

RESEARCH PLAN (RWE SCIENTIFIC PROJECT)

TITLE:	REAL-WORLD TREATMENT AND OUTCOME PATTERNS IN R/R DLBCL PATIENTS IN THIRD LINE AND BEYOND: A DANISH POPULATION-BASED STUDY
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1. LIST OF ABBREVIATIONS

Abbreviation	Definition
ALAT	Alanin aminotransferase
ASCT	Autologous stem cell transplantation
C	Cyclophosphamide
CAR	Chimeric antigen receptor
CHOEP	Cyclophosphamide, doxorubicin, vincristine, etoposide, prednisone
CNS	Central nervous system
COO	Cell of origin
CR	Complete response
CRP	c-reactive protein
CSF	Cerebrospinal fluid
CT	Computed tomography
DA-EPOCH	Dose-adjusted etoposide, prednisone, vincristine, cyclophosphamide, doxorubicin
DLBCL	Diffuse large B-cell lymphoma
EC	Ethics Committee
ECOG	Eastern Cooperative Oncology Society
eCRF	Electronic case report form
eGFR	Estimated glomerular filtration rate
FDA	Food and Drug Administration
FISH	Florescence in situ hybridization
GPP	Good Pharmacoepidemiological Practice
H	Doxorubicin
HGBCL	High grade B-cell lymphoma
IPI	International prognostic index
IRB	Institutional Review Board
LDH	Lactate dehydrogenase
LVEF	Left ventricular ejection fraction
LYFO	The Danish National Lymphoma Registry
mAB	Monoclonal antibody
MAIC	Matching-adjusted indirect comparison
NHL	Non-Hodgkin's Lymphoma
NOS	Not otherwise specified
NYHA	New York Heart Association
O	Vincristine

Abbreviation	Definition
ORR	Overall response rate
OS	Overall survival
P	Prednisone
PD	Progressive disease
PET/CT	Positron emission tomography and computed tomography
PFS	Progression-free survival
PI	Principle investigator
PMBCL	Primary mediastinal B-cell lymphoma
R	Rituximab
R-CHOP	Rituximab, cyclophosphamide, doxorubicin, vincristine, prednisone
R/R	Refractory or relapsed
SCT	Stem cell transplantation
SD	Stable disease
TTP	Time to progression
ULN	Upper limit of normal
WBC	White blood cell

2. **RESEARCH TEAM**

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3. AMENDMENTS AND UPDATES

Substantial research plan amendments/updates so far: none

4. MILESTONES

Milestone	Planned Date
Start of dataset creation	December 1, 2021
Dataset complete	March 31, 2022
Interim report	April 30, 2022
Final report of research results	August 31, 2022
Publication submission	December 15, 2022

5. RESEARCH QUESTION AND OBJECTIVES

Diffuse large B-cell lymphoma (DLBCL) accounts for 30-58% and is the most common subtype of all non-Hodgkin's Lymphoma (NHL) found in adults in the Western World¹⁻⁵. The annual incidence of NHL is estimated at 19.5 per 100,000 person years in the United States⁶ and 11.1 per 100,000 person years in Europe⁷. The standard of care frontline treatment for DLBCL is a chemo-immunotherapy regimen consisting of 3-6 courses of Rituximab[R], Cyclophosphamide[C], doxorubicin[H], vincristine[O], and prednisone[P] (R-CHOP) with or without consolidating radiotherapy. More than half of the patients that receive R-CHOP are cured; however, some patients will either be refractory to frontline therapy or relapse (R/R) after achieving remission⁸. Second line treatments include salvage chemotherapy followed by high-dose therapy with autologous stem cell transplantation (ASCT) for eligible patients. Less than half of R/R DLBCL patients are eligible for ASCT due to old age or co-morbidities, and less than half of those eligible will be cured⁹. Patients who are refractory to first line and/or salvage therapy or who relapse 12 months following ASCT have a very poor prognosis. The overall response and complete remission rates on the next line of therapy are as low as 26% and 7% respectively, with a median overall survival of 6.3 months¹⁰. For patients ineligible for SCT the outcomes are even worse¹¹. Despite the recent approval of novel agents, the therapeutic options are limited for patients with multiple relapses or refractory disease, and these patients continue to present an unmet medical need. For a large majority, treatment strategies are palliative with decisions being informed by prior chemotherapy exposure, co-morbidities, and patient preferences. Only a small minority of patients receive curative allogeneic stem cell transplantation in late treatment lines due to difficulties obtaining remission and/or finding a donor.

Three chimeric antigen receptor (CAR) CD19 T-cell therapies have been approved and are available for patients who have received at least two prior lines of systemic therapy in some geographies¹²⁻¹⁴. However, access to these treatments may be limited due to significant barriers such as high cost, reimbursement, manufacturing turnaround time, need for travel and/or hospitalization. In the US, there have been additional recent approvals for several novel agents including polatuzumab-vedotin, loncastuximab-tesirine, tafasitamab and selinexor for R/R DLBCL¹⁵⁻¹⁸. Despite these recent approvals, the optimal treatment strategies are unclear, and no standard of care is established.

A variety of clinical trials of T-cell engaging bispecific antibodies are ongoing. Glofitamab is a novel agent with two CD20 binding sites for enhanced tumor antigen avidity, and a CD3 binding site that enables rapid T-cell activation and enhanced tumor cell killing. Glofitamab is being evaluated as monotherapy for safety and efficacy in a single arm Phase 1b clinical trial for DLBCL patients with at least two prior lines of systemic therapy¹⁹.

Data on late R/R DLBCL (for example after 2 or more treatment lines) are limited, and little is known about the real-world treatment and outcome patterns following 3rd and subsequent lines of therapy. The Danish National Lymphoma Registry (LYFO) is a complete registry of all Danish patients diagnosed with lymphoma and provides unique research opportunities in real-world DLBCL outcomes. All departments of hematology are obligated to register patients at time of diagnosis, at the end of frontline therapy, at relapse and at the end of follow-up or death²⁰. Using this registry in combination with additional review of medical records, we can provide granular data on patients with R/R DLBCL after at least two prior lines of systemic chemotherapy. Such data can serve as a valuable benchmark and help to contextualize the data generated through single arm clinical trials such as phase I/II studies of novel immunotherapies and cellular therapies.

The main objectives for this research are as follows:

- Describe characteristics (demographic and clinical) as well as treatment patterns in a Danish population of DLBCL patients with R/R disease after at least two prior lines of systemic therapy outside of clinical trials
- Describe outcomes including objective response rate (ORR) and complete response (CR) rate, duration of response, progression-free survival (PFS) and overall survival (OS), overall and/or by line of therapy and by patient/treatment subgroups.

6. RESEARCH METHODS

6.1 DATA SOURCE(S)

Relevant information will be collected from LYFO and through the review of electronic patient charts. Adult patients with DLBCL will be identified from the LYFO registry. Each participating center will receive lists of treated patients for local review by a hematologist or hematologist in training. During the local review of medical records, patients fulfilling the inclusion/exclusion criteria will be identified and granular data according to the REDCap (Research Electronic Data Capture, Vanderbilt University, Nashville Tennessee) eCRF will be retrieved. Appendix 1 includes the REDCap electronic case report form (eCRF).

6.2 SETTING

This will be a retrospective population-based observational cohort study. Below are the inclusion and exclusion criteria for the study cohort.

