Quinoline derivatives are potential new-age drugs for *Leishmaniasis*

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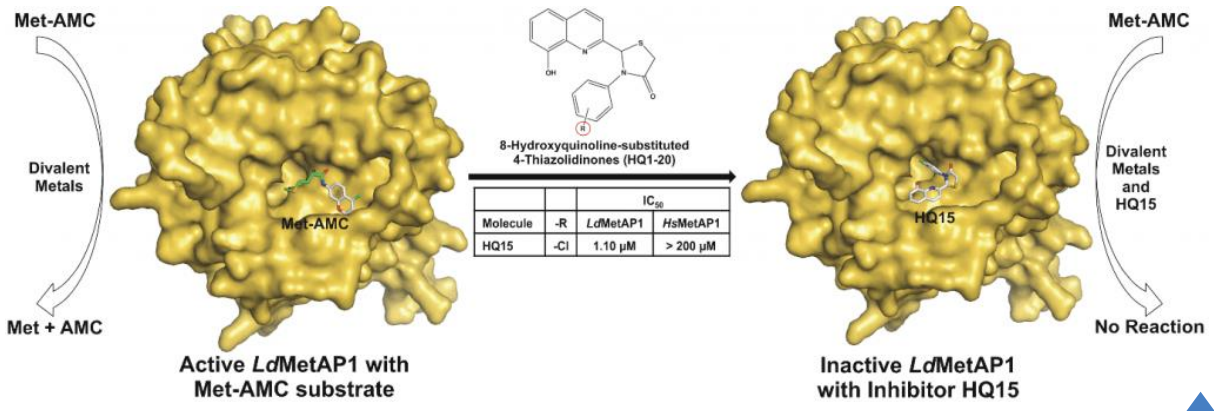
Visceral leishmaniasis, also called as 'Kala azar', is an infectious disease caused by the protozoan parasite *Leishmania donovani* and transmitted by the bite of infected sand flies. Absence of effective vaccine, increasing co-infections and emerging resistance against current line of antileishmanials are the limiting factors to cure the disease.

The research group of UoH, in collaboration with NIPER, Hyderabad have shown that Quinoline derivatives are potential new age drugs for Leishmaniasis. A crucial enzyme *methionine aminopeptidase-1* (LdMetAP1), for the survival of *Leishmania donovani,* can be used as a target for developing new therapy for treating leishmanial diseases. The researchers identified two novel and specific inhibitors HQ14 and HQ15 (quinoline carbaldehyde derivatives) inhibiting the activity of LdMetAP1 but not the human counterpart (HsMetAP1) of the drug target, negating possible side effects posed by them. The present inhibition studies on leishmanial parasite might provide a road map for proceeding of these inhibitors towards clinical trials to fight against this fatal disease.



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