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## Dermatology Online Journal

### Title

Keratinocyte carcinoma and risk of all-cause and cancer-related mortality: A systematic review

### Permalink

<https://escholarship.org/uc/item/6bv8q3wv>

### Journal

Dermatology Online Journal, 22(9)

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### Publication Date

2016

### DOI

10.5070/D3229032550

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Peer reviewed

**Abstract**

**Keratinocyte carcinoma and risk of all-cause and cancer-related mortality: A systematic review**

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**Dermatology Online Journal 22 (9)**

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**Background**

Some reports suggest a history of keratinocyte carcinoma (KC) may be associated with increased mortality. The high prevalence of KC makes the possibility of associated subsequent mortality from other causes important from a clinical and public health perspective. However, the variable methods and findings of existing studies leave the overall significance of these results uncertain. To provide clarity, we conducted a systematic review to characterize the evidence on the associations of KC with: 1) all-cause mortality, 2) cancer-specific mortality, and 3) cancer survival.

**Methods**

Bibliographic databases were searched through February 2016. Studies were included if adequate data were provided to estimate mortality ratios in patients with- vs.-without KC. Data were abstracted from the studies that met inclusion criteria.

**Results**

For all-cause mortality, a significant increased risk was observed for patients with a history of squamous cell carcinoma (SCC) (relative risk estimates (RR) 1.25 and 1.30), whereas no increased risk was observed for patients with a history of basal cell carcinoma (BCC) (RRs 0.96 and 0.97). In one study, cancer-specific mortality was increased for patients with a KC history (RR 1.28; 95% CI 1.22-1.34). With few exceptions, across multiple types of cancer BCC and SCC were consistently associated with poorer survival from second primary malignancies.

**Conclusion**

Multiple studies support an association between KC and fatal outcomes; the associations tend to be more potent for SCC than BCC. Additional investigation is needed to more precisely characterize these associations and elucidate potential underlying mechanisms.