Inclusion criteria

- Adult patients (age ≥ 18) with DLBCL
- DLBCL histology including DLBCL, not otherwise specified (NOS), High grade B-cell lymphoma (HGBCL) and primary mediastinal B-cell lymphoma (PMBCL)
- Received at least two prior systemic lines of therapy including at least one anti CD20 monoclonal antibody (mAb) and an anthracycline containing regimen, being R-CHOP including miniCHOP, addition of etoposide to CHOP (CHOEP) or dose-adjusted etoposide, prednisone, vincristine, cyclophosphamide, doxorubicin (DA-EPOCH)
- Initiation of 3rd or subsequent line of therapy on or after January 1, 2015. A patient may be enrolled more than once if receiving more lines of therapy beyond 2nd line. End of study/last follow-up will be August 31, 2021

Exclusion criteria

- Primary central nervous system (CNS) lymphoma
- Post-transplant lymphoproliferative disorder

6.3 VARIABLES AND ENDPOINTS

6.3.1 Study Variables

Demographics

- Age, Gender, Cohabitant (yes/no)

Clinical

- Date of diagnosis, first, second and subsequent relapses.
- Histological subtype
- Cell of Origin (COO), if available at diagnosis and 2nd and beyond relapse
- MYC/BCL2 immunohistochemical double expression, if available at diagnosis and 2nd and beyond relapse
- MYC/BCL2/BCL6 fluorescence in situ hybridization (FISH) break, if available at diagnosis and 2nd and beyond relapse,
- Ann-Arbor stage, at diagnosis and 2nd and beyond relapse
- Extranodal involvement at diagnosis (yes/no), including no. of organ sites
- CNS involvement, parenchyma, cerebrospinal fluid (CSF) or both
- Eastern Cooperative Oncology Group (ECOG) Performance score at diagnosis and subsequent relapses
- International prognostic index (IPI) at diagnosis and subsequent relapses
- Comorbidity: Renal (creatinine > 1.5 x ULN) (yes/no); Cardiovascular (LVEF < 45% and/or NYHA > 2) (yes/no); Liver (bilirubin > 1.5 x ULN and/or ALAT > 3 x ULN) (yes/no), Significant pulmonary disease y/n at time of initiation of 3rd+ line therapy
- Drug or alcohol abuse (yes/no)

Biochemical

- Hemoglobin concentration, white blood cell count (WBC), neutrophil, lymphocyte and monocyte count, platelet count
- Lactate dehydrogenase (LDH), alkaline phosphatase, bilirubin, creatinine and eGFR, CRP and albumin

Treatment History

- First, second, third and subsequent lines of systemic therapy, (regimen name and dates of initiation and end of treatment)
- Best response by line of therapy (progressive disease (PD), stable disease (SD), partial response (PR) or CR), date
- Refractory disease defined as PD or SD as best response or relapse within 6 months of the respective line of therapy (last dose) for each treatment line
- Radiotherapy (yes/no), if yes, indication (localized/bulk/extranodal/residual)
- Previous stem cell transplant (yes/no), if yes (date/response prior to conditioning/conditioning regimen)

6.3.2 Endpoints

- Best response by line of therapy 3rd and subsequent lines (PD, SD, PR or CR), date, including methods for response assessment (PET/CT, clinical, CT)
- Time to progression (TTP) from initiation of 3rd and subsequent lines of therapy
- PFS from time of 2nd relapse overall and by age (\leq / $>$ 70 years) and IPI 1-2 vs 3-5. PFS will be calculated from the time of initiation of third or subsequent line of therapy
- OS from time of 2nd relapse overall and by age (\leq / $>$ 70 years) and IPI 1-2 vs 3-5. OS will be calculated from the time of initiation of third or subsequent line of therapy
- Cause of death, date
 - Dead from progressive lymphoma
 - Dead from toxicity with progressive lymphoma
 - Dead from toxicity with lymphoma in remission
 - Dead from other causes with lymphoma in remission (specify)
 - Dead from other causes with lymphoma not in remission (specify)
- Death-specific survival (OS stratified by death due to progression/toxicity or other)

6.4 RESEARCH SIZE

This is a descriptive study and therefore no formal calculation of sample size will be performed. All eligible adults from the Danish population of DLBCL patients will be included in this study. Estimated sample size is between 250 and 300 patients.

6.5 DATA MANAGEMENT

The data generated in the study will be recorded by investigators and/or sub-investigators in a secured database. REDCap (Research Electronic Data Capture, Vanderbilt University, Nashville Tennessee) software will be used for remote data capture and kept on a secure server in the North Denmark Region, Denmark.

6.5.1 Data Quality Assurance

The research team at the Odense University Hospital and Aalborg University Hospital will be responsible for the data management of this research, including quality checking of the data. Roche does not have access to patient-level data and will be collaborating with the research team at Odense and Aalborg University Hospitals to develop the protocol and an analysis plan for the study. Data from the Danish Lymphoma Registry (LYFO) will be supplemented through clinical review of medical charts of the patients included in the study cohort.

The eCRF and other relevant documentation will be maintained in the data collection system audit trail. System back-ups for data and records retention for the research data will be consistent with the standard procedures at Odense and Aalborg University Hospitals. The research team will comply with Roche's procedures regarding archiving and record management.

6.6 DATA ANALYSIS AND OTHER STATISTICAL CONSIDERATIONS

All analyses of data will be descriptive in nature. Means, standard deviations, medians and interquartile ranges will be used to describe continuous variables. Counts and proportions will be used to describe the categorical variables. Kaplan Meier method will be used to estimate survival curves whereas the Aalen-Johansen estimator will be used to compute cumulative incidences. Multivariable analyses such as logistic regression and/or Cox proportional hazards will be used as appropriate. Analyses will be conducted for two subcohorts; 1) a cohort followed from the time of commencing 3rd line therapy and 2) a cohort followed from a patient-specific randomly selected index therapy line. For the latter, the index therapy lines are randomly chosen among 3rd and later lines. To compare outcomes with that observed in single-arm trials, we will perform matching-adjusted indirect comparisons (MAIC). Data analyses will be performed by the research team locally in Denmark and a study report comprising aggregated data summary will be shared with the Sponsor, Roche.

6.7 RESEARCH DOCUMENTATION

The research initiator must maintain adequate and accurate records to enable the conduct of the research to be fully documented, including but not limited to the research plan, research plan amendments, Informed Consent Forms (if applicable), source data and documentation of IRB/EC and governmental/regulatory approval (if necessary).

The research initiator shall ensure that the datasets and statistical programs used for generating the data included in the final research report are kept in electronic format and are available for auditing and inspection.

6.8 LIMITATIONS OF THE RESEARCH METHOD

This is a retrospective and observational study and the main objective of the study is to describe the patient characteristics, treatment patterns and outcomes of DLBCL patients in Denmark who have received at least two prior lines of systemic therapy. No causal or inferential findings are planned and the study aims at describing patterns of care in the target patient population based on management of such patients in the usual clinical practice setting. In absence of strict inclusion/exclusion criteria like in case of a clinical trial, the data may be heterogeneous in nature. Also, despite being a population-based study, there may be potential limitations to the representativeness of the findings of this study to the entire population of DLBCL patients in Denmark or DLBCL patients from other regions with dissimilar practice patterns.

Data pertaining to treatment outcomes will be extracted from clinical charts and there may be heterogeneity in how these outcomes are assessed in usual clinical practice and extent of documentation in the patient's chart when comparing to such outcomes evaluated in the setting of a clinical trial. Moreover, the patients' visits are on an individual basis unlike the pre-specified schedule of visits in a clinical trial and therefore timepoints for assessments of outcomes such as response and progression will be different between those in a clinical trial and those in the usual clinical practice setting.

Lastly, the findings of this study will also be limited in consideration of inherent biases such as selection bias that is often expected in observational research. For these reasons, the study is intended as descriptive or hypothesis-generating.

7. PROTECTION OF HUMAN PATIENTS

7.1 INFORMED CONSENT

For this research, it is not necessary, or not possible/practical to obtain informed consent for use of secondary data. However certain precautions will be taken, including:

- Ensuring data are anonymised
- Ensuring final analysis data are anonymised
- Ensuring possibility of linkage back to individual identified patients is impossible

7.2 COMPLIANCE WITH LAWS AND REGULATIONS

This research will be conducted in full conformance with the Guidelines for GPP published by the International Society of Pharmacoepidemiology and the laws and regulations of the country in which the research is conducted.

7.3 INSTITUTIONAL REVIEW BOARD OR ETHICS COMMITTEE

The study will be conducted according to the protocol. It is a retrospective observational study based on patient data from an approved database and patient charts. There is no clinical intervention as part of the study. No informed consent will be obtained as the vast majority of eligible subjects might be deceased. Upon application, the protocol is expected to be approved by the regulatory authorities in North Denmark Region, Denmark and approval will apply to all participating centers in Denmark.

