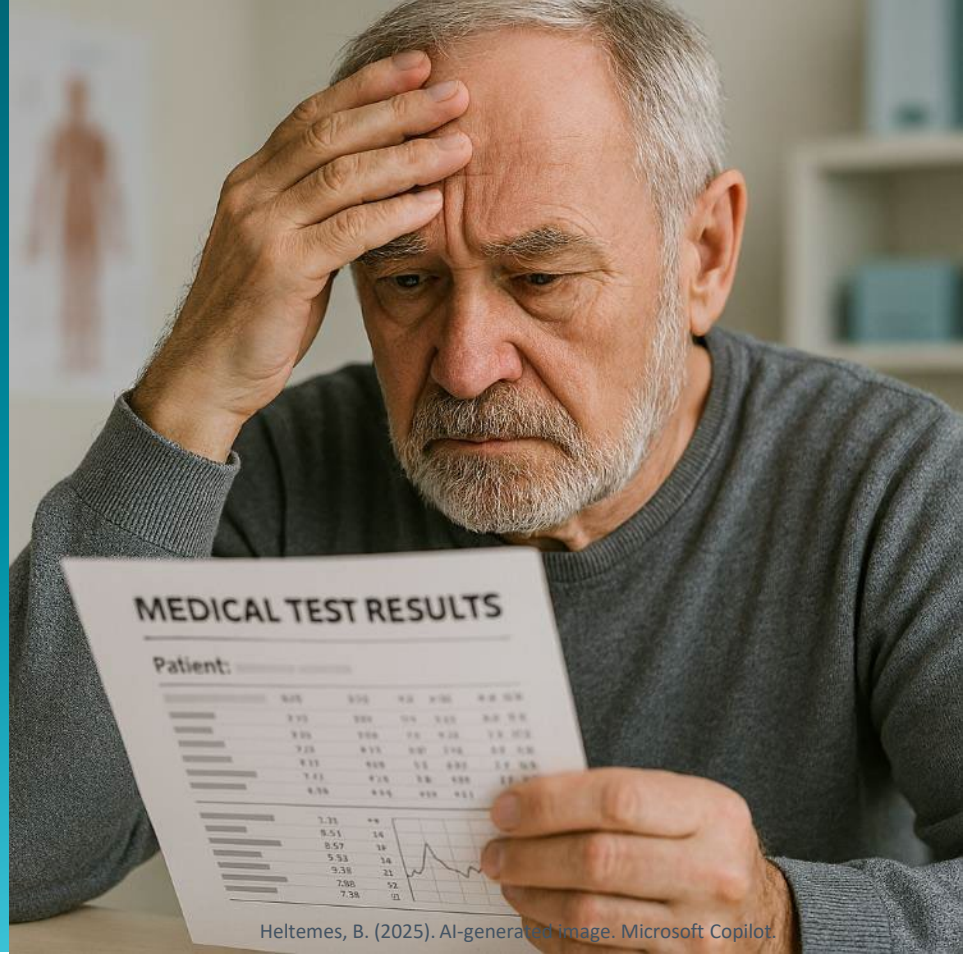
You Ask xY?

Underwriting Challenges in the Older Male

MUD 2026

Brad Heltemes MD, DBIM, FAAIM
MunichRe Life US



Heltemes, B. (2025). AI-generated image. Microsoft Copilot.

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Women age better than men

But then you already knew that

Life expectancy in US and Canada (2023):

- Males: 75.9 and 79.6 years
- Females: 81.1 and 84.1 years

Men have higher prevalence and earlier onset of:

- Cardiovascular disease
- Cerebrovascular diseases
- Chronic respiratory disease
- Most cancers

Heltemes, B. (2025). AI-generated image. Microsoft Copilot.

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Increased risk factors in men

Multifactorial

Disease differences arise from an interplay of biological, behavioral, and social factors that operate across the lifespan

- Higher rates of smoking, alcohol abuse, risky behavior, and unhealthy diet patterns
- Lower rates of healthcare underutilization
- Y chromosome (and no extra X) contributes to increased CVD risk through direct genetic effects, loss of protective mechanisms, and altered immune-inflammatory responses
- Biological and hormonal mechanisms
  - Estrogen exerts protective effects against atherosclerosis
  - Testosterone promotes inflammation of atherosclerotic plaques
  - Conversely, low testosterone levels in men are associated with heart failure and possibly CAD

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ming-jun-tan-122694-unsplash

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55 year-old man, $2.5m, 5’9 225

History of testosterone therapy since 2019 – due to low T

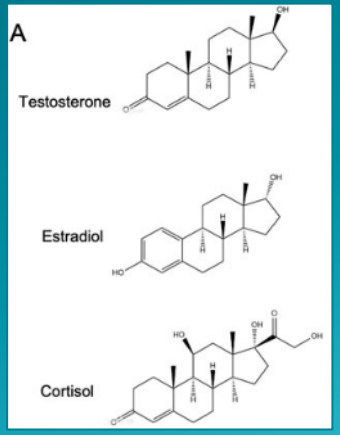
Letter from PA states on HRT to improve qualify of life

Last office visit 11/25:

- Doing well, more energy, no change in treatment plans

3/25 visit:

- Currently taking testosterone replacement therapy - switching providers
- Cycles on and off Omnitrope (somatropin/GH) and sermorelin (HGH)
- On minocycline for acne



https://doi.org/10.3389/fbioe.2025.1499164

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Benefits of testosterone

- Supports healthy lipid profiles
- Improves blood sugar regulation
- Enhances vascular function
- Stimulates protein synthesis
- Reduces fat mass
- Improves insulin sensitivity

Associated with low levels

- Cardiovascular events and mortality
- Insulin resistance
- Depression
- Reduced concentration
- Injury risk

