

ASH 2021 - Update on Lymphoma Treatments

Lymphoma Support Group of Ottawa

Feb 1, 2022




MacBook Air

ASH 2021 Report - Dr. Carolyn Owen - CARE™ Education

CARE at ASH

Chronic Lymphocytic Leukemia



Dr. Carolyn Owen
MD, MRes(UK), FRCPC
University of Calgary

Alliance longterm f/u + SEQUOIA 1st line

- SEQUOIA study compares BR to zanubrutinib 1st line
- N = 479
- Median age 70
- Median f/u 26 mo
- PFS better for zanu than BR
- No difference in OS

- Alliance study compared BR to ibrutinib (+/- R) 1st line
- N= 547
- Median age 71
- Median f/u 55 mo
- No difference in OS still
- Most benefit of +/- R in patients with TP53 abN - NO DIFFERENCE in those groups from those with TP53 wildtype

Tam ASH 2021 Abstract 396

Woyach ASH 2021 Abstract 639

CARE™ At ASH 2021 - Virtual Conference



- Advances being made across all spectrums
 - Hodgkin and non-Hodgkin lymphomas
 - Indolent and aggressive diseases
 - Frontline and relapsed setting

Profiling of Circulating Tumor DNA for Noninvasive Disease Detection, Risk Stratification, and MRD Monitoring in Patients with CNS Lymphoma

