



# Lymphom Kompetenz KOMPAKT



KML-Experten berichten

**63rd ASH Meeting 2021**



**Prof. Dr. med. Michael Hallek**  
Klinik I für Innere Medizin | Uniklinik Köln

# Grußwort

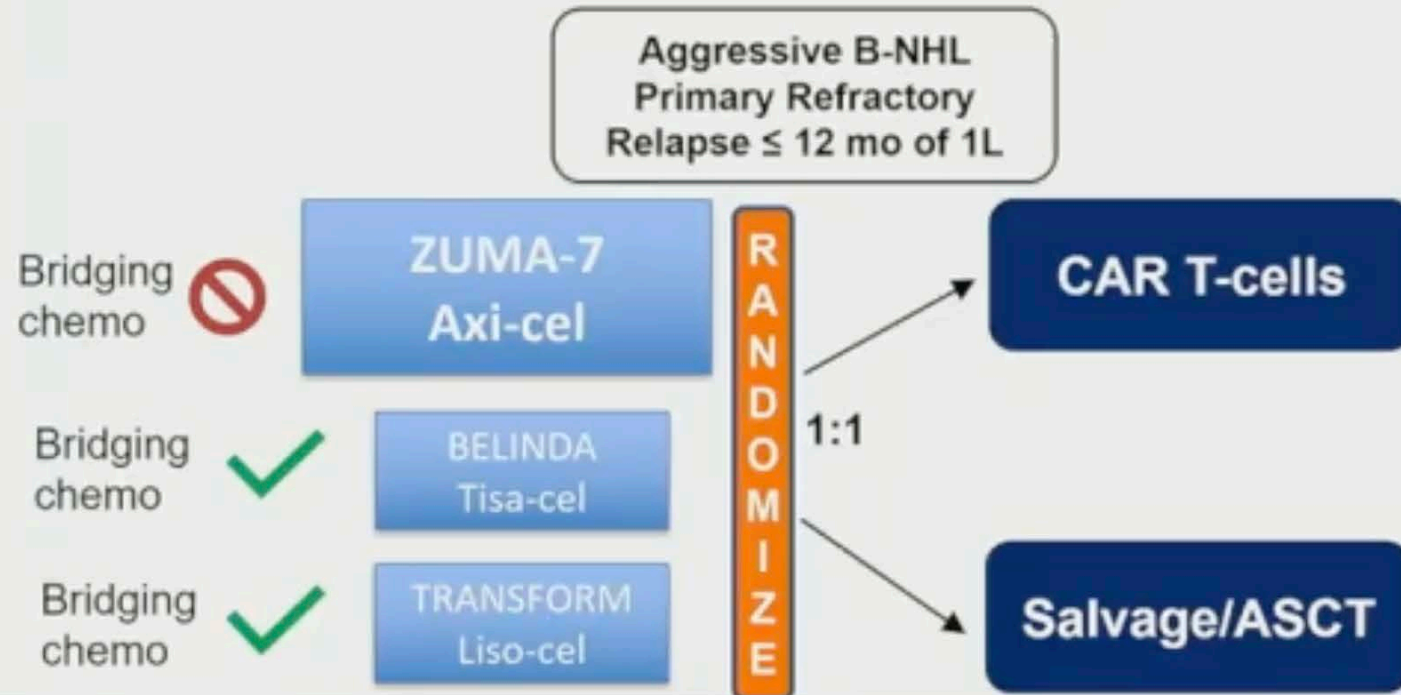
ASH 2021 | Atlanta & virtual  
11. – 14. Dezember 2021


Lymphom  
Kompetenz  
KOMPAKT





## ZUMA-7: Uncharted Territory



 American Society of Hematology





## Primary Analysis of ZUMA-7: a Phase 3 Randomized Trial of Axicabtagene Ciloleucel versus Standard-of-Care Therapy in Patients with Relapsed/Refractory Large B-Cell Lymphoma

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# Background

- Axi-cel is an autologous anti-CD19 CAR T-cell therapy approved for the treatment of adult patients with R/R LBCL after  $\geq 2$  lines of systemic therapy
- Current SOC second-line treatment in the curative setting for patients with R/R LBCL is salvage chemotherapy followed by consolidative HDT-ASCT<sup>1</sup>
- Many patients cannot receive HDT-ASCT, and their prognosis is poor<sup>2-4</sup>
- ZUMA-7 (NCT03391466) is the first randomized, global, multicenter Phase 3 study of axi-cel versus SOC as second-line treatment in patients with R/R LBCL

