



RISK OF NEUTROPENIA AND FEBRILE NEUTROPENIA IN PATIENTS TREATED WITH LOW TO INTERMEDIATE RISK CHEMOTHERAPY: A PROSPECTIVE, MULTICENTER ANALYSIS

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INTRODUCTION

- Primary prophylaxis with G-CSF is routinely recommended for chemotherapy regimens with a >20% risk of febrile neutropenia (FN).
- For regimens with a low to intermediate risk of FN, the decision to initiate G-CSF should consider additional risk factors.
- Real-world data on the incidence of FN with low to intermediate risk regimens, as well as risk factors influencing that risk is limited.
- We aimed to estimate the incidence of neutropenia and FN with low to intermediate risk regimens, and identify associated risk factors.

METHODS

- Prospective, observational, multicentre study (May 2024-October 2024).
- Patients with **solid malignancies** treatment with chemotherapy regimens with <20% risk of FN were eligible.
- Patients receiving primary prophylaxis with G-CSF for any reason were excluded.
- The occurrence of neutropenia and FN was assessed for the first 3 cycles of chemotherapy.

RESULTS



N=185

Table 1. Population characteristics

Age (years) - mean±SD	64 ±11,7
Gender - n(%)	
Female	110 (59,5)
Male	75 (40,5)
ECOG PS - n(%)	
0	130 (70,3)
Primary tumor – n(%)	
Gastrointestinal	100 (54,1)
Breast	35 (18,9)
Stage – n(%)	
IV	94 (50,8)
I-III	91 (49,2)
Treatment intent – n(%)	
(Neo)adjuvant	78 (42,7)
First line palliative	76 (41,1)
≥ Second line	31 (16,2)
Chemotherapy regimen – n(%)	
Doublet	120 (64,9)

5 (2,7%) patients developed FN:

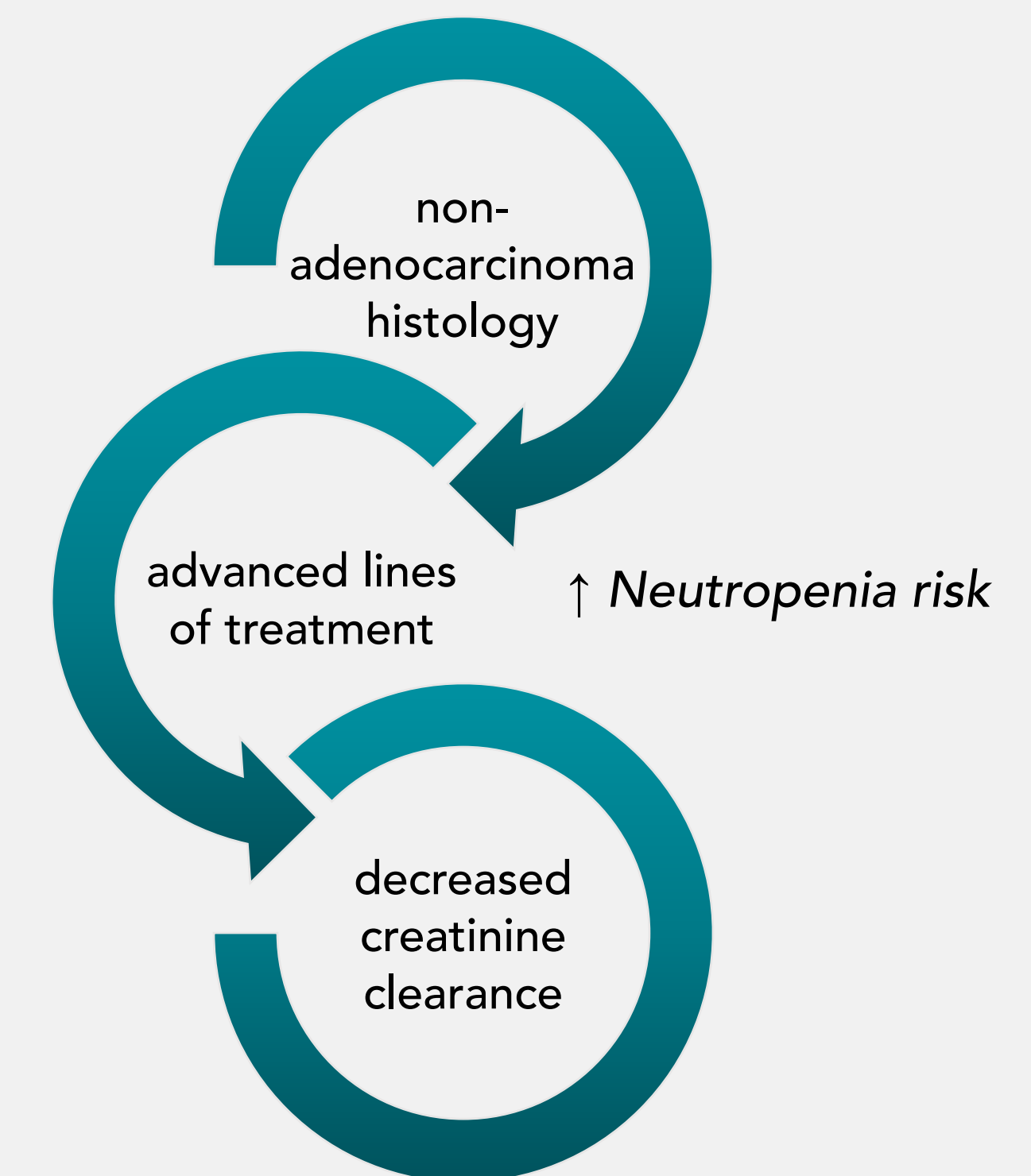
- 60% during the first cycle
- Median MASCC score: 14(11-19)
- 100% hospitalization rate
- 1 death

57 (30,8%) patients developed any grade neutropenia:

- Non-adenocarcinoma histology (OR=2.48, p=0.088) and second or later line therapy (OR=2.95, p=0.055) were associated with a higher risk of neutropenia
- Breast cancer was associated with a lower risk of neutropenia (OR=0.44, p=0.098)
- Creatinine clearance showed an inverse association with neutropenia (OR=0.99, p=0.069)

CONCLUSIONS

- We observed a low incidence of FN in patients treated with low to intermediate risk chemotherapy regimens.
- Non-adenocarcinoma histology, advanced lines of treatment and decreased creatinine clearance were associated with an increased likelihood of neutropenia.



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