

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

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Potential competing interests: No potential competing interests to declare.

Hasan et al. have presented a comprehensive mini-review titled "Inhibiting Efflux Pumps and Resistance Mechanisms: A Mini Review," lightly navigating the intricate realm of efflux pumps and their pivotal role in antibiotic resistance. The authors adeptly delve into the complex landscape of resistance mechanisms, elucidating both the underlying processes and strategic approaches to impede efflux pump activity. Notably, the paper effectively addresses knowledge gaps, catering to both seasoned scientists and those with a high school-level understanding, commendably exploring instances of success and failure without bias.

From my perspective, this manuscript lacks genuinely complex and informative content and requires improved writing professionalism. Specific concerns are outlined below.

Affiliation Numbers: The numbers of the affiliations do not correspond to the superscript numbers on the authors' names. A revision is necessary to ensure accuracy.

Terminology Refinement: In Section 1.1, it is recommended to refine the terminology, acknowledging that efflux pumps are not merely 'on' the membrane surface but intricately embedded within or integral to the bacterial membrane. Similarly, Section 1.2 requires elucidation on the term "MVPs," emphasizing the importance of explaining abbreviations for a more inclusive readership.

Content Streamlining: Concerns about redundancy within Sections 1, 2, and 3 prompt a thorough review to streamline content effectively. Attention to detail is essential to ensure that each section offers distinct insights to avoid repetition.

Section 3.1 Clarity: In Section 3.1, clarification is needed regarding the systems discussed. What are these systems? Do they have specific names or examples? How do they work, and what influences them? The provided text currently lacks substantive information for the reader.

Professional Tone: A rigorous editing process is needed to elevate the manuscript's professional tone. While analogies and metaphors can enhance understanding, a judicious application is recommended to maintain conciseness (e.g., "is like that one friend who always know to dodge trouble")

Visual Aids: Consider incorporating visual aids such as tables detailing efflux pump families or Efflux Pump Inhibitors (EPIs) to facilitate a deeper grasp of the concepts discussed.

Novelty Assertion: Lastly, it is imperative to address the assertion that the manuscript lacks substantial novelty, given the extensive coverage of this topic in existing literature. The authors should emphasize the unique contributions of their work, differentiating it from prior reviews and highlighting its significance in advancing scientific understanding.