

SIA - MERS

What's up?

il maschio tra informazione, prevenzione e benessere

Ancona, 1 Ottobre 2016

# **vecchi farmaci e nuove garanzie di efficacia, nuovi prospetti terapeutici nella D.E.**

**Antonio Granata**

U.O. Endocrinologia

Responsabile Modulo di Andrologia Clinica  
Baggiovara (MO)



## Aumento libido

**Pramipexolo §**  
**Ropinirolo §**  
**Carbidopa §**  
**Levodopa §**

## Erezione

**Alprostadil**  
**- iniettivo**  
**- trans-uretrale**

## Erezione facilitata

**i-PDE5**

## Aumento libido

ed

## Erezione facilitata

**testosterone**  
**yohimbina\***  
**maca\*\*\***

**( apomorfina )**

\* Peak et al. Expert Opin Emerg Drugs. 20:263-75,**2015**

\*\*\* Zenico et al. Andrologia. 4:95-9,**2009**

§ Oei et al. Neuropsychopharmacology. 37:1729-37,**2012**

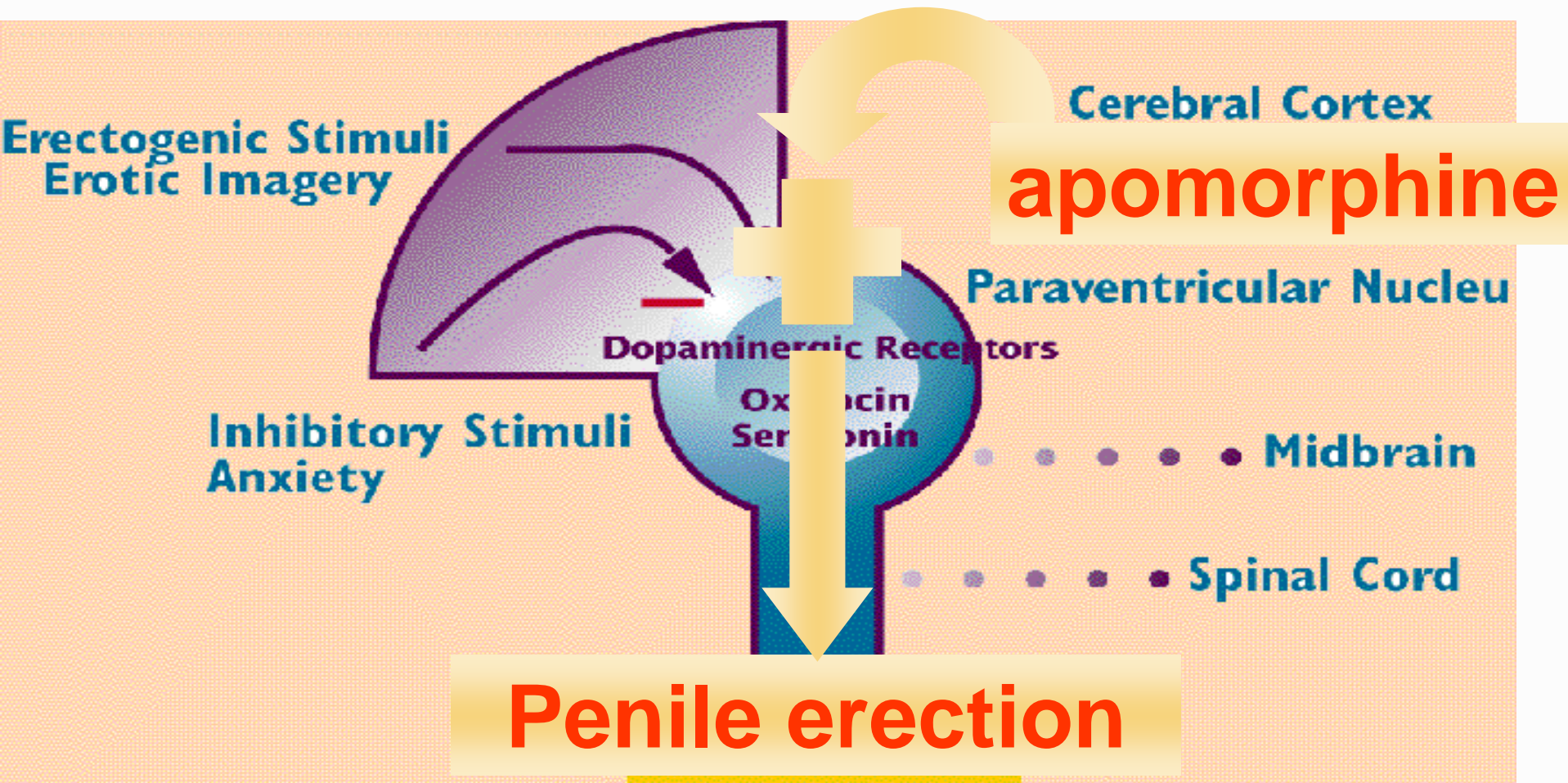
\* Porst et al. J Sex Med. 10:130-71,**2013**

