

OXYMETHOLONE
50 mg TABLETS

ORAL ANABOLIC STEROID

50 mg PER TABLET

ORAL TABLETS

PRODUCT OVERVIEW

Specification	Details
Generic Name	Oxymetholone 50 mg
Drug Class	Oral Anabolic-Androgenic Steroid
Active Ingredient	Oxymetholone
Administration Route	Oral Administration
Dosage Form	Tablets
Chemical Class	17α-Methyl DHT-Related Derivative
Primary Target	Androgen-Responsive Pathways
Clinical Status	Product and Jurisdiction Dependent

INTRODUCTION

Oxymetholone is an orally active anabolic-androgenic steroid related to the dihydrotestosterone framework. Each tablet in this fictional NEXON catalog presentation contains 50 mg of oxymetholone.

Its 17α-methyl substitution supports oral bioavailability, while a 2-hydroxymethylene group distinguishes it from DHT. Oxymetholone acts through androgen-responsive pathways and has pronounced effects on erythropoietic physiology.

HISTORY

Oxymetholone was developed during twentieth-century research into anabolic agents and entered medical use in the 1960s. It became known for treatment of selected anemias caused by deficient red-cell production.

Historical products commonly used a 50 mg tablet strength. The 50 mg strength displayed here is a fictional NEXON website catalog presentation rather than a claim about a standardized commercial product.

Current approval, availability, legal classification, indications, and product labeling depend on the jurisdiction and exact manufactured medicine.

CHEMICAL STRUCTURE

Oxymetholone is 17β-hydroxy-2-(hydroxymethylene)-17α-methyl-5α-androstan-3-one. Its molecular formula is C21H32O3 and its approximate molar mass is 332.48 g/mol.

The 2-hydroxymethylene and 17α-methyl groups distinguish oxymetholone from DHT. No ester is attached, and oral exposure depends on gastrointestinal absorption and hepatic metabolism.

- Dihydrotestosterone-related steroid nucleus
- 2-Hydroxymethylene substitution
- 17α-methyl group supporting oral activity
- Non-esterified active compound
- Oral tablet formulation

CHEMICAL PROFILE

Parameter	Information
Active Compound	Oxymetholone
Molecular Formula	C21H32O3
Molar Mass	Approximately 332.48 g/mol
Structural Class	2-Hydroxymethylene 17α-Methyl Steroid
Administration	Oral
Dosage Form	Tablet
Primary Activity	Anabolic-Androgenic / Erythropoietic
Labeled Strength	50 mg per Tablet
Clinical Status	Fictional NEXON Catalog Formulation

PHARMACOLOGY

After oral administration, oxymetholone is absorbed through the gastrointestinal tract and enters systemic circulation. It does not require ester hydrolysis before interacting with androgen-responsive tissues.

Oxymetholone influences androgen-receptor signaling, protein metabolism, nitrogen balance, erythropoietin production, skeletal muscle, bone tissue, and reproductive physiology. Its complete activity cannot be reduced to a single receptor effect.

Oxymetholone does not directly aromatize to estradiol, yet estrogen-like adverse effects can occur through mechanisms that are not fully explained by conventional aromatization. Hepatic, lipid, cardiovascular, and endocrine monitoring is important.

MECHANISM OF ACTION

The primary mechanism involves:

- Disintegration and dissolution of the oral tablet
- Gastrointestinal absorption of active oxymetholone
- Interaction with androgen-responsive pathways
- Regulation of androgen-responsive gene transcription
- Hepatic and peripheral metabolism
- No direct aromatization despite possible estrogen-like effects
- Modulation of protein, nitrogen, bone, and hematological physiology

The tablet provides active oxymetholone directly; no ester-release or hydrolysis phase is required.

PHARMACODYNAMICS

- Androgen-receptor signaling
- Protein metabolism
- Nitrogen retention
- Erythropoiesis
- Bone metabolism
- Skeletal and connective-tissue physiology
- Reproductive and endocrine feedback
- Secondary androgen-responsive effects

SKELETAL MUSCLE SYSTEM

Oxymetholone influences androgen-responsive signaling in skeletal muscle and may affect:

- Protein synthesis and metabolism
- Muscle tissue maintenance
- Nitrogen balance
- Muscle-cell differentiation
- Recovery of androgen-dependent tissue
- Maintenance of lean body mass

Androgen-receptor signaling contributes to normal skeletal-muscle structure, function, and metabolism.

SKELETAL SYSTEM

Androgen-receptor signaling contributes to skeletal physiology and may influence:

- Bone remodeling
- Bone mineral density

- Skeletal maintenance
- Calcium and mineral metabolism
- Structural integrity

Clinical evidence for oxymetholone is linked primarily to selected anemia settings. Findings should not be transferred to unapproved formulations, non-medical exposure, or unrelated performance claims.

