Creating a Partnership Between Academia and Community Practices in Delivering Cellular Therapies for Hematologic Malignancies

Muthu Veera Kumaran, MD
Associate Professor
Hematology and Stem cell Transplant Program Director
University of Arkansas for Medical Sciences
Little Rock, AR

Shortage of Oncologists

- ASCO predicts a shortage of 2393 oncologists by 2025
- 13365 Oncologists in US as of 2022
- 20% more oncologists needed for cancer care services
- 1 in 6 Americans lives in rural area
- 66% of rural counties have no oncologist
- Difficult for community oncologist to see more patients and keep up to date with latest advancements

Growing gap in cancer expertise

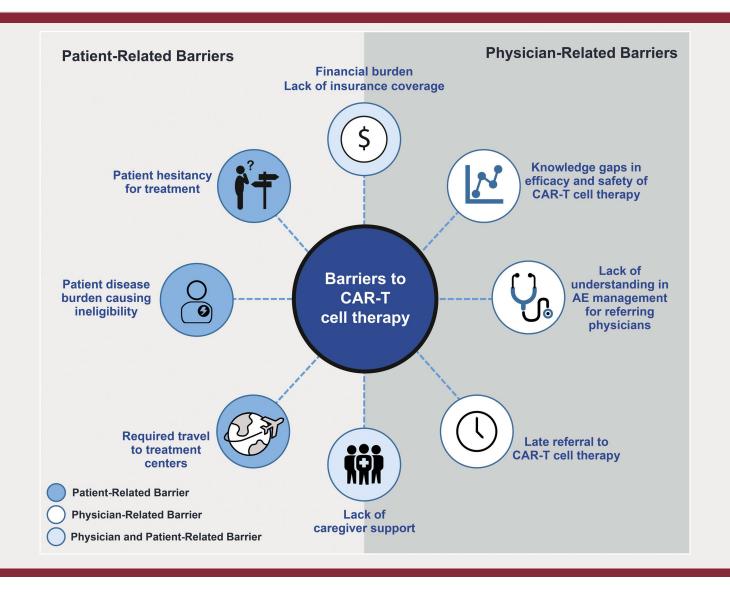
• 85% of oncology patients are in rural areas

• 40-50% of eligible patients receive CAR-T therapy

Main reason is physician non-referral

Poor KPS and patient declining CAR-T therapy

Potential barriers to CAR-T treatment access



 Some patients are too old for CAR T cell therapy or autologous stem cell transplant.

Older age does not exclude patients for CAR T cell therapy or autologous stem cell transplant. There are abundant studies showing that patients over the age of 70 have similar outcomes to younger patients with these therapies.

 My patient has a lot of health issues, CAR T cell therapy too aggressive for them.

Studies show that patient comorbidities do not strongly affect outcomes after CAR T cell therapy. We have safely treated patients with heart, lung, or kidney problems, as well as with chronic infections and other issues.

• Patients may have long term cognitive or other health issues after CAR T cell therapy or autologous stem cell transplant.

In studies of both objective and subjective outcomes, almost all patients recover physical and cognitive function within months after these therapies. In truth, patients feel worse when they have uncontrolled cancer, and if the therapy provides durable disease control, patients often feel much better after treatment.

 My patient will be in the hospital for a month for CAR T cell therapy or autologous stem cell transplant and it will it take them a long time to recover.

Patients are spending much less time in hospital than in the past. Some patients can have their CAR T cell therapy or autologous stem cell transplant entirely as outpatients, or with only a brief admission. However, some patients do require longer hospitalizations, and the provider and team will guide patients on their expected stay and recovery that is unique to their situation. In terms of recovery, most patients feel close to their pre-admission energy levels and personal functioning by 6-8 weeks after therapy.

