Oncology Nursing Society Fireside Chat, Part 2 | CAR T-cell therapy Transcript

Mary DeRome: Welcome and thank you for joining us for today's Oncology Nursing Society (ONS) daily update. I'm Mary DeRome, Senior Director of Medical Communications and Education at the Multiple Myeloma Research Foundation. I'm here in Anaheim, California for day two of the ONS meeting. Joining me today again are our Patient Navigation Center nurses, Grace Alison, Brittany Hartmann, and Erin Mensching.

Most of the sessions today have been about CAR T therapy. This is an approved therapy for many types of blood cancers, including multiple myeloma. There are two CAR T therapies, Abecma and Carvykti, approved for multiple myeloma patients. Before you tell us what you all learned today, Erin, can you explain the difference between these two therapies and how patients would choose which one to get?

Erin Mensching: Really, there isn't a difference between Abecma and Carvykti.

They are both BCMA-targeted CAR T-cell therapies, and they are both approved for patients who have been on four prior lines of therapy. These therapies need to include a proteasome inhibitor, an immunomodulator, and an anti-CD38 monoclonal antibody. An important point to consider is where the CAR T cell therapy fits into the patient’s myeloma journey; patients should speak to their care team about that.

Mary DeRome: Grace, can you walk us through the process patients go through to get CAR T therapy? Was anything discussed today about whether access to Abecma or Carvykti is getting easier these days?

Grace Alison: Carvykti is the latest FDA-approved commercial product that's available for patients. Having a second CAR T agent has certainly alleviated the stress for some providers of trying to access that treatment for their myeloma patients. Walking through the process, it can be quite complex, and it will require some advanced planning.

People who have already been through stem cell transplant will be familiar with some of the steps already, because it will include having some T cells harvested. We do get the question sometimes about whether stem cells previously collected and harvested from a transplant can be used. We want to emphasize to patients that this is a different collection. We're looking for different cells, so it will require its own harvesting.

Another question that patients ask us is, how do I ensure that I have good quality T cells, especially if you’ve had quite a few prior lines of therapy or a stem cell transplant? It's important to bear in mind that, for Carvykti for example, the

CARTITUDE trial, it included patients who'd had approximately six prior lines of therapy. Ninety percent of them had a stem cell transplant, and they were still able to harvest and successfully go through that process.

A couple of things that we heard in the presentation to enhance the health of those T cells is the importance of speaking with your provider about making sure you allow enough time for your current treatment to finish before the harvesting. And ensuring that you've got a good, healthy diet—that was mentioned, as well, to make sure that your T cells are as robust as possible. You will not need any growth factor mobilization, which is different from stem cell harvesting, which is good.

The cells usually can be harvested in one sitting, over several hours. The difference between transplant and CAR T: once the T cells are harvested, it will take approximately 30 days, and sometimes patients need some bridging treatment in the meantime. Once the cells are processed, the majority of patients go inpatient to have the cells re-infused, and that will be similar to how stem cells in a transplant are re-infused, as well.

There will be some close monitoring during that phase. One thing we also heard is the importance of making sure the patient had a caregiver who was ready to take on quite a complicated role. They will need to be with you through the whole setup process. There will be appointments. They should know how to contact your primary care team during and after the procedure about any potential complications you are experiencing.

A lot of patients have to travel for this; it's not locally available for most patients. Setting up travel and where are you going to stay— your primary care team can get a social worker to help you establish all of that. That prior planning needs to be done before the whole process.

Mary DeRome: These T cells, when they're removed from the patient, they actually undergo quite a lengthy procedure. And you were mentioning that that procedure took about 30 days from the time they were collected. Then the cells are sent to the lab to be modified so that they recognize myeloma cells through the BCMA that's on their surface. Then they have to grow them up to a large number, right before they send them back to the patient?

Grace Alison: Correct.

Mary DeRome: Brittany, I have heard that the availability of CAR T to patients is not what people really might have thought it would be. Can you tell us anything about availability and what the issue is there?

Brittany Hartmann: When the CAR T therapies were FDA approved, a lot of patients thought you can just now go to the doctor and sign up—I'll get CAR T. It doesn't exactly work that way.

You have to go to an approved center, and the slots are more limited than we had initially anticipated. Because there are two approved therapies, there is more availability than there was previously, but it's another thing to consider that you have to be the kind of patient that is in the right state for CAR T. You need to have enough disease that you will be able to respond, but you don't want to be at a point that your disease is taking off, because it does take a long time to get the cells back.

You can have bridging therapy between, which is encouraging because if you have disease that's not well controlled, it does not mean that you would not qualify for CAR T. You can get bridging therapy that will get you to the point where you're able to get the CAR T cells.

Mary DeRome: You'd be receiving the bridging therapy between the time your T cells are collected and sent to the lab and when they're sent back to you, right?

