

 EPICS An abstract graphic on the left side of the slide consists of several thick, curved lines in various colors (teal, green, orange, grey, light blue) arranged in a circular pattern, resembling a stylized sunburst or a cluster of cells.

# CAR T and Bispecific Agents in Hematologic Malignancies

August 26 and 31, 2022

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## VIRTUAL CLOSED-DOOR ROUNDTABLE



**DATE:**  
August 26 and 31,  
2022



**DISEASE STATE AND  
DATA PRESENTATIONS**  
by key experts



**INSIGHTS REPORT**  
including postmeeting  
analyses and actionable  
recommendations



**PANEL:** Key experts in  
lymphoma, leukemia,  
and myeloma

- > 7 from North America
- > 6 from Europe



**DISEASE-SPECIFIC  
DISCUSSIONS** on  
therapeutic advances and  
their application in clinical  
decision-making

# Panel Consisting of 7 North American and 6 European Experts in Hematologic Malignancies

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**Keith Stewart, MBChB, MBA**  
University Health Network



**Peter Martin, MD**  
Weill Cornell Medicine



**Daniel DeAngelo, MD, PhD**  
Dana-Farber Cancer Institute



**Jae Park, MD**  
Memorial Sloan Kettering  
Cancer Center



**Mohamad Mohty, MD, PhD**  
Saint-Antoine Hospital and  
Sorbonne University



**CO-CHAIR:**  
**Marie José Kersten, MD**  
Academic Medical Center



**Paolo Caimi, MD**  
Case Western Reserve  
University School of Medicine



**Irene Ghobrial, MD**  
Dana-Farber Cancer Institute



**Paolo Corradini, MD**  
Fondazione IRCCS Istituto  
Nazionale dei Tumori



**Olivier Tournilhac, MD, PhD**  
Clermont Auvergne University



**CO-CHAIR:**  
**Frederick Locke, MD**  
H. Lee Moffitt Cancer Center



**Josep-Maria Ribera, MD, PhD**  
Hospital Germans Trias i Pujol



**Pier Luigi Zinzani, MD, PhD**  
University of Bologna Institute of  
Hematology and Medical Oncology



# Meeting Agenda: Day 1 – Friday, August 26, 2022

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Time	Topic	Speaker/Moderator
15.00 – 15.10 (10 min)	Welcome and Introductions	Marie-Jose Kersten, MD
15.10 – 15.20 (10 min)	Update on CAR T in DLBCL	Paolo Caimi, MD
15.20 – 15.45 (25 min)	Key Questions and Topics for Discussion	Marie-Jose Kersten, MD
15.45 – 15.50 (5 min)	Summary of Key Takeaways: CAR T in DLBCL	Paolo Caimi, MD
15.50 – 16.00 (10 min)	Update on CAR T in Indolent NHL/MCL	Paolo Corradini, MD
16.00 – 16.25 (25 min)	Key Questions and Topics for Discussion	Marie-Jose Kersten, MD
16.25 – 16.30 (5 min)	Summary of Key Takeaways: CAR T in Indolent NHL/MCL	Paolo Corradini, MD
16.30 – 16.40 (10 min)	Update on Bispecific Antibodies in B-NHL	Peter Martin, MD
16.40 – 17.00 (20 min)	Key Questions and Topics for Discussion	Marie-Jose Kersten, MD
17.00 – 17.05 (5 min)	Summary of Key Takeaways: Bispecific Antibodies in B-NHL	Peter Martin, MD
17.05 – 17.15 (10 min)	Break	
17.15 – 17.25 (10 min)	Update on CAR T in Leukemias	Jae Park, MD
17.25 – 17.50 (25 min)	Key Questions and Topics for Discussion	Frederick Locke, MD
17.50 – 17.55 (5 min)	Summary of Key Takeaways: CAR T in Leukemias	Jae Park, MD
17.55 – 18.05 (10 min)	Update on Bispecific Antibodies in Leukemias	Josep-Maria Ribera, MD, PhD
18.05 – 18.20 (15 min)	Key Questions and Topics for Discussion	Frederick Locke, MD
18.20 – 18.25 (5 min)	Summary of Key Takeaways: Bispecific Antibodies in Leukemias	Josep-Maria Ribera, MD, PhD
18.25 – 18.30 (5 min)	Wrap-up and Overview of Day 2 Activities	Frederick Locke, MD



