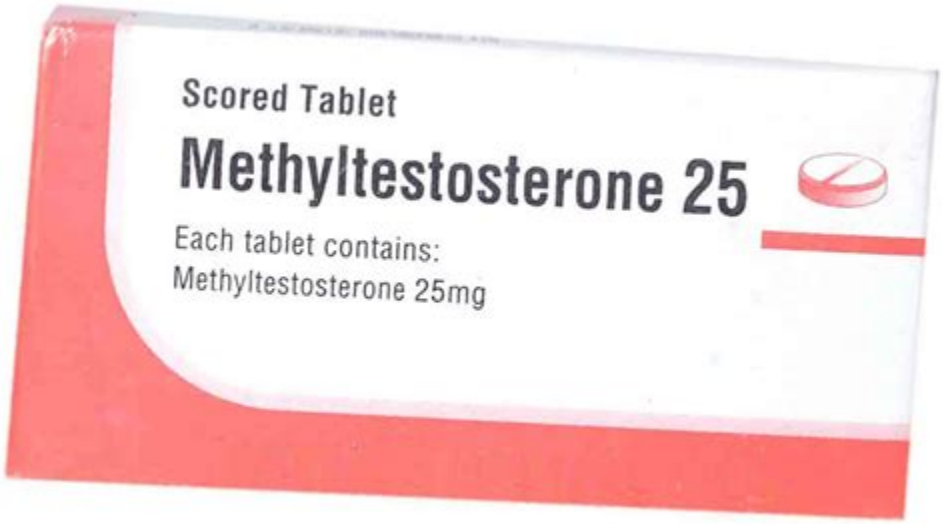
Methyl-1-testosterone (M1T; developmental code name SC-11195), also known as 17α-methyl-4,5α-dihydro-δ1-testosterone (17α-methyl-δ1-DHT) or 17α-methyl-5α-androst-1-en-17β-ol-3-one, as well as methyldihydroboldenone, is a synthetic and orally active anabolic-androgenic steroid (AAS) [1] which was never marketed for medical use.

Methyltestosterone - an overview | ScienceDirect Topics

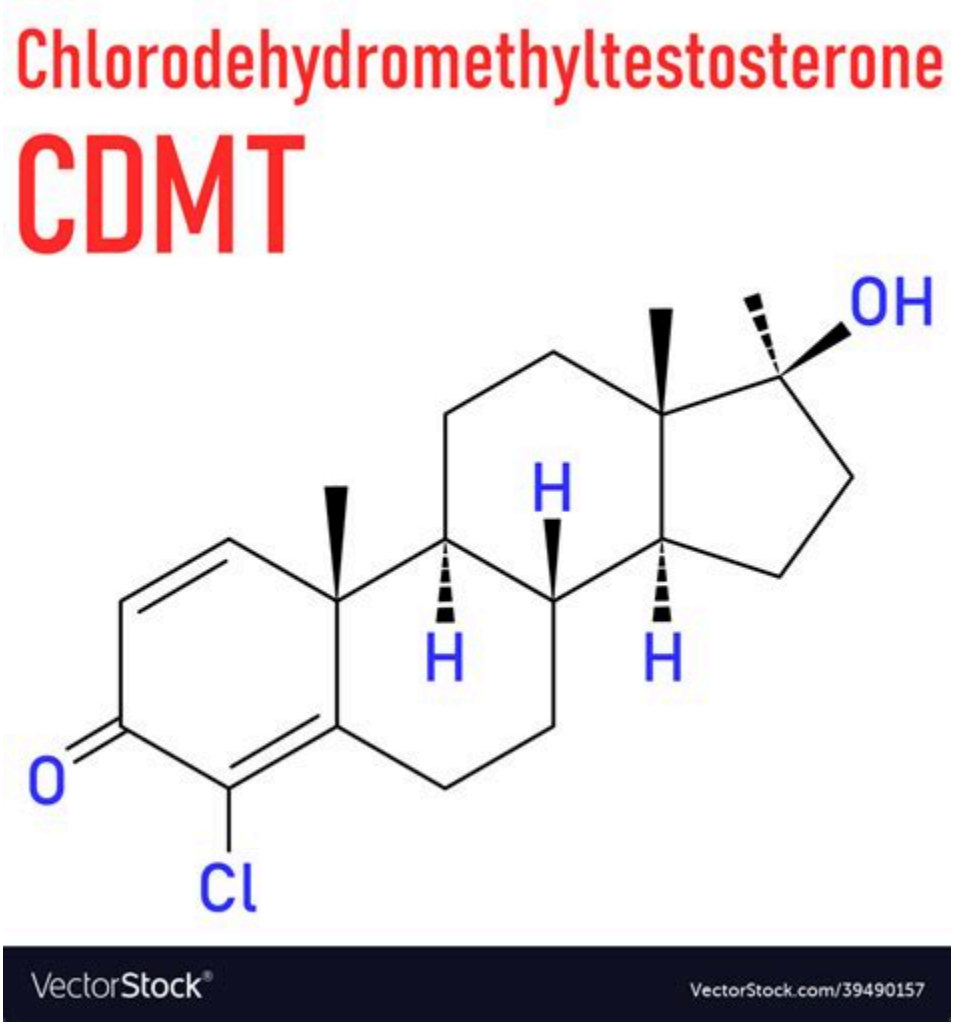


Metandienone was formerly approved and marketed as a form of androgen replacement therapy for the treatment of hypogonadism in men, but has since been discontinued and withdrawn in most countries, including in the United States. [15] [4] [6] It was given at a dosage of 5 to 10 mg/day in men and 2. 5 mg/day in women. [16] [17] [1] Available forms