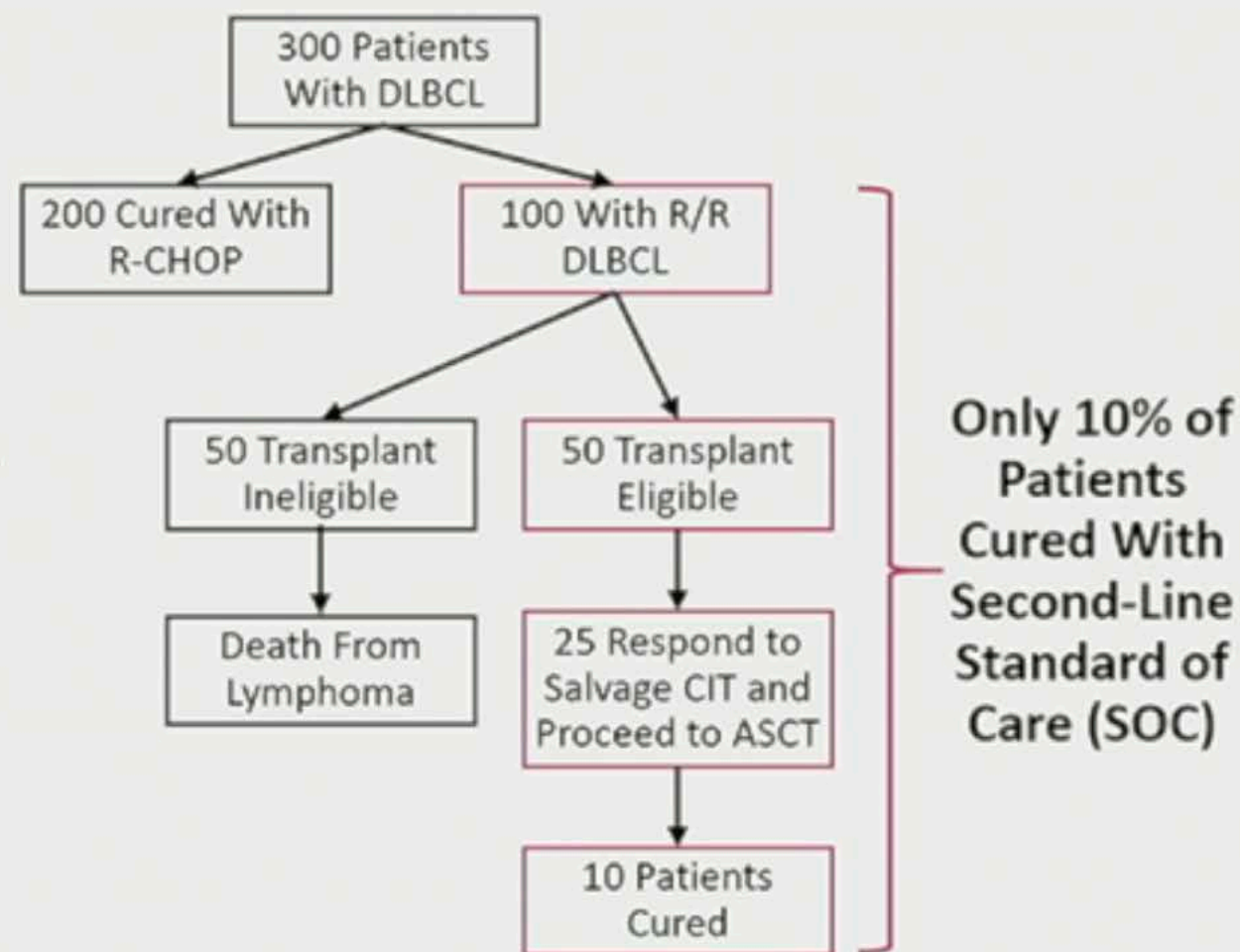
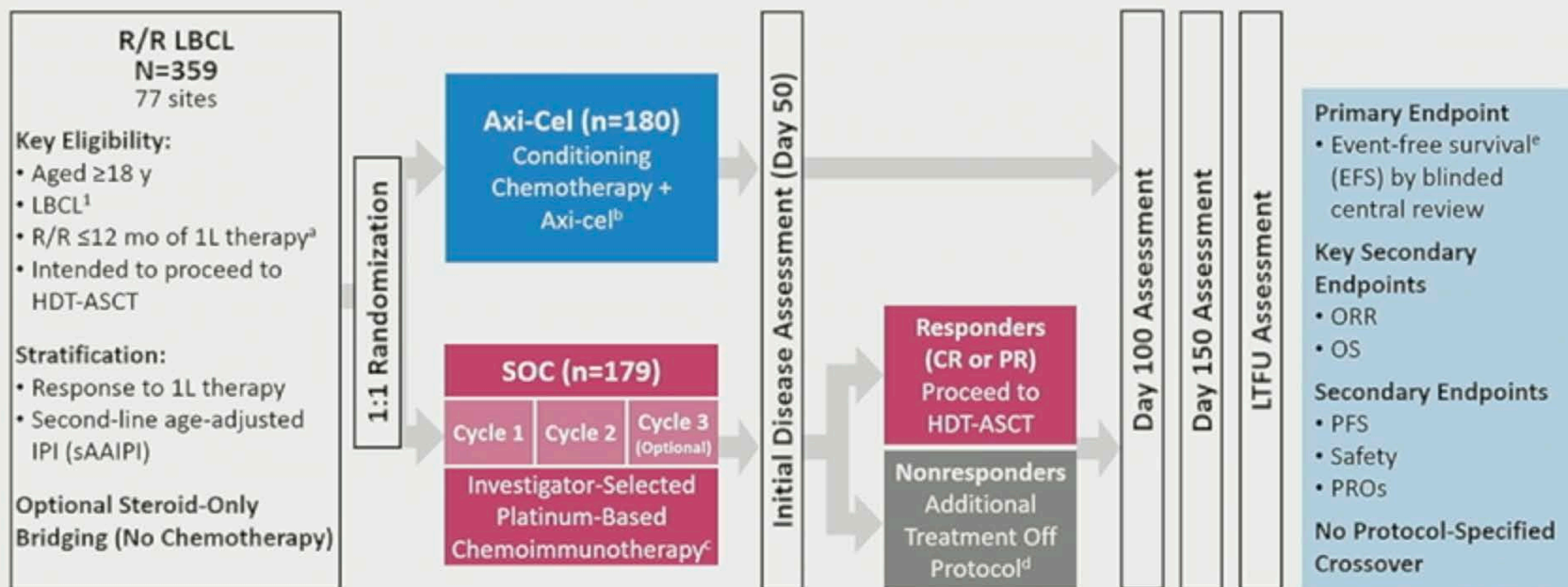