Paper Number: 6

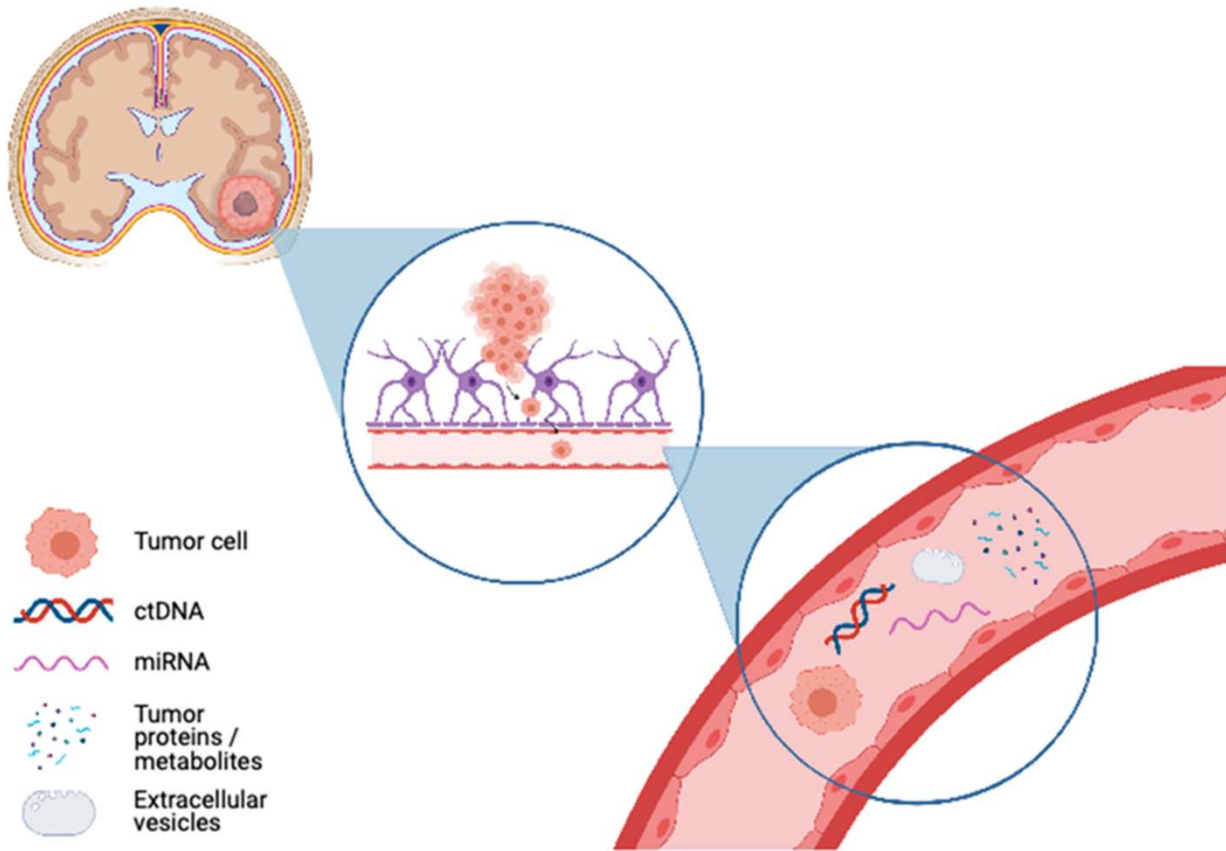
Florian Scherer, MD 

University Medical Center Freiburg

Background

- Primary CNS lymphoma is an aggressive lymphoma which affects mainly the brain
- Relatively rare
- Diagnosis can be challenging and often requires very invasive procedures (eg. brain biopsy)
- Sometimes these biopsies cannot be done or are non-diagnostic

Circulating Tumor DNA



-Tumor-derived fragments of DNA in the bloodstream

-“Liquid biopsies”

Abstract #6

- Used specialized DNA sequencing techniques
- 85 tumor biopsies, 131 blood samples, 62 CSF samples
- 92 patients with CNSL, 44 with other brain cancers or brain diseases
- Looked for hundreds of mutations
- Were able to demonstrate robust and sensitive detection of ctDNA at various milestones in CNSL (diagnosis, remission, relapse etc.)

The POLARIX Study: Polatuzumab Vedotin with Rituximab, Cyclophosphamide, Doxorubicin, and Prednisone (pola-R-CHP) Versus Rituximab, Cyclophosphamide, Doxorubicin, Vincristine and Prednisone (R-CHOP) Therapy in Patients with Previously Untreated Diffuse Large B-Cell Lymphoma

