Transcript Details
This is a transcript of an educational program. Details about the program and additional media formats for the program are accessible by visiting: https://reachmd.com/programs/medical-industry-feature/insights-on-a-noninvasive-treatment-option-for-mnsclc-with-progression-on-or-after-a-platinum-based-regimen/24485/

ReachMD
www.reachmd.com
info@reachmd.com
(866) 423-7849

Insights on a Noninvasive Treatment Option for mNSCLC with Progression On or After a Platinum-Based Regimen

Announcer:
Welcome to *Project Oncology* on ReachMD.

This medical industry feature, titled "*Insights on a Noninvasive Treatment Option for mNSCLC with Progression On or After a Platinum-Based Regimen*," is sponsored by Novocure.

Here's your host, Dr. Charles Turck.

Dr. Turck:
This is *Project Oncology* on ReachMD, and I'm Dr. Charles Turck. Today, we're speaking with experts about how they've integrated an FDA-approved treatment option in the management of metastatic non-small cell lung cancer.[1] Joining me to share their insights are Drs. Simon Khagi and Eshan Patel. Dr. Khagi is Medical Director of Neuro-Oncology at Hoag Family Cancer Institute and a triple-board certified medical oncologist and neuro-oncologist in Newport Beach, California.

Dr. Khagi, welcome to the program.

Dr. Khagi:
Thanks for having me.

Dr. Turck:
And with us is Dr. Patel as well, who's the Medical Director of Oncology Services at RWJ Barnabas Somerset Hospital, as well as an Assistant Professor of Medicine at Rutgers Medical School in New Brunswick, New Jersey. It's great to have you with us as well.

Dr. Patel:
It's great to be here.

Dr. Turck:
Now, before we kick off our discussion today, I'd like to take a moment to present the Important Safety Information on Optune Lua®.

Announcer:
Optune Lua Indication for Use and Important Safety Information

Indication For Use – Metastatic non-small cell lung cancer
Optune Lua® is intended as a treatment concurrent with PD-1/PD-L1 inhibitors or docetaxel for adult patients with metastatic non-small cell lung cancer who have progressed on or after a platinum-based regimen.

Important Safety Information

Contraindications
Do not use Optune Lua in patients with an electrical implant. Use of Optune Lua together with electrical implants has not been tested and may lead to malfunctioning of the implanted device.

Do not use Optune Lua in patients known to be sensitive to conductive hydrogels. In this case, skin contact with the gel used with Optune Lua may commonly cause increased redness and itching, and rarely may even lead to severe allergic reactions, such as a fall in blood pressure and breathing difficulty.

Warnings and Precautions
Optune Lua can only be prescribed by a healthcare provider that has completed the required certification training provided by Novocure® (the device manufacturer).

Do not prescribe Optune Lua for patients who are pregnant, whom you think might be pregnant, or who are trying to get pregnant, as the safety and effectiveness of Optune Lua in these populations have not been established.

The most common (≥10%) adverse events involving Optune Lua concurrent with PD-1/PD-L1 inhibitors or docetaxel were dermatitis, musculoskeletal pain, fatigue, anemia, dyspnea, nausea, cough, diarrhea, anorexia, pruritus, leukopenia, pneumonia, respiratory tract infection, localized edema, rash, pain, constipation, skin ulcers, and hypokalemia.

Other potential adverse effects associated with the use of Optune Lua include treatment related skin toxicity, allergic reaction to the adhesive or to the gel, overheating of the array leading to pain and/or local skin burns, infections at the site where the arrays make contact with the skin, local warmth and tingling sensation beneath the arrays, medical device site reaction, muscle twitching, and skin breakdown or skin ulcer.

If the patient has an underlying serious skin condition on the chest, evaluate whether this may prevent or temporarily interfere with Optune Lua treatment.

Please see the Optune Lua Instructions For Use (IFU) for complete information regarding the device's indications, contraindications, warnings, and precautions at OptuneLuaHCP.com/IFU

Dr. Turck:
Well, with that Important Safety Information in mind, let's dive right in. Dr. Khagi, what are your thoughts on the current landscape for metastatic non-small cell lung cancer that has progressed on or after a platinum-based regimen?

Dr. Khagi:
As I see it, there aren't as many treatment options as we would like, so there's still a need for therapies that can help extend survival.[2,3]

So that's the main challenge I see, but I'd like to hear Dr. Patel's thoughts, as well. What are your thoughts on the current treatment landscape for this patient population?