Figure adapted with permission from Friedberg. *Hematology Am Soc Hematol Educ Program*. 2011;2011:498-505.

1. Zahid U, et al. *Curr Hematol Malig Rep*. 2017;12:217-226. 2. Gisselbrecht C, et al. *J Clin Oncol*. 2010;28:4184-4190. 3. Van Den Neste E, et al. *Bone Marrow Transplant*. 2016;51:51-57. 4. van Imhoff GW, et al. *J Clin Oncol*. 2017;35:544-551.



## ZUMA-7 Study Schema and Endpoints: Axi-Cel Versus SOC as Second-Line Therapy in Patients With R/R LBCL

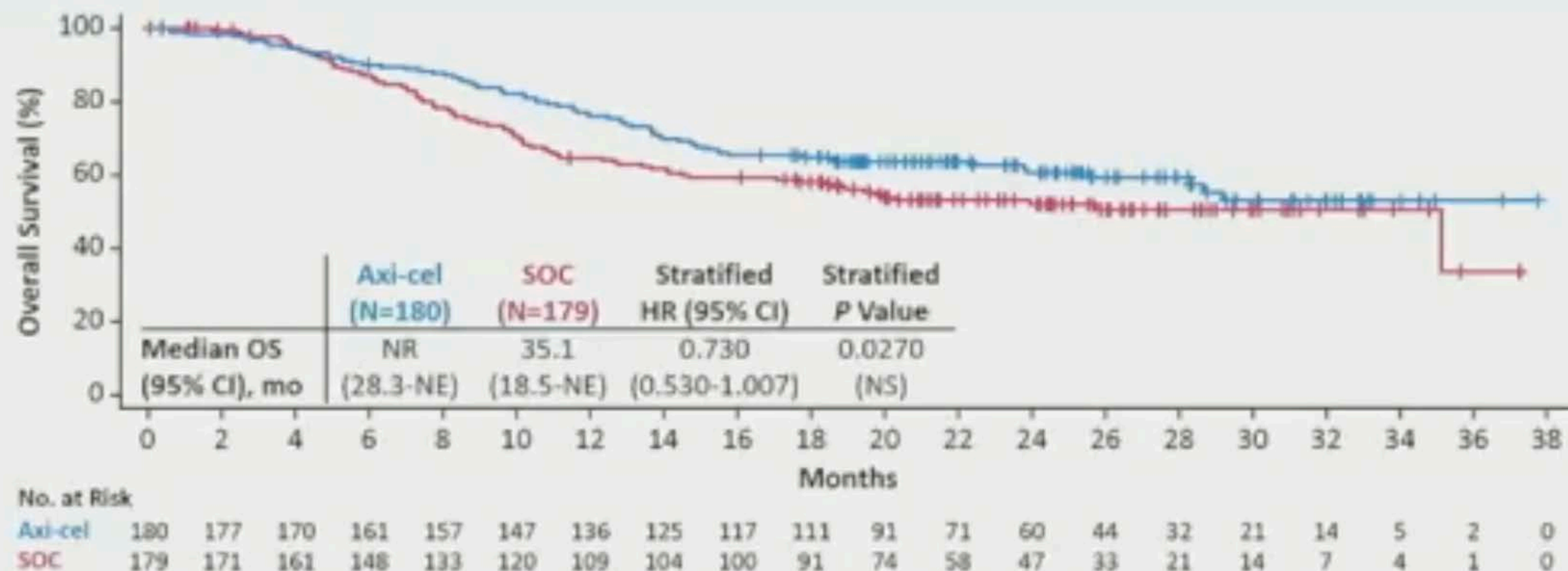


<sup>a</sup> Refractory disease was defined as no CR to 1L therapy; relapsed disease was defined as CR followed by biopsy-proven disease relapse  $\leq 12$  months from completion of 1L therapy. <sup>b</sup> Axi-cel patients underwent leukapheresis followed by conditioning chemotherapy with cyclophosphamide (500 mg/m<sup>2</sup>/day) and fludarabine (30 mg/m<sup>2</sup>/day) 5, 4, and 3 days before receiving a single axi-cel infusion (target intravenous dose,  $2 \times 10^6$  CAR T cells/kg). <sup>c</sup> Protocol-defined SOC regimens included R-GDP, R-DHAP, R-ICE, or R-ESHAP. <sup>d</sup> 56% of patients received subsequent cellular immunotherapy. <sup>e</sup> EFS was defined as time from randomization to the earliest date of disease progression per Lugano Classification,<sup>2</sup> commencement of new lymphoma therapy, or death from any cause.

