nutrition demands are more.
So, as well as she's going for chemotherapy, as rightly said, she will be starting on that.

So, I have to see my main goal will be, nutritional optimization for this patient.
So, in the pre phase, I have to see the pre-rehabilitation for her.
So, I will be concentrating on a high-calorie, high-protein diet, which is there.
Along with it, I have to see her... I have to save the rainy nutritional deficiencies, which are there.
So, in her recall, I will come to know what is lacking.
And so, I'll put in vitamin, the immunonutrients also to come in.
So, I will be putting in the vitamin D calcium, which is there.
As well as, I will be concentrating along with a high-cal protein of 1.2 grams to come in.
I will also see that I'm giving fiber to the diet, because fiber has to be there.
Moreover, there was breathlessness there.
So, I have to cut down on a little simple carbs to come in, because it helps them for that.
As well as the immunonutrient vitamin C, which is very much important for lung tissues, it is an important matrix, a tissue matrix, so it gives it healthy.
As well as, I will look into anti-inflammatory also, as the patient is going.
So, when the peri treatment comes, the phase comes in.
I will be calling the patients for a week.
So, it will be a symptomatic management. Right now, it's a loss of appetite.
So, I will give her nutritional counseling, emphasizing more in small and frequent meals, giving certain, like, ginger, because ginger has a lot of studies, RCTs done on the appetite improvement, which is there.
So, I will be incorporating that on that.
When the peri treatment comes in, looking at her symptoms, okay, as well as, I will be adding in omega 3, which is there, because it is an anti-inflammatory, and it will help again in maintaining her weight balance, which is there.
Right?
As well as, in the post treatment, I will be looking, because I have to see that there are no nutritional deficiencies, which will come in.
Moreover, I have to at least see that the ideal body weight is minting. At least she doesn't go for a weight loss, which is there.
So, how, I mean, at what interval are they supposed to follow with you?
Weekly, I mentioned weekly. Yeah, weekly. Just after the chemo, the patient will be called.
And more emphasis on the symptomatic management and the tips going on, whereas putting in vitamin, the, and the immunolutrients of vitamin C, selenium, but this will be all through the functional foods which are available in the diet.
Okay, so nothing extra she has to look into. And logistics again, but to improve, in case if my requirements are not met, then only I'll put a nutritional supplement.
And I will see, because again, the logistics, if she's staying with a relative, you know, how far they'll be able to give her the resources and foods, so that'll help her in, in the in-between meals and maintain her.
Okay.
So, that is there.
Thank you so much.
Now, moving on to the firm colleges.
The first two questions you have answered.
So, I just wanted to ask the doctor shared it because he's the AI person.
So, any scales are available, you know, like, like, so that, you know, we can quickly understand the PIMs or like some suggestion pops up like that, or any like that kind of a scale will come out in the future.
Any application would come out like that?
Yeah, I mean, that's a very good question.
AI, I mean, we know this is kind of, this is the next future, I mean.
So, basically, what I think is rather than AI, it should be an application that takes into account the medications that subject is taking and how long these medications are taken or administered.

