

## World Congress on **Breast Cancer**

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### **Differentiation and histogenesis of syringomatous tumour of the nipple and low-grade adenosquamous carcinoma: Evidence for a common origin**

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Syringomatous tumour of the nipple and low-grade adenosquamous carcinoma (LGAdSC) of the breast are regarded as distinct entities. To clear the nature of these two lesions, we compared the expression of different lineage/differentiation markers in 12 syringomatous tumours of the nipple, 10 syringomas of skin and 9 LGAdSC, and normal breast epithelium. Using triple immunofluorescence labelling and quantitative RT-PCR studies for different keratins, p63 and SMA, we demonstrated that syringomatous tumour of the nipple and LGAdSC are identical or nearly identical lesions. Both contain p63+/K5/K14+ tumour progenitors from which, based on the sequential expression of these markers, K10+ squamous and K8/18+ glandular lineage arise. In contrast, syringoma of skin does not express K8/18. Identical p63+/K5/14+ cells were also found in the normal breast duct epithelium. Based on our findings, we suggest that physiological p63+/K5/14+ counterparts of the normal breast duct epithelium or early related cells might play a key role in neoplastic transformation of both syringomatous tumour and LGAdSC. We propose that the differentiation patterns found in both lesions reflect the early ontogenetic stages of the normal breast epithelium.

#### **Biography**

Werner Boecker completed his dissertation at the age of 25 years at the Institute of Pathology, University of Hamburg where he studied pathology under his teacher Gerhard Seifert. At the age of 34 he was appointed as Professor at the same institution. In 1997 he was appointed as Director and Professor of the Gerhard-Domagk-Institute of the University of Muenster. He has published more than 200 papers in reputed journals, has been serving as an editorial board member and published the books "Breast Preneoplasia: A New conceptual approach" and the German Book "Pathologie".

#### **Notes:**