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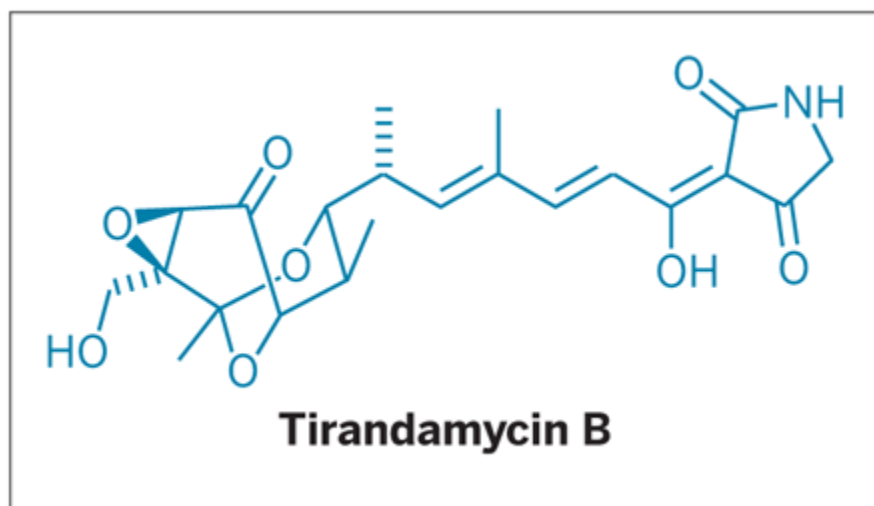
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Promising Drug Lead For Filariasis

Natural product targets an important enzyme that affects the viability of a worm that causes the disease

[Stu Borman](#)

A natural product has been identified that has encouraging activity against a worm that causes lymphatic filariasis, also known as elephantiasis (*Org. Lett.*, DOI: 10.1021/ol200420u). Lymphatic filariasis has currently infected 120 million people worldwide and has disfigured 40 million, according to the World Health Organization. Controlling the disease relies on drug administration programs that are threatened by the worms' development of drug resistance. Furthermore, the drugs kill young worms but have insufficient potency against adults, which therefore continue to produce babies. Tirandamycin B, found in a screen of microbial extracts, is now shown to kill adults efficiently by targeting asparaginyl-tRNA synthetase, part of the worms' protein-synthesis pipeline. The work was carried out by [Michael A. Kron](#) of the Medical College of Wisconsin, [Ben Shen](#) of Scripps Florida, and coworkers. [Bernadette Ramirez](#) of WHO's drug discovery unit, a former Kron collaborator, comments that data on tirandamycin B are from in vitro assays and that the compound is therefore in an early stage of discovery but that the findings are hopeful. "Targeting an important enzyme that would mean a difference in the viability of the worm is a good way to go," Ramirez says.

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