

Manuscript no. LHAEMATOL/2011/056184 entitled "A novel, highly sensitive and rapid Allele Specific-Loop mediated Amplification assay for the detection of the JAK2V617F mutation in chronic myeloproliferative neoplasms"

Authors: Giulia Minnucci, Giulia Amicarelli, Silvia Salmoiraghi, Orietta Spinelli, Marie Lorena Guinea Montalvo, Ursula Giussani, Daniel Adlerstein and Alessandro Rambaldi

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:

- Alessandro Rambaldi, Unit of Hematology Ospedali Riuniti di Bergamo, Italy.
arambaldi@ospedaliriuniti.bergamo.it

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**: Alessandro Rambaldi, Daniel Adlerstein, Orietta Spinelli

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

- Giulia Minnucci, Giulia Amicarelli and Daniel Adlerstein were responsible for JAK2 LAMP design
- Giulia Minnucci, Giulia Amicarelli were responsible for Jak2 LAMP testing on cell lines and clinical samples
- Ursula Giussani was responsible for cytogenetic/FISH analysis of cell lines
- Silvia Salmoiraghi for JAK2 conventional mutation analysis in cell lines, clinical samples and JAK2 allele quantification in RQ-PCR
- Marie Lorena Guinea Montalvo was responsible for samples preparation
- Orietta Spinelli was responsible for the evaluation of the JAK2V617F allele burden by AS-LAMP

4) **Results**. The following authors were responsible for specific portions of the results, including figures and tables:

- Giulia Minnucci, Giulia Amicarelli and Daniel Adlerstein were responsible for JAK2 LAMP design, figure 1
- Giulia Minnucci, Giulia Amicarelli were responsible for the determination of specificity (figure 2) and sensitivity (figure 3) of the AS-LAMP assay on cell lines and clinical samples
- Silvia Salmoiraghi and Orietta Spinelli were responsible for JAK2 conventional mutation analysis and JAK2V617F allele burden evaluation in cell lines and clinical samples
- Marie Lorena Guinea Montalvo was responsible for samples preparation
- Minnucci Giulia, Amicarelli Giulia, Silvia Salmoiraghi and Orietta Spinelli were responsible for evaluation of the JAK2V617F allele burden by AS-LAMP (figure 4)

5) Writing the manuscript. The following authors were responsible for writing the manuscript:

- Silvia Salmoiraghi and Orietta Spinelli were responsible for Introduction, Materials and Methods, Results and Discussion
- Alessandro Rambaldi was responsible for Introduction, Results and Discussion
- Giulia Minnucci and Giulia Amicarelli were responsible for Materials and Methods and Results

6) Contributors Listed in Acknowledgments:

The authors would like to thank Professor Cristina Mecucci of the University of Perugia, Italy for providing the probe for FISH analysis and prof. Walter Fiedler of the Eppendorf Hospital, Hamburg, Germany for the kind gift of UKE-1 cell line.