Paper Number: LBA-1

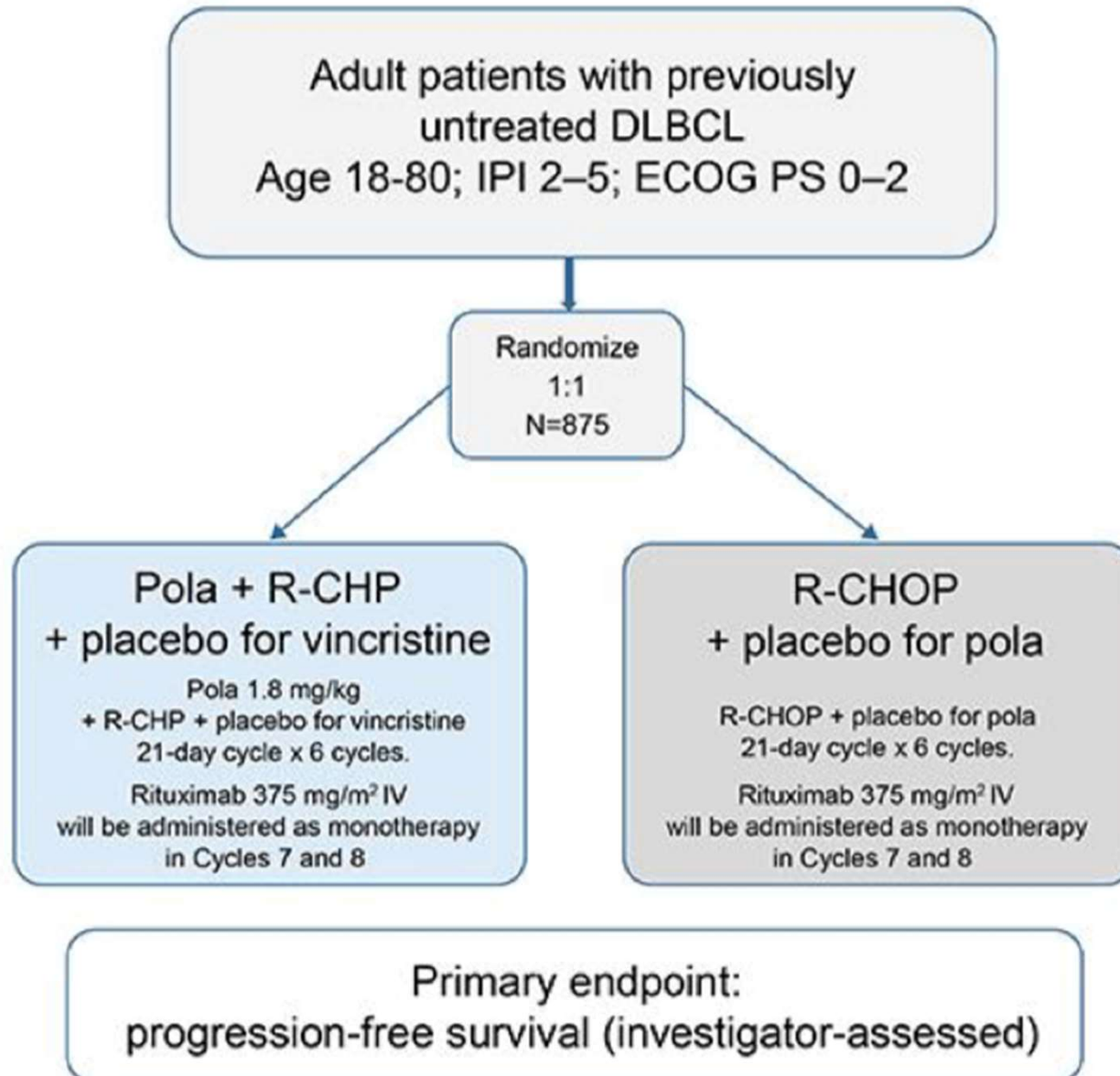
Hervé Tilly, MD 

Department of Hematology and U1245, Centre Henri Becquerel and University of Rouen

