

# ASSOCIATION BETWEEN SLEEP DISORDERS AND THE PRESENCE OF BREAST **CANCER METASTASES IN GYNECOLOGICAL PRACTICES IN GERMANY:** A CASE-CONTROL STUDY OF 11,412 WOMEN

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### **PURPOSE**

The goal of the present study was to analyze the impact of sleep disorders on the development of metastases in women with breast cancer followed in gynecological practices in Germany.

#### **METHODS**

The study included women who were initially diagnosed with breast cancer in 262 gynecological practices in Germany between January 2000 and December 2015 (index date). Participants were followed for up to 5 years. Women diagnosed with breast cancer metastases within a period of 6 months and before the end of follow-up were matched (1:1) by age, index year, physician, type of hormonal therapy (tamoxifen or aromatase inhibitors) and follow-up time (in months) with women without metastases. Regression analyses were conducted to study the association between sleep disorders and the presence of metastases, and these regression analyses were adjusted for depression.

# **RESULTS**

A total of 11,412 women were included in the present study. The mean age was 59.8 years (SD 11.4 years) and most participants were between 61 and 70 years

old (metastases group: 32.6%; no-metastases group: 32.3%). Sleep disorders were associated with a significant increase in the presence of breast cancer metastases in the overall population (odds ratio [OR] 1.31) and in the different age subgroups (ORs between 1.24 and 1.43).

## CONCLUSION

A positive association was found between sleep disorders and the presence of metastases in women diagnosed with breast cancer in gynecological practices in Germany.

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If you would like to read any of the studies in its entirety, please, contact us to obtain the full version of a publication. Also, our research director is at your disposal if you have any further questions.

Thank you for your interest!