Methyl-1-Testosterone - steroid

Rapidly absorbed following oral administration, with peak serum concentrations usually attained within a mean of 1. 04 hours. Elimination Metabolism. Metabolized in the liver to various hydroxysteroids. Methylation at the 17 position is associated with less hepatic metabolism following oral administration compared with testosterone. Half-life

Chlorodehydromethyltestosterone - Wikipedia

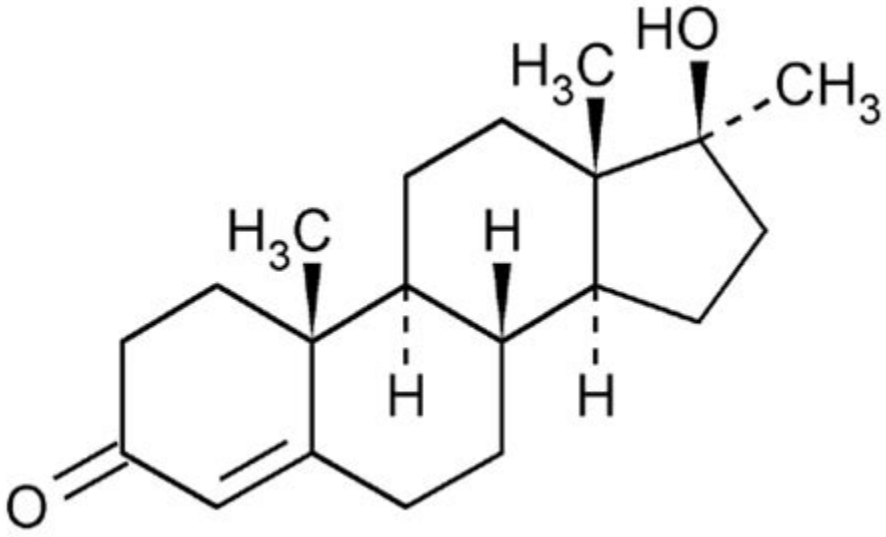


It is very possible to add 15-20lbs on a 2-4 week cycle of M1T. Users will often stack injectables such as testosterone with an M1T cycle. Regardless, if you stack it or not, Liver protection must be run while on M1T to protect the liver.

M1T (Methyl-1-Testosterone) - ANABOLICA

Methyltestosterone is a testosterone derivative bearing a methyl group at the 17 alpha position that functionally increases bioavailability. From: Reference Module in Biomedical Sciences, 2019. . After oral ingestion, peak blood levels occurred between 1. 5 and 2 h, and its serum half-life was about 150 .

Methyltestosterone Monograph for Professionals - Drugs

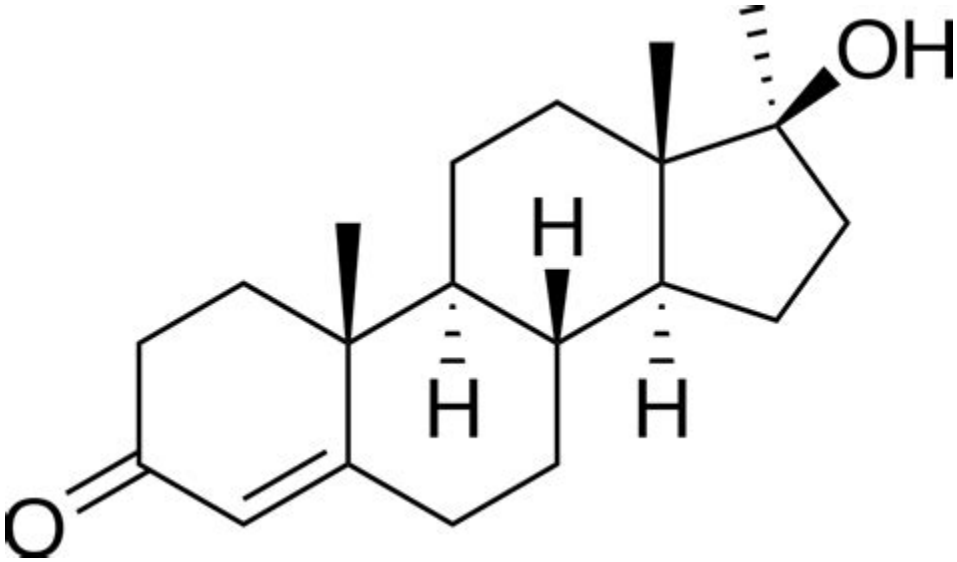


DB01572 Background Methyl-1-testosterone is a synthetic and orally active anabolic-androgenic steroid (AAS) which was never marketed for medical use. It is a derivative of 1-testosterone with a methyl group in the carbon 17. Methyl-1-testosterone is considered a prohibited doping substance. Type Small Molecule Groups Experimental, Illicit Structure

