



## **Urological Cancer,** *Combining local and systemic therapy,* ***Our side of the fence***

Prof. Dr. Henk van der Poel  
Juni 30, 2022

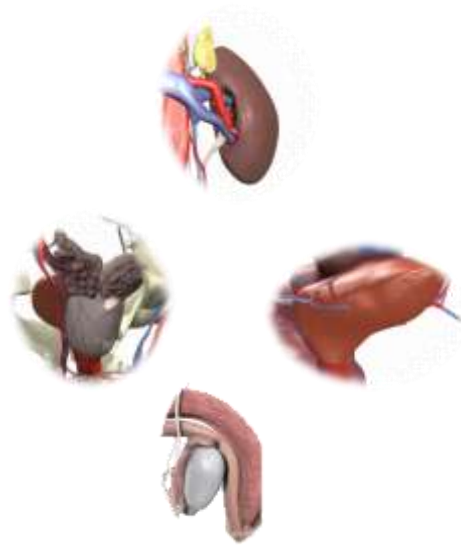
### **Disclosure**

- Astellas, Ipsen, Intuitive, Storz



## Content, fields in urology

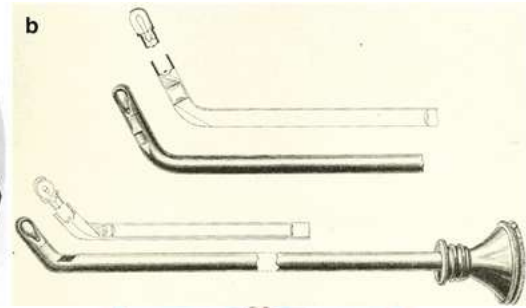
1. History
2. Management/innovations
  - = prostate cancer
  - = bladder cancer
  - = kidney cancer
  - = penile cancer
  - = testis cancer
3. European Association of Urology



## •History



## Cystoscopy: Maximillian Nitze, 1879



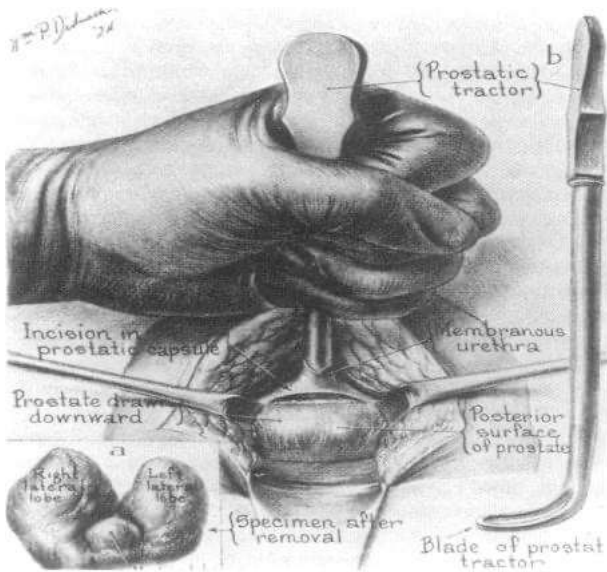
30 June to 2 July 2022

European Conference of Oncology Pharmacy

**ECOP**  
5


30 June to 2 July 2022

**ECOP**  
5



Hugh Hampton Young 1870-1945 *Hugh H. Young*

30 June to 2 July 2022

European Conference of Oncology Pharmacy



## Eugene Bricker 1908-2000



30 June to 2 July 2022

European Conference of Oncology Pharmacy



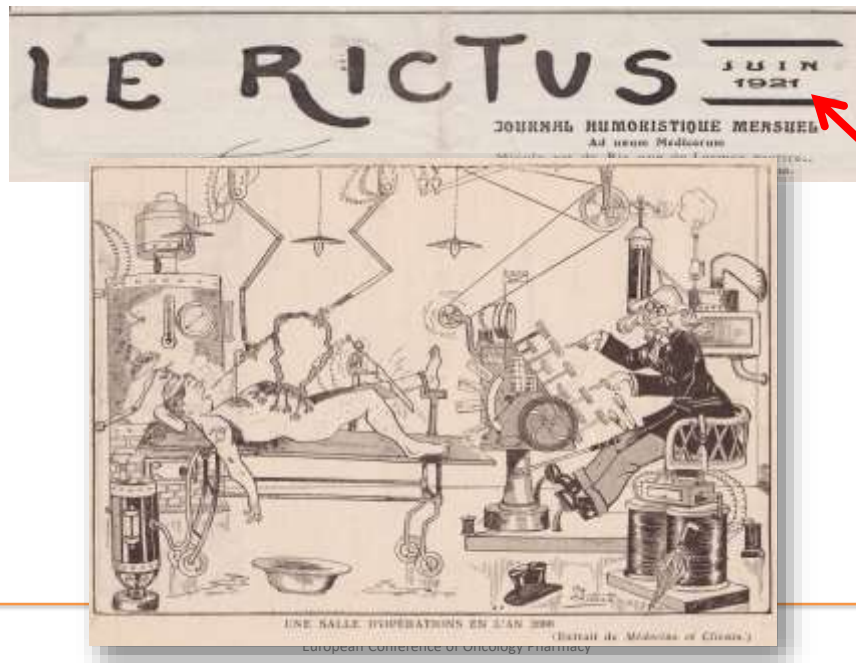
Cure might not be possible in those whom it is needed...  
 ... **but cure may not be needed in those whom it is possible...**  
 (Whitmore 1988)



Whitmore WF Jr, Warner JA, Thompson IM Jr.  
 Expectant management of localized prostatic cancer.  
*Cancer* 1991;67:1091–6.







30 June to 2 July 2022

ECOP  
5

## Newsweek 2005



30 June to 2 July

ECOP  
5

## Cancer incidence 2020

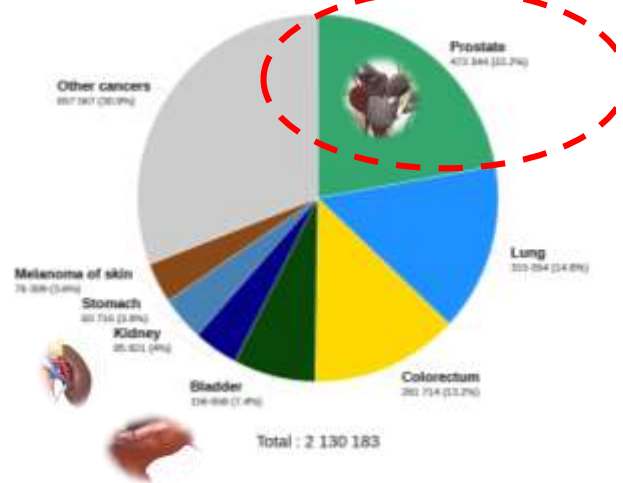
### World wide:

- 19.2million
- Men: 10million
- Women: 9.2million

### Europe:

- 3.9million (20%)
- **0.8million (22%) urological cancers**

### Europe, Men



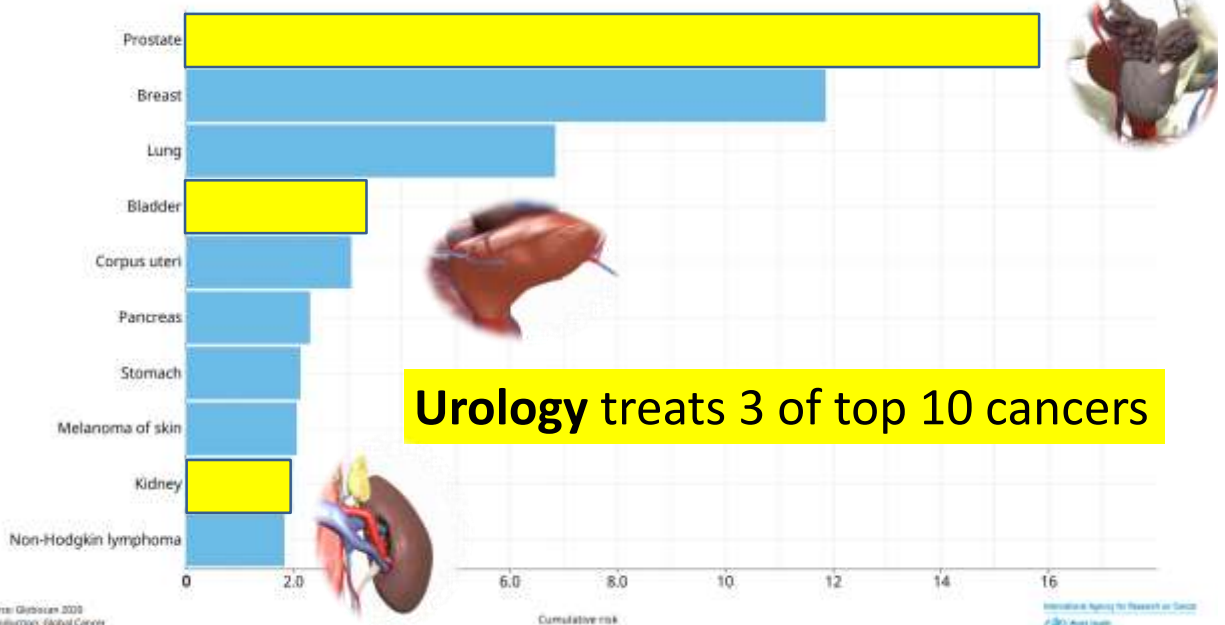
### Globocan 2020

30 June to 2 July 2022

European Conference of Oncology Pharmacy



### Estimated cumulative risk of incidence in 2020, Europe, both sexes, all ages (excl. NMSC)



**Urology treats 3 of top 10 cancers**

Data source: Globocan 2020  
Graph production: Global Cancer Observatory (@globoacancer)

International Agency for Research on Cancer  
World Health Organization

## Number of urologists

US: 13.044 (2019)

EU: 10.000 (est.)

