Tips for Quick Literature Evaluation

As pharmacists, we are extensively trained on the intricacies of evaluating medical literature, but how can we do it more efficiently? Here are some questions that can help you evaluate literature more quickly!

Study Design

- What type of study design was used?
  - Will this design show causation or correlation?
- What was the purpose of the study?

Patients

- What population is being studied (i.e. inclusion and exclusion criteria)?
- Is this study population similar to your current patients?

Intervention/Comparison

- Are the treatment and control arms consistent with standards of care (e.g. appropriate doses, agents, and use of placebo in absence of gold standard)?

Outcomes

- Is the primary endpoint appropriate & relevant to the population?
- Does it measure a clinical endpoint or a surrogate endpoint?
  - If a surrogate endpoint, is it plausible and appropriate?

Statistics

- Did the researchers perform a power analysis?
  - If so, did they meet power for the primary endpoint (i.e., how many patients enrolled and completed treatment)?
- Do the statistical tests make sense for the data analyzed?

Results: Primary Outcome

- Is the intervention comparable (non-inferior) or better (superior) to placebo/standard of care?
- Is the primary outcome statistically and clinically significant?
- If a composite endpoint, is it driven by one component? Why?

Secondary Outcomes & Subgroup Analysis

- Do any outcomes or analyses impact the primary outcome? (i.e., clinically relevant, safe)?
- Are any outcomes statistically significant?
  - May be hypothesis generating for further research

Conclusion

Does this change your approach to treating the disease state in question?