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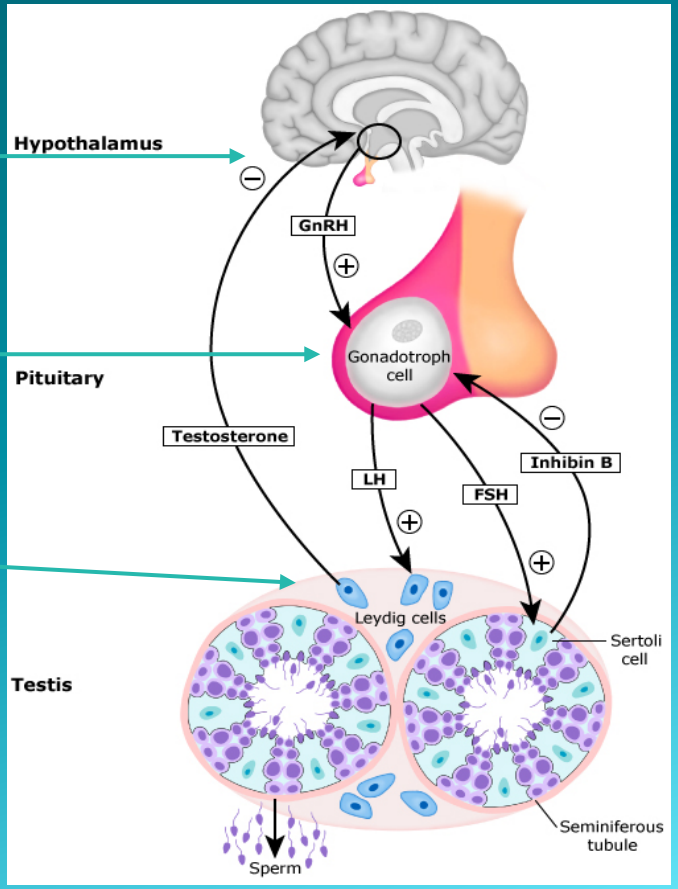
Hypothalamic-pituitary-testicular axis

Hypothalamus releases gonadotropin-releasing hormone (GnRH) in pulses

Pituitary responds by secreting the gonadotropins luteinizing hormone (LH) and follicle-stimulating hormone (FSH)

Testes produce testosterone in Leydig cells in response to LH, while FSH supports sperm production

Feedback Inhibition: Rising testosterone signals the hypothalamus to reduce GnRH



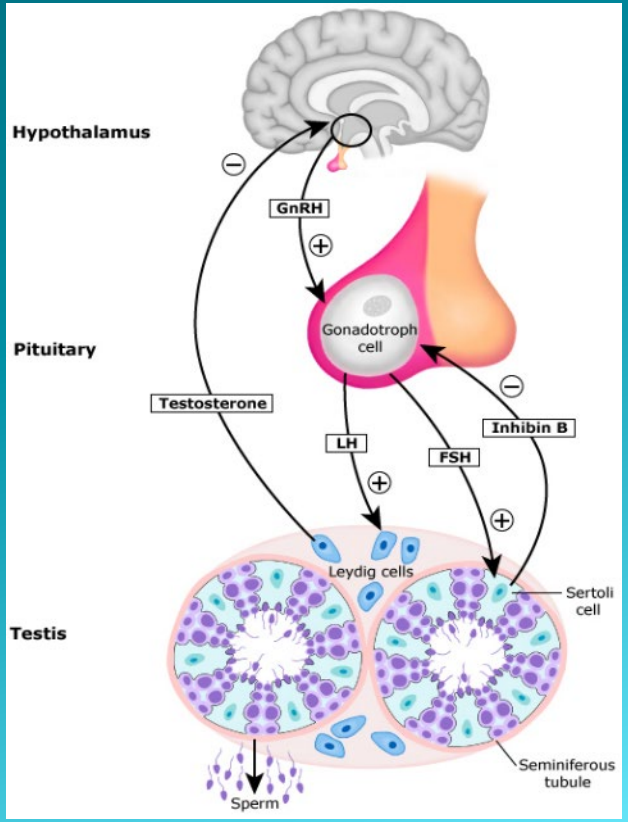
Hypothalamic-pituitary-testicular axis

Two main categories of hypogonadism -> low testosterone

Primary hypogonadism – Testicular failure causes consistently low serum testosterone concentration (and/or sperm count) but high LH/FSH

Secondary (hypogonadotropic) hypogonadism – Pituitary or hypothalamic failure leads to consistently low testosterone and the serum LH and/or FSH concentrations are normal or reduced

Symptoms similar but findings differ notably prepuberty vs in adult male



The (mostly) inevitable…

Age-Related Testosterone Decline

Decline is gradual and usually of a modest degree:

- ~1% decrease annually in T levels starting in 30s
- This decline varies substantially, unlike female menopause

Symptoms -- decreased libido, erectile dysfunction, fatigue, depressed mood
Physical findings -- decreased body hair, reduced muscle mass
Laboratory findings -- anemia, low bone mineral density

Not advised to routinely measure serum testosterone in older males, but consider if have some of these features

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Initial testing for hypogonadism

Adult males with symptoms and/or findings

Morning fasting serum total testosterone concentration between 8 and 10 AM on at least two occasions – T peaks in AM.

- Should not be assessed during acute or subacute illness -- will have a transient drop
- Opioids and steroids affect as well

“Normal” testosterone range for adult males:

- For most labs, range ~300-800 ng/dL (~10.4-31.2 nmol/L)
- CDC protocol (LCMS test) range 264-916 ages 19-39, lower limit 219 for age 60+
- Mid-range levels in young men ~350-550
- Ranges can vary widely by lab

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Diagnosis of Male Hypogonadism

Free testosterone – main active form

Free testosterone testing only if borderline T and concerns of sex hormone-binding globulin (SHBG) impact

- Should be performed only in those few laboratories that measure it by equilibrium dialysis - reference range for men aged 18-39 years 53-216 pg/mL (184-749 pmol/L)
- Measurement by an analog method (the assay most commonly offered by commercial laboratories) is inaccurate
- Obesity - decreases SHBG concentrations, leads to falsely decreased total T
- Aging - increases SHBG, leads to falsely elevated T

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Additional diagnostic testing as indicated

Adult males T <300 (or <230) and was appropriately and properly obtained

- Serum LH concentrations (+/- FSH)
  - Normal range for both approximately 1-8 mIU/mL in most laboratories
- With low/normal LH levels (Hypogonadotropic hypogonadism)
  - Prolactin levels to assess for pituitary source
  - Estradiol if gynecomastia present
  - Hemoglobin and hematocrit if offering testosterone therapy
  - PSA in men over age 40
- With high LH levels (Primary hypogonadism)
  - Genetic testing – karyotype
  - Assess exposures (chemo, radiation, heavy EtOH), testicular injury, AIDS, chronic kidney and liver disease

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55 year-old man, $2.5m, 5’9 225

History of testosterone therapy since 2019 – due to low T

Lab results:

- 11/2/25: Chol 186, HDL 49, Trigs 73, Hgb A1c 5.4%, creatinine 1.29, testosterone 1460 ng/dL , estradiol 90, normal TFTs, LFTs, ferritin, and cortisol; PSA 3.05, Hgb 18.1, Hct 56.8
- 6/25 (insurance labs): Normal BCP and UA, PSA 1.83
- 3/25: Hgb 18.4, Hct 53.1, PSA 1.4, testosterone 735, Free T 236 pg/mL (NL to 216), Ferritin 312
- 6/22: Testosterone 1373, Hgb 18.8
- 9/20: Hgb 19.7, Hct 56.3, testosterone 1061, estradiol “elevated”
- 11/19: Hgb 18, PSA 1.0, Free T 298 pg/mL
- No pre-treatment labs available

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Prevalence of clinically verified hypogonadism in men

Defined as the combination of low testosterone levels AND clinical symptoms

Strict criteria, European Male Ageing Study:

- Ages 40-49: 0.1%
- Ages 50-59: 0.6%
- Ages 60-69: 3.2%
- Ages 70-79: 5.1-18.4%

Increasing prevalence - more recent data suggests rates 2-4 times higher
Rates much higher in those with obesity, diabetes, chronic opioid use

- Dual hypothesis:
  - Systemic inflammation/chronic disease causes both the condition and the low testosterone

Treatment options

Intramuscular or subcutaneous injections	50-100 mg/week
Transdermal gels	20–100 mg applied to skin daily
Transdermal patches	2.5-5 mg patches applied nightly
Intramuscular long-acting	750 mg every 8-10 weeks
Subcutaneous Pellets	600-900 mg every 3-6 months
Nasal gel	11 mg intranasally 3 times daily
Oral capsule	Varies: 40-400 mg per day

Monitoring

Important to track treatment response

Assessment at 3 and 6 months after initiation, then annually
Measure serum testosterone, hematocrit, and PSA

- Target testosterone levels in the mid-normal range (450-600 ng/dL)
- Stop TRT if hematocrit >54%

Evaluate symptom improvement
Evaluate for cardiovascular symptoms, sleep apnea, acne, gynecomastia

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Outcomes in testosterone therapy for hypogonadism

RCT trials comparing treatment with placebo

- Modest improvements in sexual functioning, self-reported mobility, and slightly improved mood
- Increases in volumetric bone mineral density and of muscle mass
- Correction of anemia

- No clear effect on physical functioning, energy and vitality, and cognition
- Possibly increased risk of pulmonary embolism, incidence of cardiac arrhythmias, and risk of clinical fractures (paradoxically)

- Impact on long-term risks of cardiovascular events, prostate cancer, and overall mortality remain inconclusive

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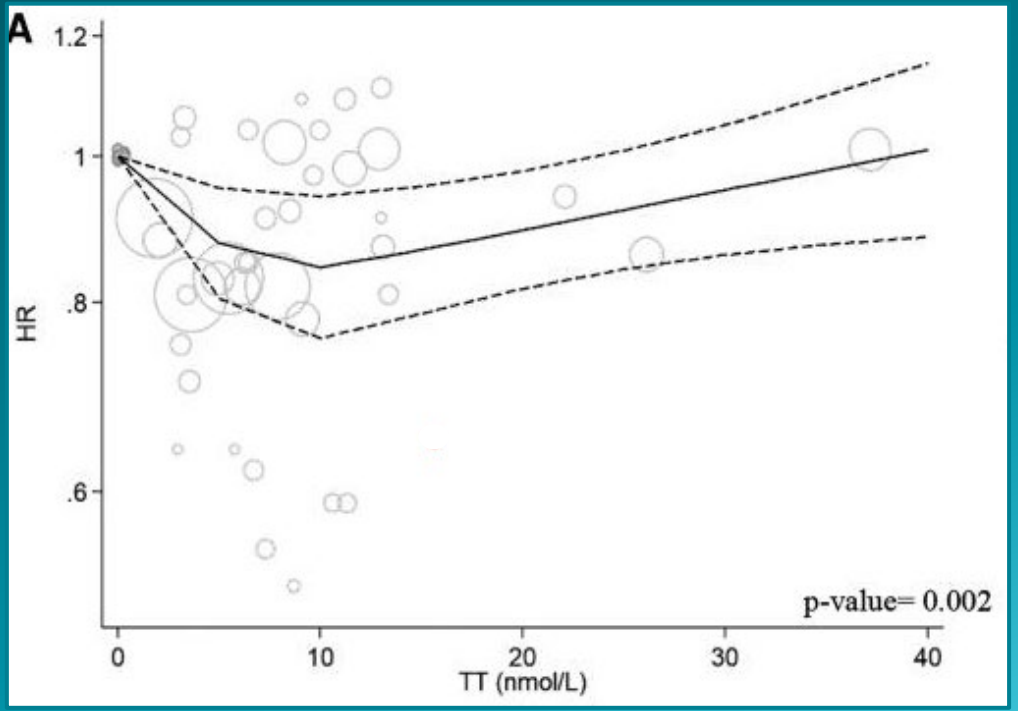
In a recent systematic review and meta-analysis of prospective cohort studies

Association between total testosterone level and all-cause mortality in men



In another study, highest levels of free T were associated with 45% increase in mortality.

Conversely, in a separate analysis of all-cause mortality by baseline total testosterone level, only those in the lowest quintile (TT <244 ng/dL) had an increased risk, after multi-variate adjustment.

doi:10.1210/clinem/dgaf262
doi:10.1093/gerona/glae065
doi:10.7326/M23-2781

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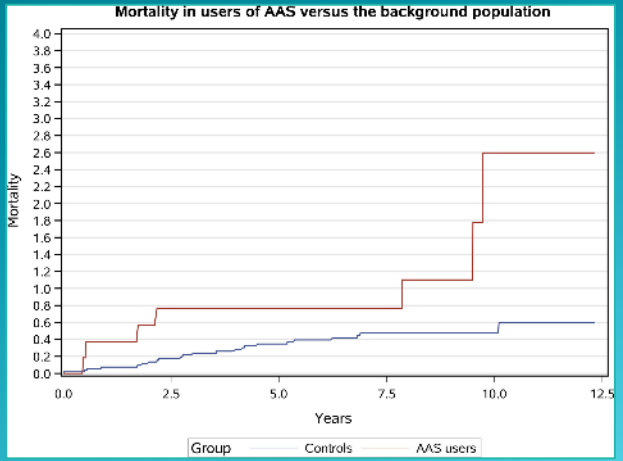
Excess testosterone use

