# Implantation techniques for TESTOPEL®1,2

Prior to initiating TESTOPEL®, confirm the diagnosis of hypogonadism in accordance with Prescribing Information.

# 1. PRFP











- A. Open the package containing the items needed to implant TESTOPEL<sup>®</sup> pellets. An example of such a package is a TestoPak™. Place the contents on a sterile surface and prepare the sterile trocar.
- B. Using sterile technique, draw up local anesthetic (eg, lidocaine HCl 2% with epinephrine or lidocaine HCl 2%).
- C. Break open the glass ampoule for each individual TESTOPEL® pellet, and gently drop the prescribed number of pellets into the sterilized cup or tray.
- **D.** Position patient in lateral jackknife or prone position. The implantation area is the upper outer quadrant of the hip.
- E. Cleanse the area with Betadine® swabs.

Note: The exterior of the local anesthetic (eg, lidocaine HCl 2% with epinephrine or lidocaine HCl 2%) vial is NOT sterile.

### 2. NUMB & INCISE









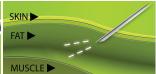
- A. Place fenestrated drape over the patient, revealing the implantation area. Mark anticipated trocar tract.
- B. Inject local anesthetic (eg, lidocaine HCI 2% with epinephrine or lidocaine HCI 2%) to begin hydrodissection in subcutaneous fat layer. Complete hydrodissection of subcutaneous fat layer, and be sure to numb entire length of trocar tract.
- C. Before removing the needle, create a skin wheal for scalpel insertion.
- D. Recleanse the area. Insert the scalpel straight down and to the plastic tip.

### 3. INSERT











- A. Insert trocar with sharp-ended stylet. Enter downward at a 45° angle and into the subcutaneous fat layer.
- **B.** Once you have reached the subcutaneous tissue, flatten out the trocar, stopping to leave only the trocar well exposed.
- C. Replace the sharp-ended stylet with the blunt stylet. Using sterile gloved fingers or forceps, load the pellets into the trocar well.
- D. For "V" technique, advance pellets into the tract with stylet while withdrawing the trocar. For the stacking method, place pellets at the distal end of the tract by advancing the stylet without withdrawing the trocar.
- E. If using the <u>stacking method</u>, stack the pellets by moving the trocar up and down while advancing the stylet without withdrawing the trocar.
- F. Avoid having the final pellet too close to the initial point of insertion. Withdraw the trocar.
- **G.** If more than one tract is needed, remove the blunt stylet and reintroduce sharp stylet for new tract formation.

# 4. POST-CARE







- A. Once completed, cleanse area with alcohol wipes.
- B. Seal the incision using Steri-Strips® for closure. Once sealed, cover the area with a 2"x2" gauze, folded in half and secured by Tegaderm®.
- C. Apply pressure/ice pack to minimize bruising. Please counsel your patients with the TESTOPEL® Post-Insertion Tips and Considerations Guide, and go over with patients the potential side effects associated with TESTOPEL®.

Please see next page for Important Safety Information. Please see full <u>Prescribing Information</u>.

# **Important Safety Information**

# INDICATION MALES

Androgens are indicated for replacement therapy in conditions associated with a deficiency or absence of endogenous testosterone.

- a. Primary hypogonadism (congenital or acquired) testicular failure due to cryptorchidism, bilateral torsion, orchitis, vanishing testes syndrome; or orchiectomy
- b. Hypogonadotropic hypogonadism (congenital or acquired) gonadotropic LHRH deficiency, or pituitary - hypothalamic injury from tumors, trauma, or radiation

Safety and efficacy of TESTOPEL® in men with "age-related hypogonadism" have not been established.

# IMPORTANT SAFETY INFORMATION ABOUT TESTOPEL® CONTRAINDICATIONS

- Androgens are contraindicated in men with carcinomas of the breast or with known or suspected carcinomas of the prostate
- If administered to pregnant women, androgens cause virilization of the external genitalia of the female fetus. If the patient becomes pregnant while taking these drugs, she should be apprised of the potential hazard to the fetus

