Posaconazole vs voriconazole as antifungal prophylaxis for invasive fungal diseases in patients with hematological malignancies. 



Resul

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# Both posaconazole & voriconazole have comparable efficacy and safety in the prevention of IFD in AML and MDS receiving chemotherapy but *voriconazole* is more cost effective.







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### Background

- The incidence of Invasive Fungal Diseases (IFDs) in patients with hematologic malignancies is increasing.
- Both Posaconazole and voriconazole has been recommended by guidelines with different levels of recommendations.
- Data on a direct comparison between Posaconazole delayed-release tablets (DR) and Voriconsazole for IFD prophylaxis are lacking.

Our aim was to compare the efficacy and safety of the fungal prophylaxis in AML/MDS patients at Princess Nourah Oncology Center (PNOC), Jeddah. Saudi Arabia **Primary Objective:** 

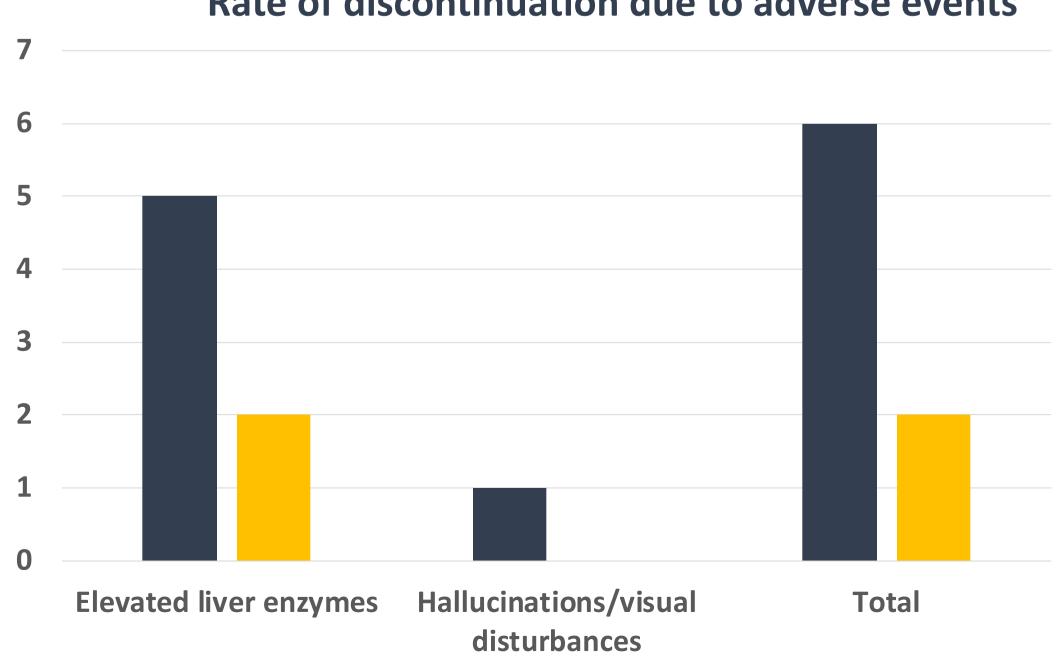
- Identify the rate of breakthrough IFD Secondary objective:
- Identify the drug acquisition cost

#### Patient characteristic

#### **Total number of patients (48) Total number of chemo cycles (130)**

Characteristic	Voriconazole	Posaconazole
	(80)	(50)
Age, years	47 (24-71)	
Weight, Kg	68 (24-103)	
Female, n (%)	26 (54)	
Type of chemo, n (%)		
(7+3)	25 (31)	8 (16)
HIDAC	39 (48)	28 (56)
FLAG-IDA	7 (9)	4 (8)
FLAG	1 (1)	1 (2)
Azacytidine	3 (4)	3 (6)
<b>5+2</b>	3 (4)	1 (2)
IDAC&SORAFINIB	2 (3)	5 (10)
Median days of		
prophylaxis (range)	19 (7- 31)	20 (12- 28)

All values are expressed as median (IQR) unless otherwise noted.



■ Voriconazole ■ Posaconazole

#### Rate of discontinuation due to adverse events

Aim and objectives

• Assess the proportion of adverse events

## Method

Retrospective chart review study for eligible patients from January 2017 to February 2019

