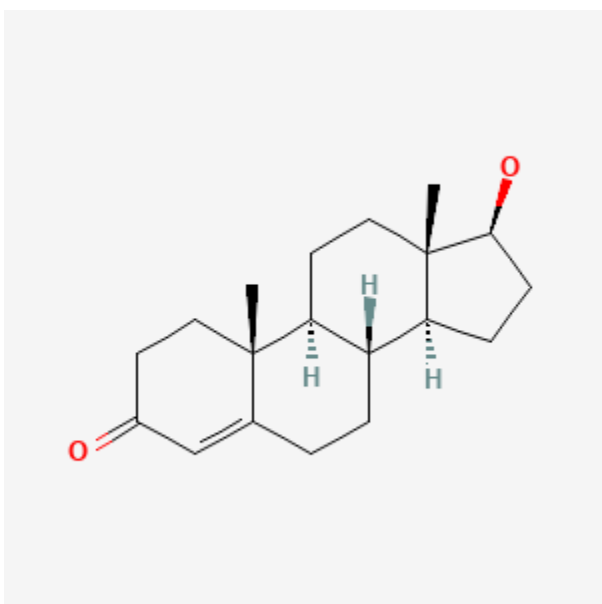




## Testosterone

Revised: May 15, 2022.

CASRN: 58-22-0



## Drug Levels and Effects

### Summary of Use during Lactation

Limited data indicate that a low-dose (100 mg) subcutaneous testosterone pellet given to a nursing mother appears not to increase milk testosterone levels markedly. Subcutaneous testosterone cypionate does increase milk testosterone levels. However, testosterone has low oral bioavailability because of extensive first-pass metabolism, so it appears to not increase serum testosterone levels in breastfed infants. Breastfed infants appear not to be adversely affected by maternal or transgender paternal testosterone therapy. High doses of testosterone can suppress lactation.

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## Drug Levels

*Maternal Levels.* A woman received testosterone for depressive symptoms sublingually (drops, dose unspecified), vaginally (cream, dose unspecified), and subcutaneously (pellet, 100 mg). Foremilk samples were obtained at various times over the first 24 hours after administration of the sublingual and vaginal administration and on days 2, 3 and 7 after the implanting of the testosterone pellet. The highest milk level recorded following the pellet implantation was 101 ng/L on day 7. Testosterone levels in breastmilk were not increased above baseline with any of these preparations.[1]

A transgender male began receiving subcutaneous testosterone cypionate 50 mg weekly at 13.75 months after giving birth. The dose was increased to 80 mg weekly after 1 month. Trough foremilk samples were obtained at baseline, and just before doses at 4, 14, 28, 70 and 134 days after the first dose. The milk total testosterone level was 4.62 ng/L at baseline, 84 ng/L at 4 days after the first dose, 209 ng/L at 14 days after the first dose, 126 ng/L at 28 days after the first dose, 339 ng/L at 70 days after the first dose and 359 ng/L at 134 days after the first dose. The authors calculated the maximum relative infant dose to be 0.041%.[2]

*Infant Levels.* After implantation of a 100 mg pellet of testosterone subcutaneously in a postpartum woman, serum levels of testosterone in her breastfed infant (extent and age not stated) were <100 ng/L on days 2, 3 and 7, and at 5 months after the implanting of the testosterone pellet.[1]

A transgender male began testosterone in a standard dose (not stated) for female-to-male therapy 15 months after giving birth. He “chestfed” his infant (extent not stated) and at 21 months, the infant’s testosterone level was reportedly normal.[3]

A transgender male began receiving subcutaneous testosterone cypionate 50 mg weekly at 13.75 months after giving birth. The dose was increased to 80 mg weekly after 1 month. His male infant was “chestfed” (extent not stated). Infant total testosterone serum levels were undetectable (<70 ng/L) at the start of therapy and 4, 14, 28, 70 and 134 days after initiation of therapy.[2]

## Effects in Breastfed Infants

After implantation of a 100 mg pellet of testosterone subcutaneously in a postpartum mother, her infant (age not stated) was breastfed (extent not stated). No adverse effects were noted in the infant over a 5-month period.[1]

A transgender male began receiving subcutaneous testosterone cypionate 50 mg weekly 13.75 months after giving birth. The dose was increased to 80 mg weekly after 1 month. His male infant was partially “chestfed” (extent not stated) until the infant self-weaned at 137 days after initiation of testosterone (18 months of age). During this time, no adverse events or signs of virilization were noted by the infant’s pediatrician. The infant grew and developed normally.[2]

## Effects on Lactation and Breastmilk

Supraphysiologic serum levels of testosterone, either from a tumor[4,5] or from exogenously administered testosterone,[6] reduces milk production in postpartum women. Testosterone alone reduces serum prolactin;[6] however, when given in combination with estrogen and progestin, serum prolactin levels are not markedly reduced.[7] Testosterone was previously used therapeutically to suppress lactation, usually in combination with an estrogen.[6-12]

## References

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## Substance Identification

### Substance Name

Testosterone

### CAS Registry Number

58-22-0

### Drug Class

Breast Feeding

Lactation

Milk, Human

Androgens

Hormones