



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

Torino, 14 dicembre 2018

Centro Congressi Torino Incontra  
Via Nino Costa, 8 - Torino

# LINFOMI INDOLENTI NON FOLLICOLARI E WALDENSTROM

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*SC Ematologia – Dr. U. Vitolo*

*AO Città della Salute e della Scienza*

*Torino*



## *Interventistico*

- BART
- BRB

## *Osservazionale*

- NF10
- BIOWM

## LINFOMI INDOLENTI HCV POSITIVI

**A multicenter study to evaluate the anti-viral activity of an interferon-free treatment with ledipasvir/sofosbuvir (G1 and G4) and sofosbuvir/velpatasvir (G2 and G3) for patients with hepatitis C virus-associated indolent B-cell lymphomas**

# INCLUSION CRITERIA (1)

1. Age > 18 years
2. **Indolent B cell lymphoma:**
  - ***Marginal Zone Lymphoma (MZL):***
    - ***Nodal (NMZL)***
    - ***Extranodal (EMZL, MALT-type)***
    - ***Splenic (SMZL)***
    - ***Disseminated***
  - ***Lymphoplasmacytic lymphoma (LPL)***
  - ***Small Lymphocytic Lymphoma (SLL)***
  - ***Follicular lymphoma (FL) grade 1-2***
  - ***CD5-negative B-cell lymphoma NOS***
3. **HCV-RNA positive** patients
4. **Assessable HCV genotype (1, 2, 3 or 4)**
5. **No previous therapy for lymphoma**

## INCLUSION CRITERIA (2)

6. **Measurable disease** after diagnostic biopsy (*longest axis  $\geq 1.5$  cm for nodal and  $\geq 1$  cm for extranodal lesions*) **and/or evaluable disease** (*quantifiable BM infiltrate and  $>5 \times 10^9/L$  clonal B-cells in PB in case of exclusive BM/leukemic disease*)
7. **No need for immediate lymphoma treatment**, defined by the **absence of all the following criteria**:
  - systemic symptoms
  - bulky ( $>7$  cm) and symptomatic nodal or extranodal mass
  - symptomatic splenomegaly
  - progressive leukemic phase
  - serous effusions
8. Performance status  $< 2$  according to ECOG scale
9. **Adequate haematological counts**:
  - ANC  $>1 \times 10^9/l$
  - Hb  $>9$  g/dl (transfusion independent)
  - Plt  $>50 \times 10^9/l$  (transfusion independent)

# MAIN EXCLUSION CRITERIA

- Diagnosis of **cirrhosis** (histological or **Stiffness >12 KpA** at fibroscan)
- **Uncontrolled diabetes** (if under therapy subjects must be on stable dose  $\geq 3$  months)
- Concomitant therapy with **Amiodarone**
- **HIV positivity**
- **HBV positivity (HBsAg+ or HBV-DNA+)** [pts with HBcAb+, HBsAg-, HBsAb+/- and HBV-DNA-negativity are eligible]
- If female: pregnant or breast-feeding

## Primary endpoint

- Sustained virologic response at 12 weeks (**SVR12**)

## Secondary endpoints

- Overall response rate (**ORR**) of lymphoma

(Lymphoma response will be assessed *12 weeks after the end of AT*)

- **PFS, EFS, OS**

- Reduction of peripheral lymphocytes, lymph nodes and splenomegaly and amelioration of cytopenias during AVT (monthly evaluation)

- **Rate of virological responses:** *rapid virologic response (RVR), extended RVR (eRVR), early virologic response (EVR), early responders, partial response, breakthrough, end-of-treatment response (ETR), relapse, null-response*

- **Toxicity** (CTCAE version 4.03), evaluated by incidence of severe/life-threatening events (grade 3, 4 and 5) and/or SAE