*2 new oncological patients weekly*

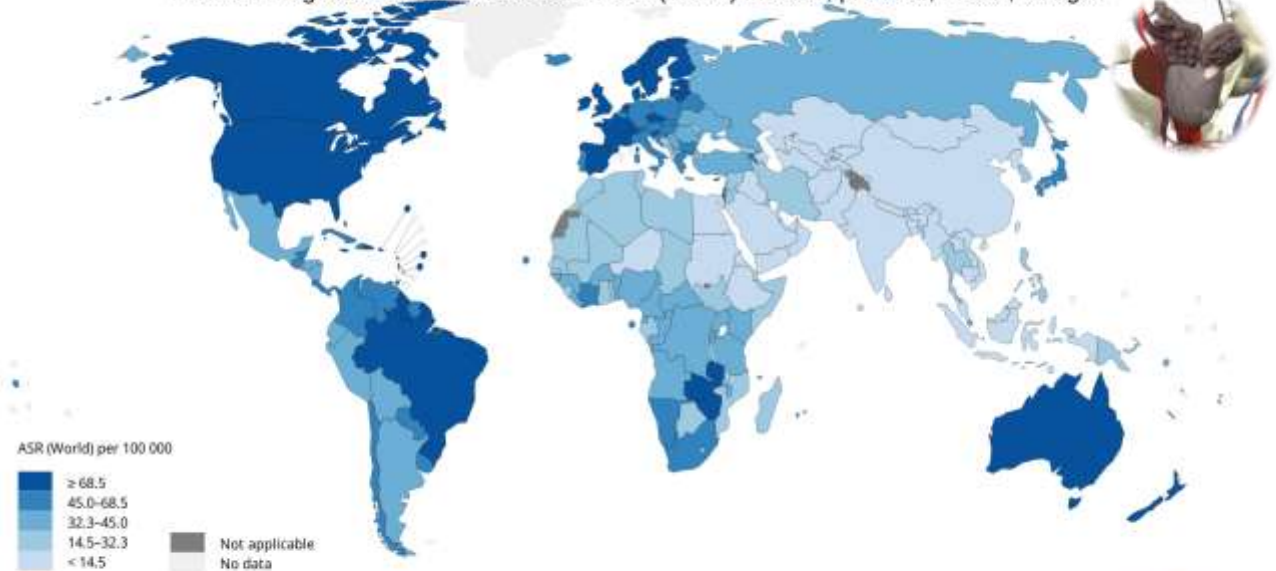


## •Prostate





Estimated age-standardized incidence rates (World) in 2020, prostate, males, all ages

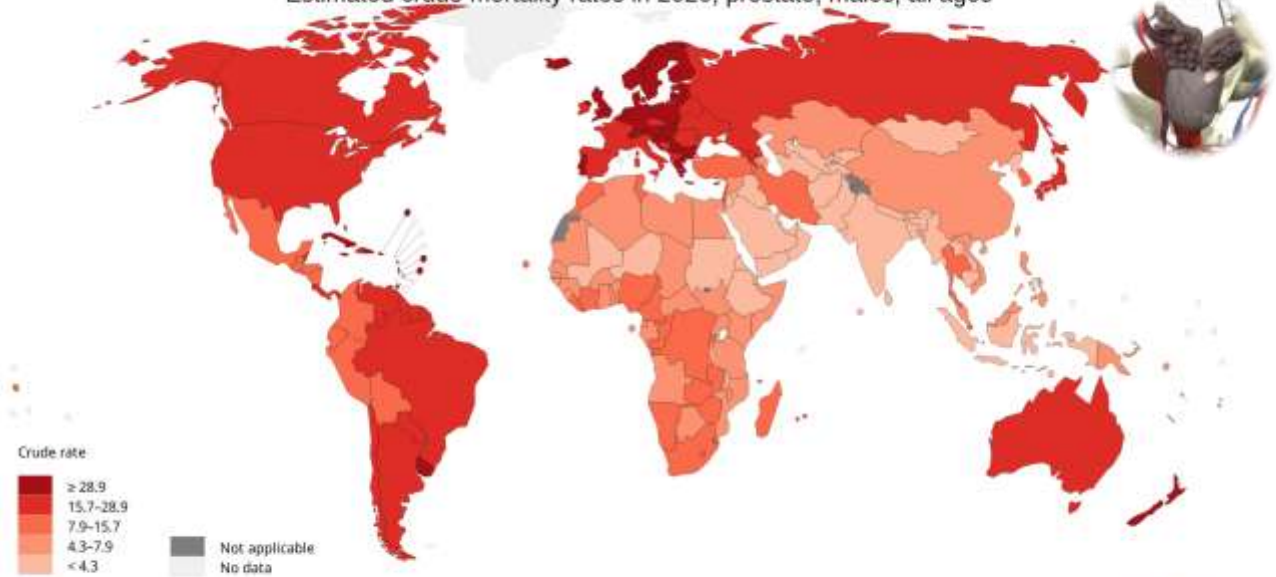


All rights reserved. The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the World Health Organization / International Agency for Research on Cancer concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate borderlines for which there may not yet be full agreement.

Data source: GLOBOCAN 2020  
Graph production: IARC  
© World Health Organization  
International Agency for Research on Cancer 2022



Estimated crude mortality rates in 2020, prostate, males, all ages

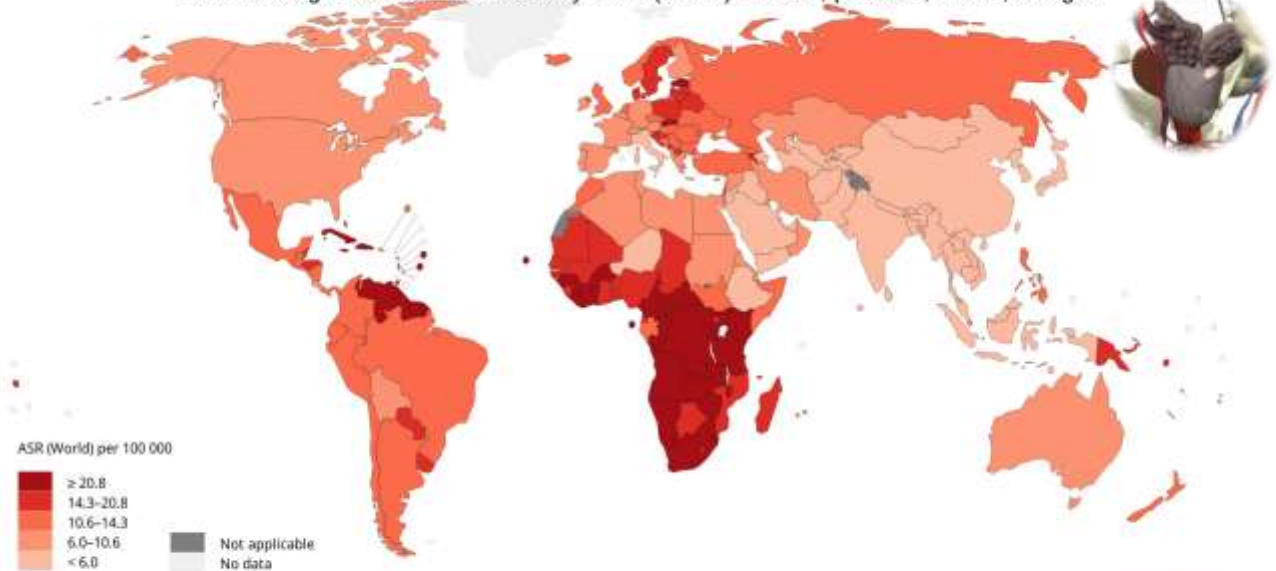


All rights reserved. The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the World Health Organization / International Agency for Research on Cancer concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate borderlines for which there may not yet be full agreement.