1. Swerdlow SH, et al. *Blood*. 2016;127:2375-2390. 2. Cheson BD, et al. *J Clin Oncol*. 2014;32:3059-3068.



# Median OS, Evaluated as an Interim Analysis, Was Not Reached for Axi-Cel Versus 35.1 Months for SOC



- 56% of SOC patients received subsequent cellular immunotherapy (off protocol)
- Preplanned sensitivity analysis<sup>a</sup> suggests an OS benefit, likely confounded by SOC treatment switching

<sup>a</sup> Analysis utilized the validated and commonly used Rank Preserving Structural Failure Time model, which preserves randomization as described by Robins and Tsiatis (Commun Stat Theory Methods, 1991;2609-2631) and revealed the difference in treatment effect if SOC patients did not receive subsequent cellular immunotherapy. Stratified hazard ratio was 0.580 (95% CI, 0.416-0.809).

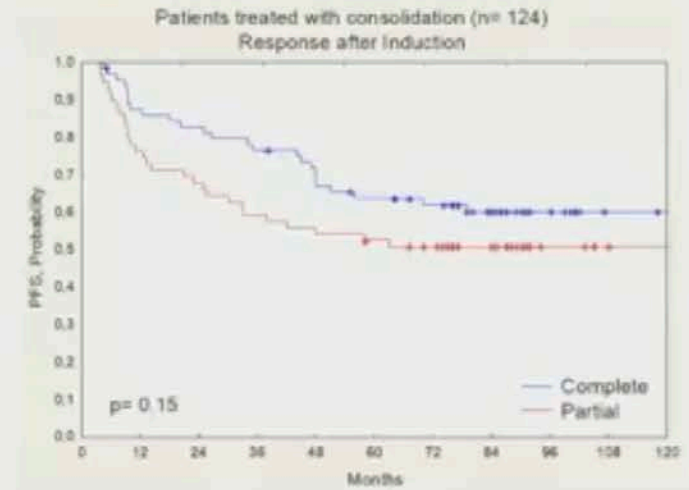
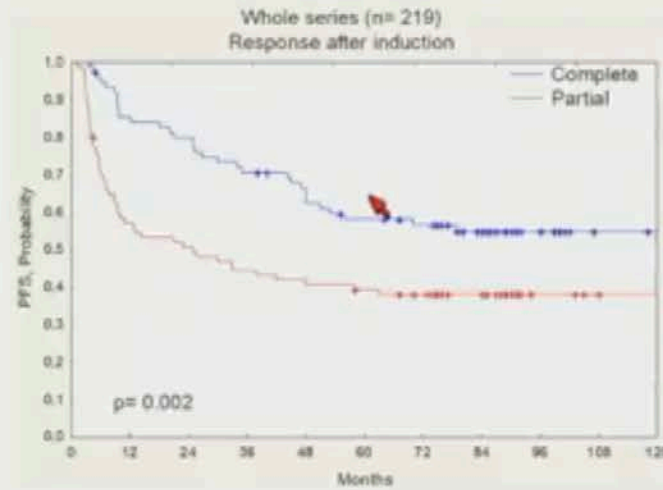




## Post-treatment MRI is not fully accurate in anticipating cure or relapse

IELSG 32

Treatment: Methotrexate-Cytarabine or Methotrexate-Cytarabine-Rituximab or Methotrexate-Cytarabine-Thiotepa-Rituximab



Some complete responders will recur some partial responders will not

(Courtesy of Prof Andrés JM Ferreri, IELSG)