Background

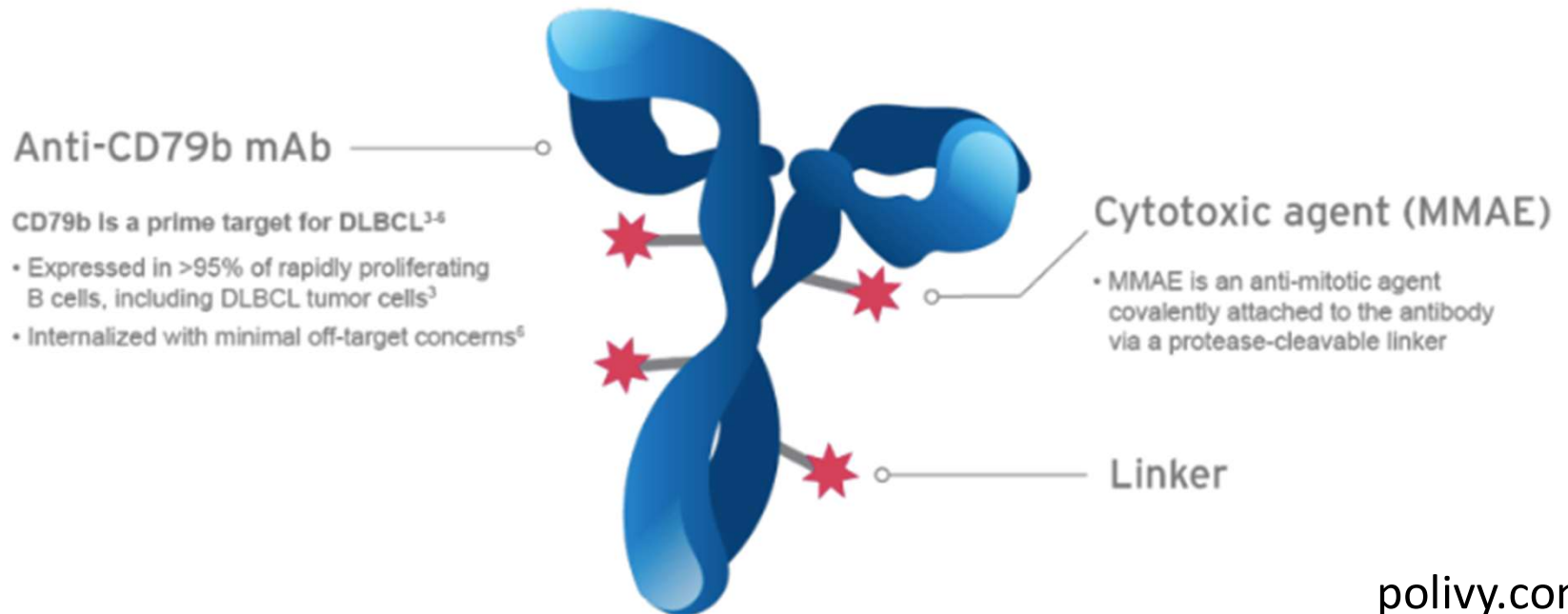
- DLBCL is the most common type of aggressive non-Hodgkin lymphoma
- Again, approximately 60% of patients are cured with front-line therapy
- Standard therapy = R-CHOP chemotherapy
- Have been using this for years
- Many studies have tried to find regimens which would “beat” R-CHOP – none so far

POLARIX



Polatuzumab

POLIVY is composed of the potent cytotoxin monomethyl auristatin E (MMAE) and a CD79b-targeted monoclonal antibody (mAb)^{1,3-6}



polivy.com

- Antibody-drug conjugate (ADC)
- Anti-CD79b monoclonal antibody
- Delivers MMAE into the cancer cell

Polarix

- 2 year PFS 76% with pola-R-CHP, compared to 70% with R-CHOP
- Pola-R-CHP led to a 27% relative risk reduction in disease progression, relapse or death
- ?Cost-effectiveness of this approach

Frontline Treatment with Single Agent Pembrolizumab (PEM) Followed By AVD Chemotherapy for Classic Hodgkin Lymphoma: Updated Results and Correlative Analysis

Paper Number: 231

Pamela Allen, MD 

Winship Cancer Institute at Emory University

Mosunetuzumab Monotherapy Is an Effective and Well-Tolerated Treatment Option for Patients with Relapsed/Refractory (R/R) Follicular Lymphoma (FL) Who Have Received ≥ 2 Prior Lines of Therapy: Pivotal Results from a Phase I/II Study

