

IMPACT OF PALLIATIVE RADIOTHERAPY IN ELDERLY PATIENTS WITH HEAD AND NECK CANCER



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INTRODUCTION

The elderly population are the fastest growing segment of the population in developed countries. Approximately 50% of all cancers and 70% of cancer deaths occur in those over 65 years old. The prevalence of head and neck cancer (HNC) in the elderly has been increasing over the last decades. The management of this particular group of patients represents an important challenge. The treatment approach by radiotherapy alone, or in association with chemotherapy or surgery, is responsible for the improvement in loco-regional tumoral control and overall survival, however, its role in the management of the elderly is still controversial.

OBJECTIVES

The aim of our study was to evaluate effectiveness of different palliative radiotherapy schemes in elderly population with HNC. Primary endpoint: overall survival (OS); Secondary endpoint: disease control rate (DCR).

MATERIAL AND METHODS

Retrospective study that included all the patients with HNC, aged 65 years and older, treated with palliative radiotherapy in Portuguese Institute of Oncology of Coimbra – Clinical Cancer Center (OEI) between January 2013 and December 2015. Fractionation regimens Group I - 50 Gy in 20 fractions over 4 weeks; Group II - 30 Gy in 10 fractions over 2 weeks; Group III - 37.5 Gy in 15 fractions over 3 weeks; Group IV - 40Gy in 20 fractions over 4 weeks. Disease control rate (DCR) was defined as having had complete response, partial response, stable disease or progression. Response assessment was performed with cervical and thoracic CT scan between 4 and 6 weeks after treatment. Survival outcomes were estimated using Kaplan-Meier's method.

RESULTS

CHARACTERISTICS	STUDY POPULATION
AGE (years)	
MEDIAN	78.6
RANGE	68 – 92
GENDER (n)	
FEMALE	9
MALE	26
KARNOFSKY PERFORMANCE STATUS SCALE (n)	
≤ 60	14
70	10
80	9
90	2
TUMOUR LOCATION	
ORAL CAVITY	9
OROPHARYNX	9
LARYNX	7
HYPOPHARYNX	4
NASOPHARYNX	2
PARANASAL SINUSES	2
SALIVARY GLAND	1
CERVICAL ESOPHAGUS	1
FRACTIONATION REGIMENS (n)	
GROUP I	10
GROUP II	12
GROUP III	8
GROUP IV	5
TNM STAGE (n)	
I	1
II	1
III	27
IV	6

Table 1: Demographic characteristics of the study population (n = 35)

