

# ECONOMIC IMPACT OF A POWER OUTAGE ON THE PHARMACY CONSULTATION FOR IMMUNE-MEDIATED DISEASES

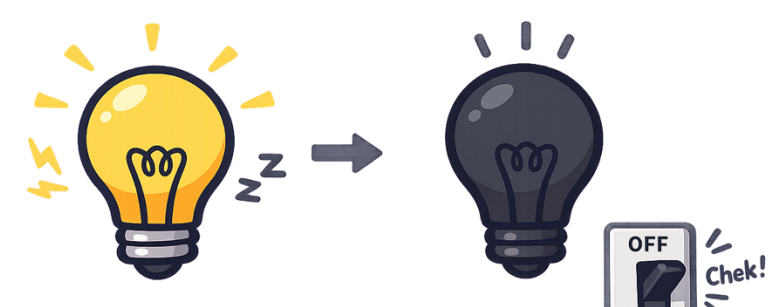
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## BACKGROUND AND IMPORTANCE

Many drugs prescribed for **immune-mediated diseases** require **refrigeration** and are dispensed through the **outpatient pharmacy for home administration**, often covering 2 months of treatment.

Exceptional situations, such as **prolonged power outages**, may compromise drug stability, causing patient concern and potential economic losses.



## MATERIAL AND METHODS

- **Retrospective observational study.**
- **Identify patients:** all patients who contacted the pharmacy after the blackout, seeking advice on the stability of refrigerated drugs (2-8°C) stored at home.
- **Extract data:** sex, age, disease and dispensed drug.

### ✓ **Questions:**

1. Identify the drug.
2. Check the refrigerator temperature (using a digital thermometer with memory).
3. Report the number of stored units and provide the date of the next administration.



### • **Report results:**

- Qualitative variables: %
- Quantitative variables: median and range

- **Drug stability:** was assessed by consulting the summary of product characteristics and complementary data sources.



## AIM AND OBJECTIVES

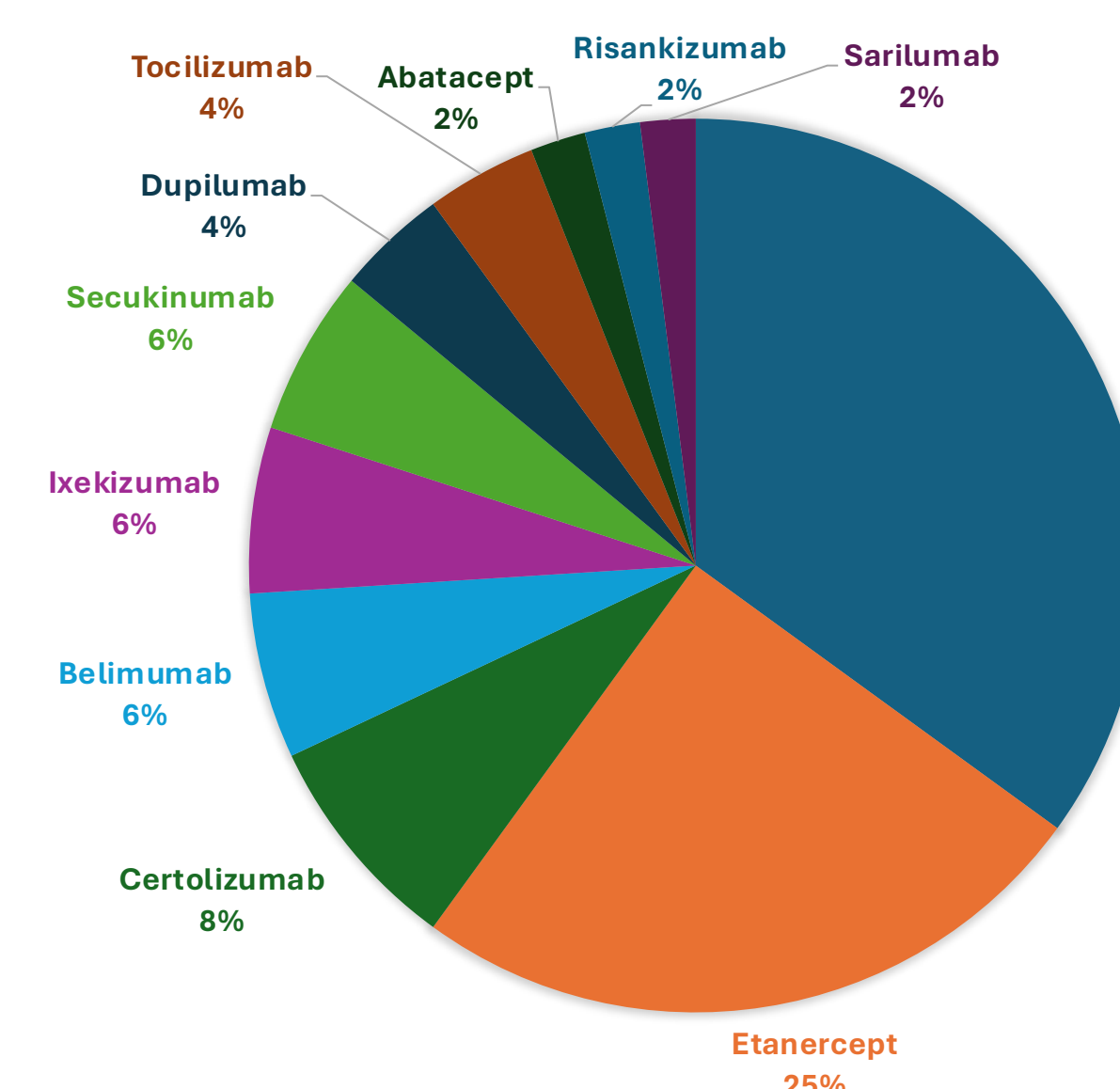
To **evaluate the economic impact** of a 15-hour total power outage on the pharmacy consultation for immune-mediated diseases.

## RESULTS



n = 49 (70% women)  
49 (9-90) years

1. Rheumatology (59%)
2. Dermatology (33%)
3. Gastroenterology (8%)



**Drugs involved**

- **35% of patients** confirmed that their refrigerator maintained **temperature** during the outage. → **3 (1-10) units** at home.
- According to data consulted, most drugs remained stable for up to 14 days at room temperature (some had shorter stability periods).
  - Based on stability data, **82% of patients** could **safely use their medication**.
  - **43 units were discarded** → 15 from 4 patients who had frozen the medication
- Estimated economic loss: **€9.343**
- **Advice on preventive measures** was provided to all patients.

## CONCLUSION AND RELEVANCE

- ✓ **Power outages** can generate uncertainty about **thermolabile drug stability** and lead to substantial **financial losses**.
- ✓ **Pharmacist counselling** and **patient education** are essential to **ensure safe administration**, **minimize drug wastage** and **protect both clinical outcomes** and **healthcare resources**.

