



INCONTRO DI AGGIORNAMENTO  
SUI **DISORDINI LINFOPROLIFERATIVI**  
E SUI PROTOCOLLI  
DELLA **FONDAZIONE ITALIANA LINFOMI**

Torino, 14 dicembre 2018

Sede:  
Centro Congressi Torino Incontra  
Via Nino Costa, 8 - Torino

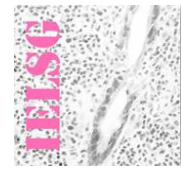
# Aggiornamenti sui protocolli FIL Linfomi extranodali

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SSD Ematologia

Ospedale degli Infermi di Biella - ASLBI



AZIENDA SANITARIA  
LOCALE DI **BIELLA**

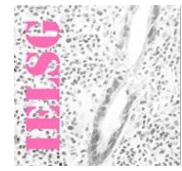


## Aggressive lymphomas

- Primary mediastinal B-cell lymphoma  
IELSG37
- Primary central nervous system lymphoma  
IELSG43 – Matrix study  
IELSG45 – Fiorella study

## Indolent lymphomas

- Marginal zone B-cell lymphomas  
IELSG47 – MALIBU study

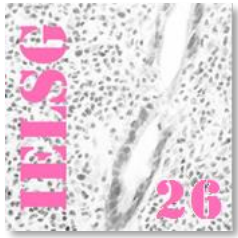


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# The role of PET in PMBCL



## *IELSG-26 Study patient flow*

**125 PMBCL enrolled**

→ 6 early withdrawal

**Baseline PET**

(within 14 days before R-Chemo)

→ 17 baseline PET  
omitted (treatment  
urgency)

**Full course of chemotherapy:**

R-CHOP 21/14 (n=15) or  
R-MACOP-B or R-VACOP-B (n=85)

→ 2 final PET omitted  
(major protocol  
violation)

**Final PET**

(3-4 weeks after R-Chemo)

**100 with complete  
PET-CT study**

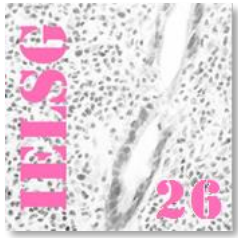
**Consolidation RT**

(according to local policy, n=93)

→ FOLLOW UP

**86% with  
initial bulk  
(>7.5cm)**

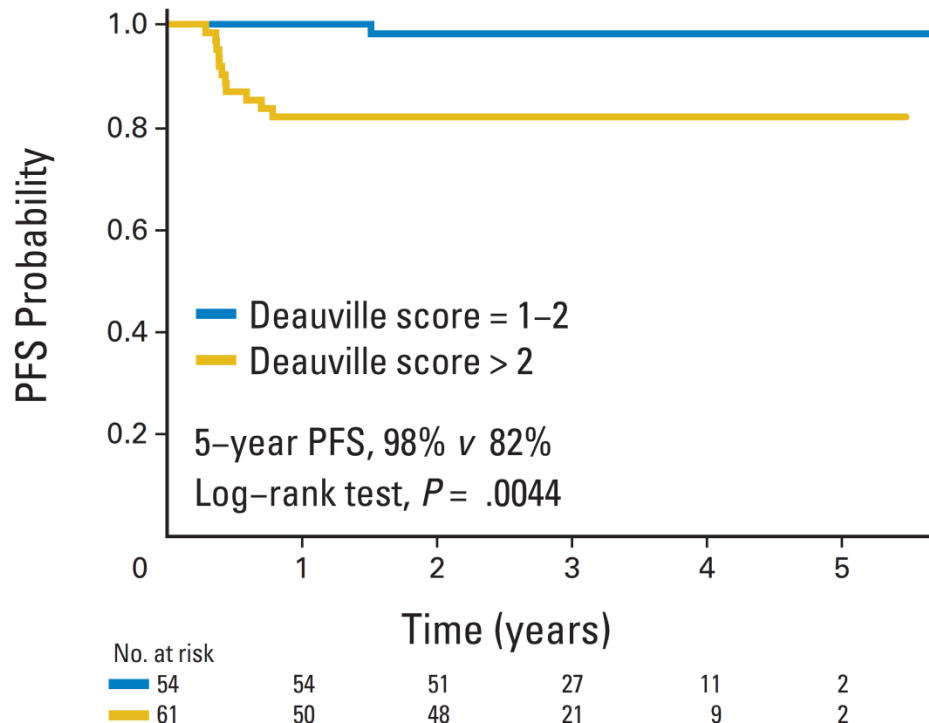
**90% with a  
residual  
lesion  
after  
R-Chemo**



# PFS according to the PET response after chemoimmunotherapy

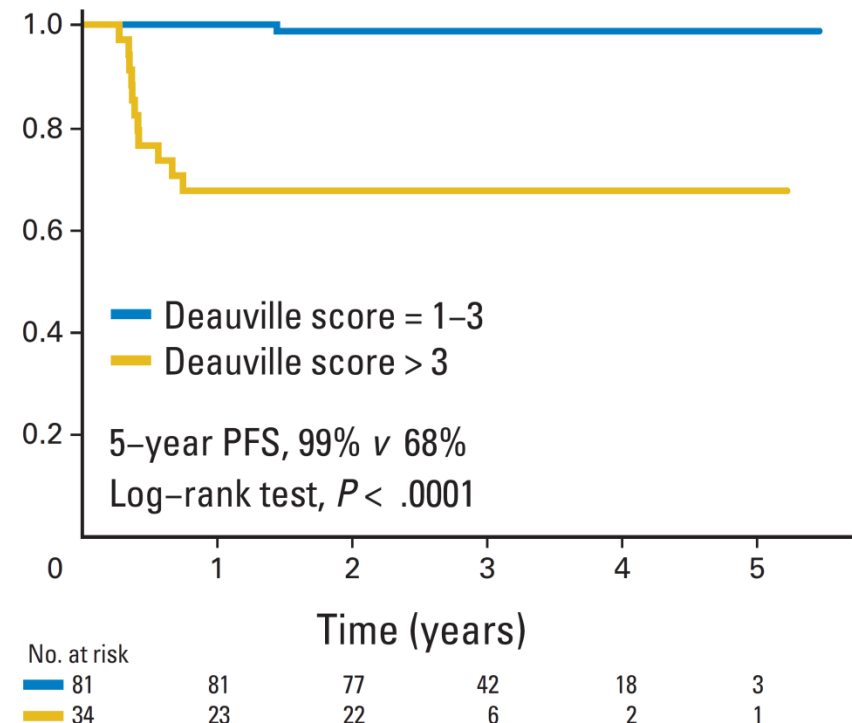
## ***MBP cutoff***

(NPV 98% and PPV 18%)

