

# The Annenberg Academy for Team-Based Care

## Interprofessional Care of Patients Treated with CAR T-Cell Therapy

### MANAGING PATIENTS TREATED WITH CAR T-CELL THERAPY: KEY CONCEPTS

Chimeric antigen receptor (CAR) T-cells are T-lymphocytes genetically engineered to express a recombinant antigen receptor allowing them to recognize cancer cells and, upon their activation, to become cytotoxic and kill those cancer cells. Five CAR T-cell products target CD19 and two target B-cell maturation antigen (BCMA). The CD19 targeted agents are approved for a range of indications for B-cell related hematologic malignancies covering relapsed or refractory B-cell acute lymphoblastic leukemia (ALL), B-cell non-Hodgkin's lymphomas (follicular, large B-cell, and mantle cell lymphoma) and chronic lymphocytic leukemia. The BCMA targeted agents are approved for relapsed or refractory multiple myeloma. CAR T products have generally produced excellent response rates and significant survival benefits compared to traditional salvage therapies utilized in the related hematologic malignancies. Key concepts to keep in mind when managing patients treated with CAR T-cell therapy include:

- CAR T-cell therapies have revolutionized the treatment of relapsed & refractory hematologic malignancies, offering in some instances a curative potential, including in situations where this was rarely achievable with conventional therapy approaches.<sup>1-3</sup>
- Complexities surrounding CAR T cell therapies have created challenges with integration across all oncology practices and treatment centers, requiring improved communication and coordination.<sup>4-6</sup>
- Challenges with logistics and manufacturing delays (2.5 to 4 weeks) can result in patients requiring bridging chemotherapy to control a patient's disease until the CAR T-cell product is available for administration.
- Early referral, collaboration, and communication between the care teams at the referring and treatment centers are vital to improve patient outcomes.<sup>7,8</sup>
- Treatment-related toxicity is an important consideration when selecting therapy.<sup>7</sup>
- Secondary T-cell malignancies derived from CAR T-cell product (CAR transgene) are a real phenomenon, but incidence is extremely low.<sup>3,9,10</sup>
- Shared decision making, effective communication, dedicated time, and trust building between clinician/healthcare team and patients/caregivers will allow for enhanced patient selection and optimized care for patients being evaluated for CAR T-cell therapy.<sup>5,6</sup>

### INTERPROFESSIONAL COLLABORATION: PRINCIPLES

For the evolution in treatment to be of optimal benefit to patients, comprehensive strategies for choosing, delivering, monitoring, and modifying therapy have become especially important. As a consequence, care is typically provided by an interprofessional, multidisciplinary care team that extends beyond physicians to include nurses, nurse practitioners, pharmacists, physician associates, social workers, and others, often involving collaboration between providers in community and academic settings.

To that end, the following reflects a conversation among 3 healthcare professionals about interprofessional care and how collaborative practices and teams can strengthen our health systems.

**Christopher Flores, MD:** In medical school, I was taught that the patient-doctor relationship was the most critical and important dynamic in healthcare. But after 30-plus years in clinical care, I can attest that healthcare is a team sport and we deliver care in teams of individuals with different training, different skills, different talents. And we teach each other, we learn from each other, we brainstorm and solve problems to meet the needs of the patient.

I want to make a point that interprofessional refers to clinicians in different professions, such as nurses, nurse practitioners, pharmacists, physicians, and physician associates. Multidisciplinary refers to clinicians in different specialties or sub-specialties, such as cardiology, dermatology, and oncology. LaTosha, do you want to talk about interprofessional collaboration?

**LaTosha Mollette, DNP:** The World Health Organization defines interprofessional collaboration as when multiple healthcare workers from various backgrounds work together with patients, families, and communities to provide the best healthcare possible.<sup>11</sup> This is exactly what teamwork should look like, but it is important to remember that healthcare teams can vary from patient to patient.

I work in a rural setting, working together with various healthcare professionals to improve access to needed healthcare services, which helps to prevent unnecessary delays in care and treatment. Ultimately, working together as a team helps to meet the needs of others to improve health outcomes, patient care, and safety.