Androgenic steroid abuse is associated with a 3-fold increase in mortality risk

- Cardiovascular toxicity represents the main risk, including AFib, heart failure, and sudden death
- Risk of polycythemia (eg thrombosis) and neurotoxicity
- Potential concerns of other substance use/abuse and risky behaviors

Addition of growth hormone introduces further risk in younger men – not so clear in older men



doi:10.1111/joim.12850

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55 year-old man, $2.5m, 5’9 225

- Significant use/abuse of anabolic steroids -- this is not for hypogonadism replacement but very likely for body building/performance enhancement
  - Risk of androgen excess, risk of HGH use
  - Significant erythrocytosis is an important additional risk
- Interesting to note that PA who wrote letter supporting his use works for a plastic surgeon
- Underwrite with caution. BNP good, normal ECG, CBCs otherwise normal, and reportedly in good health otherwise – substandard offer might be a consideration?
- However, the rising PSA is an additional concern
  - Possibly due to the excess T but…
  - PSA consistently rising, most recent doubled in nine months and tripled since before that
  - Postponement is warranted

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60 year-old man; 5’8” 173# $1500k

Elevated PSA

- Insurance lab PSA 5.4 ng/mL (lab otherwise unremarkable)
  - Rate for lab results?
  - What is the likelihood of having prostate cancer?
  - What is the risk *if has* prostate cancer?

Clinically significant prostate cancer (csPCa)

Likelihood of prostate cancer, depending on source, 25-50%

~20% low-grade

5-25% csPCa

Heltemes, B. (2025). Life insurance application for a 59-year-old man [AI-generated image]. Microsoft Copilot.

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Prostate Cancer in the U.S.

Most commonly diagnosed malignancy in men in North America and second leading cause of cancer death in men

Prevalence in 2025 - estimated 3,552,460 men living with prostate cancer in the U.S.
- 43% of all male cancer survivors
- ~2% of the entire male population

The overall prostate cancer specific 5-year survival rate ~99%

Despite these high 5-year survival rates, outcomes are variable
- 100% survival in organ-confined disease
- 34% survival with advanced disease

The challenge:
Identify the high-risk cases and not the indolent cancers

Underwriting Assessment

60 year-old man with PSA 5.4

- What is the risk *if has* prostate cancer?
  Clinically significant prostate cancer (csPCa)
- What else can help determine that risk?

Risk depends on:

- PSA level and kinetics (eg PSA velocity, PSA density, Free% PSA)
- Age, family history, digital rectal exam (DRE), symptoms
- Other biomarkers (eg PCA3, PHI, 4K score, ExoDx Prostate)
- Transrectal Ultrasound, mpMRI
- Any prior biopsy results

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60 yo man with elevated PSA

PSA 5.4 ng/mL

APS:

- History of Adult ADHD, Hyperlipidemia. Non-smoker. Father died of heart disease age 80.
- PSA 3 years ago 5.2, repeat was 3.5. Normal DRE.
- PSA one year ago 4.1.

➢ How does that change your assessment?

Heltemes, B. (2025). Man wishing to avoid a prostate biopsy [AI-generated image]. Microsoft Copilot.

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Prostate cancer diagnosis

Age

- Single most important risk for having prostate cancer

Most cancers are found while asymptomatic

- Prostate specific antigen (PSA)
- Digital rectal exam (DRE)

Non-specific symptoms

- GU symptoms: Hematuria, voiding difficulties, incontinence, erectile dysfunction
- Metastatic disease: Bone pain, weight loss, spinal cord compression, kidney failure

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60 yo man with elevated PSA

Urology evaluation:

- Normal DRE, prostate estimated 40cc, no symptoms
- Repeat PSA 5.4, PHI 35
- Biopsy advised

Plan for Active Surveillance

➢ Is AS appropriate?

DIAGNOSIS:
A. Right Apex Needle biopsy
ADENOCARCINOMA, GLEASON SCORE 3 + 3 = 6 involving 10 % of the specimen (1 of 2 core(s) positive).
Grade Group 1. Ends not involved by the tumor.
B. Right Mid Needle biopsy
C. Right Base Needle biopsy
Benign prostatic tissue.
D. Right Lateral Apex Needle biopsy
Benign prostatic tissue.
E. Right Lateral Mid Needle biopsy
ADENOCARCINOMA, GLEASON SCORE 3 + 3 = 6 involving 5 % of the specimen (1 of 1 core(s) positive).
Grade Group 1. Ends not involved by the tumor.
F. Right Lateral Base Needle biopsy
ADENOCARCINOMA, GLEASON SCORE 3 + 3 = 6 involving 10 % of the specimen (1 of 1 core(s) positive).
Grade Group 1. Ends not involved by the tumor.
G. Left Apex Needle biopsy
Benign prostatic tissue.
H. Left Mid Needle biopsy
Benign prostatic tissue.
I. Left Base Needle biopsy
Benign prostatic tissue.
J. Left Lateral Apex Needle biopsy
ADENOCARCINOMA, GLEASON SCORE 3 + 3 = 6 involving 40 % of the specimen, discontinuous (1 of 1 core(s) positive).
Grade Group 1. Ends not involved by the tumor.
K. Left Lateral Mid Needle biopsy
ADENOCARCINOMA, GLEASON SCORE 3 + 3 = 6 involving 70 % of the specimen, discontinuous (1 of 1 core(s) positive).
Grade Group 1. Tumor involves one end.
L. Left Lateral Base Needle biopsy
ADENOCARCINOMA, GLEASON SCORE 3 + 3 = 6 involving 20 % of the specimen, discontinuous (1 of 1 core(s) positive).
Grade Group 1. Ends not involved by the tumor.

