

**OFFICIAL TITLE: EFFECTS OF LAUGHTER THERAPY ON
RESPIRATORY FUNCTIONS AND GERIATRIC PAIN IN ELDERLY
INDIVIDUALS**

NCT NUMBER: XXXXXX

DATE: JULY 18, 2025

STATISTICAL ANALYSIS PLAN

This thesis study will be conducted at the Dikmen Retirement Home, affiliated with the Ankara Metropolitan Municipality. The research population consists of 2296 members of this home. A g-power analysis was performed for the content of the research. For the power analysis regarding sample size, the data from the study by Jahanimoghadam et al. (2022) was used as the basis for detailed calculations of the G*Power 3.1.9.7 (Faul et al., 2007) data. A power analysis was performed regarding sample size, and with a power of 0.90 and a margin of error of 0.05, the required volume for each group was calculated as 29 to determine whether the difference between the means of the two groups is different from zero. The research proportions are as follows: If there is no possibility of withdrawal from the research due to the inclusion of parts, it is planned to include 64 people in total, consisting of 32 replacement group members and 32 control group members, with a 10% increase.