Methyl-1-testosterone - DrugBank Online

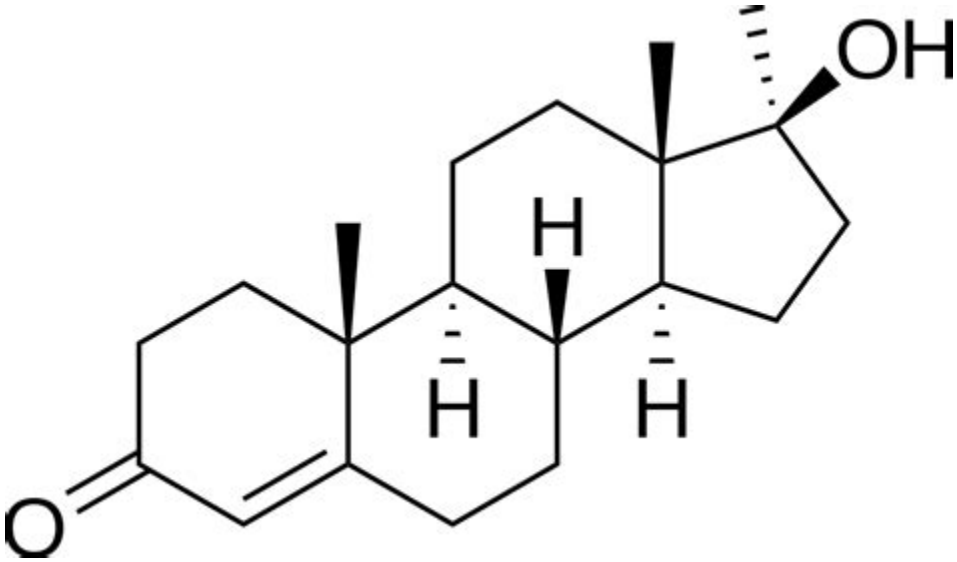
MethylTESTOSTERone: Dosage, Mechanism/Onset of Action, Half-Life - Medicine MethylTESTOSTERone Generic name: methyltestosterone systemic Brand names: Android, Testred, Virilon, Android-10, Android-25, Oreton Methyl, Methitest Reviewed by Medicine on February 10, 2020 Dosage Forms Pharmacology Pharmacokinetics

Methyltestosterone | C20H30O2 | CID 6010 - PubChem



Half-Life: 10-100 min. Peak Plasma Time: 1-2 hr. Bioavailability: absorbed from GI tract & oral mucosa. Protein Bound: 98%. . Do not increase your dose or use this drug more often or for longer than prescribed. When testosterone is misused or abused, you may have withdrawal symptoms (such as depression, irritability, tiredness) when you .

Methyltestosterone - Wikipedia



Methyl-1-testosterone is a synthetic and orally active anabolic-androgenic steroid (AAS) which was never marketed for medical use. It is a derivative of 1-testosterone with a methyl group in the carbon 17. Methyl-1-testosterone is considered a prohibited doping substance. DrugBank.

Endocrine characterization of the designer steroid methyl-1 .