Paper Number: 127

L. Budde 

City of Hope

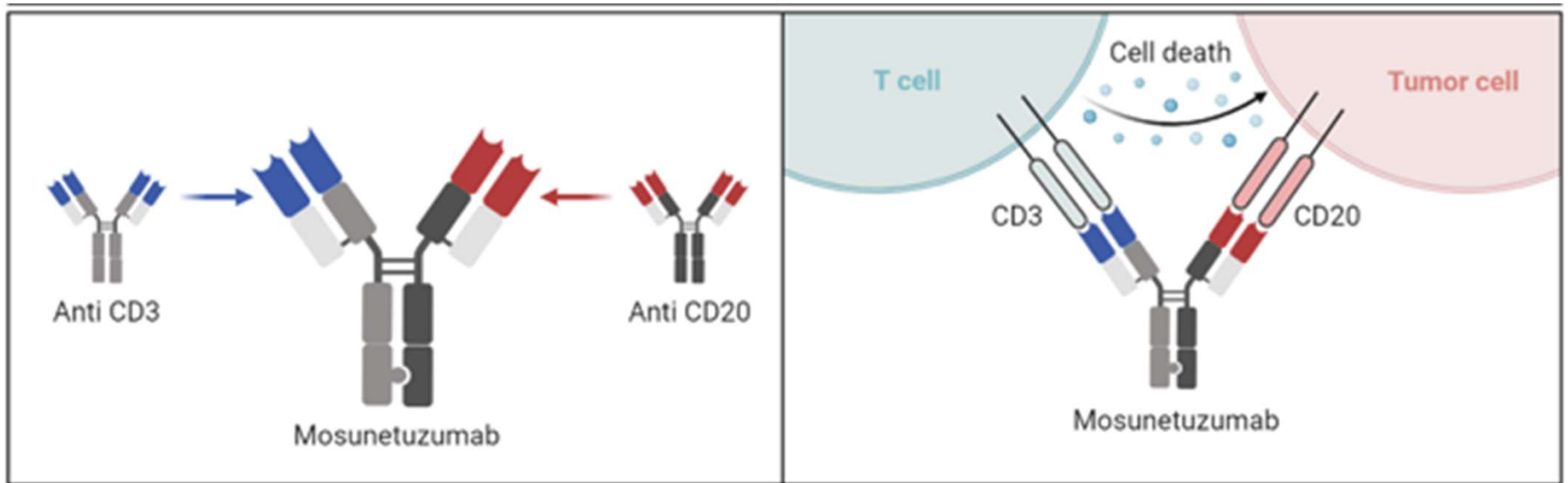
Background

- Follicular lymphoma is the most common indolent (non-aggressive) non-Hodgkin lymphoma
- Median survival today is 18-20 years
- Some patients will initially be placed on watchful waiting
- Some will need treatment on repeat occasions throughout their lives
- Some patients relapse early after receiving therapy (POD24)

Background

- Most patients today in Ontario will receive bendamustine-rituximab (BR) as their first line of therapy (immunochemotherapy)
- Numerous options for time of relapse
 - Immunochemotherapy
 - Novel (oral) agents
 - Bone marrow transplant
 - Experimental: CAR-T, BITE

Mosunetuzumab



molecularcloud.org

- Bispecific antibody
- T-cell engager
- ”BITE”

Abstract #127

- Early phase study
- Patients with relapsed/refractory follicular lymphoma, who have received at least 2 prior lines of therapy
- Mosun administered IV every 21 days

Abstract #127

| Population | ORR, % (95% CI) | CR rate, % (95% CI) |
|--|------------------------|----------------------------|
| All 3L+ R/R FL pts, n=90 | 79 (69–87) | 58 (47–68) |
| Pts with POD24, n=47 | 83 (69–92) | 55 (40–70) |
| Pts with 2 prior lines of therapy, n=34 | 85 (69–95) | 68 (49–83) |
| Pts with ≥3 prior lines of therapy, n=56 | 75 (62–86) | 52 (38–65) |
| Pts with disease refractory to any prior anti-CD20 Ab therapy, n=71 | 76 (64–85) | 52 (40–64) |
| Pts with disease refractory to any prior anti-CD20 Ab therapy and an alkylator (double refractory), n=48 | 69 (54–81) | 48 (33–63) |
| Pts with disease refractory to their last prior therapy, n=62 | 76 (63–86) | 48 (35–61) |

Primary Analysis of ZUMA-7: A Phase 3 Randomized Trial of Axicabtagene Ciloleucel (Axi-Cel) Versus Standard-of-Care Therapy in Patients with Relapsed/Refractory Large B-Cell Lymphoma