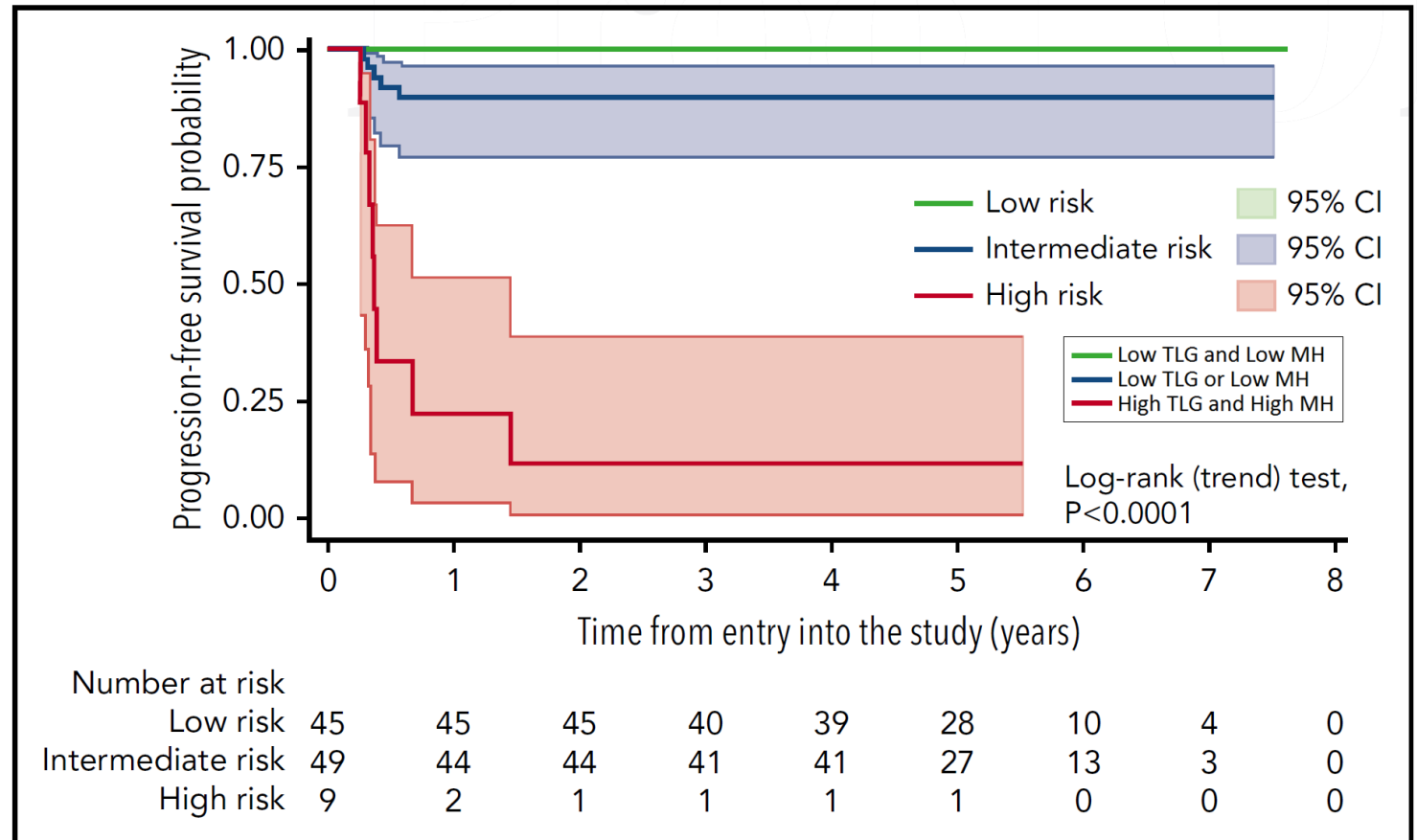


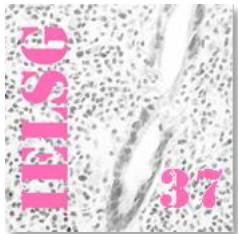
## ***Liver cutoff***

(NPV 99% and PPV 32%)

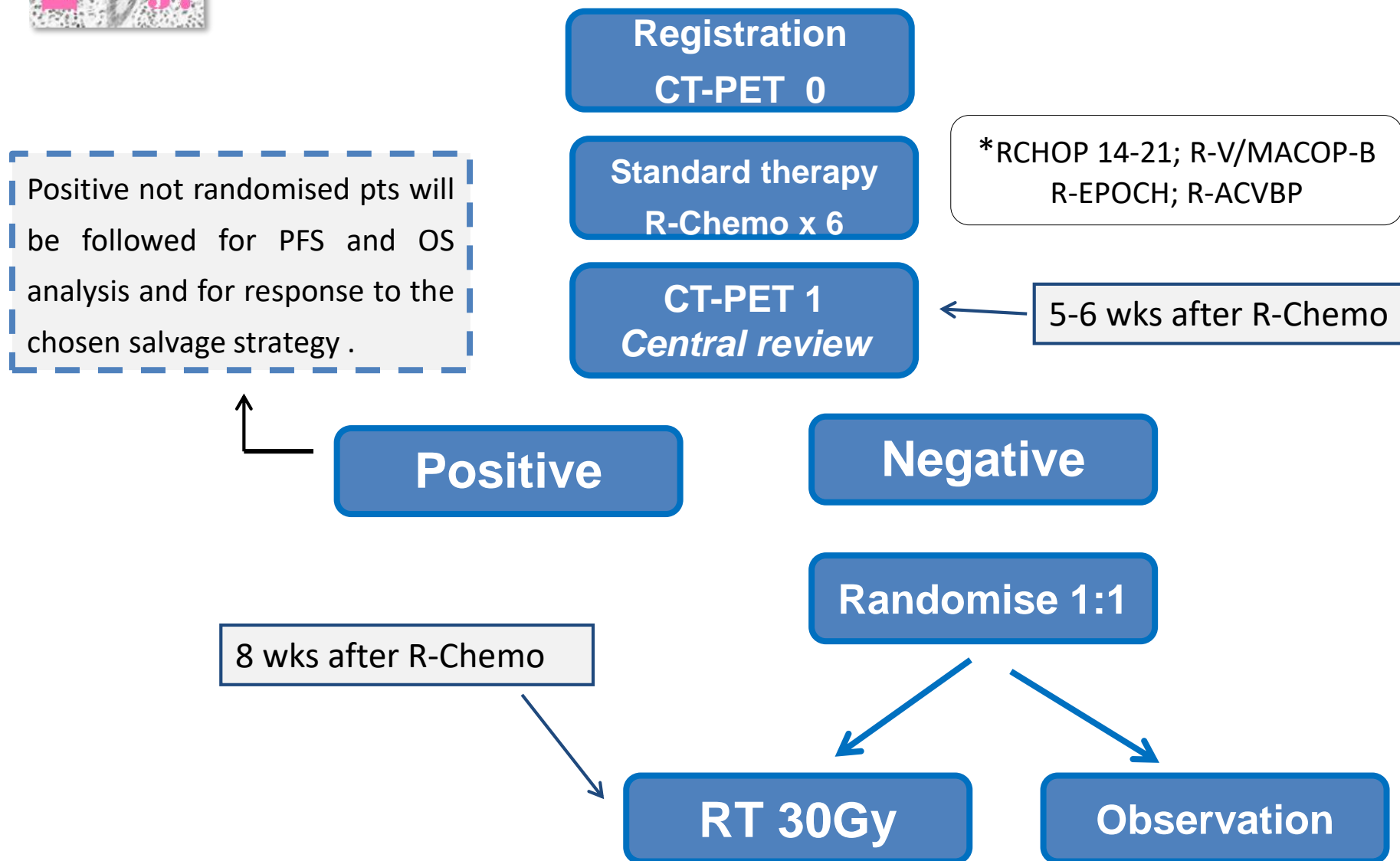


# Prognostic model using TLG and MH

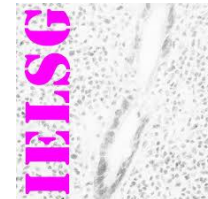




# IELSG 37 - Trial design



# IELSG37



A randomized, open-label, multicentre, two-arm phase III comparative study assessing the role of mediastinal radiotherapy after Rituximab containing chemotherapy regimens to patients with newly diagnosed Primary Mediastinal Large B-Cell Lymphoma (PMLBCL)

PI: Prof. M. Martelli

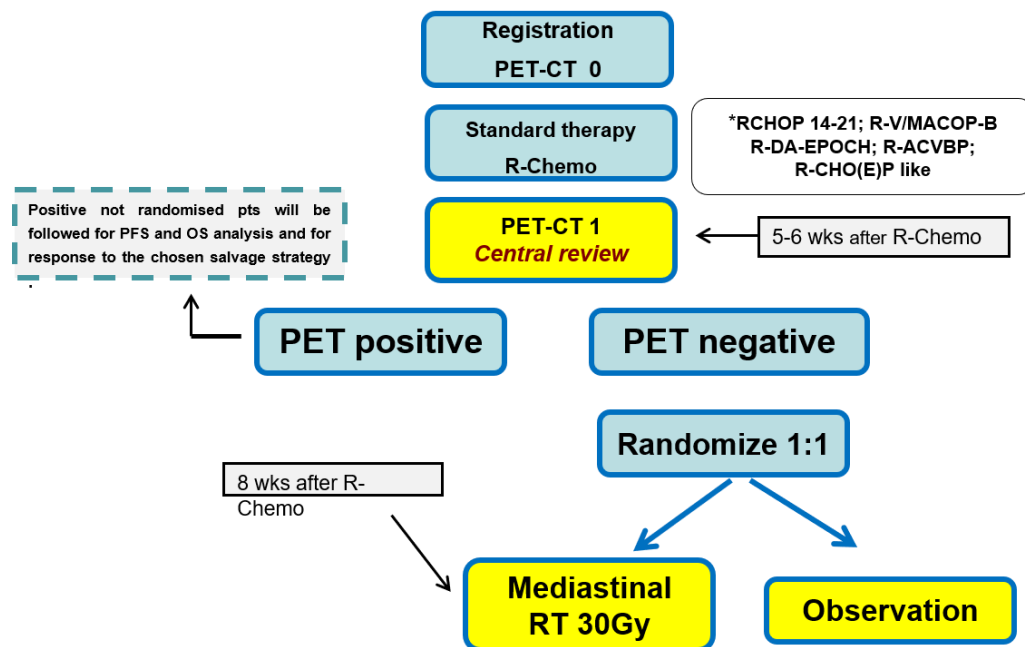
- Centro Coordinatore: Dipartimento di Biotecnologie Cellulari ed Ematologia, Università "La Sapienza" – Prof. Martelli