# NEWS FOR G2 E G3

Week

0

12

24

36

**GT 1 & 4**  
 Naïve

**LDV-SOF**

**SVR12**

**GT 1 & 4**  
 Previously  
 treated

**LDV-SOF**

**SVR12**

**GT 2**

**SOF-VEL**

**SVR12**

**GT 3**

**SOF-VEL**

**SVR12**

**LDV-SOF:** Ledipasvir-Sofosbuvir (90/400 mg) one pill once daily

**SOF-VEL:** Sofosbuvir-Velpatasvir (400/100 mg) one pill once daily

# STUDY DURATION

**Sample size:** 44 patients

**Number of FIL centers:** 21

**Planned accrual time:** 24 months (*first patient May 2016*)

**Treatment time:** 12 or 24 weeks (according to genotype)

**Time for virological & hematological assessment:** 12 weeks

**Follow-up:** 36 months

**Total study duration:** 69 months

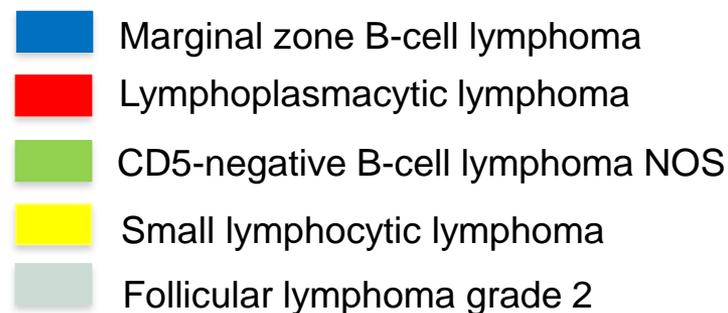
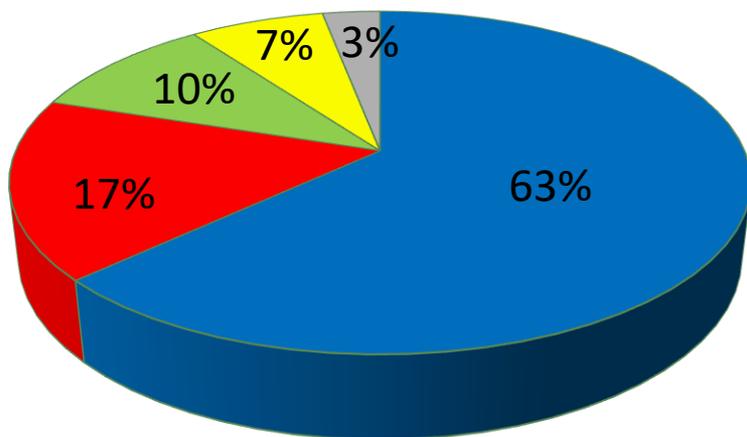
# STATUS ARRUOLAMENTO (31/10/18)



\*1 paziente registrato ma poi non trattato

# PATIENTS' CHARACTERISTICS (N=30)

Histology	N	%
Marginal zone B-cell lymphoma	19	63
Lymphoplasmacytic lymphoma	5	17
CD5-negative B-cell lymphoma NOS	3	10
Small lymphocytic lymphoma	2	7
Follicular lymphoma grade 2	1	3



**PHASE II STUDY WITH BORTEZOMIB, RITUXIMAB AND  
BENDAMUSTIN –BRB- FOR NON-HODGKIN  
LYMPHOPLASMACYTIC LYMPHOMA/WALDENSTROM  
MACROGLOBULINEMIA'S PATIENTS AT FIRST  
RELAPSE**

*Dr Lorella Orsucci*

*Dr Giulia Benevolo*

# FIL\_BRB: CARATTERISTICHE DELLO STUDIO

## FASE II STUDY WITH BORTEZOMIB, RITUXIMAB AND BENDAMUSTIN -BRB- FOR NON-HODGKIN LYMPHOPLASMACYTIC LYMPHOMA/WALDENSTROM MACROGLOBULINEMIA'S PATIENTS AT FIRST RELAPSE

**SPONSOR** Fondazione Italiana Linfomi (FIL)

**COORDINATORI DELLO STUDIO** Dr Lorella Orsucci, Dr Giulia Benevolo

SC Ematologia , AOU Città della salute e della Scienza di Torino, Presidio Molinette.

