

P078 - Management of Febrile Neutropenia in Hematology Department: A Retrospective Study at Tlemcen University Hospital.

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Introduction:

Febrile neutropenia (FN) is a common complication in patients with hematological malignancies, necessitating prompt and effective management. This study aims to evaluate the management and outcomes of FN in patients hospitalized in the hematology department at Tlemcen University Hospital.

Méthods:

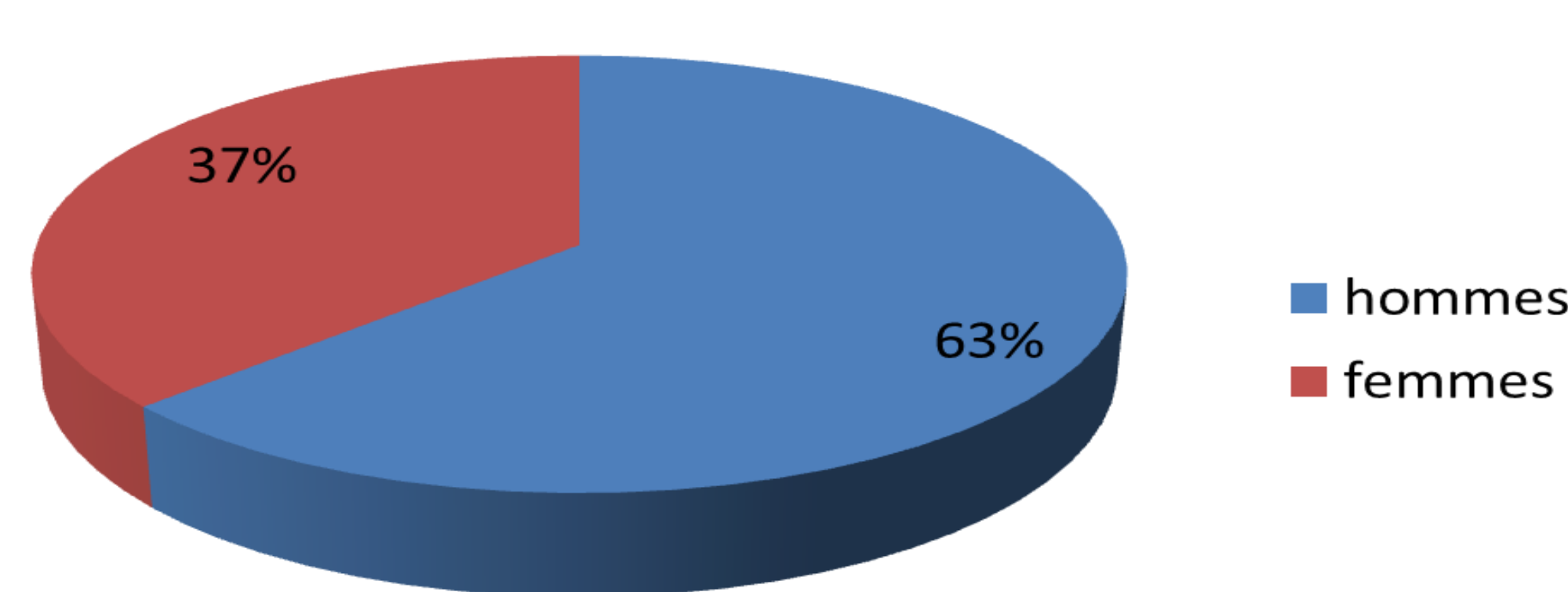
A retrospective analysis was conducted at tlemcen departement of hematology for six years between 2018 and 2023.

Results :

We collected data on 63 patients who experienced at least one episode of febrile neutropenia during their hospitalization for induction treatment.

The average age is 39 years with a range of 16 to 65 years.

The sex ratio is 2.10 with 40 men and 19 women.