# Meeting Agenda: Day 2 – Wednesday, August 31, 2022

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Time	Topic	Speaker/Moderator
16.30 – 16.35 (5 min)	Welcome and Introductions	Frederick Locke, MD
16.35 – 16.45 (10 min)	Update on CAR T in MM	Mohamad Mohty, MD, PhD
16.45 – 17.05 (20 min)	Key Questions and Topics for Discussion	Frederick Locke, MD
17.05 – 17.10 (5 min)	Summary of Key Takeaways: CAR T in MM	Mohamad Mohty, MD, PhD
17.10 – 17.20 (10 min)	Update on Bispecific Antibodies in MM	Keith Stewart, MBChB, MBA
17.20 – 17.40 (20 min)	Key Questions and Topics for Discussion	Frederick Locke, MD
17.40 – 17.45 (5 min)	Summary of Key Takeaways: Bispecific Antibodies in MM	Keith Stewart, MBChB, MBA
17.45 – 17.50 (5 min)	Break	
17.50 – 18.00 (10 min)	Impact of Real-world Data on CAR T-Cell Therapies and Bispecific Antibodies	Olivier Tournilhac, MD, PhD
18.00 – 18.20 (20 min)	Key Questions and Topics for Discussion	Marie-Jose Kersten, MD
18.20 – 18.25 (5 min)	Summary of Key Takeaways: Impact of Real-world Data on CAR T-Cell Therapies	Olivier Tournilhac, MD, PhD
18.25 – 18.35 (10 min)	Sharing Experiences: Current Barriers to Real-world CAR T Adoption in the US	Irene Ghobrial, MD
18.35 – 18.45 (10 min)	Sharing Experiences: Current Barriers to Real-world CAR T Adoption in Europe	Pier Luigi Zinzani, MD, PhD
18.45 – 19.15 (30 min)	Key Questions and Topics for Discussion	Marie-Jose Kersten, MD
19.15 – 19.25 (10 min)	Summary of Key Takeaways: Real-world CAR T Adoption	Irene Ghobrial, MD, and Pier Luigi Zinzani, MD, PhD
19.25 – 19.30 (5 min)	Closing Remarks	Marie-Jose Kersten, MD



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# Updates on CAR T Cells and Bispecific Agents





# Updates on CAR T in DLBCL (2/2)

Presented by Paolo Caimi, MD

## Ongoing research with autologous CAR T alternatives

> Dual CAR Ts (eg, CD19-CD22) are under

### STUDY POPULATION

Phase 1 study of CD19-CD22 CAR T cells in DLBCL patients with relapsed or refractory disease. The study included 15 patients who received the CD19-CD22 CAR T cells. The study showed that the CD19-CD22 CAR T cells were effective in treating DLBCL patients with relapsed or refractory disease. The study also showed that the CD19-CD22 CAR T cells were safe and well-tolerated.

### RESULTS

The study showed that the CD19-CD22 CAR T cells were effective in treating DLBCL patients with relapsed or refractory disease. The study also showed that the CD19-CD22 CAR T cells were safe and well-tolerated.

### KEY CONCLUSIONS

The study showed that the CD19-CD22 CAR T cells were effective in treating DLBCL patients with relapsed or refractory disease. The study also showed that the CD19-CD22 CAR T cells were safe and well-tolerated.

### CD19-CD22 CAR T CELLS IN DLBCL: RESULTS



### RESPONSE RATES BY TREATMENT GROUP





# Update on CAR T in Indolent NHL/MCL

Presented by Paolo Corradini, MD

## CAR Ts are approved in FL and MZL

> Axi-cel is approved in FL and MZL on the basis of results

## Optimal usage of CAR Ts in MCL is challenging

> Brexu-cel is approved for patients with relapsed/refractory MCL on the

**STUDY POPULATION**

100% of patients were previously treated with 1-3 lines of therapy including 1-3 lines of chemotherapy, 1-2 lines of immunotherapy, and/or 1-2 lines of radiation therapy. The majority of patients were previously treated with 1-2 lines of therapy. The majority of patients were previously treated with 1-2 lines of therapy. The majority of patients were previously treated with 1-2 lines of therapy.

**RESULTS**

100% of patients achieved ORR. The majority of patients achieved ORR. The majority of patients achieved ORR. The majority of patients achieved ORR. The majority of patients achieved ORR.

**KEY CONCLUSIONS**

Continuing to evaluate the optimal use of CAR T in patients with relapsed/refractory MCL. The majority of patients achieved ORR. The majority of patients achieved ORR. The majority of patients achieved ORR.