8. PLANS FOR DISSEMINATION AND COMMUNICATION OF RESEARCH RESULTS

The principal investigator (PI) will write the final manuscript as last-author based on the data analysis and study results along with co-investigator and co-authors from the research team at the Odense and Aalborg University Hospitals as well as from Roche. A first draft will be revised by co-authors, i.e., investigators and sub-investigators from participating centers contributing with at least 5 patients, and Roche representatives. The PI agrees to share all abstracts/manuscripts/presentations with all co-authors and with Roche/Genentech being the financial Sponsor of the study and all will be given adequate time (4 weeks) to provide comments and feedback prior to publication. The PI and first-author retain final rights with regards to data extraction, analyses, interpretation and publication in adherence to the study protocol with input from co-authors. The final manuscript will be submitted for publication in a peer-reviewed international scientific journal.

9. MANAGEMENT AND REPORTING OF ADVERSE EVENTS

There is no studied medicinal product in this research and no adverse events/safety information will be extracted as per study protocol, therefore the research report and final publication will not include a summary of adverse events.

10. RETENTION OF RECORDS

Archiving at the site has to be for at least five years after final report or first publication, whichever comes later; or longer according to local regulation.

Records and documents pertaining to the conduct of this research must be retained by the research initiator for at least 10 years after completion of the research, or for the length of time required by relevant national or local health authorities, whichever is longer. After that period, the documents may be destroyed, subject to local regulations.

No records may be disposed off without the written approval of the research initiator.

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APPENDIX 1 REDCap eCRF

Clinical Information at time of diagnosis

Local ID (Anonymized)

(Please do not input social security number/CPR or similar. However, do maintain a key, so "local ID" can be used to track patients.)

Date of birth

Date of diagnosis

(Date of diagnostic biopsy)

Histology biopsy diagnostic of Diffuse Large B-Cell Lymphoma (DLBCL) with certainty ?

- DLBCL
- High-grade & double-/triple-hit B-cell lymphoma
- primary mediastinal B-cell
- None of the above / unknown

Why is diagnosis uncertain ? Other possible / probable diagnosis ?

NB: DO NOT REGISTER MORE DATA IN THE FORM

Patient has received a total of atleast 3 lines of therapy (i.e. 2 x relapsed / progressed / refractory disease)

- yes
- No
- Unknown

AND

In 1st or 2nd line: atleast one CD20 mAB and anthracycline containing regimen i.a (R-CHOP / R-CHOEP / DA-EPOCH /R-miniCHOP). Anthracyclin substitution (i.e liposomal doxorubicin / Vyxeos) is permissible.

AND

3rd or higher line was initiated AFTER 01.01.2015

Select applicable options

- Did not receive CD20 mAB in 1st or 2nd line
- Did not receive anthracyclin in 1st or 2nd line
- Did not receive a minimum of 3 lines of therapy in the study
- Did not Receive 3rd (or higher) line therapy AFTER 01.01.2015

----- ATTENTION -----

Your choices indicate the patient does not meet the inclusion criteria. Please revise, if data is accurate DO NOT REGISTER MORE DATA IN THE FORM

Did the patient have indolent lymphoma at any point prior to the time of 3rd line therapy ?

- yes
- no

Which indolent lymphoma ?

- Follicular lymphom
 CLL / SLL
 Other

Cell of origin (COO)

- Germinal Center B-cell-like (GCB)
 Non-GCB
 Unknown

c-MYC / BCL2 overexpression by immunohistochemistry

- c-MYC over-expression (>40%)
 BCL2 over-expression (>50%)
 Both MYC and BCL2 over expression
 No over-expression
 Unknown

Was FISH performed ?

Select all applicable!

- C-MYC translocation - t(8;14)(q24;q32)
 BCL2 translocation - t(14;18)(q32;q21)
 BCL6 translocation - t(3q27)
 No FISH translocations found
 FISH not performed / Unknown

----- ATTENTION -----

You have selected High-Grade / Double / Triple hit lymphoma but have not marked appropriate FISH translocations. Please review. Otherwise leave comment.

----- ATTENTION -----

You have selected "No FISH translocations found" but you have also selected another option. Please Revise!!

----- ATTENTION -----

You have NOT selected High-Grade / Double / Triple hit lymphoma but have multiple FISH translocation.

Please revise, otherwise comment:

Staging, disease burden at time of diagnosis

Ann Arbor Stage

- Stage I
 Stage II
 Stage III
 Stage IV
 Unknown

Staging done by:

- Computed Tomography Scan (CT)
 PET/CT
 No scanning performed
 Unknown

Extranodal involvement ?

- Yes
 No
 Unknown

How many extra-nodal organs involved ?

1
 2
 3
 4
 5
 6
 7
 8
 9
 10

Which Extranodal involvements:

(Please specify organ(s))

CNS involvement at time of diagnosis?

Yes
 no
 Unknown

If yes to CNS involvement, please select how this was verified

- Imaging with parenchymal lymphoma
 imaging with leptomeningeal lymphoma
 Cerebrospinal fluid diagnostic
 Brain-biopsy diagnostic
(Select all applicable options!)
-

Bone Marrow Involvement?

Yes
 No
 Unknown

B-symptoms

Yes
 No
 Unknown

B-Symptoms, stringent definition:

Weight Loss > 10% within 6 months
 Drenching Night Sweats
 Recurrent Fever > 38,0 without other explanations (infections etc)
 Characterised as B-symptoms, but doesn't qualify for above criteria
 Unknown
(Check one or more options)

ECOG Performance Score

0
 1
 2
 3
 4
 Unknown

Death and Follow-UP

Local ID (Anonymized)

(Please do not input social security number/CPR or similar. However, do maintain a key, so "local ID" can be used to track patients.)

Date of medical records review (date of access)

Is patient confirmed dead ?

- Yes
 No

Date of death

Last confirmed date alive (often date of access)

Cause of death

- Progressive lymphoma
 Toxicity with progressive lymphoma
 Toxicity with lymphoma in remission
 Other causes with lymphoma in remission
 Other causes with lymphoma NOT in remission

Please specify cause of death

Overall comments or peculiarities

1st And 2nd Line Therapy

Local ID (Anonymized)

(Please do not input social security number/CPR or similar. However, do maintain a key, so "local ID" can be used to track patients.)

If "Clinical Trial" or "Other", Please specify

(Please provide full name, not just abbreviations)

1st line therapy

- R-CHOP
- R-CHOEP
- R-CEOP
- DA-EPOCH
- Clinical Trial
- Other

1st line therapy dates First day of treatment Final day of treatment

If unknown, leave empty

If unknown, leave empty

Number of cycles

(If unknown type "101")

Full dose regimen or attenuated dose regimen ?

- Full dose regimen (standard dose therapy)
- Attenuated dose regimen (reduction from standard dose)
- Unknown
(If unknown type "101")

If attenuated dose, what was the reason ?

- Dosis reduction due to toxicity
- Dosis reduction due to age / comorbidity / other
- Unknown

Consolidation

- No consolidation
- Radiotherapy (RTx)
- Autologous Stem-Cell transplant (ASCT)
- Both RTx and ASCT
- Unknown

Date of stem-cell re infusion

Response to treatment

Complete remission
 Complete remission (unconfirmed)
 Partial remission
 Stable disease
 Progressive disease
 Dead before response assessment
 Unknown

----- ATTENTION -----

You have selected "Dead before Reponse Assessment". Please ensure this is correct. If so, continue to the final tab (Death and Follow-up)

Date of response assessment

1st Relapse

Date of relapse (date of scan)

DLBCL verified by biopsy ?

Yes
 No
 Unknown

Ann Arbor Stage

1
 2
 3
 4
 Unknown

Extranodal involvement?

Yes
 No
 Unknown

Number of areas with extra nodal involvement

1
 2
 3
 4
 5
 6
 7
 8
 9
 10

CNS involvement at time of 1st relapse?

Yes
 no
 Unknown

If yes to CNS involvement, please select how this was verified

Imaging with parenchymal lymphoma
 imaging with leptomeningeal lymphoma
 Cerebrospinal fluid diagnostic
 Brain-biopsy diagnostic
 (Select all applicable options!)

