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# Oral Efficacy of DA-8159, a Novel Selective PDE 5 Inhibitor, for Inducing Penile Erection in Conscious Rabbits

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DA-8159 is a pyrazolopyrimidinone derivative showing potent and selective phosphodiesterase 5 inhibition. In the previous study, DA-8159 induced a dose-dependent increase in intracavernous pressure (ICP) in the anesthetized dog. The aim of this study was to investigate the oral efficacy of DA-8159 in a conscious rabbit model. DA-8159 and sildenafil citrate (0.3 to 10 mg/kg) was given orally to awake male rabbits in the absence or presence of intravenous sodium nitroprusside, a nitric oxide donor. Erection was evaluated in a time-course manner by measuring the length of the uncovered penile mucosa. In results, both DA-8159 and sildenafil citrate induced a dose-dependent erection in conscious rabbits. The effective dose level and the duration of DA-8159 induced erection were comparable to those of sildenafil citrate. However, the onset time of erectile activity was slightly but significantly faster in DA-8159 treated animals than in the sildenafil citrate-treated rabbits. The oral efficacy of both drugs was potentiated and the effective doses were significantly decreased by intravenous sodium nitroprusside. Potentiation of the effect by a nitric oxide donor implies that DA-8159 would have enhanced activity during sexual arousal. These results clearly demonstrate that DA-8159 may be useful for treatment of erectile dysfunction.