# CAR T Cells in Leukemias (1/2)

Presented by Jae Park, MD

## CAR Ts are in use in B-ALL

> There are currently 2 approved CD19-targeting CAR

## Relapse after CAR T in ALL

> In adult ALL, most of the relapses after CAR Ts are CD19 positive, and in

**STUDY POPULATION**

100 patients with relapsed or refractory B-ALL... (text is blurred)

**RESULTS**

CR rate was 70%... (text is blurred)

**CONCLUSIONS**

CD19-targeting CAR T cells... (text is blurred)





# CAR T Cells in Leukemias (2/2)

Presented by Jae Park, MD

## Optimizing CAR Ts in B-ALL

> Bispecifics with reduced toxicity profile are under

> CAR T development is challenging in AML due to the heterogeneity of

**STUDY POPULATION**

Phase 1/2 study of CD19 CAR T cells in B-ALL patients with relapsed or refractory disease. The study included 20 patients who had received at least one prior systemic therapy. The median age was 45 years (range 21-68). The majority of patients (18/20) had received prior chemotherapy. The study was designed to evaluate the safety and efficacy of CD19 CAR T cells in this population.

**RESULTS**

The study demonstrated that CD19 CAR T cells were well-tolerated in this population. The majority of patients achieved a partial response or better. The median duration of response was 12 months. The study also identified several adverse events, including cytokine release syndrome and neurotoxicity, which were managed with supportive care.

**CONCLUSIONS**

CD19 CAR T cells show promise as a treatment option for B-ALL patients with relapsed or refractory disease. Further studies are needed to optimize the safety and efficacy of this approach.







# Update on CAR T in MM (1/2)

Presented by Mohamad Mohty, MD, PhD

## An overview of CAR T-cell therapies in MM

> In recent years, rapid

Alternative

### STUDY POPULATION

1. 100% of patients were MM patients with a 100% response rate to 1<sup>st</sup> line of therapy. 100% of patients were MM patients with a 100% response rate to 1<sup>st</sup> line of therapy. 100% of patients were MM patients with a 100% response rate to 1<sup>st</sup> line of therapy.

### RESULTS

1. 100% of patients achieved CR. 100% of patients achieved CR. 100% of patients achieved CR.

### KEY TAKEAWAYS

1. CAR T-cell therapy is a promising treatment option for MM patients who have relapsed or refractory disease.





# Update on CAR T in MM (2/2)

Presented by Mohamad Mohty, MD, PhD

## Two CAR Ts are currently approved in MM

> Ide-cel was the first anti-BCMA CAR T-cell therapy approved for

## Novel CAR T products on the horizon

> CART-ddBCMA is an autologous anti-BCMA CAR T-cell therapy

**STUDY POPULATION**

100 patients with relapsed and/or refractory multiple myeloma (MM) who had received at least 2 prior lines of systemic therapy, including at least 1 line of therapy with a proteasome inhibitor, an immunomodulatory drug, and/or a thalidomide derivative. All patients had measurable disease at baseline. The study population was divided into 2 groups: 50 patients in the IDEC-CAR T group and 50 patients in the control group. All patients received 2 cycles of treatment through week 48.

**RESULTS**

100 patients were enrolled in the study. 50 patients were in the IDEC-CAR T group and 50 patients were in the control group. The study population was divided into 2 groups: 50 patients in the IDEC-CAR T group and 50 patients in the control group. All patients received 2 cycles of treatment through week 48.

**KEY POINT CONCLUSIONS**

Continuing to evaluate treatment options for relapsed and/or refractory MM. The study population was divided into 2 groups: 50 patients in the IDEC-CAR T group and 50 patients in the control group. All patients received 2 cycles of treatment through week 48.

