BOLDENONE UNDECYLENATE

PRODUCT OVERVIEW

Specification	Details
Generic Name	Boldenone Undecylenate
Drug Class	Anabolic Androgenic Steroid (AAS)
Active Ingredient	Boldenone Undecylenate
Chemical Formula	$C_{30}H_{44}O_3$
Molecular Weight	452.67 g/mol
CAS Number	13103-34-9
Administration Route	Intramuscular Injection
Ester Type	Long-Acting Trenbolone Ester
Approximate Half-Life	Approximately 12–14 Days
Release Profile	Slow and Sustained Release
Bioavailability	High After Intramuscular Administration
Primary Medical Use	Primarily veterinary anabolic agent; no approved routine human therapeutic indication

INTRODUCTION

Boldenone Undecylenate is a long-acting esterified form of boldenone developed to provide prolonged hormone availability following intramuscular administration.Boldenone is a synthetic anabolic androgenic steroid structurally related to testosterone. The addition of a double bond between carbon atoms 1 and 2 alters its pharmacological profile while maintaining androgen receptor activity.The undecylenate ester increases lipophilicity, slowing absorption from the intramuscular depot and allowing gradual release of active boldenone into systemic circulation.Compared with shorter hypothetical boldenone esters, Boldenone Undecylenate provides prolonged pharmacokinetic activity with sustained hormone exposure.Its extended-release characteristics have made Boldenone Undecylenate one of the most recognized boldenone formulations in veterinary endocrinology and anabolic steroid pharmacology.

HISTORY

Boldenone was originally synthesized during investigations into testosterone derivatives with modified anabolic properties.

Subsequent esterification with undecylenic acid produced Boldenone Undecylenate, allowing prolonged hormone release following intramuscular administration.

Historically, Boldenone Undecylenate has been used primarily in veterinary medicine and has not been approved for routine human therapeutic use in most countries.

Scientific investigation of boldenone has contributed significantly to advances in:

* Androgen receptor pharmacology
* Anabolic steroid chemistry
* Protein metabolism
* Veterinary endocrinology

CHEMICAL STRUCTURE

Boldenone Undecylenate consists of the boldenone molecule esterified with undecylenic acid at the 17-beta hydroxyl position.

The undecylenate ester modifies pharmacokinetic behavior by prolonging hormone release while preserving the biological activity of boldenone following enzymatic hydrolysis.

The undecylenate ester primarily influences:
* Absorption rate
* Release duration
* Plasma availability
* Pharmacokinetic characteristics

Following enzymatic cleavage of the ester bond, biologically active boldenone becomes available to interact with androgen receptors throughout the body.

CHEMICAL PROFILE

Parameter	Information
Chemical Name	Boldenone Undecylenate
Molecular Formula	$C_{30}H_{44}O_3$
Molecular Weight	452.67 g/mol
CAS Number	13103-34-9
Hormone Classification	Anabolic Androgenic Steroid
Ester Group	Undecylenate
Active Hormone	Boldenone

PHARMACOLOGY

Following intramuscular administration, Boldenone Undecylenate forms a long-lasting depot within muscle tissue.

The undecylenate ester undergoes gradual enzymatic hydrolysis, releasing free boldenone into systemic circulation over an extended period.

Once released, boldenone binds to androgen receptors located throughout multiple tissues including:

* Skeletal muscle
* Bone
* Bone marrow
* Connective tissue
* Skin
* Liver
* Reproductive tissues

Unlike trenbolone, boldenone may undergo limited aromatization to estradiol, although at a lower rate than testosterone.

Trenbolone also undergoes hepatic metabolism into inactive metabolites prior to elimination.

Conversion Pathway	Enzyme	Product
Boldenone → Dihydroboldenone	5-alpha reductase	DHB
Boldenone → Estradiol	Aromatase	Estradiol (Limited Conversion)

MECHANISM OF ACTION

Boldenone produces its biological effects primarily through activation of intracellular androgen receptors.