Communication is the Key

- Patient's fear- Lose their primary oncologist
- Also need to travel away from home to receive treatment
- Community oncologist fear of losing patients -Academia is considered a "Black Hole"
- Periodic phone conversations during initial referral, and options for bridging therapy
- Phone conversation at the time of hand –off (day 30) for cytopenia, IV fluids, labs, Imaging needs and infection risks

Recommendations for effective partnership between community oncologists and academic treatment centers to enhance patient journey during CAR-T therapy

First relapse

Leukapheresis

Bridging therapy



Infusion

Return to the community





- Early interaction with the community oncologist is key to getting patients into CAR-T cell therapy at the appropriate time
- Educate community oncologists on eligibility criteria for CAR-T cell therapy to help obtain early referrals and quicker treatment
- Provide community oncologists with a direct line of communication (via personal cell phone) with treatment center physicians to facilitate timely referral

- Early, direct communication between the community oncologist and the leukapheresis center is key to optimizing the manufacturing process
- Prior to leukapheresis, educate community oncologists about the negative effects bendamustine and other therapies can have on T-cell fitness
- Leukapheresis material can be collected and cryopreserved, which may be optimal for some patients. Keep community oncologists apprised throughout the leukapheresis process to facilitate collaboration

- Educate community oncologists about appropriate bridging therapy options to maintain disease control and ensure CAR-T cell therapy eligibility
- Keep the community oncologist apprised of the infusion process and the state of the patient following infusion
- Monitor patients for the first 7 days after infusion for possibility of adverse events
- Instruct patients to remain within proximity of certified healthcare facility for at least 4 weeks

- Clear, direct handoff of the patient back to the community oncologist for follow-up care is important
- Perform imaging following infusion to identify early relapses; educate the community oncologist on signs to monitor. Real world follow-up protocol for imaging is evolving and based on the remission status of the patient
- Long-term follow-up care is essential for management of cytopenias and B-cell aplasia, and to monitor for rare late relapses
- Community oncologists should monitor the patient for long-term immune reconstitution

ACCESS Initiative by ASTCT and NMDP

To address these recurring themes of access barriers and disparate outcomes associated with patient race and lower SES in the HCT/CT ecosystem

Summary of Initial Committee Projects

Awareness Committee

- · Create case-based educational toolkits for community physicians
- Perform gap analysis for new standards of care in popular reference resources and guidelines (eg, UpToDate and National Comprehensive Cancer Network)
- Partner with disease-specific groups and health-focused community organizations

Poverty Committee

- Form a task force to identify available psychosocial and financial resources for patients and caregivers
- · Form physician-led, state-specific advocacy "swat" teams
- Create request for proposals to identify barriers to HCT/CT for private and public health insurance

Racial/Ethnic Inequity Committee

- Create a health equity dashboard at piloted HCT/CT centers
- Educate HCT/CT providers about individual, structural, and systemic barriers for Indigenous, African, Asian, and Latino diasporic populations

Alliance members of an Academic center

- Faculty physically travels to Alliance sites to teach about various topics such as Stem cell transplant and CAR-T therapies
- Invited to participate in weekly, disease specific tumor boards and discuss challenging cases with expert opinion
- Also help in transitioning patient care and establish continuity of care

Greater collaboration can optimize cancer care

• Subspecialists can help run expert case reviews or Discussions with inperson or Virtual platforms

 Promote clinical trials: Subspecialist can keep community oncologists aware of clinical trials that are open and enrolling

 Genetic testing to improve cancer care- make them personalized and evidence-based treatments

Sharing resources

- Protocols for CRS, ICANS management, ID prophylaxis could be shared between academic and community oncologists
- Periodic phone conversations between Academia and community oncologists
- Communications can be also improved at coordinator and nursing level between the Academia and community oncology practice
- Pathology slide sharing, imaging and medical records should be readily requested and processed in a timely manner

'Shared Ownership' Model

- Personal cell phone of the CAR-T Champion at academic institution
- Consider administration of the drug either at your place or the first 1-2 cycles at the certified treatment center
- Periodic reassessment with collaborating center to look for late/ atypical complications
- Patient is able to get quality care close to home and avoid long travel

Key Mantras

- Where there is a will there is a way- Believe in the efficacy of CAR-T therapies
- Patient-centered care: It takes two to tango Collaboration
- Patient safety and satisfaction are a top priorities!!
- "Of all the forms of inequality, injustice in health care is the most shocking and inhumane." Martin Luther King, Jr