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

Mutter JA\*, Alig S\*, Lauer EM, Esfahani MS, Mitschke J, Kurtz DM, Kühn J, Bleul S, Olsen M, Liu CL, Jin MC, Macaulay CW, Neidert NN, Volk T, Rauer S, Heiland DH, Finke J, Duyster J, Wehrle J, Prinz M, Illerhaus G, Reinacher PC, Schorb E, Diehn M, Alizadeh AA, Scherer F

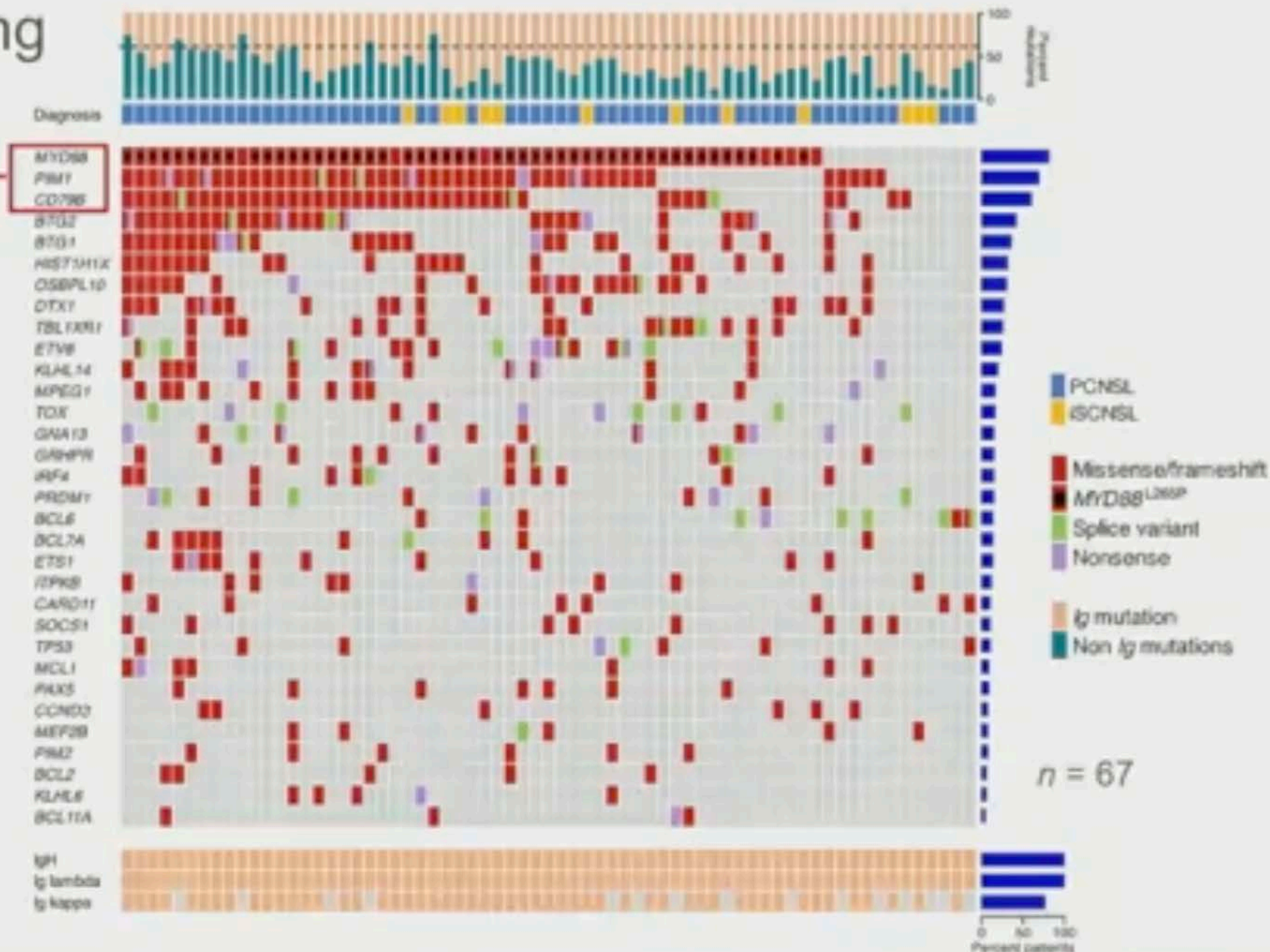
63<sup>rd</sup> ASH Annual Meeting, Plenary Session, 12/12/2021



# Tumor genotyping

*MYD88* L265P  
73% of patients

Median number of mutations per patient: 288





## Biopsy-free CNSL classification

### CNSL vs. Non-CNSL (other primary brain tumors or brain metastases)

- Different treatment strategies
- Suboptimal discriminatory capacity of radiographic imaging
- Mutational landscapes are fundamentally different