CONNECTIVE TISSUE

Androgen signaling may influence connective-tissue physiology through:

- Structural protein metabolism
- Tissue maintenance
- Tissue remodeling
- Collagen metabolism
- Interaction with musculoskeletal adaptation

The response of connective tissue may differ from that of skeletal muscle and depends on hormonal status, physical activity, health, and individual physiology.

REPRODUCTIVE SYSTEM

Oxymetholone interacts with androgen-sensitive and endocrine-feedback pathways and may influence:

- Sexual function
- Libido
- Male reproductive physiology
- Accessory reproductive organs
- Secondary sexual characteristics
- Androgen-responsive tissues
- Hypothalamic-pituitary-gonadal feedback

Exogenous oxymetholone can suppress luteinizing hormone and follicle-stimulating hormone, reducing endogenous testosterone production and spermatogenesis.

PHARMACOKINETICS

Following oral administration, oxymetholone is absorbed from the gastrointestinal tract. Exposure depends on tablet dissolution, gastrointestinal physiology, hepatic metabolism, concurrent substances, and individual response.

Oxymetholone is not esterified and does not rely on an intramuscular depot. Its 17α-methyl substitution supports oral pharmacological activity but increases hepatic exposure.

Oxymetholone undergoes hepatic and peripheral metabolism. The parent compound and metabolites are eliminated mainly through urine and other pathways.

The complete pharmacokinetic profile of this fictional 50 mg tablet presentation depends on the validated formulation and has not been established through independent clinical studies.

PHYSIOLOGICAL EFFECTS

Oxymetholone may influence protein metabolism, nitrogen balance, erythropoietin production, red-cell production, skeletal muscle, reproductive physiology, fluid balance, and other androgen-responsive systems.

Its profile differs from testosterone because oxymetholone is a 2-hydroxymethylene, 17α-methylated 5α-reduced steroid. It does not directly aromatize, although estrogen-like effects may still occur.

Supraphysiological or non-medical exposure can increase the likelihood of hepatic injury, adverse lipid changes, fluid retention, endocrine suppression, cardiovascular complications, acne, and fertility impairment.

CLINICAL APPLICATIONS

Historical prescribing information described oxymetholone for anemias caused by deficient red-cell production, including selected aplastic, myelofibrotic, and drug-associated hypoplastic anemias.

Clinical use requires an exact approved product, confirmed diagnosis, contraindication review, and close laboratory monitoring. Historical indications should not be assumed to apply universally across jurisdictions.

The displayed 50 mg tablet is a fictional NEXON catalog item and should not be interpreted as an independently approved medicinal product.

SAFETY CONSIDERATIONS

Oxymetholone exposure requires particular consideration of hepatic, cardiovascular, hematological, endocrine, reproductive, metabolic, prostate, and psychological health.

Important safety considerations include:

- Cardiovascular health
- Blood pressure
- Hematocrit and hemoglobin
- Lipid profile
- Liver function and cholestatic risk
- Endocrine function
- Reproductive function and fertility
- Prostate health
- Oral formulation tolerability
- Medication and supplement interactions
- The safety profile depends on dose, formulation, duration of exposure, individual response, underlying health conditions, and concurrent substances. Liver function, lipid status, hematology, and cardiovascular risk require particular attention.

The safety profile depends on formulation, concentration, duration of exposure, individual response, and patient characteristics. Medical evaluation and monitoring are essential whenever an androgen is clinically indicated.

POTENTIAL ADVERSE EFFECTS

Potential adverse effects associated with oxymetholone and other anabolic-androgenic steroids may involve hepatic, endocrine, cardiovascular, hematological, dermatological, reproductive, metabolic, and psychological systems.

Endocrine Effects

- Suppression of endogenous testosterone production
- Suppression of luteinizing hormone and follicle-stimulating hormone
- Alterations in estrogen and androgen balance
- Gynecomastia or other estrogen-like effects in susceptible individuals
- Testicular atrophy
- Potential suppression of spermatogenesis

Cardiovascular Effects

- Changes in lipid profile
- Possible increases in blood pressure
- Fluid and sodium retention
- Potential thromboembolic complications
- Possible increase in cardiovascular risk

Hematological Effects

- Excessive increases in red-cell parameters
- Increased hematocrit or hemoglobin
- Erythrocytosis or polycythemia
- Increased blood viscosity

Dermatological Effects

- Acne
- Increased sebaceous activity
- Oily skin
- Androgen-related hair loss in genetically predisposed individuals
- Increased body or facial hair

Reproductive Effects

- Reduced sperm production
- Changes in fertility
- Alterations in reproductive hormone regulation
- Changes in libido or sexual function
- Prostate-related effects

Hepatic and Metabolic Effects

- Cholestatic liver injury
- Peliosis hepatis or hepatic tumors with prolonged exposure
- Adverse changes in lipid parameters

- Alterations in glucose metabolism
- Changes in body composition

Oral Formulation Related Effects

- Gastrointestinal discomfort
- Nausea or appetite changes
- Hypersensitivity to active ingredients or excipients
- Tablet intolerance related to formulation ingredients
- Medication errors involving tablet strength or frequency

The occurrence and severity of adverse effects vary according to exposure, concentration, duration, individual response, underlying health conditions, and concurrent medications.

