



In vivo male infertility mouse model

ACYLINE-INDUCED MALE INFERTILITY MODEL IN MICE

Model

Infertility is a major reproductive health problem in the developing countries.

Treatment with acyline, a GnRH [Gonadotropin-Releasing Hormone] antagonist, generated a male infertility model in mice, characterized by a significant decrease in reproductive organ weights and sperm parameters.

Furthermore, human Chorionic Gonadotropin (hCG) treatment substantially reversed the effects of acyline treatment.

Interest

This model can be used to evaluate the efficacy of drugs targeting spermatogenesis.

Species

Mouse

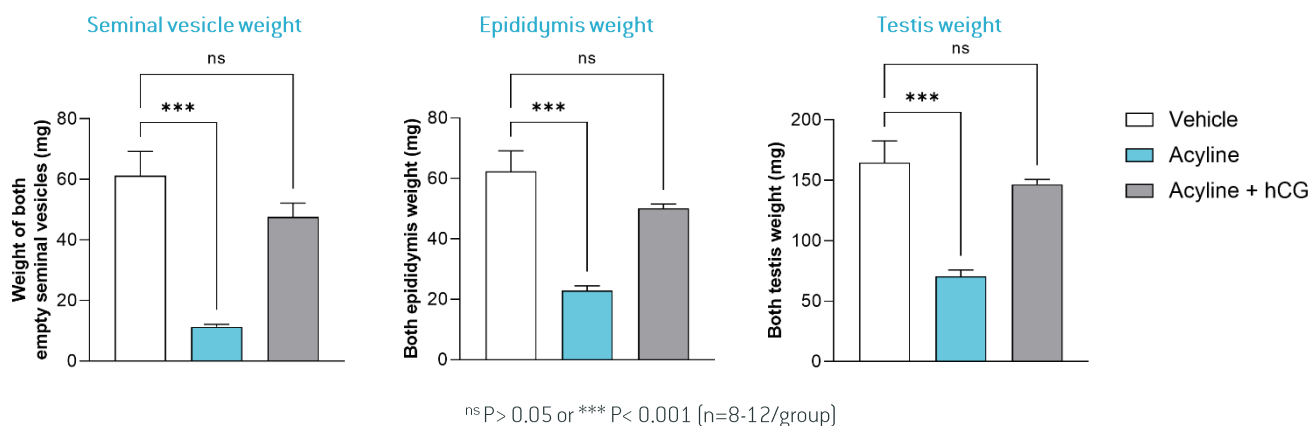
Model Description

- Weekly subcutaneous injection of acyline
- Standard protocol duration: 2 to 13 weeks
- Pathophysiological features: body weight loss, reproductive organ weight loss, oligospermia to azoospermia

Parameters evaluated

- Body and reproductive organ weights
- Sperm parameters: sperm count, motility, and vitality determinations using the Sperm Class Analyser® (SCA) CASA System
- Measurement of plasma and testis testosterone levels by immunoassays
- Testis histology

Acyline-induced decrease in reproductive organ weights



Acyline-induced impairment of sperm parameters