**ANALISI STATISTICA** Dr Giovannino Ciccone

AOU Città della Salute e della Scienza, CPO Piemonte, Torino

**FARMACOVIGILANZA** Dr Alessandro Levis/Dr Daniela Gioia

Fondazione Italiana Linfomi

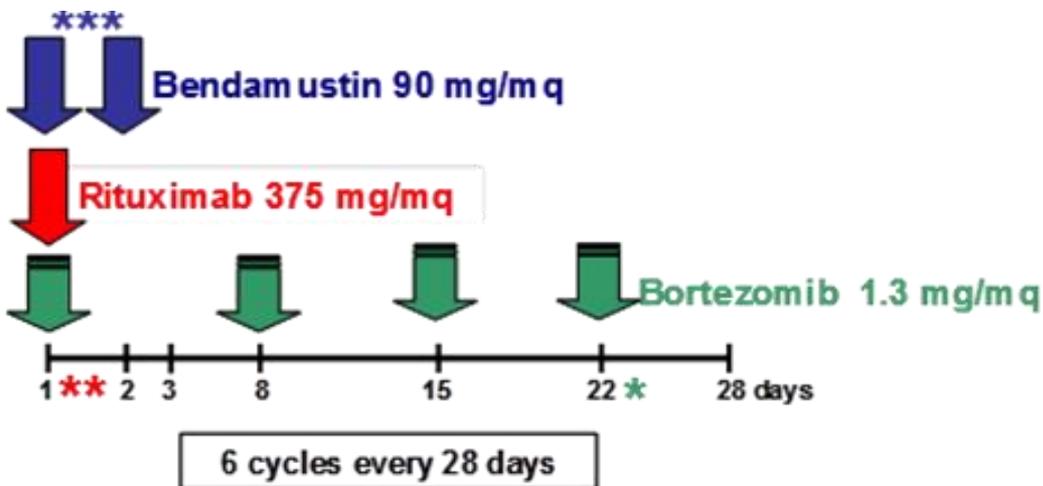
### OBIETTIVO PRIMARIO

- Valutazione della sopravvivenza libera da progressione di malattia.

Lo studio ha come obiettivo l'ottenimento di una migliore PFS a 18 mesi, almeno pari al 65%, rispetto al 50% ottenibile con altre terapie riportate in letteratura.

### OBIETTIVI SECONDARI

- tasso di risposta globale
- sopravvivenza globale
- profilo di tossicità



\* in case of toxicity is omitted

\*\* in cycles 1, in order to avoid tumor lysis syndrome, Rituximab will be given on day 8

\*\*\* days 1-2 or days 2-3 according to istituzionale/patient/physician choice

**ARRUOLAMENTO  
 CONCLUSO**

**DETTAGLIO CENTRI**

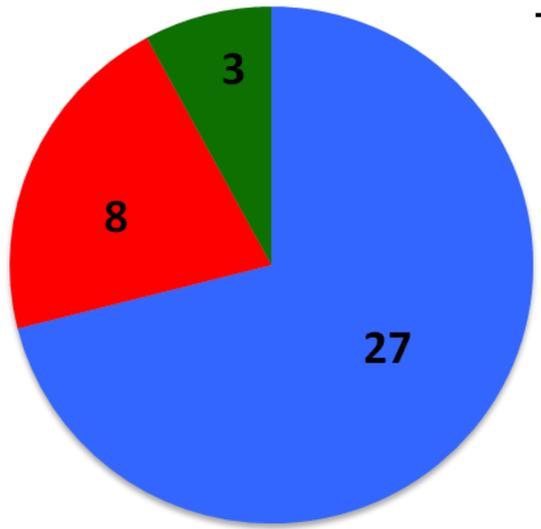
- Centri attivi → 23
- Centri arruolanti → 18

**DIMENSIONE DEL CAMPIONE**

- 38 pazienti arruolati (22 pazienti inseriti nello studio biologico)

**Terapia conclusa → 27**  
**Interruzioni premature → 8**  
**Terminato il trattamento ma non valutabili → 3**

Tossicità di grado 1-2: ematologica (neutropenia e plt-penia)  
 Tossicità di grado 3-4: gastrointestinale e neurologica



**RISULTATI ORR was 82.9%:**

- 3 (9%) CR
- 13 (37%) VGPR,
- 12 (34%) PR and
- 1 (3%) MR

**Follow up mediano di 12 mesi**

4 progressioni, 2 morti (una ischemia cerebrovascolare ed una embolia polmonare)

