CJC-1295

PRODUCT OVERVIEW

Specification	Details
Generic Name	CJC-1295
Drug Class	Growth Hormone–Releasing Hormone (GHRH) Analog
Active Ingredient	CJC-1295
Administration Route	Subcutaneous Injection
Dosage Form	Injectable Peptide
Chemical Class	Synthetic Peptide / GHRH Analog
Primary Target	Growth Hormone–Releasing Hormone Receptor (GHRHR)
Clinical Status	Investigational; not approved as a therapeutic medication

INTRODUCTION

CJC-1295 is a synthetic peptide analog related to Growth Hormone–Releasing Hormone (GHRH). It was developed to stimulate endogenous growth hormone secretion by acting on the GHRH receptor rather than directly supplying growth hormone.

CJC-1295 is commonly discussed in two forms: CJC-1295 with Drug Affinity Complex (DAC) and formulations without DAC. The DAC modification was designed to extend the peptide's duration of action by increasing its association with serum proteins.

Its principal research interest involves the GH/IGF-1 axis, growth hormone secretion, and endocrine regulation.

HISTORY

CJC-1295 was developed as a modified GHRH analog with the objective of producing more prolonged stimulation of growth hormone secretion than native GHRH. Research into the compound investigated its ability to increase circulating growth hormone and IGF-1 concentrations following administration.

Clinical research demonstrated prolonged elevation of GH and IGF-1 following administration of the long-acting CJC-1295-DAC form. However, CJC-1295 did not progress to an approved therapeutic medicine and remains an investigational peptide.

CHEMICAL STRUCTURE

CJC-1295 is a modified synthetic peptide derived from the structure of GHRH.

The modifications are intended to:

- Improve metabolic stability
- Extend systemic exposure
- Increase interaction with circulating proteins
- Prolong stimulation of the GH/IGF-1 axis

The DAC-containing form incorporates a Drug Affinity Complex that contributes to its extended pharmacological profile.

CHEMICAL PROFILE

Parameter	Information
Primary Components	CJC-1295
Hormone Classification	GHRH Analog
Administration	Subcutaneous Injection
Dosage Form	Injectable Peptide
Molecular Type	Synthetic Peptide
Primary Receptor Target	GHRH Receptor

PHARMACOLOGY

CJC-1295 acts as an analog of growth hormone–releasing hormone, stimulating the GHRH receptor located primarily on somatotroph cells of the anterior pituitary gland.

Activation of this receptor promotes endogenous growth hormone secretion. Increased GH can subsequently stimulate production of IGF-1, particularly in the liver and other tissues.

The resulting pathway can be summarized as:

CJC-1295 → GHRH Receptor → Growth Hormone → IGF-1

MECHANISM OF ACTION

The general mechanism involves:

- Subcutaneous administration
- Systemic peptide exposure
- Binding to GHRH receptors
- Activation of pituitary signaling
- Increased endogenous GH secretion
- Increased IGF-1 production
- Modulation of growth hormone–dependent metabolic processes

PHARMACODYNAMICS

CJC-1295 primarily influences:

- Growth hormone secretion
- IGF-1 production
- GH/IGF-1 axis activity
- Pituitary endocrine 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

The pharmacokinetic characteristics of CJC-1295 depend substantially on the molecular form being studied.

The CJC-1295-DAC form was specifically designed to produce prolonged systemic exposure. Clinical research demonstrated a substantially extended pharmacological effect compared with native GHRH, with sustained increases in circulating GH and IGF-1.

The pharmacokinetic profile of non-DAC CJC-1295 is considerably shorter and should not be treated as interchangeable with the DAC form.

PHYSIOLOGICAL EFFECTS

CJC-1295 primarily influences physiology by stimulating endogenous growth hormone secretion through activation of the GHRH receptor. Increased GH secretion can subsequently elevate IGF-1 concentrations, producing downstream effects on protein metabolism, lipid utilization, connective-tissue turnover, bone physiology, and glucose regulation. This mechanism differs from direct administration of recombinant growth hormone because CJC-1295 acts upstream of GH production at the pituitary level.

The magnitude and duration of these effects depend on the molecular form, particularly whether the peptide incorporates the Drug Affinity Complex. Clinical research involving CJC-1295-DAC has demonstrated prolonged increases in GH and IGF-1 concentrations, but these endocrine changes should not automatically be interpreted as established improvements in muscle growth, athletic performance, or body composition.

CLINICAL APPLICATIONS

CJC-1295 has been investigated primarily as a potential means of stimulating the GH/IGF-1 axis. Research has examined its effects on growth hormone secretion and IGF-1 exposure, with potential relevance to conditions associated with inadequate GH activity.

However, CJC-1295 itself does not have an established approved therapeutic indication. Its clinical development has remained investigational, and the evidence available for medical treatment is substantially more limited than that for approved recombinant growth hormone products.

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
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 CJC-1295?
CJC-1295 is a synthetic analog of growth hormone–releasing hormone (GHRH) that stimulates endogenous GH secretion.

Is CJC-1295 a steroid?
No. It is a synthetic peptide.

Is CJC-1295 a SARM?
No. Its primary target is the GHRH receptor, not the androgen receptor.

Is CJC-1295 oral or injectable?
CJC-1295 is encountered as an injectable peptide, generally administered subcutaneously in research and clinical-study settings.

What is the difference between CJC-1295-DAC and non-DAC CJC-1295?
The DAC form contains a Drug Affinity Complex designed to extend systemic exposure and prolong the pharmacological effect. The non-DAC form has a substantially shorter duration.

Does CJC-1295 directly contain growth hormone?
No. CJC-1295 does not supply recombinant GH directly. It stimulates the body's own GH secretion through the GHRH receptor.

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.

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