Data source: GLOBOCAN 2020  
Graph production: IARC  
© World Health Organization  
International Agency for Research on Cancer 2022



Estimated age-standardized mortality rates (World) in 2020, prostate, males, all ages



All rights reserved. The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the World Health Organization / International Agency for Research on Cancer concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate boundaries for which there may not yet be full agreement.

Data source: GLOBOCAN 2020  
 Graph production: IARC  
 WHO/AIICO/WHO/WHO  
 World Health Organization



## Risk calculators



## • Family history



30 June to 2 July 2022

European Conference of Oncology Pharmacy

**ECOP**  
5

### 5.1.3 Guidelines for screening and early detection

Recommendations	LE	Strength rating
Do not subject men to prostate-specific antigen (PSA) testing without counselling them on the potential risks and benefits.	3	Strong
Offer an individualised risk-adapted strategy for early detection to a well-informed man with a good performance status (PS) and a life-expectancy of at least 10 to 15 years.	3	Weak
Offer early PSA testing in well-informed men at elevated risk of having PCa: <ul style="list-style-type: none"> <li>men &gt; 50 years of age;</li> <li>men &gt; 45 years of age and a family history of PCa;</li> <li>men of African descent &gt; 45 years of age;</li> <li>Men carrying BRCA2 mutations &gt; 40 years of age.</li> </ul>	2b	Strong
Offer a risk-adapted strategy (based on initial PSA level), with follow-up intervals of 2 years for those initially at risk: <ul style="list-style-type: none"> <li>men with a PSA level of &gt; 1 ng/mL at 40 years of age;</li> <li>men with a PSA level of &gt; 2 ng/mL at 60 years of age;</li> </ul> Postpone follow-up to 8 years in those not at risk.	3	Weak
Stop early diagnosis of PCa based on life expectancy and PS; men who have a life-expectancy of < 15 years are unlikely to benefit.	3	Strong

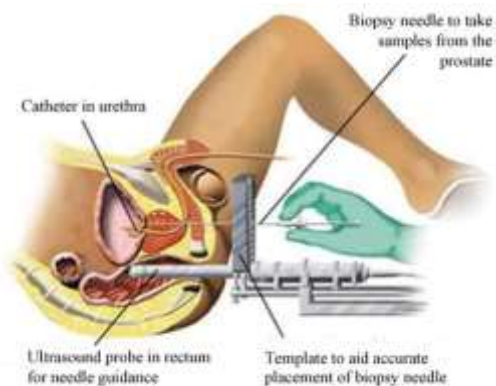
30 June to 2 July 2022

European Conference of Oncology Pharmacy

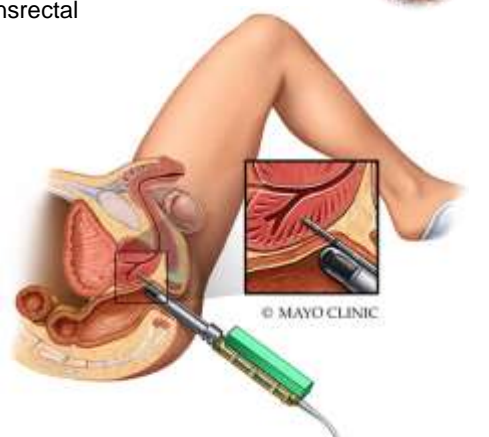
**ECOP**  
5

# Biopsies

transperineal



transrectal



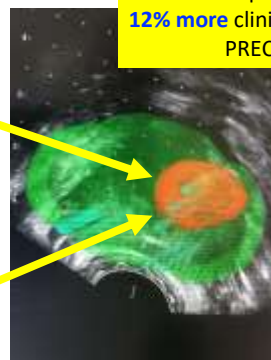
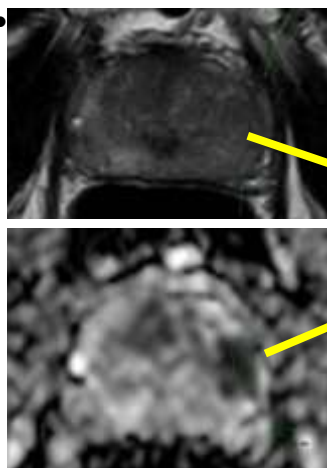
Vs

30 June to 2 July 2022

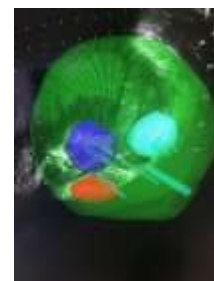
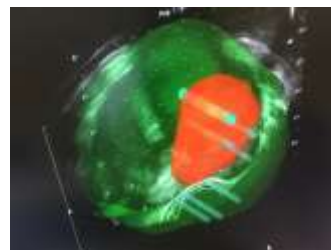
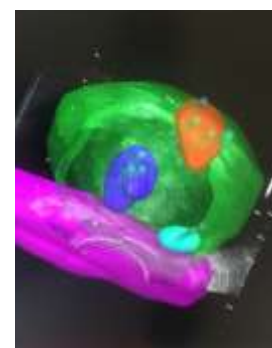
European Conference of Oncology Pharmacy

ECOP  
5

## MRI Targeted biopsies



**28% less** biopsy indications  
**12% more** clinically significant disease  
 PRECISION trial

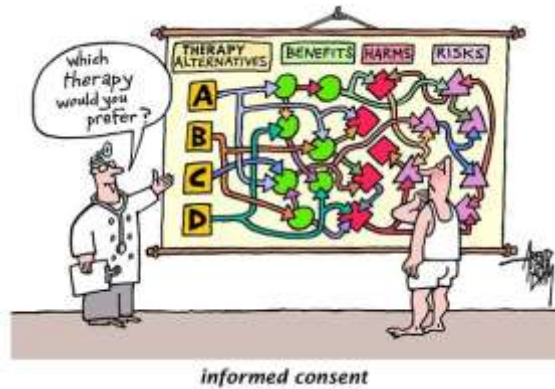


30 June to 2 July 2022

European Conference of Oncology Pharmacy

ECOP  
5





30 June to 2 July 2022

European Conference of Oncology Pharmacy



## Surgery



30 June to 2 July 2022

European Conference of Oncology Pharmacy



## Treatment localized prostate cancer



1. Low risk: **active surveillance** (30% 5y progression)
2. **Surgery vs radiotherapy: no difference in 10y outcome** (lower risk: *PRoTect, SPCG-15 ongoing*)
3. Radiotherapy **ADT 6m-3y (LHRHa)** dependent on risk group
4. **Adjuvant systemic therapy** after surgery limited value
5. Management of recurrence: **delayed salvage RT** (RADICALS, GETUG17, RAVES)



30 June to 2 July 2022

European Conference of Oncology Pharmacy



## Landscape of metastasized disease



1. More **extensive and early** systemic therapy (ADT + docetaxel, abiraterone, enzalutamide, darolutamide, apalutamide)
2. Low vs high **volume** (CHAARTED, LATITUDE)
3. **Localized treatment** in metastasized disease (Stampede H: 3% survival benefit)



### (m)CRPC, novelties

1. **<sup>177</sup>Lu-PSMA-617 radiopharmaceutical**: 5.3m PFS benefit (*VISION, TheraP*)
2. **Olaparib (PARPi)**: 3.8m delay in progression (*PROFOUND, BRCA1,2, ATM*)



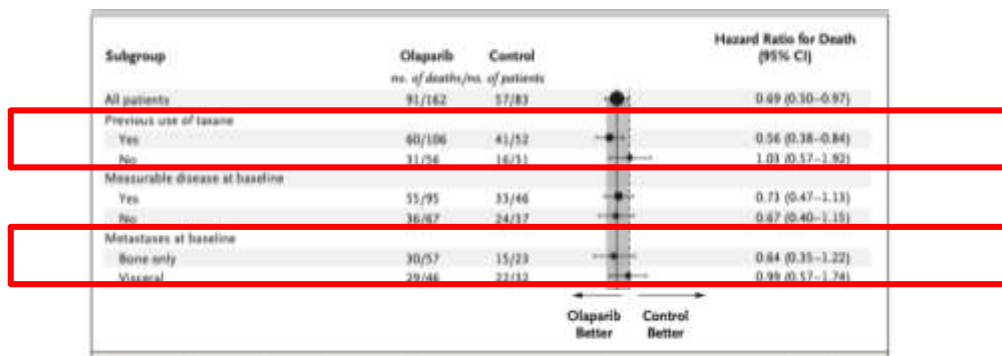
30 June to 2 July 2022

European Conference of Oncology Pharmacy





## PROfound OS: Prior taxanes and non-visceral mets



**Cohort A:** BRCA1/2<sub>mut</sub>, ATM

\*Hussain NEJM 2020

30 June to 2 July 2022

European Conference of Oncology Pharmacy



- I. Routine
- II. Investigational
- III. Other cancers
- IV. Preclinical
- V. Co-targeting
- X. No-evidence

