UWTASP tele-antimicrobial stewardship program | echo

March 28, 2023

Agenda

- How to Write a SBAR
- Speaker: Jeannie Chan
- Case Discussions
- Open Discussion

What is a SBAR?

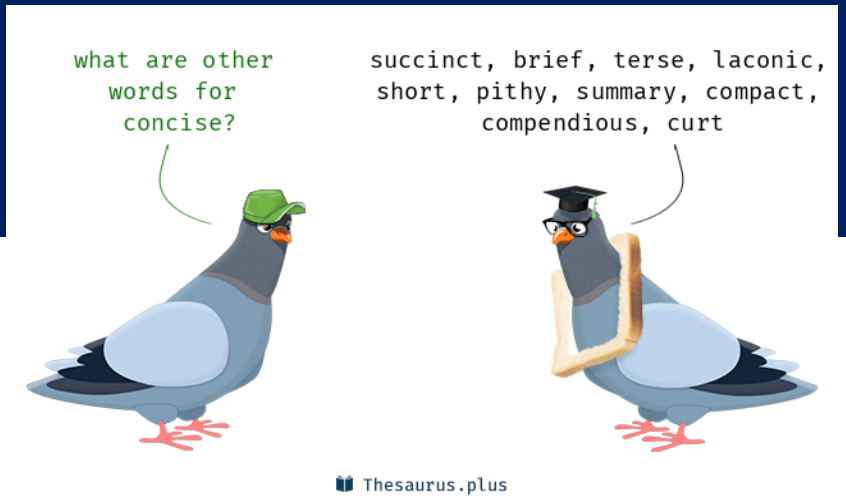
- **S**ituation
  Background
  Assessment
  Recommendation
- Introduced by US Military in the 1940s
- Adopted in patient safety and quality improvement
- Essential stewardship tool

What is a SBAR

- **S = Situation**
  - a **concise** statement of the problem
- **B = Background**
  - **pertinent** and brief information related to the situation
- **A = Assessment**
  - analysis and considerations of options — **what you found/think**
- **R = Recommendation**
  - action requested/recommended — **what you want**

SBAR Tool: Situation-Background-Assessment-Recommendation | IHI - Institute for Healthcare Improvement

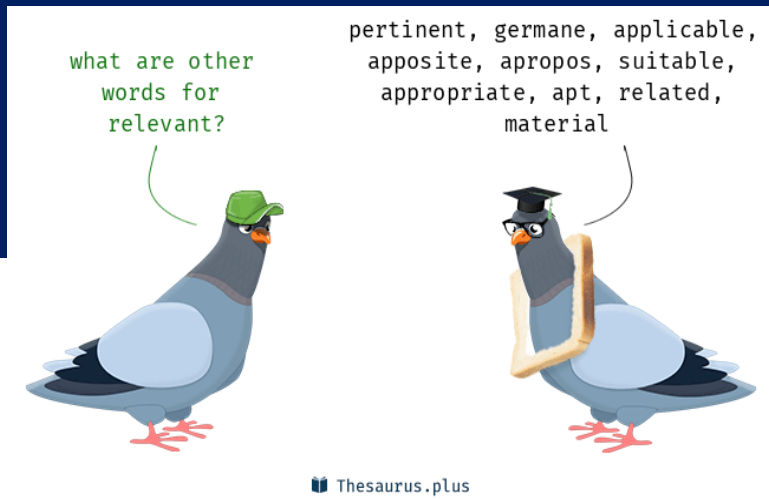
Situation



- **CONCISE, SUCCINCT**

- Bezlotoxumab was last reviewed for UW Medicine formulary in 2017.
- The IDSA Guidelines on Management of *Clostridioides difficile* Infection were recently updated in June 2021.
- An update is needed to better assess bezlotoxumab's place of therapy at UW Medicine.