Brittany Hartmann: Yes. There will be, they said, about a 2-week period between any kind of therapy before you get the re-infusion. As long as you're at a point that you could be stable throughout that approximately 4- to 6-week period, then that is encouraging. But another thing to consider is, although there are only two approved, there are still a lot of clinical trials for CAR T. Again, these are available through specialty centers, so you'll want to make sure that you speak with your myeloma specialist about if and when CAR T would be a good fit for you.

Erin Mensching: An important point to consider is that patients need to stay local to the center where they get the infusion for around 4 weeks, possibly a bit longer. They do need to have that caregiver available 24/7 for the first 2 weeks for that really careful monitoring. Something to be aware of is that there's no driving for up to 8 weeks post-infusion.

Mary DeRome: Brittany, can you highlight the main toxicities that patients can anticipate if they receive one of these CAR T-cell therapies? Was anything new discussed today as it relates to helping patients know what to look for as far as when they might experience these toxicities?

Brittany Hartmann: The main toxicities that are usually mentioned are cytokine release syndrome (CRS), as well as neurotoxicities. Patients are typically monitored for these at the hospital, but they can present later, so it's important to know what to look for. Cytokine release syndrome presents a lot like flu-like symptoms. You'll want to note fevers, chills, body aches, and fatigue. Fever is the number one sign of that. Temperature monitoring is definitely important. They take care of that in the hospital, but it's important to make sure that that's something that you consider when you're at home, as well.

Neurotoxicities can present as confusion, or sometimes the symptoms are a little more subtle—even something like a headache. These are anticipated and are things to look out for.

Mary DeRome: Is there a period after the time that the cells are infused into the patient where you should be looking for these toxicities? If you get past a certain point without having them, does that mean that you're not going to get them?

Brittany Hartmann: Not necessarily. As with any medication, some patients can experience an immediate reaction and others can experience a delayed reaction. If you're in the hospital, they will monitor for this. But, again, you can experience delayed onset of these symptoms, so it's important to make sure you have a caregiver who's looking out for things like this. Something like neuro toxicity may not be as obvious to the patient. If you have a caregiver, it's important to note small things.

If you notice in conversation, the conversation's not flowing, doesn't really make sense, it might not just be chemo brain or chemo fog. It's not something to just write off and take lightly. You should be paying attention to any slight changes in mental acuity, because that can actually be a symptom of neurotoxicity.

Mary DeRome: I've also heard that nurses can test patients for neurotoxicity by asking them to write their name every day, right? And that's another way of determining whether or not this neurotoxicity is taking hold with patients.

Brittany Hartmann: Yes. They usually do a baseline when a patient is admitted to a hospital, and they will do that daily. Patients may not be able to fully write their name out; that's one small test that they're able to do to monitor for the neuro status.

Mary DeRome: How long do patients usually remain in the hospital after receiving their infusion of CAR T?

Brittany Hartmann: Typically, it can be up to about 2 weeks, and it really depends on how the patient is recovering. Similar to stem cell transplant, some patients' blood counts may recover quickly and they're able to be discharged sooner. Also, you want to consider if a patient has any kind of complications, such as an infection. They may have to remain in the hospital longer.

I would anticipate at least 2 weeks, but you can be in the hospital anywhere up to a month if you're experiencing complications. It's important to consider that, as Grace mentioned before. Plan ahead. This is a process. It's not always straightforward, and things can come up, so being prepared ahead of time is really important.

Mary DeRome: Are there are long-term toxicities associated with CAR T that patients need to be aware of?

Brittany Hartmann: There can be long-term side effects. The doctors and the care team do note that a lot of these are anticipated, so it's important to note that they typically will resolve, but one of the long-term side effects is decreased blood counts or cytopenias. The white blood cell count being low puts you at very high risk for infection. There are ways to maneuver around that.

Usually, the doctor and the care team will put you on an anti-microbial prophylaxis, and that is something that you actually have to remain on long-term, about a year or so. If you're getting this done at a specialty center, but you're treated at home locally, it's very important to make sure that your care team is aware of that.

They also mentioned during some of the talks about vaccination status. A lot of that is still undergoing research because they're not sure whether you will respond to a vaccine if you have modified your immune system I believe the ASCO guidelines says that flu and COVID are two of the recommended vaccines, because they did generate a T-cell response, though not a B-cell response. With the low blood counts, you may be anemic or have low platelets. Some patients can actually become transfusion dependent.

It can be up to a year plus. The median, they said, was about 11.7 months where they'll start to see these cytopenias or low blood counts resolve. There are long-term side effects, but they do typically resolve over time and you can speak with your care team about supportive care to be able to work through that.

