

Manuscript no. HAEMATOL/2011/051383 entitled “Identification of residual leukemic cells by flow cytometry in childhood B-cell precursor acute lymphoblastic leukemia: verification of leukemic state by flow-sorting and molecular/cytogenetic methods“

Authors: Nina F. Øbro, Lars P. Ryder, Hans O. Madsen, Mette K. Andersen, Birgitte Lausen, Henrik Hasle, Kjeld Schmiegelow, and Hanne V. Marquart

Information about the contributions of each person named as having participated in the study

1) Guarantor(s), i.e., person(s) who is (are) responsible for the integrity of the work as a whole:

- Nina Friesgaard Øbro, Dept. of Clinical Immunology, University Hospital Rigshospitalet, Copenhagen, Denmark. Email: nina.friesgaard@rh.regionh.dk
- Hanne V. Marquart, Dept. of Clinical Immunology, University Hospital Rigshospitalet, Copenhagen, Denmark. Email: hanne.marquart@rh.regionh.dk

According to the International Committee of Medical Journal Editors (ICMJE)

(http://www.icmje.org/ethical_1author.html): “*Authorship credit should be based on: 1) substantial contributions to conception and design, acquisition of data, or analysis and interpretation of data; 2) drafting the article or revising it critically for important intellectual content; and 3) final approval of the version to be published. Authors should meet conditions 1, 2, and 3 Acquisition of funding, collection of data, or general supervision of the research group alone does not constitute authorship*”.

The guarantors of this manuscript confirm that all persons designated as authors qualify for authorship, and that each author has participated sufficiently in the work to take public responsibility for appropriate portions of the content.

2) Authors who participated in the **conception of the study**: Kjeld Schmiegelow and Hanne V. Marquart designed the research study.

3) **Design & Methods**. The following authors were responsible for specific investigations:

- Nina F. Øbro, Lars P. Ryder, Hans O. Madsen, Mette K. Andersen and Hanne V. Marquart performed research and analyzed data
- Nina F. Øbro, Lars P. Ryder and Hanne V. Marquart were responsible for flow cytometric immunophenotyping and flow-sorting
- Nina F. Øbro and Hans O. Madsen were responsible for PCR analyses
- Nina F. Øbro and Mette K. Andersen were responsible for cytogenetic analyses
- Birgitte Lausen and Henrik Hasle contributed patients for the study.

4) **Results**. The following authors were responsible for specific portions of the results, including figures and tables (please indicate the person responsible for each figure and each table):

- Nina F. Øbro and Hanne V. Marquart were responsible for the flow cytometry results (Figures 1 and 2. Table 1. Supplementary Table S2. Supplementary Figure S1).
- Nina F. Øbro and Hans O. Madsen were responsible for the PCR results (Figure 1. Supplementary Tables S1 and S2).
- Nina F. Øbro and Mette K. Andersen were responsible for the cytogenetic results (Figure 1. Supplementary Tables S1 and S2).

5) **Writing the manuscript**. The following authors were responsible for writing the manuscript: Nina F. Øbro, Lars P. Ryder and Hanne V. Marquart wrote the paper. Nina F. Øbro, Lars P. Ryder, Hans O. Madsen, Mette K. Andersen, Birgitte Lausen, Henrik Hasle, Kjeld Schmiegelow and Hanne V. Marquart revised and reviewed the paper.

6) Contributors Listed in Acknowledgments:

Technical assistance:

Lone Jørgensen and the rest of the flow-MRD group assisted with the flow cytometric analyses (Dept. of Clinical Immunology). Ewa Szojmer assisted with the PCR analyses (Dept. of Clinical Immunology). Inge-Lise F. Andersen assisted with the FISH analyses (Dept. of Clinical Genetics).

Funding:

The Ministry of Health (grants 2006-12103-205 and 2006-12103-520), the Novo Nordic Foundation, the Danish Cancer Society, the Danish Council for Health and Disease (Grant R20-A1156-10-S2), the Danish Cancer Society (grants 2008/2 and 2010/2), and the Otto Christensen Foundation.