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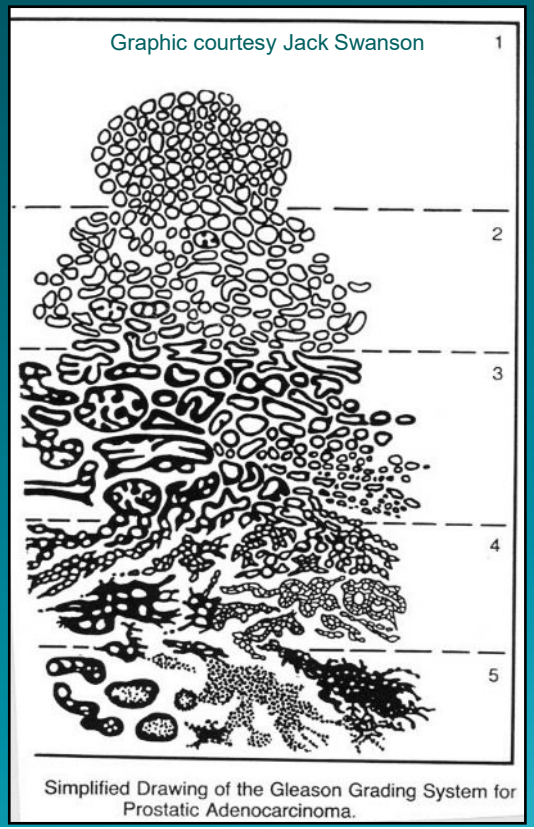
Gleason's Grading System

Original Schematic



Simplified Drawing of the Gleason Grading System for Prostatic Adenocarcinoma.

1: Small uniform glands

2: More stroma between glands

3: Distinctly infiltrative margins

4: Irregular masses of neoplastic cells

5: Anaplastic - only occasional gland formation

Gleason score:
Derived by adding the value of the two most prevalent differentiation patterns (a primary grade and a secondary grade)
Even though there are often more than two different patterns!

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Prostate Cancer Histologic Grade Groups (GG)

GG I:	Gleason score 3+3=6
GG II:	Gleason score 3+4=7
GG III:	Gleason score 4+3=7
GG IV:	Gleason score 4+4 or 3+5=8
GG V:	Gleason score 4+5=9 or 5+5=10

- Prior patterns 1 and 2 no longer considered to be cancer (but may represent increased risk?)
- By separating out a Gleason's score of 3+4 vs 4+3 and of 8 vs 9-10, the GG alone was consistently better at predicting higher risks of T3-4 disease
- Tertiary grade still matters!

Prostate cancer stage groups – AJCC 8th Edition

Clinical (c) staging:

- cT0 – No evidence of primary tumor
- cT1a/b – Incidental finding at TURP
- cT1c – Clinically inapparent, biopsy diagnosis only
- cT2a – Palpable on DRE < ½ of one lobe
- cT2b – Involves up to one lobe
- cT2c – Involves both lobes
- cT3a – Extraprostatic extension (through 'capsule')
- cT3b – Seminal vesicle invasion
- cT4 – Fixed, or invades adjacent structures

Pathological (p) staging:

- pT2 – Organ confined
- pT3a – Extraprostatic extension or microscopic invasion of bladder neck
- pT3b – Seminal vesicle invasion
- pT4 – Fixed or invades adjacent structures other than seminal vesicles

Stage	T	N	M	Grade group	PSA
I	cT1a-c, T2a pT2	N0	M0	1	<10
IIA	As above, or cT2b-c	N0	M0	1	10-20 <20
IIB	T1-2	N0	M0	2	<20
IIC	T1-2	N0	M0	3 or 4	<20
IIIA	T1-2	N0	M0	1-4	≥20
IIIB	T3-4	N0	M0	1-4	Any
IIIC	Any T	N0	M0	5	Any
IVA	Any T	N1	M0	Any	Any
IVB	Any T	Any N	M1	Any	Any

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Risk Level With Newly Diagnosed Prostate Cancer

National Comprehensive Cancer Network (NCCN)

- **Very low risk disease**
  - T1c, GG 1, and PSA <10
  - Fewer than three positive biopsy cores
  - Less than 50% involvement in each core
  - PSA density <0.15 ng/mL/gram

→ Active surveillance (AS) usually recommended

- **Low risk disease**
  - T1 to T2a, GG 1, and PSA <10 ng/mL
  - Does not qualify for very low risk

→ Consider AS; or Prostatectomy or Radiation if preferred

- **Favorable intermediate risk disease**
  - Low risk disease plus:
  - Percentage of positive biopsies <50
  - One of the following: T2b/c, PSA 10-20, or GG 2 or 3

→ Prostatectomy or Radiation, but AS can be considered

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Case #1 60 yo man with GG 1 prostate cancer

PSA 5.4, normal DRE, no symptoms

GG 1 Prostate cancer in 6 of 12 biopsy cores

Undergoing Active Surveillance

- Mortality risk with GG 1 PCa?
- Offer?

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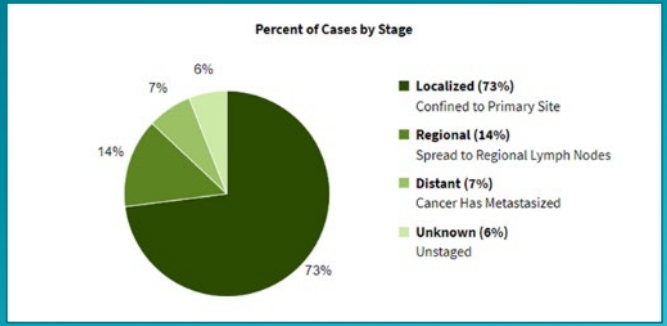
Prostate Cancer Survival Rates by Stage

Relative survival of men with prostate cancer, 5 and 10 years after diagnosis: US, 2001-2016

Stage	5-Year	10-Year
Localized	100.0	100
Regional	98.6	96.1
Distant	30.7	18.5



Caveats:

- Most in this era received definitive treatment
- Even 10-year survival rates don’t tell the whole story with early-stage prostate cancer!

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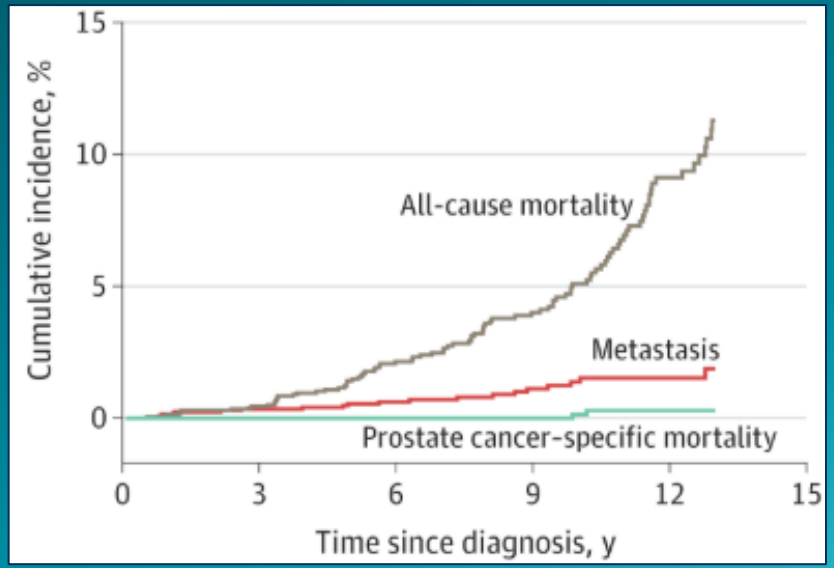
Long-term outcomes in those undergoing AS