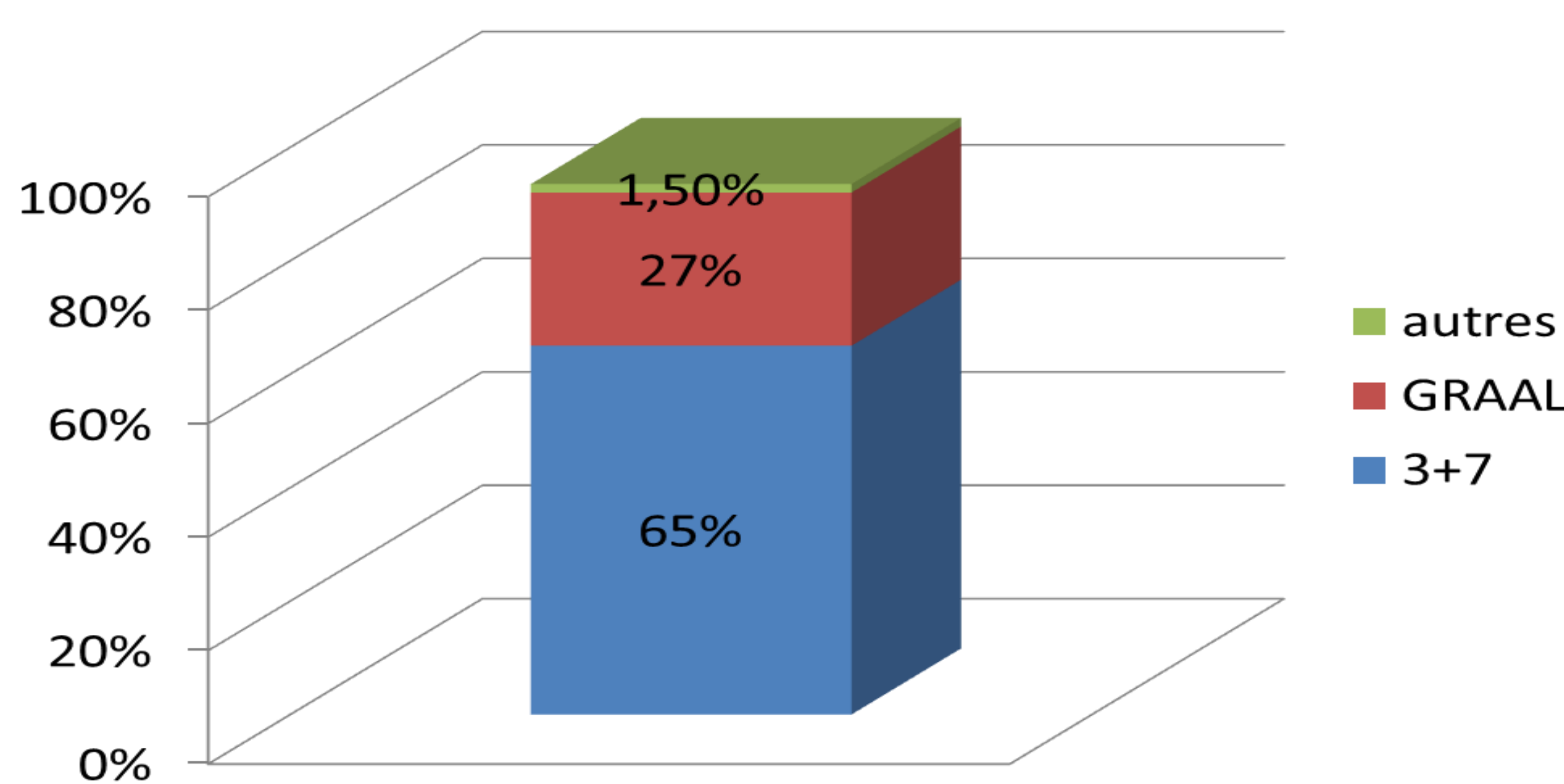


The cohort demonstrates a predominance of patients with AML with a percentage of 68% with 25% of patients with ALL.