#### **Inclusion/Exclusion Criteria**

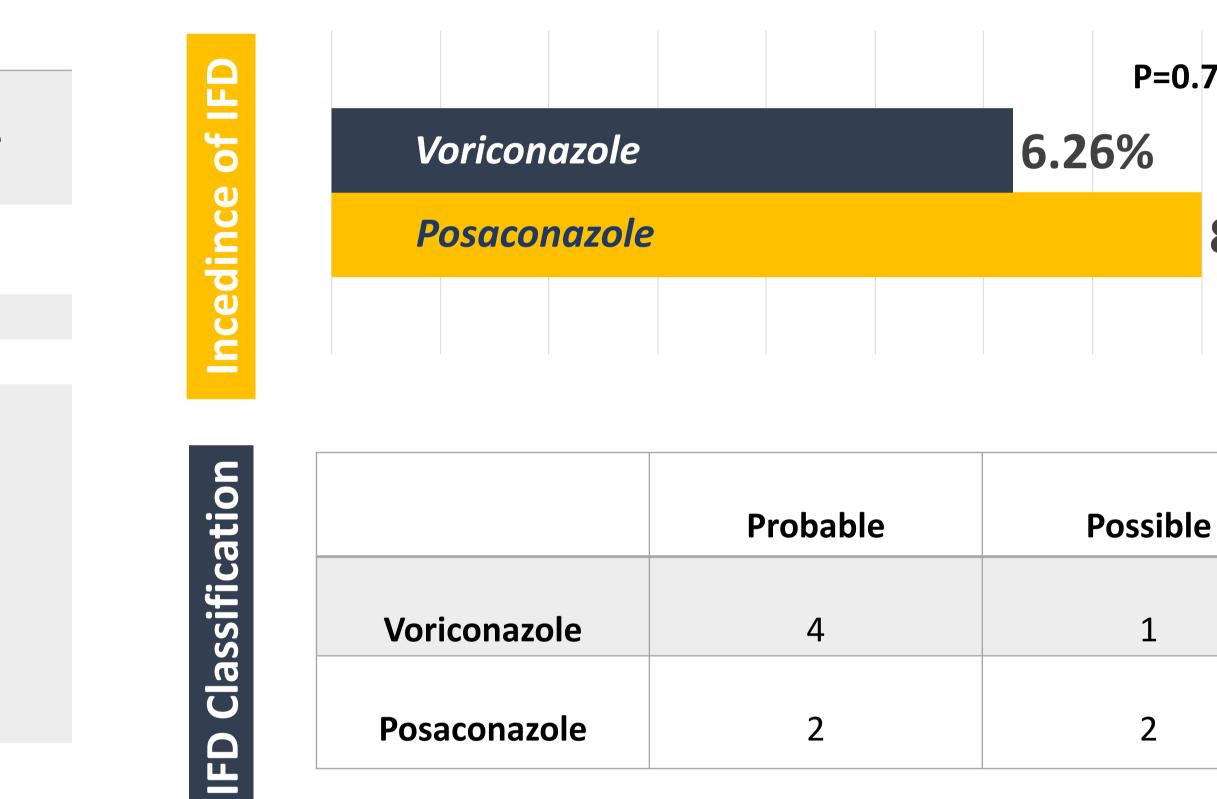
Age  $\geq$  14 years.

AML /MDS patient undergoing intensive induction/ consolidation chemotherapy.

Received delayed-release posaconazole tablets or voriconazole as antifungal prophylaxis.

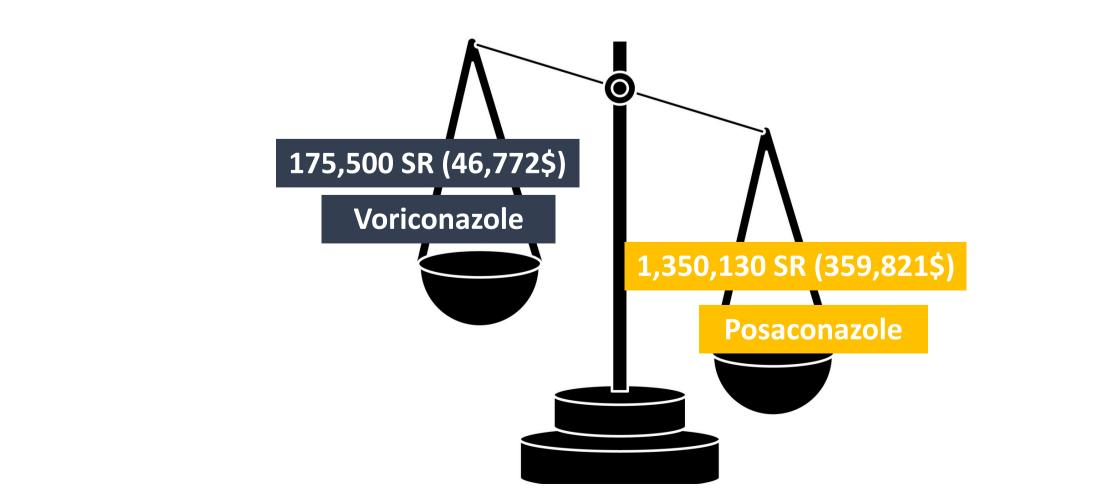
Probable and proven invasive fungal disease before starting chemotherapy and antifungal prophylaxis.

# **Primary Outcome**



### **Secondary Outcomes**

# **Antifungal prophylaxis acquisition cost**



Total cost of antifungal prophylaxis for 15 days in 130 cycles (48 AML/MDS patients)