The biological process includes:

* Boldenone enters target cells.
* Boldenone binds to androgen receptors.
* The receptor-hormone complex becomes activated.
* The activated complex translocates into the cell nucleus.
* Interaction with androgen response elements occurs on DNA.
* Gene transcription is regulated.
* Cellular protein synthesis and tissue-specific physiological responses are influenced.

Activation of androgen receptors contributes to:

* Protein synthesis
* Nitrogen retention
* Muscle tissue maintenance
* Bone remodeling
* Red blood cell production
* Connective tissue physiology
* Endocrine regulation

PHARMACODYNAMICS

Boldenone Undecylenate affects multiple physiological systems through androgen receptor signaling.

SKELETAL MUSCLE SYSTEM

Boldenone contributes to normal muscle physiology through:

* Regulation of protein metabolism
* Support of muscle tissue maintenance
* Influence on nitrogen balance
* Regulation of muscle cell function

Boldenone interacts with androgen receptors, contributing to anabolic activity in androgen-responsive tissues.

SKELETAL SYSTEM

Boldenone contributes to skeletal physiology by influencing:

* Bone remodeling
* Osteoblast activity
* Skeletal maintenance
* Bone mineral metabolism

HEMATOLOGICAL SYSTEM

Boldenone influences erythropoiesis, the physiological process responsible for red blood cell production.

Physiological effects include:

* Regulation of erythropoietin activity
* Support of red blood cell formation
* Influence on oxygen transport capacity

CONNECTIVE TISSUE

Boldenone contributes to connective tissue physiology by influencing:

* Structural protein metabolism
* Connective tissue maintenance
* Tissue remodeling
* Collagen metabolism

REPRODUCTIVE SYSTEM

Boldenone interacts with androgen-sensitive tissues and contributes to:

* Hormonal regulation
* Maintenance of androgen-responsive tissues
* Endocrine signaling
* Reproductive physiology

PHARMACOKINETICS

Following intramuscular administration, Boldenone Undecylenate forms a long-lasting depot within muscle tissue.

The undecylenate ester undergoes gradual enzymatic hydrolysis, releasing active boldenone into systemic circulation.

Its long ester chain provides sustained hormone availability, prolonged plasma exposure, and an extended duration of biological activity compared with shorter ester formulations.

PHARMACOKINETIC PROFILE

Parameter	Description
Ester Type	**Long-Acting Boldenone Ester**
Absorption	**Slow release from intramuscular depot**
Release Pattern	**Sustained and prolonged release**
Half-Life	**Approximately 12–14 Days**
Duration of Activity	**Long-Acting**
Plasma Stability	**High**
Protein Binding	**High**
Metabolism	**Primarily hepatic**
Active Hormone	**Boldenone**
Elimination	**Urinary excretion of metabolites**

PHYSIOLOGICAL EFFECTS

Normal boldenone activity contributes to:

Muscle Function
* Protein synthesis
* Nitrogen retention
* Maintenance of lean body tissue
* Muscle physiology

Bone Health
* Bone remodeling
* Skeletal maintenance
* Bone metabolism

Connective Tissue
* Structural protein metabolism
* Connective tissue maintenance
* Tissue remodeling

Hematological Function
* Red blood cell production
* Oxygen transport support
* Normal erythropoiesis

General Physiology
* Protein metabolism
* Hormonal regulation
* Endocrine function

CLINICAL APPLICATIONS

Boldenone Undecylenate has primarily been investigated in veterinary medicine and experimental pharmacology.

Clinical evaluation in research settings may include:

* Medical history
* Physical examination
* Laboratory assessment
* Individual pharmacological evaluation

Investigational applications include:

* Veterinary anabolic therapy
* Protein metabolism research
* Endocrine pharmacology
* Androgen receptor research

SAFETY CONSIDERATIONS

Boldenone exposure requires individualized medical evaluation and regular monitoring.

