

NEW PROJECT

PREDICTIVE VALUE OF COMPLEX KARYOTYPE IN CLL PATIENTS TREATED WITH TARGETED THERAPIES

PROJECT LEADERS

Blanca Espinet, Hospital del Mar, Barcelona, Spain.

Anna Puiggros, Hospital del Mar, Barcelona, Spain.

Panagiotis Baliakas, Uppsala University, Uppsala, Sweden.

Project Start date	June 2024*
Project Finish date	June 2026

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INTRODUCTION

- **CK, a good predictor for progression-free survival (PFS) in patients treated with CIT**
(Badoux et al, 2011; Herling et al, 2017; Puiggros et al, 2017; Baliakas et al, 2019)
- **Prognostic impact of CK in CLL patients treated with targeted agents still in debate:**
 - Most of the data from clinical trials: selection of patients (1st line vs RR; fit vs unfit;...) and treatments (iBTK, iBCL2, combinations)
 - Independence from other poor prognostic factors? *TP53*, *IGHV*
 - Real world data: limited
- **Need for real world data, large cohorts and long follow-ups**

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AIMS

To assess the predictive relevance of complex karyotype in patients treated with targeted therapies:

- Impact of the number of cytogenetic aberrations for defining cytogenetic complexity: ≥ 3 vs ≥ 5
- Impact of the type of aberrations (i.e. structural vs numerical, balanced vs unbalanced, specific subgroups)
- Associations with other clinical and biological factors

STUDY DESIGN

Multicentric retrospective analysis on CLL treated with novel agents (iBTK, iBCL2, combinations)

- Real-world evidence (RWE) data (main focus)
- Clinical trials data

Patients will be included in the ERIC database

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INCLUSION CRITERIA

- Patients diagnosed with CLL according to the iwCLL 2018 criteria that have been **treated exclusively with targeted therapies**. *Patients treated with chemoimmunotherapy will be excluded*
- A minimum **follow-up of two years** after treatment initiation will be required for inclusion (treatment initiation before June 2022)
- **CBA or genomic arrays data prior the initiation of treatment** (max 6 months before)
- Clinical data available
- *TP53* status (del/mut) and IGHV status available
- Sequencing data on *NOTCH1*, *SF3B1* and other genes recurrently mutated in CLL desirable but not obligatory

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MAIN ACTIVITIES

- Gather and analyze CBA/GM data performed prior the initiation of treatment with targeted agents
- Define the impact of genomic complexity in treatment response of CLL patients treated with targeted agents

PARALLEL ACTIVITIES

- Harmonization of different cytogenomic methodologies for CK definition
- Update of the ERIC guidelines on CK in CLL

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PROJECT STATUS

- February 2024: Survey sent to ERIC members: 44 centers interested
- July-October 2024: ERIC DB members have contacted/will contact the centers, providing datasheets
- **Data collection until June 2025**
- Data curation and analysis: 2025-2026

IF YOU WANT TO PARTICIPATE, CONTACT US:

ERIC office: office@ericll.org

Blanca Espinet: bespinet@psmar.cat

Anna Puiggros: apuiggros@psmar.cat

Thomas Chatzikonstantinou: thomas.chatzikonstantinou@certh.gr