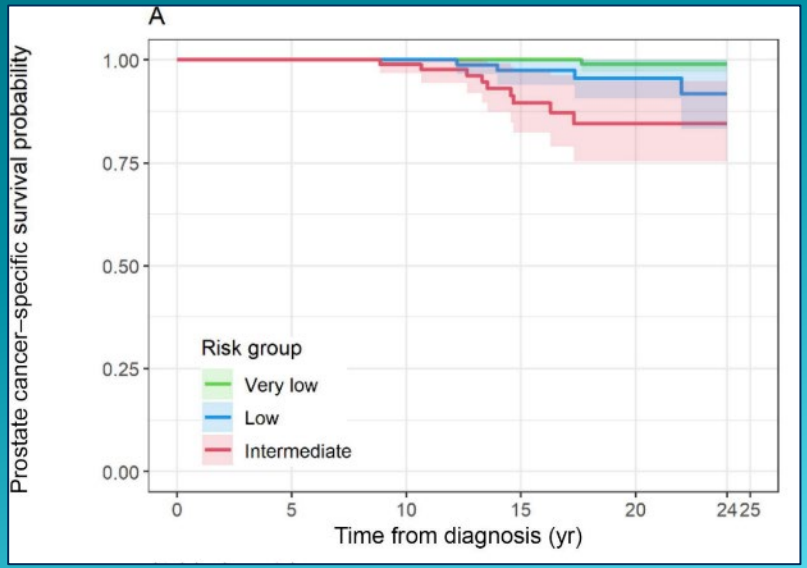
PASS Cohort

doi:10.1001/jama.2024.6635



GÖTEBORG-1 screening trial

doi:10.1016/j.eururo.2025.06.012..



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Active Surveillance follow-up strategy

No single widely accepted AS monitoring strategy…

- PSA every 6 months
- DRE yearly
- Repeat biopsy after 6 to 18 months (MRI-targeted if feasible)
  - Thereafter as needed with changes
  - mpMRI an alternative to repeat biopsy – then biopsy if MRI evidence of growth or a PI-RADs increase
- Definitive treatment usually advised if:
  - Progression to a higher-grade disease
  - New abnormalities on DRE or imaging suggestive of extracapsular extension
  - Serial, confirmed rises in PSA

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Issues with Active Surveillance

Most who progress do so within the first two years (undersampling error??), but the risk continues to accrue with ongoing surveillance

With limited biopsy sampling, can miss high grades

- Upgrade Gleason score after radical prostatectomy ~30%
- In PASS cohort, upgrade rate of 23% at confirmatory biopsy and 43% at 10 years
- However…
- Recent data, in the era of MRI targeted biopsies, suggest a 10-15% upgrade rate

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Now 63 year-old man …

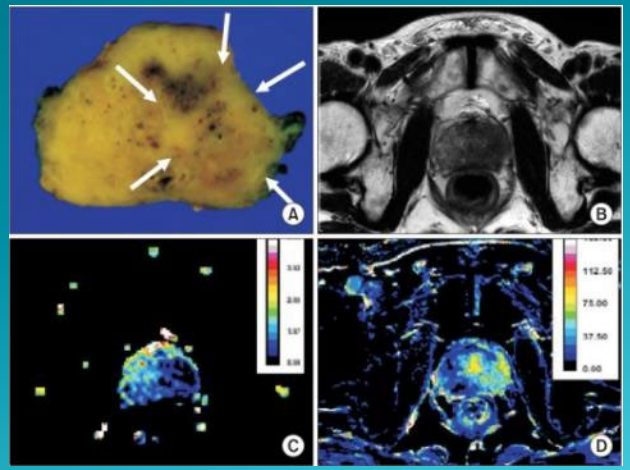
Now 3+ years later and applying for coverage

At age 60:

- Urology evaluation normal DRE, volume est. 40cc
- Repeat PSA 5.4, PHI 35.
- GG 1 cancer in 6 cores – Active Surveillance

- PSA 7/22 (6 months after biopsy) 11.3; repeat PSA 8.5

➢ Any concerns?
➢ I hope so!



Prostate MRI_Yoo S -Korean journal of urology(2015)

MRI: Prostate volume 52ml. Lesion 8mm x 7mm left lateral mid peripheral zone; PIRADS 4. Changes of prostatitis right base and mid peripheral.

➢ Likelihood of csPCa?

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Prostate Multiparametric MRI (or Biparametric?)

Goal is to recognize *clinically significant* prostate cancer

And not low grade, prostate confined tumors

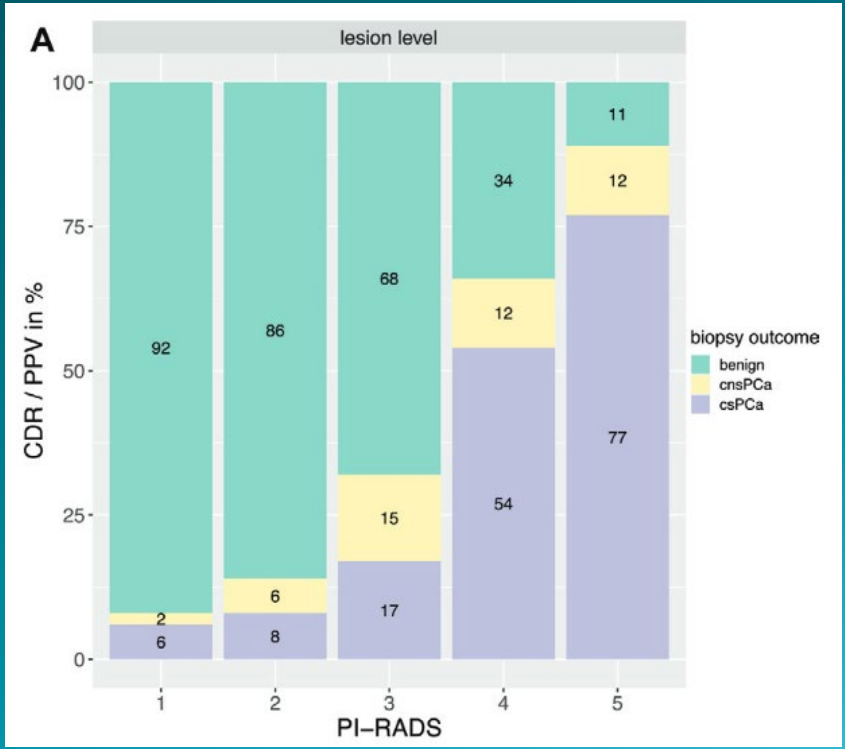
- PI-RADS 1 – Clinically significant cancer is highly unlikely to be present.
- PI-RADS 2 – Clinically significant cancer is unlikely to be present.
- PI-RADS 3 – The presence of clinically significant cancer is equivocal.
- PI-RADS 4 – Clinically significant cancer is likely to be present.
- PI-RADS 5 – Clinically significant cancer is highly likely to be present.