2nd Line Therapy

2nd line therapy included Rituximab

- Yes
 No
 Unknown

2nd line therapy

- CHOP
 DHAP
 ICE
 GDP
 GemOX
 Bendamustin
 Gemcitabin.
 PREBEN
 CCVP
 Best supportive care (Rituximab monotherapy, steroid etc)
 Clinical Trial
 Other

If "Clinical Trial or "Other", Please specify

(Please provide full name, not just abbreviations)

2nd line therapy dates First day of treatment Final day of treatment

If unknown, leave empty

If unknown, leave empty

Number of cycles

(If unknown type "101")

Consolidation

- No consolidation
 Radiotherapy (RTx)
 Autologous Stem-Cell transplant (ASCT)
 Both RTx and ASCT
 Unknown

Date of stem-cell re infusion

Response to treatment

- Complete remission
 Complete remission (unconfirmed)
 Partial remission
 Stable disease
 Progressive disease
 Dead before response assessment
 Unknown

----- ATTENTION -----

You have selected "Dead before Reponse Assessment". Please ensure this is correct. If so, continue to the final tab (Death and Follow-up)

Date of response assessment

2nd relapse

Local ID (Anonymized)

(Please do not input social security number/CPR or similar. However, do maintain a key, so "local ID" can be used to track patients.)

Clinical at time of 2nd relapse

ECOG Performance score

0
 1
 2
 3
 4

B-symptoms

Yes
 No
 Unknown

B-symptomes: Were there stringent B-symptoms ?

Weight Loss > 10% within 6 months
 Drenching Night Sweats
 Recurrent Fever > 38,0 without other explanations (infections etc)
 Characterised as B-symptoms in records, but unclear how
 (Check one or more options)

Demography at Time of 2nd Relapse

Does the patient live with others (cohabitation) ?

yes
 no
 unknown
 (Animals do not count.)

Does the patient consume > 14 units of alcohol weekly or any drug abuse ?

yes
 no
 unknown

Specify alcohol / drug consumption.
Check each box applicable

More than 14 units weekly currently
 Drug abuse prior
 Drug abuse current

Heart disease - Latest LVEF < 45% and/or NYHA > 2

Yes
 no
 Unknown

Renal disease - Creatinine > 1,5 x Upper limit of normal

Yes
 No
 Unknown

Bilirubin > 1,5 x Upper limit of normal and / or ALAT / ALT > 3 x upper limit of normal

Yes
 No
 Unknown

Significant pulmonary disease, ie severe COPD, influencing choice of treatment at time of initiation of 3rd line treatment.

- Yes
 No
 Unknown

Comorbidities continued

- Active Malignancy
 Previous Non-DLBCL Malignancy
 Previous non-lymphoma related chemotherapy
 Previous Radiotherapy

Which malignancy ? Which primary organ / type ? Status (i.e cured / in treatment / in watch & wait / terminal).

Active or previous Hepatitis (B, C) and/or HIV ?

- Yes
 No
 Unknown

Which viral infection ?

- Hepatitis B - ACTIVE - Presence of Hbs antigens or PCR / DNA
 Hepatitis B - PREVIOUS - Presence of anti HBc + HBs but no antigens or PCR / DNA
 Hepatitis C - ACTIVE - Presence of Anti HCV and PCR/RNA
 Hepatitis C - PREVIOUS - Presence of Anti HCV but negative PCR / RNA
 HIV - Positive antibody / antigens / PCR

Radiology at time of 2nd relapse

Date of relapse (date of scan)

(In patients with SD/PD in previous line, use date of response assessment.)

Radiology

- Computed Tomography Scan (CT)
 PET/CT
 Unknown
 Radiology was NOT performed

Ann Arbor Stage

- 1
 2
 3
 4
 Unknown

Extranodal involvement?

- Yes
 No
 Unknown

Number of areas with extra nodal involvement

1
 2
 3
 4
 5
 6
 7
 8
 9
 10

Which Extranodal involvement ?

 (Specify Organ(s))

Largest Lymphnode / Conglomerate?

 (In centimeters - Use comma as decimal. If unknown type 101)

CNS involvement at time of 2nd relapse?

Yes
 No
 Unknown

If yes to CNS involvement, please select how this was verified

Imaging with parenchymal lymphoma
 imaging with leptomeningeal lymphoma
 Cerebrospinal fluid diagnostic
 Brain-biopsy diagnostic
 (Select all applicable options!)

Histology at time of 2nd relapse

Histology repeated before 3rd line treatment showing:

DLBCL
 DLBCL not otherwise Specified (NOS),
 High-grade & double-/triple-hit B-cell lymphoma
 primary mediastinal B-cell
 None of the above / not performed / unknown

Why was histology not performed or unknown ?

Date of histological confirmation (the last histology BEFORE treatment start)

Cell of origin (COO)

Germinal Center B-cell-like (GCB)
 Non-GCB
 Unknown

c-MYC / BCL2 overexpression by immunohistochemistry

c-MYC over-expression (>40%)
 BCL2 over-expression (>50%)
 Both MYC and BCL2 over expression
 No over-expression
 Unknown

Was FISH performed ?

Select all aplicable!

- C-MYC translocation - t(8;14)(q24;q32)
 BCL2 translocation - t(14;18)(q32;q21)
 BCL6 translocation - t(3q27)
 No FISH translocations found
 FISH not performed / Unknown

----- ATTENTION -----

You have selected High-Grade / Double / Triple hit lymphoma but have not marked appropriate FISH translocations. Please review. Otherwise leave comment.

----- ATTENTION -----

You have selected No FISH performed but you have also selected another option.

Please revise, otherwise comment:

----- ATTENTION -----

You have NOT selected High-Grade / Double / Triple hit lymphoma but have multiple FISH translocation.

Please revise, otherwise comment:

Bone marrow involvement ?

- Yes
 No
 Unknown (i.e. not performed or unregistered)

Biochemistry at time of 2nd relapse

Haemoglobin mmol/l

(mmol/l - Use comma as decimal)

White blood cell count

(10⁹/l - Use comma as decimal)

Absolute neutrophil count

(10⁹/l - Use comma as decimal)

Lymphocyte count

(10⁹/l - Use comma as decimal)

Absolute monocyte count

(10⁹/l - Use comma as decimal)

Thrombocyte count

($10^9/l$ - Use comma as decimal)

Lactate dehydrogenase value

(U/L - Use comma as decimal)

Lactate dehydrogenase, upper normal limit (for reference)

(U/L - Use comma as decimal)

Alanine aminotransferase (ALT/ALAT)

(U/L - Use comma as decimal)

Bilirubin

($\mu\text{mol/l}$ - Use comma as decimal)

Alkaline phosphotase (ALP / BASP)

(U/L - Use comma as decimal)

eGFR

(ml/min/1,73m²)

Albumine

(g/L - Use comma as decimal)

CRP

(mg/L - Use comma as decimal)

3rd Line Therapy

Local ID (Anonymized)

(Please do not input social security number/CPR or similar. However, do maintain a key, so "local ID" can be used to track patients.)

Treatment given as 3rd line therapy

Was Rituximab given as part of treatment ?

- Yes
 No
 Unknown

Chemotherapy given

- DHAP
 ICE
 GDP
 GemOX
 Bendamustin
 Gemcitabin.
 PREBEN
 CCVP
 Best supportive care (Rituximab monotherapy, steroid etc)
 Clinical Trial
 Other

If "Clinical Trial" or "Other", Please specify

(Please provide full name, not just abbreviations)

3rd line therapy First day of treatment Final day of treatment

If unknown, leave empty

If unknown, leave empty

Number of cycles

(If unknown type "101")

Full dose- or attenuated dose regimen ?

- Full dose regimen (standard dose therapy)
 Attenuated dose regimen (reduction from standard dose)
 Unknown

If attenuated dose, what was the reason ?

- Dosis reduction due to toxicity (After beginning of therapy)
 Dosis reduction due to age / comorbidity / other (Before treatment initiation)
 Unknown

Consolidation Therapy Autologous Stem-Cell transplant (HDT + ASCT)
 Allogeneous Stem-Cell transplantation.
 No Consolidation
 Unknown

Date of stem-cell re infusion _____

Radiotherapy Consolidation Yes
 No
 Unknown

Indication for radiotherapy Localised relapse
 Bulkt disease
 Extra nodal disease
 Incomplete response
 Other / unknown (specify below)

Please specify reason for RTx consolidation _____

Dates for Radiotherapy treatment

Date of first date of last dose

Response to treatment Complete remission
 Complete remission (unconfirmed)
 Partial remission
 Stabile disease
 Progressive disease
 Dead before response assessment
 Unknown

Date of response assessment _____

Response to treatment (BEFORE consolidation) Complete remission
 Complete remission (unconfirmed)
 Partial remission
 Stabile disease
 Progressive disease
 Dead before response assessment
 Unknown

----- ATTENTION -----

You have selected that the patient received consolidation, but died before "response assessment BEFORE consolidation". Please revise!

