European Commission

Europe's Beating Cancer Plan

Diagnosis and treatment

Start date – end date
01/11/2022 – 31/10/2025

Countries
Sweden, Netherlands, Estonia, Lithuania, Latvia, Norway, Spain, Denmark, Finland, Belgium, Portugal, Iceland

Overall budget
EUR 2 993 152

EU contribution under EU4Health programme
EUR 2 394 522

CHIP-AML22 - Improved diagnostics and survival for all children with Acute Myeloid Leukemia treated within the NOPHO-DB- SHIP consortium; a cross-European collaboration

"Our project is on a very rare type of cancer in children, acute myeloid leukemia, and with this EU Cancer Plan support we can have a truly European collaboration investigating a promising new agent and that will contribute to saving more lives.

Pediatric AML treatment requires balancing efficacy with severe toxicity. Here, survival and genetic diagnostics are crucial for treatment success. The previous protocol (NOPHO-DBH AML12) emphasised advanced diagnostics and evaluations. It found that access to cutting-edge treatments is not equal across European countries.

The CHIP-AML22 consortium focuses on three key areas:

- genetic profiling;
- tailored treatments based on gene activity;
- advanced treatment-response evaluations.

Minimal residual disease (MRD) measurements will be used to evaluate treatment response and implementation and evaluation of MRD measurements can improve treatment outcomes. Our goal is to improve outcomes for all children with AML within the NOPHO-DB-SHIP consortium.

The findings from this initiative will have the potential to provide insights for a broader cohort of patients, including those with adult AML.

The project implements advanced genetic diagnostics and targeted treatments for children with AML within the consortium. Recent risk-adapted treatment based on cytogenetics and MRD measurements has improved survival rates to 70%. AML12 achieved an unprecedented 78-79% survival due to cytogenetic risk-group allocation and MRD-based treatment. CHIP-AML22 consolidates and implements these methods with advanced cytogenetic profiling and NGS to guide tailored and targeted treatments with equal access for all children with AML.

The project has three main objectives:

- genetically characterise newly diagnosed patients with AML using techniques such as whole genome sequencing and RNA sequencing;
- introduce novel, tailored, and targeted treatments such as GO and Venetoclax to AML patients in the consortium; investigate availability and affordability and correlate treatment efficacy with genetic data;
- use advanced methods such as flow cytometry and RT-PCR to evaluate treatment response in patients; adopt new flow MRD analysis guidelines and establish genetic-based MRD methods for all or a selection of patients in 2-3 years.

For more info

Contact details
Elise Witthoff

Project website
https://vard.skane.se/en/skane-university-hospital/research-and-education/research2/childhood-international-protocol--acute-myeloid-leukaemia-2022/

Europe's Beating Cancer Plan makes use of the whole range of Commission funding instruments with a total of €4 billion being earmarked for actions addressing cancer. €1.25 billion from the EU4Health programme is being used to support actions and initiatives outlined in the Cancer Plan.

PDF ISBN 978-92-68-05892-3 doi:10.2875/134422 EW-09-23-343-EN-N

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