**Table 6. List of genomic alterations level I/II/III according to ESCAT in advanced prostate cancer**

Gene	Alteration	Prevalence	ESCAT	References
BRCA1/2	Somatic mutations/deletions	9%	IA	De Bono J, et al. <i>N Engl J Med.</i> 2020 <sup>11</sup>
	MSI-H	1%	IC	Cortes-Ciriano I, et al. <i>Nat Commun.</i> 2017 <sup>12</sup> Abida W, et al. <i>J Clin Oncol.</i> 2018 <sup>13</sup> Marcus L, et al. <i>Clin Cancer Res.</i> 2019 <sup>14</sup>
PTEN	Deletions/mutations	40%	IIA	Abida W, et al. <i>Proc Natl Acad Sci.</i> 2019 <sup>15</sup> De Bono J, et al. <i>Clin Cancer Res.</i> 2019 <sup>16</sup> NCT03072238 <sup>17</sup>
ATM	Mutations/deletions	5%	IIA	De Bono J, et al. <i>N Engl J Med.</i> 2020 <sup>18</sup>
PALB2	Mutations	1%	IIIB	Mateo J, et al. <i>N Engl J Med.</i> 2015 <sup>19</sup> De Bono J, et al. <i>N Engl J Med.</i> 2020 <sup>20</sup>
PIK3CA	Hotspot mutations	3%	IIIA	Crumbaker M, et al. <i>Cancers.</i> 2017 <sup>21</sup>
AKT1 <sup>G12V</sup>	Mutations	1%	IIIA	Crumbaker M, et al. <i>Cancers.</i> 2017 <sup>22</sup>

30 June to 2 July 2022

European Conference of Oncology Pharmacy



- When to test during disease progression?

**NCCN:**

	localized	mHRPC	mCRPC
HRR**	consider	do	do
MSI/MMR		consider	do

\*\* BRCA1/2, ATM, PALB2, FANCA, RAD51D, CHEK2, CDK12

**EAU:**

all men with **metastasized** disease  
HRR gene and MMR defects

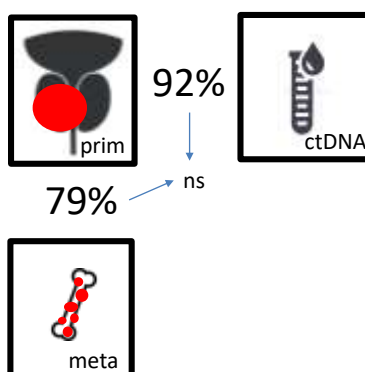
30 June to 2 July 2022

European Conference of Oncology Pharmacy



Concordance of tests **is high**

- N=51
- Primary tumor vs ctDNA vs metastases



Differences mainly explained by sampling

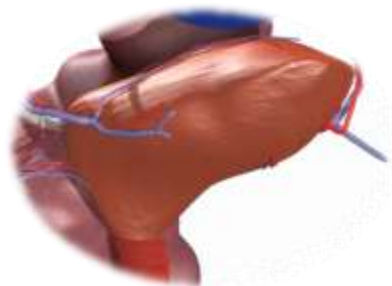
Schweizer JAMA Oncol 2021

30 June to 2 July 2022

European Conference of Oncology Pharmacy



# •Bladder cancer



30 June to 2 July 2022

European Conference of Oncology Pharmacy

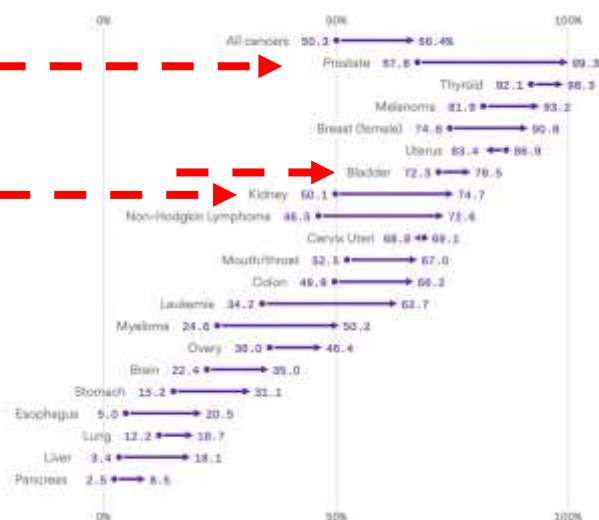


## 1975-2014

**Limited improvement in 5y-survival  
for bladder cancer**  
(prostate 31.5%, kidney 24.6%, **bladder 6.2%**)



Five-year survival rates for most common cancer sites  
Average for the years 1975-77 and 2006-12



