Repurposing the Antihelminthic Drug Niclosamide to Inhibit E. coli

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The need to develop antimicrobial therapies is on the rise as antibiotic resistance increases. Drug repurposing is a cost-effective measure and much more efficient than drug development. Niclosamide belongs in the family of medications known as anthelmintics which treat tapeworm infections in humans, but it has shown to also inhibit bacteria. The framework of the compound doesn't impact the binding sites due to its rigidity on the bacteria, but the functional groups do. This study followed the minimum inhibitory concentrations of Niclosamide and several derivates to denote the importance of each functional group and to learn it's interaction with E.coli. This was done through a minimum inhibitory concentration assay, and visualization of the bacteria under a microscope.

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