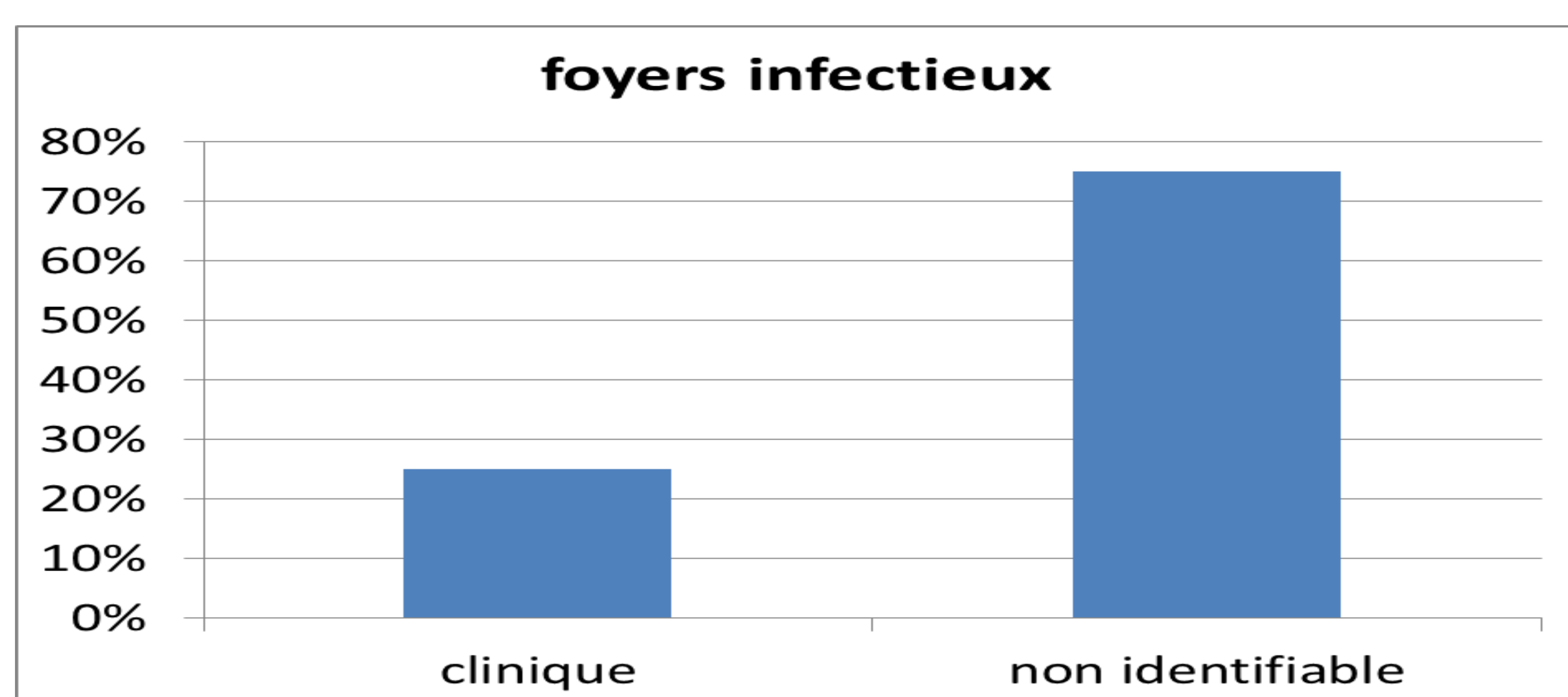
L'antibioprophylaxie a été administrée à 93 % des patients.

Un cathéter central a été placé dans 93 % des cas, soit jugulaire, sous-clavier, ou fémoral.