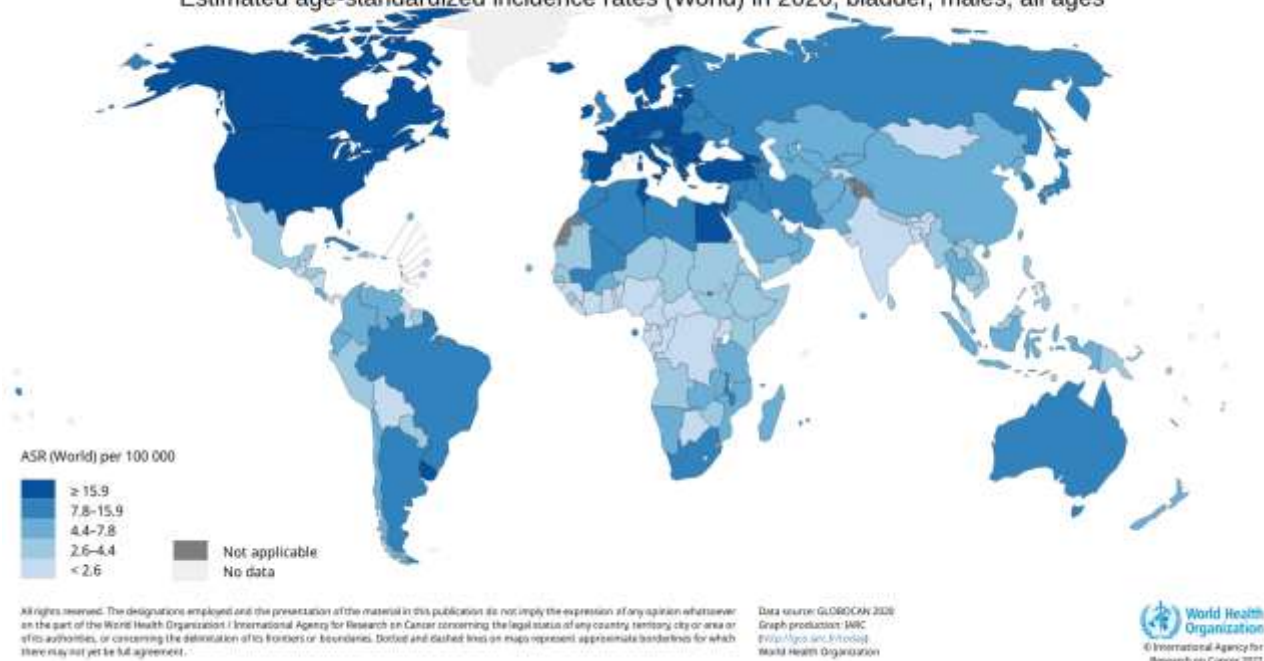
Jemal JNCI 2017

30 June to 2 July 2022

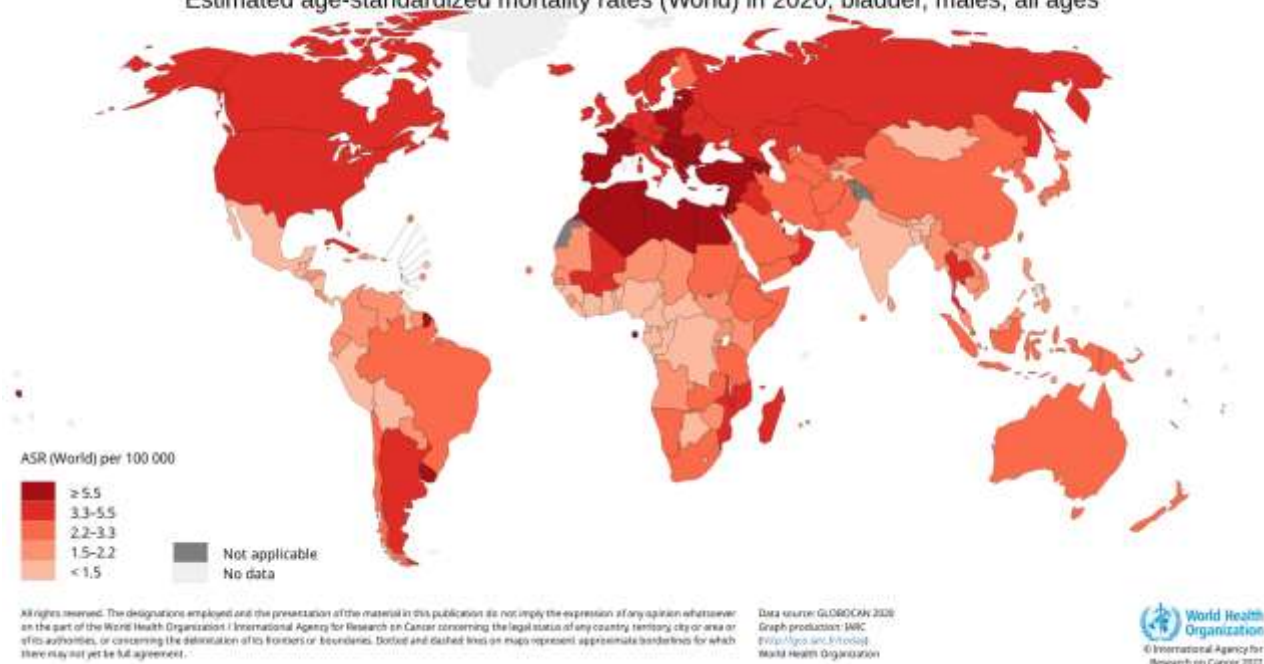
European Conference of Oncology Pharmacy



Estimated age-standardized incidence rates (World) in 2020, bladder, males, all ages



Estimated age-standardized mortality rates (World) in 2020, bladder, males, all ages



## Hematuria and risk factors

1. **Screening** theoretically feasible in a high-risk population, there is currently **insufficient evidence to recommend it**. (Larre Eur Urol 2013)
2. Urine molecular **markers insufficient**
3. **Risk adapted screening** *cystoscopy, ultrasound, CT-U:*
  - a. **Smoking** (50% of cases, 5x risk)
  - b. **Occupational** hazard (10% of cases)
  - c. Limited: family/genetic, diet
  - d. Increased risk: cyclophosphamide, pioglitazone, schistosomiasis

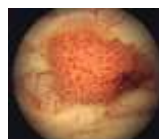


30 June to 2 July 2022

European Conference of Oncology Pharmacy



## Bladder cancer: risk calculators



Age

☐ ≤ 70 years ☐ > 70 years

Tumor Status

☐ Primary

Number of Tumors

☐ Single

Maximum Tumor Diameter

☐ ≤ 3 cm

Stage

☐ T0

Concomitant CIS

☐ No ☐ Yes



Results		
Probability of progression after TURBT without induction or maintenance BCG		
	BASED ON WHO 2004/2016 High Risk	BASED ON WHO 1972 High Risk
at 1 year	3.9%, 2.4%-5.2%	3.8%, 2.6%-5.7%
at 5 years	9.6%, 7.4%-12%	11%, 8.1%-14%
at 10 years	14%, 11%-18%	14%, 10%-19%
Probability of Progression and 95% Confidence Interval		
Reset		
Share result		

30 June to 2 July 2022

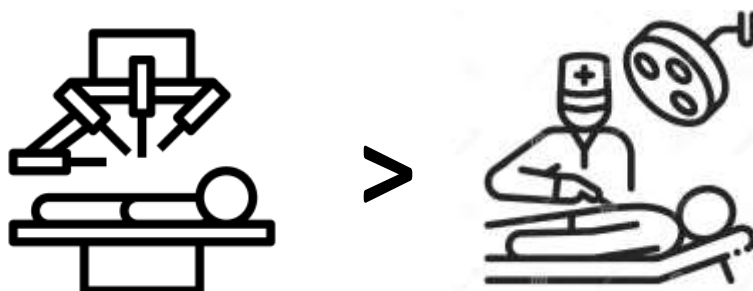
European Conference of Oncology Pharmacy





## Surgery

RCT **robot vs open**: 8 vs 10 days admission (*> 50% reduction in DVT/infections, similar 18m survival*)



Catto JAMA 2022

30 June to 2 July 2022

European Conference of Oncology Pharmacy

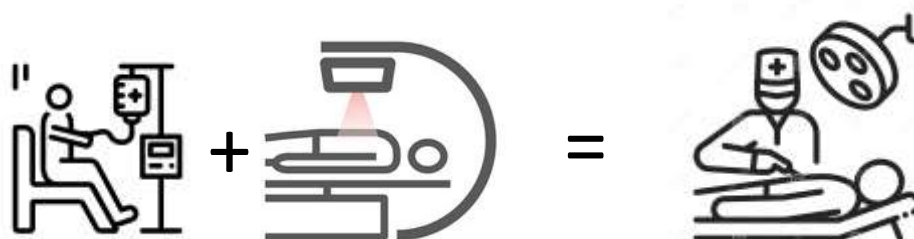


## High-risk non-metastasized bladder cancer



**Chemoradiotherapy** in selected cases (n=1002, propensity matched)

*cisplatin, 5FU/TMC, carbogen/nicotinamide or gemcitabine*



Zhong AMJCO 2019, Giacalon Eur Urol 2017, de Ruiter Eur Urol 2022

30 June to 2 July 2022

European Conference of Oncology Pharmacy

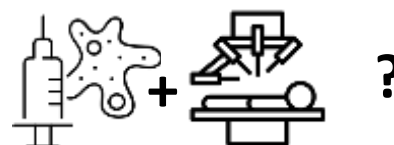
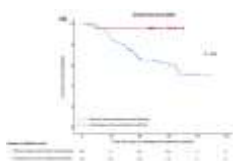




## Systemic therapy bladder cancer: Immunotherapy



1. In patients achieving stable disease, or better, after first-line platinum-based chemotherapy, use **maintenance treatment with PD-L1 inhibitor avelumab**.
2. **Unfit for chemo**: checkpoint inhibitors **pembrolizumab or atezolizumab** in case of high PD-1
3. Second line: **pembrolizumab**
4. **Later line**: FGFR3i, vinflunine, pacli/docetaxel, enfortumab
5. Immunotherapy (ipi/nivo) + Surgery: **pCR = 46%** (22% for chemo)



Einerhand IJC 2022

30 June to 2 July 2022

European Conference of Oncology Pharmacy



## •Kidney



30 June to 2 July 2022

European Conference of Oncology Pharmacy



Estimated age-standardized incidence rates (World) in 2020, kidney, males, all ages

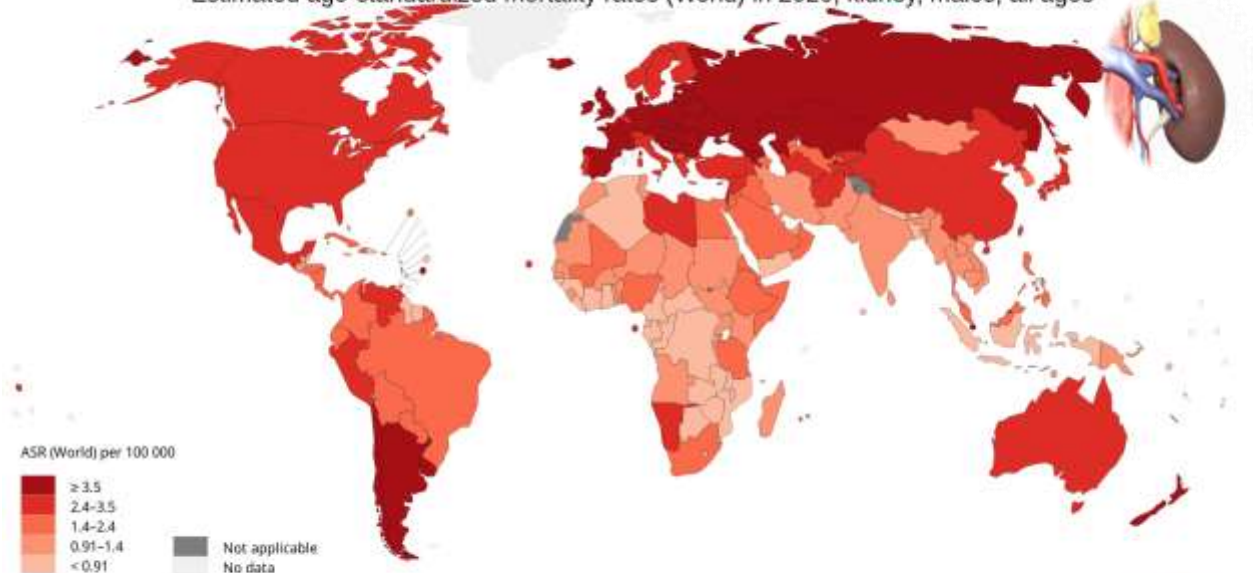


All rights reserved. The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the World Health Organization / International Agency for Research on Cancer concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate borderlines for which there may not yet be full agreement.

