

## Visceral Leishmaniasis

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- The Institute of Nano Science and Technology (INST), an autonomous institute of the Department of Science and Technology have developed a non-invasive, easy to administer, cost-effective, and patient compliant potential therapeutic strategy against Visceral Leishmaniasis, a neglected tropical disease.
- Researchers have developed a smart and intelligent nanocarrier utilizing the natural intrinsic Vitamin B12 pathway present in human body that can mitigate stability challenges and drug-associated toxicity. Their strategy based on nano carrier-based oral drugs coated with Vitamin B12 enhanced oral bioavailability and efficacy of the therapy by more than 90%.
- Visceral Leishmaniasis (VL) is a complex infectious disease transmitted by the bite of female Phlebotomine sandflies. It affects millions annually, making it the second most common parasitic killer after malaria.
- The research showed that Vitamin B12 being an essential lifesaving micronutrient, which plays a pivotal role in the body by modulating the toxic side effects associated with the most neglected tropical disease, also works as an innovative and beneficial supplement for its treatment and prevention. It reduces the risk of infection and also enhances the immunity of an individual.