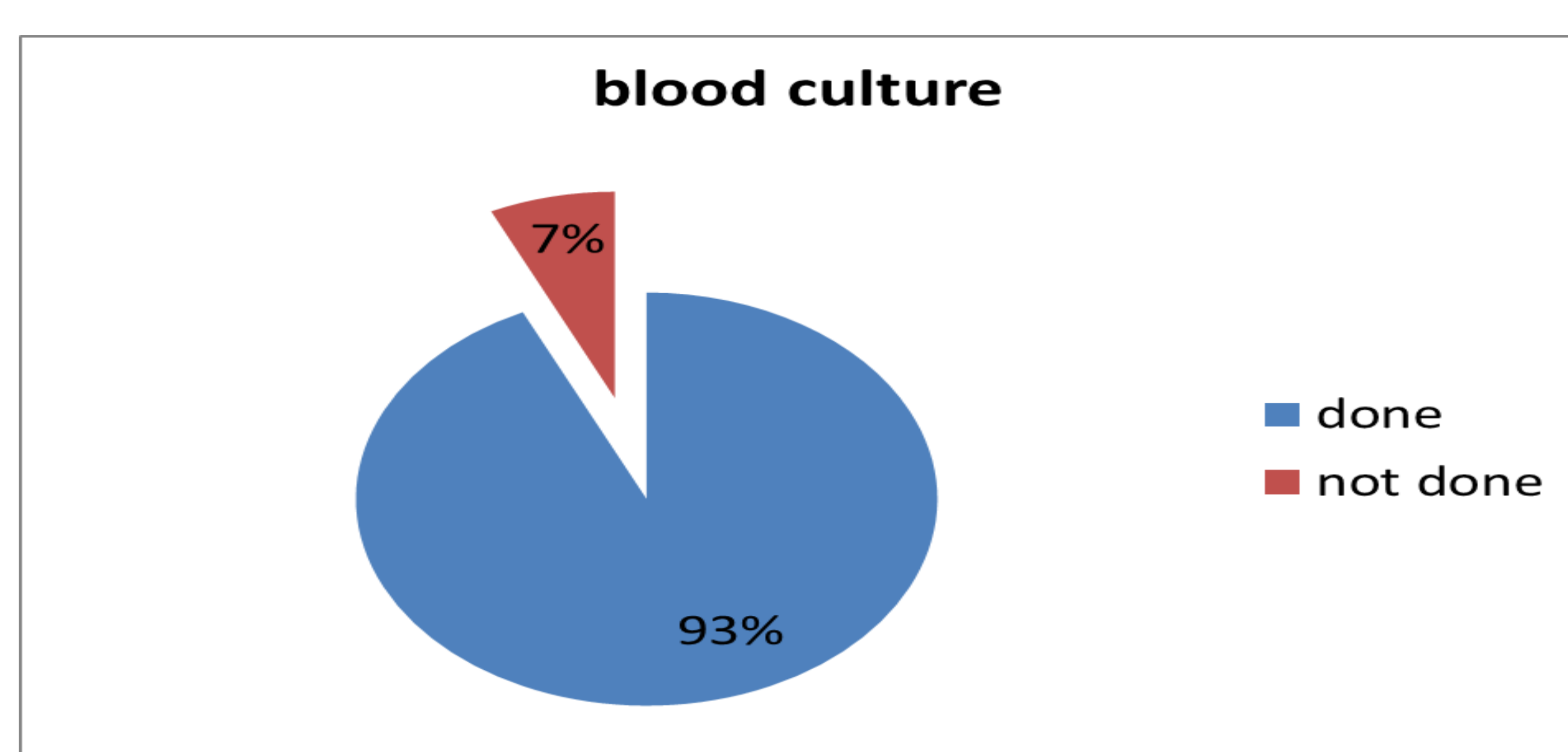
65% of the patients had received an induction treatment of type 3+7, and 27% of type GRAAL 2005, and 1.5% other chemotherapies.



Un foyer infectieux cliniquement détectable dans 25 % des cas. the collection of the infectious site was done in only 12% of cases.



