Incorporating Optune® Into the Multidisciplinary Care of Patients With GBM

Excerpts From a Multidisciplinary Panel of Experts

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This promotional supplement is wholly funded by Novocure®.
Introduction

Glioblastoma (GBM) is an aggressive, life-threatening disease that is challenging to control and carries a poor prognosis. It is always present and continually proliferating; therefore, every appropriate treatment available should be used to combat this persistent threat. Unfortunately, for many years, treatment options were limited. Until 2005, when temozolomide (TMZ) was approved by the US Food and Drug Administration (FDA), only 2 post-surgical treatment modalities were available for patients with newly diagnosed GBM: radiation and carmustine. After approval, TMZ given concomitantly with radiation therapy (RT) followed by maintenance therapy became the standard of care for patients with newly diagnosed GBM by increasing median survival by 2.5 months.

In October 2015, Optune®—which delivers alternating electric fields known as Tumor Treating Fields (TTFields)—became the first FDA-approved treatment for patients with newly diagnosed GBM in more than a decade. This approval was based on the interim analysis (n=315) of the landmark EF-14 clinical trial. These results showed that Optune plus maintenance TMZ extended median overall survival by 4.9 months with no significant increase in serious adverse events compared with TMZ alone. In addition, nearly half of the patients on Optune plus maintenance TMZ were alive at 2 years compared to 31% of people on TMZ alone with the most common side effect being mild-to-moderate skin irritation. In December 2017, the analysis of the mature EF-14 dataset of 695 patients showed that those treated with Optune plus maintenance TMZ had better overall survival up to 5 years in comparison to patients treated with TMZ alone (13% vs 5%), with no late-emerging serious adverse events, increase in systemic side effects, or negative impact on quality of life as measured up to 1 year.

In March 2018, alternating electric field therapy received a Category 1 recommendation for newly diagnosed GBM in the NCCN Clinical Practice Guidelines in Oncology for Central Nervous System Cancers. The Category 1 recommendation, which indicates uniform National Comprehensive Cancer Network® (NCCN®) consensus based on high-level evidence, is for alternating electric field therapy in combination with TMZ following maximal safe resection and standard brain radiation therapy with concurrent TMZ for patients with newly diagnosed supratentorial GBM and KPS ≥60. The amount of time it takes to implement guidelines—combined with the finding that colleagues may play a more influential role than literature in the integration of research advances into practice—underscores the need for clinicians to coordinate a multidisciplinary approach to integrating treatments like Optune into evidence-based clinical practice. Effective implementation of a multidisciplinary team approach to patient care has the capacity not only to provide benefits to the patient, but to individual team members, the team as a whole, and the overall organization (see Benefits of Multidisciplinary Care). More importantly, treatment approaches that utilize teamwork have been shown to improve the survival of patients with cancer and lead to the use of more multimodality treatment options.

In June and July of 2018, Novocure® convened a total of 23 clinical experts from neurosurgery, neuro-oncology, medical oncology, radiation oncology, nursing, and advanced practice providers to increase the understanding of how practitioners translate the science of team-based care to integrating Optune into the treatment of patients with newly diagnosed GBM. Feedback from the participating multidisciplinary experts, who will be collectively referred to as the panel, serves as the basis of this report.
Panel experts were asked to share their experiences and best practices integrating Optune into the multidisciplinary approach to treating their patients with newly diagnosed GBM. Using their feedback, an Optune Integration Pathway was developed. This pathway (outlined in Optune Integration Pathway) defines 4 key steps a certified prescribing healthcare provider (HCP)/practice may take to successfully integrate Optune. This pathway, along with helpful brochures and resources available at Optune.com, will be discussed.

The Optune Treatment Team
Based on current guideline recommendations, all appropriate patients with newly diagnosed GBM should be recommended and provided access to Optune. The panel of multidisciplinary clinical experts noted that HCPs can gain access to Optune for their patients in one of two ways: directly within their practice (if they or one of their colleagues is a certified prescriber) or by visiting OptuneCenter.com to find a certified treatment center in their area. When asked to describe their Optune treatment team, the panel explained that, once a certified prescriber is identified, integrating Optune into the treatment plan for patients with GBM does not require forming a new team of HCPs. Instead, members of their existing multidisciplinary GBM treatment team—including the neurosurgeon, radiation oncologist, neurological or medical oncologist, nurses, and advance practice providers—can effectively educate, initiate, and manage patients throughout their treatment journey.