## DATI PER CENTRI FIL

- Centri partecipanti/Centri attivi: **65/52**
- Centri arruolanti/Centri attivi: **39/52**
- Pazienti arruolati: **336**

## Italian Top 5 sites

Centro	n. pt
Roma Sapienza	37
Torino (Vitolo)	27
Brescia	18
Rozzano Humanitas	18
Cagliari	16
Milano Niguarda	15
Pavia	15

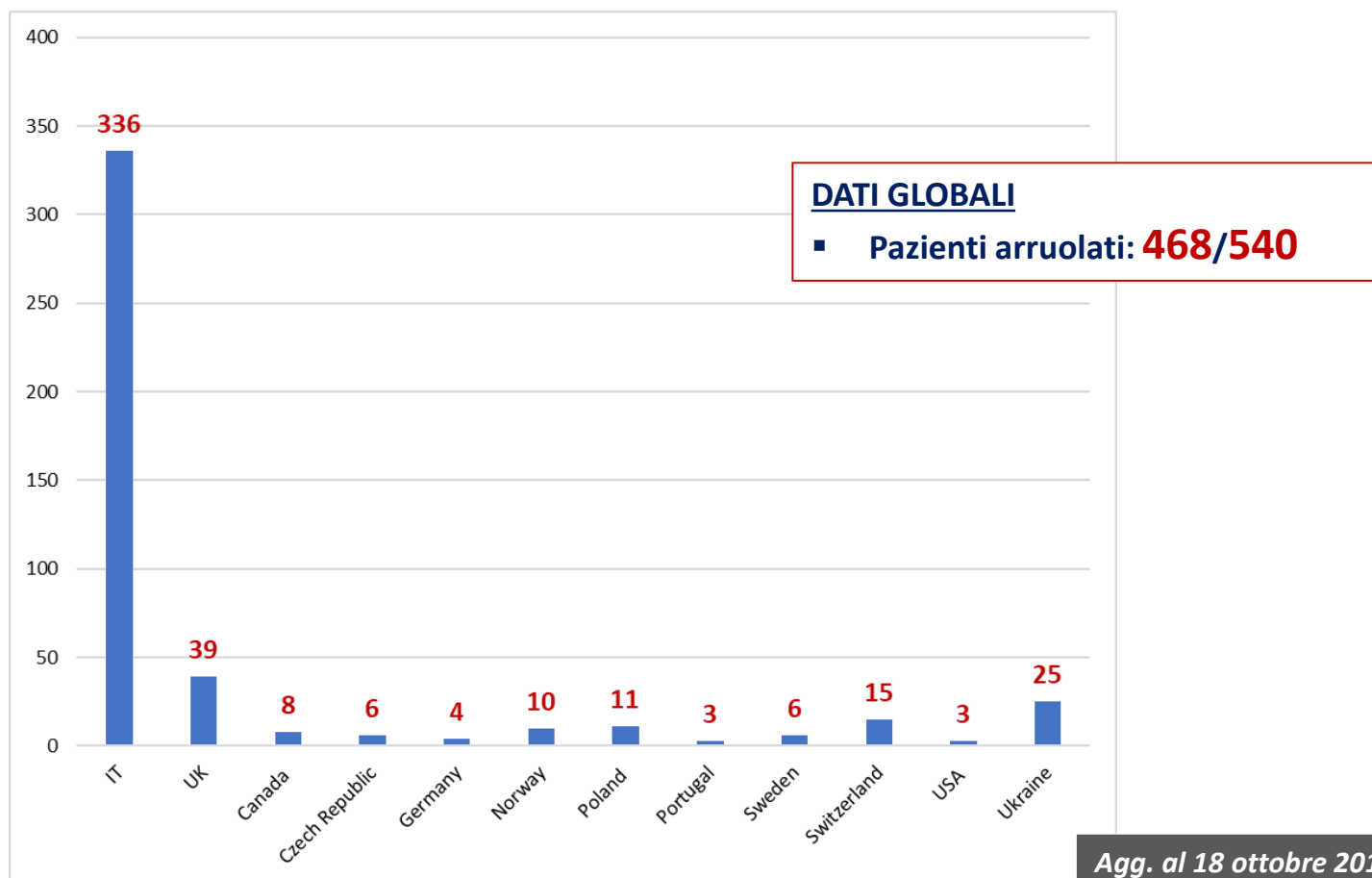




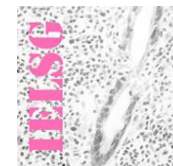
# IELSG37



<b>Total number of pt enrolled</b>	<b>468</b>
<i>Countries enrolling</i>	<b>12</b>
<i>Centres with at least 1 pt</i>	<b>70</b>



Agg. al 18 ottobre 2018

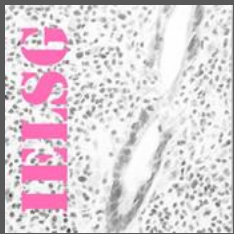


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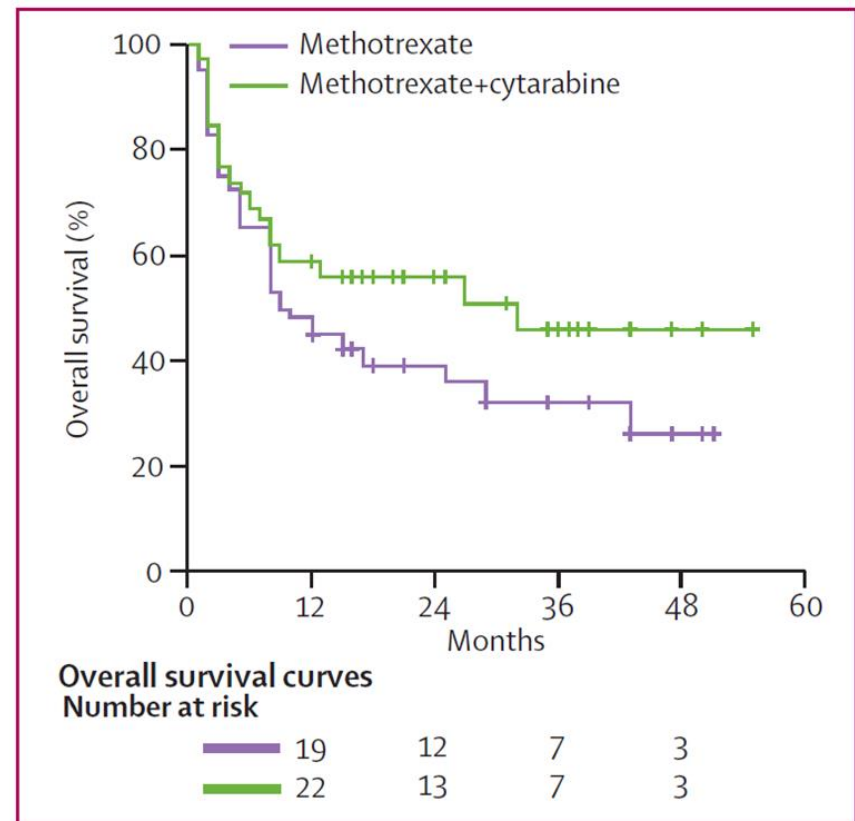
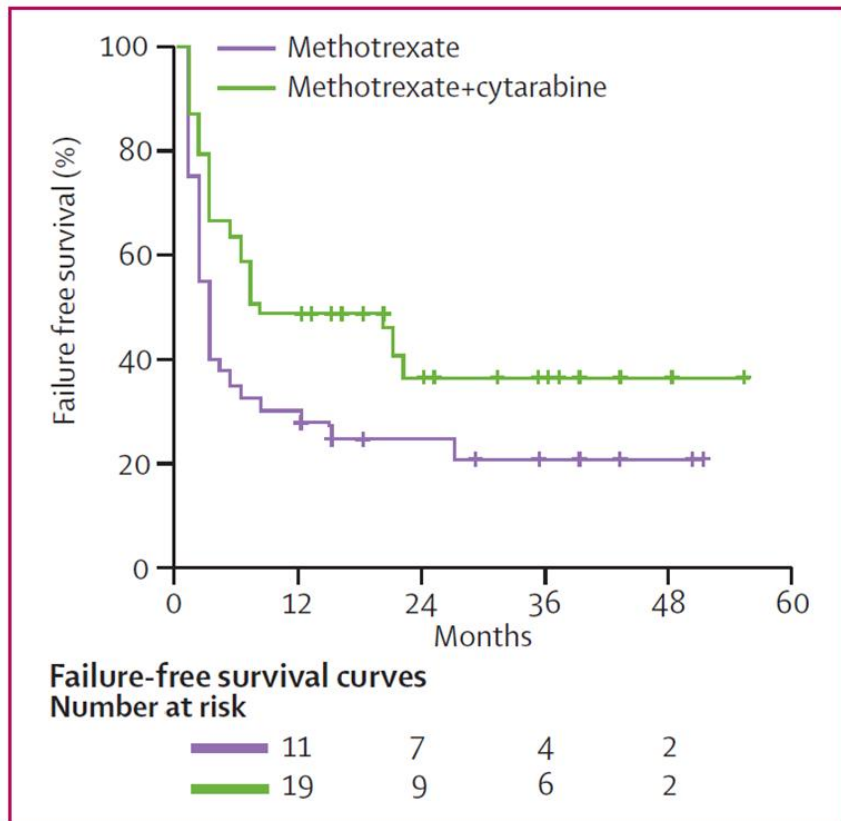
## Indolent lymphomas