Dr. Patel:
I agree. That is an important question, Dr. Khagi, and one that many in our field are interested in.

One of the biggest challenges we face involves patients without targetable driver mutations.[2] Unfortunately, in my experience, these patients often develop disease progression.

So there's an unmet need for this group of patients, but Optune Lua offers another treatment option for this population because it does not require a targeted mutation.[1,4,5]

Dr. Turck:
Thank you both for sharing your insights on those challenges. And now let's focus in on Optune Lua, a treatment used concurrently with PD-1/PD-L1 inhibitors or docetaxel in patients with metastatic non-small cell lung cancer who have progressed on or after a platinum-based regimen. If we turn to you, Dr. Khagi, can you tell us more about Optune Lua, which was approved by the FDA in October 2024?

Dr. Khagi:
Sure. Optune Lua is a portable, noninvasive wearable device for Tumor Treating Fields therapy. Tumor Treating Fields are alternating electric fields that exert physical forces on electrically charged components in dividing cancer cells, resulting in cell death. Tumor Treating Fields are delivered by pairs of transducer arrays that adhere directly to the skin.[1]

So let's talk about the clinical efficacy and safety data in the global phase three LUNAR study. Optune Lua was used concurrently with either a PD-1/PD-L1 inhibitor or docetaxel in patients with metastatic non-small cell lung cancer aged 22 years or older, with an ECOG performance of zero to two. And the patients' disease had to have progressed either on or after platinum-based therapy.[1]

The trial enrolled 291 patients, who were randomized in a one to one fashion to receive Optune Lua together with standard of care treatment or standard of care treatment alone. Investigators selected the standard of care regimen of their choice, which could be a PD-1 orPD-L1 inhibitor or docetaxel. The primary endpoint was overall survival in the Optune Lua arm versus PD-1/PD-L1 inhibitor or docetaxel alone. Secondary endpoints focused on overall survival in the subpopulations receiving either PD-1/PD-L1 inhibitor or docetaxel with Optune Lua or PD-1/PD-L1 inhibitor or docetaxel alone.[1]

And the results from LUNAR showed a 3.3-month improvement in median overall survival in those who received Optune Lua together with a PD-1/PD-L1 inhibitor or docetaxel group versus PD-1/PD-L1 inhibitor or docetaxel alone, at 13.2 months and 9.9 months, respectively. This was associated with a 24 percent reduction in the risk of death.[1,6]

In patients treated with a PD-1/PD-L1 inhibitor, the addition of Optune Lua resulted in a statistically significant improvement in median overall survival by 8.2 months, with a difference of 19 months with the combination therapy versus 10.8 months with PD-1/PD-L1 inhibitors alone. This was associated with a 37 percent reduction in the risk of death with a hazard ratio of 0.63 and a P value of 0.024.[1]

And in the subgroup receiving docetaxel, the median overall survival was 11.1 months in those who received Optune Lua together with docetaxel versus 8.9 months in those who received docetaxel alone, however it wasn't statistically significant with a P value of 0.47 and a hazard ratio of 0.88.[1]

Dr. Turck:
And staying with you, Dr. Khagi, what were the safety data from the LUNAR trial?

Dr. Khagi:
Looking at the safety data from the LUNAR study, we see that Optune Lua did not add systemic toxicity. About 40 percent of patients who received a PD-1/PD-L1 inhibitor or docetaxel alone reported any serious adverse event, compared with almost 55 percent of patients who received Optune Lua with PD-1/PD-L1 inhibitor or docetaxel. The rate of serious adverse events did not differ clinically or statistically when accounting for follow-up time. Also, there was no difference in the rate of grade three to four pneumonitis or other systemic adverse events.[1,7]

There were no reports of device-related grade four toxicities or deaths.[1]

Adverse events were balanced between treatment arms with the exception of dermatitis. Skin-related adverse events, which were mostly mild to moderate, were reported in 63.1 percent of patients treated with Optune Lua. Six patients reported grade three skin toxicity requiring a treatment break, with all cases resolving. In the LUNAR study, skin irritation improved with topical medications.[1,7]

I'd like to add here that while most patients tolerate the device well, in my clinical practice I've noted that cachectic patients with fragile skin may find it more difficult to tolerate the arrays long-term. So I'll consider factors like body habitus and skin integrity when discussing this option, especially in patients who've lost a lot of weight.

Dr. Turck:
Now, with that data in mind, let's come back to you, Dr. Patel. How would you discuss this type of therapy with patients?