Consensus feedback among the panel identified several key steps required to successfully onboard existing GBM treatment team members and ensure effective integration of Optune. These include:

- Gaining institutional support
- Raising awareness among all treatment team members
- Educating HCPs about the mechanism of action, indications for use (see inside back cover), treatment benefits, and safety profile
- Ensuring all team members understand and are aligned on roles, responsibilities, and treatment plan

“Multidisciplinary communication can be enhanced by discussing the patient case at a tumor board conference.”
Treatment Plan

With the Optune treatment team established, the initial two steps of the Optune Integration Pathway identified by the panel occur during treatment planning (see Steps 1 and 2). The first is discussing the treatment plan with the multidisciplinary team, patient, and caregiver. While this may sound intuitive, participants felt it should be reinforced as the first step in integrating Optune because it can be difficult to effectively do so if:

- The entire multidisciplinary team is not aligned
- Consistent information is not communicated by the team to the patient and caregiver(s)

Therefore, it is important for members of the team to define a coordinated approach to educating and instructing patients appropriately and consistently—including identifying when, how, and by whom information is shared with the patient and caregiver.

The panel also noted that patients with GBM and their caregiver(s) often actively seek information about the disease and its treatment immediately after diagnosis, but it is treatment recommendations from physicians that have the greatest impact. Patients often look to their neurosurgeon first for advice, so communication between the neurosurgeon and the patient often informs first impressions about the severity of their GBM and available treatments. Hence, the neurosurgeon plays an important role in both establishing Optune as part of the integrated treatment plan, as well as initiating the relationship between the patient and the Optune treatment team. The panel agreed that when the neurosurgeon informs the patient that, in addition to surgery, treatment may include RT, TMZ, and Optune, patients are more receptive to learning about Optune from other team members.

“A unified approach between all multidisciplinary team members instills confidence in patients and their loved ones that they are pursuing the best, most effective approach to treating their GBM. Establishing specific roles for each team member also allows for a smoother, less stressful process for the patient.”
Neurosurgeons play an important role in communicating that some cancer cells will remain even after surgery. Therefore, radiation, TMZ, and Optune are viable treatments for slowing or stopping GBM cancer cells from dividing and may lead to cell death.1,5

Since Optune is a wearable, portable treatment that differs from more traditional therapies, patients and their caregivers may find it challenging to understand what treatment with Optune could mean for them. During treatment planning discussions, the panel emphasized that it is important for the Optune prescriber, whether it be the radiation oncologist, medical oncologist, or neuro-oncologist, to understand the patient’s social context, support system, goals, and expectations of treatment so they can present Optune in a way that addresses the patient’s needs and concerns. Failing to do so may leave the patient and caregiver(s) feeling unsure of the potential benefits of Optune. The panel also noted that since patients are often overwhelmed by their diagnosis, it may be difficult for them to retain large amounts of information at once. For this reason, the treatment plan should be continually reinforced at subsequent visits through layered education and multiple HCP touchpoints.

Approximately two weeks after surgery—at the first post-op consult—patients typically receive the first educational overview of the quadrimodality treatment plan. The specialist who conducts this consult depends on the practice setting. According to the panel, it is generally the radiation oncologist, but it may also be the neuro-oncologist or medical oncologist. Panel participants have found it helpful to keep the conversation brief during this consult. They often introduce Optune as a wearable, portable, FDA-approved device for the treatment of GBM that is a recommended part of the overall treatment plan in combination with TMZ following surgery and RT. The First Glance at Optune brochure can help facilitate this discussion. Patients are often advised to visit Optune.com to learn more about GBM, Optune, and additional resources and support available to them. Novocure partners with patients and practices through a support program called nCompass™ which provides reimbursement assistance and customized support based on patient or caregiver needs, including:

- In-person device education by a Device Support Specialist (DSS)
- Resources and tips for using Optune
- 24/7 technical support via phone or email
- Reordering supplies

The radiation oncologist sees patients weekly during the standard 6-week course of RT and concomitant TMZ. These weekly touchpoints provide the perfect opportunity for the radiation oncologist and their nursing staff to continue to educate patients and caregivers about Optune. Patients and caregivers have shared that when deciding on treatment it is most important for their physician to discuss that Optune has data showing that survival with Optune + TMZ versus TMZ alone was significantly higher at the 2-year landmark analysis and remained higher at 5 years.5 Patients also want to know that Optune treats where the tumor is without increasing chemotherapy-related side effects and how Optune slows/stops GBM cells from dividing. Therefore, the panel emphasized that it is important to present a fair and unbiased overview of the pros and cons of all treatments available, including clinical trials.
**Peer Insights**