§ Lim et al. Parkinsonism Relat Disord. 17:761-4,**2011**

§ Bostwick et al. Mayo Clin Proc. 84:310-6,**2009**

2001

# APOMORFINA meccanismo d'azione



## Testosterone e DE

### correlazione mutata negli anni

**1946** WERNER. The male climacteric. J Am Med Assoc.  
ipotestosteronemia = DE

**1982** Davidson et al. Hormonal replacement and sexuality in men.  
Clin Endocr Metab. ipotestosteronemia = possibile DE

**2006** Zitzmann et al. Association of specific symptoms and  
metabolic risks with serum testosterone in older men.  
JCEM. ipotestost. = sempre deficit Libido

**DONNA (2006-2016)**

Testost cerotti 8.4 mg/3-4 giorni = assorbimento 300 mcg/die



## Aumento libido

**Pramipexolo §**  
**Ropinirolo §**  
**Carbidopa §**  
**Levodopa §**

## Erezione

**Alprostadil**  
**- iniettivo**  
**- trans-uretrale**

## Erezione facilitata

**i-PDE5**

## Aumento libido

ed

## Erezione facilitata

**testosterone**  
**yohimbina\***  
**maca\*\*\***

**( apomorfina )**

\* Peak et al. Expert Opin Emerg Drugs. 20:263-75,**2015**

\*\*\* Zenico et al. Andrologia. 4:95-9,**2009**

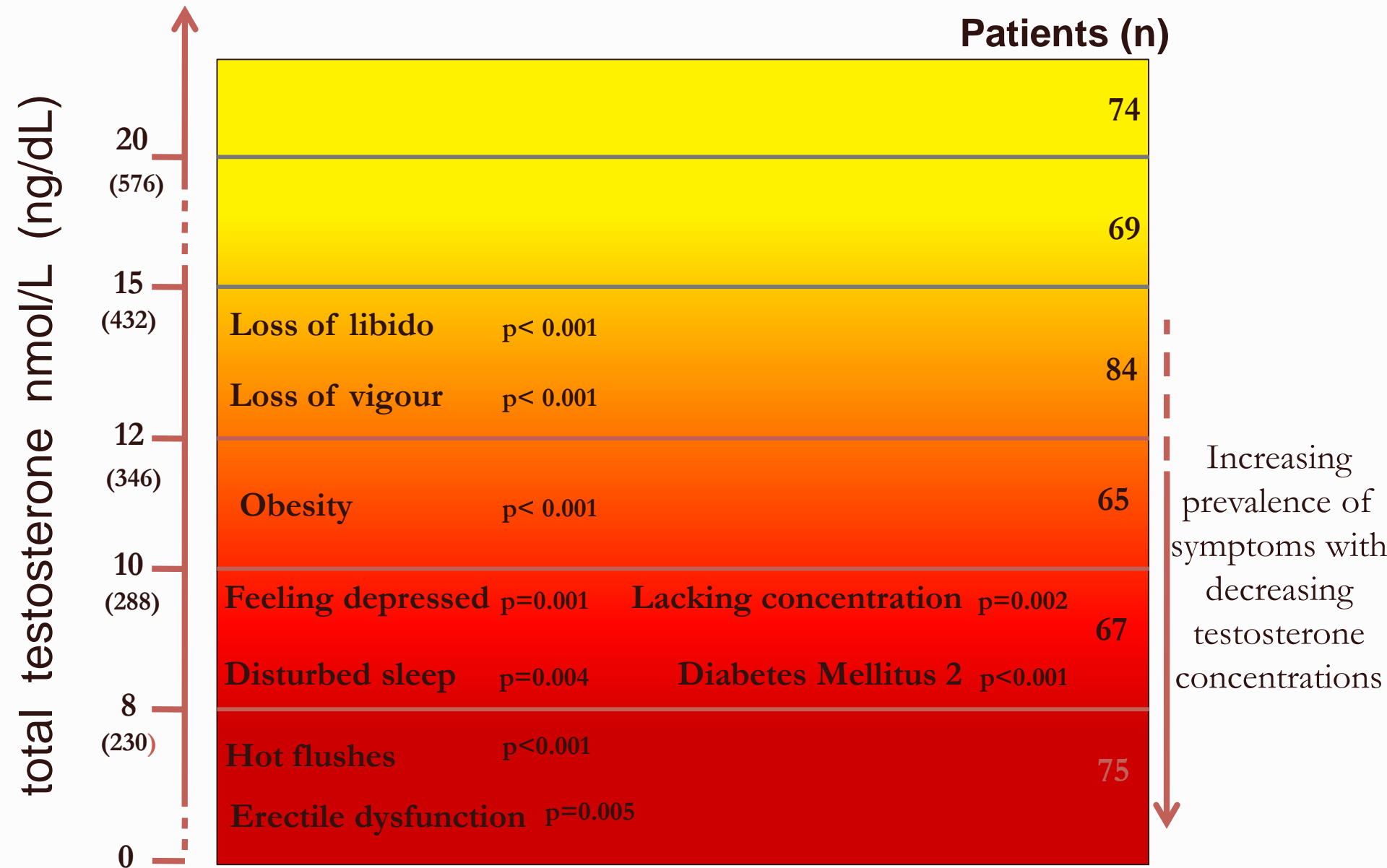
§ Oei et al. Neuropsychopharmacology. 37:1729-37,**2012**

\* Porst et al. J Sex Med. 10:130-71,**2013**

§ Lim et al. Parkinsonism Relat Disord. 17:761-4,**2011**

§ Bostwick et al. Mayo Clin Proc. 84:310-6,**2009**

# T-THRESHOLD FOR SYMPTOMS AND SIGNS OF HYPOGONADISM





# THRESHOLD for TREATMENT in HYPOGONADAL MEN

**NORMAL**

10 nmol/L  
(300 ng/dL)

**Endocrine Society**

Bhasin et al J Clin Endocrinol Metab 2010

**NORMAL**

12 nmol/L  
(346 ng/dL)

8 nmol/L  
(231 ng/dL)