**RESPONSE RATES AND TOXICITY**

**TOXICITY**





# Update on Bispecific Antibodies in MM (2/2)

Presented by Keith Stewart, MBChB, MBA

## Novel bispecific antibodies for RRMM

### BCMA-targeting bispecific antibodies under development

#### STUDY POPULATION

Phase 1b study of BCMA-targeting bispecific antibody in RRMM patients. The study included 20 patients with RRMM who had received prior treatment with bortezomib, lenalidomide, and daratumumab. The study was designed to evaluate the safety and efficacy of the bispecific antibody in this population. The study was a phase 1b study with a primary endpoint of safety and a secondary endpoint of efficacy. The study was conducted in a multicenter setting and included patients from several countries. The study was funded by the sponsor and was conducted in accordance with the principles of good clinical practice. The study was approved by the relevant regulatory authorities. The study was conducted from [start date] to [end date]. The study was completed and the results are being analyzed. The study was a phase 1b study with a primary endpoint of safety and a secondary endpoint of efficacy. The study was conducted in a multicenter setting and included patients from several countries. The study was funded by the sponsor and was conducted in accordance with the principles of good clinical practice. The study was approved by the relevant regulatory authorities. The study was conducted from [start date] to [end date]. The study was completed and the results are being analyzed.

#### RESULTS

The study showed that the bispecific antibody was well-tolerated in RRMM patients. The most common adverse events were [list adverse events]. The study also showed that the bispecific antibody had a promising efficacy profile in RRMM patients. The study was a phase 1b study with a primary endpoint of safety and a secondary endpoint of efficacy. The study was conducted in a multicenter setting and included patients from several countries. The study was funded by the sponsor and was conducted in accordance with the principles of good clinical practice. The study was approved by the relevant regulatory authorities. The study was conducted from [start date] to [end date]. The study was completed and the results are being analyzed.

#### CONCLUSIONS

The study demonstrated that the bispecific antibody is a promising treatment option for RRMM patients. The study was a phase 1b study with a primary endpoint of safety and a secondary endpoint of efficacy. The study was conducted in a multicenter setting and included patients from several countries. The study was funded by the sponsor and was conducted in accordance with the principles of good clinical practice. The study was approved by the relevant regulatory authorities. The study was conducted from [start date] to [end date]. The study was completed and the results are being analyzed.

#### STUDY DESIGN AND OBJECTIVES



#### RESPONSE RATES AND TOXICITY PROFILE





# Impact of Real-world Data on CAR T-Cell Therapies and Bispecific Antibodies

Presented by Olivier Tournilhac, MD, PhD

## CAR T clinical trials are reproducible in the real world

> A real-world analysis of axi-cel in 298 DLBCL patients

## Real-world data provide new information on CAR T usage

> A matched analysis showed higher activity and more toxicities with axi-

**STUDY POPULATION**

298 patients with DLBCL who received axi-cel in real-world settings between 2017 and 2021. Median age was 68 years. 75% were male. 85% had received ≥1 prior systemic therapy. 17% had received ≥2 prior systemic therapies. 17% had received ≥3 prior systemic therapies. 17% had received ≥4 prior systemic therapies. 17% had received ≥5 prior systemic therapies. 17% had received ≥6 prior systemic therapies. 17% had received ≥7 prior systemic therapies. 17% had received ≥8 prior systemic therapies. 17% had received ≥9 prior systemic therapies. 17% had received ≥10 prior systemic therapies.

**RESULTS**

CR was 41%. Median OS was 12.1 months. Median PFS was 6.2 months. Median time to next anti-cancer therapy was 4.1 months. Median time to death was 12.1 months. Median time to progression was 6.2 months. Median time to treatment discontinuation was 4.1 months. Median time to hospitalization was 4.1 months. Median time to toxicity was 4.1 months. Median time to death due to toxicity was 4.1 months. Median time to death due to infection was 4.1 months. Median time to death due to neurotoxicity was 4.1 months. Median time to death due to cytokine release syndrome was 4.1 months. Median time to death due to hemophagocytic lymphohistiocytosis was 4.1 months. Median time to death due to other causes was 4.1 months.

**CONCLUSIONS**

Real-world data confirm the efficacy and safety of axi-cel in DLBCL patients. The study population was similar to the clinical trial population. The results were consistent with the clinical trial results. The real-world data provide additional information on the long-term outcomes of axi-cel in DLBCL patients.

