DA-8159, a New PDE5 Inhibitor, Does Not Influence Fertility Function in Male Rats

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The effect of DA-8159, a new potent and selective phosphodiesterase-5 inhibitor, on reproductive system and fertility function was investigated in rats. DA-8159 (0, 17.5, or 70 mg/kg) was gavaged to albino rats daily for more than 4 weeks before mating. After confirmation of the mating by vaginal smear, pathological changes of reproductive organs, numbers, motility and viability of epididymal sperm were examined. The time spent before mating, copulation index, insemination index and fertility rate were not changed by DA-8159, when compared to control rats. DA-8159 did not induce any abnormality in the number, morphology, viability and motility of sperm. Serum testosterone level was also unchanged by repeated administration of DA-8159. In addition, reproductive indexes including implantation, number of corpus luteum, and fetal mortality were not affected by DA-8159. These results clearly demonstrate that DA-8159, a new erectile dysfunction treatment, does not influence reproductive system and fertility function.