



## Testogel<sup>®</sup>

### Background

#### What is Testogel<sup>®</sup>?

Testogel<sup>®</sup> is a hydro-alcoholic testosterone gel, indicated for the treatment of male hypogonadism. Hypogonadism is a condition in which men have low levels of testosterone (serum total testosterone levels below 8 nmol/L (231 ng/dL) or 12 nmol/L (246 ng/dL), resp.)<sup>1</sup> and typical symptoms of testosterone deficiency syndrome. Low testosterone levels are associated with erectile dysfunction (ED) and other serious health conditions.<sup>2</sup>

Testogel<sup>®</sup> is applied daily to clean, dry skin on the shoulders, upper arms and/or abdomen.

#### Pharmacological Properties

One 5 g sachet of Testogel<sup>®</sup> contains 50 mg of testosterone (1%). Around 10% of the testosterone contained in the gel is bio-available, resulting in approximately 5mg of testosterone being delivered to the bloodstream per sachet applied.

#### Efficacy

Testogel<sup>®</sup> is absorbed quickly by the skin and a single application of Testogel<sup>®</sup> produces constant serum testosterone levels within the normal range for a duration of 24 hours. A single application of Testogel<sup>®</sup> restores normal testosterone plasma levels resulting in the improvement of hypogonadal symptoms, such as:

- Diminished sexual desire and erection quality/frequency
- Changes in mood and decreased cognitive function
- Sleep disturbances
- Decreased lean body mass and muscle volume/strength
- Increased visceral fat



- Decreased body hair and skin alterations
- Decreased bone and mineral density<sup>3</sup>

Testogel<sup>®</sup> improves sexual health-related quality of life and body composition (increases in lean body mass, decreases in fat mass) in men who have late-onset hypogonadism (LOH).<sup>4</sup>

### **Safety and Tolerability**

In a clinical study, no differences in discontinuation rates due to adverse events were found between placebo and Testogel<sup>®</sup> (6.7% placebo vs. 4.9% Testogel<sup>®</sup>) nor were there any differences in experiences of adverse events (4.5% placebo vs. 4.9% Testogel<sup>®</sup>). Prostate safety, liver function, serum lipids, haemoglobin and haematocrit were monitored in the same study and no unexpected safety findings were found.<sup>5</sup>

### **REFERENCES**

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<sup>1</sup> Wang C, Nieschlag E, Swerdloff R, Behre HM, Hellstrom WJ, Gooren LJ, Kaufman JM, Legros JJ, Lunenfeld B, Morales A, Morley JE, Schulman C, Thompson IM, Weidner W, Wu FCW. Investigation, treatment, and monitoring of late-onset hypogonadism in males: ISA, ISSAM, EAU, EAA and ASA Recommendations. *Eur Urol.* 2009 Mar-Apr; 55:121-130

<sup>2</sup> MM Miner, R Sadovsky. Evolving issues in male hypogonadism: evaluation, management, and related comorbidities. *Cleve Clin J Med.* 2007;74(3):S38-46

<sup>3</sup> Nieschlag E, Swerdloff R, Behre HM, Gooren LJ, Kaufman JM, Legros JJ, Lunenfeld B, Morley JE, Schulman C, Wang C, Weidner W, Wu FC. Investigation, treatment, and monitoring of late-onset hypogonadism in males: ISA, ISSAM, and EAU recommendations. *J Androl.* 2006;27(2):135-7

<sup>4</sup> Bouloux P-M, Kelly J, F. Hiemeyer. Late-onset hypogonadism in the aging male: effects of treatment with a 1% testosterone gel (Testogel) on body composition and serum lipids. Presented at the 22nd Annual European Association of Urology Congress, Berlin, March 2007

<sup>5</sup> Bouloux P-M, Kelly J, F. Hiemeyer. Late-onset hypogonadism in the aging male: effects of treatment with a 1% testosterone gel (Testogel) on body composition and serum lipids. Presented at the 22nd Annual European Association of Urology Congress, Berlin, March 2007