csPSA rates in one analysis: 6, 8, 17, 54, 77% respectively

MRI also used to “target” the biopsy to the suspicious site

Identifies more csPCa and more accurate tumor grading

Prostate mpMRI -- For detection of csPCa



Oerther B. Published Online: August 13, 2024
https://doi.org/10.1148/radiol.233337

Per a 2024 systematic review and meta-analysis

PIRADS 3-5:

- 96% sensitivity; 43% specificity; AUC 0.86

PIRADS 4-5:

89% sensitivity; 66% specificity; AUC 0.89

Per a Dutch assessment of AI-assisted MRI
(doi: 10.1001/jamanetworkopen.2025.15672)

PIRADS 3-5, AI-assisted vs unassisted:

Sens 96.8% vs 94.3%; Spec 50.1% vs 46.7%
AUC AI assisted 0.916 vs 0.882 unassisted

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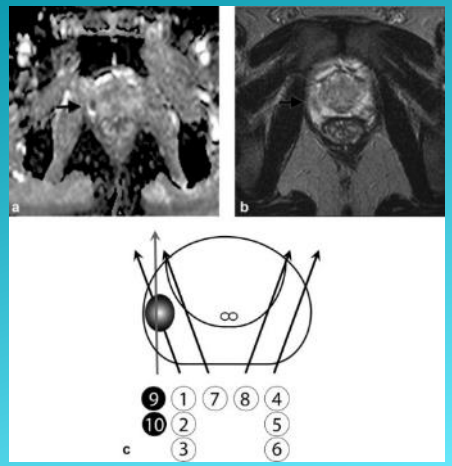
Case #1.5 - 62 yo man with prostate cancer

- Repeat PSA 8.5
- mpMRI: Prostate volume 52ml. Lesion 8mm x 7mm left lateral mid peripheral zone; PIRADS 4. Changes of prostatitis right base and mid peripheral.
- Repeat fusion targeted biopsy – Gleason's score 3+4 in 40% of one core

➢ AS still appropriate?



Targeted biopsy_Watanabe Y - JMRI(2012)

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Risk Stratification

Factors that impact prognosis and treatment:

- Anatomic staging (TNM) - tumor extent
- Gleason grade – tumor differentiation
- PSA level

Most important prognostic factors - but still do not fully inform how the tumor will behave

➢ Other Prognostic Factors:

- PSA dynamics – PSA density and velocity, % free PSA — PSAD 8.5/52 = 0.163
- Additional biomarkers – PHI, 4K score, % proPSA — PHI 35 – intermediate risk
- Multi-parametric MRI and TRU/S findings — PIRADs 4
- Molecular assays
- Presence of germline mutations
- Polygenic risk score

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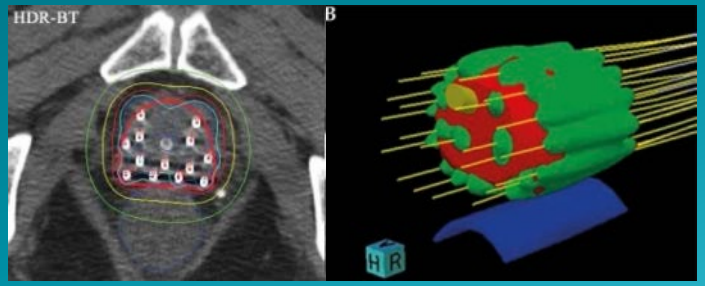
Case #1.5 - 62 yo man with prostate cancer

- ✓ PSA 8.5; PSAD 0.163
- ✓ mpMRI: Lesion 8mm x 7mm; PIRADS 4.
- ✓ Gleason's score 3+4 in 40% of one core = GG 2



Prostate Brachytherapy_Fukuda -Journal of radiation research(2014)

- Elected to undergo brachytherapy 9/22
- Follow-up since: No issues or findings except increase in urinary urgency and nocturia
- Select subsequent PSAs:

8/22	3.9
1/23	1.8
2/24	0.7
10/24	0.42
8/25	0.12

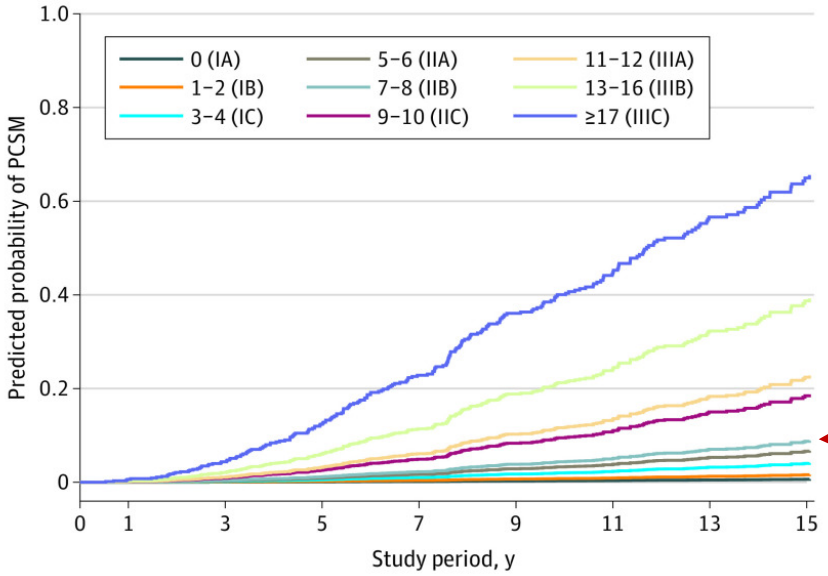
➢ Stage and grade now?