Background

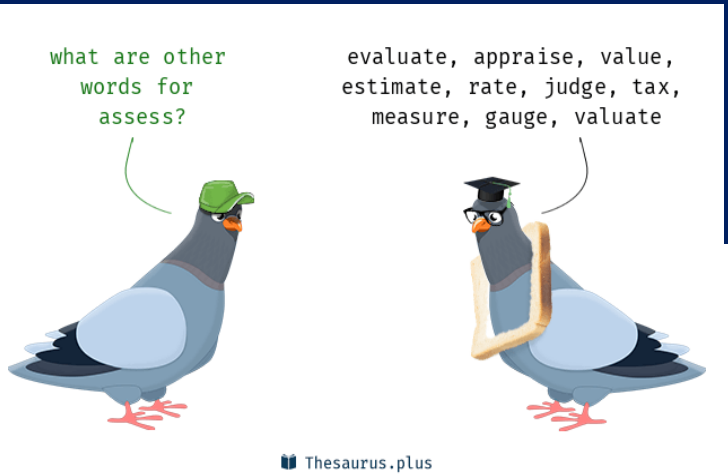


- **RELEVANT, PERTINENT**
- Indication, Dose and Administration
  - Monoclonal antibody that binds to *C. difficile* toxin B
  - FDA approved its use to reduce recurrent CDI in adults at high risk for recurrence as a single dose (10 mg/kg) given intravenously over 60 min between Day 1-14 of CDI antibiotic therapy.
- Clinical Evidence (Efficacy and Safety):
  - Bezlo demonstrates no impact on clinical outcomes, but reduces risk of recurrent infections in clinical trials
  - Infusion is well tolerated but patients with history of congestive heart failure had more fatal outcomes with bezlo compared to standard of care.

Background – Providing Context for the Situation

- Current Practice
  - Bezlo is restricted to approval of infectious diseases consultation on a case-by-case basis
- Updated National Guidelines
  - Recommends bezlo in adults with recurrent CDIs and considers in adults with an initial CDI episode at high risk of recurrence. Risk factors include ≥65 yo, immunocompromised, severe CDI, recurrent CDI within 6 months, and virulent ribotype strains
- Providing Context for the Situation:
  - Does our current practice align with guidelines recommendation?

Assessment - Evaluate literature



Start with clinical evidence

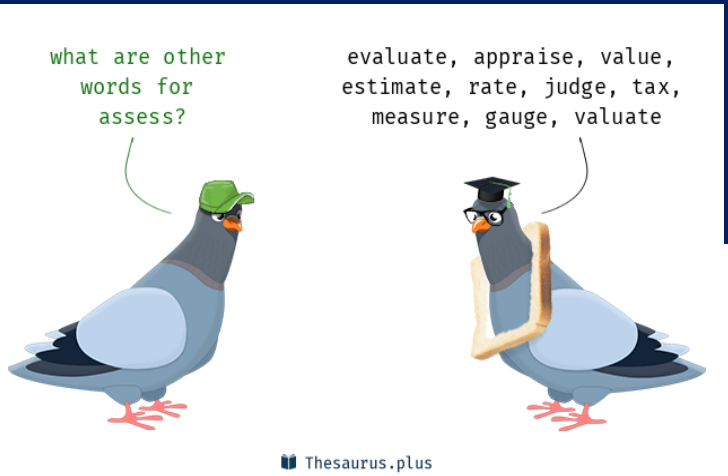
Study	Design/Analysis		Recurrence Rate (%)	
			SOC	Bezlo
Wilcox et al (2017)	Randomized, double blind, placebo	MODIFY I	28	17
		MODIFY II	26	16
Gerding et al (2018)	MODIFY I & II pooled subgroup analysis of patients with ≥1 risk factor		37	21

Number Needed to Treat (NTT)

- Absolute risk reduction (ARR)
  - Difference between the event rate [recurrence] in control group and intervention group
  - 26% - 16% = 10%

- Number needed to treat (NNT)
  - Inverse of the absolute risk reduction (ARR) expressed as a decimal.
  - NNT = 1/ARR
  - NNT = 1/0.01 = 10

Assessment - Evaluate literature



Start with clinical evidence

Design/Analysis		Recurrence Rate (%)		ARR	NNT
		SOC	Bezlo		
Randomized, double blind, placebo	MODIFY I	28	17	11%	10
	MODIFY II	26	16	10%	10
MODIFY I & II pooled subgroup analysis of patients with ≥1 risk factor		37	21	16%	7