Data source: GLOBOCAN 2020  
Graph production: IARC  
© International Agency for Research on Cancer 2022

World Health Organization  
International Agency for Research on Cancer 2022

Estimated age-standardized mortality rates (World) in 2020, kidney, males, all ages



All rights reserved. The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the World Health Organization / International Agency for Research on Cancer concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate borderlines for which there may not yet be full agreement.

Data source: GLOBOCAN 2020  
Graph production: IARC  
© International Agency for Research on Cancer 2022

World Health Organization  
International Agency for Research on Cancer 2022

## Renal cancer



1. **Incidentaloma** 60%, 87% for smaller (<4cm) tumors.
2. **Small renal masses** management: ablation or (robot)partial nephrectomy
3. **Adjuvant TKI: no benefit**, Adjuvant PD-1i: **pembrolizumab HR 0.54 for OS!** (Keynote 564)
4. **Non-clear cell RCC** (pembrolizumab, cabozantinib, savolitinib)
5. Role of **surgery in metastasized** disease limited to responders

30 June to 2 July 2022

European Conference of Oncology Pharmacy



## Metastasized renal cancer: Immuno → TKI → Checkpoint-i



Table 12: European Association of Urology 2013 evidence-based recommendations for first-line and second-line systemic therapy in patients with mRCC. Levels of evidence are shown in square brackets.

RCC type	MSKCC risk group (a)	1st-line therapy*	2nd-line therapy*	3rd-line therapy
Clear cell	Favourable or intermediate	<ul style="list-style-type: none"> <li>• Sunitinib [1b]</li> <li>• IFN-<math>\alpha</math> + bevacizumab [1b]</li> <li>• Pazopanib [1b]</li> </ul>	<p>After prior TKI:</p> <ul style="list-style-type: none"> <li>• Axitinib [1b]</li> <li>• Sorafenib [1b]</li> <li>• Everolimus [1b]</li> </ul> <p>After prior cytotoxics:</p> <ul style="list-style-type: none"> <li>• Everolimus after prior TKIs [1b]</li> </ul>	
	Poor <sup>b</sup>	<ul style="list-style-type: none"> <li>• Temsirolimus [1c]</li> </ul>	<ul style="list-style-type: none"> <li>• Sorafenib [1b]</li> <li>• Axitinib [1b]</li> <li>• Pazopanib [1b]</li> </ul>	
	Non-clear cell			

2013

IFN- $\alpha$  = interferon alpha; MSKCC = Memorial Sloan-Kettering Cancer Center; RCC = renal cell carcinoma; TKI = tyrosine kinase inhibitor.

2013

Figure 7.1: Updated EAU Guidelines recommendations for the first-line treatment of cc-mRCC

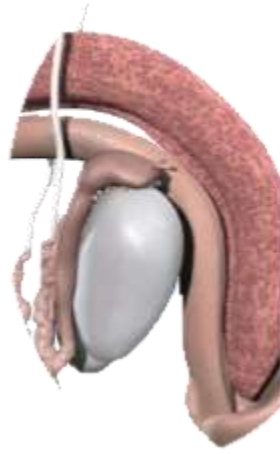
	<b>2022</b>	
	<b>Standard of Care</b>	<b>Alternative in patients who can not receive or tolerate immune checkpoint inhibitors</b>
<b>IMDC favourable risk</b>	nivolumab/cabozantinib [1b] pembrolizumab/sunitinib [1b] pembrolizumab/lenvatinib [1b]	sunitinib* [1b] pazopanib* [1b]
<b>IMDC intermediate and poor risk</b>	nivolumab/cabozantinib [1b] pembrolizumab/sunitinib [1b] pembrolizumab/lenvatinib [1b] nivolumab/pratinib [1b]	cabozantinib* [2a] sunitinib* [1b] pazopanib* [1b]

30 June to 2 July 2022

European Conference of Oncology Pharmacy



# Penis



30 June to 2 July 2022

European Conference of Oncology Pharmacy



**Simon Horenblas**

30 June to 2 July 2022

European Conference of Oncology Pharmacy



Estimated age-standardized incidence rates (World) in 2020, penis, males, all ages

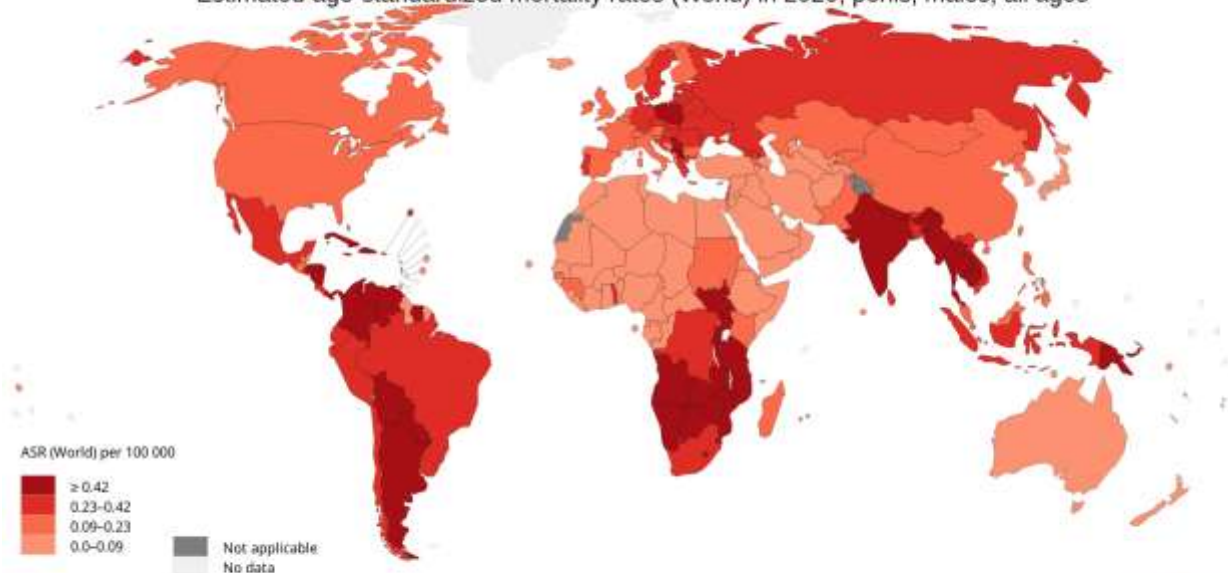


All rights reserved. The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the World Health Organization / International Agency for Research on Cancer concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate borderlines for which there may not yet be full agreement.

Data source: GLOBOCAN 2020  
 Graph production: IARC  
 WHO/Algo. Inc./Infodiv  
 World Health Organization



Estimated age-standardized mortality rates (World) in 2020, penis, males, all ages



All rights reserved. The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the World Health Organization / International Agency for Research on Cancer concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate borderlines for which there may not yet be full agreement.