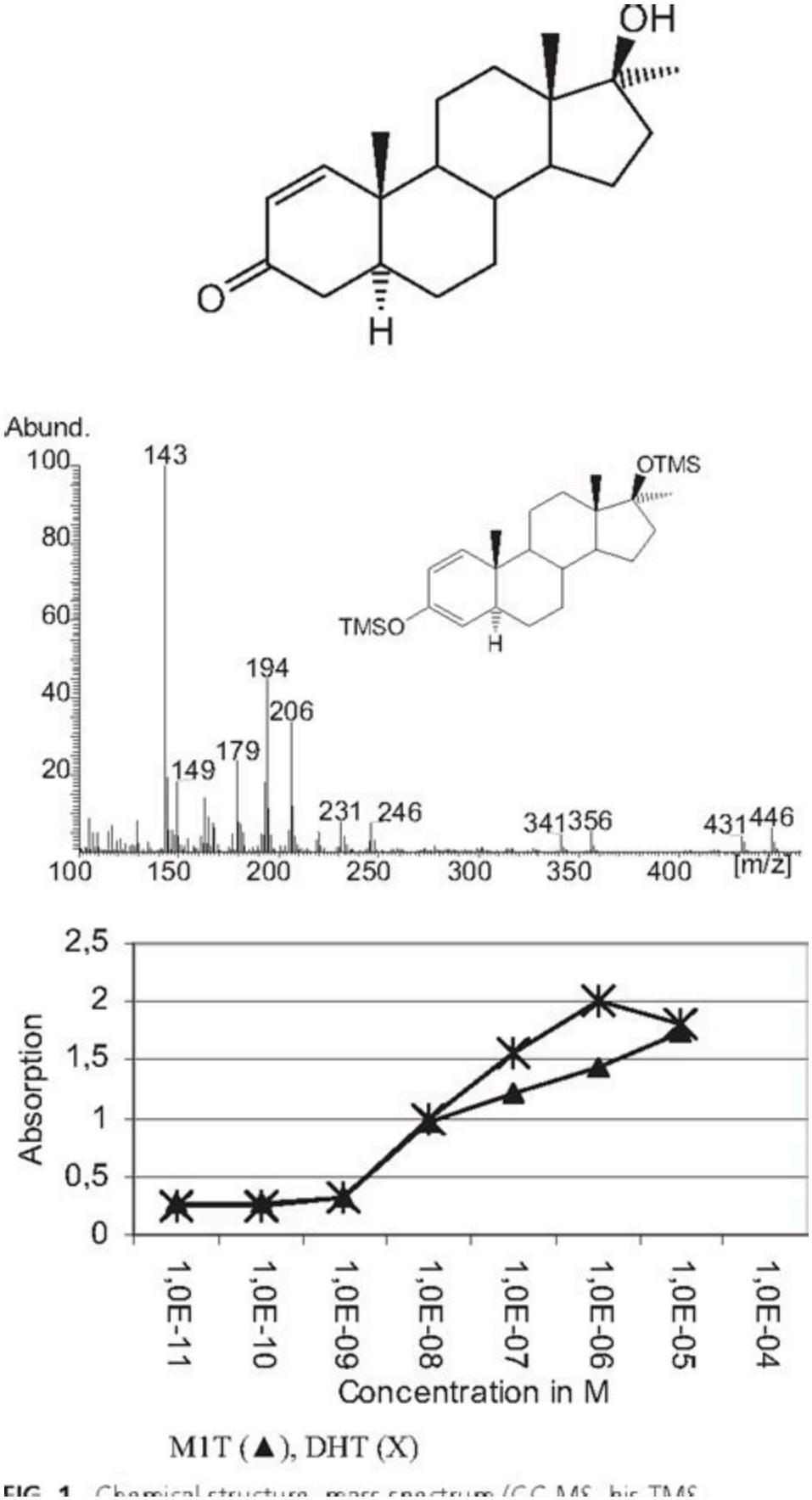


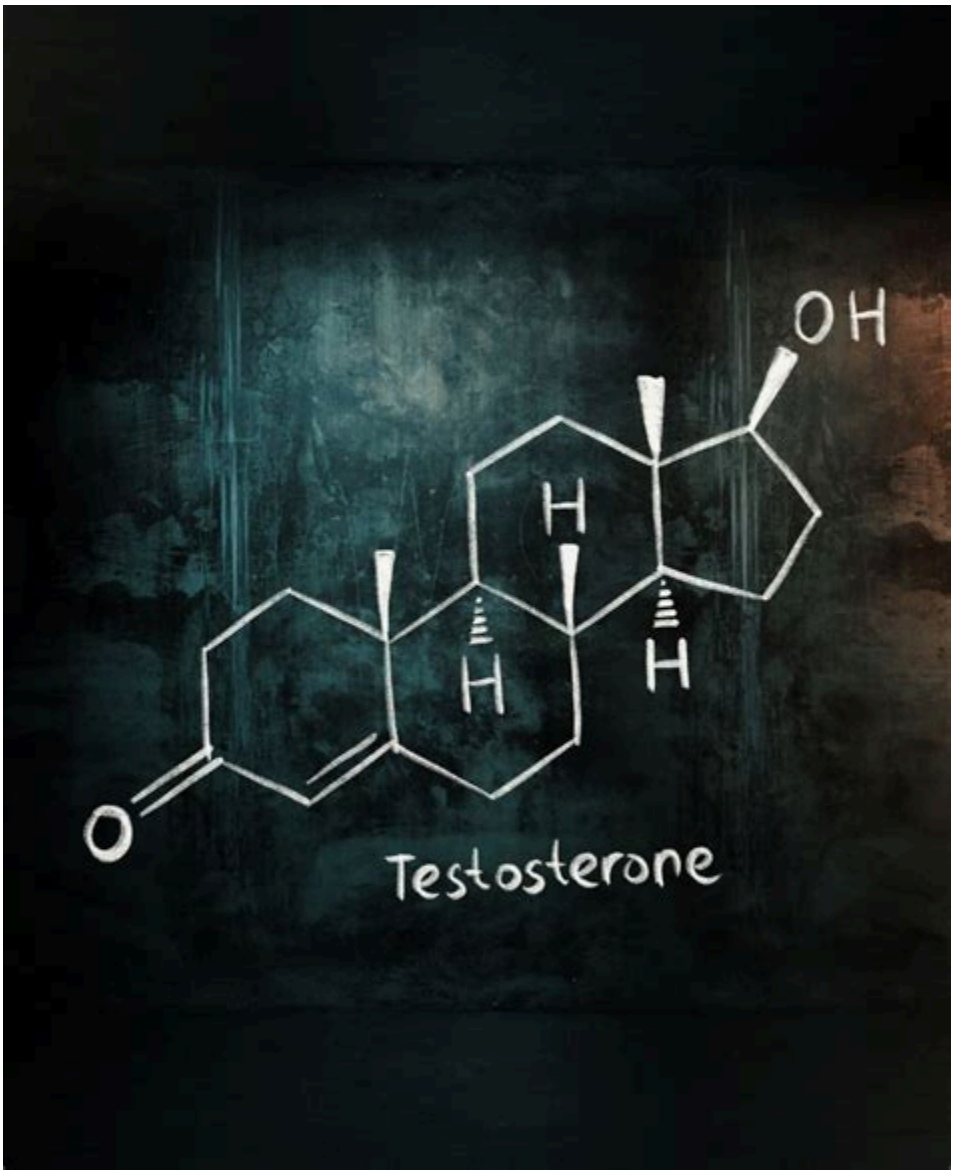
FIG. 1 Chemical structure, mass spectrum (GC-MS, bis-TMS