*Consensus Thoughts From Clinical Experts*

In order to facilitate shared decision-making, multidisciplinary team communication should:

- Be based on a shared communication plan for Optune
- Take a balanced approach to educating the patient about Optune safety and efficacy
- Tailor communications about Optune around patients’ lifestyle, social support, goals, expectations, concerns, and fears

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"When educating patients about Optune®, the use of visual aids is helpful. It is also helpful to discuss the portability of the device and how they can continue most routine activities while they use Optune.”

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physicians and nurses should address these impactful discussion points during these visits and identified the Understanding Optune brochure as a key education resource that can be used to supplement conversations about these topics, as well as reinforce information about additional resources and nCompass™ support that are available. At this stage, patients are also often introduced to the Buddy Program, which connects patients considering Optune with an experienced Optune user and/or their caregiver who is willing to share what they have learned. Topics frequently covered by this program include:

- Tips for using Optune
- Advice on how to incorporate Optune into daily life
- Personal experience with Optune and the nCompass support team

Once a patient has agreed to include Optune as a part of their treatment plan, the second step identified by the panel is submission of the Optune prescription to Novocure by the certified HCP/practice (see **Step 2**). The panel identified nursing staff or program coordinators as the:

- Managers of the prescription process
- Facilitators of communication between the practice and patient
- Facilitators of communication between the practice and Novocure

**Optune Start**

Once a prescription for Optune has been received by Novocure, reimbursement assistance and customizable patient support begin through nCompass. The DSS delivers the device to the patient’s home or your practice and provides in-person training at treatment start. The panel agreed that the patient should initiate Optune within 4 weeks of completing RT and concomitant TMZ, as the first cycle of maintenance TMZ starts. During the in-person training, the DSS teaches the patient and caregiver how to use the device, prepare the scalp, and properly place the transducer arrays based on the patient’s individualized array layout. Finally, once the patient has started Optune, the prescribing HCP is contacted by Novocure and informed of the start date so follow-up can be scheduled by the practice.
After starting Optune, a positive patient experience in the first 30 days is critical for patients to continue treatment. For this reason, the third step identified in the Optune Integration Pathway by the panel was a follow-up visit two weeks after starting Optune so that lifestyle integration and proper scalp care can be discussed further and patient/caregiver concerns can be addressed early (see Step 3). The DSS will also provide continuous support to the patient and caregiver but cannot provide medical advice. For this reason, the panel noted that it is important to identify one point of contact within the practice that patients can be instructed to call should medical questions arise.

**Maintenance and Monitoring**

Ensuring that patients maintain treatment with Optune is critical for the realization of optimal treatment benefit. To help HCPs monitor a patient’s time on therapy, Optune has been designed to capture information about when and for how long a patient uses Optune. This information is then tabulated in an “Optune usage report” and sent to the designated HCP. As the fourth and final step this report should be reviewed with the patient every month (see Step 4). Nurses from the panel emphasized that monthly follow-up visits also provide continued opportunities to learn about challenges and patient experiences. Patients are again encouraged to refer to resources, such as the Optune website and Buddy Program, for useful tips on overcoming challenges and integrating Optune into their life. Their DSS will also continue to follow up with them.

Based on Optune clinical and registry data, an average monthly usage goal of at least 75% of the time, or 18 hours a day, is recommended. The panel confirmed that many of their patients reach or exceed this usage goal; however, some patients may initially have a more difficult time adjusting to life with Optune and find it challenging. For these patients, the panel recommended establishing a personalized goal that can be increased at each consecutive follow-up visit, as long as this goal does not fall below the 50% threshold, or 12 hours a day, clinically shown to be needed for a significant extension in overall survival. This, along with visualization of their personal usage pattern on their Optune usage report, may help patients remain motivated to continue and even increase their use of Optune. Nurses have found it particularly impactful to walk the patient through their usage report and reinforce their personal Optune usage data with clinical data showing an increased survival benefit with longer Optune use. Patients can also be reminded that it is okay to take breaks from treatment as long as they strive to reach their recommended monthly usage goal.

