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## Prenatal developmental toxicity study of procyanidine polyphenols from *Cinnamomum zeylanicum* (TAPP-CZ) in rats

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The prenatal developmental toxicity of procyanidine polyphenols from *Cinnamomum zeylanicum* (TAPP-CZ) to pregnant female rats and their developing fetuses was evaluated in Sprague-Dawley rats. Groups of 25 mated females were treated by oral administration with vehicle or TAPP-CZ (125, 250 and 500 mg/kg body weight/day) on gestation days (GD) 5 to GD 19. Maternal food consumption, body weight and clinical signs were monitored throughout gestation period. Cesarean sections were performed on GD 20 and gravid uterine weight, implantation sites, number of early and late resorptions, number of live and dead fetuses were recorded. Live fetuses were weighed and examined for external, visceral and skeletal variations and malformations. The maternal toxicity no-Observed-Adverse-Effect Level (NOAEL) was 500 mg/kg/day based on maternal parameters like gestation body weight, feed consumption, corrected body weight, uterine weight (gravid and relative), uterine observations and gross pathological findings under the conditions of this study. However, the developmental toxicity NOAEL was 500 mg/kg/day based on fetal developmental endpoints like fetal weight, crown-rump length, fetal sex ratio and incidence of external, soft tissue and skeletal anomalies. In conclusion, there was no significant effect on any maternal and fetal endpoints at any dose level of TAPP-CZ as compared to vehicle control group.

### Biography

Pallavi Deshpande has completed her MPharm from SNTD University, Mumbai. She is working as Clinical Research Associate at Indus Biotech Private Limited, Pune and mainly involved in coordinating clinical and animal toxicology studies since 3 years. Earlier, she was working with Cipla Ltd., as a Project Coordinator and responsible for coordinating clinical as well as pre-clinical studies for more than 3 years.

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