# BIO – BRB STUDY

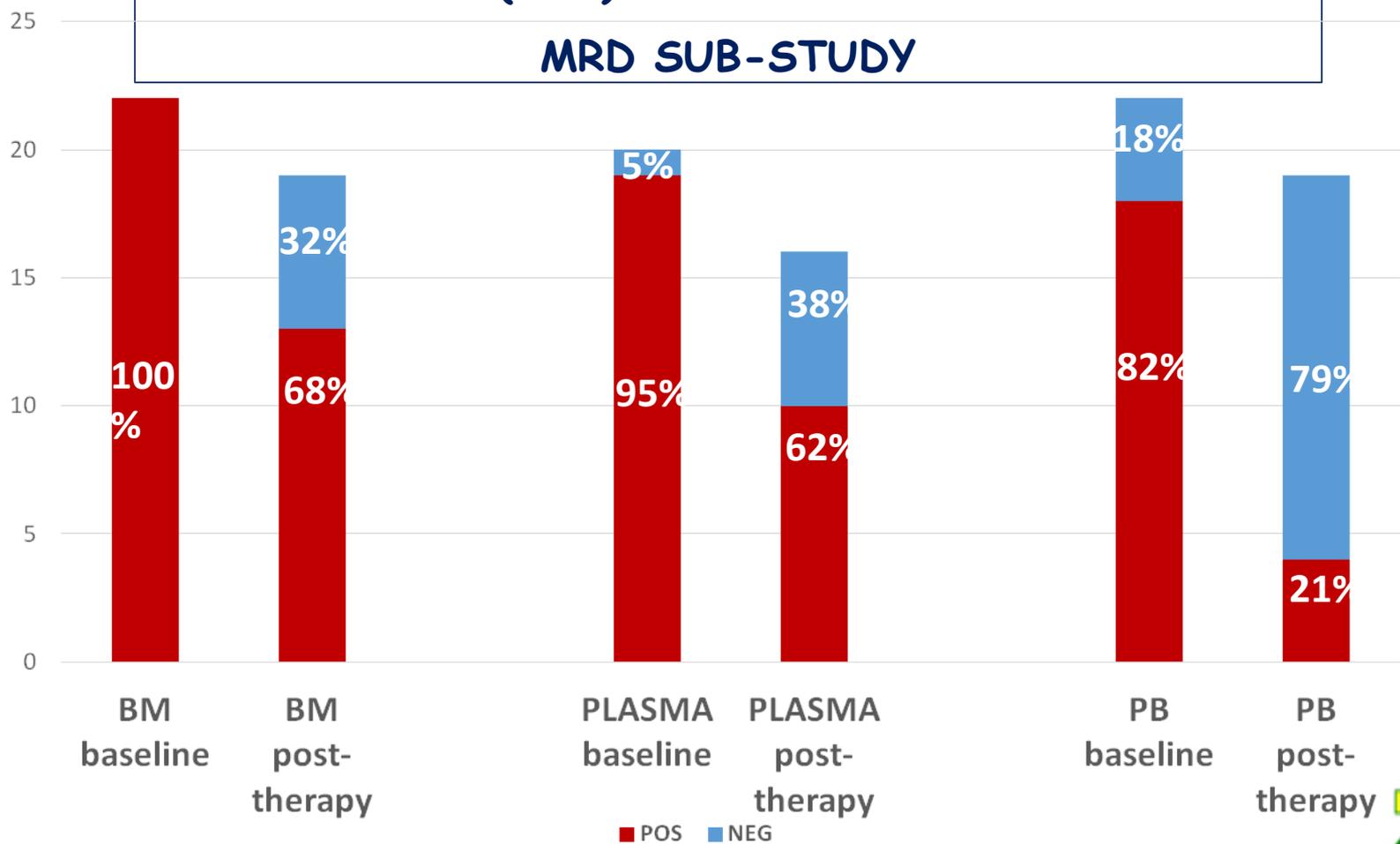
**Mutational characterization of Waldenström Macroglobulinemia and minimal residual disease monitoring in the context of BRB phase II trial by Fondazione Italiana Linfomi (FIL)**

Referente per lo studio biologico: **Simone Ferrero** Ematologia Univ. Torino

## SPECIFIC AIMS

- **Mutational screening** of baseline samples for the most frequently mutated genes in WM: MYD88, CXCR4 and ARID1A
- **MRD quantitative evaluation** on MYD88<sup>L265P</sup> by the sensitive ddPCR approach at baseline and after BRB treatment on BM and PB
- Development of a sensitive, **plasma-based ddPCR tool** to detect MYD88L<sup>265P</sup> on circulating tumor DNA

