

PRODUCT OVERVIEW

Specification	Details
Generic Name	S-23
Drug Class	Selective Androgen Receptor Modulator (SARM)
Active Ingredient	S-23
Administration Route	Oral
Dosage Form	Oral Compound
Composition	Non-Steroidal SARM
Aromatization	Does not undergo conventional aromatization
Clinical Status	Investigational; not approved as a therapeutic medication



INTRODUCTION

S-23 is a non-steroidal selective androgen receptor modulator (SARM) belonging to the arylpropionamide class. It was investigated for its ability to selectively activate androgen receptors and produce androgenic and anabolic effects in specific tissues.

Preclinical research has particularly focused on S-23 as a potential male hormonal contraceptive, with studies examining its effects on androgen-responsive tissues, reproductive hormones, spermatogenesis, lean mass, and bone mineral density. S-23 has not been established as an approved therapeutic medication.



HISTORY

S-23 was developed during research into selective androgen receptor modulators with the objective of producing potent androgen receptor activity while maintaining tissue-selective pharmacological characteristics. Preclinical studies subsequently investigated S-23 in male rats, where the compound demonstrated strong androgen receptor activity and produced suppression of luteinizing hormone and follicle-stimulating hormone. Research combining S-23 with estradiol demonstrated substantial suppression of spermatogenesis and reversible infertility in the animal model, leading investigators to identify S-23 as a potential candidate for hormonal male contraception. Subsequent analytical studies have focused on its metabolism and detection following oral administration, while no established therapeutic application in humans has been approved.



CHEMICAL STRUCTURE

S-23 is a non-steroidal arylpropionamide selective androgen receptor modulator.

Its chemical structure differs substantially from the steroid nucleus found in testosterone and conventional anabolic-androgenic steroids.

The compound was designed to interact with the androgen receptor with high affinity and produce receptor-mediated transcriptional activity.



CHEMICAL PROFILE

Parameter	Information
Primary Components	S-23
Hormone Classification	Selective Androgen Receptor Modulator
Administration	Oral
Dosage Form	Oral Compound
Development Code	Arylpropionamide SARM
Chemical Class	Non-Steroidal SARM
Aromatization	Does not undergo conventional aromatization



PHARMACOLOGY

S-23 produces its principal biological activity through interaction with the androgen receptor (AR). Preclinical research demonstrated high androgen receptor binding affinity and androgen receptor agonist activity.

Its activity has been investigated in androgen-responsive tissues including:

- Skeletal muscle
- Bone
- Prostate
- Reproductive tissues
- Other androgen-responsive tissues

The compound has attracted particular research interest because of its ability to suppress reproductive hormone signaling and spermatogenesis in animal models.



MECHANISM OF ACTION

The principal mechanism involves selective activation of the androgen receptor.

The general pathway includes:

- Oral absorption
- Systemic distribution
- Binding to androgen receptors
- Formation of receptor-ligand complexes
- Nuclear translocation
- Interaction with androgen-responsive elements
- Regulation of gene transcription
- Modulation of androgen-responsive cellular processes



PHARMACODYNAMICS

S-23 produces its biological activity primarily through androgen receptor signaling.



SKELETAL MUSCLE SYSTEM

Anabolic-androgenic steroids interact with androgen receptors in skeletal muscle and may influence:

- Protein metabolism
- Muscle tissue maintenance
- Nitrogen metabolism
- Muscle cell function

Androgen receptor signaling contributes to the regulation of normal skeletal muscle structure and function.



SKELETAL SYSTEM

Androgen receptor signaling contributes to skeletal physiology and may influence:

- Bone remodeling
- Skeletal maintenance
- Bone metabolism
- Structural integrity



CONNECTIVE TISSUE

Androgen receptor signaling may influence connective tissue physiology through:

- Structural protein metabolism
- Tissue maintenance
- Tissue remodeling
- Collagen metabolism



REPRODUCTIVE SYSTEM

Androgenic compounds interact with androgen-sensitive tissues and may influence:

- Hormonal regulation
- Endocrine signaling
- Reproductive physiology
- Androgen-responsive tissues



PHARMACOKINETICS

PHYSIOLOGICAL EFFECTS

S-23 produces its physiological activity primarily through androgen receptor signaling and has been investigated for its effects on skeletal muscle, bone, reproductive tissues, and endocrine function. Preclinical studies have demonstrated anabolic activity associated with increased lean mass and bone mineral density, while also showing strong suppression of reproductive hormone signaling. In male animal models, S-23 reduced LH and FSH levels and substantially suppressed spermatogenesis, producing reversible infertility under the experimental conditions studied.

