Manuscript no. HAEMATOL2010/022277- entitled “Expanded and highly active proliferation centers identify a histological subtype of chronic lymphocytic leukemia (“accelerated” chronic lymphocytic leukemia) with aggressive clinical behavior“ Authors: Eva Giné, Antoni Martinez, Neus Villamor, Armando López-Guillermo, Mireia Camos, Daniel Martinez, Jordi Esteve, Xavier Calvo, Ana Muntañola, Pau Abrisqueta, Maria Rozman, Ciril Rozman, Francesc Bosch, Elias Campo, and Emili Montserrat

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:
   • Eva Giné, Hospital Clinic, egine@clinic.ub.es
   • Antonio Martinez, Hospital Clinic, antonmar@clinic.ub.es
   • Francesc Bosch, Hospital Clinic, fbosch@clinic.ub.es
   • Armando López-Guillermo, Hospital Clinic, alopezg@clinic.ub.es
   • Elias Campo, Hospital Clinic, ecampo@clinic.ub.es

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:
   Eva Giné, Antonio Martinez, Francesc Bosch, Armando López-Guillermo, Elias Campo

3) Design & Methods. The following authors were responsible for specific investigations (please detail):
   • Francesc Bosch, Armando López Guillermo and Eva Giné were responsible for designing the clinical study
   • Elias Campo and Antonio Martinez were responsible for designing the histological study
   • Francesc Bosch, Armando López-Guillermo, Ciril Rozman and Eva Giné were responsible for the statistical 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):
   • Eva Giné was responsible for Figure 1 and 3 and Table 2
   • Antonio Martinez and Daniel Martinez were responsible for Figure 2
   • Jordi Esteve, Xavier Calvo, Ana Muntañola and Pau Abrisqueta were responsible for Tables 1 and 3
   • Mireia Camos was responsible for analysis of clonality
   • Neus Villamor, Mireia Camós and Maria Rozman were responsible for morphological, flow cytometry, cytogenetic and IGVH mutational studies of the samples
5) **Writing the manuscript.** The following authors were responsible for writing the manuscript:

- Eva Giné, Armando López-Guillermo and Francesc Bosch were responsible for the introduction, design and methods, results and discussion sections
- Elias Campo and Emili Montserrat were responsible for reviewing the manuscript critically
- All authors discussed and agreed on the final version of the paper

6) **Contributors Listed in Acknowledgments:** (Examples of those who might be acknowledged include a person who provided purely technical help, writing assistance, or a department chair who provided only general support. Corresponding authors must declare whether they had assistance with the study design, data collection, data analysis, or manuscript preparation. If such assistance was available, the authors must disclose the identity of the individuals who provided this assistance and the entity that supported it. Financial and material support should also be acknowledged.)

The corresponding author has nothing to disclosure. This work was supported by grants from the Spanish Ministry of Health, FIS- PI07/0409, PI08/0095, Pi08/0304, RT06/0020/002051, 2009-SGR-1008, CICYT SAF 2008-03630 and by the RTICC (Red Temática de Investigación Cooperativa en Cáncer, RD06/0020/0051).