Paper Number: 2

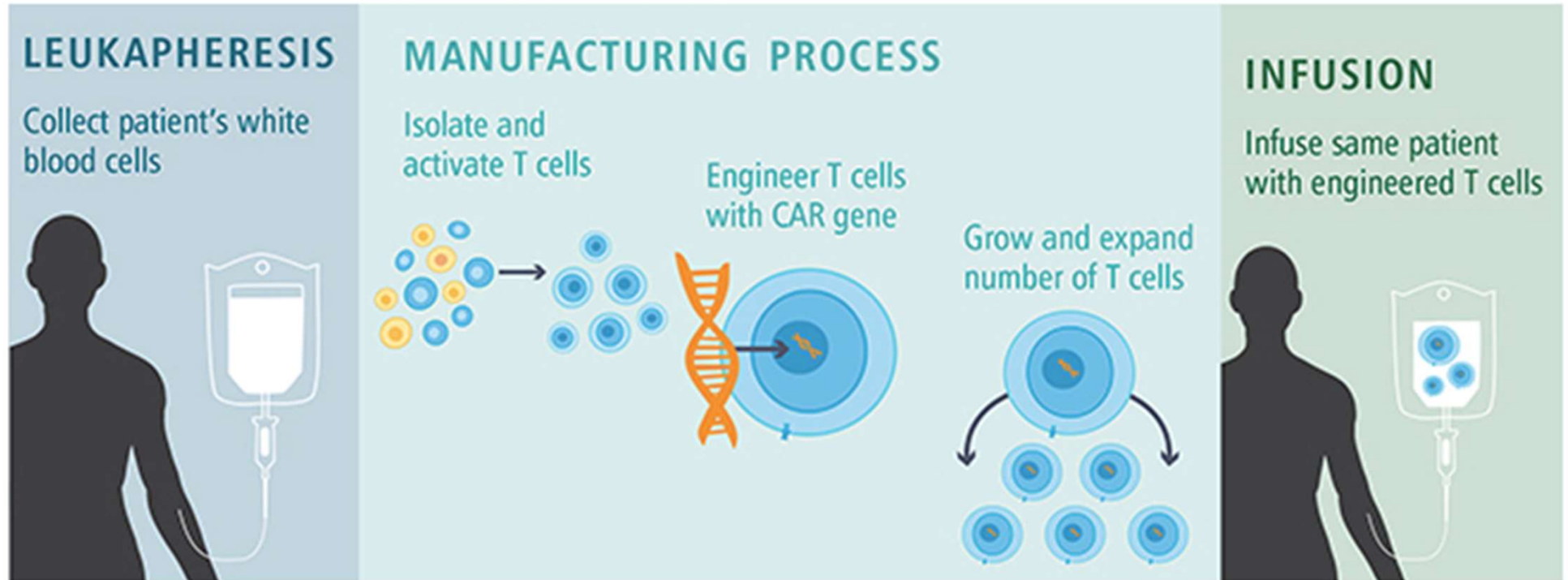
Frederick Locke, MD 

Moffitt Cancer Center

Background

- Aggressive non-Hodgkin lymphomas (DLBCL)
- Currently most patients treated with R-CHOP
- About 60% will be cured with this
- This means that 40% either do not go into remission or relapse
- Currently if someone is not in remission or relapses, the first step is to administer more chemotherapy → autologous bone marrow transplant