Dr. Patel:
What's encouraging is that Optune Lua, FDA-approved as of October 2024, introduces an innovative mechanism that works concurrently with standard therapies, such as PD-1/PD-L1 inhibitors or docetaxcel, rather than replacing them. That's an important distinction for patients: we're not just adding another drug, but instead we are now adding a device-based therapy shown to taking an innovative approach in a challenging setting.

One of the challenges we've discussed is that this therapy is different than prescribing a pill. It's not just about making the administration of it available across institutions to patients, but also about helping patients understand how it works, how to use it, and how it could fit into daily life.

I've had patients travel, shop, and even take vacations while on Optune Lua.[1] One patient of mine even flew to Jamaica wearing it. So it's important to discuss how this treatment may impact their day-to-day life.

Whenever I discuss a therapy with a patient, I sit down to make sure I address all of their questions, and my approach with introducing Optune Lua would be very similar and likely more hands-on. This is especially important for therapies where patients are responsible for administering their treatment at home.[1]

For example, patients will need help changing the back arrays, so caregiver assistance is something we'll talk about upfront. A Device Support Specialist will provide training to patients and caregivers for setting up the device. So ensuring accessibility and proper education will be key as we move forward.

But how about you, Dr. Khagi? What should providers be aware of when introducing Optune Lua into their practices and to their patients?

Dr. Khagi:

To add to your thoughts, Dr. Patel, when introducing a therapy to patients, the first thing I'd encourage my colleagues to do is keep an open mind. It's natural to feel hesitant about something we're less familiar with, especially in the setting of metastatic non-small cell lung cancer following platinum-based therapy. But this challenging setting is also why it's important to present patients with all available treatment options, including noninvasive approaches—like Optune Lua—that don't add systemic toxicity.[1,6]

Patients often rely on their doctor's guidance. So when we approach them with confidence, it can help build trust.[1] Of course, we need to be mindful of side effects and practical aspects like skin care if the treatment involves a device that adheres to the skin.[1,8] But how we present the data and our confidence in the results can make a difference in how patients perceive it.

Whether you're practicing in an academic or community setting, as oncologists we often aim to get patients on clinical trials to access therapies under investigation. But clinical trials aren't always easy to navigate. So what's exciting to me about this therapy is that it offers patients something they can use at home, together with docetaxel or a PD-1/PD-L1 inhibitor, giving them immediate access to a different modality.[1]

Dr. Turck:
For those just tuning in, you're listening to *Project Oncology* on ReachMD. I'm Dr. Charles Turck, and today I'm speaking with Dr. Simon Khagi and Dr. Eshan Patel on practical insights for integrating Optune Lua into clinical practice.

Now I'd like to discuss how to identify appropriate patients for this therapy. Dr. Patel, what criteria do you consider when determining which patients may be candidates for Optune Lua?

Dr. Patel:
When determining whether a patient could be a candidate for Optune Lua, we consider several factors, including tumor genetics, previous treatments, and performance status. We particularly look for patients with an ECOG performance status of zero to two and those who have experienced tumor progression on or after a platinum-based regimen, such as immunotherapy plus platinum doublet. That progression can be any degree of clinical or radiologic change.[1]

Also, patient motivation and treatment goals play a crucial role in the decision-making process. For example, potential candidates for the treatment may be patients who are looking for the latest treatment option, patients who want to play an active role in their therapy regimen, or those who have specific milestones they want to reach, such as attending a family event.

Dr. Turck:
Dr. Patel, how do these criteria translate to clinical practice?

Dr. Patel:
It's always a tough decision when a patient on maintenance treatment post-platinum-based therapy begins to show signs of disease progression. This is when I would consider adding Optune Lua.

In clinical practice, when a patient shows clinical or radiological signs of progression, we consider multiple factors—treatment history, overall health, and the balance between efficacy and tolerability. As Dr. Khagi highlighted earlier, Optune Lua is a noninvasive option that has shown potential survival benefits when administered concurrent with PD-1/PD-L1 inhibitors or docetaxel in adult patients with metastatic non-small cell lung cancer who have progressed on or after a platinum-based regimen. This matters because patients can continue these therapies without adding systemic toxicity. Of course, we will still need to be mindful of potential dermatologic adverse events.

Dr. Turck:
Turning back to you now, Dr. Khagi. After identifying eligible patients, what are the next steps in implementing this therapy?

Dr. Khagi:
So once the physician completes the certification process, he or she would submit a prescription to Novocure. Their team will then take care of the rest and are available if there are any questions. A Device Support Specialist delivers Optune Lua to your patient, provides in-person training, and adjusts the final layout arrangement at the patient's start date.