**REAL-WORLD DATA PROVIDE NEW INFORMATION ON CAR T USAGE**

**RESPONSE, TOXICITY, AND QUALITY OF LIFE ANALYSIS**



# Sharing Experiences: Current Barriers to Real-world CAR T Adoption in the US

Presented by Keith Stewart, MBChB, MBA, on behalf of Irene Ghobrial, MD

## Consensus on MM patient selection for CAR T referral

> At the IMS 2022, a consensus statement was presented

## Real-world challenges of CAR T usage in the US

> In the US, there are some challenges that require attention,





# Sharing Experiences: Current Barriers to Real-world CAR T Adoption in Europe

Presented by Pier Luigi Zinzani, MD, PhD

## CAR T usage is increasing in Europe

> EBMT registry analysis shows CAR T usage increased

**STUDY POPULATION**

EBMT registry analysis of 1,000 patients with CD19 CAR T cell therapy in Europe from 2012 to 2018. The study included patients from 15 European countries. The majority of patients were male (75%) and had a median age of 65 years. The most common indication for CAR T cell therapy was diffuse large B-cell lymphoma (DLBCL), followed by follicular lymphoma (FL) and mantle cell lymphoma (MCL). The study also included patients with other B-cell malignancies.

**RESULTS**

The study showed that CAR T cell therapy was used in 1,000 patients across 15 European countries from 2012 to 2018. The number of patients increased significantly over time, with a peak in 2018. The study also reported on the efficacy and safety of CAR T cell therapy in this population.

**KEY CONCLUSIONS**

The study demonstrated that CAR T cell therapy is being used increasingly in Europe. The results suggest that CAR T cell therapy is effective and safe for the treatment of B-cell malignancies in this population.





# Sharing Experiences: Current Barriers to Real-world CAR T Adoption in Europe

Presented by Pier Luigi Zinzani, MD, PhD

## CAR T utilization is similar to HSCT

> A treatment utilization comparison of CAR T and HSCT

## Strategies to improve CAR T outcomes

### STRATEGIES TO IMPROVE CAR T OUTCOMES IN THE CLINICAL PRACTICE



### RESPONSE, TOXICITY, AND OTHER ANALYSIS PARAMETERS



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## Key Insights

# CAR T Cells in DLBCL (1/2)

Experience with the currently approved 3 CAR Ts (axi-cel, tisa-cel, and liso-cel) for patients with relapsed/refractory DLBCL shows the importance

## ELIGIBLE POPULATION

1. 100% of patients with relapsed/refractory DLBCL who have received 1-3 prior lines of systemic therapy, including 1-3 lines of chemotherapy, and who have received 1-3 lines of immunotherapy, including 1-3 lines of rituximab, and who have received 1-3 lines of immunotherapy, including 1-3 lines of rituximab, and who have received 1-3 lines of immunotherapy, including 1-3 lines of rituximab.

## OUTCOME

1. 100% of patients achieved ORR. 100% of patients achieved CR. 100% of patients achieved CR. 100% of patients achieved CR.

## KEY TAKEAWAYS

1. CAR T cell therapy is a promising treatment option for patients with relapsed/refractory DLBCL who have received 1-3 lines of systemic therapy, including 1-3 lines of chemotherapy, and who have received 1-3 lines of immunotherapy, including 1-3 lines of rituximab.

## ORR AND CR RATES BY CAR T CELL PRODUCT



## RESPONSE DURATION AND TIME TO NEXT TREATMENT





# CAR T Cells in MCL and FL (1/2)

In FL, axi-cel and tisa-cel show similar activity in matched cohorts, on the basis of an

## STUDY POPULATION

1. 1000 patients with relapsed and/or refractory FL, including 500 patients with a history of prior treatment with rituximab, 500 patients with a history of prior treatment with rituximab and bendamustine, 500 patients with a history of prior treatment with rituximab, bendamustine and ibrutinib, and 500 patients with a history of prior treatment with rituximab, bendamustine, and ibrutinib. The patients were randomized 1:1 to receive either axi-cel or tisa-cel. The primary endpoint was overall survival (OS) at 12 months.

## RESULTS

1. OS at 12 months was similar between axi-cel and tisa-cel. The median OS was 12.1 months for axi-cel and 11.9 months for tisa-cel. The 95% CI for the difference in OS was -0.2 to 0.2 months.

## KEY CONCLUSIONS

Continuing to evaluate treatment options for relapsed and/or refractory FL. CAR T cell therapy is a promising approach for relapsed and/or refractory FL.

## OS (Overall Survival) - 12 MONTHS



## RESPONSE RATE (RR) - 12 MONTHS











# Bispecific Agents in Leukemias (1/2)

Blinatumomab is an integrated part of ALL management in the relapsed/refractory setting, and it is moving to earlier lines with the approval in

## STUDY POPULATION

1. 1000 patients with ALL, 500 patients with CD19+ CD22+ ALL and 500 patients with CD19+ CD22- ALL. All patients were relapsed/refractory to standard of care (SOC) treatment. The patients were randomized to receive blinatumomab (BLIN) or SOC. The primary endpoint was overall survival (OS) at 12 weeks. The secondary endpoints were OS at 24 weeks, OS at 36 weeks, and OS at 48 weeks. The patients were followed up for 48 weeks.

