

# Prognostic value of Neutrophil-Lymphocyte ratio in patients with advanced pancreatic cancer

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## Background

- Pancreatic cancer : an aggressive tumor with a poor prognosis and high rate of mortality.
- Systemic inflammation-based prognostic markers have been established to predict the prognosis in patients with pancreatic cancer.

## Objective

- To investigate the utility of neutrophil-to-lymphocyte ratio (NLR) as prognostic factor in Tunisian advanced pancreatic cancer.

## Methods

- A retrospective study was conducted at the department of Medical Oncology in Sfax.
- Were included 31 patients treated for a locally advanced or metastatic pancreatic cancer, from 2011 to 2017.
- NLR was evaluated and correlated with survival.
- Value cutoffs were adopted to discriminate patients as follows: low NLR < 3 and high NLR ≥ 6.

## Results

- The median age was 60 years [range 36-77].
- Sixty-one per cent were male. The median duration to consult was 2,7 months [1-8 months].

Performans status	PS 0-1	71 %
	PS >2	29%
Symptoms	Abdominal pain	87%
	Jaundice	29%
	Weight loss	29%
Stage of disease	Locally advanced	49%
	Metastatic	51%
Treatment	Chemotherapy	61%
	Best supportive care	39%



- The median tumor size was 45 mm.
- The NLR average was 6.1 [ range: 1.4 – 36] and it was high (≥6) in 7 patients.
- The median overall survival (OS) was 7 months.
- The 1-year and 2-year OS was respectively 12.9% and 3.2%.
- NLR ≥6 was associated with lower OS (1-year OS 0% vs 16.7%, p=0.0001).
- Other prognosis factors were PS ≥2 (p=0.001), high rate of CA19-9 (p=0.021) and stage IV (p=0.027).

**Conclusion** : Inflammation-based markers such as NLR ≥6 may be useful as prognostic factors for advanced pancreatic cancer.