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### **Accelerometer based physical activity in patients with head and neck cancer**

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**Purpose:** Physical activity (PA) is an effective treatment that may positively impact head and neck cancer patients' (HNCpts) physical functioning and quality of life. The majority of previous studies assessed PA through self-report. The aim of this study is to contribute to objectively measured PA research by investigating extent and intensity of accelerometer-based PA in a sample of HNCpts.

**Methods:** In this ongoing cross-sectional study, HNCpts are asked to participate in the study. The recruitment is performed in a clinic during outpatient consultation hours. The study protocol includes a self-administered survey (e.g., sociodemographics, quality of life) as well as the collection of accelerometer-based PA data (ActiGraph model GT3X+) for seven consecutive days (at least 10 hours during day-time). Disease specific parameters (e.g., tumour site, therapies) are taken from the patient files, in close cooperation with the treating physicians.

**Results:** To date, 44 HNCpts have been asked to participate in the study. Thirty five HNCpts (86% male, 66 ± 10 years) were enrolled (participation rate 80%). A proportion of 86% was completely adherent to the 7-day wearing protocol of the device.

**View:** Data collection will be finished in June 2022. Our presentation comprises levels of measured physical activity in HNCpts. Further, we want to evaluate the association between time that HNCpts remain in different physical activity intensities and quality of life.