

# The Paraguayan *Rhinella* toad venom: Implications in the traditional medicine and proliferation of breast cancer cells

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© 2017 Elsevier Ireland Ltd Ethnopharmacological relevance Toads belonging to genus *Rhinella* are used in Paraguayan traditional medicine to treat cancer and skin infections. Aim of the study The objective of the study was to determine the composition of venoms obtained from three different Paraguayan *Rhinella* species, to establish the constituents of a preparation sold in the capital city of Paraguay to treat cancer as containing the toad as ingredient, to establish the effect of the most active *Rhinella schneideri* venom on the cell cycle using human breast cancer cells and to assess the antiprotozoal activity of the venoms. Methods The venom obtained from the toads parotid glands was analyzed by HPLC-MS-MS. The preparation sold in the capital city of Paraguay to treat cancer that is advertised as made using the toad was analyzed by HPLC-MS-MS. The effect of the *R. schneideri* venom and the preparation was investigated on human breast cancer cells. The antiprotozoal activity was evaluat