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## O-081 - COST ANALYSIS OF OUTPATIENT ONCOLOGICAL NEUROSURGERY (OON): A COMPARISON BETWEEN HOSPITAL ADMISSION AND OUTPATIENT SURGERY WITH HOSPITAL-AT-HOME-BASED FOLLOW-UP

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### Resumen

**Introduction:** Outpatient oncological neurosurgery (OON) and ERAS protocols have proven to be safe and result in multiple clinical and psychological advantages for patients. Besides, previous studies suggest that they have a lower economic impact on healthcare systems. However, it remains unclear if OON protocols with Hospital-at-Home (HaH)-based perioperative care lead to a significant reduction in healthcare-associated costs in social security-based healthcare systems.

**Objectives:** The goal of this study is to evaluate the economic efficiency of our HaH-based OON protocol.

**Methods:** The OON cohort included a consecutive series of 17 patients who underwent outpatient brain tumor excision or biopsy in a tertiary referral hospital since 2019. The control group included 38 paired patients who underwent in-hospital postoperative care and met all inclusion criteria of the OON protocol, except for the HaH coverage area. We analyzed their clinical and demographic characteristics and the direct costs related to each group.

**Results:** There were no significant differences in clinical and demographic features between the OON and the control groups. Similarly, the duration of surgery and procedure associated costs were comparable. However, the control group had longer postoperative monitoring with increased observation costs (€2,462 vs. €463). Outpatients received post-hospital home care with a follow-up of 4.1 days, which was comparable to the hospital stay (4.14 days) but with significantly lower costs (€713 vs. €1,280). Total hospitalization costs were approximately 1.5 times higher than those of outpatient surgery (€7,326 vs. €4,590).

**Conclusions:** This study demonstrates that OON is both efficient and safe. The increase in costs associated with traditional admission is mainly due to post-surgical observation and admission to the ward. The home monitoring carried out by HaH included in our protocol does not contribute significantly to total costs, maintaining the efficiency of the program and ensuring a quality of postoperative care comparable to traditional care.