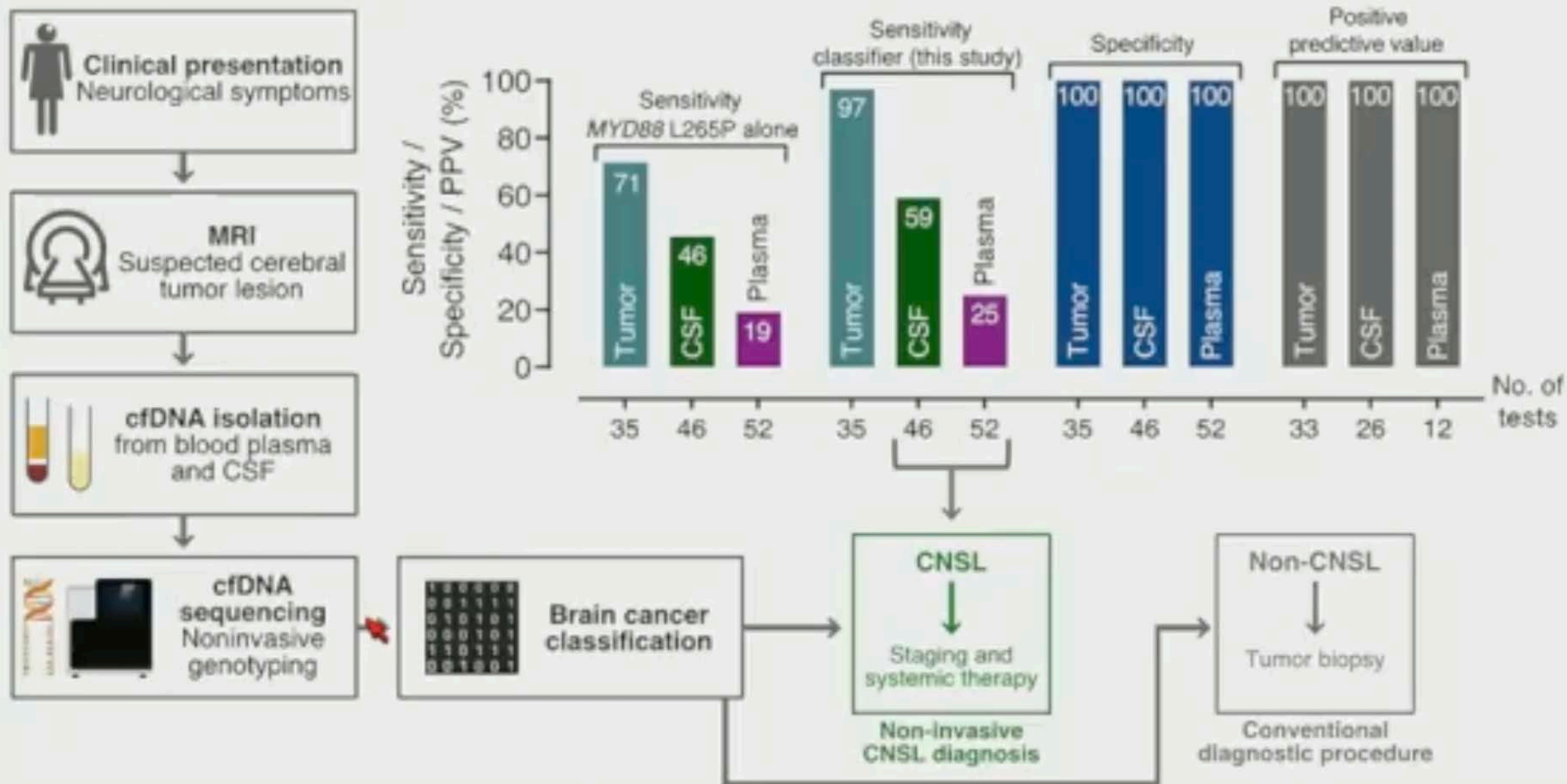
Hypothesis: CNSL can be diagnosed without surgical procedure based on ctDNA mutational profiles in CSF or plasma

### Methodology

- Training cohort: Mutational data from 30 CNSL tumors (this study) and 2647 Non-CNSL tumors (public datasets)
- Approach: **Ensemble of Empirical Bayesian Models** to define a **Classifier score**
- Independent validation cohort: Tumor-agnostic genotyping by CAPP-Seq:
  - CNSL (35 tumors, 46 CSF, 52 plasma)
  - Non-CNSL (18 tumors, 16 CSF, 16 plasma)