And then, artificial intelligence, I don't think it has a great role because what this needs is just an application that can recommend what is the PIM.
And if you look at all the scales that are currently in, it is published maybe in the last 10 years, that's it.
But the current, I'm approved drugs.
So, I currently deal with the FDA for new drug recommendations.
So, the newer drugs, the newer drug interactions that are seen, has it been updated?
Has it been seen?
So, I'm little too evidence, there's so much drugs that have shown drug drug interactions post-doc after the clinical trials.
So, all those needs to be included in these applications.
And this recommendation during the geriatric assessment, if it's shown, then it would be a good help during the clinic.
That's what I think.
Dr. Shee, anything to add?
Yeah, so I agree with Sharad that AI can just assist us.
So, it cannot take up the role of a scale.
But yes, like, what, how AI can help us if we can have a common dashboard, if where we get to know the medications available, the GFR status, any other medications, like, you know, if the patient is taking any herbal supplement also.
So, that also we can include the formulation type.
And there's one common dashboard and we just have to click one button.
And that can, AI can help us in easily, you know, in a quicker way, it can help in assisting us to make a PM and a drug interaction.
So, sometimes when we are doing it manually, so sometimes we miss it out.
Sometimes we don't take care of the herbal supplements or we don't take care of the GFR status or the sodium, like, in this case, the trammadol, it has a risk of SI hyponatremia.
So, we have to monitor the sodium levels because this patient has a history of falls as well.
So, in such cases, AI can help us in assisting into categorizing it, what are the most utmost importance rather than just telling it just a PM.
So, what are the further recommendations?
So, there AI can assist us basically in a quicker way.
Which could be better for the patient with the lead side at this.
Yes.
And it will be quicker.
No.
Yes, I think, Sherid, can help us in it.
Please make that a friend.
It will be very quick actually, I think.
Send it to us.
I think it will be very...
And some prompt system for old people, you know, like to take pills in time or, you know, like, if they miss some pills, some alarm that they are missing.
I think that is there.
Some apps are there for it.
They're apps for that.
Yeah, apps for that.
But I think it can help us in a quick way because CJ takes so much time to work.
And a lot of older people actually, they have issues with vision and hearing also.
So, because of that, there are a lot of them, they are not even able to see the name of the medication.
Sometimes the mix of medications in that way.
So, a lot of issues like that are there.
So, there's a lot of scope for AI and, you know, like pharmacology in the future, I guess.
Okay, thank you so much.

Dr. Harshya, moving on to Dr. Ajita.
So, what all challenges do you think you will face while taking care of this patient?
Yes, sir.
Dr. Ajita.
Ajita, sir.
Yes, sir.
Yes.
So, talking about challenges, the first major challenge is her age.
It's 83.
It's not in the small lower zone of geriatric patients.
But I just wanted to mention in this that her ADL is very good.
Yeah, yeah.
And only in that one one that she got the symptom she had a problem before that she was independent in all the activities.
That's true.
That's true.
That's also good.
So, then hypertension, whether she's on medications, that needs to be monitored.
Balancing is an issue.
Being a lung cancer, it is pushing on to the bronchial segments.
So, some of the alveoli probably are collapsed.
Okay.
So, those can be challenges for her to do certain amount of aerobic exercises.
Secondly, she's got many light lesions.
So, probably she may need support for the spine as well as aids to walk for.
Another thing is her ulna.
The left side ulna is affected.
We don't know the status of the bone, the quality as well as how much of osteosynthesis has taken place.
So, we cannot give any weight wearing or weight training exercises on that.
Okay.
So, looking at the arm circumference and the calf circumference, we've seen that arm
is still okay nearing to the normal, but the lower extremity should probably be strengthened.
Okay.
So, there is a discrepancy.
Upper extremity, because of the fracture, we cannot properly go and multiple lesions.
Luckily, there are no multiple, no lesions on the upper extremity.
Okay.
It's more at the pelvic level.
So, even the long bones, it is not seen.
So, there we can give them weight training.
So, how do you strengthen the lower limbs then in that way?
Yeah, lower limbs, we can give them theta bands instead of weights.
Okay.
That is easier.
So, we have an omni scale on which we can grade what type of theta bands she will be able to use.
So, you are saying that with all these light deletions and those who have so much issue
and all that theta bands will be better.
Theta bands work better than the weights.
Secondly, or dumbbells.
Secondly, instead of giving her a walking training, for aerobic, we can give her as active passive
trainer, which is a cyclical for your lower extremity.