cT1c, GG2, PSA <20 = *Clinical* stage group IIB

Time to assess – risk now nearly 3 years after radiation

Munich RE

Prostate cancer specific mortality by risk score



Clinical Prognostic Stage Group Score System for Prostate Cancer–Specific Mortality (PCSM) Prediction in the Validation Cohort

Score stage group IA (0 points) included 1261 patients from the validation cohort (12.9%; 10-year PCSM estimate, 0.3%); Score stage group IB (1-2 points), 2501 patients (25.6%; 10-year PCSM estimate, 0.8%); Score stage group IC (3-4 points), 1901 patients (19.5%; 10-year PCSM estimate, 2.0%); Score stage group IIA (5-6 points), 1554 patients (15.9%; 10-year PCSM estimate, 3.3%); Score stage group IIB (7-8 points), 1208 patients (12.4%; 10-year PCSM estimate, 4.4%); Score stage group IIC (9-10 points), 719 patients (7.4%; 10-year PCSM estimate, 9.5%); Score stage group IIIA (11-12 points), 354 patients (3.6%; 10-year PCSM estimate, 11.7%); Score stage group IIIB (13-16 points), 248 patients (2.5%; 10-year PCSM estimate, 21.2%); and Score stage group IIIC (≥17 points), 23 patients (0.2%; 10-year PCSM estimate, 40.0%).

Reference 0 (IA) =

- Age 51-70
- T1a-c, N0
- GG 1
- Core biopsy <50%
- PSA < 6

10-year PCSM ranges from 0.3 to 40% by stage

IIB equivalent (~8.5% at 15 yrs)

Mostly favorable factors
Ongoing but low risk to at least 15 years out

JAMA Oncol. Published online October 22, 2020. doi:10.1001/jamaoncol.2020.4922

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52 year-old male; $500,000 Term. 6’1” 220 lbs.

Accelerated underwriting program

Rx:

- Tadalafil 20mg, #10; Lisinopril 10mg, #90; HCTZ 25mg, #100
- Refills every 3 months over the past year; no hits prior to that

Dx, Feb 2025:

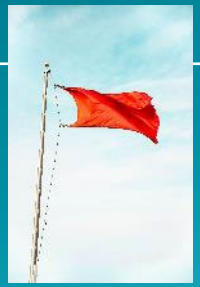
- Essential hypertension; Hyperlipidemia

➢ STP?

Munich RE

52 year-old male; $500,000 Term. 6’1” 220 lbs.

Accelerated underwriting program



Rx: Tadalafil 20mg, #10; Lisinopril 10mg, #90; HCTZ 25mg, #100
Refills every 3 months over the past year; no hits prior to that
Dx, Feb 2025: Hypertension and Hyperlipidemia

- ✓ Multinational study, men aged 40–70: 45.2% self-reported prevalence of ED
- ✓ In a UK population study: 74% of men with ED reported one or more chronic comorbid condition (32% HTN, 16% DM), yet 45.3% were not receiving treatment
- ✓ Higher rates of smoking, alcohol intake, and obesity
- ✓ In a review of men with ED, the prevalence of endocrine and glycemic disorders was 30% in those *without a previously known history*

*ED in this context represents a possible early warning sign of systemic vascular disease and often precedes cardiovascular events by 2-5 years

Munich RE

52 year-old male; $500,000 Term. 6’1” 220 lbs.

Accelerated underwriting program

Rx: Tadalafil 20mg, #10; Lisinopril 10mg, #90; HCTZ 25mg, #100
Dx, Feb 2025: Hypertension and hyperlipidemia

Lab PiQture ordered. Feb 2025 – significant for:

- Hgb A1c 6.3
- Cholesterol 223, HDL 34, Triglycerides 245

EHR, last visit 2/25:

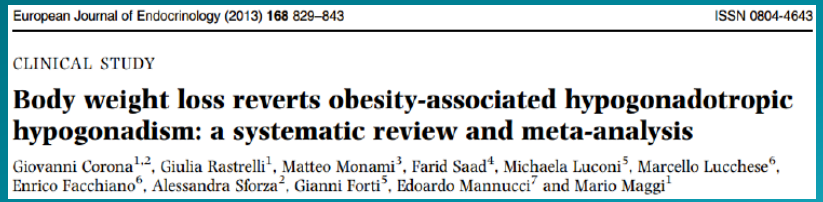
- Ht 6’0”, 243 lbs. BP 138/88. No new complaints.
- HTN, IGT and hyperlipidemia – advised metformin and atorvastatin
- Wishes to first improve diet and lose weight
- Follow-up in 3 months

Munich RE

Does it fit to the T?

The diagnosis of hypogonadism in males requires a proper evaluation

- Correct timing of and interpretation of lab results
- Assessment for other causes (diseases, drugs)
- Address underlying conditions alongside or before considering testosterone therapy



European Journal of Endocrinology (2013) **168** 829–843 ISSN 0804-4643

CLINICAL STUDY

Body weight loss reverts obesity-associated hypogonadotropic hypogonadism: a systematic review and meta-analysis

Giovanni Corona[1,2], Giulia Rastrelli[1], Matteo Monami[3], Farid Saad[4], Michaela Luconi[5], Marcello Lucchese[6], Enrico Facchiano[6], Alessandra Sforza[2], Gianni Forti[5], Edoardo Mannucci[7] and Mario Maggi[1]

Periodic follow-up indicated – T levels, Hct, PSA

There is a U-shaped mortality curve based on testosterone levels

- And both high and low values may represent risk beyond that of the testosterone alone

Use of T other than as HRT carries additional risk, especially if high Hgb/Hct, prostate cancer or CVD, other hormone manipulation, or additional risky behaviors

Munich RE

PSA and prostate cancer caveats

- Main concern is for csPCa, and that likelihood depends on more than PSA
  - Consider PSA kinetics, family history, other biomarkers, DRE, imaging (especially MRI) and any prior biopsy results
- Prognosis of PCa depends heavily on stage (tumor extent, grade, and PSA)
  - Other factors modify this further, more so with clinical staging -- keep in the mind the likelihood of upstaging and/or upgrading
  - Use prostatectomy path stage and grade, over biopsy grade & clinical stage
- Close follow-up is necessary, especially with AS
- Given the often prolonged course of prostate cancer, the relative risk is lower at older ages (when competing causes of death prevail)

Photo courtesy emily-morter-188019-unsplash

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