Date of response assessment (BEFORE consolidation) _____

Response to treatment (AFTER consolidation)

- Complete remission
- Complete remission (unconfirmed)
- Partial remission
- Stable disease
- Progressive disease
- Dead before response assessment
- Unknown

Date of response assessment (AFTER consolidation)

Did the patient relapse after the current line of therapy ?

- Yes
- No

If yes, continue to the next page. Otherwise stop registering more data.

----- ATTENTION -----

You have selected that the patient did not experience more relapses. Please continue to the tab with "Follow-up and Death". Disregard the other relapse / treatment tabs.

----- ATTENTION -----

3rd relapse

Local ID (Anonymized)

(Please do not input social security number/CPR or similar. However, do maintain a key, so "local ID" can be used to track patients.)

Clinical at time of 3rd relapse

ECOG Performance score

0
 1
 2
 3
 4

B-symptoms

Yes
 No
 Unknown

B-symptomes: Were there stringent B-symptoms ?

Weight Loss > 10% within 6 months
 Drenching Night Sweats
 Recurrent Fever > 38,0 without other explanations (infections etc)
 Characterised as B-symptoms in records, but unclear how
 (Check one or more options)

Demography at Time of 3rd Relapse

Does the patient live with others (cohabitation) ?

yes
 no
 unknown
 (Animals do not count.)

Does the patient consume > 14 units of alcohol weekly or any drug abuse ?

yes
 no
 unknown

Specify alcohol / drug consumption.
Check each box applicable

More than 14 units weekly currently
 Drug abuse prior
 Drug abuse current

Heart disease - Latest LVEF < 45% and/or NYHA > 2

Yes
 no
 Unknown

Renal disease - Creatinine > 1,5 x Upper limit of normal

Yes
 No
 Unknown

Bilirubin > 1,5 x Upper limit of normal and / or ALAT / ALT > 3 x upper limit of normal

Yes
 No
 Unknown

Significant pulmonary disease, ie severe COPD, influencing choice of treatment at time of initiation of 3rd line treatment.

- Yes
 No
 Unknown

Comorbidities continued

- Active Malignancy
 Previous Non-DLBCL Malignancy
 Previous non-lymphoma related chemotherapy
 Previous Radiotherapy

Which malignancy ? Which primary organ / type ? Status (i.e cured / in treatment / in watch & wait / terminal).

Active or previous Hepatitis (B, C) and/or HIV ?

- Yes
 No
 Unknown

Which viral infection ?

- Hepatitis B - ACTIVE - Presence of Hbs antigens or PCR / DNA
 Hepatitis B - PREVIOUS - Presence of anti HBc + HBs but no antigens or PCR / DNA
 Hepatitis C - ACTIVE - Presence of Anti HCV and PCR/RNA
 Hepatitis C - PREVIOUS - Presence of Anti HCV but negative PCR / RNA
 HIV - Positive antibody / antigens / PCR

Radiology at time of 3rd relapse

Date of relapse (date of scan)

(In patients with SD/PD in previous line, use date of response assessment.)

Radiology

- Computed Tomography Scan (CT)
 PET/CT
 Unknown
 Radiology was NOT performed

Ann Arbor Stage

- 1
 2
 3
 4
 Unknown

Extranodal involvement?

- Yes
 No
 Unknown

Number of areas with extra nodal involvement

1
 2
 3
 4
 5
 6
 7
 8
 9
 10

Which Extranodal involvement ?

 (Specify Organ(s))

Largest Lymphnode / Conglomerate?

 (In centimeters - Use comma as decimal. If unknown type 101)

CNS involvement at time of 3rd relapse?

Yes
 No
 Unknown

If yes to CNS involvement, please select how this was verified

Imaging with parenchymal lymphoma
 imaging with leptomeningeal lymphoma
 Cerebrospinal fluid diagnostic
 Brain-biopsy diagnostic
 (Select all applicable options!)

Histology at time of 3rd relapse

Histology repeated before 3rd line treatment showing:

DLBCL
 DLBCL not otherwise Specified (NOS),
 High-grade & double-/triple-hit B-cell lymphoma
 primary mediastinal B-cell
 None of the above / not performed / unknown

Why was histology not performed or unknown ?

Date of histological confirmation (the last histology BEFORE treatment start)

Cell of origin (COO)

Germinal Center B-cell-like (GCB)
 Non-GCB
 Unknown

c-MYC / BCL2 overexpression by immunohistochemistry

c-MYC over-expression (>40%)
 BCL2 over-expression (>50%)
 Both MYC and BCL2 over expression
 No over-expression
 Unknown

Was FISH performed ?

Select all aplicable!

- C-MYC translocation - t(8;14)(q24;q32)
 BCL2 translocation - t(14;18)(q32;q21)
 BCL6 translocation - t(3q27)
 No FISH translocations found
 FISH not performed / Unknown

----- ATTENTION -----

You have selected High-Grade / Double / Triple hit lymphoma but have not marked appropriate FISH translocations. Please review. Otherwise leave comment.

----- ATTENTION -----

You have selected No FISH performed but you have also selected another option.

Please revise, otherwise comment:

----- ATTENTION -----

You have NOT selected High-Grade / Double / Triple hit lymphoma but have multiple FISH translocation.

Please revise, otherwise comment:

Bone marrow involvement ?

- Yes
 No
 Unknown (i.e. not performed or unregistered)

Biochemistry at time of 3rd relapse

Haemoglobin mmol/l

(mmol/l - Use comma as decimal)

White blood cell count

(10⁹/l - Use comma as decimal)

Absolute neutrophil count

(10⁹/l - Use comma as decimal)

Lymphocyte count

(10⁹/l - Use comma as decimal)

Absolute monocyte count

(10⁹/l - Use comma as decimal)

Thrombocyte count

($10^9/l$ - Use comma as decimal)

Lactate dehydrogenase value

(U/L - Use comma as decimal)

Lactate dehydrogenase, upper normal limit (for reference)

(U/L - Use comma as decimal)

Alanine aminotransferase (ALT/ALAT)

(U/L - Use comma as decimal)

Bilirubin

($\mu\text{mol/l}$ - Use comma as decimal)

Alkaline phosphotase (ALP / BASP)

(U/L - Use comma as decimal)

eGFR

(ml/min/1,73m²)

Albumine

(g/L - Use comma as decimal)

CRP

(mg/L - Use comma as decimal)

4th Line Therapy

Local ID (Anonymized)

(Please do not input social security number/CPR or similar. However, do maintain a key, so "local ID" can be used to track patients.)

Treatment given as 3rd line therapy

Was Rituximab given as part of treatment ?

- Yes
 No
 Unknown

Chemotherapy given

- DHAP
 ICE
 GDP
 GemOX
 Bendamustin
 Gemcitabin.
 PREBEN
 CCVP
 Best supportive care (Rituximab monotherapy, steroid etc)
 Clinical Trial
 Other

If "Clinical Trial" or "Other", Please specify

(Please provide full name, not just abbreviations)

3rd line therapy First day of treatment Final day of treatment

If unknown, leave empty

If unknown, leave empty

Number of cycles

(If unknown type "101")

Full dose- or attenuated dose regimen ?

- Full dose regimen (standard dose therapy)
 Attenuated dose regimen (reduction from standard dose)
 Unknown

If attenuated dose, what was the reason ?

- Dosis reduction due to toxicity (After beginning of therapy)
 Dosis reduction due to age / comorbidity / other (Before treatment initiation)
 Unknown

Consolidation Therapy

Autologous Stem-Cell transplant (HDT + ASCT)
 Allogeneous Stem-Cell transplantation.
 No Consolidation
 Unknown

Date of stem-cell re infusion

Radiotherapy Consolidation

Yes
 No
 Unknown

Indication for radiotherapy

Localised relapse
 Bulkt disease
 Extra nodal disease
 Incomplete response
 Other / unknown (specify below)

Please specify reason for RTx consolidation

Dates for Radiotherapy treatment

Date of first date of last dose

Response to treatment

Complete remission
 Complete remission (unconfirmed)
 Partial remission
 Stabile disease
 Progressive disease
 Dead before response assessment
 Unknown

Date of response assessment

Response to treatment (BEFORE consolidation)

Complete remission
 Complete remission (unconfirmed)
 Partial remission
 Stabile disease
 Progressive disease
 Dead before response assessment
 Unknown

----- ATTENTION -----

You have selected that the patient received consolidation, but died before "response assessment BEFORE consolidation". Please revise!

