

TABLE 1A: EFFECTS AND EXPECTED TIME COURSE OF MASCULINIZING HORMONES^A

| Effect | Expected Onset^B | Expected Maximum Effect^B |
|--------------------------------|-----------------------------------|--|
| Skin oiliness/acne | 1-6 months | 1-2 years |
| Facial/body hair growth | 3-6 months | 3-5 years |
| Scalp hair loss | >12 months ^C | variable |
| Increased muscle mass/strength | 6-12 months | 2-5 years ^D |
| Body fat redistribution | 3-6 months | 2-5 years |
| Cessation of menses | 2-6 months | n/a |
| Clitoral enlargement | 3-6 months | 1-2 years |
| Vaginal atrophy | 3-6 months | 1-2 years |
| Deepened voice | 3-12 months | 1-2 years |

^A Adapted with permission from Hembree et al. (2009). Copyright 2009, The Endocrine Society.

^B Estimates represent published and unpublished clinical observations.

^C Highly dependent on age and inheritance; may be minimal.

^D Significantly dependent on amount of exercise.

TABLE 2: RISKS ASSOCIATED WITH HORMONE THERAPY. BOLDDED ITEMS ARE CLINICALLY SIGNIFICANT

| Risk Level | Feminizing hormones | Masculinizing hormones |
|---|--|--|
| Likely increased risk | Venous thromboembolic disease ^A Gallstones Elevated liver enzymes Weight gain Hypertriglyceridemia | Polycythemia Weight gain Acne Androgenic alopecia (balding) Sleep apnea |
| Likely increased risk with presence of additional risk factors ^B | Cardiovascular disease | |
| Possible increased risk | Hypertension Hyperprolactinemia or prolactinoma ^A | Elevated liver enzymes Hyperlipidemia |
| Possible increased risk with presence of additional risk factors ^B | Type 2 diabetes^A | Destabilization of certain psychiatric disorders^C Cardiovascular disease Hypertension Type 2 diabetes |
| No increased risk or inconclusive | Breast cancer | Loss of bone density Breast cancer Cervical cancer Ovarian cancer Uterine cancer |

^A Risk is greater with oral estrogen administration than with transdermal estrogen administration.

^B Additional risk factors include age.

^C Includes bipolar, schizoaffective, and other disorders that may include manic or psychotic symptoms. This adverse event appears to be associated with higher doses or supraphysiologic blood levels of testosterone.