



# Immunosuppressory activity of an isoxazolo[5,4-e]triazepine-compound RM-33 II. Effects on the carrageenan-induced inflammation

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## Abstract:

The aim of this investigation was to evaluate effectiveness of RM-33, a new isoxazolotriazepine, in the model of carrageenan-induced inflammation in rats. Wistar rats were pretreated with intraperitoneal (*ip*) or oral (*po*) doses of RM-33, at daily doses ranging from 250 to 1000 µg, administered 1–3 days before elicitation of the carrageenan reaction. We showed that both routes of RM-33 administration were effective in significantly diminishing the footpad edema. The effects were dose-dependent and better pronounced at the *ip* administration of the compound. We found a lower production of tumor necrosis factor alpha (TNF-α) by mitogen-stimulated splenocytes isolated from rats pretreated with RM-33 and injected with carrageenan, as well as lower serum TNF-α levels in these rats, as compared to the respective control. Histological analysis of the skin reaction site revealed that in the rats pretreated with RM-33, the carrageenan-induced inflammation was reduced, as reflected by a lesser damage of mast cells, smaller infiltration by macrophages and a diminished edema of the connective tissue. Together with our previous data, indicating the antagonistic action of RM-33 in the adjuvant-induced footpad inflammation in mice, the present results confirm the anti-inflammatory activity of RM-33 compound.

## Key words:

isoxazolotriazepines, carrageenan, rats, TNF-α

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