- Marginal zone B-cell lymphomas  
IELSG47 – MALIBU study



# IELSG20: randomised phase-2 study

HD Ara-C plus HD MTX vs HD MTX alone in PCNSL



— HD MTX alone

— HD Ara-C plus HD MTX

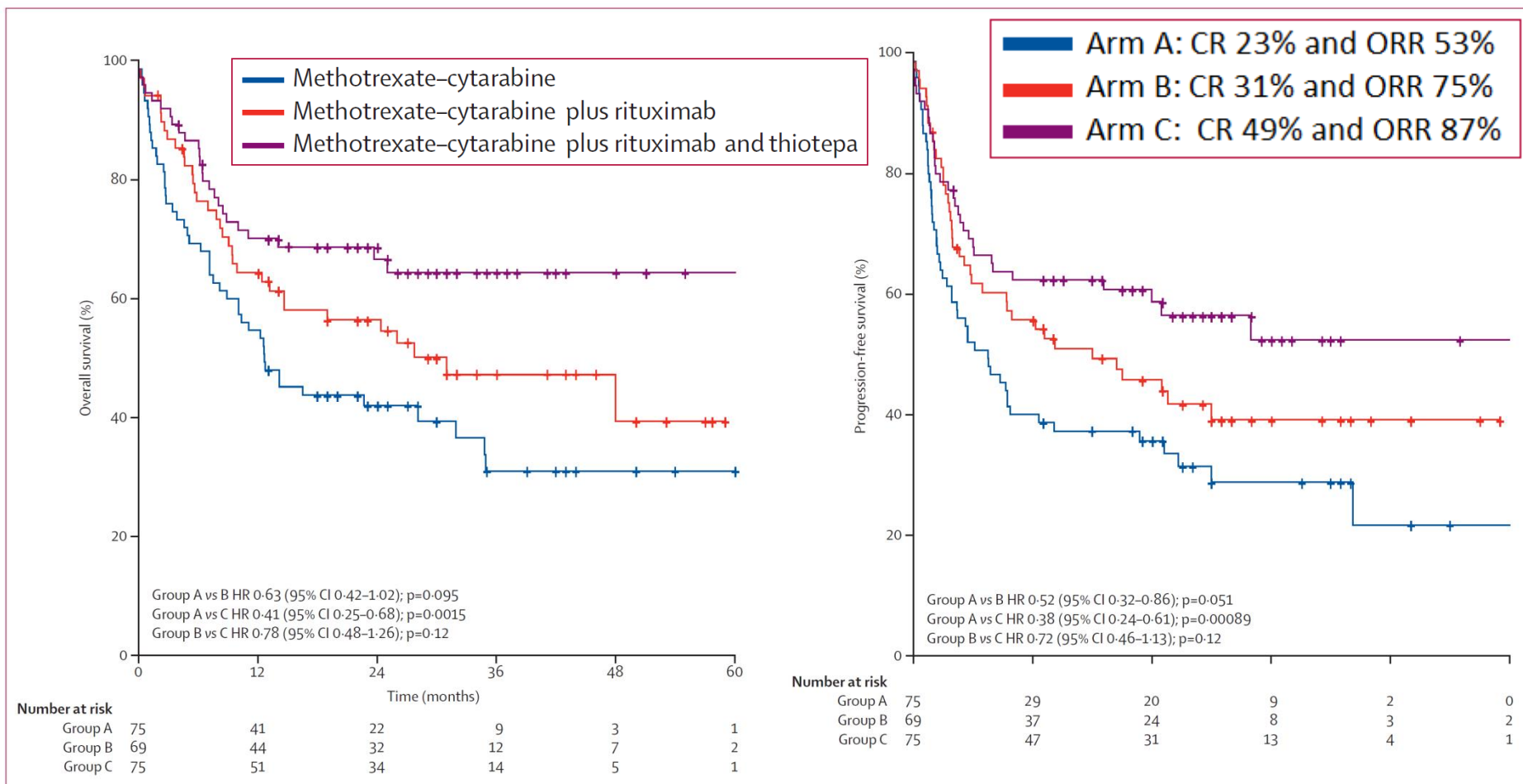
**CR** 18% (95% CI 6–30) 46% (95% CI 31–61)  $p=0.006$

**ORR** 40% (95% CI 25–55) 69% (95% CI 55–83)  $p=0.009$

*Ferreri et al, Lancet 2009*

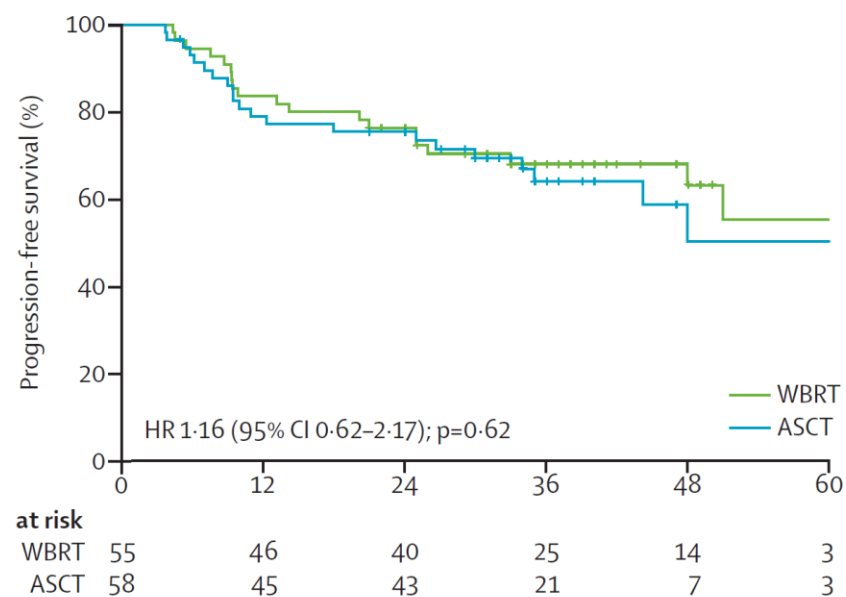
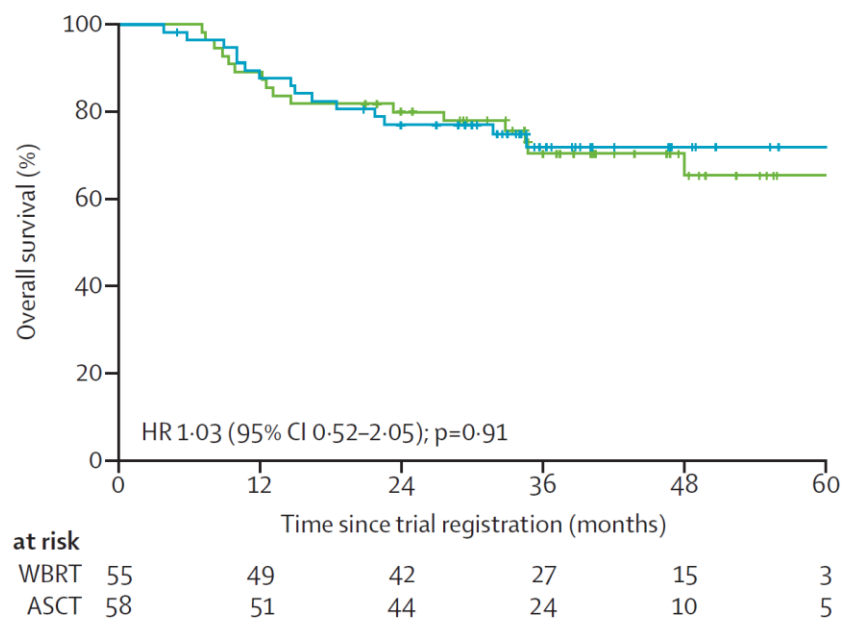