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**Christopher Flores, MD:** I think all of us in healthcare are trying to figure out how to do things better, make life easier for ourselves, and make everybody happier, patients, our staff, and ourselves, to make things more sustainable. Interprofessional collaboration can accomplish this. There's a growing body of literature that shows that interprofessional collaboration can improve patient outcomes, acceptance of treatment, and satisfaction.<sup>12-15</sup> It can decrease costs, improve efficiency, reduce disparities, improve health equity, and make things more sustainable for providers.<sup>12,16-23</sup>

The Interprofessional Education Collaborative has identified 4 behavioral competencies for effective interprofessional collaboration: 1) roles and responsibilities; 2) values and ethics; 3) communication; and 4) teams and teamwork.<sup>24</sup> Michael, do you want to talk a little bit about the roles and responsibilities?

**Michael Smith, PharmD:** Certainly, it's one of these things that we don't often think about, but it's important for 2 reasons. One, understanding our own responsibility and roles that we have within our team and what our teammates can expect from us in terms of what we can deliver to them and deliver to patients.<sup>24</sup> The other is understanding what your team can do for you as well, so that you understand their educational background and you can help them practice at the top of their license by utilizing their skillset to the fullest extent.

It is increasingly common for clinicians, even those within a profession, to take different educational and practice paths leading to clinical practice. As an example, there are various differences in training a pharmacist. Nowadays, all pharmacists graduate with a Doctor of Pharmacy degree (PharmD), but some of us have done 1 or 2 years of residency training or postdoc fellowships. So, getting to know your teammates and what you can expect from them and what they can expect from you can really help your team function at a high level.

**Christopher Flores, MD:** We talk about values and ethics as well.<sup>24</sup> In medicine, we're constantly required to make very difficult and complicated treatment decisions for our patients. We really are missing a great opportunity if we don't involve the opinions of all the members of our team. What does the nurse think about this plan or what does the social worker who has talked to the family members think about this plan? Or what does the physical therapist think, who has

been working with the patient for the last 3 days? LaTosha, what do you think about communication?

**LaTosha Mollette, DNP:** Communication is essential in everything we do, and it's how we're able to effectively achieve goals, as well as improve relationships and interactions with others.<sup>24</sup> The healthcare system is often described as being fragmented with little communication and collaboration, but when healthcare professionals communicate responsibly and respectfully, this allows them to overcome differences and work together to accomplish a shared goal, including learning from each other, to better improve patient outcomes and safety.<sup>17,25-27</sup>

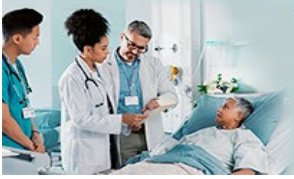
**Christopher Flores, MD:** We're talking a lot about teams and teamwork. Michael, do you have any other points you want to make about teamwork?

**Michael Smith, PharmD:** Most of us are members of various teams during the course of a typical day. Think about the team members that you work with to take care of patients, but also think about a team from a networking standpoint. Do you have a network of like colleagues? As an example, other pharmacists in our healthcare system may reach out to me for advice about a patient with pain, whether or not I'm actually seeing the patient. We can make our team small, we can make them big, but we should be making our teams in ways that everybody's functioning at a high level and putting the patient at the center of the team.

**Christopher Flores, MD:** Michael, LaTosha talked about the fragmented healthcare system and how interprofessional collaboration can help with that. Do you have any examples from your experience?

**Michael Smith, PharmD:** Think about the patient's experience through our healthcare system. Even if a patient receives all of their healthcare within 1 system, they often have to travel to many different places just to access care. From a primary care clinic to a hospital, to a specialty clinic, to a pharmacy. We can fill these gaps by using our interprofessional framework, our education, and allowing our collaborative practice teammates to step in and fill that.

**Christopher Flores, MD:** In conclusion, I just want to summarize that medicine is a team sport and that there is a growing body of evidence that supports the various benefits of interprofessional collaboration. LaTosha, Michael, do you have any final thoughts?