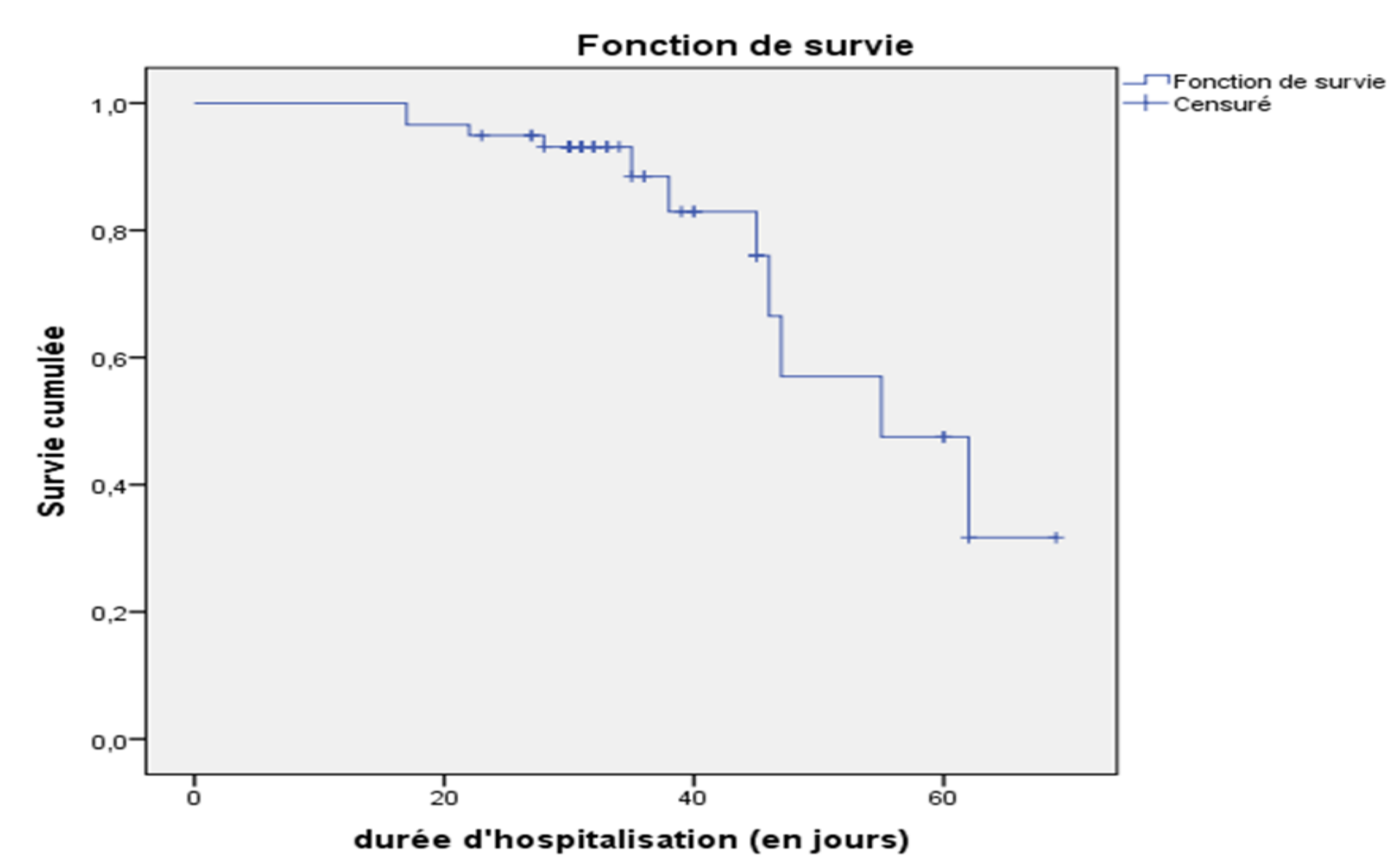
Blood cultures were performed in 93% of cases, and the blood cultures returned positive in 11% of cases, with an equal distribution between gram-positive and gram-negative bacteria.