# IELSG32: 1<sup>st</sup> randomisation

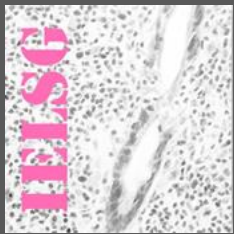




# IELSG32: 2<sup>nd</sup> randomisation

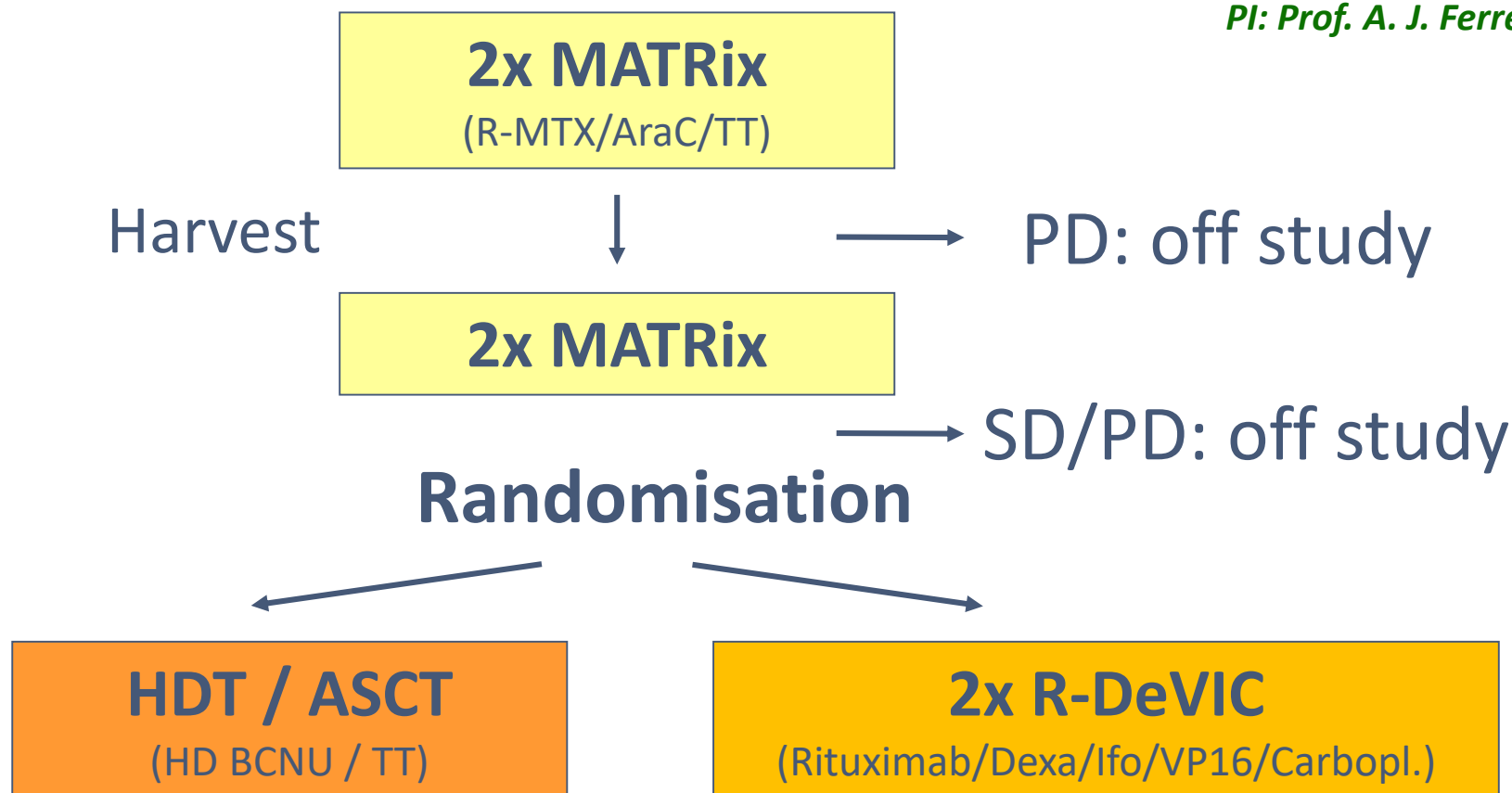


Overall and progression-free survival curves of randomly assigned patients (per-protocol populations)



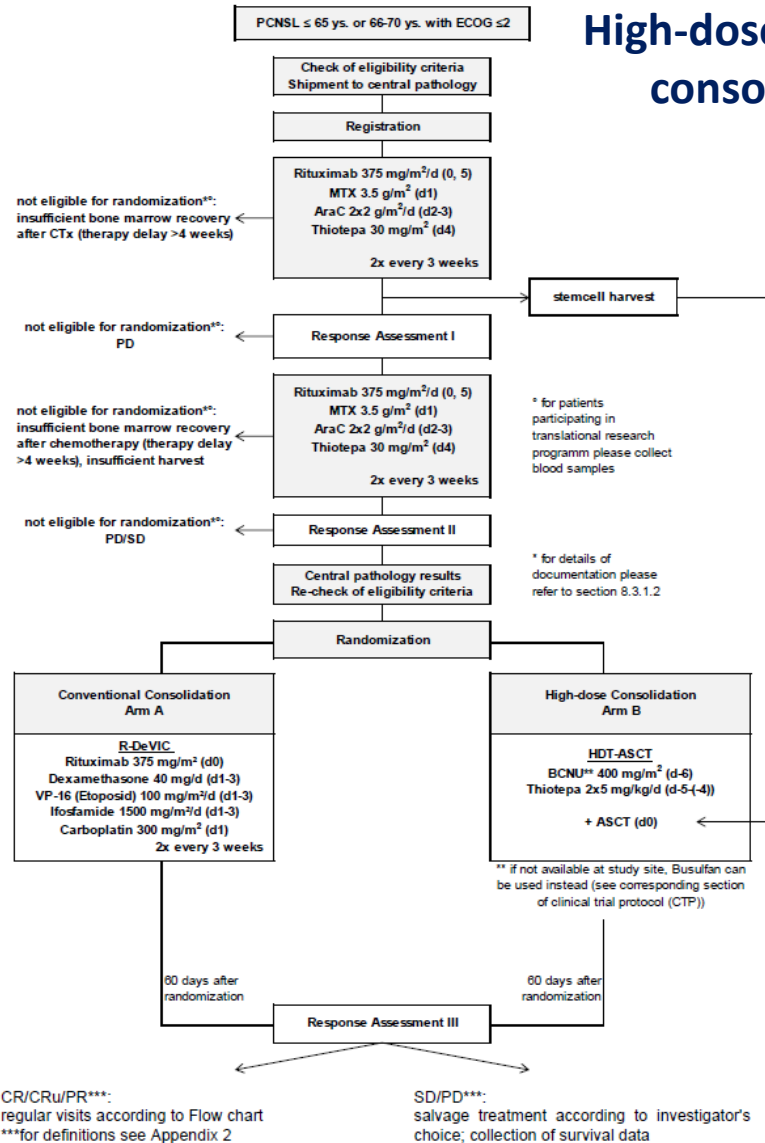
# IELSG43 MATRix Randomised Study

*PI: Prof. A. J. Ferreri*



High-dose chemotherapy and autologous stem cell transplant  
or consolidating conventional chemotherapy in PCNSL

# IELSG43 MATRIX Trial



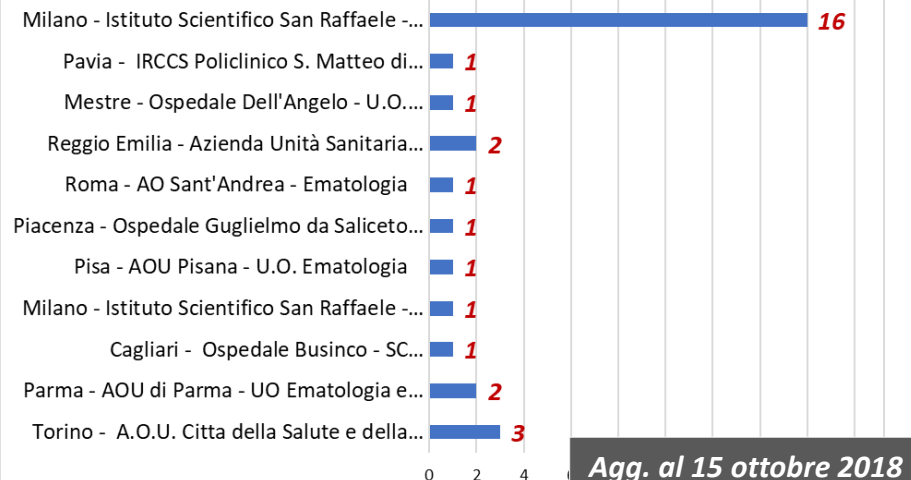
**High-dose chemotherapy and autologous stem cell transplant or consolidating conventional chemotherapy in primary CNS lymphoma - randomized phase III trial**