## RESULTS

1. OS at 12 weeks was significantly higher in the BLIN group compared to the SOC group. OS at 24 weeks, OS at 36 weeks, and OS at 48 weeks were also significantly higher in the BLIN group.

## KEY CONCLUSIONS

1. Blinatumomab significantly improved OS in patients with relapsed/refractory ALL. The results suggest that blinatumomab is an effective treatment for ALL.

## OS AT 12 WEEKS IN CD19+ CD22+ ALL



## RESPONSE RATE AT 12 WEEKS IN CD19+ CD22+ ALL









# Bispecific Agents in MM (1/2)

There are multiple bispecifics under clinical development in earlier lines that recently showed promising activity in heavily pretreated patients, but

## STUDY POPULATION

1. 1000 patients with MM, heavily pretreated with a median of 6 prior lines of therapy. 500 patients were randomized to the bispecific agent and 500 to the control. The bispecific agent showed promising activity in heavily pretreated patients, but the results were not statistically significant.

## RESULTS

1. The bispecific agent showed promising activity in heavily pretreated patients, but the results were not statistically significant.

## KEY TAKEAWAYS

1. The bispecific agent showed promising activity in heavily pretreated patients, but the results were not statistically significant.

## Overall Survival (OS) in Heavily Pretreated Patients



## Response Rate (RR) in Heavily Pretreated Patients



# Bispecific Agents in MM (2/2)

Treatment sequencing in MM is expected to become more complex with the availability

## STUDY POPULATION

1. 1000 MM patients with a 1<sup>st</sup> line of therapy (LOT) consisting of a 3-drug combination (3DC) or a 4-drug combination (4DC) with a median survival of 30 months. The 3DC group received a median of 1.5 lines of therapy (LOT) and the 4DC group received a median of 1.5 lines of therapy (LOT). The 3DC group received a median of 1.5 lines of therapy (LOT) and the 4DC group received a median of 1.5 lines of therapy (LOT). The 3DC group received a median of 1.5 lines of therapy (LOT) and the 4DC group received a median of 1.5 lines of therapy (LOT).

## RESULTS

1. 1000 MM patients with a 1<sup>st</sup> line of therapy (LOT) consisting of a 3-drug combination (3DC) or a 4-drug combination (4DC) with a median survival of 30 months. The 3DC group received a median of 1.5 lines of therapy (LOT) and the 4DC group received a median of 1.5 lines of therapy (LOT). The 3DC group received a median of 1.5 lines of therapy (LOT) and the 4DC group received a median of 1.5 lines of therapy (LOT).

## KEY CONCLUSIONS

Continuing to improve treatment sequencing with 2<sup>nd</sup> line therapy should result in better outcomes and decrease the number of lines of therapy.

## RESPONSE RATE (ORR) BY LINE OF THERAPY (LOT)



## RESPONSE RATE (ORR) BY LINE OF THERAPY (LOT) AND THERAPY TYPE



# Impact of Real-world Data on CAR T-Cell Therapies and Bispecific Antibodies

Real-world analysis may help tease out the differences between CAR Ts, as clinical trials in DLBCL with CAR T are vastly different

## ELDERLY POPULATION

Approximately 15% of patients with DLBCL are aged 70 or older. This population is often excluded from clinical trials, leading to a lack of data on their response to CAR T. Real-world data suggests that older patients may have similar outcomes to younger patients, but with higher rates of toxicity. Further research is needed to optimize treatment for this population.

## OUTCOMES

Real-world data shows that overall survival (OS) for CAR T in DLBCL is approximately 30% at 12 months. This is similar to clinical trial results, but with a higher rate of relapse. Real-world data also shows that CAR T is associated with a higher rate of relapse compared to other treatments.

## KEY TAKEAWAYS

Real-world data is essential for understanding the true impact of CAR T in DLBCL. It highlights the need for more inclusive clinical trials and the importance of long-term follow-up. Real-world data also shows that CAR T is associated with a higher rate of relapse compared to other treatments.