It is known that the testosterone base (Figure 1) has a short half-life of roughly a few hours; thus, it is often subjected to esterification in order to increase the half-life by intramuscular injections and avoid daily administration [10].

Methyltestosterone - an overview | ScienceDirect Topics

Herein, the designer steroid methyl-1-testosterone (M1T) (17β-hydroxy-17α-methyl-5α-androst-1-en-3-one) was identified, and its biological activity, potential adverse effects, and metabolism were investigated. The affinity of M1T toward the androgen receptor (AR) was tested in vitro using a yeast AR transactivation assay.

Testosterone 101 - Evolutionary



Methyltestosterone is a 17beta-hydroxy steroid that is testosterone bearing a methyl group at the 17alpha position. It has a role as an antineoplastic agent, an anabolic agent and an androgen. It is a 3-oxo-Delta(4) steroid, a 17beta-hydroxy steroid and an enone. . Biological half-life by route of exposure: The metabolism of absorbed drug is .

Methyltestosterone: Package Insert - Drugs

Half-Life: 5 Hours Detection Time: Unknown Anabolic/ Androgenic Ratio: 910-1600/100-220 Description Methyl-1-Testosterone, a. k. a. methyldihydroboldenone, is a methylated derivative of the anabolic steroid dihydrotestosterone (DHT), an anabolic steroid that was designed to treat testosterone deficiency in males. Steroid Form

Pharmacology of testosterone replacement therapy preparations

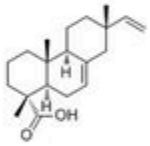
TABLE 2
FDA-approved testosterone formulations[2]

Formulation	Trade names	Dosing, route, and administration	Benefits	Potential adverse effects or drawbacks
Testosterone cypionate, testosterone enanthate		75-100 mg IM every week or 150-200 mg IM every 2 weeks	Short-acting preparation that allows for drug withdrawal in the event of adverse effects	Fluctuation of testosterone levels
Testosterone undecanoate	Aveed	750 mg IM followed in 4 weeks by another 750 mg IM, then 750 mg every 10 weeks thereafter	Steady-state testosterone levels without fluctuation	Long-acting formulation; does not allow for rapid discontinuation of therapy if adverse effects develop
Transdermal and transmucosal testosterone	Androderm (patch)	A single, 2-6–mg patch daily	Most closely mirrors physiologic testosterone levels	May cause skin irritation; risk of transfer to partner or children
	Axiron (axillary)	30-120 mg daily		
	Androgel, Testim, Vogelxo (gel)	50-100 mg daily applied to shoulders, arms, or abdomen		
	Fortesta (gel)	10-70 mg daily applied to thighs		
	Natesto (intranasal)	11 mg 3 times daily		
	Striant (buccal)	30 mg every 12 hours		
Oral testosterone	Androxy (fluoxymesterone)	5-20 mg daily in a single or divided doses	Daily oral dosing	Difficult to obtain normal physiologic levels; risk of hepatotoxicity
	Android, Methitest, Testred (methyltestosterone)	10-50 mg daily		
Subdermal testosterone pellets	Testopel	150-450 mg implanted subcutaneously every 3-6 months	Long duration of action	Infection at implantation site; explantation

IM, intramuscular.

Herein, the designer steroid methyl-1-testosterone (M1T) (17β-hydroxy-17α-methyl-5α-androst-1-en-3-one) was identified, and its biological activity, potential adverse effects, and metabolism were investigated. The affinity of M1T toward the androgen receptor (AR) was tested in vitro using a yeast AR transactivation assay. .

