

Review of: "Flavocillin: a potent TrxR and OATP inhibitor"

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Potential competing interests: No potential competing interests to declare.

The manuscript makes a case for flavocillin as a potent TrxR and OATP inhibitor. Several issues remained unaddressed in the review, for example

- (i) Abstract: Several statements need to be toned down. For example: "Flavocillin shows an affinity for the metallo beta-lactamase, omitting the use of clavulanic acid" just by showing that the drug has an affinity towards metallo beta-lactamase, one cannot rule out the use of clavulanic acid.
- (ii) Why TrxR inhibitor synergies with B-lactams only?
- (iii) Did the authors perform docking studies with GrxR? What makes it specific to TrxR?
- (iv) Are any clinical drug-resistant strains (MRSA) reported to contain mutations in TrxR?
- (iii) The manuscript seems to generalize that bacterium withstand the effect of antibiotics by TrxR and GrxR. This needs to be corrected and will depend on several factors, such as the kind of antibiotics, drug dosage, the metabolic state of bacteria, carbon source, and respiration.
- (iv) Flavocillin is also OATPB1/OATPB3 inhibitor. The authors need to discuss what this drug would inhibit inside bacterial cells.
- (iv) Manuscript could have been written better.