I will just mention, oh, I am laughing.
A lot of old people, they complain they did not want to get into the cycle and they do
not want to do the thread milk because actually, they are muscles also, you know, like it aches
a lot.
Yes.
So, then once they do that, once that happens, then they will not do it again.
They will just refuse to do it again.
Sure.
So, is there anything, if you just step down from that, like anything, apart from that, would
you substitute with?
She is an illiterate.
Yes.
If we counsel her, she will listen.
You know, the more Google you, they tend to have some barriers.
But if you counsel this female, definitely at least the cycle part she will be able to
do and simple walks because her P.S. is too.
Right?
So, if we can, if we can, if we can, if we can, if we can, if we can, if we can, if we can, if we can, if we can, if we can, if we can, if we can, if we can, if we can,
if we can, if we can, if we can, if we can, if we can, if we can, if we can, if we can,
if we can, if we can, if we can, if we can, if we can, if we can, if we can, if we can,
Genesis Sahaja.
Apart from that, she's got lysic lesions.
So, she's got dry coff, but in case she deteriorates and she has some sputum, we cannot
give the usual manures for chest physiotherapy.
lung, lower lung. So, keep the left lung as irritated as possible.
Thank you so much, Phan. So, as far as we talk about the challenges, this patient also
has shortness of breath. So, again we need to know exactly what is the level of dysnea
the patient has. So, if you have to train the patient, so what is her current level of
dysnea on that we can manage again with the, as MAM had already discussed about the NOG
conservation techniques and the pacing of activities. Even where generally we make them
work something, then again we give them pacing for activities like staircase climbing, walking
and then taking care of the respiratory as MAM said, spirometry and again strengthening
and that is again walking, walking aids again because of the ulna, we do not know the status
of it, well even while prescribing a walking aids and seeing her architectural barriers
at home, that is how we will have to recommend what walking aid will she require, a walking
stick, does it has to be cord report, tripod or a walker, but again a walker will be a
barrier because she has already got an ulna fracture.
Thank you so much, Dr. Ankita, just quick comments from Dr. Leika and Dr. Anita. Dr.

Leika, the anxiety depression she is having, anything you want to do for that or you think
it is related to the pain or some other issues.
Okay, so screening is useful to know about the, I mean that, to know about the detailed
evaluation, you know, so that this patient that the GDS I think 5 and GAD is 10, so GAD
is 10 that she has that moderate anxiety.
So we need to evaluate patient that what is the contributing factors because she is, she
is a genetic, she is 83 years old and in Indian population that many times they do not understand
the proper meaning of the items, you know.
So that is why that, now, psychiatric evaluation is been needed.
So what is our practice that when you refer the patient for the evaluation, psychological
evaluation, certain history with presenting complaint along with that mental state examination
gives us some impression and that objective data is equally important because what patient
is feeling, why and in what situation that she is anxious, whether that she is, I mean,
fulfilling the criteria of anxiety disorder.
So that, I mean, that JD score and that clinical impression is been, I mean, subjective
and objective evaluation is been matched.
So on the basis of that psychological intervention is framed.
So if that patient really has, I mean, not exactly anxiety but some amount of distress
she has related to illness, related to her physical, I mean, frailty functions.
So we need to have a appropriate and evidence-based psychological intervention to support and
to cope with that current situation, not only psychological but that it will again helpful
to cope up physically.
So what would you give, pharmacological or non-fapancol school intervention for the patient?
If that she, she, I mean, she has anxiety disorder.
Sorry, pharmacy and PIM she has already.
Okay.
That's what I'm saying after detail evaluation that she's been diagnosed with anxiety disorder
along with mental state examination and then she's really not cope up with only psychological
intervention.
So we, that we will use that combination, that psychological intervention and my, my
insulotic if she, she is needed for time being.
So we can do so that anxiety management technique along with that mindfulness-based activities
and intervention.
So we can do, and then we should have that proper followup that depend on the intensity
of the symptoms of health.
So we should call, we should call the patient that weekly and that two weekly basis and
then in two weekly basis that we should see that how the effect of the combination of
therapy and that we do that, that the weekly or the two weekly and then the patient

is,
I mean, is the improved, that moderately improved then we increase the days of followup.
Like one, I mean one month, but that we do and that when patient is that is poor, compliance then we do telephonic followup also.
Thank you so much Dr. Leike, final comments, Dr. Anita on the false management.
So obviously we all have spoken about false already.
So there is nothing much that I could say except that maybe there is some resistance
training, some balance training, some checking of the methodology of walking.
So just ensure that all those things are taken care of and we can do routine big sauce cans
to see the any level of osteoporosis, you know, or a stupenia, what is the levels and
correct that as well.
Okay.
Thank you so much.
Thank you panelists for the discussion.