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**LaTosha Mollette, DNP:** I think just being willing to change is crucial. I think sometimes we have become complacent in clinical practice, but our healthcare system is ever evolving. So, learning how to be a team player always benefits everyone involved.

**Michael Smith, PharmD:** I've learned a great deal from my interprofessional colleagues, and I hope that I've helped them learn as well, with the ultimate goal of really improving patient care.

### INTERPROFESSIONAL CARE OF PATIENTS TREATED WITH CAR T-CELL THERAPY

It is vital for community oncology practices to adopt early referrals for patients for CAR T evaluation and eligibility considerations<sup>6</sup> since early initiation of CAR T therapy is one of the most important ways to improve patient safety and efficacy outcomes.<sup>8,28</sup> Community oncologists can evaluate and screen patients for various comorbidities, but patient eligibility for CAR T therapy is best left to the authorized CAR T treatment center (ATC), especially if patients meet FDA label criteria for a CAR T product.<sup>29,30</sup> Practices should identify a contact person or team to manage collaboration and communication between the referring and treating centers.<sup>5,8</sup> This is especially important because of the need for ongoing monitoring, particularly for timely identification and mitigation of adverse events such as cytokine release

syndrome (CRS), immune effector cell-associated neurotoxicity syndrome (ICANS), and infection, as well as the ongoing support needed by patients treated with CAR T-cell therapy and their caregivers.<sup>4</sup> Once the patient has completed the necessary waiting period following CAR T-cell infusion and is ready to return home, a clear and direct handoff of the patient from the ATC back to the community oncologist for follow-up care is important.<sup>31</sup> Recommendations for transitioning care back to the community oncology setting were recently provided by an interprofessional care team at Moffitt Cancer Center (Figure).<sup>5</sup>

A recent study found that oncologists positively framed their discussions about CAR T-cell therapy with patients/caregivers.<sup>32</sup> Patients were well informed about the possibility of cure or prolonged disease control and risk mitigation, but less informed about treatment failure, treatment toxicities, and how best to prepare for relapse or life-threatening complications. Utilization of tools and resources and providing resources to patients and caregivers can help community oncologists communicate effectively with patients and address these gaps surrounding CAR T-cell therapy.



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**Figure.** Educational considerations for the multidisciplinary care team and patients and caregivers: Transition of care

Multidisciplinary care team (ATC physician, APs, nurse coordinators, referring physician)	Patients and caregivers
<p><i>Transferring care</i></p> <ul style="list-style-type: none"> <li>• When transferring care, it can be helpful for the <b>nurse coordinators</b> and <b>APs</b> to provide the following information to the <b>referring physician</b> <ul style="list-style-type: none"> <li>○ A copy of the patient wallet card</li> <li>○ A copy of the CAR T-cell therapy prescribing information and medication guide</li> <li>○ An accurate medication list</li> <li>○ Hospital records (e.g., pre-CAR T-cell therapy with workup results, notes made during inpatient CAR T-cell therapy, restaging results if performed at days 28-30, notes from the last ambulatory visit, educational handouts on CRS and neurologic events)</li> <li>○ Recommendations for which laboratory values should be monitored and the timing of such</li> </ul> </li> </ul>	<p><i>Knowledge</i></p> <ul style="list-style-type: none"> <li>• The <b>patient</b> needs to understand that they will be followed over time by their primary oncologist more often and by the ATC less often</li> </ul>
<p><i>Communication</i></p> <ul style="list-style-type: none"> <li>• Ongoing close communication with the <b>referring physician</b> is essential for a smooth transition of care</li> <li>• <b>APs</b> and <b>nurse coordinators</b> should educate the <b>referring physician's team</b> about the toxicities associated with CAR T-cell therapy, steroid use, and long-term effects of treatment (i.e., B-cell aplasia and hypogammaglobulinemia)</li> <li>• A point of contact should be provided to the <b>referring physician</b> (explain when and how to contact the oncologist who treated the patient with CAR T-cell therapy)</li> </ul>	

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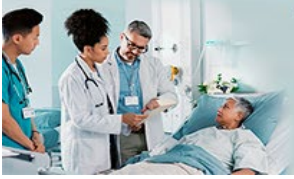
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