PhD thesis

Transforming Growth Factor-β in Pathogenesis of Breast Cancer Metastasis and Fibrosis

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Transforming Growth Factor-β in Pathogenesis of Breast Cancer Metastasis and Fibrosis

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Preface

This dissertation is the result of four years of dedicated and intense research on the pathobiology of transforming growth factor-β. Particularly focused on breast cancer and skeletal metastasis and the therapeutic intervention with various sites of TGF-β signaling. Through the study of the role of this growth factor in in vitro and in vivo models of pathology and particularly breast cancer metastasis it is my hope that we have contributed to the unraveling of the cancer code and progressed a small step in the direction of improved cancer treatment.

The study was commenced in March 2005 and finished in March 2009 under the supervision of Prof. Dr. Peter ten Dijke in the department of Molecular Cell Biology and later in close collaboration with Dr. Gabri van der Pluijm at the department of Urology and Endocrinology at the Leiden University Medical Center in The Netherlands. The study was part of a European Union Marie Curie Research Training Network ”EpiPlastCarcinoma” (project 005428). A fantastic group of European senior scientists whom through their encouraging support not only functioned as great mentors and teachers but also inspired and broadened our scientific view. The consortium has provided a platform for stimulating cross-boarder fertilization of results and a forum for free discussion of results and future directions.

It has been some hectic years of great challenges and an eye-opening adventure to both the greatly rewarding and at times cruel world of academic scientific research.

The Hague, December 2009
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