**PI: Prof. A. J. Ferreri**

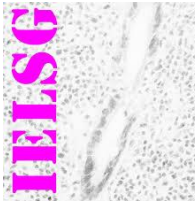
- **Centro Coordinatore: IRCCS Ospedale San Raffaele - Prof. Ferreri**

## DATI PER CENTRI FIL

- **Data apertura: dicembre 2016**
- **Centri partecipanti/Centri attivi: 39/33**
- **Centri arruolanti/Centri attivi: 11/33**
- **Pazienti arruolati: 30**



# IELSG43 MATRIX Trial

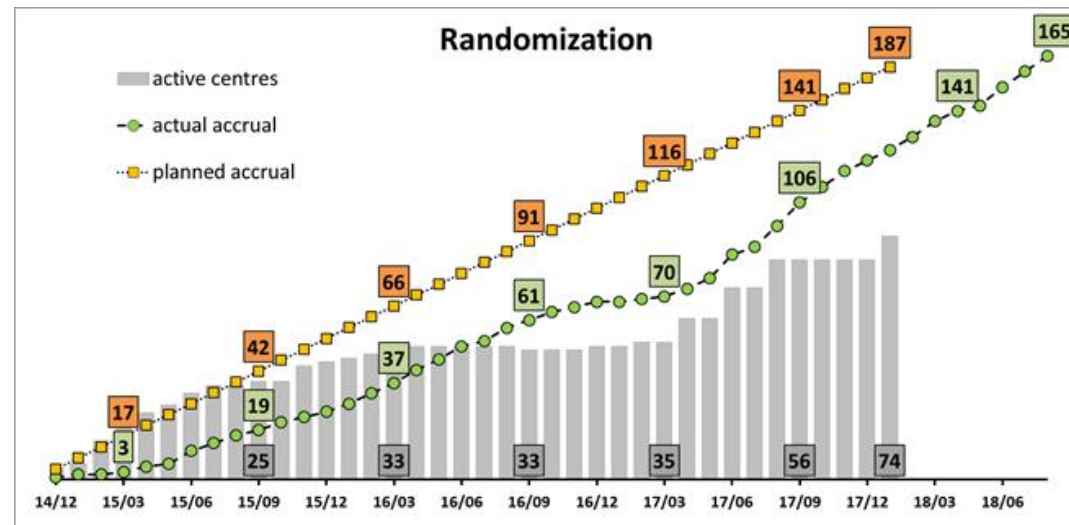
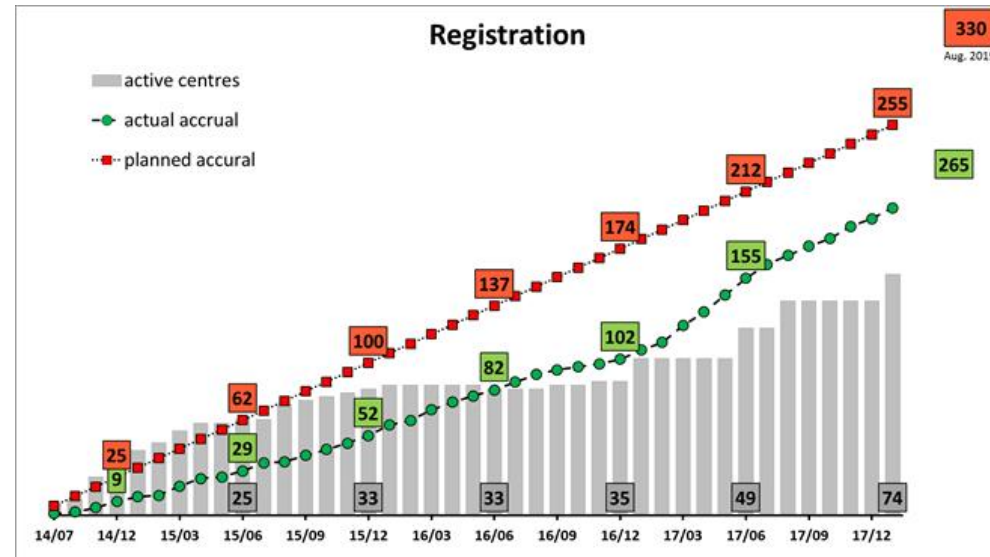


## Number of participating sites and countries

	GER	IT	DEN	CZR	NOR	CH
No. of sites	35	41	4	3	2	6
initiated	35	33	3	none	1	5

### DATI GLOBALI

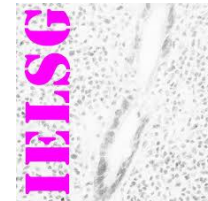
- Fine arruolamento prevista: 31 agosto 2019
- Pazienti arruolati: **245/330**



Agg. al 04 ottobre 2018



# IELSG45 FIORELLA Trial



## Randomized Phase II Trial on Fitness- and Comorbidity- Tailored Treatment in Elderly Patients with Newly Diagnosed Primary CNS Lymphoma (FIORELLA Trial)



### ▪ **Coordinator Site:**

- IRCCS Ospedale San Raffaele - Prof. Ferreri

### ▪ **Inclusion Criteria (partial):**

- - Histologically or cytologically assessed diagnosis of CD20+ diffuse large B-cell lymphoma exclusively localized in the central nervous system - **Age  $\geq 70$  years**
- - **Patients not eligible for high-dose chemotherapy supported by autologous stem cell transplant**
- - ECOG PS  $\leq 3$ .

### ▪ **Primary endpoint**

2-year progression-free survival (PFS)

- **Estimated enrolling pts: 208** who will be stratified according to their suitability to tolerate an induction chemo-immunotherapy regimen containing high-dose methotrexate.

**PROSSIMA  
APERTURA**

# IELSG45 FIORELLA Trial



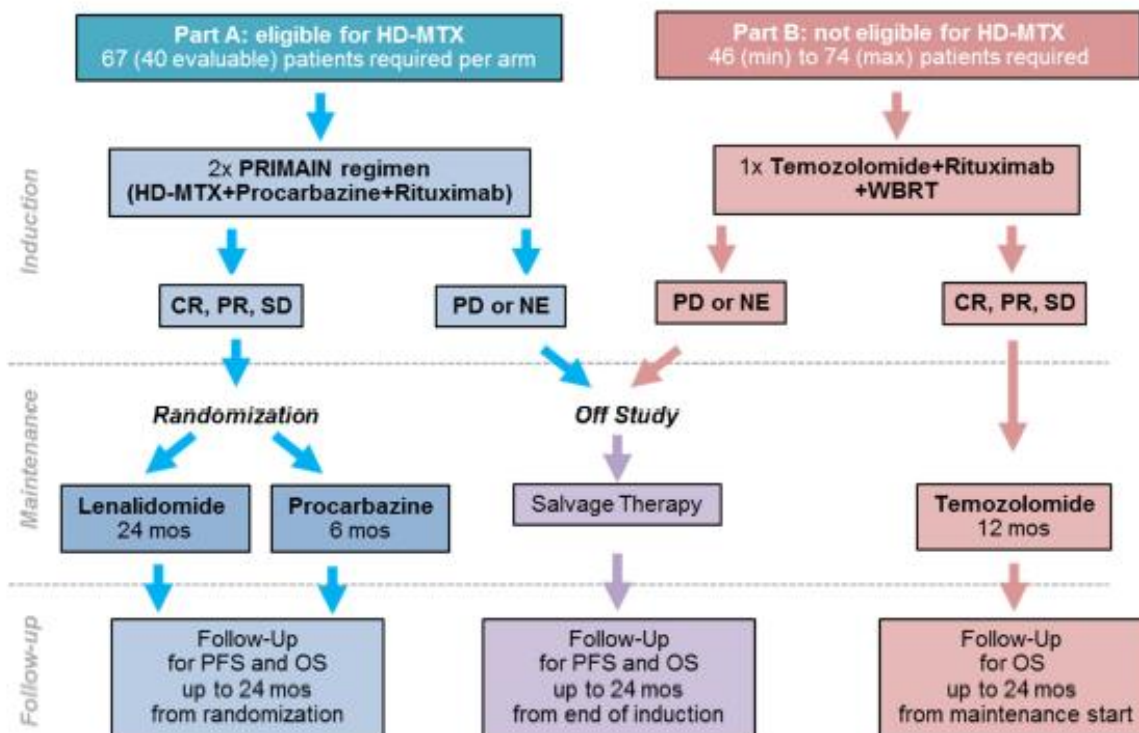
All PCNSL pts  $\geq 70$  years old

Trial registration

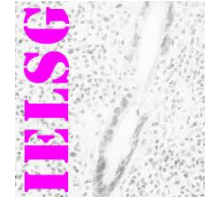
Eligible for therapy (PS  $\leq 3$  – Not eligible for ASCT)

