Manuscript no. HAEMATOL/2011/050567 entitled "Abrogation of RUNX1 gene expression in "de novo" myelodysplastic syndrome with t(4;21)(q21;q22)"

Authors: Ana Rio-Machín, Juliane Menezes, Alba Maiques-Diaz, Xabier Agirre, Bibiana I. Ferreira, Francesco Acquadro, Sandra Rodriguez-Perales, Karmele A. Juaristi, Sara Álvarez and Juan C. Cigudosa.

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:
- Juan C. Cigudosa, Molecular Cytogenetics Group, Human Cancer Genetics Program, Spanish National Cancer Research Centre CNIO, Madrid, Spain; jccigudosa@cnio.es

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:** Juan C. Cigudosa, Ana Rio-Machin and Juliane Menezes.
- 3) Design & Methods. The following authors were responsible for specific investigations:
- Juan C Cigudosa, was responsible for the design of the research;
- Ana Rio-Machin and Juliane Menezes performed most of the experiments (FISH, aCGH, RUNX1 screening, qRT-PCR and MSP assays);
- Karmele A. Juaristi recruited the patient and collected the sample.
- Sandra Rodriguez-Perales help in the break-apart FISH probe design
- Bibiana I. Ferreira and Francesco Acquadro performed the aCGH analysis
- Xabi Agirre performed the pyrosequencing experiment;
- Alba Maiques-Diaz provides unpublished data to be evaluated in our study.
- 4) **Results**. The following authors were responsible for specific portions of the results, including figures and tables:
- Juan C Cigudosa, Ana Rio-Machin and Juliane Menezes were responsible for the results
- Karmele A. Juaristi and Sara Álvarez interpreted the clinical data and wrote the clinical history of the patient;
- Sandra Rodriguez-Perales contributed to the clinical interpretation of the FISH results;
- Bibiana I. Ferreira and Francesco Acquadro help in the aCGH data analysis;
- Xabi Agirre interpreted the pyrosequencing data;
- Alba Maiques-Diaz help in the interpretation of the qRT-PCR data.
- Figure 1A: Sara Álvarez and Juan C Cigudosa
- Figure 1B: Ana Rio-Machin, Juliane Menezes and Sandra Rodriguez-Perales
- Figure 1C: Ana Rio-Machin, Juliane Menezes and Francesco Acquadro
- Figure 1D: Ana Rio-Machin and Juliane Menezes
- Supplementary Figure 1A: Ana Rio-Machin and Juliane Menezes
- Supplementary Figure 1B: Xabi Agirre

- Supplementary table 1: Ana Rio-Machin and Juliane Menezes
- 5) Writing the manuscript. The following authors were responsible for writing the manuscript:
- Juan C Cigudosa, Ana Rio-Machin and Juliane Menezes drafted the manuscript.
- Sara Álvarez carefully revised the paper.
- Juan C. Cigudosa wrote the final version and all the authors accepted the final version of the manuscript.
- 6) Contributors Listed in Acknowledgments: The authors would like to thank Maria del Carmen Martin, who performed the cytogenetic assay, for her excellent technical assistance. This work was supported by an INTRASALUD project PI 08-0440 to JCC, by a grant from the Asocación Española contra el Cáncer (AECC); a PhD fellowship from Obra Social- Fundación "La Caixa" to JM, and a PhD fellowship from the Ministry of Science and Innovation to AR-M.