Date of response assessment (BEFORE consolidation)

Response to treatment (AFTER consolidation)

- Complete remission
- Complete remission (unconfirmed)
- Partial remission
- Stable disease
- Progressive disease
- Dead before response assessment
- Unknown

Date of response assessment (AFTER consolidation)

Did the patient relapse after the current line of therapy ?

- Yes
- No

If yes, continue to the next page. Otherwise stop registering more data.

----- ATTENTION -----

You have selected that the patient did not experience more relapses. Please continue to the tab with "Follow-up and Death". Disregard the other relapse / treatment tabs.

----- ATTENTION -----

4th relapse

Local ID (Anonymized)

(Please do not input social security number/CPR or similar. However, do maintain a key, so "local ID" can be used to track patients.)

Clinical at time of 2nd relapse

ECOG Performance score

0
 1
 2
 3
 4

B-symptoms

Yes
 No
 Unknown

B-symptomes: Were there stringent B-symptoms ?

Weight Loss > 10% within 6 months
 Drenching Night Sweats
 Recurrent Fever > 38,0 without other explanations (infections etc)
 Characterised as B-symptoms in records, but unclear how
 (Check one or more options)

Demography at Time of 2nd Relapse

Does the patient live with others (cohabitation) ?

yes
 no
 unknown
 (Animals do not count.)

Does the patient consume > 14 units of alcohol weekly or any drug abuse ?

yes
 no
 unknown

Specify alcohol / drug consumption.
Check each box applicable

More than 14 units weekly currently
 Drug abuse prior
 Drug abuse current

Heart disease - Latest LVEF < 45% and/or NYHA > 2

Yes
 no
 Unknown

Renal disease - Creatinine > 1,5 x Upper limit of normal

Yes
 No
 Unknown

Bilirubin > 1,5 x Upper limit of normal and / or ALAT / ALT > 3 x upper limit of normal

Yes
 No
 Unknown

Significant pulmonary disease, ie severe COPD, influencing choice of treatment at time of initiation of 3rd line treatment.

- Yes
 No
 Unknown

Comorbidities continued

- Active Malignancy
 Previous Non-DLBCL Malignancy
 Previous non-lymphoma related chemotherapy
 Previous Radiotherapy

Which malignancy ? Which primary organ / type ? Status (i.e cured / in treatment / in watch & wait / terminal).

Active or previous Hepatitis (B, C) and/or HIV ?

- Yes
 No
 Unknown

Which viral infection ?

- Hepatitis B - ACTIVE - Presence of Hbs antigens or PCR / DNA
 Hepatitis B - PREVIOUS - Presence of anti HBc + HBs but no antigens or PCR / DNA
 Hepatitis C - ACTIVE - Presence of Anti HCV and PCR/RNA
 Hepatitis C - PREVIOUS - Presence of Anti HCV but negative PCR / RNA
 HIV - Positive antibody / antigens / PCR

Radiology at time of 2nd relapse

Date of relapse (date of scan)

(In patients with SD/PD in previous line, use date of response assessment.)

Radiology

- Computed Tomography Scan (CT)
 PET/CT
 Unknown
 Radiology was NOT performed

Ann Arbor Stage

- 1
 2
 3
 4
 Unknown

Extranodal involvement?

- Yes
 No
 Unknown

Number of areas with extra nodal involvement

1
 2
 3
 4
 5
 6
 7
 8
 9
 10

Which Extranodal involvement ?

 (Specify Organ(s))

Largest Lymphnode / Conglomerate?

 (In centimeters - Use comma as decimal. If unknown type 101)

CNS involvement at time of 2nd relapse?

Yes
 No
 Unknown

If yes to CNS involvement, please select how this was verified

Imaging with parenchymal lymphoma
 imaging with leptomeningeal lymphoma
 Cerebrospinal fluid diagnostic
 Brain-biopsy diagnostic
 (Select all applicable options!)

Histology at time of 2nd relapse

Histology repeated before 3rd line treatment showing:

DLBCL
 DLBCL not otherwise Specified (NOS),
 High-grade & double-/triple-hit B-cell lymphoma
 primary mediastinal B-cell
 None of the above / not performed / unknown

Why was histology not performed or unknown ?

Date of histological confirmation (the last histology BEFORE treatment start)

Cell of origin (COO)

Germinal Center B-cell-like (GCB)
 Non-GCB
 Unknown

c-MYC / BCL2 overexpression by immunohistochemistry

c-MYC over-expression (>40%)
 BCL2 over-expression (>50%)
 Both MYC and BCL2 over expression
 No over-expression
 Unknown

Was FISH performed ?

Select all aplicable!

- C-MYC translocation - t(8;14)(q24;q32)
 BCL2 translocation - t(14;18)(q32;q21)
 BCL6 translocation - t(3q27)
 No FISH translocations found
 FISH not performed / Unknown

----- ATTENTION -----

You have selected High-Grade / Double / Triple hit lymphoma but have not marked appropriate FISH translocations. Please review. Otherwise leave comment.

----- ATTENTION -----

You have selected No FISH performed but you have also selected another option.

Please revise, otherwise comment:

----- ATTENTION -----

You have NOT selected High-Grade / Double / Triple hit lymphoma but have multiple FISH translocation.

Please revise, otherwise comment:

Bone marrow involvement ?

- Yes
 No
 Unknown (i.e. not performed or unregistered)

Biochemistry at time of 2nd relapse

Haemoglobin mmol/l

(mmol/l - Use comma as decimal)

White blood cell count

(10⁹/l - Use comma as decimal)

Absolute neutrophil count

(10⁹/l - Use comma as decimal)

Lymphocyte count

(10⁹/l - Use comma as decimal)

Absolute monocyte count

(10⁹/l - Use comma as decimal)

Thrombocyte count

($10^9/l$ - Use comma as decimal)

Lactate dehydrogenase value

(U/L - Use comma as decimal)

Lactate dehydrogenase, upper normal limit (for reference)

(U/L - Use comma as decimal)

Alanine aminotransferase (ALT/ALAT)

(U/L - Use comma as decimal)

Bilirubin

($\mu\text{mol/l}$ - Use comma as decimal)

Alkaline phosphotase (ALP / BASP)

(U/L - Use comma as decimal)

eGFR

(ml/min/1,73m²)

Albumine

(g/L - Use comma as decimal)

CRP

(mg/L - Use comma as decimal)

5th Line Therapy

Local ID (Anonymized)

(Please do not input social security number/CPR or similar. However, do maintain a key, so "local ID" can be used to track patients.)

Treatment given as 3rd line therapy

Was Rituximab given as part of treatment ?

- Yes
 No
 Unknown

Chemotherapy given

- DHAP
 ICE
 GDP
 GemOX
 Bendamustin
 Gemcitabin.
 PREBEN
 CCVP
 Best supportive care (Rituximab monotherapy, steroid etc)
 Clinical Trial
 Other

If "Clinical Trial" or "Other", Please specify

(Please provide full name, not just abbreviations)

3rd line therapy First day of treatment Final day of treatment

If unknown, leave empty

If unknown, leave empty

Number of cycles

(If unknown type "101")

Full dose- or attenuated dose regimen ?

- Full dose regimen (standard dose therapy)
 Attenuated dose regimen (reduction from standard dose)
 Unknown

If attenuated dose, what was the reason ?