Ineligible for therapy

**ONLY DATA  
COLLECTION**



# IELSG45 FIORELLA Trial



**At registration, pt will be defined as eligible for HD-MTX based on all of the following mandated criteria:**

- ✓ Adequate bone marrow function (Platelet  $\geq 100,000/\text{mm}^3$ , Hb  $\geq 8$  g/dL, ANC  $\geq 1,500/\text{mm}^3$ )
- ✓ Creatinine clearance  $\geq 50$  ml/min
- ✓ Adequate cardiac function (LVEF  $\geq 45\%$ )
- ✓ Absence of symptomatic coronary artery disease, cardiac arrhythmias uncontrolled with medication or myocardial infarction within the last 6 months (NYHA Class III or IV)
- ✓ Physician's preference (overall assessment other than age and comorbidities)

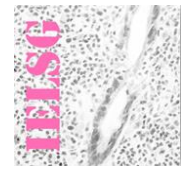
## **Part A**

To establish the efficacy of two consolidation strategies: lenalidomide or procarbazine in elderly PCNSL pts ( $>70$  ys) eligible to receive HD-MTX.

## **Part B**

To establish the efficacy of concomitant chemo-immuno-radiotherapy followed by temozolomide maintenance in elderly PCNSL pts ( $>70$  ys) not eligible to receive HD-MTX.

**Primary endpoint:** 2-year PFS



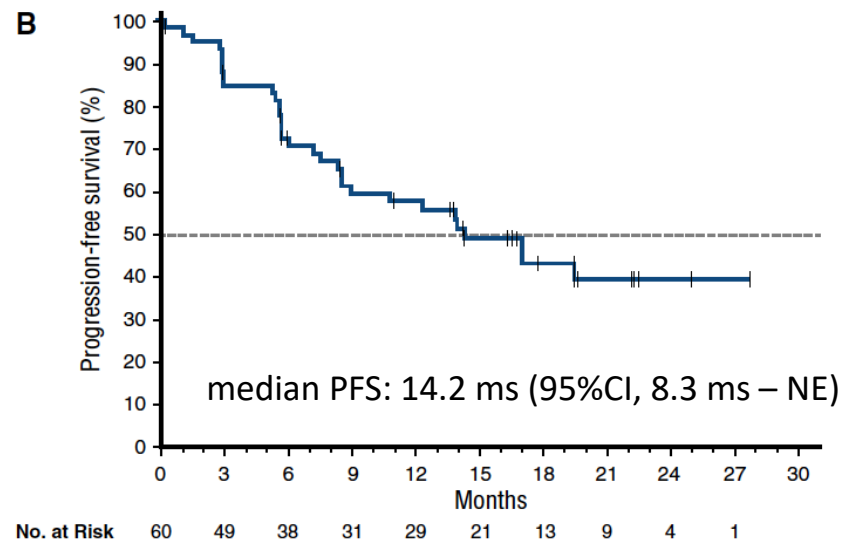
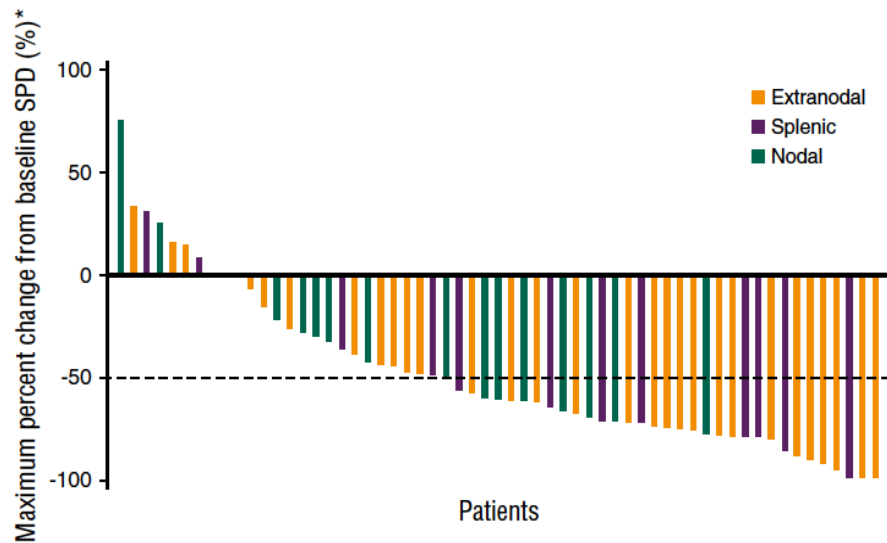
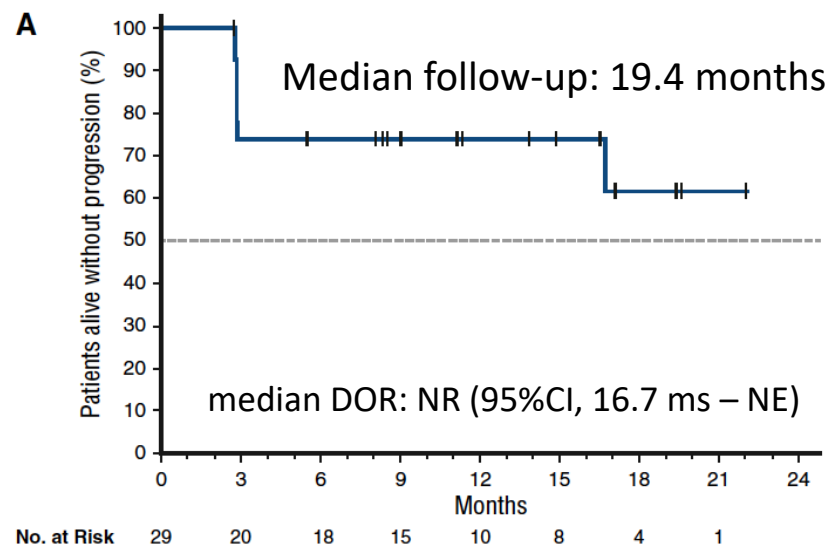
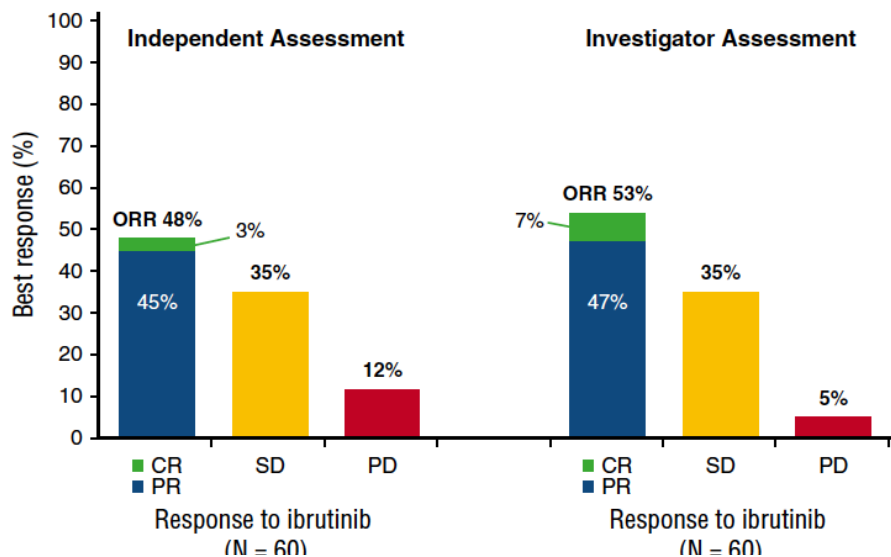
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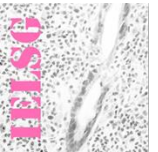
- Marginal zone B-cell lymphomas  
IELSG47 – MALIBU study

# IBRUTINIB IN R/R MZL: PHASE II STUDY



# MALIBU TRIAL – IELSG47 STUDY

Phase II study of combination  
ibrutinib and rituximab  
in untreated marginal zone lymphomas (MZL)