How CAR T-Cell Therapy Works



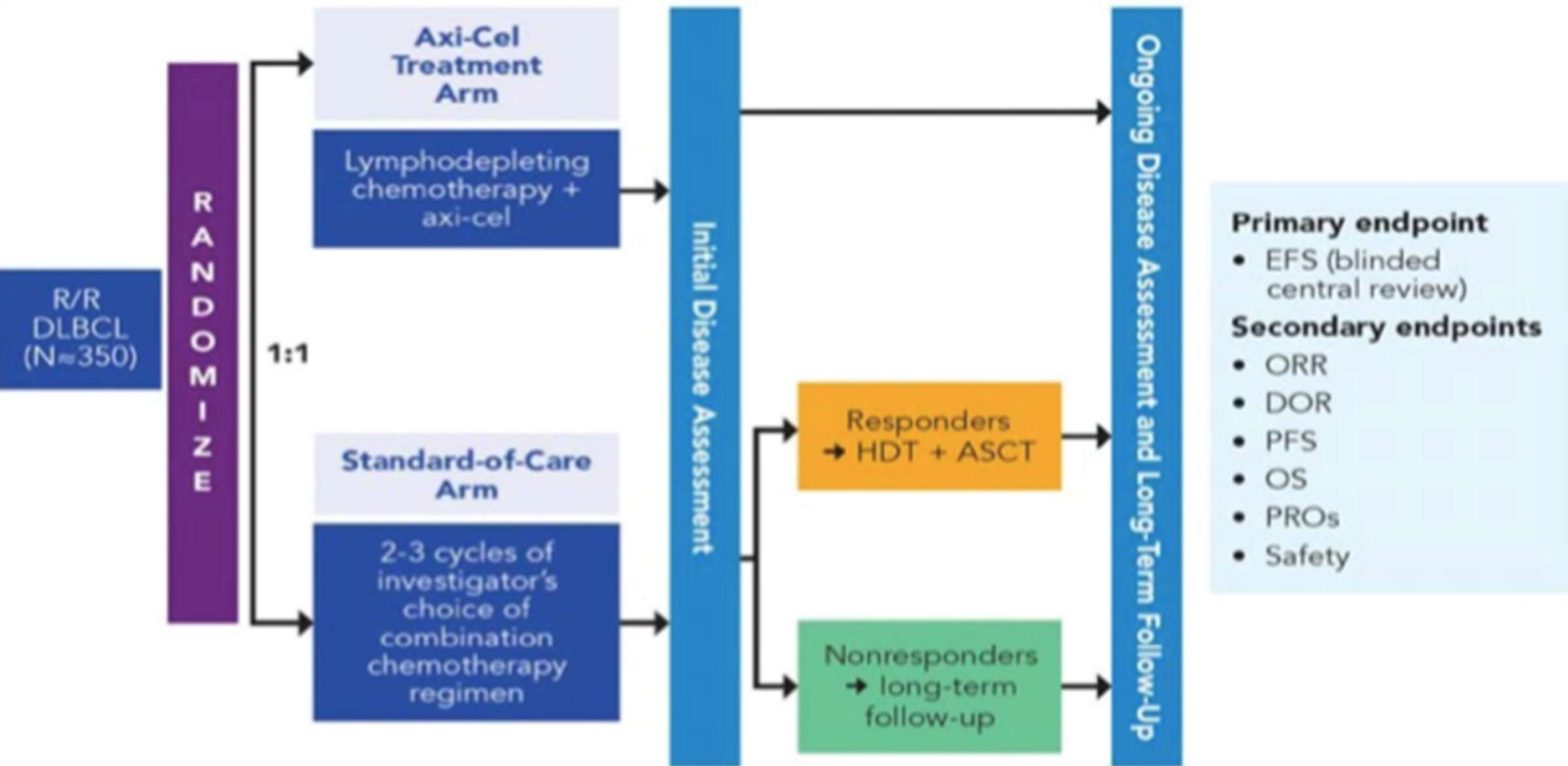
Dana-farber.org

CURRENTLY IN ONTARIO

-Approved for: DLBCL/high grade lymphomas which have failed two lines of therapy; B-ALL