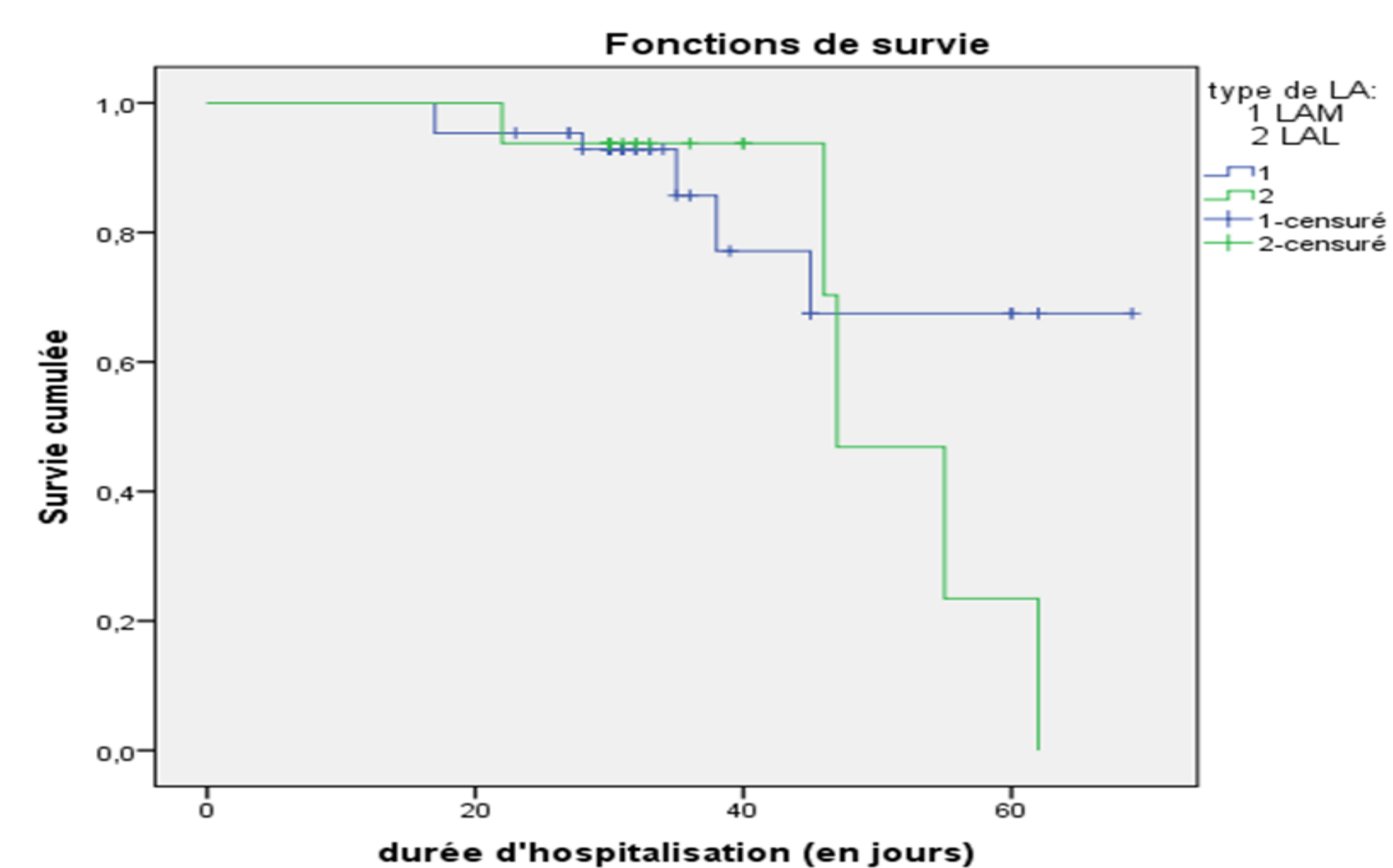
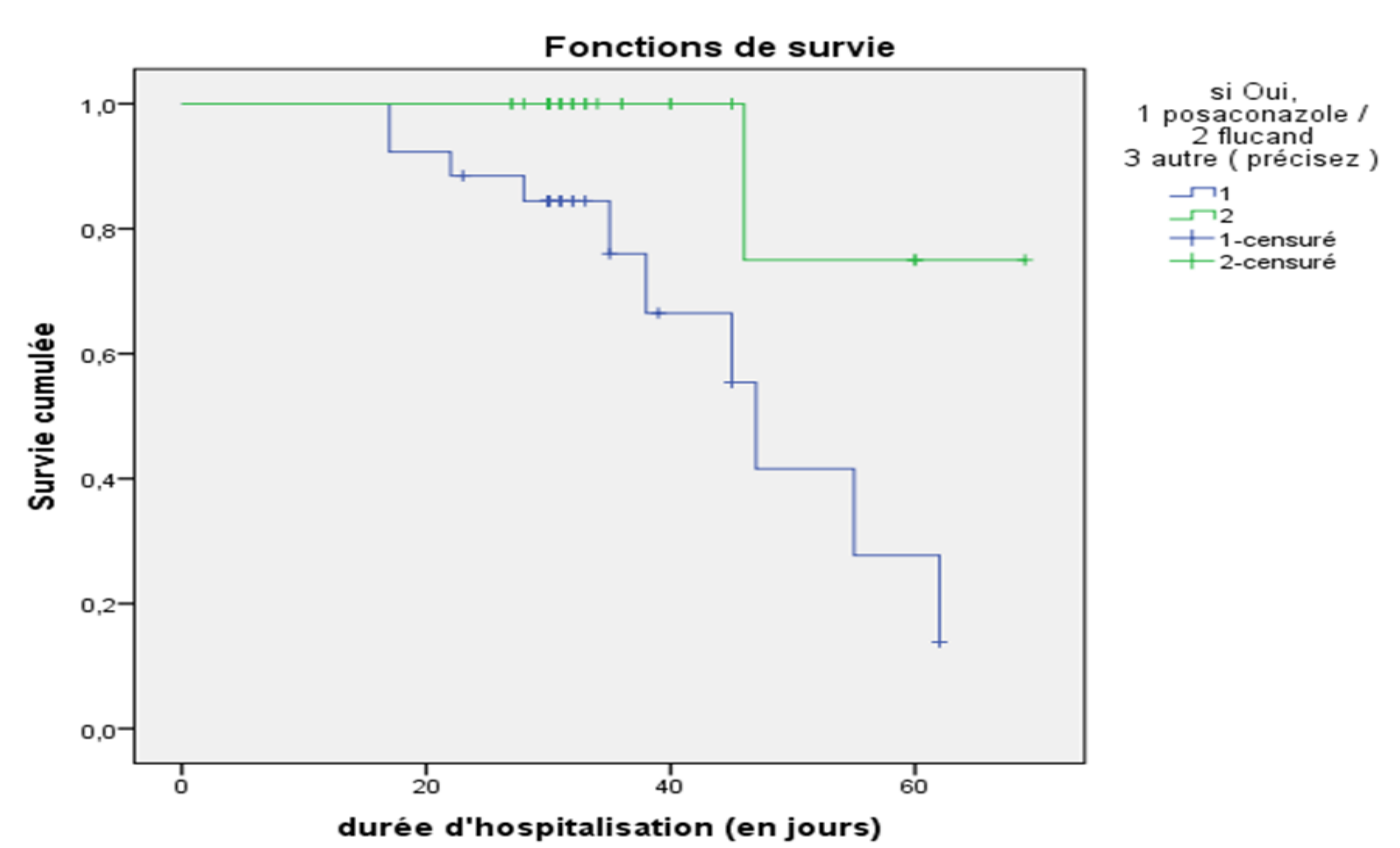
The infectious etiologies included Pseudomonas aeruginosa in 2% of cases and Escherichia coli in 4% of cases. Notably, septic shock occurred in 7% of patients with FN.

