Chondrosarcoma models : understanding chemoresistance mechanisms for use in targeted treatment

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Curriculum Vitae

Jolieke Gerdy van Oosterwijk was born in Leiden, the Netherlands, on April 15th 1984. She attended preuniversity school (gymnasium) at the international school "Het Rijnlands Lyceum" in Oegstgeest, the Netherlands, where she received Bilingual Education obtaining the International Baccalaureate English A2 certificate. After graduating in 2002, she attended the Utrecht International Honours College "University College Utrecht" where she followed the pre-med track with a minor a psychology. During this time Jolieke participated in an EAP exchange program at the University of California at Berkeley. Jolieke wrote a Bachelor's thesis on identifying proteins in head and neck tumors using Mass Spectrometry at the department of Mass Spectrometry/Proteomics, Netherlands Proteomics Insitute, Utrecht University, under the supervision of Dr. M Slijper. Extracurricularly Jolieke became a certified freelance photographer, and she graduated as a Bachelor of Science with honors in 2005. Jolieke continued her studies in Berlin, Germany at the Charité Medical School, where she entered the International Elite Master Programme, Molecular Medicine, from which she graduated in 2008. Her master's thesis was written in the lab of Prof. Dr. rer. nat. Eva Klopocki and led to the discovery of a novel mutation in noncoding elements 5' of SOX9 and a publication in Nature Genetics. Immediately after finishing her master's thesis, Jolieke started her PhD education, at the Department of Pathology, LUMC, under supervision of Prof. dr. J.V.M.G. Bovée, of which the results are described in this thesis. In June 2013, Jolieke started as a postdoctoral fellow in the laboratory of Sharyn Baker, PharmD, at the Department of Pharmaceutical Sciences of St Jude Children's Research Hospital, Memphis, TN, USA.

List of Publications

- van Oosterwijk JG, Anninga JK, Gelderblom H, Cleton-Jansen AM, Bovée JVMG. Update on targets and novel treatment options for high grade osteo- and chondrosarcoma *Hem/Onc Clinics of North America*

- van Oosterwijk JG, de Jong D, van Ruler MAJH, Hogendoorn PCW, Dijkstra PDS, van Rijswijk CSP, Machado I, Llombart-Bosch A, Szuhai K, Bovée JVMG. Three new chondrosarcoma cell lines: one grade III conventional central chondrosarcoma and two dedifferentiated chondrosarcomas of bone. *BMC Cancer*

- van Oosterwijk JG, Plass JRM, Meijer D, Que I, Karperien M, Bovée JVMG. Orthotopic mouse model for chondrosarcoma of bone: an *in vivo* tool for drug testing. *Submitted*

- van Oosterwijk JG, Herpers B, Meijer D, Briaire de Bruijn IH, Cleton-Jansen AM, Gelderblom H, van de Water B, Bovée JVMG. Restoration of chemosensitivity for doxorubicin and cisplatin in chondrosarcoma in vitro: Bcl-2 family members cause chemoresistance *Annals of Oncology*

- van Oosterwijk JG, Meijer D, van Ruler MAJH, van den Akker BEWM, Oosting J, Krenács T, Picci P, Flanagan AM, Liegl-Atzwanger B, Leithner A, Athanasou N, Daugaard S, Hogendoorn PCW, Bovée JVMG. Screening for potential targets for therapy in mesenchymal, clear cell, and dedifferentiated chondrosarcoma reveals Bcl-2 family members and TGFbeta as potential targets. *American Journal of Pathology*

- van Oosterwijk JG, van Ruler MAJH, Briaire- de Bruijn IH, Herpers B, Gelderblom H, van de Water B, Bovée JVMG. Src kinases in chondrosarcoma chemoresistance and migration: dasatinib sensitizes to doxorubicin in TP53 mutant cells. *Britisch Journal of Cancer*

- Zhang Y-X, van Oosterwijk JG, Sicinska E, Moss S, Remillard SP, van Wezel T, Bühnemann C, Hassan AB, Demetri GD, Bovée JVMG, Wagner AJ. Functional profiling of receptor tyrosine kinases and downstream signaling in human chondrosarcomas identifies pathways for rational targeted therapy. *Clinical CancerResearch*

- Schrage YM, Briaire-de Bruijn IH, de Miranda NF, van Oosterwijk JG, Taminiau AH, van Wezel T, Hogendoorn PCW, Bovée JVMG. Kinome profiling of chondrosarcoma reveals SRC-pathway activity and dasatinib as option for treatment. *Cancer Research*

- Waaijer CJ, de Andrea CE, Hamilton A, van Oosterwijk JG, Stringer SE, Bovée JVMG. Cartilage tumour progression is characterized by an increased expression of heparan sulphate 6O-sulphation-modifying enzymes. *Virchows Archive*

- Pansuriya TC, van Eijk R, d'Adamo P, van Ruler MA, Kuijjer ML, Oosting J, Cleton-Jansen AM, van Oosterwijk JG, Verbeke SL, Meijer D, van Wezel T, Nord KH, Sangiorgi L, Toker B, Liegl-Atzwanger B, San-Julian M, Sciot R, Limaye N, Kindblom LG, Daugaard S, Godfraind C, Boon LM, Vikkula M, Kurek KC, Szuhai K, French PJ, Bovée JVMG. Somatic mosaic IDH1 and IDH2 mutations are associated with enchondroma and spindle cell hemangioma in Ollier disease and Maffucci syndrome. *Nature Genetics*

- Kurth I, Klopocki E, Stricker S, van Oosterwijk JG, Vanek S, Altmann J, Santos HG, van Harssel JJ, de Ravel T, Wilkie AO, Gal A, Mundlos S. Duplications of noncoding elements 5' of SOX9 are associated with brachydactyly-anonychia. *Nature Genetics*

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