- Dosis reduction due to toxicity (After beginning of therapy)
 Dosis reduction due to age / comorbidity / other (Before treatment initiation)
 Unknown

Consolidation Therapy

Autologous Stem-Cell transplant (HDT + ASCT)
 Allogeneous Stem-Cell transplantation.
 No Consolidation
 Unknown

Date of stem-cell re infusion

Radiotherapy Consolidation

Yes
 No
 Unknown

Indication for radiotherapy

Localised relapse
 Bulkt disease
 Extra nodal disease
 Incomplete response
 Other / unknown (specify below)

Please specify reason for RTx consolidation

Dates for Radiotherapy treatment

Date of first date of last dose

Response to treatment

Complete remission
 Complete remission (unconfirmed)
 Partial remission
 Stabile disease
 Progressive disease
 Dead before response assessment
 Unknown

Date of response assessment

Response to treatment (BEFORE consolidation)

Complete remission
 Complete remission (unconfirmed)
 Partial remission
 Stabile disease
 Progressive disease
 Dead before response assessment
 Unknown

----- ATTENTION -----

You have selected that the patient received consolidation, but died before "response assessment BEFORE consolidation". Please revise!

Date of response assessment (BEFORE consolidation)

Response to treatment (AFTER consolidation)

- Complete remission
- Complete remission (unconfirmed)
- Partial remission
- Stable disease
- Progressive disease
- Dead before response assessment
- Unknown

Date of response assessment (AFTER consolidation)

Did the patient relapse after the current line of therapy ?

- Yes
- No

If yes, continue to the next page. Otherwise stop registering more data.

----- ATTENTION -----

You have selected that the patient did not experience more relapses. Please continue to the tab with "Follow-up and Death". Disregard the other relapse / treatment tabs.

----- ATTENTION -----

5th relapse

Local ID (Anonymized)

(Please do not input social security number/CPR or similar. However, do maintain a key, so "local ID" can be used to track patients.)

Clinical at time of 2nd relapse

ECOG Performance score

0
 1
 2
 3
 4

B-symptoms

Yes
 No
 Unknown

B-symptomes: Were there stringent B-symptoms ?

Weight Loss > 10% within 6 months
 Drenching Night Sweats
 Recurrent Fever > 38,0 without other explanations (infections etc)
 Characterised as B-symptoms in records, but unclear how
 (Check one or more options)

Demography at Time of 2nd Relapse

Does the patient live with others (cohabitation) ?

yes
 no
 unknown
 (Animals do not count.)

Does the patient consume > 14 units of alcohol weekly or any drug abuse ?

yes
 no
 unknown

Specify alcohol / drug consumption.
Check each box applicable

More than 14 units weekly currently
 Drug abuse prior
 Drug abuse current

Heart disease - Latest LVEF < 45% and/or NYHA > 2

Yes
 no
 Unknown

Renal disease - Creatinine > 1,5 x Upper limit of normal

Yes
 No
 Unknown

Bilirubin > 1,5 x Upper limit of normal and / or ALAT / ALT > 3 x upper limit of normal

Yes
 No
 Unknown

Significant pulmonary disease, ie severe COPD, influencing choice of treatment at time of initiation of 3rd line treatment.

- Yes
 No
 Unknown

Comorbidities continued

- Active Malignancy
 Previous Non-DLBCL Malignancy
 Previous non-lymphoma related chemotherapy
 Previous Radiotherapy

Which malignancy ? Which primary organ / type ? Status (i.e cured / in treatment / in watch & wait / terminal).

Active or previous Hepatitis (B, C) and/or HIV ?

- Yes
 No
 Unknown

Which viral infection ?

- Hepatitis B - ACTIVE - Presence of Hbs antigens or PCR / DNA
 Hepatitis B - PREVIOUS - Presence of anti HBc + HBs but no antigens or PCR / DNA
 Hepatitis C - ACTIVE - Presence of Anti HCV and PCR/RNA
 Hepatitis C - PREVIOUS - Presence of Anti HCV but negative PCR / RNA
 HIV - Positive antibody / antigens / PCR

Radiology at time of 2nd relapse

Date of relapse (date of scan)

(In patients with SD/PD in previous line, use date of response assessment.)

Radiology

- Computed Tomography Scan (CT)
 PET/CT
 Unknown
 Radiology was NOT performed

Ann Arbor Stage

- 1
 2
 3
 4
 Unknown

Extranodal involvement?

- Yes
 No
 Unknown

Number of areas with extra nodal involvement

1
 2
 3
 4
 5
 6
 7
 8
 9
 10

Which Extranodal involvement ?

 (Specify Organ(s))

Largest Lymphnode / Conglomerate?

 (In centimeters - Use comma as decimal. If unknown type 101)

CNS involvement at time of 2nd relapse?

- Yes
 No
 Unknown

If yes to CNS involvement, please select how this was verified

- Imaging with parenchymal lymphoma
 imaging with leptomeningeal lymphoma
 Cerebrospinal fluid diagnostic
 Brain-biopsy diagnostic
 (Select all applicable options!)

Histology at time of 2nd relapse

Histology repeated before 3rd line treatment showing:

- DLBCL
 DLBCL not otherwise Specified (NOS),
 High-grade & double-/triple-hit B-cell lymphoma
 primary mediastinal B-cell
 None of the above / not performed / unknown

Why was histology not performed or unknown ?

Date of histological confirmation (the last histology BEFORE treatment start)

Cell of origin (COO)

- Germinal Center B-cell-like (GCB)
 Non-GCB
 Unknown

c-MYC / BCL2 overexpression by immunohistochemistry

- c-MYC over-expression (>40%)
 BCL2 over-expression (>50%)
 Both MYC and BCL2 over expression
 No over-expression
 Unknown

Was FISH performed ?

Select all aplicable!

- C-MYC translocation - t(8;14)(q24;q32)
 BCL2 translocation - t(14;18)(q32;q21)
 BCL6 translocation - t(3q27)
 No FISH translocations found
 FISH not performed / Unknown

----- ATTENTION -----

You have selected High-Grade / Double / Triple hit lymphoma but have not marked appropriate FISH translocations. Please review. Otherwise leave comment.

----- ATTENTION -----

You have selected No FISH performed but you have also selected another option.

Please revise, otherwise comment:

----- ATTENTION -----

You have NOT selected High-Grade / Double / Triple hit lymphoma but have multiple FISH translocation.

Please revise, otherwise comment:

Bone marrow involvement ?

- Yes
 No
 Unknown (i.e. not performed or unregistered)

Biochemistry at time of 2nd relapse

Haemoglobin mmol/l

(mmol/l - Use comma as decimal)

White blood cell count

(10⁹/l - Use comma as decimal)

Absolute neutrophil count

(10⁹/l - Use comma as decimal)

Lymphocyte count

(10⁹/l - Use comma as decimal)

Absolute monocyte count

(10⁹/l - Use comma as decimal)

Thrombocyte count

($10^9/l$ - Use comma as decimal)

Lactate dehydrogenase value

(U/L - Use comma as decimal)

Lactate dehydrogenase, upper normal limit (for reference)

(U/L - Use comma as decimal)

Alanine aminotransferase (ALT/ALAT)

(U/L - Use comma as decimal)

Bilirubin

($\mu\text{mol/l}$ - Use comma as decimal)

Alkaline phosphotase (ALP / BASP)

(U/L - Use comma as decimal)

eGFR

(ml/min/1,73m²)

Albumine

(g/L - Use comma as decimal)

CRP

(mg/L - Use comma as decimal)

6th Line Therapy

Local ID (Anonymized)

(Please do not input social security number/CPR or similar. However, do maintain a key, so "local ID" can be used to track patients.)

Treatment given as 3rd line therapy

Was Rituximab given as part of treatment ?

- Yes
 No
 Unknown

Chemotherapy given

- DHAP
 ICE
 GDP
 GemOX
 Bendamustin
 Gemcitabin.
 PREBEN
 CCVP
 Best supportive care (Rituximab monotherapy, steroid etc)
 Clinical Trial
 Other

If "Clinical Trial" or "Other", Please specify

(Please provide full name, not just abbreviations)

3rd line therapy First day of treatment Final day of treatment

If unknown, leave empty

If unknown, leave empty

Number of cycles

(If unknown type "101")

Full dose- or attenuated dose regimen ?

- Full dose regimen (standard dose therapy)
 Attenuated dose regimen (reduction from standard dose)
 Unknown

If attenuated dose, what was the reason ?

