

# Review of: "Inhibiting Efflux Pumps and Resistance Mechanisms: A Mini Review"

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This paper aims to review research on inhibiting efflux pumps as a strategy to combat antibiotic resistance. However, upon evaluation, I would classify it more as a science popularization paper rather than a traditional research review.

While it introduces the topic of efflux pumps and inhibition, the paper lacks the thorough examination of primary literature that is expected in a research review. Only a few studies are explicitly cited to support claims, and there is no systematic organization of findings from the literature.

As a science popularization piece, the paper has some notable weaknesses. Only efflux pumps are described as an antibiotic resistance mechanism, neglecting other important resistance routes. The concepts of pump function and inhibition are repeated across redundant sections and analogies. Simplifying complex topics is reasonable for popularization but is overused here.

The analogies used to explain the complex topics, while an effective communication technique, are employed excessively. By the end, the barrage of analogies serves more to confound rather than clarify the concepts for the reader. Simplifying technical subjects with analogies is reasonable for popularization but too many analogies have a detrimental impact on comprehension.

Additionally, the high number of sections contains repetitive subdivisions that could be consolidated. Maintaining reader attention would benefit from fewer divisions of content.

More specifically, the paper would be improved by including details about current research projects exploring efflux pump inhibition. Only brief case studies are mentioned, lacking specifics about experimental methods and findings that would interest other researchers.

In summary, while the paper introduces its topic accessibly, it does not qualify as a research review and could be strengthened as a science communication piece. Including a broader range of resistance topics, limiting the overuse of analogies that introduce confusion, reducing redundancy, and providing more specifics on ongoing projects would enhance its value for both specialists and general audiences. The goal of disseminating science would be better achieved with some modification to content and structure.

