

# EMICIZUMAB IN ACQUIRED HAEMOPHILIA TYPE A: A CASE REPORT

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## BACKGROUND AND IMPORTANCE

- **Acquired haemophilia A** is a coagulation disorder in which **antibodies against factor VIII** are produced, interfering with its activity and leading to potentially severe bleeding. Among numerous causes, cancer is a prevailing one.
- First-line hemostatic treatment until inhibitor eradication consists of bypass agents, including recombinant factor VII activated (rFVIIa) or activated prothrombin complex concentrates (aPCC).

## AIM AND OBJECTIVES

We present the case of a 70-year-old male patient diagnosed with metastatic prostate cancer who went to the emergency department of a tertiary referral hospital due to an **acute-onset extensive hematoma** on the right thigh, with neither personal nor family history of haemophilia.

## MATERIAL AND METHODS



- The patient was diagnosed with paraneoplastic acquired haemophilia and received immunosuppressive (methylprednisolone+cyclophosphamide) and hemostatic (rFVIIa at 5mg/8h) treatment.
- 9 days in, **off-label use of emicizumab** was requested, intended to guarantee a hemostatic level that would allow **outpatient management**.

**Emicizumab 3mg/kg SC**

January 13<sup>th</sup> – May 25<sup>th</sup>, 2022

4 weeks:  
weekly

16 weeks:  
fortnightly

- Haemostatic was monitored daily during hospitalization and weekly after discharge through determination of **inhibitor activity** (Bethesda Units, UB) and **FVIII activity** (bovine based Chromogenic Factor VIII assay, UI) in blood samples.

## RESULTS

The patient was successfully treated until the resolution of bleeding and normalized FVIII levels.

Hemostatic agent	Emicizumab	rFVIIa at 5mg/12h
Administrations	8 SC injections	214 IV infusions
Direct cost	€51,255.20	€618,301.64
Savings	€567,046.44	–

Table I. Comparison of hemostatic agents (during 107 days of Emicizumab monotherapy).



- Other contributing factors to overheads: prolonged hospital stay, expenditure on consumables or staffing.
- Also risk of vascular access complications and quality of life must be considered.

## CONCLUSION AND RELEVANCE

1. Emicizumab has been a **safe and cost-effective** alternative to rFVIIa in hemorrhage prophylaxis, reducing direct costs by more than 10 times and allowed **outpatient management**.
2. Self-administration at home represents a major improvement in acquired haemophilia A quality of life.
3. Hospital pharmacy and hematology must collaborate to achieve a rational use of resources and an improvement in quality of life