**22 OUT OF 38 (58%) PATIENTS INCLUDED IN THE MRD SUB-STUDY**



**MYD88<sup>L265P</sup> detection rate before and after therapy (MRD)**



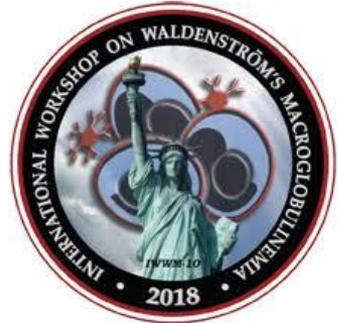
# FIL\_BRB: PUBBLICAZIONI

## Comunicazione orale

*10<sup>th</sup> International Workshop on Waldenström's Macroglobulinemia*

*IWWM2018*

*New York, October 11-13, 2018*



International Workshops on  WALDENSTRÖM'S MACROGLOBULINEMIA

## Poster

*60<sup>th</sup> ASH Annual Meeting*

*San Diego, December 1-4, 2018*

**American Society of Hematology**

Helping hematologists conquer blood diseases worldwide



**Grazie ai Centri che hanno partecipato allo studio**

Uffici Studi FIL [segreteria@filinf.it](mailto:segreteria@filinf.it)

Dott.ssa Claudia Peracchio



**Da:** IWMF Office [mailto:office@iwmf.com]  
**Inviato:** giovedì 29 giugno 2017 22:31  
**A:** segreteria@filinf.it  
**Oggetto:** IWMF-LLS Research Roadmap  
 Notification

Dear Dr. Varettoni,  
 The Board of Trustees of the International Waldenström's Macroglobulinemia Foundation (IWMF) is very pleased to inform you that you are the recipient of a two-year \$400,000 grant award under the 2016 IWMF-LLS Strategic Research Roadmap RFP for your project

Guy Sherwood, MD, CCFP, FAAFP  
 IWMF Vice President for Research



## Study Protocol

Non-invasive diagnostics and monitoring of minimal residual disease and clonal evolution in Waldenström's Macroglobulinemia and in IgM monoclonal gammopathy of undetermined significance

**ID Study: FIL\_BIOWM**

**INVESTIGATOR SPONSOR**

Fondazione Italiana Linfomi ONLUS (FIL)

COORDINATING INVESTIGATOR (PI)	Marzia Varettoni, Pavia (Italy)
CO-INVESTIGATOR	Ramon Garcia-Sanz, Salamanca (Spain)
WRITING COMMITTEE AND SCIENTIFIC SUPPORT	Marzia Varettoni, Pavia (Italy) Simone Ferrero, Torino (Italy) Marco Ladetto, Alessandria (Italy) Ramon Garcia-Sanz, Salamanca (Spain)

REGISTRATION (SEE SECTION 12)

[www.filinf.it](http://www.filinf.it)

# Study objectives

## Primary objective

- ◆ demonstrate that the rate of mutation of MYD88 (L265P) and CXCR4 (S338X) detected with dd-PCR in peripheral blood (PB), plasma or urine show a negligible difference with the rate of mutations detected in bone marrow samples (gold standard)

## Secondary objectives

- ◆ assess whether WM may be differentiated from IgM MGUS based on results of mutation analysis and/or flow cytometry
- ◆ assess the rate of MRD negativity after treatment and its correlation with progression-free survival
- ◆ evaluate the clonal evolution on sequential samples using NGS
- ◆ evaluate progression free and overall survival

## Sample size

- 300 pts: 150 retrospective (learning cohort) + 150 prospective (validation cohort)