S-23 is an orally active compound and undergoes systemic exposure following oral administration. The reproductive and endocrine effects are particularly important to the physiological profile of S-23. Unlike compounds available for clinical use, S-23 has not been established as a potential male hormonal contraceptive. Research combining S-23 with estradiol demonstrated substantial suppression of spermatogenesis and reversible infertility in the animal model, leading investigators to identify S-23 as a potential candidate for hormonal male contraception. Subsequent analytical studies have focused on its metabolism and detection following oral administration, while no established therapeutic application in humans has been approved.



CLINICAL APPLICATIONS

S-23 has not been established as an approved clinical medication. Its principal scientific application has been preclinical investigation as a potential male hormonal contraceptive.

Animal research demonstrated that S-23 can suppress LH and FSH, reduce spermatogenesis, and produce reversible infertility under experimental conditions. The same studies reported effects on lean mass and bone mineral density, supporting further investigation of its androgen receptor activity. However, these findings come primarily from animal research and should not be interpreted as evidence of an approved contraceptive treatment for humans.



SAFETY CONSIDERATIONS

The use of anabolic-androgenic steroids may require consideration of cardiovascular, hematological, hepatic, endocrine, metabolic, and reproductive health.

Important safety considerations include:

- Cardiovascular health
- Blood pressure
- Hematological parameters
- Lipid profile
- Liver function
- Endocrine function
- Reproductive function
- Prostate health

The overall safety profile depends on the specific compound, formulation, concentration, duration of exposure, individual response, and patient characteristics. Appropriate medical evaluation and regular monitoring should be considered when clinically indicated.



POTENTIAL ADVERSE EFFECTS

Potential adverse effects associated with anabolic-androgenic steroid exposure may involve endocrine, cardiovascular, hematological, hepatic, dermatological, reproductive, and metabolic systems.

Endocrine Effects

- Suppression of endogenous hormone production
- Alterations in hormonal balance
- Changes in reproductive hormone signaling
- Potential suppression of spermatogenesis

Cardiovascular Effects

- Changes in lipid profile
- Possible increases in blood pressure
- Potential cardiovascular risk

Hematological Effects

- Changes in hematocrit
- Changes in hemoglobin
- Possible increase in erythropoietic activity

Dermatological Effects

- Acne
- Increased sebaceous activity
- Androgen-related hair loss in genetically predisposed individuals

Reproductive Effects

- Changes in reproductive function
- Potential reduction in fertility
- Alterations in reproductive hormone regulation

Hepatic & Metabolic Effects

- Changes in liver function parameters
- Alterations in metabolic markers
- Changes in glucose and lipid metabolism

The occurrence and severity of adverse effects vary according to the specific compound, formulation, exposure, duration of use, individual response, and patient characteristics.



CONTRAINDICATIONS

Condition	Reason
Severe hepatic disease	Increased hepatic risk
Known hormone-sensitive cancers	Androgen receptor sensitivity
Pregnancy	Potential risk of fetal development
Known hypersensitivity	Allergic reaction
Significant cardiovascular disease	Potential cardiovascular effects



DRUG INTERACTIONS

A comprehensive interaction profile may not be established for every anabolic-androgenic steroid or formulation.

Potential interactions or clinical considerations may exist with:

- Anticoagulants
- Antidiabetic medications
- Hepatotoxic medications
- Other anabolic-androgenic steroids
- Other hormonal therapies
- Drugs affecting lipid metabolism

The clinical significance of potential interactions depends on the specific compound, formulation, dosage, duration of exposure, concomitant medications, and individual patient characteristics. Appropriate medical evaluation should be considered when multiple medications or hormonal therapies are used concurrently.

LABORATORY MONITORING

Laboratory Test	Purpose
CBC	Monitor hematological parameters
ALT / AST	Liver function
Bilirubin	Hepatic assessment
Lipid Profile	Cardiovascular risk assessment
Blood Pressure	Cardiovascular monitoring
Total Testosterone	Assess androgen status
LH / FSH	Assess endocrine suppression

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 S-23?
S-23 is a non-steroidal selective androgen receptor modulator belonging to the arylpropionamide class.

Is S-23 a steroid?
No. S-23 is a non-steroidal SARM and does not possess the conventional steroid structure of testosterone.

Is S-23 oral or injectable?
S-23 is an orally administered compound.

Does S-23 aromatize?
S-23 does not undergo conventional aromatization to estrogen.

What was S-23 primarily investigated for?
S-23 was primarily investigated in preclinical research as a potential male hormonal contraceptive.

Can S-23 affect fertility?
Yes. In animal studies, S-23 suppressed LH and FSH and significantly reduced spermatogenesis. The contraceptive effect was reported to be reversible after treatment cessation in the studied animals.

Is S-23 approved for human use?
No. S-23 is an investigational compound and is not an approved therapeutic medication.

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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