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

Letizia Tomassini[1]

1 Istituto Zooprofilattico Sperimentale dell'Umbria e delle Marche

Potential competing interests: No potential competing interests to declare.

The manuscript “Inhibiting Efflux Pumps and Resistance Mechanisms: A Mini Review” by Thualfakar Hayder Hasan Abusaiba, Ali Abdul Hussein, Taghreed F. Almahbob aims to summarizes the role of efflux pumps in antimicrobial resistance and their potential use in future targeted therapies.

General Comments:

The work is relevant because it explores a narrow and important aspect within the broader world of antimicrobial resistance; however the tone of the chosen language is not scientific and not appropriate for academic scientific publishing.

Specific Comments:

- In the introduction the role of efflux pumps should be placed within the context and in contrast to other existing antimicrobial resistance strategies and mechanisms.
- When describing the role of efflux pumps in antibiotic resistance a more specific description of the pumps molecular structure and mechanisms involved should be added. Please use https://doi.org/ 10.3390/ijms232415779 as one example.
- A figure displaying the structure of the pumps and their localization within the bacterial cell is needed.
- A description of the antimicrobial classes involved in efflux pumps based resistance would be a very helpful addition to this paper.
- Please check the references: throughout the whole manuscript they often do not match nor support the statements being made in the text. They also contain editing and formatting errors.
- The heading “Conclusion and Implications for Combating Antibiotic Resistance” appears twice at numbers 8 and 9.

In conclusion this manuscript needs major revisions.

Best regards,

Dr. Letizia Tomassini