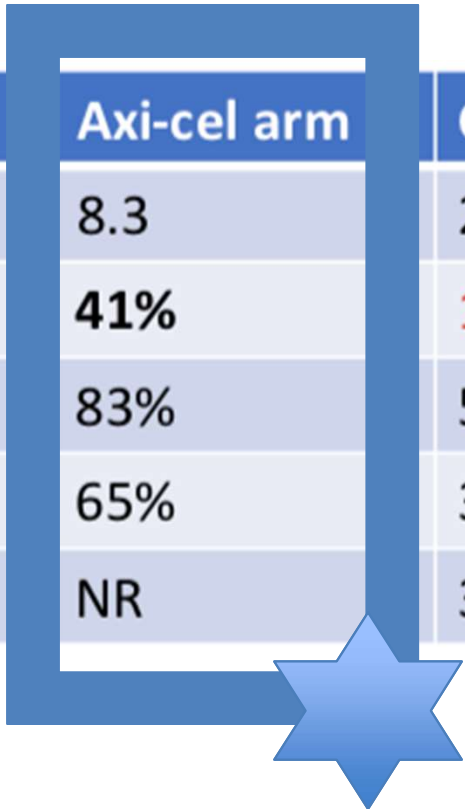
-Still experimental: follicular lymphoma, mantle cell lymphoma, CLL, etc

ZUMA-7



ZUMA-7

| | Axi-cel arm | CIT and autoHCT arm | Stats |
|---------------|-------------|---------------------|-------------------|
| mEFS (months) | 8.3 | 2.0 | HR 0.398, p<.0001 |
| 24-month EFS | 41% | 16% | |
| ORR | 83% | 50% | OR 5.31, p<.0001 |
| CR | 65% | 32% | |
| mOS (months) | NR | 35.1 | HR 0.730, p=.027 |



A Randomized Phase III Study of Venetoclax-Based Time-Limited Combination Treatments (RVe, GVe, GIVe) Vs Standard Chemoimmunotherapy (CIT: FCR/BR) in Frontline Chronic Lymphocytic Leukemia (CLL) of Fit Patients: First Co-Primary Endpoint Analysis of the International Intergroup GAIA (CLL13) Trial

Paper Number: 71

Barbara Eichhorst, MD 

Department I of Internal Medicine and Center of Integrated Oncology Cologne Bonn, University Hospital

Background

- CLL is the most common leukemia in adults
- Behaves very much like an indolent non-Hodgkin lymphoma
- The field of CLL therapeutics has exploded over the last 5-10 years
- Watchful waiting still standard of care for asymptomatic patients
- Numerous options for patients needing therapy

Publicly funded treatment options in Ontario (constantly evolving)

- **Upfront – mutated IgHV**
 - FCR, bendamustine, GA101-chlorambucil
- **Upfront – unmutated IgHV, 17p del, TP53 mut**
 - Ibrutinib*
- **Relapsed**
 - Ibrutinib*, venetoclax*, R-venetoclax

CLL13 (GAIA)

- Large randomized trial
- “Fit” patients
- Frontline therapy
- Primary endpoint - uMRD

CLL13 (GAIA)

- Winning combinations were:
 - GVe
 - GIVe
- However more adverse events with GIVe

Humoral Response to mRNA Vaccines BNT162b2 and mRNA-1273 COVID-19 in Chronic Lymphocytic Leukemia Patients

Paper Number: 637

Cristina Bagacean, MD,PhD 

Inserm UMR1227

Abstract #637

- 530 patients with CLL
- 71% Pfizer, 14% Moderna, 15% mixed
- 40% untreated, 26% prior treatment, 34% on treatment
- Response rates to vaccines:
 - 27% after 1st dose (all comers)
 - 52% after 2nd dose (all comers)
 - 35% after 3rd dose (this was in patients who had no response after 2nd dose)

Response rates according to treatment status

- 1st dose
 - 34% untreated, 33% prior treatment, 15% on treatment
- 2nd dose
 - 72% untreated, 60% prior treatment, 22% on treatment

Response rates for those on treatment, according to type

- BTKi – 22%
- Venetoclax – 52% (significantly higher)
- Monoclonal antibody – 0%
- Venetoclax + ibrutinib – 0%