DISEASE CONTROL RATE

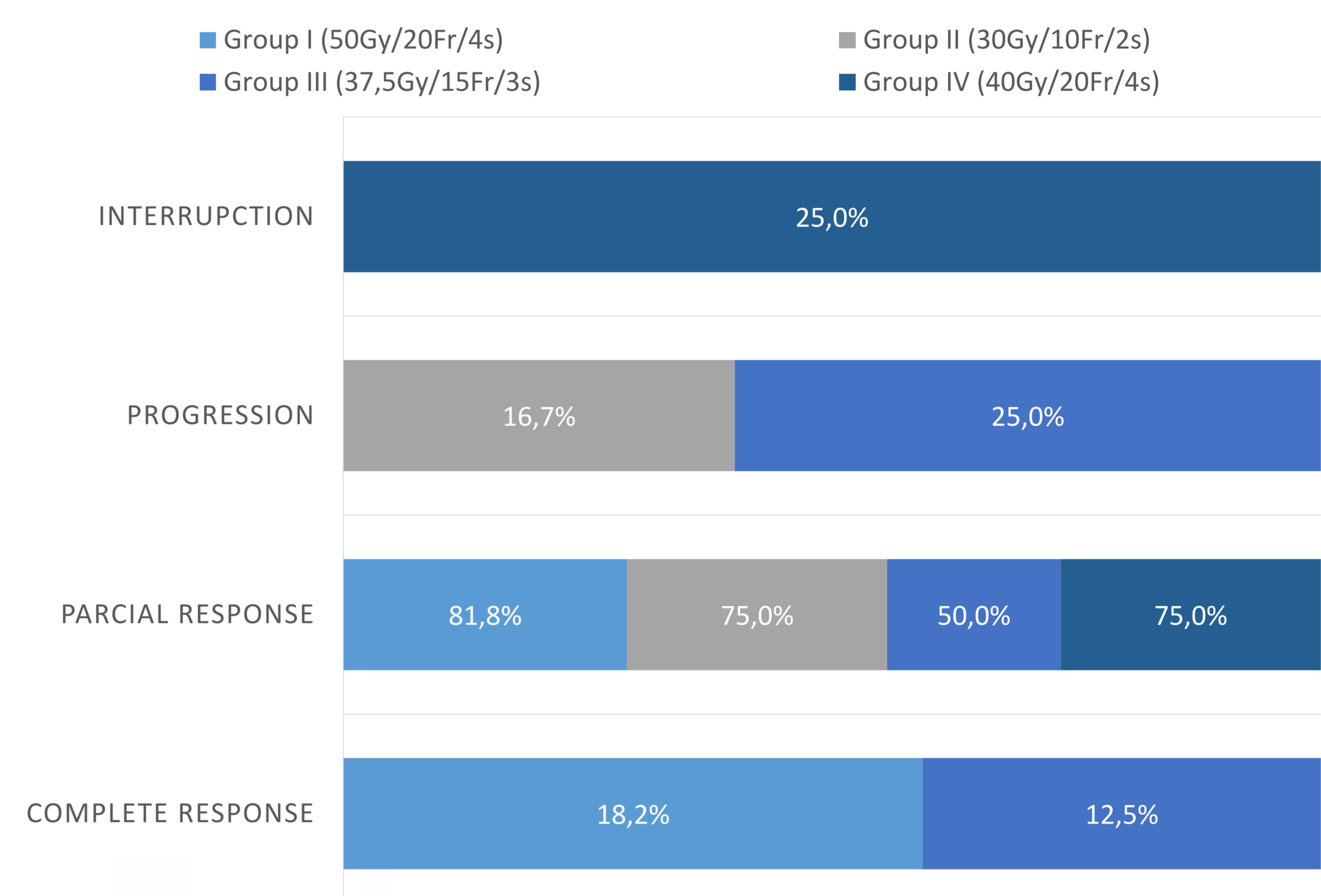


Figure 1: Disease control rate

OVERALL SURVIVAL

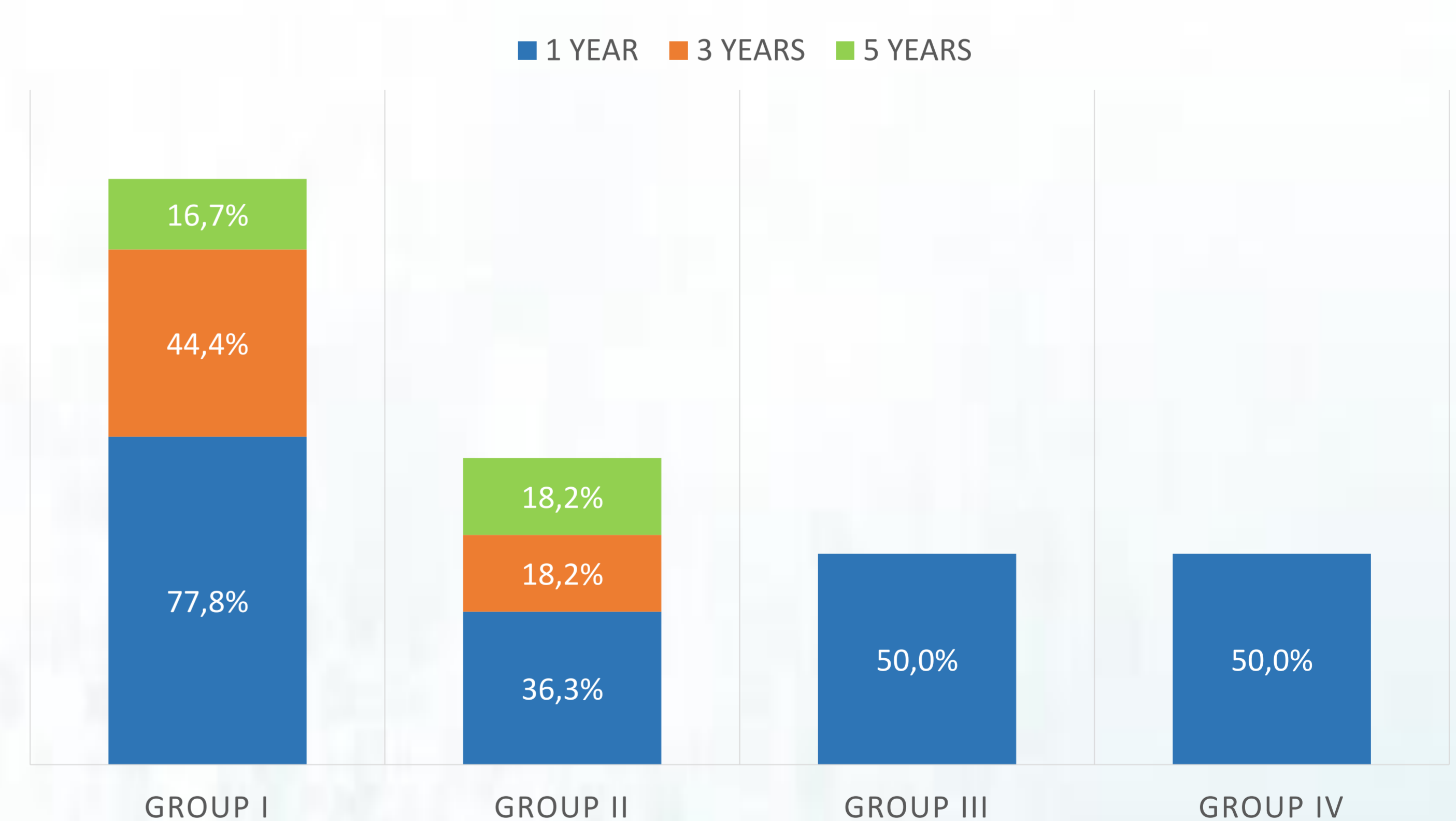


Figure 2: Overall-survival

- The median OS for early-stage disease was 8.7 months, for locally advanced disease was 13 months (1.5-91.6) and metastatic disease was 10 months (1-23.4). Group I and II encompasses the majority of patients who presented the highest disease control rate, 9.5% complete response and 76.2% partial response.
- The overall 5 years survival of our cohort was 13.3%. These study had a median follow up of 13,4 months.

CONCLUSION

The choice of palliative radiotherapy varies significantly, in contrast to regimens of curative radiotherapy which are well standardized. This study has shown that regardless of the palliative intent radiotherapy, most patients presented a considerable DCR. Response to treatment seems to be associated with longer survival, however future well designed trials are needed to clarify which fractionation regimens bargain toxicity and quality of life in addition to survival in this elderly patients.