# MALIBU TRIAL: study design

- **Single-arm, phase II clinical trial of patients with EMZL (N=130)**

The study primary endpoints will be analysed on the EMZL population

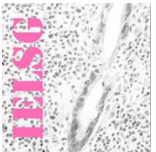
- Additional patients, with SMZL (up to 15) and NMZL (up to 15), with exploratory purposes

## Primary objectives

- assess the safety and efficacy of the combination of rituximab and ibrutinib in EMZL patients
- explore its activity in SMZL and NMZL

## Primary endpoints

- Complete Response (CR) rate at 12 months
- Progression-Free Survival (PFS) at 5 years



# MALIBU TRIAL: inclusion criteria (i)

**Systemic therapy-naïve patients, symptomatic and in need of treatment, with histologically proven CD20+ MZL not eligible for local therapy**

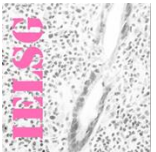
## **MALT Lymphoma patients with MALT- IPI score $\geq 1$**

- either de novo or relapsed following local therapy (including surgery, radiotherapy and antibiotics for *HP*-positive gastric lymphoma) arisen at any extranodal site

1.1. The following patients with gastric MALT Lymphoma can be entered:

- a) *H. pylori*-negative cases, either de novo (non pretreated) or at relapse following local therapy (i.e., surgery, radiotherapy or antibiotics).
- b) *H. pylori*-positive cases at diagnosis, who had either first line antibiotics or further local treatment (surgery or radiotherapy), including patients with:
  - clinical (endoscopic) and histological evidence of disease progression at any time post HP eradication
  - clinical (endoscopic) and histological relapse (without HP re-infection), after a remission
  - persistent (stable) lymphoma at  $\geq 1$  year post HP eradication

1.2. Similar consideration for patients with ocular adnexal lymphoma treated with antibiotics.





# **MALIBU TRIAL: inclusion criteria (ii)**

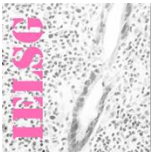
**Systemic therapy-naïve patients, symptomatic and in need of treatment, with histologically proven CD20+ MZL not eligible for local therapy**

## **SMZL patients in need of therapy**

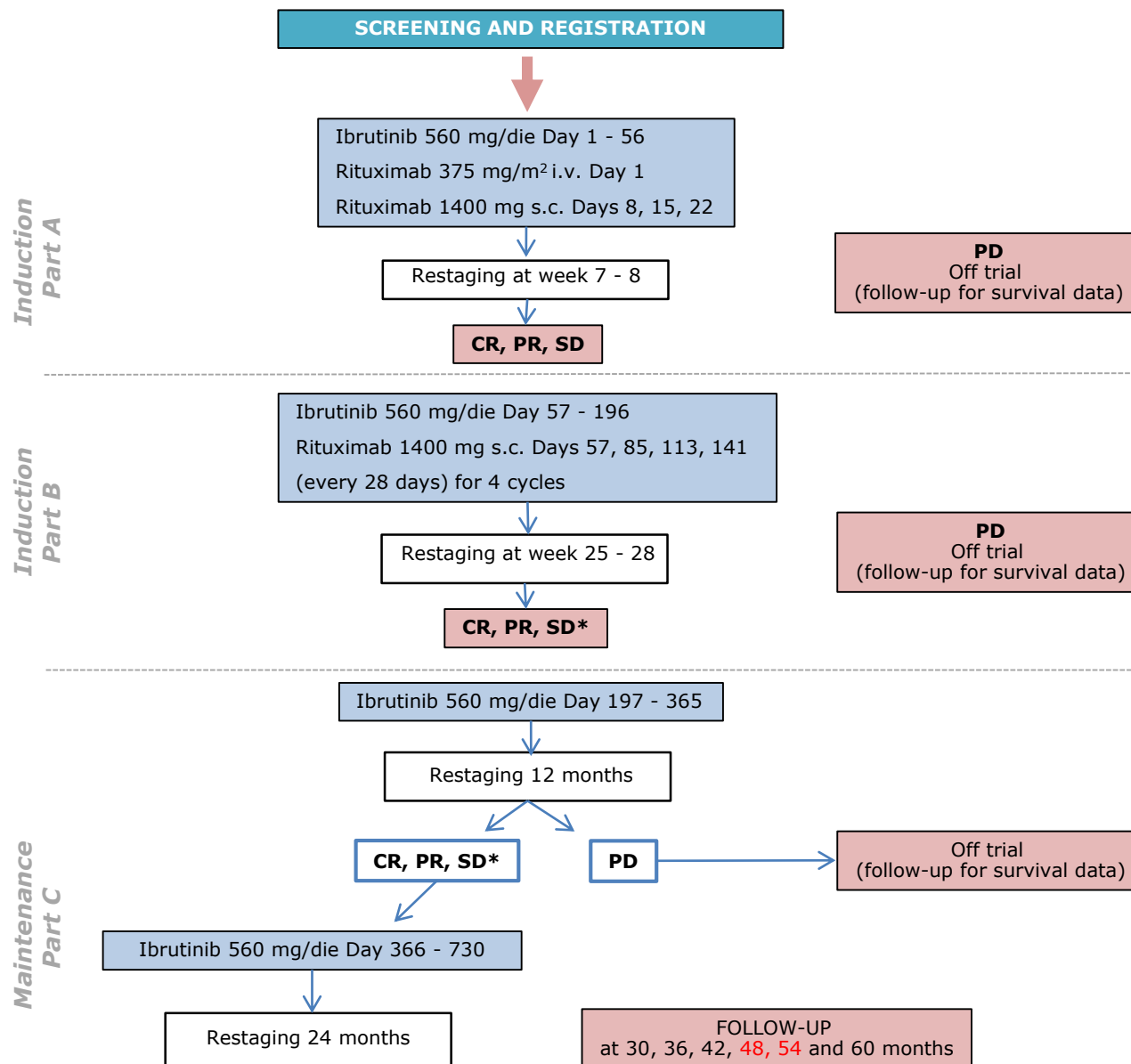
- either de novo or relapsed following local therapy (including surgery and antiviral therapy for Hepatitis C virus)
- patient must have a symptomatic disease requiring treatment and be not eligible for splenectomy or not willing to undergo splenectomy

## **NMZL patients in need of therapy**

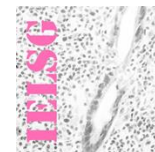
- either, de novo presenting with disseminated disease or relapsed after local radiotherapy or following antiviral therapy for Hepatitis C virus



# MALIBU trial flow



\*patients in SD will continue study treatment at discretion of the investigator, if of clinical benefit



# MALIBU TRIAL: sample size

**Primary endpoint.** The statistical hypothesis is based on an improvement of the **CR rate at 12 months from 72.9 %** (as observed with the combination of Rituximab and Chlorambucil in the IELSG19 study in patients with MALT-IPi>0) **to 85%**

Ho:  $p = 0.7290$  and alternative  $p = 0.8500$

$\alpha = 0.0250$  (one-sided)

power = 0.9000

$n = 120$

Taking into account exclusion of cases after central histology review and non-evaluable patients, **130 patients with EZML will be enrolled**

**Co-primary endpoint.** The statistical hypothesis is based on a **15% improvement of the 5-yrs PFS rate from 61.4 %** (as observed with the combination of Rituximab and Chlorambucil in the IELSG19 study in patients with MALT-IPi>0)

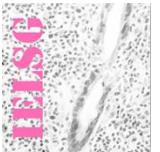
Ho:  $p = 0.614$  and alternative  $p = 0.7640$

$\alpha = 0.025$  (two-sided)

power = 0.9000

$n = 100$

In the case of statistically significant result on CR,  
the study will yield a type 1 error rate = 0.05 and power = 0.95.



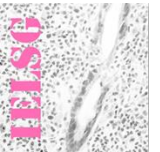
# MALIBU ANCILLARY STUDIES

## PET study

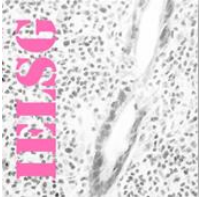
With centralisation of the studies

## Biological studies

With collection of different kind of samples



# MALIBU TRIAL-CENTERS



Sponsor: IELSG

- |                  |            |
|------------------|------------|
| • Italy          | 16 centers |
| • France         | 13 centers |
| • United Kingdom | 12 centers |
| • Switzerland    | 2 centers  |
| • Belgium        | 1 center   |
| • Portugal       | 1 center   |



# Acknowledgements

- The FIL Central Office staff
- The IELSG Central Office staff
- F. Cavalli, E. Zucca, U Vitolo, M. Martelli, A.Ferreri, L. Ceriani , P. Johnson, A. Lopez Guillermo, C. Thieblemont and all the many other IELSG investigators
- The study nurses and data managers

