

BIO⁷ PHARMCOR

ADVANCING MEN'S HEALTH

ERECTILE DYSFUNCTION



Overview

Erectile dysfunction (ED) is defined as the inability to attain and maintain an erection sufficient to permit satisfactory sexual intercourse.



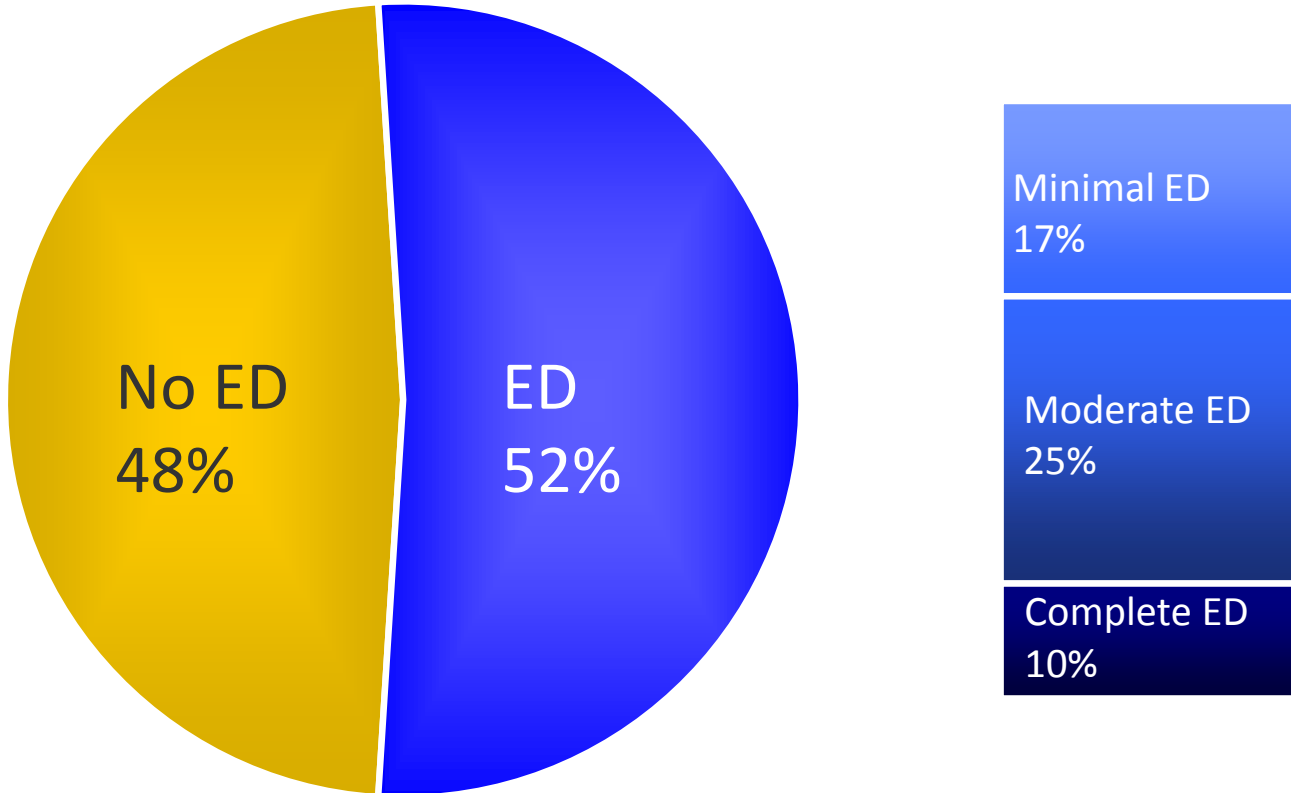
Overview

40% of men over the age of 40 ("40 over 40" rule) have ED.

As a man gets older, ED is more common than having normal erectile function. In fact, after age 50-60, more men have ED than optimal (normal) erections.



MASSACHUSETTS MALE AGING STUDY: KEY PREVALENCE STUDY OF ED



Minimal ED, “usually able to get or keep an erection.”

Moderate ED, “sometimes able to get and maintain an erection.”

Complete ED, “unable to get and keep an erection.”



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Source Material Feldman HA et al. *J Urol.* 1994;151:54-61.



