Background: Anemia is an important factor in patient quality of life and is related to a worse prognosis in overall terms of survival and time to progression in many tumors. The objective of our study was to determine the impact of anemia on survival and time to progression in SCLC patients.

Methods: We analyzed 97 SCLC patients. Mean age was 62 years (40-80): 94% male (96.9%), 3% female (3.1%). 53 (54.9%) had limited disease (LD), and 44 (45.4%) extensive disease (ED). All patients received first-line chemotherapy with platinum plus etoposide. Average number of cycles administered was 4 (range, 1–9). While receiving treatment, 63 patients presented anemia, 8 of them G3-G4. Response to treatment. In LD patients, the overall response rate was 66% (37/56), complete response (CR), 16% (33.93%); partial response (PR), 7 (13.2%) stable disease (SD) and 6 (11.9%) progressive disease (PD). In ED patients, the overall response rate was 40.9%, 4 (9.09%) CR, 14 (31.81%) PR, 15 (34.09%) SD, 11 (25%) PD. 45.5% of all patients received second-line chemotherapy, with an average of three cycles. Anemia was observed in 35.5% of patients 16 (15.5%) patients with hematocrit levels <12 g/dl at the time of diagnosis had a significantly lower overall survival (6 vs 13 months; P < 0.0001) and time to progression (4 vs 8 months, P = 0.0005) than patients with hematocrit levels over 12 g/dl (83%)).

Conclusions: Anemia is related to poor prognosis in SCLC patients.