94% received antifungal prophylaxis, with posaconazole prescribed for 41% and fluconazole for 53%. Urine cultures were performed in 70% of cases.

The overall survival at the end of the induction treatment is 83%.



The factors that influence overall survival are the type of antifungal prophylaxis, posaconazole versus fluconazole, with a p-value of 0.007.



Discussion :

The cohort shows a high prevalence of AML (68%), followed by acute lymphoblastic leukemia (ALL) at 25%. This distribution is representative of the trends observed in the literature, where AML is more common in adults while ALL predominates in children. The induction treatments administered to patients mainly include the 3+7 protocol (65%), which is a standard in the treatment of AML. The placement of a central catheter in 93% of cases is also noted, which is essential for the administration of chemotherapy and for the management of complications.

Antibioprophylaxis and Infections

Antibioprophylaxis was administered to 93% of patients, highlighting the importance of preventing infections in immunocompromised patients. However, an infectious focus was clinically detected in only 25% of cases, and samples were taken in only 12% of cases. This raises questions about the effectiveness of surveillance and clinical evaluation protocols. Positive blood cultures in 11% of cases, with an equal distribution between Gram-positive and Gram-negative bacteria, indicate that although antibiotic prophylaxis is common, infections remain a significant risk.

The results show that despite a high rate of antibiotic prophylaxis and blood cultures performed, infections remain a major challenge in patients with acute leukemia. The predominance of AML in this cohort underscores the need to adapt therapeutic strategies to the specific characteristics of the patients. Moreover, the significant impact of the type of antifungal prophylaxis on overall survival must be taken into account when developing treatment protocols.

These results call for increased attention to infection prevention and the continuous evaluation of therapeutic strategies to improve the prognosis of patients with acute leukemia.

Conclusion:

The findings underscore the high prevalence of FN in patients with hematological malignancies, particularly AML and ALL. Effective prophylactic strategies, including antifungal agents, are critical in this vulnerable population. Continued monitoring and prompt intervention for infections are essential to improve patient outcomes.