Neither for Nor Against

LD 1277- An Act Regarding Controlled Substances Prescription Monitoring Activities

Joint Standing Committee on Health and Human Services
Room 209, Cross Building, Augusta, Maine
Friday, April 11th, 2025

Good morning, Senator Ingwersen, Representative Meyer, and Members of the Joint Standing Committee on Health and Human Services. My name is Daniel Oppenheim, MD, and I am a practicing endocrinology, diabetes and metabolism, and internal medicine doctor. I am testifying neither for nor against LD 1277—An Act Regarding Controlled Substances Prescription Monitoring Activities—to provide the committee with information as it discerns whether LD 1277 is the right move for our state.

Testosterone is a valuable medication used to treat hypogonadism[1] in males caused by a variety of medical processes, as well as for gender affirming care for which clinicians are under attack for providing to their patients. However, it is also a "drug of abuse", used by athletes as a "performance enhancing drug". These include recreational weight-lifters and bodybuilders. Testosterone is banned by the World Anti-Doping Agency (WADA).

Testosterone is being increasingly used by men who, without any medical condition causing hypogonadism, believe, or are led to believe, that using this will enhance their strength, energy level, sexual performance, and longevity.

There has been a dramatic increase in the inappropriate use of testosterone therapy in healthy men. From UpToDate[2]:

> The rise in testosterone prescriptions in healthy, middle-aged men is likely due, at least in part, to direct-to-consumer advertising (DTCA) encouraging use of testosterone products for nonspecific symptoms, such as decreased energy and sexual interest [13-16]. In one study of 75 designated market areas with high rates of DTCA of specific testosterone products and/or testosterone deficiency ("low T"), approximately 1 million of 17 million men (6 percent) had themselves tested for low testosterone for the first time between 2009 and 2013 [17]. Approximately

[1] https://www.mayoclinic.org/diseases-conditions/male-hypogonadism/symptoms-causes/syc-20354881 (Male hypogonadism is a condition in which the body doesn't produce enough of the hormone that plays a key role in masculine growth and development during puberty (testosterone) or enough sperm or both).

[2] UpToDate, Inc. is a company in the Wolters Kluwer Health division of Wolters Kluwer, the main product of which is the eponymous UpToDate, a software system that is a point-of-care medical resource. The UpToDate system is an evidence-based clinical resource. Here is an access to the article that UpToDate referenced: https://1stclassurgentcare.com/mdoctors/testosterone-replacement-therapy/.

280,000 men (1.6 percent) started testosterone therapy during that interval. The study authors calculated that each exposure to DTCA was associated with a 0.6, 0.7, or 0.8 percent increase in testosterone testing, initiation of therapy, or initiation of testosterone therapy without baseline testing, respectively. Although the percentage changes are small, in large populations, the impact is large.

There are significant risks involved in using testosterone without fully diagnosed hypogonadism. Exogenous testosterone causes suppression of endogenous testosterone production, so the body can no longer regulate its own testosterone production. It also causes shrinkage of the testes and infertility. Recovery from such suppression is often long and arduous. Other significant potential risks to the use of testosterone include stimulation of the growth of prostate cancer, worsening of benign prostatic hypertrophy, worsening of sleep apnea, increase in red blood cell mass, increased risk of blood clots, increased cardio-vascular risk, as well as breast enlargement.

Women are also at risk for abuse, and the side effects include acne, hirsutism, temporal hair recession in a male pattern, and deepening of the voice.

For more information, please see the following journal articles:

- Baillargeon J, Urban RJ, Ottenbacher KJ, et al. Trends in androgen prescribing in the United States, 2001 to 2011. JAMA Intern Med 2013; 173:1465.
- Braun SR. Promoting "low T": a medical writer's perspective. JAMA Intern Med 2013; 173:1458.
- Schwartz LM, Woloshin S. Low "T" as in "template": how to sell disease. JAMA Intern Med 2013; 173:1460.
- Handelsman DJ. Global trends in testosterone prescribing, 2000-2011: expanding the spectrum of prescription drug misuse. Med J Aust 2013; 199:548.
- Layton JB, Kim Y, Alexander GC, Emery SL. Association Between Direct-to-Consumer Advertising and Testosterone Testing and Initiation in the United States, 2009-2013. JAMA 2017; 317:1159.

Please let me know if you have any additional questions.

Best,
Daniel Oppenheim, MD