

NEAR-MISS ERRORS FROM PRESCRIBING

NEAR-MISS CASE 1 → WRONG DOSING / NO. OF TABLETS ORDERED

THE SCENARIO

A **75kg** patient with a confirmed *Acinetobacter baumannii* MDRO infection was initially prescribed with **Tab Bactrim 1 tab BD** which only provides **80mg** Trimethoprim content.

However Infectious Diseases' (ID) team suggested 10mg/kg/day Trimethoprim (TMP) in divided doses.



ACTUAL TARGET DOSE

10 mg/kg/day of TMP
10mg x 75kg (Patient weight)
= 750mg/day



BACTRIM FORMULATION

1 Bactrim tablet contains:
400mg Sulfamethoxazole + 80mg Trimethoprim
1 tablet = **80mg TMP**



CORRECTED PRESCRIPTION STRATEGY

STEP 1	To get the the dose needed at a time, Divide the daily total dose by a reasonable frequency. (TDS = 3 times/day) e.g. 750mg/day ÷ 3 = 250mg
STEP 2	To get the amount of tablets needed per dose, Divide the dose needed by 80 (since 1 tab has 80mg TMP) e.g. 250mg ÷ 80mg = 3.125 tablets
STEP 3	Round off to the nearest whole number e.g. 3.125 = 3 tablets



MONITORING PARAMETERS



Renal function:
Serum creatinine, eGFR/CrCl



Electrolytes:
Especially potassium



Complete blood count:
Hemoglobin, White blood cells, Platelets



Liver function test:
If prolonged therapy or underlying liver disease



Hence, **3 tablets 3 times a day (TDS)** is to be given, providing a total daily dose of **720mg** (about 9.6mg/kg/day), which is a reasonable range.

NEAR-MISS CASE 2 → WRONG DRUG PRESCRIBED

WHAT HAPPENED?



Patient with Sjögren syndrome

INTENDED MEDICATION

Hydroxychloroquine 200mg OD



PRESCRIBING ERROR (Sound-alike name)

Hydrochlorothiazide 200mg OD



NEAR-MISS DETECTED BEFORE ADMINISTRATION

Hydrochlorothiazide 200mg OD



POTENTIAL CONSEQUENCES IF ERROR REACHED THE PATIENT

Hydrochlorothiazide given (instead of HCQ)

- Increased urination
- Dehydration
- Hypotension
- Hyponatremia
- Hypokalemia

HOW TO PREVENT?

Read the full drug name, not just "HYDRO"



Check the indication before prescribing



Verify unusual doses (HCTZ 200mg OD should raise concern)



Tall-Man Lettering

Hydroxychloro**QUINE**
Hydrochloro**THIAZIDE**

Drugs in HCTM that can be confused due to the common word **HYDR** in them:

Drug Name	Indication
hydrochloro THIAZIDE	Hypertension, Edema or Fluid Retention
Hydroxychloro QUINE	To treat autoimmune conditions like systemic lupus erythematosus (SLE) and rheumatoid arthritis.
Hydr ALAZINE	High Blood Pressure
Hydro CORT isone	Inflammation, Adrenal Insufficiency

Hydrochloroquine omitted

- Worsening Sjögren syndrome
- Dry Eyes
- Dry mouth
- Fatigue
- Arthralgia