Clinical Infectious Diseases

MAJOR ARTICLE

IDSA Infectious Diseases Society of America

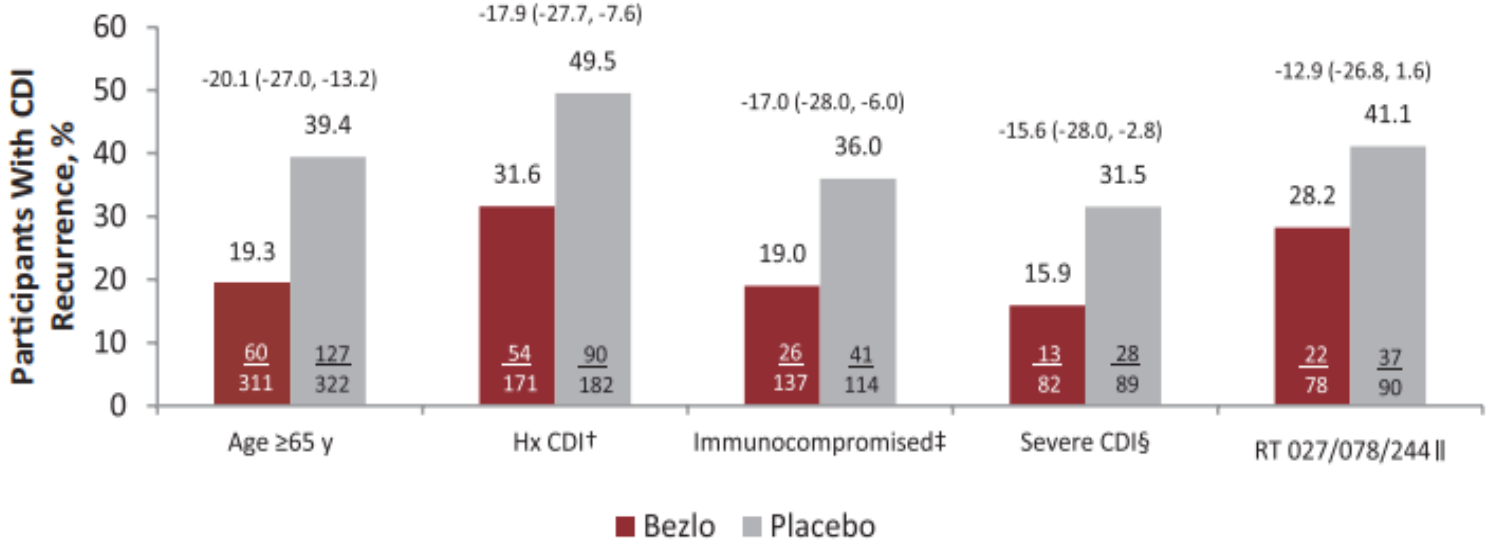
hivma hiv medicine association

OXFORD

Bezlotoxumab for Prevention of Recurrent *Clostridium difficile* Infection in Patients at Increased Risk for Recurrence

Dale N. Gerding,[1] Ciaran P. Kelly,[2] Galia Rahav,[3] Christine Lee,[4,5] Erik R. Dubberke,[6] Princy N. Kumar,[7] Bruce Yacyshyn,[8] Dina Kao,[9] Karen Eves,[10] Misoo C. Ellison,[11] Mary E. Hanson,[12] Dalya Guris,[10] and Mary Beth Dorr[10]

NNT = 5 **NNT = 6** **NNT = 6** **NNT = 7**



Clinical Infectious Diseases

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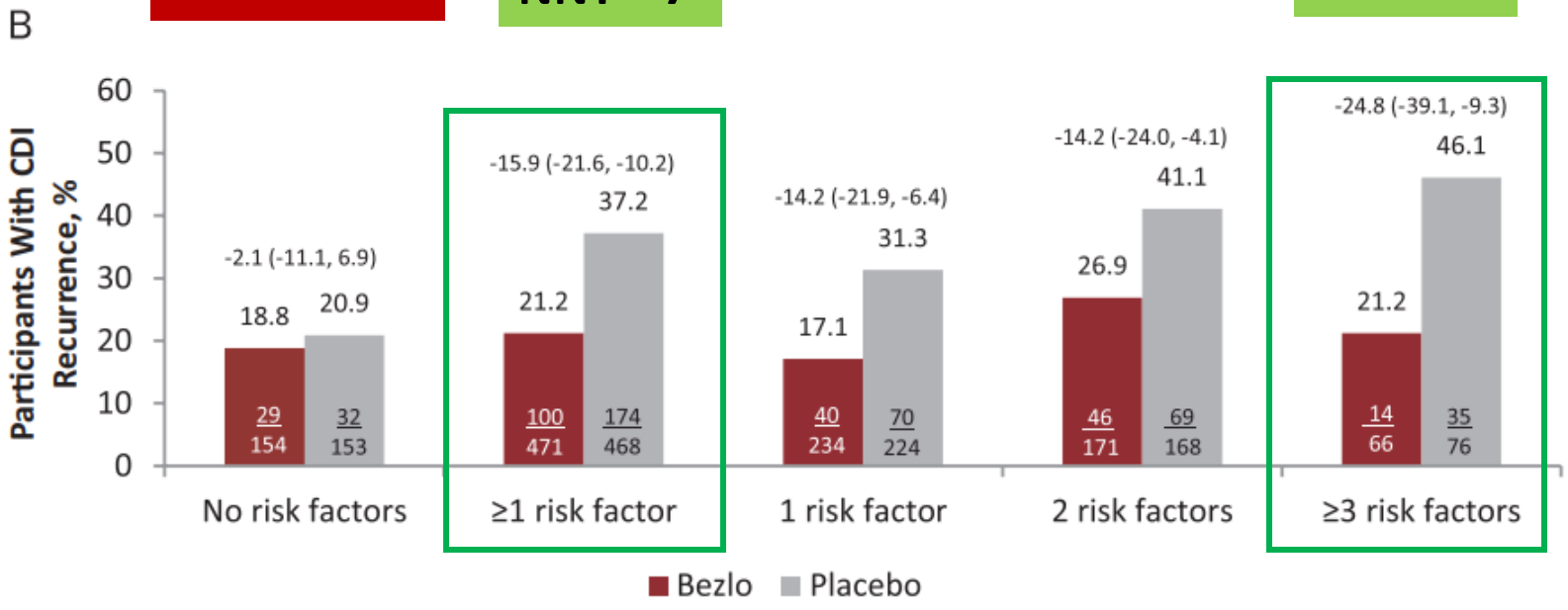
No benefits