## Centers

20 FIL centers + 5 centers in Spain

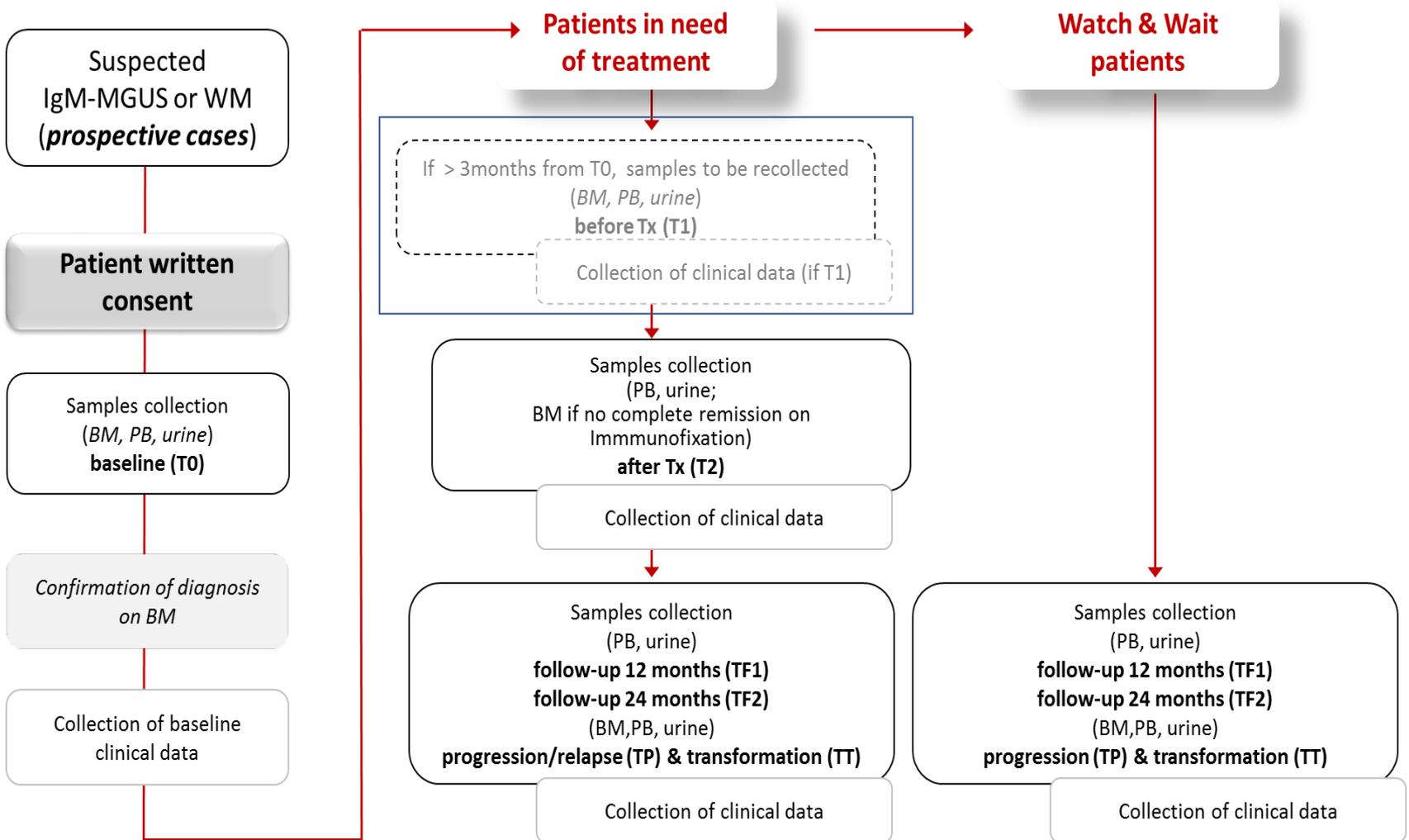
## Inclusion criteria

- Diagnosis of Waldenstrom's Macroglobulinemia (symptomatic or asymptomatic) or IgM MGUS according to criteria established during the second IWWM
- No prior treatment for WM
- Age  $\geq$  18 years
- Informed consent

## Exclusion criteria

- Prior treatment with immunotherapy and/or chemotherapy and/or novel agents
- Active HBV, HCV, HIV infection

# Study flow-chart



# Biological studies and timepoints



BM CD19+ MNCs

PB MNCs

Plasma

genomic DNA

cell-free DNA

**Multiparameter flow cytometry**  
 (Pavia, Salamanca, Torino)

**Mutational studies**  
 dd-PCR (Torino, Salamanca)  
 NGS (Pavia, Salamanca)

**Clinical data**  
 eCRF

**FIL-NF10**

**INDOLENT NON-FOLLICULAR  
LYMPHOMAS PROGNOSTIC PROJECT**

*Luca Arcaini*

*Stefano Luminari*

# STUDY DESIGN

- The study is aimed to verify whether a prognostic collection of data would allow the development of a more accurate prognostic assessment for non-follicular low grade B-cell lymphomas
  - Enrollment: **8** years
  - Follow up: **5** years
- } amendament submitted
- **1500** indolent non follicular lymphoma to obtain **300** SMZL (amendament submitted)