#### **WARNINGS**

- In patients with breast cancer, androgen therapy may cause hypercalcemia by stimulating osteolysis. In this case, the drug should be discontinued
- Prolonged use of high doses of androgens has been associated with the development of peliosis hepatis (which can be a lifethreatening or fatal complication) and hepatic neoplasms including hepatocellular carcinoma
- Men treated with androgens may be at an increased risk for the development of prostatic hypertrophy and prostatic carcinoma
- There have been postmarketing reports of venous thromboembolic events (VTE), including deep vein thrombosis (DVT) and pulmonary embolism (PE), in patients using testosterone products, such as TESTOPEL. Evaluate patients who report symptoms of DVT or PE. If a VTE is suspected, discontinue treatment with TESTOPEL and initiate appropriate workup and management
- Some postmarketing studies have shown an increased risk of major adverse cardiovascular events (MACE) with use of testosterone replacement therapy. Patients should be informed of this possible risk when deciding to use or to continue to use TESTOPEL
- Testosterone can increase cardiovascular (CV) risk over time. Monitor blood pressure periodically in men using testosterone products, especially in men with hypertension. Testosterone products are not recommended for use in patients with uncontrolled hypertension.
- Testosterone has been subject to abuse, typically at doses higher than recommended for the approved indication and in combination with other anabolic steroids. Anabolic androgenic steroid abuse can lead to serious cardiovascular and psychiatric adverse reactions. If testosterone abuse is suspected, check serum testosterone concentrations to ensure that they are within therapeutic range. However, testosterone levels may be in the normal or subnormal range in men abusing synthetic testosterone derivatives. Counsel patients concerning the serious adverse reactions associated with abuse of testosterone and anabolic androgenic steroids. Conversely, consider the possibility of testosterone and androgenic steroid abuse in suspected patients who present with serious cardiovascular or psychiatric adverse events
- Edema with or without congestive heart failure may be a serious complication in patients with preexisting cardiac, renal, or hepatic disease. In addition to discontinuation of the drug, diuretic therapy may be required

- Gynecomastia frequently develops in patients and occasionally persists in patients being treated for hypogonadism
- Postmarketing cases associate TESTOPEL insertion with implant site infection (cellulitis and abscess) and/or pellet extrusion. Infection and/ or extrusion can occur at any time and may require further treatment
- This drug has not been shown to be safe and effective for the enhancement of athletic performance. Because of the potential risk for serious adverse health effects, this drug should not be used for such purpose

#### **PRECAUTIONS**

- There is less flexibility for dosage adjustment compared to oral, intramuscular, or aqueous suspension. Surgical removal may be required if testosterone therapy is discontinued
- Patients receiving oral anticoagulant therapy require close monitoring, especially when androgens are started or stopped
- In diabetic patients the metabolic effects of androgens may decrease blood glucose and insulin requirements

#### **ADVERSE REACTIONS**

- Side effects reported with the use of TESTOPEL include: excessive frequency and duration of penile erections, hirsutism, oligospermia at high doses, nausea, cholestatic jaundice, rare hepatic neoplasms, increased serum cholesterol, acne, acceleration of bone maturation without compensatory gain in linear growth in children, male pattern baldness, alterations in liver function tests, suppression of clotting factors, bleeding in patients on concomitant anticoagulation therapy, polycythemia, fluid and electrolyte disturbances, increased or decreased libido, headache, anxiety, depression, generalized paresthesia, edema, and/or prostate enlargement accompanied by difficulty urinating
- TESTOPEL insertion may cause pain at the site of subcutaneous implantation of pellets and is rarely associated with anaphylactoid reactions

### **DRUG ABUSE AND DEPENDENCE**

- TESTOPEL contains testosterone, a Schedule III controlled substance
- Abuse and misuse of testosterone are seen in male and female adults and adolescents. Testosterone, often in combination with other anabolic androgenic steroids, may be abused by athletes and bodybuilders
- Serious adverse reactions have been reported in individuals who abuse anabolic androgenic steroids, and include cardiac arrest, myocardial infarction, hypertrophic cardiomyopathy, congestive heart failure, cerebrovascular accident, hepatotoxicity, and serious psychiatric manifestations, including major depression, mania, paranoia, psychosis, delusions, hallucinations, hostility, and aggression
- The following adverse reactions have been reported in men: transient ischemic attacks, convulsions, hypomania, irritability, dyslipidemia, testicular atrophy, subfertility, and infertility
- The following adverse reactions have been reported in women: hirsutism, virilization, deepening of voice, clitoral enlargement, breast atrophy, male-pattern baldness, and menstrual irregularities
- The following adverse reactions have been reported in male and female adolescents: premature closure of bony epiphyses with termination of growth, and precocious puberty
- Withdrawal symptoms can be experienced upon abrupt discontinuation in patients with addiction. Withdrawal symptoms include depressed mood, major depression, fatigue, craving, restlessness, irritability, anorexia, insomnia, decreased libido, and hypogonadotropic hypogonadism. Drug dependence in individuals using approved doses for approved indications have not been documented

### Please see full Prescribing Information.

References: 1. Cavender RK, Fairall M. Subcutaneous testosterone pellet implant (TESTOPEL®) therapy for men with testosterone deficiency syndrome: a single-site retrospective safety analysis. *J Sex Med*. 2009;6(11):3177-3192. 2. Conners W, Flinn K, Morgentaler A. Outcomes with the "V" implantation technique vs. standard technique for testosterone pellet therapy. *J Sex Med*. 2011;8:3465-3470.