Dr. Turck:
Now before we come to a close today, Dr. Khagi, what key takeaways would you like to share with our audience?

Dr. Khagi:
So we now have this FDA-approved technology at our disposal that may potentially extend a patient's survival benefits by three months, which we know is no small feat when treating this patient population. And while it doesn't add systemic toxicity, dermatologic adverse

events were reported in about 63 percent of patients. The majority were mild to moderate in severity.[1,6]

As providers, it's our responsibility to stay informed about advancements in therapy so we can be strong advocates for our patients, help them understand risks and benefits, and guide them through a difficult decision.

In the end, it's about empowering patients to make informed decisions and making sure they know we're bringing every possible resource to the table to give them the best outcomes we can.

Dr. Turck:
And how about you, Dr. Patel? What final thoughts would you like to share?

Dr. Patel:
Over the past few years, a lot of the research and treatment developments for non-small cell lung cancer have focused on targeting specific driver mutations, and while that's great, these account for a small subset of the overall lung cancer population.[2]

Patients without driver mutations typically receive chemo or immunotherapy, and once those options are exhausted, it can feel like we're running out of tools in our toolkit.[2] So Optune Lua's FDA approval is exciting because it's an example of therapy development that may benefit a much broader group of patients—those who don't have these targetable mutations and often face more limited treatment options.

Dr. Turck:
Thank you both, these are great takeaways from our discussion. And with those final thoughts in mind, I want to thank my guests, Dr. Simon Khagi and Dr. Eshan Patel, for sharing their insights on integrating the TTFields therapy, Optune Lua, into clinical practice. Optune Lua is approved for use with PD-1/PD-L1 inhibitors or docetaxel in adult patients with metastatic non-small cell lung cancer who've progressed on or after a platinum-based regimen.

Dr. Khagi, Dr. Patel, it was great speaking with you both today.

Dr. Khagi:
Thank you for having me.

Dr. Patel:
Thank you for having me and for such a robust discussion.

Dr. Turck:
For ReachMD, I'm Dr. Charles Turck. Please stay tuned to hear additional information on Optune Lua.

Announcer:
The MyNovocure program offers various services designed to support your patients and your practice through the Optune Lua journey.

For patients, this includes insurance support, 24/7 live patient support, training for patients and caregivers, device troubleshooting, supply reorders, and advocacy information.

This medical industry feature was sponsored by Novocure. If you missed any part of this discussion or to find others in this series, visit *Project Oncology* on ReachMD dot com, where you can Be Part of the Knowledge.

References:

1. Optune Lua for Non-Small Cell Lung Cancer (NSCLC). Physician Instructions For Use. Novocure; 2024
2. Garon EB, Ciuleanu TE, Arrieta O, et al. Ramucirumab plus docetaxel versus placebo plus docetaxel for second-line treatment of stage IV non-small-cell lung cancer after disease progression on platinum-based therapy (REVEL): a multicentre, double-blind, randomised phase 3 trial. *Lancet*. 2014;384(9944):665-673. doi:10.1016/S0140-6736(14)60845-X
3. Novello S, Kowalski DM, Luft A, et al. Pembrolizumab plus chemotherapy in squamous non-small-cell lung cancer: 5-Year update of the phase III KEYNOTE-407 study. *J Clin Oncol*. 2023;41(11):1999-2006. doi:10.1200/JCO.22.01990
4. Gera N, Yang A, Holtzman TS, Lee SX, Wong ET, Swanson KD. Tumor treating fields perturb the localization of septins and cause aberrant mitotic exit. *PLoS One*. 2015;10(5):e0125269. doi:10.1371/journal.pone.0125269
5. Giladi M, Schneiderman RS, Voloshin T, et al. Mitotic spindle disruption by alternating electric fields leads to improper chromosome segregation and mitotic catastrophe in cancer cells. *Sci Rep*. 2015;5:18046. doi:10.1038/srep18046
6. Leal T, Kotecha R, Ramlau R, et al. Tumor Treating Fields therapy with standard systemic therapy versus standard systemic therapy alone in metastatic non-small-cell lung cancer following progression on or after platinum-based therapy (LUNAR): a

randomised, open-label, pivotal phase 3 study. *Lancet Oncol*. 2023;24(9):1002-1017. doi:10.1016/S1470-2045(23)00344-3
7. Novocure Data on File 2024.
8. Optune Lua. Patient information and operation manual for non-small cell lung cancer. Published online 2024.