- Dosis reduction due to toxicity (After beginning of therapy)
 Dosis reduction due to age / comorbidity / other (Before treatment initiation)
 Unknown

Consolidation Therapy

Autologous Stem-Cell transplant (HDT + ASCT)
 Allogeneous Stem-Cell transplantation.
 No Consolidation
 Unknown

Date of stem-cell re infusion

Radiotherapy Consolidation

Yes
 No
 Unknown

Indication for radiotherapy

Localised relapse
 Bulkt disease
 Extra nodal disease
 Incomplete response
 Other / unknown (specify below)

Please specify reason for RTx consolidation

Dates for Radiotherapy treatment

Date of first date of last dose

Response to treatment

Complete remission
 Complete remission (unconfirmed)
 Partial remission
 Stabile disease
 Progressive disease
 Dead before response assessment
 Unknown

Date of response assessment

Response to treatment (BEFORE consolidation)

Complete remission
 Complete remission (unconfirmed)
 Partial remission
 Stabile disease
 Progressive disease
 Dead before response assessment
 Unknown

----- ATTENTION -----

You have selected that the patient received consolidation, but died before "response assessment BEFORE consolidation". Please revise!

Date of response assessment (BEFORE consolidation)

Response to treatment (AFTER consolidation)

- Complete remission
- Complete remission (unconfirmed)
- Partial remission
- Stable disease
- Progressive disease
- Dead before response assessment
- Unknown

Date of response assessment (AFTER consolidation)

Did the patient relapse after the current line of therapy ?

- Yes
- No

If yes, continue to the next page. Otherwise stop registering more data.

----- ATTENTION -----

You have selected that the patient did not experience more relapses. Please continue to the tab with "Follow-up and Death". Disregard the other relapse / treatment tabs.

----- ATTENTION -----

6th relapse

Local ID (Anonymized)

(Please do not input social security number/CPR or similar. However, do maintain a key, so "local ID" can be used to track patients.)

Clinical at time of 2nd relapse

ECOG Performance score

0
 1
 2
 3
 4

B-symptoms

Yes
 No
 Unknown

B-symptomes: Were there stringent B-symptoms ?

Weight Loss > 10% within 6 months
 Drenching Night Sweats
 Recurrent Fever > 38,0 without other explanations (infections etc)
 Characterised as B-symptoms in records, but unclear how
 (Check one or more options)

Demography at Time of 2nd Relapse

Does the patient live with others (cohabitation) ?

yes
 no
 unknown
 (Animals do not count.)

Does the patient consume > 14 units of alcohol weekly or any drug abuse ?

yes
 no
 unknown

Specify alcohol / drug consumption.
Check each box applicable

More than 14 units weekly currently
 Drug abuse prior
 Drug abuse current

Heart disease - Latest LVEF < 45% and/or NYHA > 2

Yes
 no
 Unknown

Renal disease - Creatinine > 1,5 x Upper limit of normal

Yes
 No
 Unknown

Bilirubin > 1,5 x Upper limit of normal and / or ALAT / ALT > 3 x upper limit of normal

Yes
 No
 Unknown

Significant pulmonary disease, ie severe COPD, influencing choice of treatment at time of initiation of 3rd line treatment.

- Yes
 No
 Unknown

Comorbidities continued

- Active Malignancy
 Previous Non-DLBCL Malignancy
 Previous non-lymphoma related chemotherapy
 Previous Radiotherapy

Which malignancy ? Which primary organ / type ? Status (i.e cured / in treatment / in watch & wait / terminal).

Active or previous Hepatitis (B, C) and/or HIV ?

- Yes
 No
 Unknown

Which viral infection ?

- Hepatitis B - ACTIVE - Presence of Hbs antigens or PCR / DNA
 Hepatitis B - PREVIOUS - Presence of anti HBc + HBs but no antigens or PCR / DNA
 Hepatitis C - ACTIVE - Presence of Anti HCV and PCR/RNA
 Hepatitis C - PREVIOUS - Presence of Anti HCV but negative PCR / RNA
 HIV - Positive antibody / antigens / PCR

Radiology at time of 2nd relapse

Date of relapse (date of scan)

(In patients with SD/PD in previous line, use date of response assessment.)

Radiology

- Computed Tomography Scan (CT)
 PET/CT
 Unknown
 Radiology was NOT performed

Ann Arbor Stage

- 1
 2
 3
 4
 Unknown

Extranodal involvement?

- Yes
 No
 Unknown

Number of areas with extra nodal involvement

1
 2
 3
 4
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 7
 8
 9
 10

Which Extranodal involvement ?

 (Specify Organ(s))

Largest Lymphnode / Conglomerate?

 (In centimeters - Use comma as decimal. If unknown type 101)

CNS involvement at time of 2nd relapse?

Yes
 No
 Unknown

If yes to CNS involvement, please select how this was verified

Imaging with parenchymal lymphoma
 imaging with leptomeningeal lymphoma
 Cerebrospinal fluid diagnostic
 Brain-biopsy diagnostic
 (Select all applicable options!)

Histology at time of 2nd relapse

Histology repeated before 3rd line treatment showing:

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c-MYC / BCL2 overexpression by immunohistochemistry

c-MYC over-expression (>40%)
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Was FISH performed ?

Select all aplicable!

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You have NOT selected High-Grade / Double / Triple hit lymphoma but have multiple FISH translocation.

Please revise, otherwise comment:

Bone marrow involvement ?

- Yes
 No
 Unknown (i.e. not performed or unregistered)

Biochemistry at time of 2nd relapse

Haemoglobin mmol/l

(mmol/l - Use comma as decimal)

White blood cell count

(10⁹/l - Use comma as decimal)

Absolute neutrophil count

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Alkaline phosphotase (ALP / BASP)

(U/L - Use comma as decimal)

eGFR

(ml/min/1,73m²)

Albumine

(g/L - Use comma as decimal)

CRP

(mg/L - Use comma as decimal)

7th Line Therapy

Local ID (Anonymized)

(Please do not input social security number/CPR or similar. However, do maintain a key, so "local ID" can be used to track patients.)

Treatment given as 3rd line therapy

Was Rituximab given as part of treatment ?

- Yes
 No
 Unknown

Chemotherapy given

- DHAP
 ICE
 GDP
 GemOX
 Bendamustin
 Gemcitabin.
 PREBEN
 CCVP
 Best supportive care (Rituximab monotherapy, steroid etc)
 Clinical Trial
 Other

If "Clinical Trial" or "Other", Please specify

(Please provide full name, not just abbreviations)

3rd line therapy First day of treatment Final day of treatment

If unknown, leave empty

If unknown, leave empty

Number of cycles

(If unknown type "101")

Full dose- or attenuated dose regimen ?

- Full dose regimen (standard dose therapy)
 Attenuated dose regimen (reduction from standard dose)
 Unknown

If attenuated dose, what was the reason ?

- Dosis reduction due to toxicity (After beginning of therapy)
 Dosis reduction due to age / comorbidity / other (Before treatment initiation)
 Unknown

Consolidation Therapy Autologous Stem-Cell transplant (HDT + ASCT)
 Allogeneous Stem-Cell transplantation.
 No Consolidation
 Unknown

Date of stem-cell re infusion _____

Radiotherapy Consolidation Yes
 No
 Unknown

Indication for radiotherapy Localised relapse
 Bulkt disease
 Extra nodal disease
 Incomplete response
 Other / unknown (specify below)

Please specify reason for RTx consolidation _____

Dates for Radiotherapy treatment

Date of first date of last dose

Response to treatment Complete remission
 Complete remission (unconfirmed)
 Partial remission
 Stabile disease
 Progressive disease
 Dead before response assessment
 Unknown

Date of response assessment _____

Response to treatment (BEFORE consolidation) Complete remission
 Complete remission (unconfirmed)
 Partial remission
 Stabile disease
 Progressive disease
 Dead before response assessment
 Unknown

----- ATTENTION -----

You have selected that the patient received consolidation, but died before "response assessment BEFORE consolidation". Please revise!

Date of response assessment (BEFORE consolidation) _____

Response to treatment (AFTER consolidation)

- Complete remission
- Complete remission (unconfirmed)
- Partial remission
- Stable disease
- Progressive disease
- Dead before response assessment
- Unknown

Date of response assessment (AFTER consolidation)

Did the patient relapse after the current line of therapy ?

- Yes
- No

If yes, continue to the next page. Otherwise stop registering more data.

----- ATTENTION -----

You have selected that the patient did not experience more relapses. Please continue to the tab with "Follow-up and Death". Disregard the other relapse / treatment tabs.

----- ATTENTION -----