

Immunotherapy as second-line treatment in grade 3 neuroendocrine carcinomas: a prospective case series from an ENETS Center of Excellence

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On behalf of the Steering Committee and all NET-specialists in NETwerk.

INTRODUCTION AND AIM

Metastatic WHO grade 3 extra-pulmonary neuroendocrine carcinomas (EP-NEC) have a poor prognosis and optimal treatment after first-line platinum-etoposide chemotherapy remains unclear. A recent, small phase II study combining ipilimumab and nivolumab showed promising results. The aim is to evaluate the use of immunotherapy in NETwerk, an ENETS Center of Excellence, as new treatment option in EP-NEC.

MATERIALS AND METHODS

Patient characteristics of all EP-NEC, discussed at the NET specific MDT (NET MDT), were prospectively recorded between August 2018 and January 2020. Progression-free survival (PFS) of patients receiving immunotherapy was calculated.

RESULTS

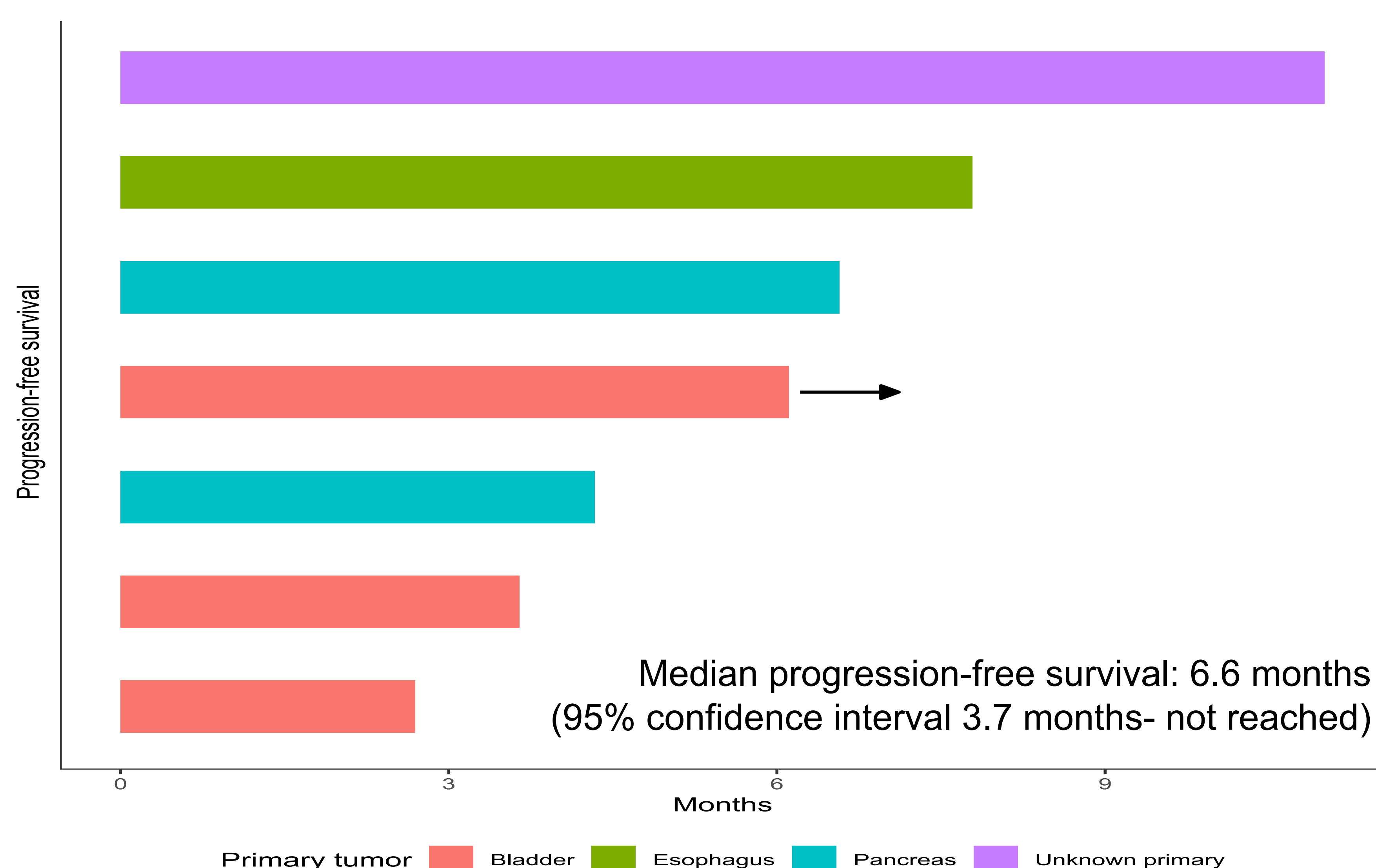
PATIENTS CHARACTERISTICS

EP-NEC on NET MDT	76
Treatment plan: immunotherapy	9
Patients that received immunotherapy	7
Mean age	65 ± 17 years
Median Ki-67	90%
Small cell carcinoma	5
Large cell carcinoma	2
Treatment distribution	
• Pembrolizumab	3
• Nivolumab	1
• Ipilimumab-nivolumab	1
• Atezolizumab	1
• Atezolizumab-bevacizumab	1