Internat. J. Androl. 28:125-127,2005

**ISA, ISSAM, EAU, EAA and ASA**  
(Aging Male)

Wang et al. Eur J Endocrinol. 2008

ISA

Internat. Society of Andrology

ISSAM

Internat. Society for the Study of Aging Male

EAU

European Association of Urology

EAA

European Adademy of Andrology

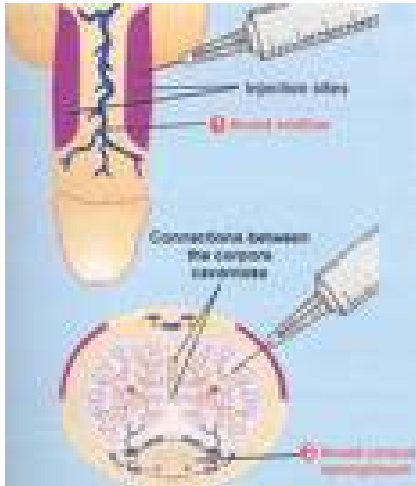
ASA

American Society of Andrology

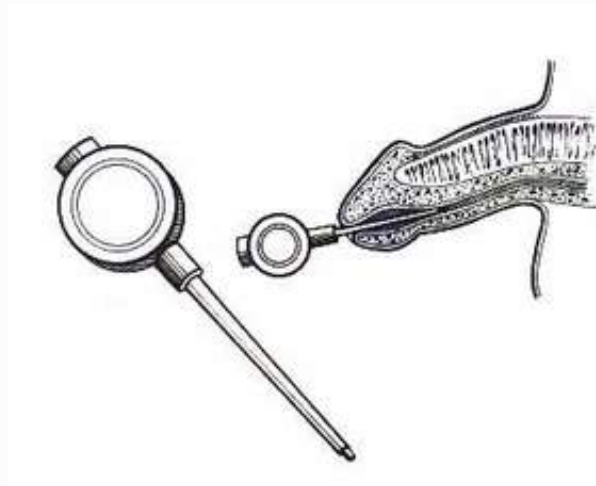


# Alprostadil

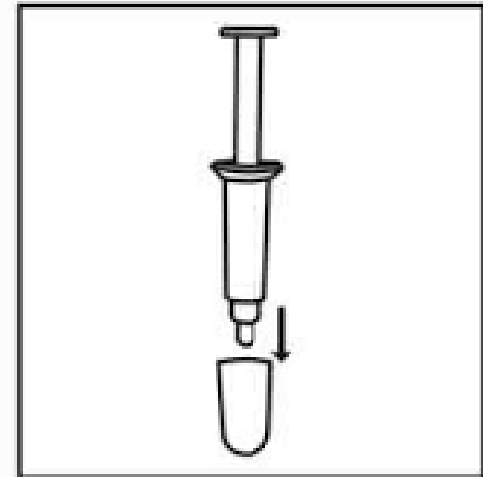
Ishii et al. Jap J Urol 1986



1995



1999/2007



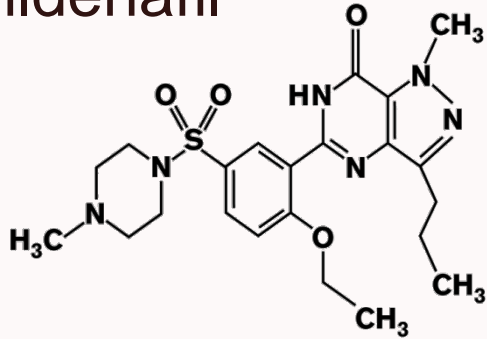
2014

Virag. Lancet 1982

Intracavernous injection of **Papaverine** for erectile failure.

