

Manuscript no. HAEMATOL/2012/070789 entitled “Dlk1 is a negative regulator of emerging hematopoietic stem and progenitor cells”

Authors: Bahar Mirshekar-Syahkal, Esther Haak, Gillian M. Kimber, Kevin van Leusden, Kirsty Harvey, John O'Rourke, Jorge Laborda, Steven R. Bauer, Marella F. T. R. de Bruijn, Anne C. Ferguson-Smith, Elaine Dzierzak and Katrin Ottersbach

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:
• Katrin Ottersbach, Department of Haematology, Cambridge Institute for Medical Research, Wellcome Trust - Medical Research Council Stem Cell Institute, University of Cambridge, Cambridge CB2 0XY, UK, ko268@cam.ac.uk

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: Katrin Ottersbach, Bahar Mirshekar-Syahkal

3) Design & Methods. The following authors were responsible for specific investigations (please detail):

- Bahar Mirshekar-Syahkal was responsible for AGM explant cultures, long-term transplantations, gene expression analysis, immunohistochemistry, in situ hybridisation, transfection of stromal cell lines, co-culture experiments, CFU-C assays
- Esther Haak was responsible for co-culture experiments, CFU-C assays
- Gillian Kimber was responsible for long-term transplantations, transfection of stromal cell lines, co-culture experiments
- Kevin van Leusden was responsible for cloning, gene expression analysis
- Kirsty Harvey was responsible for stromal cell line generation
- John O'Rourke was responsible for immunohistochemistry
- Jorge Laborda was responsible for knockout mouse generation
- Steven Bauer was responsible for knockout mouse generation
- Marella de Bruijn was responsible for knockout mouse embryo generation, RNA extraction
- Anne Ferguson-Smith was responsible for knockout mouse embryo generation, transgenic mouse generation
- Elaine Dzierzak was responsible for stromal cell generation
- Katrin Ottersbach was responsible for AGM explant cultures, long-term transplantations, immunohistochemistry, co-culture experiments, CFU-C assays

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):

- Bahar Mirshekar-Syahkal was responsible for Figure 1, 2, 3, 4, 5, S1, S2, S3
- Esther Haak was responsible for Figure 4C

- Gillian Kimber was responsible for Figure 4
- Kevin van Leusden was responsible for siRNA constructs used for Figure 4F,G and 5B
- Kirsty Harvey was responsible for generating stromal cell lines used in Figure 4B-E
- John O'Rourke was responsible for Figure 2B
- Jorge Laborda was responsible for knockout mouse generation used for Figure 3F,G and S3
- Steven Bauer was responsible for knockout mouse generation used for Figure 3F,G and S3
- Marella de Bruijn was responsible for knockout mouse embryo generation and RNA extraction used for Figure 2B-I
- Anne Ferguson-Smith was responsible for knockout mouse embryo generation, transgenic mouse generation used for Figure 3, S3
- Elaine Dzierzak was responsible for stromal cell generation for Figure 4
- Katrin Ottersbach was responsible for Figure 1, 2, 3, 4, 5, S3

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

- Katrin Ottersbach, Bahar Mirshekar-Syahkal were responsible for writing the manuscript
- Esther Haak, John O'Rourke, Jorge Laborda, Steven Bauer, Marella de Bruijn, Anne Ferguson-Smith, Elaine Dzierzak were responsible for editing the manuscript

6) **Contributors Listed in Acknowledgments:** The authors would like to thank Aimée Parker for technical assistance and Dr Anna Petrunkina and Veronika Romashova for cell sorting services. We are also very grateful to Isabel Gutteridge for help with *Dlk1*-transgenic timed matings, to Dr Sacri Ferron for help with *Dlk1*KO timed matings, to Dr Simao da Rocha for the *Dlk1* probe for Southern blotting and to Drs Justin Rochford and Chris Lowe for 3T3-L1 cell cDNA.