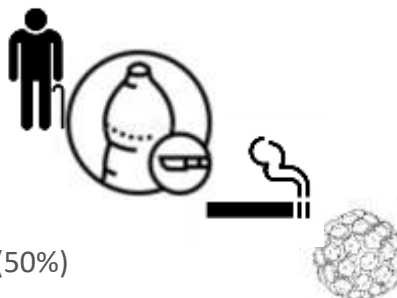
Data source: GLOBOCAN 2020  
 Graph production: IARC  
 WHO/Algo. Inc./Infodiv  
 World Health Organization





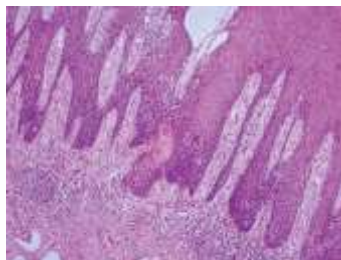
## Etiology

- Age (peak > 70y)
- Phimosis (>50%)
- Smoking (>50%)
- High risk Human Papilloma Virus (50%)
- Protective: circumcision



30 June to 2 July 2022

European Conference of Oncology Pharmacy



### Topical treatment PeIN:

5-fluorouracil (57% CR)

Imiquimod (85% needed additional surgical tx)

30 June to 2 July 2022

European Conference of Oncology Pharmacy





## T1-T2 peniscarcnoom

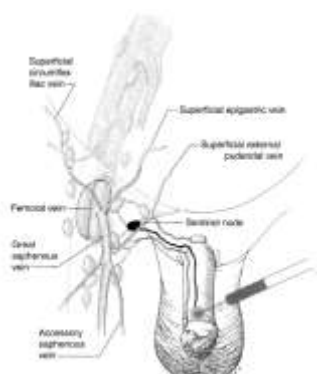


30 June to 2 July 2022

acy

ECOP  
5

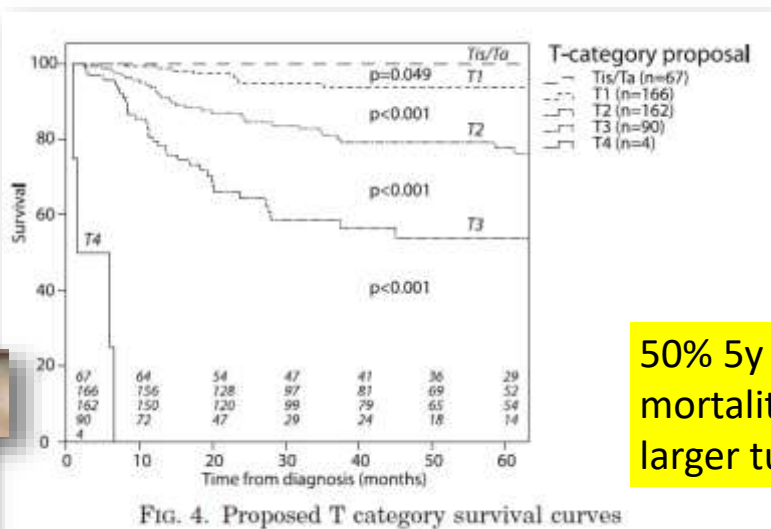
## Dynamic sentinel node biopsy



30 June to 2 July 2022

European Conference of Oncology Pharmacy

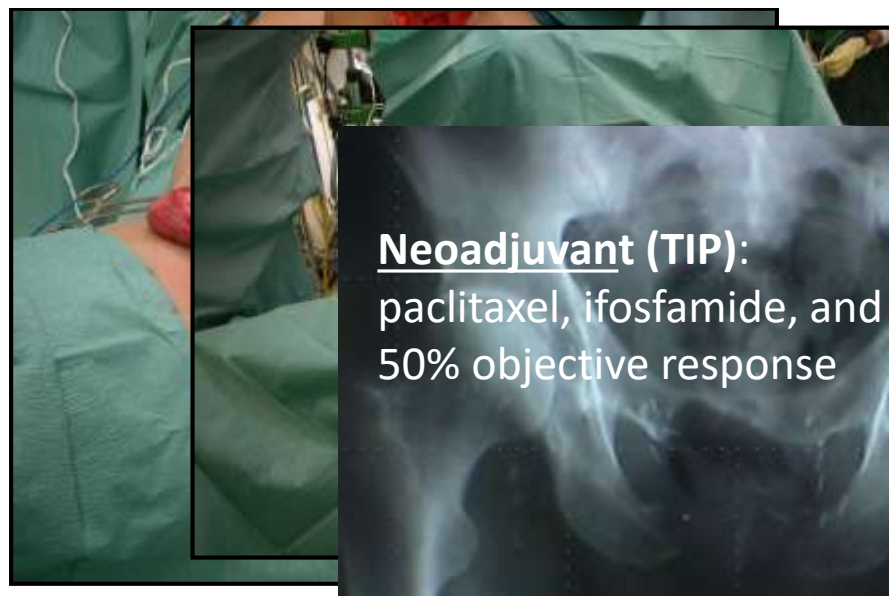
ECOP  
5



50% 5y  
mortality for  
larger tumors

30 June to 2 July 2022

European Conference of Oncology Pharmacy



**Neoadjuvant (TIP):**  
paclitaxel, ifosfamide, and cisplatin  
50% objective response

30 June to 2 July 2022

European Conference of Oncology Pharmacy



## HPV, penile cancer, **vaccination**

1. **50%** of penile cancers attributable to HPV
2. **90%** cervical cancer reduction on vaccination (12-13y)

55% of WHO member states  
>12 years of age  
**One third included boys**



Bruni Prev Med 2021

30 June to 2 July 2022

European Conference of Oncology Pharmacy



## • Testis



30 June to 2 July 2022

European Conference of Oncology Pharmacy



Estimated age-standardized incidence rates (World) in 2020, testis, males, all ages

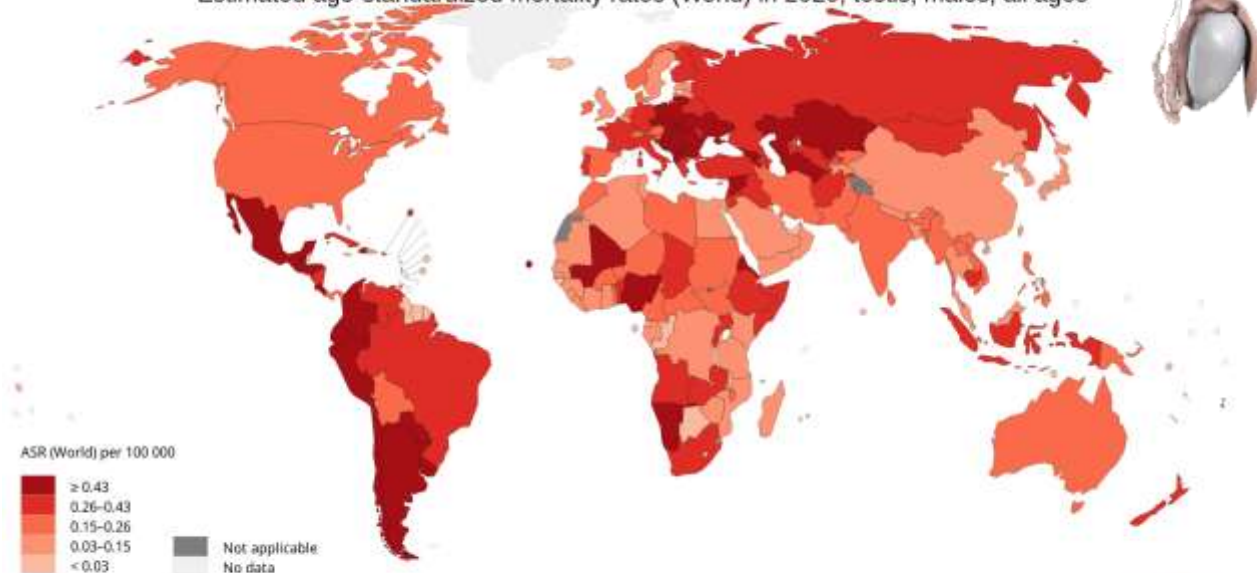


All rights reserved. The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the World Health Organization / International Agency for Research on Cancer concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate borderlines for which there may not yet be full agreement.

Data source: GLOBOCAN 2020  
Graph production: IARC  
© International Agency for Research on Cancer 2022



Estimated age-standardized mortality rates (World) in 2020, testis, males, all ages



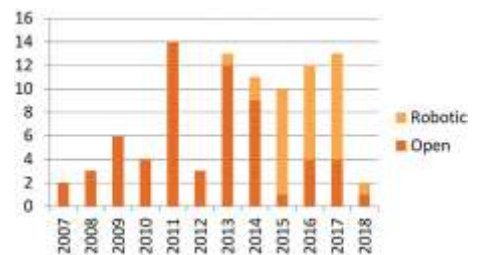
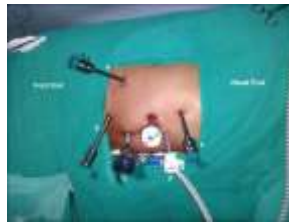
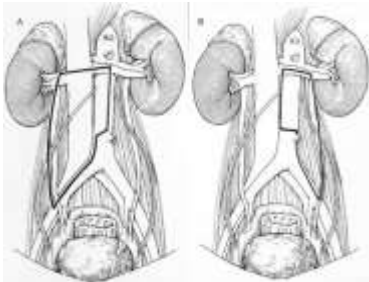
All rights reserved. The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the World Health Organization / International Agency for Research on Cancer concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate borderlines for which there may not yet be full agreement.