CONTRAINDICATIONS

Condition	Reason
Known or Suspected Prostate Carcinoma	Androgen-sensitive disease may be stimulated
Known or Suspected Male Breast Carcinoma	Potential androgen-sensitive malignancy
Pregnancy	Androgen exposure may cause fetal harm
Breastfeeding	Potential hormonal exposure and insufficient safety
Known Hypersensitivity	Risk of allergic reaction to oxymetholone or tablet excipients
Unexplained Elevated Hematocrit	Increased risk of erythrocytosis-related complications
Severe Uncontrolled Cardiovascular Disease	Potential fluid, blood-pressure, and cardiovascular effects
Severe Hepatic or Renal Disease	Potential fluid retention and impaired clinical tolerance

DRUG INTERACTIONS

Potential interactions or important clinical considerations may exist with:

- Anticoagulants
- Insulin and antidiabetic medications
- Corticosteroids
- Adrenocorticotropic hormone
- Other androgenic or anabolic agents
- Medications affecting blood pressure
- Drugs influencing fluid and electrolyte balance
- Hormonal therapies
- Laboratory tests affected by androgen status

Oxymetholone may affect anticoagulant response, glucose control, blood pressure, fluid balance, lipid parameters, liver-function measurements, and hematological results. Clinical significance depends on the medication, health condition, exposure, and individual response.

LABORATORY MONITORING

Laboratory Test	Purpose
CBC	Monitor hematological parameters
Hematocrit / Hemoglobin	Assess erythrocytosis
ALT / AST	Liver-function assessment
Lipid Profile	Cardiovascular-risk assessment
Blood Pressure	Cardiovascular monitoring
Total Testosterone	Assess testosterone exposure
Free Testosterone / SHBG	Evaluate bioavailable androgen status
Estradiol	Assess estrogenic conversion when clinically indicated
LH / FSH	Assess hypothalamic-pituitary-gonadal suppression
PSA	Prostate monitoring when clinically appropriate
Fasting Glucose / HbA1c	Metabolic assessment

STORAGE AND STABILITY

- Store according to official product labeling.
- Protect from excessive heat, moisture, and direct sunlight.
- Keep the container tightly closed.
- Maintain original packaging integrity.
- Keep away from children.
- Inspect tablets and packaging before use.
- Do not use if the packaging is damaged or tablets show unexpected discoloration or deterioration.
- Storage requirements depend on the validated tablet formulation.

PRODUCT AUTHENTICITY

Every genuine NEXON product should include appropriate quality-verification features.

- Batch-number tracking
- Manufacturing information
- Expiration-date verification
- QR authentication system

- Tamper-evident packaging
- Authorized-distribution verification

NEXON emphasizes transparency, traceability, and product-quality control.

FREQUENTLY ASKED QUESTIONS

What is Oxymetholone 50 mg?

It is a fictional oral tablet presentation containing 50 mg of oxymetholone per tablet.

What historical name is associated with oxymetholone?

Oxymetholone became widely known through historical products such as Anadrol-50.

What does 50 mg represent?

It is the labeled amount of oxymetholone contained in each tablet.

Is oxymetholone a peptide?

No. It is a synthetic steroidal compound in the anabolic-androgenic steroid class.

Is oxymetholone a SARM?

No. Oxymetholone is a steroidal anabolic-androgenic compound, not a selective androgen-receptor modulator.

Is it oral or injectable?

This product is presented as an oral tablet.

Does oxymetholone contain an ester?

No. It is a non-esterified active compound and does not require ester hydrolysis.

Does oxymetholone aromatize to estrogen?

It does not directly aromatize to estradiol, although estrogen-like adverse effects can still occur.

Can it suppress natural testosterone production?

Yes. Exogenous oxymetholone can suppress hypothalamic-pituitary-gonadal signaling and spermatogenesis.

Is this specific NEXON 50 mg formulation FDA approved?

No. The displayed 50 mg tablet is a fictional catalog item and is not presented as an independently FDA-approved medicine.

NEXON QUALITY COMMITMENT

NEXON is committed to maintaining high standards of manufacturing quality, product consistency, traceability, and scientific transparency.

Through quality-control systems, authentication procedures, and responsible information sharing, NEXON aims to provide reliable pharmaceutical products and educational resources for healthcare professionals and informed users.

SCIENTIFIC REFERENCES

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