Background:
Sarcopenia is a disorder that causes muscular mass and strength loss, which can result in diminished mobility and functional limits. Depression and a bad assessment of one's own health are common results among cancer patients. As a result, the goal of this study was to look at the association between sarcopenia, depression, and health perception.

Methods:
Cancer patients were the subject of a retrospective study from January to April 2023. The study included 150 patients who had different forms of verified cancer diagnosis. These individuals were admitted to Mayo Hospital's Palliative Care Cancer Department. The presence of depressive symptoms was assessed using the Patient Health Questionnaire (PHQ-9) (Spitzer et al., 1999). SARCF was used to measure all the five dimensions of sarcopenia (Malmstrom & Morley, 2013). To examine self-perceived health, a self-report questionnaire was used (Busgang et al., 2022). The relationships between sarcopenia, depression, and health perception were investigated using correlation analysis.

Results:
We observed a significant and positive association between depression and the dimensions of sarcopenia. Specifically, we found a positive correlation between depression and SARC1=Strength (r = 0.378, p<0.01), SARC2=Assistance in walking (r = 0.390, p<0.01), SARC3=Rise from a chair (r = 0.488, p<0.01), and SARC4=Climb stairs (r = 0.392, p<0.01). However, we found a positive but insignificant relationship between depression and SARC5=Falls (r = 0.150, p>0.05). In addition, we discovered that patients' perception of poor health was correlated with depression (r = -0.391, p<0.01), SARC2=Assistance in walking (r = -0.235, p<0.01), SARC3=Rise from a chair (r = -0.259, p<0.01), and SARC4=Climb stairs (r = -0.277, p<0.01). However, we did not find a significant relationship between health perception and two dimensions of sarcopenia (i.e., SARC1=Strength and SARC5=Falls).

Conclusions:
Sarcopenia adversely affects the physical and mental health of cancer patients. They feel depressed and perceive their health as bad which imparts a negative impact on the outcome of these patients.