

BMS-564929 Overview

Why We Need It

BMS-564929 is a potent, highly selective androgen receptor modulator developed by Bristol-Myers Squibb for the treatment of age-related muscle loss (sarcopenia) and androgen deficiency. It is designed to provide anabolic benefits to muscle and bone while avoiding androgenic side effects such as prostate enlargement. BMS-564929 remains investigational, with no FDA-approved medical uses.

Mechanism of Action

BMS-564929 works by selectively binding to androgen receptors (AR) with high affinity, particularly in muscle and bone tissue.

Its tissue selectivity allows it to:

- Stimulate anabolic signaling to enhance muscle protein synthesis
- Promote bone mineralization and density
- Minimize activation of androgen receptors in the prostate and reproductive tissues, reducing unwanted side effects
- Preclinical studies have shown over 20-fold selectivity for muscle compared to the prostate, making it one of the most tissue-selective SARMs studied to date.

Functions and Benefits

- Increases lean muscle mass in aging or androgen-deficient subjects
- Supports bone health and skeletal integrity
- Minimizes androgenic side effects like prostate enlargement or hair loss
- Provides clean muscle gains without excessive water retention
- May improve physical function in age-related muscle wasting models
- Low suppression risk compared to traditional anabolic steroids

Medical-Grade Dosing

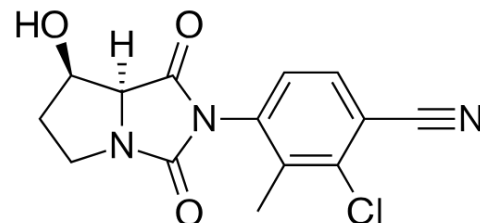
Dose: 3–15 mg per day (based on preclinical data)

Frequency: Once daily (half-life ~12–18 hours)

Cycle Duration: 4–8 weeks (experimental)

Post-Cycle Therapy (PCT): Mild to moderate; Clomid or Nolvadex if suppression occurs

Liver Support: Not typically required based on current data



Pharmacology and Bioavailability

- High oral bioavailability with once-daily dosing potential
- Highly selective for muscle and bone androgen receptors
- Minimal liver toxicity in preclinical models
- Chemically synthesized for research-use only

Administration Guidelines

- Take once daily, with or without food
- Monitor hormone levels pre- and post-cycle in experimental settings
- Consider PCT if symptoms of hormonal suppression are observed
- Monitor prostate health markers if extended use is planned

Conclusion

BMS-564929 is a highly selective investigational SARM designed to maximize muscle and bone anabolic effects while minimizing androgenic side effects. Its superior tissue selectivity and long half-life make it a promising candidate for research into age-related muscle loss and androgen deficiency. Experimental use should include hormone monitoring, proper cycle management, and professional oversight.