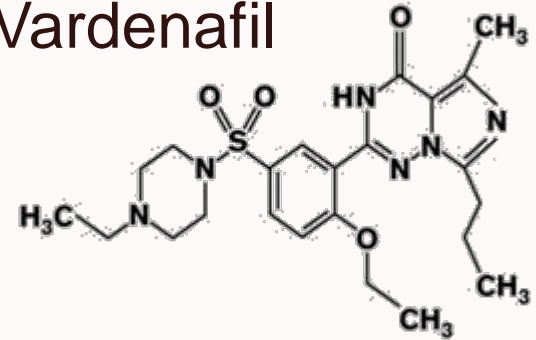
# inibitori PDE5

Sildenafil



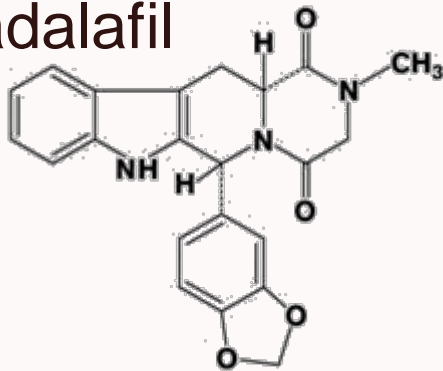
1998

Vardenafil



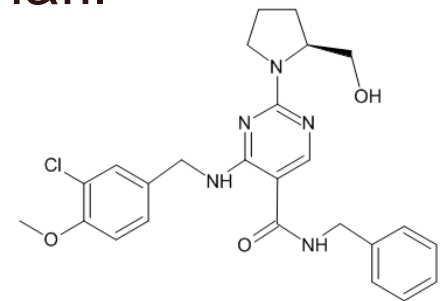
2003

Tadalafil

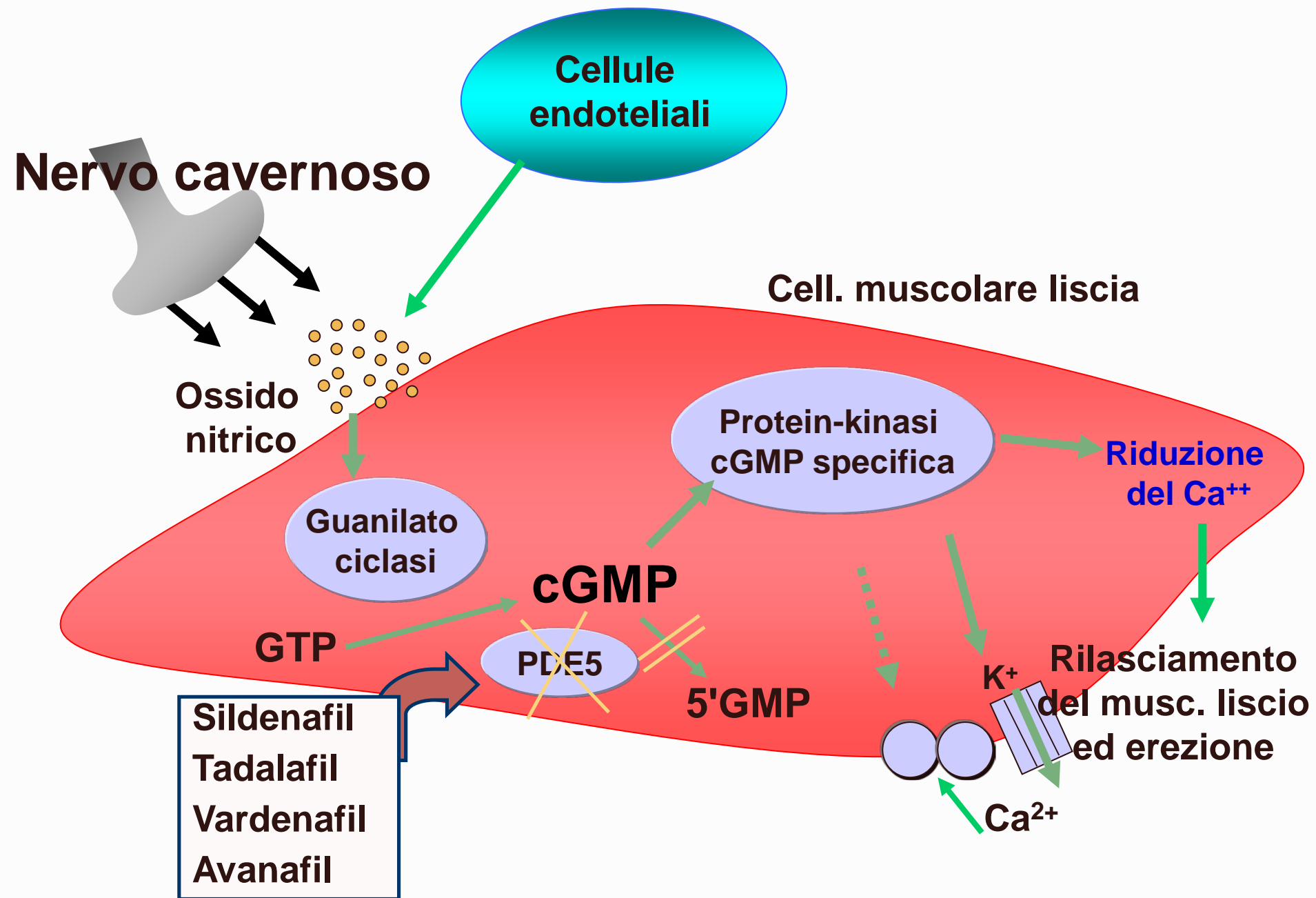


2003

Avanafil



2014 (2008)