Grace Alison: One interesting thing we heard from people who did these CAR Ts, which was wonderful outside clinical trials, as well as with clinical trials, is that the vast majority of patients got some type of CRS. It can be managed, so it’s important not to panic, not to feel like that this is going to be permanent. Especially if somebody ends up in an intensive care unit, it can be temporary. It can be managed and then the patient can recover. That was interesting to hear and very encouraging.

Brittany Hartmann: With infections, it's important to note that the immunoglobulins, the IVIG, can be considered for patients, as well as growth factor. They don't usually want to give that within 28 days, because it can have adverse effects with the immune system immediately post-CAR T. But, similar to the transfusions, growth factor—IVIG—these are all things that are important, because risk for infection is very high. They did note that respiratory infections were one of the most common, but the good news was there was less than 5% of these infections that showed to be fatal. They can be serious and may require hospitalization—a grade three infection would require IV antibiotics—but most patients recover, even if they're having infections frequently. That's something that you'll want to speak with the doctor about, if you're a good candidate to be on IVIG therapy to help prevent infections.

Grace Alison: Another thing we heard them say was that, before a person undergoes CAR T for multiple myeloma, it's very hard to know who's going to have those adverse events.

You really have to just go through it to know how you're going to handle it yourself. But know that your care team is skilled in managing these adverse effects or events as they happen. But that early intervention is key. Anything that seems even minor, again, speaking up and advocating for yourself—or having your caregiver do that—will help you have the most successful outcome.

Mary DeRome: Obviously side effects and their management is one of the many aspects of patient care that is critical to oncology nurses. But let's also talk about what you've learned about how patients are faring with CAR T cells.

Grace, did you learn anything about how long patients can expect to respond to this type of treatment?

Grace Alison: The data is still maturing, but the overall response rate was very high, especially with Carvykti. Some people relapsed after a CAR T, but there are still other treatments available. *S*ome patients have the idea that this is the last intervention that is possible for their myeloma, but it was very interesting to hear today that there are still bispecifics. There are still other chemotherapy therapies that are available if you relapse after CAR T. What we're hearing is that patients are staying in a good remission upwards of 2 years.

Mary DeRome: Are there patients that do not respond to CAR T or are actually refractory to that type of therapy, like right from the outset?

Grace Alison: We didn't hear that reported. There was a tiny percentage who did not manage to have enough T cells that could be replicated, but most patients had a response.

Mary DeRome: Erin, if a patient has CAR T and they respond to it for a period of time, but then they stop responding and then they begin to relapse, can that patient have another CAR T?

Erin Mensching: They can have another CAR T that doesn't focus on the BCMA target. Also, there are bispecific antibody therapies in clinical trials; several of them are available to patients.

Mary DeRome: It would be really onto a clinical trial at that point.

Erin Mensching: Yes.

Mary DeRome: But these have not been approved yet.

Erin Mensching: Yes.

Mary DeRome: Based on what you learned from today's sessions, can each of you tell me one key message about CAR T therapy that you'd want patients to know? Brittany, let's start with you.

Brittany Hartmann: Toxicities and side effects are very much expected in the CAR T process, but they are manageable. It's important to make sure that you're your own advocate and are looking out for these side effects and toxicities yourself. You want to make sure that you and your caregiver are both aware of what to look out for, and that you are in constant communication with your care team so that these can be properly managed.

Grace Alison: The emphasis that I took home was that the caregivers are a very integral part of the team and relied on. They need to be in those meetings from the beginning and may need to step outside their comfort zone, because they will have to speak up sometimes and they will have to make sure that they're heard, and that can be complicated sometimes. They may be relied on to make complicated or complex decisions without a lot of training.

We're really trying to work hard on educating them more so that they can be effective. But the patients really understand that they go without sleep. They go without eating. That this is a big ask and they really appreciate that support.

Mary DeRome: Erin, I will leave the last word to you on CAR T therapy.

Erin Mensching: Really the key takeaway from all of this is that it is a complex process, but it's a very encouraging treatment that's available. Talk to your care team, talk to your nurses, make sure that your caregiver and family is involved and utilize us for support. We're here in the Navigation Center to answer questions, to help empower and guide you. It is an exciting therapy. The more treatments that we can have as options for patients, the better. We're really excited about the CAR T recent approvals.

Mary DeRome: To see a therapy that can be given to patients who have had so many previous lines of therapy and have it really work so well is amazing. Some patients just have great responses to CAR T. Of course, there are toxicities that are involved, but it's really a hopeful therapy, it's really great to see that patients have that available to them now as approved therapies.

I'd like to thank Grace, Brittany, and Erin for sharing their insights from their time here at the ONS meeting.

I'd also to thank Adaptive Biotechnologies, Janssen, and GlaxoSmithKline for supporting these updates. If you have additional questions, you can speak directly with Grace, Brittany, or Erin by calling our MMRF Patient Navigation Center at 1-888-841-6673.