Methyl-1-testosterone | C20H30O2 | CID 7092657 - PubChem



Chlorodehydromethyltestosterone (CDMT; brand name Oral Turinabol), also known as 4-chloro-17β-hydroxy17α-methylandrosta-1,4-dien-3-one, is an anabolic-androgenic steroid (AAS). It is the 4-chloro-substituted derivative of metandienone (dehydromethyltestosterone). Side effects History

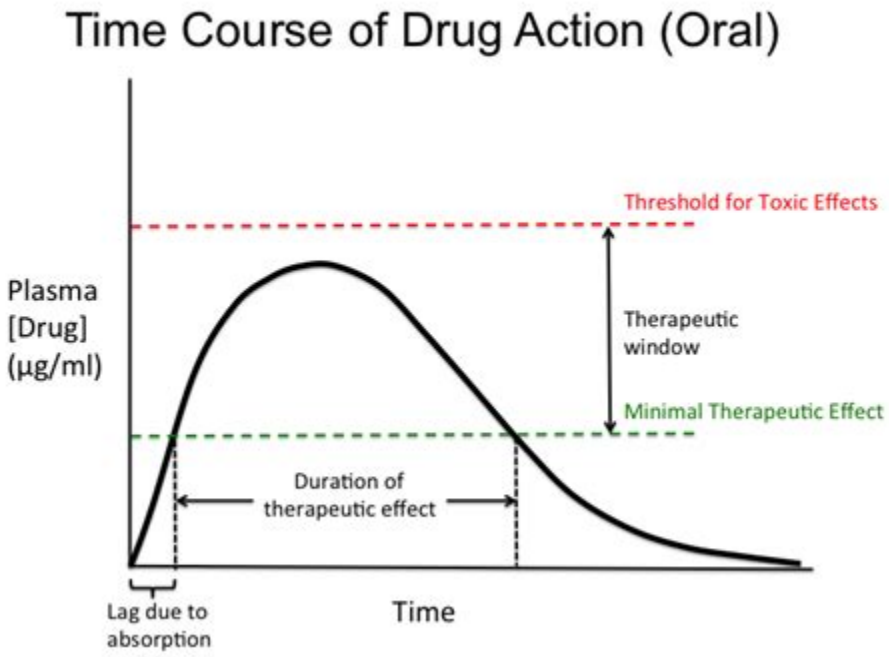
Android, Methitest (methyltestosterone) dosing, indications .

The first orally active, synthesized derivative of testosterone was 17α-methyltestosterone (Table 5). After oral ingestion, peak blood levels occurred between 1. 5 and 2 h, and its serum half-life was about 150 min, indicating several daily doses would be required to maintain a therapeutic level of the steroid. Hepatic toxicity, characterized as cholestasis, peliosis, and elevation of liver .

METHYL-1-TESTOSTERONE - National Center for Advancing Translational .

Half-Life Conclusion Forums References Profile Methyl-1-testosterone is the methylated version of the steroid 1-testosterone. It is a DHT derivative. It cannot convert to DHT or estrogen. M1T is 910-1600% as anabolic and 100-200% as androgenic as methlytest.

MethylTESTOSTERone: Dosage, Mechanism/Onset of Action, Half-Life .



The approximate half-life is 1. 3 hours and hypogonadal concentrations are achieved within 24 hours of patch removal . . Unmodified testosterone has an approximate half-life of 10 minutes when injected, which would necessitate unrealistic multi-dosing regimens to achieve and maintain therapeutic levels . Current formulations have a prolonged .

Methyltestosterone: Uses, Interactions, Mechanism of Action | DrugBank .

C 20 H 30 O 2 Molecular Weight: 302. 46 17-β-hydroxy-17-methylandrost-4-en-3-one Methyltestosterone, USP occurs as white or creamy white crystals or powder, which is soluble in various organic solvents but is practically insoluble in water. Each capsule, for oral administration, contains 10 mg of methyltestosterone, USP.

M1T (Methyl-1-testosterone) - Evolutionary

Methyltestosterone is a synthetic anabolic steroid used for the replacement therapy in conditions associated with testosterone deficiencies in males, . 17α-methyl-Δ4-androsten-17β-ol-3-one; 17α-methyltestosterone; . Half-life. 6-8 hours. Clearance. Not Available. Adverse Effects.

Endocrine Characterization of the Designer Steroid Methyl-1 .

