Manuscript no. HAEMATOL Published Ahead of Print on April 26, 2010, as doi:10.3324/haematol.2009.021212

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3) Design & Methods.
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   - Bernd Dörken was responsible for design and data analysis
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• Wolf-Dieter Ludwig was responsible for clinical strategy, design and data analysis
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4) Results.
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5) Writing the manuscript.
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• Michael Hummel was responsible for “Molecular analyses”, “Molecular features of the Langerhans cell sarcoma and B-ALL” and “Discussion”
• Ioannis Anagnostopoulos was responsible for “Immunohistochemistry” and “Phenotypical characteristics of the malignant Langerhans cell sarcoma”
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• Hans-Henning Müller for technical assistance
• Elisabeth Oker for technical assistance