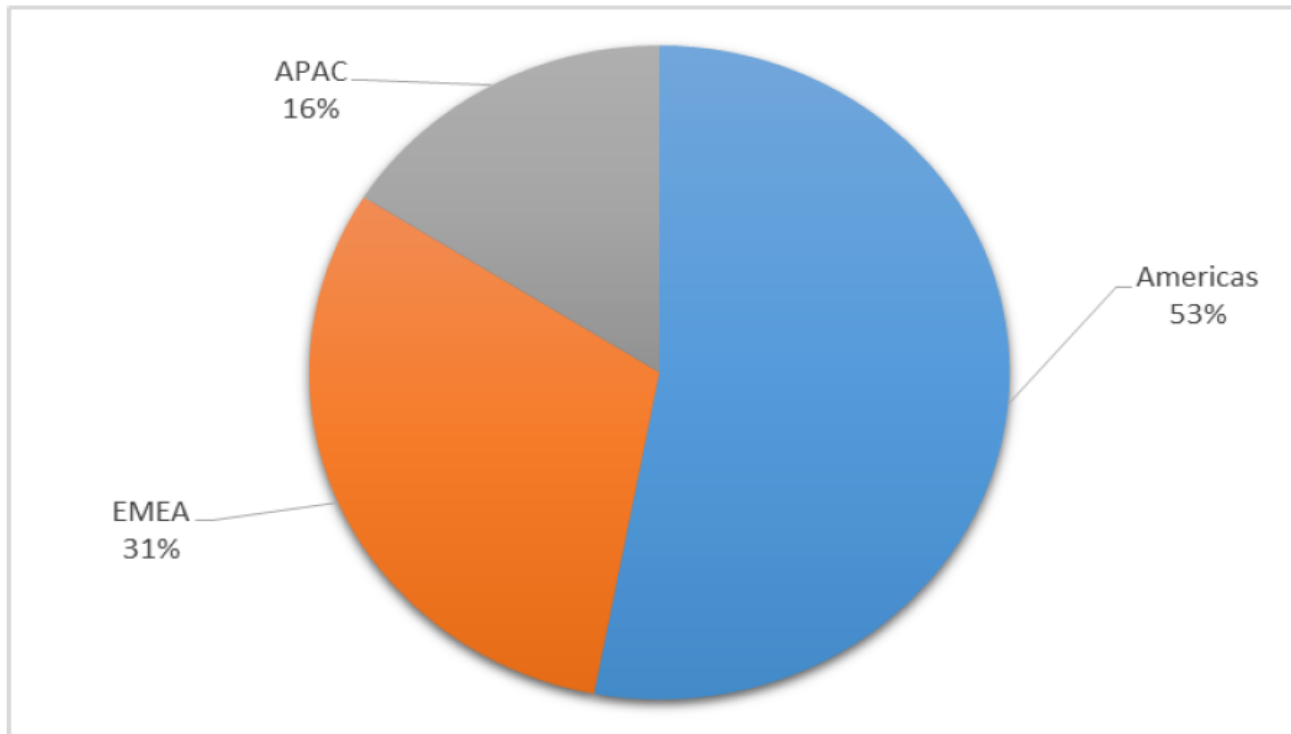
Overview

30 million men in the United States are estimated to have varying degrees of ED, with similar numbers in the EU.

Fewer men in the EU obtain treatment compared to the Americas; cost of medications is the main barrier to care.



Exhibit 9: Global Erectile Dysfunction Drugs Market by Geographical Segmentation
2013



Source: TechNavio Analysis



Causes of Erectile Dysfunction

Some common causes of ED are diabetes, cardiovascular disease, hypertension, abnormal cholesterol, smoking, obesity, lack of physical fitness and exercise, psychological issues, overuse of alcohol and the use of medications for other diseases (side-effect of medications such as blood pressure pills and anti-depressants).



Impact of Erectile Dysfunction

ED is a highly prevalent condition, which affects the physical and psychosocial (psychological) well-being and quality of life for thousands of men, their partners, and families around the world.

ED leads to stress, anxiety and self-confidence issues, in addition to the physical inability to perform sexually.

It is not surprising that the global market for ED medications was over \$4.1 billion USD in 2013.

