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Chemotherapy of leishmaniasis part XIII: Design and synthesis of novel heteroretinoid-bisbenzylidene ketone hybrids as antileishmanial agents[†]

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Abstract

Some novel heteroretinoid-bisbenzylidene ketone hybrids have been synthesized and evaluated for their *in vitro* antileishmanial activity against intramacrophagic amastigotes of *Leishmania donovani*. Among all the nine synthetic compounds, five compounds (**7c**, **7d** and **7f-h**) have shown significant (less than 7 μ M) activity against intramacrophagic amastigotes. The IC₅₀ values of these compounds were found better than the reference drugs sodium stibogluconate (SSG) and miltefosine. This study helped us in identifying the new class of compounds that could be exploited as potent antileishmanial agents.

Keywords: Heteroretinoid, Bisbenzylidene ketone, *Leishmania donovani*, *In vitro* activity.

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