**2014:**

**prima pubblicità i-PDE5 tutta al femminile**



# **i-PDE5** - usi non pro-erettogeni

**ipertensione arteriosa polmonare**  
**LUTS**

endotelio

sport

malattia d'alta quota

malattia di Raynaud

sessualità femminile

fertilità maschile

sclerosi multipla

ansia / depressione

**negli IPOGONADICI con DE**

**i-PDE5  
+  
testosterone**

**più efficace di**

**i-PDE5 in mono-tp**

Buvat et al., 2011

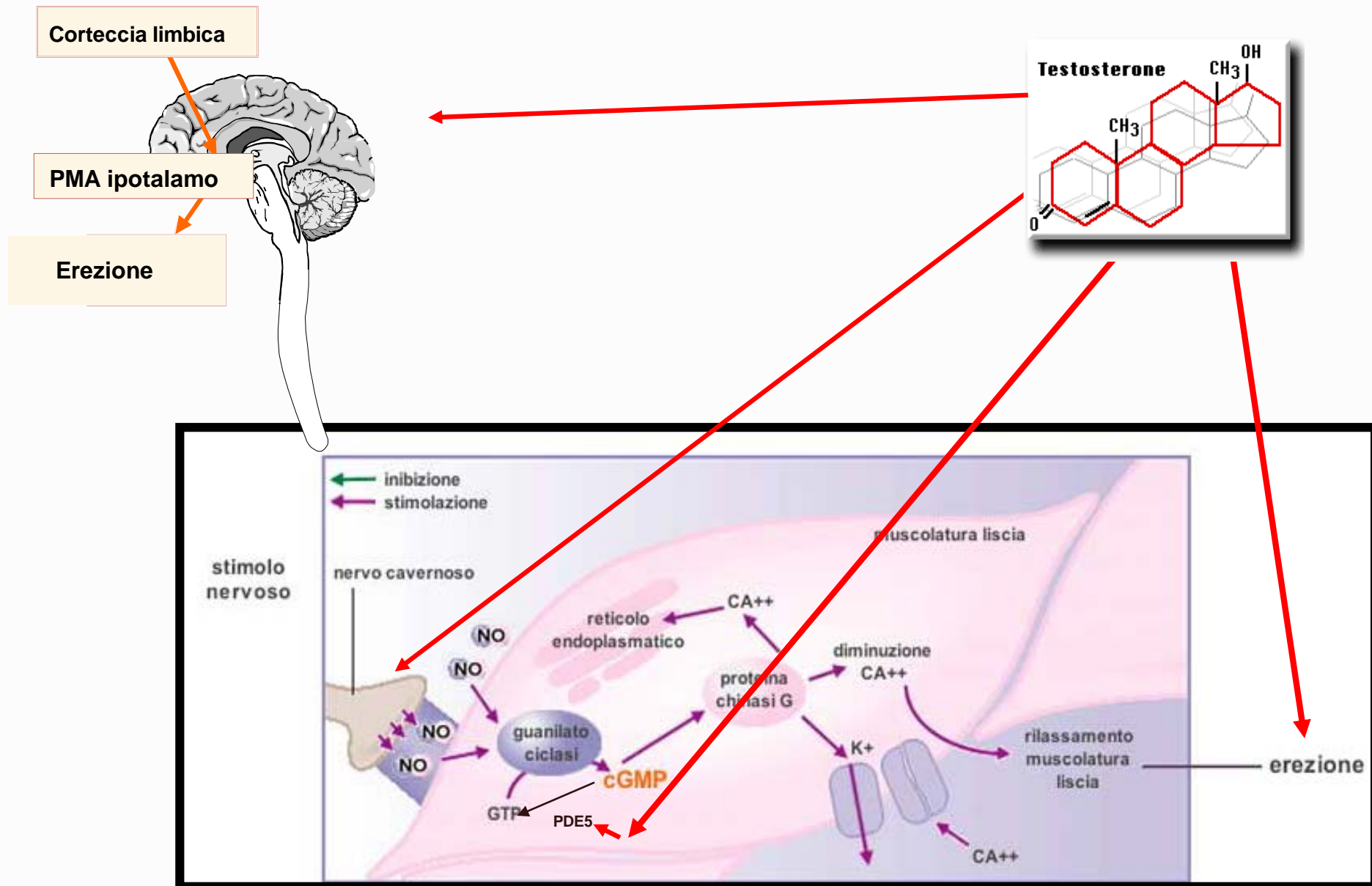
Rochira et al., 2006

Morelli et al, 2005

