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Abstract

Risks of different skin tumor combinations after a first melanoma, squamous cell carcinoma and basal cell carcinoma in Dutch population based cohorts: 1989 - 2009

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The aim of this study was to calculate risks of different type of subsequent skin cancers.

All melanoma and squamous cell carcinoma (SCC) patients included in the national Netherlands Cancer Registry (NCR) and all basal cell carcinoma (BCC) patients included in the regional Eindhoven Cancer Registry (ECR) between 1989 and 2009 were followed until diagnosis of a subsequent different skin cancer (melanoma, SCC or BCC), date of death or end of study. Cumulative risk, Standardized Incidence Ratio (SIR) and Absolute Excess Risk (AER) of subsequent skin cancers were calculated.

In total, 50,510 melanoma patients and 64,054 SCC patients were included (national data NCR). The regional data of the ECR consisted of 5,776 melanoma patients, 5,749 SCC patients and 41,485 BCC patients. The 21-year cumulative risk for a subsequent melanoma after a first SCC or BCC was respectively 1.7% and 1.3% for males and 1.3% and 1.2% for females; SCC after melanoma or BCC was 4.6% and 9.3% (males) and 2.6% and 4.1% (females); BCC after melanoma or SCC was respectively 13.2% and 27.8% (males) and 14.9% and 21.1% (females). SIRs and AERs remained elevated up to 21 years after the first melanoma, SCC or BCC.

The results of this study showed high cumulative risks of mainly BCC and SCC and markedly increased relative and absolute risks of all tumor combinations. These estimates confirm a common carcinogenesis and can serve as information for follow-up guidelines and patient education aiming for an early detection of the subsequent cancers.