# Biopsy-free CNSL classification



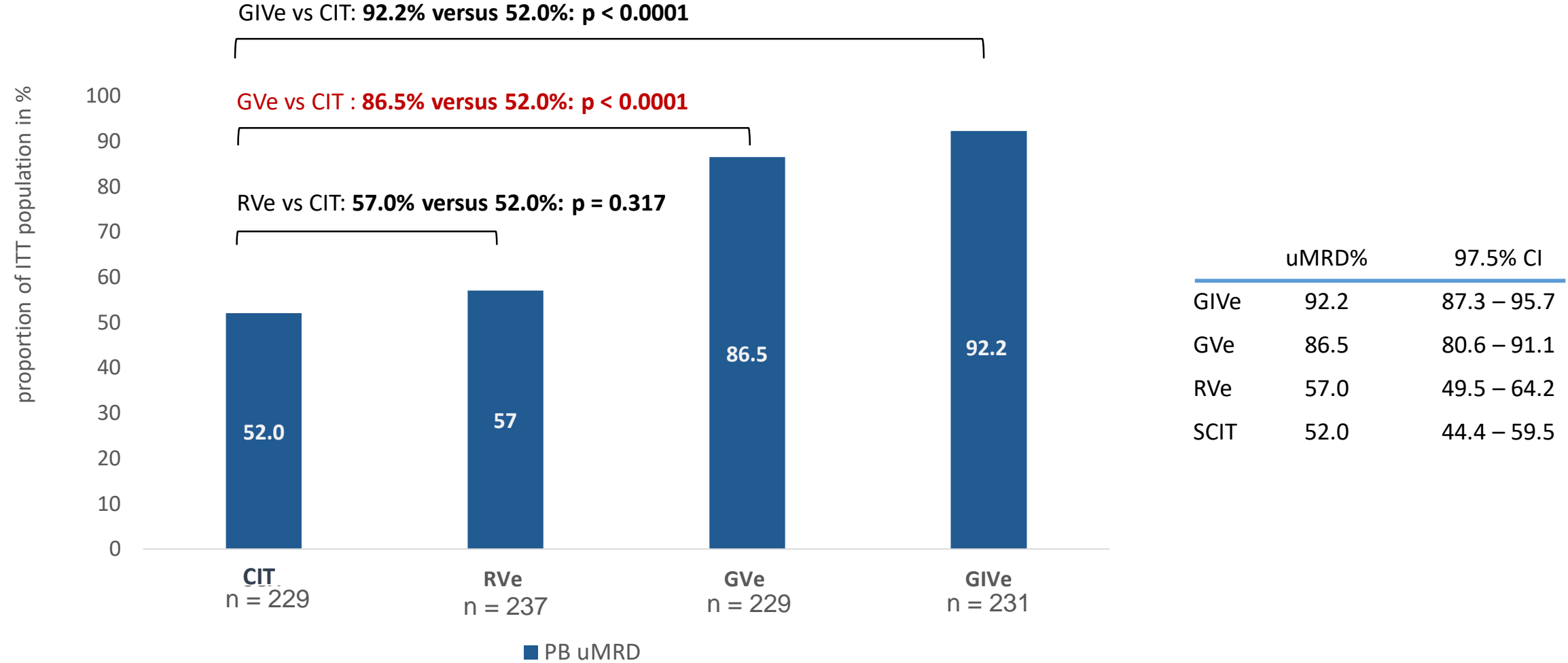


**A RANDOMIZED PHASE III STUDY OF  
VENETOCLAX-BASED TIME-LIMITED COMBINATION  
TREATMENTS  
(RVE, GVE, GIVE) VS STANDARD CHEMOIMMUNOTHERAPY (CIT:  
FCR/BR)  
IN FRONTLINE CHRONIC LYMPHOCYTIC LEUKEMIA OF FIT  
PATIENTS:  
FIRST CO-PRIMARY ENDPOINT ANALYSIS OF THE  
INTERNATIONAL INTERGROUP GAIA (CLL13) TRIAL**

Barbara Eichhorst, Carsten U Niemann, Arnon P Kater, Moritz Fürstenau, Julia von Tresckow, Can Zhang, Sandra Robrecht, Michael Gregor, Gunnar Juliusson, Patrick Thornton, Philipp B. Staber, Tamar Tadmor, Vesa Lindström, Caspar da Cunha-Bang, Christoph Schneider, Christian Poulsen, Thomas Illmer, Björn Schöttker, Ann Janssens, Ilse Christiansen, Thomas Nösslinger, Michael Baumann, Marjolein van der Klift, Ulrich Jäger, Henrik Frederiksen, Maria BL Leys, Mels Hoogendoorn, Kouros Lotfi, Holger Hebart, Tobias Gaska, Harry Koene, Florian Simon,  
Nisha De Silva, Anna Fink, Kirsten Fischer, Clemens Wendtner, Karl A Kreuzer, Matthias Ritgen, Monika Brüggemann, Eugen Tausch, Mark-David Levin, Marinus van Oers, Christian Geisler, Stephan Stilgenbauer, Michael Hallek

# Coprimary endpoint: uMRD ( $< 10^{-4}$ ) at Mo15 in PB by 4-colour-flow

ITT analysis: 63 pts (34 CIT, 15 RVe, 10 GVe, 4 GIVe) with missing samples (6.8%) were counted as MRD positive