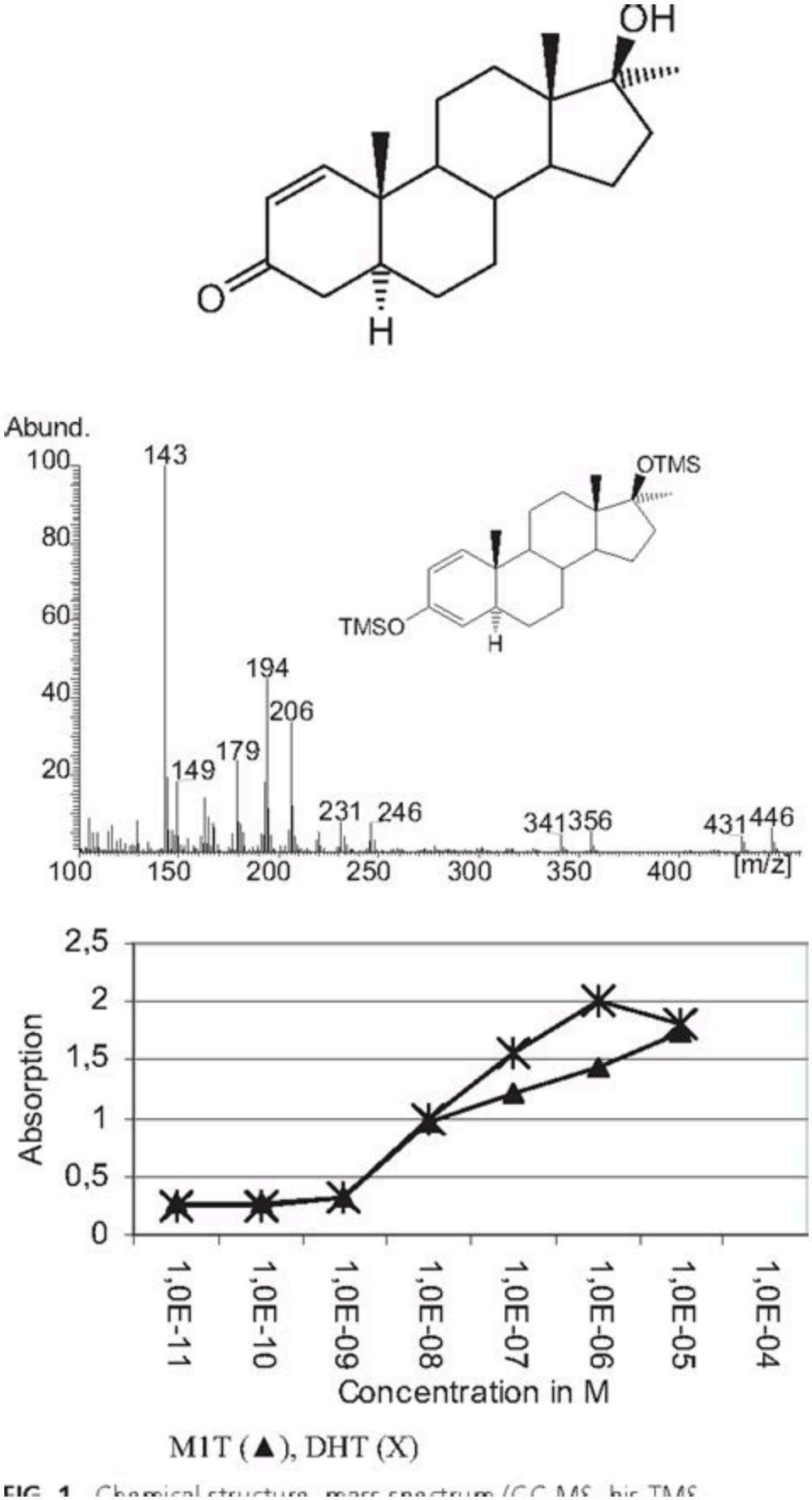
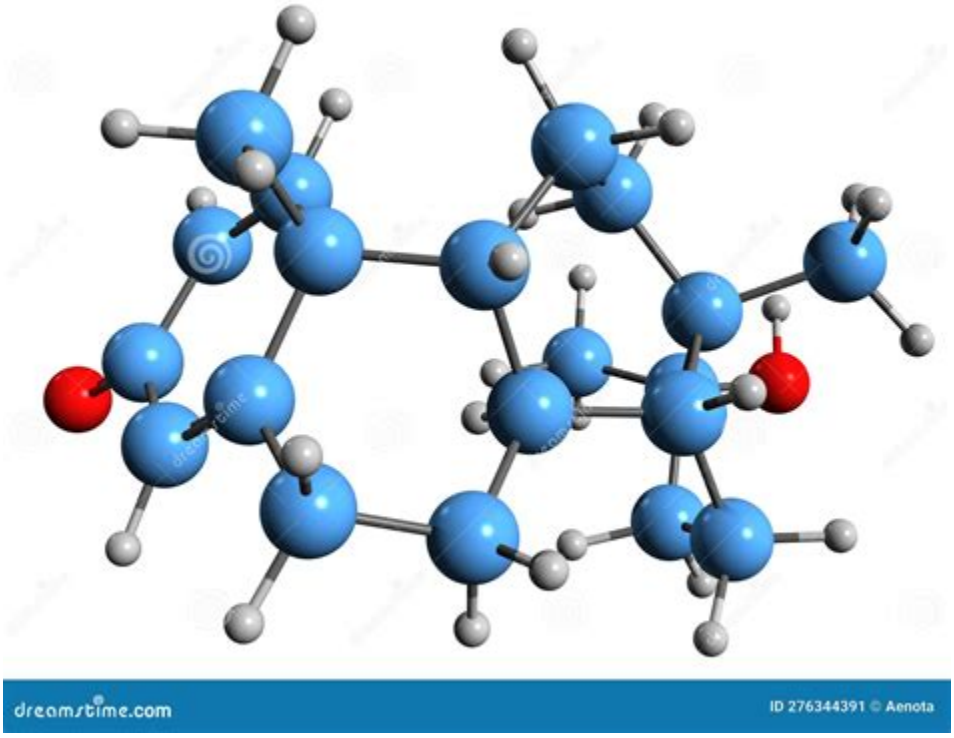


FIG. 1 Chemical structure, mass spectrum (GC-MS, bis-TMS

Methyl-testosterone (active half-life 6-9 hours) Methyl-testosterone does not have an ester, but rather it is methylated for oral use and it is the oldest known oral steroid made. Methyl-testosterone was originally used as a prescription drug to treat men with low testosterone levels, although it fell out of favor and has been replaced with injectables since methyltestosterone is quite liver .