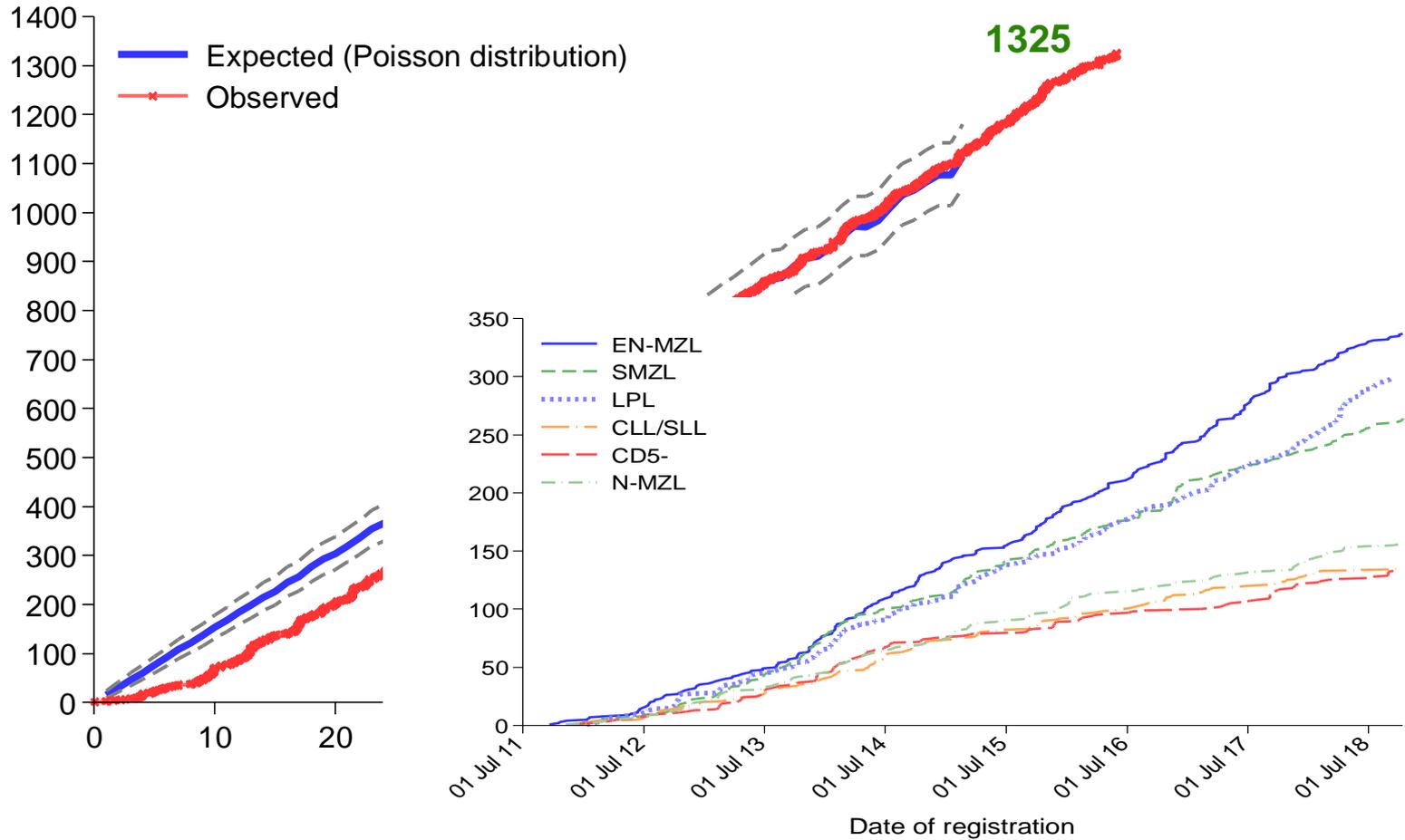
## INCLUSION CRITERIA

- Patients with histologically confirmed diagnosis of non-follicular low grade B-cell lymphoma
  - Splenic MZL (bone marrow histology and/or spleen tissue)
  - Extranodal MZL of MALT (tissue biopsy)
  - Nodal MZL (lymph node biopsy)
  - Lymphocytic lymphoma (lymph node biopsy)
  - Lymphoplasmacytic lymphoma (bone marrow histology or lymph node biopsy)
  - CD5-negative low grade B-cell lymphoma (bone marrow histology)
- Age over 18
- Written informed consent

## EXCLUSION CRITERIA

- None

# ENROLLMENT STATUS (15/10/18)



# NF10 STUDY WORK IN PROGRESS

- Large repository of INFL cases
- Subtype frequency and characteristics different from what expected
- Need work: path. review, CRF validation, update
- Excellent basis for:
  - ✓ descriptive analysis
  - ✓ Prognostic studies: planned
  - ✓ Biomarker study: in development (bioNF10)