AACE Clinical Practice Guidelines, 1998

# Testosterone ed erezione

Morelli et al. 2005

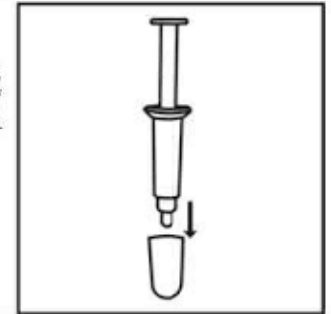
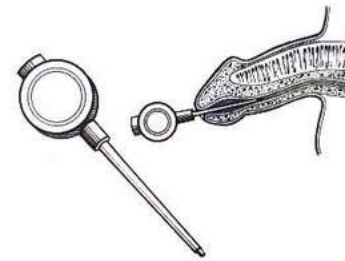
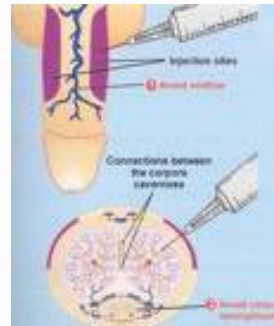


# cura D.E.

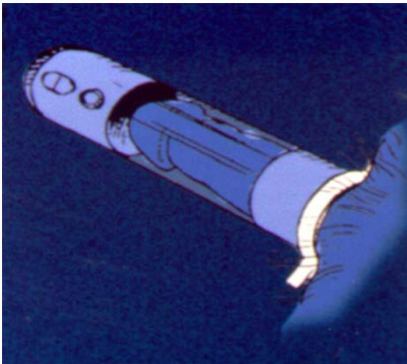
tp per  
disendocrinia



i-PDE5



alprostadil





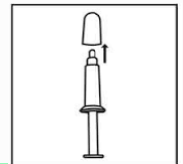
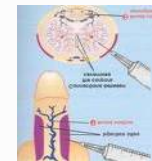
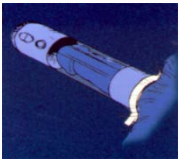
cura D.E.

counseling



**i-PDE5**

**tp per  
disendocrinia**



**alprostadil**