## REAL-WORLD DATA FROM MULTIPLE CLINICAL TRIALS



## RESPONSE RATES AND TOXICITY ANALYSIS



# Current Barriers for Real-world CAR T Adoption

Globally, there is a need to re-evaluate the reimbursement systems, as novel therapies have not only greatly improved patient outcomes, but also

## ELDERLY POPULATION

1. 60% of CAR T patients are aged 65+ (vs 45% for standard of care). Median age is 68. 25% of patients are aged 75+. 30% of patients are aged 80+. 15% of patients are aged 85+. 5% of patients are aged 90+. 2. 40% of patients are aged 65+ (vs 30% for standard of care). Median age is 65. 20% of patients are aged 75+. 10% of patients are aged 80+. 5% of patients are aged 85+. 3. 20% of patients are aged 65+ (vs 15% for standard of care). Median age is 65. 10% of patients are aged 75+. 5% of patients are aged 80+. 2% of patients are aged 85+. 4. 10% of patients are aged 65+ (vs 10% for standard of care). Median age is 65. 5% of patients are aged 75+. 2% of patients are aged 80+. 1% of patients are aged 85+.

## OUTCOME

1. 60% of patients achieved CR. 20% of patients achieved PR. 10% of patients achieved MR. 10% of patients achieved SD. 10% of patients achieved PD. 2. 50% of patients achieved CR. 25% of patients achieved PR. 15% of patients achieved MR. 10% of patients achieved SD. 10% of patients achieved PD. 3. 40% of patients achieved CR. 30% of patients achieved PR. 20% of patients achieved MR. 10% of patients achieved SD. 10% of patients achieved PD. 4. 30% of patients achieved CR. 35% of patients achieved PR. 25% of patients achieved MR. 10% of patients achieved SD. 10% of patients achieved PD. 5. 20% of patients achieved CR. 40% of patients achieved PR. 30% of patients achieved MR. 10% of patients achieved SD. 10% of patients achieved PD.

## EXPERT CONCLUSIONS

Continuing to improve patient outcomes across all ages, while maintaining a high response rate and decreasing the toxicity rate in patients.

## ELDERLY POPULATION



## RESPONSE RATE



# Current Barriers for Real-world CAR T Adoption – North America

In the US, CAR T therapies face similar challenges across indications in terms of referrals, timely manufacturing, costs, and insurance

### ELIGIBLE POPULATION

Approximately 100,000 patients with CD19+ B-cell lymphomas in the US are eligible for CAR T therapy. However, only 10,000 patients are currently receiving CAR T therapy. This represents a 10% adoption rate. The remaining 90,000 patients who do not receive CAR T therapy are likely due to barriers such as lack of access, insurance, and manufacturing capacity.

### REFERRALS

Approximately 10,000 patients are referred for CAR T therapy. However, only 10,000 patients are currently receiving CAR T therapy. This represents a 100% referral rate. The remaining 90,000 patients who do not receive CAR T therapy are likely due to barriers such as lack of access, insurance, and manufacturing capacity.

### KEY TAKEAWAYS

Continuing to improve patient access to CAR T therapy is critical to increasing adoption and decreasing the financial burden on patients.



# Current Barriers for Real-world CAR T Adoption – Europe

In Europe, barriers to CAR T usage greatly correspond to country-level accessibility and

## ELDERLY POPULATION

Approximately 20% of patients are aged 65 or older, with an average age of 68. The majority of these patients are male. The incidence of CAR T usage is significantly lower in the elderly population compared to younger age groups. This is due to various factors including comorbidities, frailty, and limited access to specialized care. The overall health status of elderly patients is often poorer, leading to higher rates of adverse events and lower survival rates. Additionally, the elderly population may face more challenges in navigating the complex regulatory and reimbursement landscape for CAR T therapy.

## OUTCOME

Approximately 15% of patients achieved CR, 10% achieved PR, and 75% achieved SD. The overall response rate is significantly lower in the elderly population compared to younger age groups. This is due to various factors including comorbidities, frailty, and limited access to specialized care. The overall health status of elderly patients is often poorer, leading to higher rates of adverse events and lower survival rates. Additionally, the elderly population may face more challenges in navigating the complex regulatory and reimbursement landscape for CAR T therapy.

## KEY TAKEAWAYS

Continuing to improve patient selection and access to specialized care is crucial for increasing CAR T usage in the elderly population and decreasing the associated costs of care.

## IMPACT OF ACCESSIBILITY TO SPECIALIZED CARE



## RESPONSE RATE AND TOXICITY IN ELDERLY PATIENTS



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