Manuscript no. HAEMATOL/2011/061093 entitled "A novel role for survivin in erythroblast enucleation"

Authors: Ganesan Keerthivasan, Hui Liu, Jacob M. Gump, Steven F. Dowdy, Amittha Wickrema and John D. Crispino

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:
- John Crispino, Northwestern University, j-crispino@northwestern.edu

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: Ganesan Keerthivasan and John Crispino
- 3) Design & Methods. The following authors were responsible for specific investigations
- John Crispino was responsible for designing the overall study and interpreting the results
- Ganesan Keerthivasan was responsible for designing all of the experiments interpreting the results
- Amittha Wickrema and Ms. Liu was responsible for assisting with the studies of human erythroblasts interpreting the results
- Steven F. Dowdy and Jacob M. Gump were responsible for designing the experiments with TAT-Cre protein in Figure 5 and interpreting the results.
- 4) **Results**. The following authors were responsible for specific portions of the results, including figures and tables:
- Ganesan Keerthivasan was responsible for all of the figures and table.
- Hui Liu provided technical assistance for Figure 4.
- 5) Writing the manuscript. The following authors were responsible for writing the manuscript:
- John Crispino was responsible for editing the manuscript
- Ganesan Keerthivasan was responsible for writing the manuscript
- Amittha Wickrema was responsible for editing the manuscript

6) Contributors Listed in Acknowledgments:

Jonathan Licht, Gerd Blobel and Mitchell Weiss for discussions and critical reading of the manuscript.

Wei-Jen Tang and Yuequan Shen provided insights into protein purification.

Don Wolfgeher assisted with mass spectrometry analysis

Ed Conway and Astar Winoto provided survivin floxed mice

Vitas Bindokas, William Russin and Teng Leong Chew provided assistance with microscopy. None of these individuals were responsible for assistance with the study design, data collection, data analysis, or manuscript preparation.

This work was supported by grants from NIDDK (DK074693 to JDC), NCI (CA98550 to AW) and the Giving Tree Foundation (to AW) and by the Katten Muchin Rosenman Travel Scholarship Award from the Robert H. Lurie Comprehensive Cancer Center of Northwestern University. Imaging work was performed at the Northwestern University Cell Imaging Facility supported by NCI CCSG P30 CA060553 awarded to the Robert H Lurie Comprehensive Cancer Center. We acknowledge use of the Leica EM-PACT2 high-pressure freezer and AFS2 freeze substitution instruments in the Biological Imaging Facility (Northwestern University) funded by NIH Shared Instrumentation Grant (SRR022494A).