## Early Progression As a Predictor of Survival in Marginal Zone Lymphomas: An Analysis from the Prospective International NF10 Study By Fondazione Italiana Linfomi

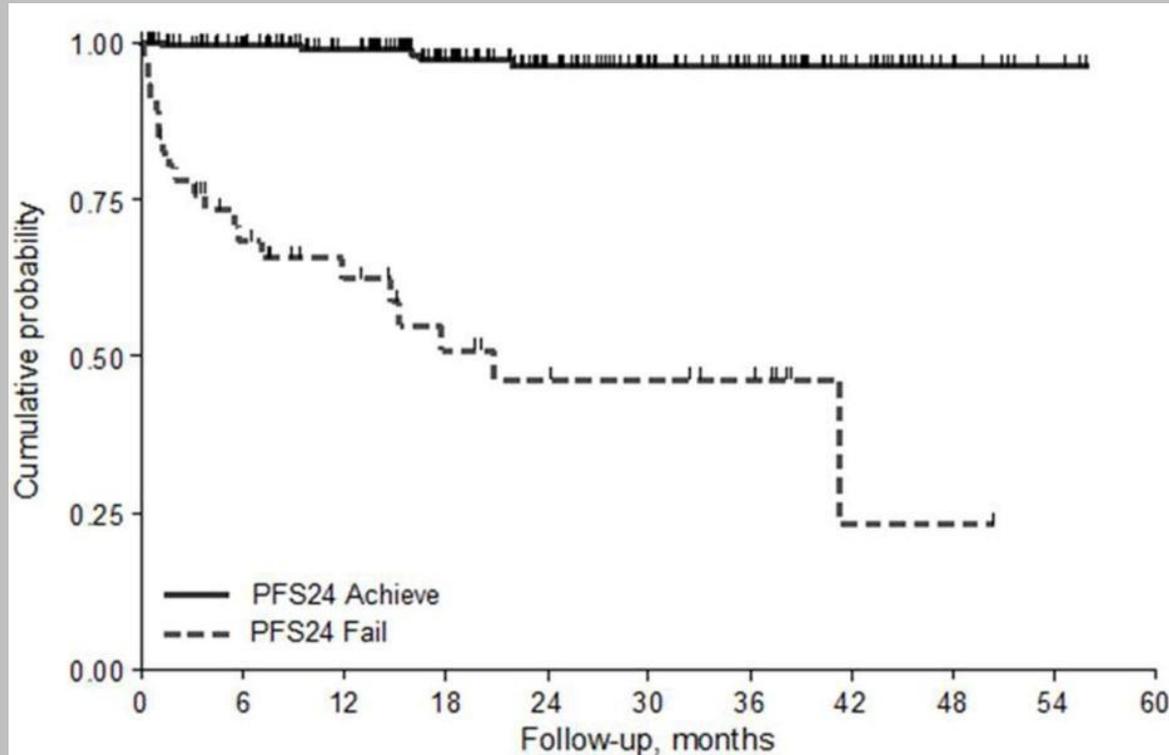
Stefano Luminari, Luigi Marcheselli, Irene DeFrancesco, Sara Rattotti, Marina Cesaretti, Marco Frigeni, Roberta Sciarra, Federica Cavallo, Marina Deodato, Maria Giuseppina Cabras, Michele Merli, Angela Ferrari, Francesca Re, Michele Spina, Emanuele Cencini, Ombretta Annibaldi, Alessandro Pulsoni, Marcia Torresan Delamain, Donato Mannina, Gianluca Gaidano, Caterina Stelitano, Daris Ferrari, Carlo Visco, Francesco Angrilli, Vittoria Tarantino, and Luca Arcaini

- ▶ The ability of PFS24 to predict subsequent OS in a large, multinational MZL cohort as part of the NF10 observational multicentric international study promoted by FIL
  - ▶ PFS24 was calculated only for pts requiring immediate therapy
  - ▶ 1253 cases from 65 centres in Europe and South America: **400 pts with MZL needing immediate therapy**
  - ▶ Median follow-up 38 months
  - ▶ 3-yrs PFS 79% and 3-yrs OS 90%; progressive disease was the cause of death in 47% of all cases

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- ▶ Assessment of PFS24 predicts subsequent outcome in MZL (especially for ENMZL, SMZL and Diss-MZL)





**Grazie per l'attenzione**