“The DSS is a good resource for the patient. They may serve as a liaison between the patient and the clinician particularly in the initial stages of treatment. Additionally, communication between the DSS and clinician allows for smooth integration, start of care, and support during treatment.”

“Using Optune may take some practice, but once patients get used to it they find that it is portable enough to allow them to continue most daily activities.”

“Optune usage reports may provide patients with a sense of empowerment and control over their treatment.”
In clinical trials, the most common side effect associated with Optune® was skin irritation beneath the transducer arrays. For this reason, physicians and nurses monitor not only a patient’s clinical status but also his or her scalp health. Proper scalp care can help reduce the risk of developing skin irritation while on Optune and help ensure patients maximize their Optune use. This is done through patient and caregiver education about proper scalp care, prevention of skin irritation, and the management of skin irritation that may occur. It was agreed that the Patient Scalp Care Guidelines brochure, which can be found at Optune.com, is the key resource used to facilitate these discussions.

“Some patients are concerned about how Optune will interfere with their daily routine. For these patients it is helpful to review the quality of life data that suggest patients who used Optune maintained mental, emotional, and physical well-being as measured up to 1 year. I encourage patients and their loved ones to explore the Optune website as well.”

Final Discussion and Conclusion

In this report, we have outlined a 4-step Optune Integration Pathway created based on feedback from a panel of multidisciplinary clinical experts with experience treating patients with Optune. All members of the GBM treatment team can adopt this pathway, regardless of practice setting, as a guide to integrating Optune into the treatment plan for their patients with newly diagnosed GBM. Through this approach, along with the concepts of patient-centered care and shared decision-making, HCPs can educate, initiate, and manage patients using Optune and provide them with the best opportunity for long-term quality survival.

References

8. Referenced with permission from the NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Central Nervous System Cancers. V.2.2018. ©2018 National Comprehensive Cancer Network, Inc. All rights reserved. Accessed November 26, 2018. To view the most recent and complete version of the NCCN Guidelines, go online to NCCN.org. NCCN makes no warranties of any kind whatsoever regarding their content, use or application and disclaims any responsibility for their application or use in any way.
**Indications for Use**
Optune is intended as a treatment for adult patients (22 years of age or older) with histologically-confirmed glioblastoma multiforme (GBM).

Optune with temozolomide is indicated for the treatment of adult patients with newly diagnosed, supratentorial glioblastoma following maximal debulking surgery, and completion of radiation therapy together with concomitant standard of care chemotherapy.

For the treatment of recurrent GBM, Optune is indicated following histologically- or radiologically-confirmed recurrence in the supratentorial region of the brain after receiving chemotherapy. The device is intended to be used as a monotherapy, and is intended as an alternative to standard medical therapy for GBM after surgical and radiation options have been exhausted.

**Important Safety Information**

**Contraindications**
Do not use Optune in patients with an active implanted medical device, a skull defect (such as, missing bone with no replacement), or bullet fragments. Use of Optune together with implanted electronic devices has not been tested and may theoretically lead to malfunctioning of the implanted device. Use of Optune together with skull defects or bullet fragments has not been tested and may possibly lead to tissue damage or render Optune ineffective.

Do not use Optune in patients that are known to be sensitive to conductive hydrogels. In this case, skin contact with the gel used with Optune may commonly cause increased redness and itching, and rarely may even lead to severe allergic reactions such as shock and respiratory failure.

**Warnings and Precautions**
Optune 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 for patients that are pregnant, you think might be pregnant or are trying to get pregnant, as the safety and effectiveness of Optune in these populations have not been established.

The most common (≥10%) adverse events involving Optune in combination with temozolomide were thrombocytopenia, nausea, constipation, vomiting, fatigue, medical device site reaction, headache, convulsions, and depression.

The most common (≥10%) adverse events seen with Optune monotherapy were medical device site reaction and headache.

The following adverse reactions were considered related to Optune when used as monotherapy: medical device site reaction, headache, malaise, muscle twitching, fall and skin ulcer.

Use of Optune in patients with an inactive implanted medical device in the brain has not been studied for safety and effectiveness, and use of Optune in these patients could lead to tissue damage or lower the chance of Optune being effective.

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

Please see the summary of important safety information and visit www.Optune.com/IFU for complete information regarding the device’s indications, contraindications, warnings and precautions.