Manuscript no. HAEMATOL/2011/052597 entitled “Varicella-zoster virus glycoproteins B and E are major targets of CD4+ and CD8+ T cells reconstituting during zoster after allogeneic transplantation“

Authors: Patrick Kleemann, Eva Distler, Eva M. Wagner, Simone Thomas, Sebastian Klobuch, Steffi Aue, Elke Schnü rer, Hansjörg Schild, Matthias Theobald, Bodo Plachter, Stefan Tenzer, Ralf G. Meyer, and Wolfgang Herr

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:
   • Wolfgang Herr, Dept. of Medicine III, University Medical Center, Mainz, Germany
   Email: wolfgang.herr@unimedizin-mainz.de

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: Wolfgang Herr, Eva Distler, Stefan Tenzer, Bodo Plachter

3) Design & Methods. The following authors were responsible for specific investigations (please detail):
   • Patrick Kleemann was responsible for RP-HPLC purification of VZV-infected Vero cell lysate, for ELISpot assays with healthy donor and patient PBMC and for cLSM analyses.
   • Eva Distler was responsible for designing and evaluation of ELISpot assays with patient cells.
   • Eva M. Wagner, Matthias Theobald and Ralf G. Meyer were responsible for collecting patient samples and providing clinical data.
   • Simone Thomas and Sebastian Klobuch were responsible for establishing the methods of in vitro transcription and RNA electroporation.
   • Steffi Aue was responsible for VZV IgG and IgM ELISA.
   • Elke Schnü rer was responsible for processing of healthy donor and patient blood samples and for conducting ELISpot assays with patient cells.
   • Stefan Tenzer was responsible for the methodology of protein identification by ESI-MS.
   • Wolfgang Herr was responsible for the overall design of experiments.

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):
   • Patrick Kleemann was responsible for Figures 1 to 5 and online suppl. Figure S1.
   • Eva Distler was responsible for Figure 6 and online suppl. Figure S2.

5) Writing the manuscript. The following authors were responsible for writing the manuscript:
   • Patrick Kleemann was responsible for the subheadings “Biochemical purification of VZV-infected Vero cell lysate by reverse-phase HPLC”, “Protein identification by ESI-MS”, “production and electroporation of IVT-RNA” and “Confocal laser scanning microscope (cLSM)” of Design and Methods, for the Results section, for Figure Legends to Figures 1 to 5 and online suppl. Figure S1, and for References.
• Eva Distler was responsible for the subheadings “Donors and Patients” and “IFN-γ enzyme-linked immunosorbent spot (ELISpot) assay” of Design and Methods and for Figure Legends for Figure 6 and online suppl. Figure S2.
• Wolfgang Herr was responsible for Introduction, Discussion, Authorship and Disclosures, and for final approval of the whole manuscript.
• Hansjörg Schild, Matthias Theobald and Bodo Plachter discussed results and provided input for the experimental design.

6) Contributors Listed in Acknowledgments:
The authors would like to thank Dr. Ann M. Arvin and Dr. Marvin Sommer, Departments of Pediatrics, Microbiology, and Immunology, Stanford University School of Medicine, Stanford, CA, USA, for providing pcDNA™3.1 vectors that encode VZV proteins.