# ASH 2021 | Atlanta & virtual



**Prof. Dr. med. Michael Hallek**

Uniklinik Köln

Grußwort



**Prof. Dr. med. Martin Dreyling**

Klinikum der Universität München

Folikuläres Lymphom (FL)



**PD Dr. med. Bastian von Tresckow**

Universitätsklinikum Essen

Hodgkin Lymphom (HL)



**Prof. Dr. med. Barbara Eichhorst**

Uniklinik Köln

Chronische lymphatische Leukämie (CLL)



**Prof. Dr. med. Christiane Pott**

Universitätsklinikum Schleswig-Holstein, Campus Kiel

Mantelzell-Lymphom (MCL)



**Prof. Dr. med. Katja Weisel**

Universitätsklinikum Hamburg-Eppendorf

Multiples Myelom (MM)



**Prof. Dr. med. Christian Buske**

Universitätsklinikum Ulm

Morbus Waldenström (WM) & Marginalzonen-Lymphom (MZL)



**Prof. Dr. med. Peter Borchmann**

Uniklinik Köln

Diffus großzelliges B-Zell-Lymphom (DLBCL)



**Prof. Dr. med. Kai Hübel**

Uniklinik Köln

Seltene Lymphome





# Neues Videoportal: www.lymphome.de/kongressberichte

The screenshot shows the home page of the lymphome.de website. At the top, there is a navigation bar with links for English, Mediathek, Login, Presse, Kontakt, and Spenden. Below this is a secondary navigation bar with links for Lymphome, Studien, Experten, Termine, Leistungen (highlighted), and Über uns. The main content area features a section titled "KML Videoberichte" with a sub-header "Das Kompetenznetz Maligne Lymphome e.V. versteht sich als Forschungsverbund, dessen übergeordnetes Ziel es ist, die optimale Behandlung, Betreuung und Information für alle Lymphom-Patienten in Deutschland sicherzustellen und kontinuierlich zu verbessern." Below this is a search filter with dropdown menus for "Veranstaltung", "Ort", and "Jahr". A horizontal line separates this from the "ASH - AMERICAN SOCIETY OF HEMATOLOGY" section. At the bottom, there are three video thumbnails for "ASH 2021 Atlanta", "ASH 2020 VIRTUAL", and "ASH 2019 Orlando", each with a "Lymphom Kompetenz KOMPAKT" logo and a video count (6, 7, and 7 respectively).

The screenshot shows a detailed view of the "KML Videoberichte" section for the "ASH 2021 Atlanta" congress. The page title is "KML Videoberichte" and the sub-header is "ASH 2021 Atlanta". The event is dated "Dezember 2021" and took place in "Atlanta & Virtual" in "2021". The main text describes the event: "Vom 11. bis 14. Dezember 2021 findet das 63. Meeting der American Society of Hematology (ASH) in Atlanta (Georgia, USA) und als virtueller Online-Kongress statt. Das KML berichtet in seiner Reihe LymphomKompetenz KOMPAKT mit Video-Berichten von relevanten Studienergebnissen und neuen Entwicklungen im Bereich der Lymphomforschung." There is a link for "Informationsflyer zum Projekt". A section titled "Gern informieren wir Sie, wenn alle Videos online sind: Jetzt KML-Infoverteiler abonnieren" explains that subscribers receive the KML newsletter twice a year with relevant information and irregular reminders for upcoming events. A list of sponsors is provided: AbbVie Deutschland GmbH & Co. KG, Amgen GmbH, Bristol-Myers Squibb GmbH & Co. KGaA, GlaxoSmithKline GmbH & Co. KG, Hexal AG, and Janssen-Cilag GmbH. A disclaimer states: "Die Firmen haben keinen Einfluss auf die Inhalte. Die Höhe der Zuwendungen kann der Seite Projektunterstützung entnommen werden." On the right side, there is a vertical list of speakers with their photos and names: Prof. Dr. med. Christiane Pott (Mantelzell-Lymphom (MCL) at Universitätsklinikum Schleswig-Holstein, Campus Kiel), Prof. Dr. med. Peter Borchmann (Diffus großzelliges B-Zell-Lymphom at Uniklinik Köln), PD Dr. med. Bastian von Tresckow (Hodgkin Lymphom (HL) at Universitätsklinikum Essen), Prof. Dr. med. Katja Weisel (Multiples Myelom (MM) at Universitätsklinikum Hamburg-Eppendorf (UKE)), and Prof. Dr. med. Kai Hübel (Seltene Lymphome at Uniklinik Köln). Each speaker has a "Vita" link.

Die Kurzpräsentationen sind online unter

**[www.lymphome.de/ash2021](http://www.lymphome.de/ash2021)**

Bleiben Sie gut informiert!



Informationsportal:  
[www.lymphome.de](http://www.lymphome.de)

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Das Informationsprojekt wird unterstützt von den Firmen



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