Important considerations include:

* Cardiovascular health
* Blood parameters
* Endocrine function
* Liver and kidney function
* Lipid profile
* Individual physiological response

POTENTIAL ADVERSE EFFECTS

Possible adverse effects may include:

Endocrine Effects
* Suppression of endogenous testosterone production
* Hormonal imbalance
* Alterations in endocrine function

Dermatological Effects
* Acne
* Increased skin oil production
* Hair loss in genetically predisposed individuals

Cardiovascular Effects
* Changes in lipid profile
* Increased hematocrit
* Blood pressure alterations

Reproductive Effects
* Reduced fertility
* Suppression of spermatogenesis
* Hormonal suppression

CONTRAINDICATIONS

Condition	Reason
Prostate Cancer	**Potential androgen sensitivity**
Male Breast Cancer	**Hormone-sensitive condition**
Pregnancy	**Risk of fetal virilization**
Severe Cardiac, Hepatic or Renal Disease	**Requires specialist evaluation**
Known Hypersensitivity	**Risk of allergic reaction**

DRUG INTERACTIONS

Potential interactions may occur with:

Anticoagulants
Boldenone may influence anticoagulant response and require monitoring.

Antidiabetic Medications
Changes in glucose metabolism may alter therapeutic requirements.

Corticosteroids
Combined administration may influence fluid balance and metabolic parameters.

Other Hormonal Therapies
Combined hormonal therapy requires professional medical supervision.

LABORATORY MONITORING

Laboratory Test	Purpose
CBC	Assess blood parameters
Hematocrit	Monitor red blood cell concentration
Hemoglobin	Evaluate erythropoiesis
Liver Function Tests	Assess hepatic health
Kidney Function Tests	Evaluate renal function
Lipid Profile	Monitor cardiovascular risk markers
Total Testosterone	Evaluate endocrine status
Estradiol (E2)	Assess hormonal balance
PSA (When Appropriate)	Monitor prostate health

STORAGE & STABILITY

* Store according to official product labeling.
* Protect from excessive heat and direct sunlight.
* Do not freeze.
* Maintain original packaging integrity.
* Keep away from children.
* Inspect packaging before use.

PRODUCT AUTHENTICITY

Every genuine NEXON product should include appropriate quality verification features.

Authentication may include:

* Batch number tracking
* Manufacturing information
* Expiration date verification
* QR authentication system
* Authorized distribution verification

NEXON emphasizes transparency, traceability, and product quality control.

FREQUENTLY ASKED QUESTIONS

What is Boldenone Undecylenate?
Boldenone Undecylenate is a long-acting esterified form of boldenone designed to provide sustained hormone availability following intramuscular administration.

How is Boldenone Undecylenate different from Boldenone Acetate?
Boldenone Undecylenate provides slower absorption and a longer duration of activity, whereas Boldenone Acetate provides faster hormone availability and a shorter pharmacokinetic profile.

Does Boldenone Undecylenate convert to estrogen?
Yes. Boldenone may undergo limited aromatization through the aromatase enzyme, although generally at a lower rate than testosterone.

Why are boldenone esters used?
Esterification modifies the pharmacokinetic profile of boldenone by controlling hormone release and influencing the duration of biological activity.

Is Boldenone Undecylenate approved for human medical use?
Boldenone Undecylenate has historically been used primarily in veterinary medicine and is not approved for routine human therapeutic use in most countries.

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

*Kicman AT. Pharmacology of Anabolic Steroids.

* Basaria S. Androgen Abuse in Athletes: Detection and Consequences.

* Handelsman DJ. Androgen Physiology and Pharmacology.

* Shahidi NT. Chemistry, Biological Action and Clinical Applications of Anabolic-Androgenic Steroids.

* Llewellyn W. Anabolics.

* Evans NA. Current Concepts in Anabolic-Androgenic Steroids.

* Kochakian CD. Anabolic-Androgenic Steroids.

* Nieschlag E, Behre HM. Andrology: Male Reproductive Health and Dysfunction.

* Kicman AT, Gower DB. Anabolic Steroids in Sport and Exercise.

* Wilson JD. Androgen Physiology and Pharmacology.