NNT = 7

NNT = 4



Assessment
2) Evaluate local data

- Mini MUE (medication utilization evaluation)
- Define time period
- Data query (pharmacy dispensing, Slicer Dicer)
- Chart review
  - Baseline demographics
  - Pertinent clinical variables of interest
    - ID consult approval, risk factors for CDI
  - Primary Endpoint
    - Define criteria for appropriateness (≥1 risk factor)

Assessment - Mini MUE

	N = 100 (%)
Age [Median, IQR]	56 [35-81]
Female	30 (30)
ID consult approval	
Yes	55 (55)
No	45 (45)
Risk Factors	
≥65 yo	20 (20)
Immunocompromised	30 (30)
Severe CDI	15 (15)
Recurrent CDI within 6 months	60 (60)
None	35 (35)

Assessment
- Summarize Findings

Appropriateness	N = 100 (%)
No (without risk factor)	35 (35%)
Yes (≥1 risk factor)	65 (65%)

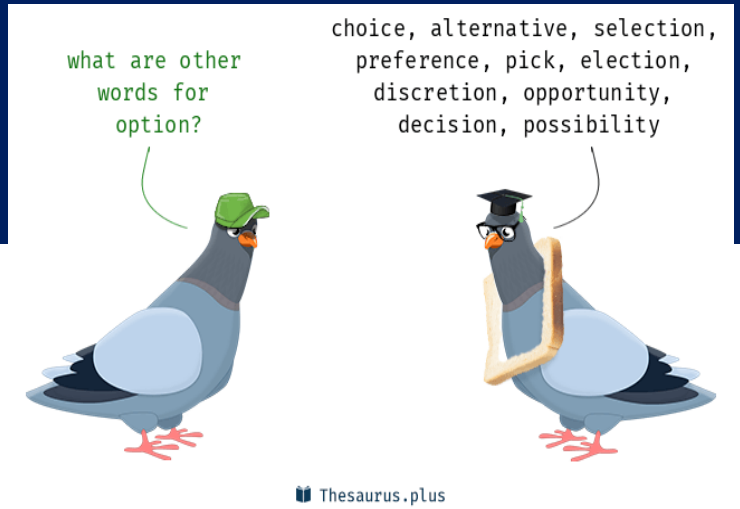
Non-adherence to current protocol:

45% of usage without ID consult approval

Inappropriate usage (35%)

Annal Cost Avoidance = 35 x $3000 = $105,000

Assessment
3) Provide Options



- Option A
  - Given the non-urgent nature of Bezlo, restrict Bezlo to AMS review with approval hours from 8am-4pm Mon-Fri
- Option B
  - Develop clinical decision tree and create Bezlo orderset in EPIC with forced function
  - Concern for potential override by providers

Recommendation – Proposal

- Develop internal clinical guidance for appropriate use of Bezlo defined as ≥ 1 risk factor for recurrence of CDI
- Recommend AMS approval of Bezlo
- Follow-up Plan: Perform MUE in 6 months to re-evaluate usage

Summary

- SBAR is an essential stewardship tool
- Efficient and effective way to get key points across without excessive details
- Identify areas of improvement in the process