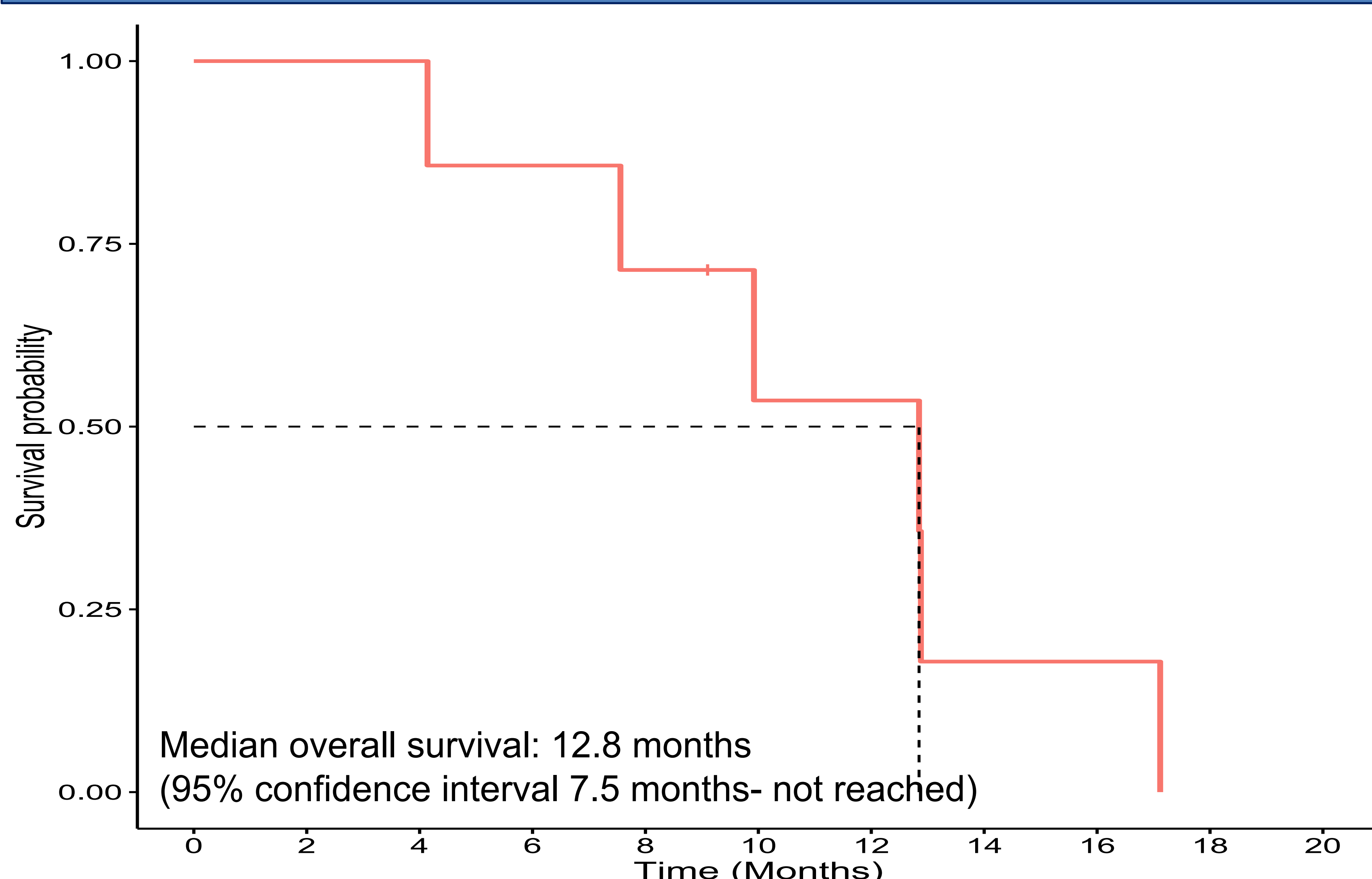
ADVERSE EVENTS

Intertrigo	Grade 1
Pulmonary embolism	Grade 3
Hepatitis	Grade 4

PROGRESSION FREE SURVIVAL



OVERALL SURVIVAL



CONCLUSIONS

Immunotherapy in high grade NENs is an upcoming new treatment option to be considered after first-line platinum-etoposide chemotherapy. The treatment is well tolerated and partial responses can be seen. PFS showed promise in this hard-to-treat population. Prospective studies in a larger NEC population with focus on immune markers are needed.