

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

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Potential competing interests: No potential competing interests to declare.

I'm afraid this is utterly unsuitable for publication for the reasons mentioned below:

- What is your target journal/audience? With the exception of the abstract, the manuscript reads like it was prepared for young children. Phrases like 'Okay, maybe not flavors, but you get the point' and 'bacterial dance crew' (to give only a few examples) don't belong in a scientific publication and should be removed.
- Why is so much of the word count given over to repeated bouncer-related analogies? This is wholly unacceptable in scientific literature. In some sections, you spend as many words talking about your analogy as you do actually covering the content of the review! If this publication is actually aimed at children, why would you include the completely unsuitable analogy about 'sprinkling a little something in the bouncer's drink'?!?
- Where is your detail? According to the abstract, this mini review 'delves into the intricacies of efflux pump-mediated resistance, exploring the types and functions of efflux pumps, their role in antibiotic resistance, and the strategies employed to inhibit their activity.' But, once all the analogies are removed, the manuscript unfortunately has an almost total dearth of detail regarding either efflux pumps or inhibitors thereof. This subject has been covered numerous times recently in other review articles which are far more comprehensive and educational than this, so I'm struggling to work out what the intended purpose of this mini-review is.
- There are numerous blatant factual errors: for example, you say 'Efflux pumps are not just random proteins floating around in bacterial cells'. But efflux pumps are membrane-associated proteins! You also state that efflux pumps are 'basically the MVPs of the resistance game', despite the fact that they are relatively minor contributors to resistance compared to mechanisms like target mutation.
- There's not a single figure, table or chemical structure anywhere! Whoever your intended audience is, the manuscript would definitely benefit from more visual learning aids.
- Your analogies (though I have already mentioned they should be completely removed) often don't make sense! For example, why would handcuffs stop a bouncer from doing their job? Why frame antibiotics as party poopers?
- In your author list, the third author has a superscript 3 next to their name. I think this is supposed to be a 2.
- The references are a mess. There are multiple mistakes in paper details and the papers cited often have little to do with the sentence where the reference appears (20 of the 37 papers referenced are to do with nanoparticles of some kind - why??)

My advice to the authors is to consider very carefully what they want to achieve with this review, who the target audience

is going to be and what the audience is going to learn that they couldn't from an existing review. Above all else, if this is destined for a scientific journal, all mentions of analogies should be removed.