Metandienone - Wikipedia



The dosages of methyltestosterone used are 10 to 50 mg/day in men for common medical uses like hypogonadism and delayed puberty as well as physique- and performance-enhancing purposes and 2. 5 mg/day in women for menopausal symptoms. [4]

Structural Aspects and Intermolecular Energy for Some Short .

materials

MDPI

Article

Structural Aspects and Intermolecular Energy for Some Short Testosterone Esters

Alexandru Turza [1], Violeta Popescu [2], Liviu Mare [2] and Gheorghe Borodi [3,*]

[1] Mass Spectrometry, Chromatography and Applied Physics Department, National Institute for R&D of Isotopic and Molecular Technologies, 67-103 Donat, 400293 Cluj-Napoca, Romania
[2] Physics & Chemistry Department, Technical University of Cluj-Napoca, 28 Memorandumului Str., 400114 Cluj-Napoca, Romania
[3] Molecular and Biomolecular Physics Department, National Institute for R&D of Isotopic and Molecular Technologies, 67-103 Donat, 400293 Cluj-Napoca, Romania
* Correspondence: borodi@itim-cj.ro

Abstract: Testosterone (17β-hydroxyandrost-4-en-3-one) is the primary naturally occurring anabolic–androgenic steroid. The crystal structures of three short esterified forms of testosterone, including propionate, phenylpropionate, and isocaproate ester, were determined via single-crystal X-ray diffraction. Furthermore, all the samples were investigated using powder X-ray diffraction, and their structural features were described and evaluated in terms of crystal energies and Hirshfeld surfaces. They were also compared with the base form of testosterone (without ester) and the acetate ester. Moreover, from a pharmaceutical perspective, their solubility was evaluated and correlated with the length of the ester.

Keywords: 17β-hydroxyandrost-4-en-3-one; testosterone; ester; crystal structure; lattice energy; solubility

Citation: Turza, A.; Popescu, V.; Mare, L.; Borodi, G. Structural Aspects and Intermolecular Energy for Some Short Testosterone Esters. *Materials* **2022**, *15*, 7245. https://doi.org/10.3390/ma15207245

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1. Introduction

Testosterone (17β-hydroxyandrost-4-en-3-one) is a cholesterol derivative and a naturally occurring anabolic steroid. It can be viewed as a derivative of the androstane group and the primary male sex hormone. It plays a major role in the development of male reproductive tissues and the maintenance of secondary male characteristics [1]. Testosterone has been shown to impact overall health and well-being [2] and prevent osteoporosis [3]. By binding to the androgen receptor, it exerts anabolic and androgenic properties that are the specific common characteristic of all derivatives belonging to this class [4]. In a medical context, testosterone is used to relieve symptoms of low testosterone in men (male hypogonadism) and breast cancer in women, as well as for hormone therapy in transgender men [5]. Testosterone targets androgen receptors [6], and previous studies have shown that normal testosterone levels in older men have an overall positive impact on health, decreasing body and visceral fat, increasing lean body mass, and improving cholesterol panel and carbohydrate metabolism [7]. Since it is an anabolic–androgenic steroid, testosterone is often used by athletes to increase performance [8]. Furthermore, medically, it can be used to relieve or treat protein degradation in certain catabolic states [9].

It is known that the testosterone base (Figure 1) has a short half-life of roughly a few hours; thus, it is often subjected to esterification in order to increase the half-life by intramuscular injections and avoid daily administration [10]. The esterified forms of testosterone possess a half-life ranging from around less than 1 day for testosterone acetate, 1 day for propionate, 2.5 days for phenylpropionate, and up to 3.1 days for testosterone isocaproate [11]. In this regard, the length of the ester can be correlated with the length of the carbon chain; thus, the longer the ester, the longer the half-life.

Methyl-1-testosterone(M1T)(17alpha-hydroxy-17-methyl- 5-androst-1-en-3-one) is a new designer steroid that is most likely produced to circumvent the legal restrictions. It is advertised to be highly anabolic and moderately androgenic and not convertible to estrogens. However, in scientific literature, it was reported to show anabolic properties .

- https://publiclab.org/notes/print/45928
- https://telegra.ph/Deca-Durabolin-Vs-Sustanon-02-06
- https://blog.libero.it/wp/vladislavkomarovss/wp-content/uploads/sites/88267/2024/01/How-Much-Tongkat-Ali-Is-Too-Much.pdf