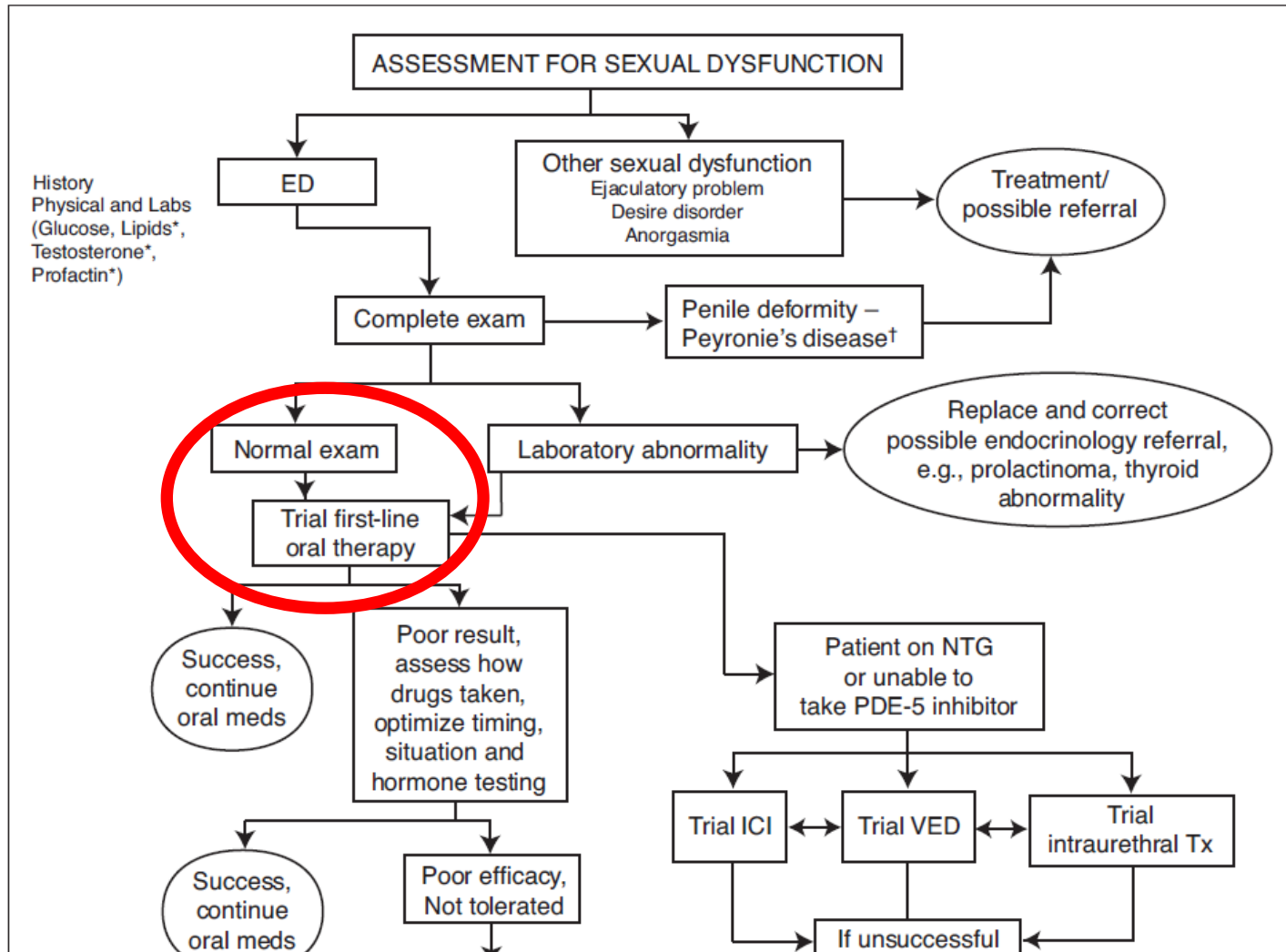


Treatment of Erectile Dysfunction

The treatment of ED in general was revolutionized by the introduction of the PDE5 inhibitor (PDE5I) class of medications. The first of these was sildenafil (Viagra[®]), followed by vardenafil (Levitra[®]/Staxyn[®]) and tadalafil (Cialis[®]). In April 2012 a fourth PDE5I, avanafil (Stendra[®])*, received FDA approval.

ED treatment is successful using pills (oral therapy) for the majority of men regardless of the underlying cause of ED.

Treatment of Erectile Dysfunction



Treatment of Erectile Dysfunction

The majority of men will have an excellent treatment response to PDE5Is. They will not require more invasive treatments.

Second-line treatments for ED include intracavernous injections (needle delivery of medication into the penis), vacuum erection device, or intraurethral alprostadil (a small pellet inserted into the opening of the urinary passage).

Third-line treatment includes surgical insertion of an internal penile prosthesis (pump).



Summary

Erectile dysfunction is common, occurs in more than half of men after age 50, and significantly impacts quality of life.

Safe, effective oral drugs are available. The cost of these medications is the primary barrier for patient care.

Opportunities exist for Biopharmcor to develop new generic medications to successfully treat men with ED.



Key Aspects of Erectile Dysfunction

Point 1: ED rates are increasing globally.

Point 2: Safe and effective oral treatments are available.

Point 3: First-line treatment for EAU, AUA and CUA guidelines are PDE5Is (pills).

Point 4: Cost is the main barrier to successful ED treatment. Development of generic medications offers a safe and effective option.



Further Information

1. Please refer to the FAQ sections for Men's Health and Erectile Dysfunction on the Biopharmcor website.
2. European Association of Urology at <http://patients.uroweb.org>
3. American Urological Association patient care website at <http://www.urologyhealth.org/>
4. 2015 Canadian Urological Association Guidelines for the Treatment of Erectile Dysfunction at:
http://www.cua.org/themes/web/assets/files/guidelines/en/erectile_dysfunction_feb_2015.pdf.