

# TREATMENT WITH ERYTHROPOIETIN STIMULATING AGENTS IN PATIENTS WITH CHRONIC KIDNEY DISEASE AND CANCERS

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## BACKGROUND AND PURPOSE

Erythropoietin stimulating agents are used to treat anaemia associated with chronic kidney disease (CKD) and anaemia in patients receiving chemotherapy.

The purpose of this study was to analyze erythropoietin stimulating agents treatment in patients with CKD and oncology diseases.

## MATERIAL AND METHODS

- Retrospective longitudinal study of patients treated with erythropoietin stimulating agents from March 2013 to July 2014 in a University Hospital.
- Descriptive and clinical data were obtained from the records of outpatients that had picked up their medication from Hospital Pharmacy Service.
- Descriptive statistical analyses of qualitative and quantitative data were made with SPSS program.

## RESULTS

- A total of 51 patients were included: 38 with CKD and 13 with cancer.

### • Nephrology:

- 42.1% were men, mean age: 83.4 years-old (SD 10.0).
- The average of glomerular filtration rate (GFR) was 23ml/min/1.73m<sup>2</sup> (SD 13).

### • Oncology:

- 53.8% were men, mean age: 68.7 years-old (SD 11.2).
- 69.2% were patients with chemotherapy induced anaemia and 30.8% with myelodysplastic syndrome.

Figure 1. Distribution of patients according to their CKD stage

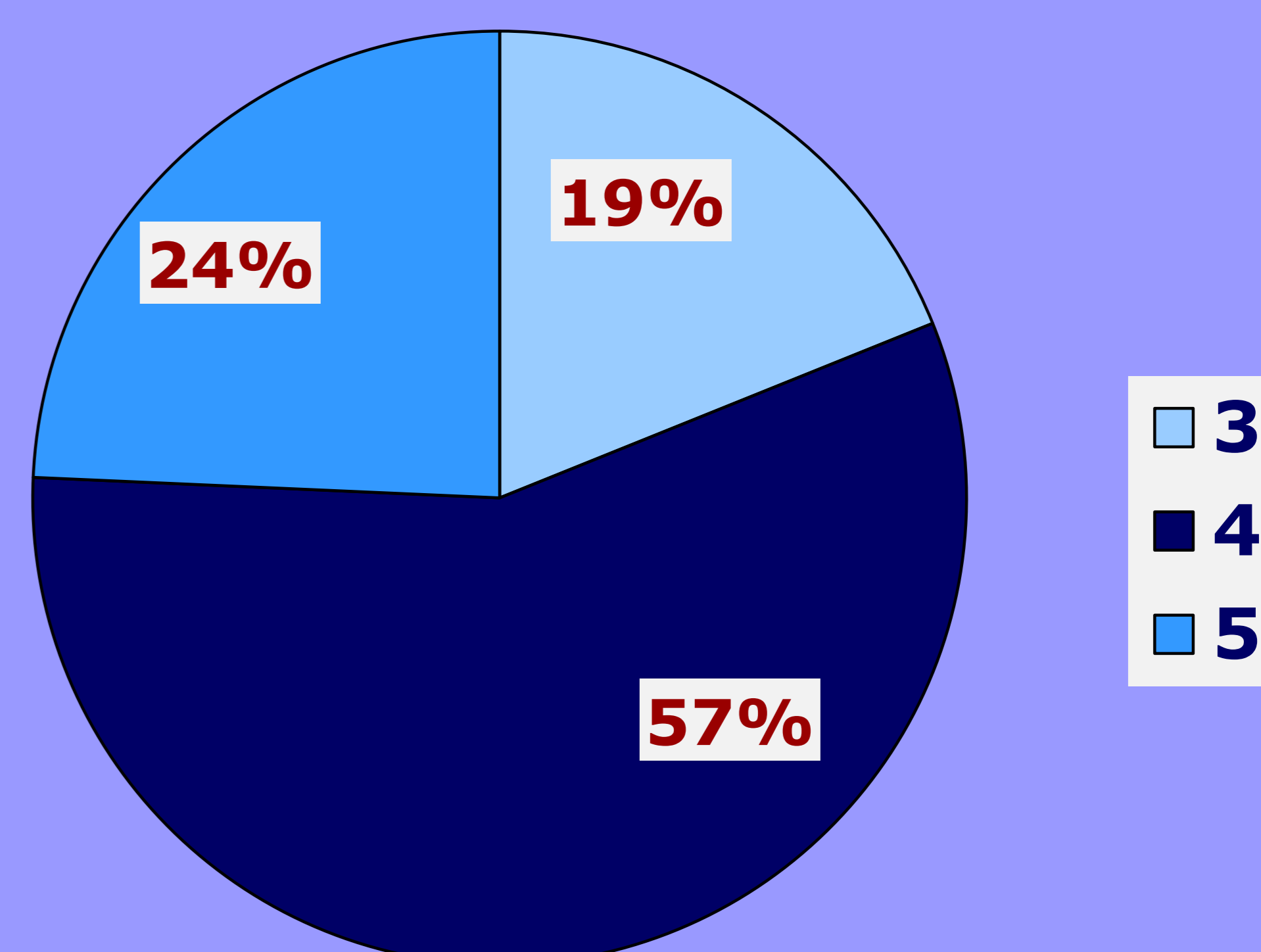


Table 1

VARIABLE		NEPHROLOGY (n=38)	ONCOLOGY (n=13)
Hemoglobin average concentration	<11 g/dl	n=27 (73.0%)	n=13 (100 %)
	11-12 g/dl	n=9 (24.3 %)	n=0 (0%)
	>12 g/dl	n=1 (2.7 %)	n=0 (0%)
Difference between initial hemoglobin average concentration and final hemoglobin average concentration		0.177 g/dl (p=0.476)	0.725 g/dl (p=0.272)
Blood transfusions		n= 3 (8.1%)	n= 7 (53.8 %)

## CONCLUSIONS

In patients with chronic kidney disease, hemoglobin levels remained stable during the period. Although the levels were lower than 11 g/dl in most of them, no significant clinical symptoms were observed.

The use of erythropoietin stimulating agents lightly improved the hemoglobin values in oncology patients, although blood transfusions were needed for half of the patients.

Hahn D, et al. *Cochrane Database Syst Rev.* 2014 May 28;5:CD003895.

Palmer SC, et al. *Cochrane Database Syst Rev.* 2014 Mar 31;3:CD009297.