Data source: GLOBOCAN 2020  
Graph production: IARC  
© International Agency for Research on Cancer 2022



## Management

1. **Chemotherapy** has not changed over decades
2. Challenges: secondary **retroperitoneal surgery**
3. **Salvage treatment: conventional vs HD chemo**  
(cisplatin/ifosfamide/paclitaxel) (carbo/etoposide)



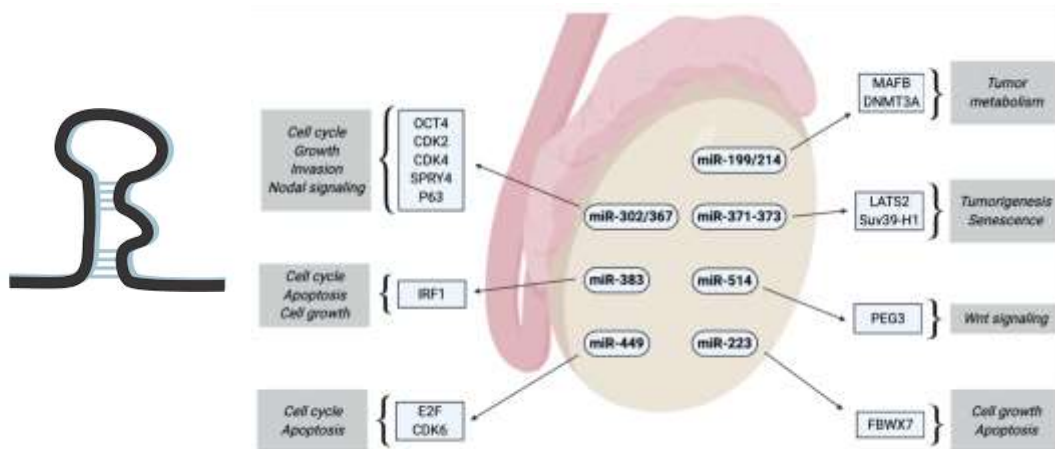
Blok WJU 2020, Li Eur Urol Oncol 2021, Honecker Ann Oncol 2018

30 June to 2 July 2022

European Conference of Oncology Pharmacy



## Risk factors: miRNA markers



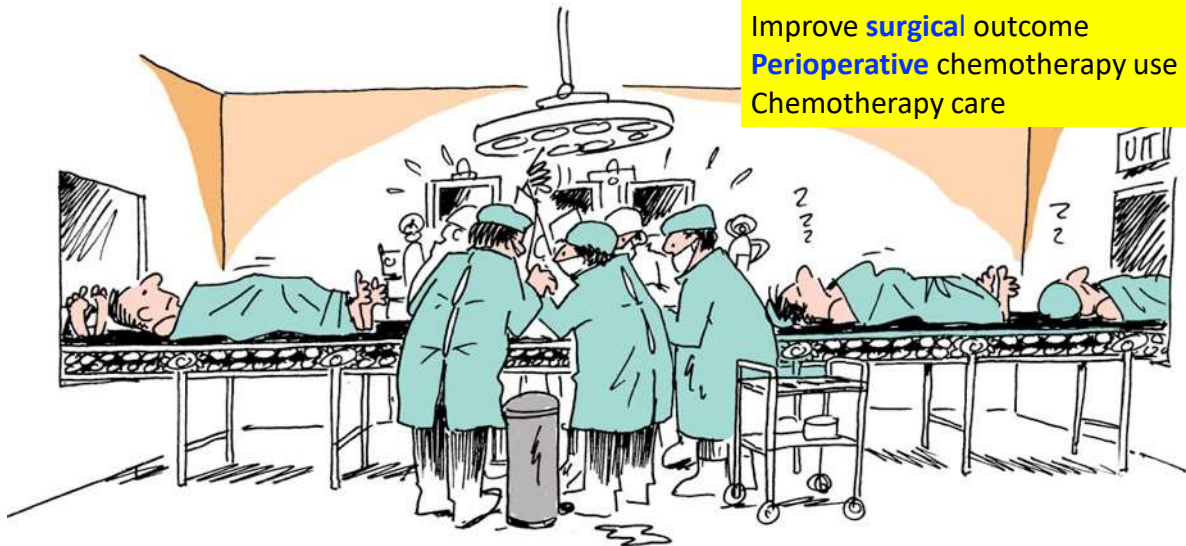
Regouc Cancers 2020

30 June to 2 July 2022

European Conference of Oncology Pharmacy





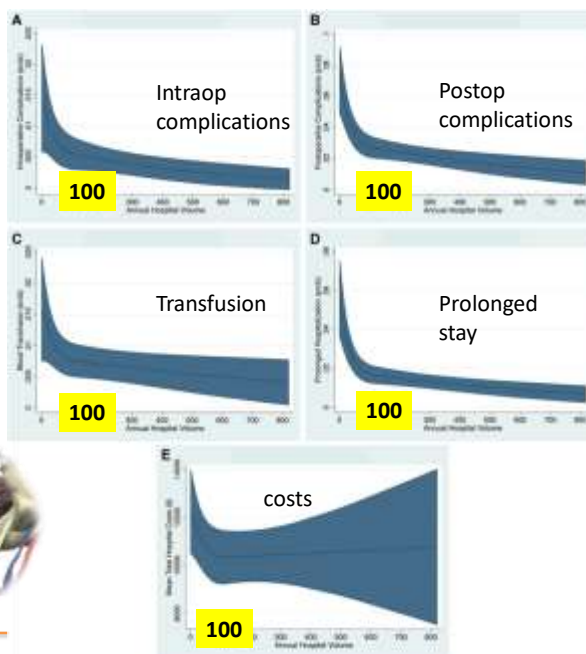


Improve **surgical** outcome  
**Perioperative** chemotherapy use  
 Chemotherapy care

Siemens Can J Urol 2020

30 June to 2 July 2022

European Conference of Oncology Pharmacy



Annual **prostatectomy** case load



**>100 yearly**  
 seems  
 Reasonable quality

N=140.671, RARP  
 2472 hospitals  
 2009-2011

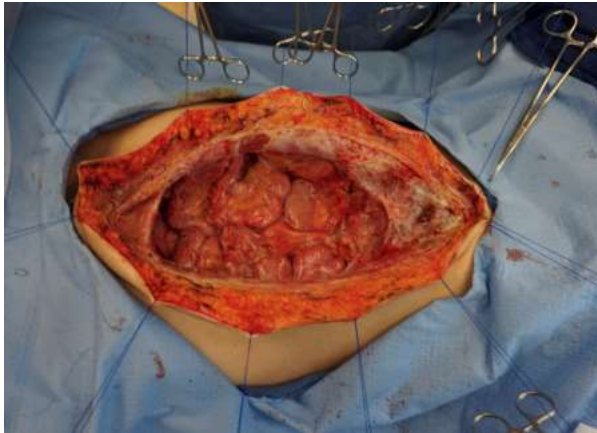
Gershman et al., J Urol Vol. 198, 1-8, July 2017

30 June to 2 July 2022

European Conference of Oncology Pharmacy







30 June to 2 July 2022

European Conference

## Medtronic: HUGO

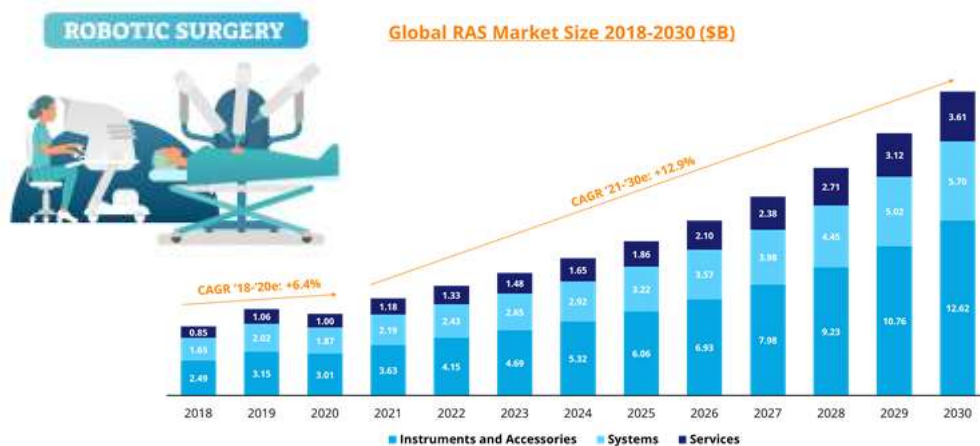


30 J

European Conference of

IP 5

## Growth in robotic surgery market



<https://www.meddeviceonline.com/doc/the-market-outlook-for-robotic-assisted-surgery-in-0001>

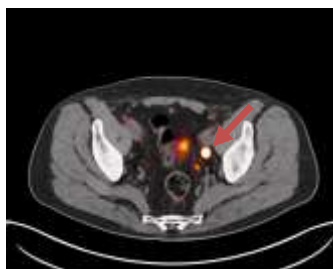
30 June to 2 July 2022

European Conference of Oncology Pharmacy



Prostate specific  
membrane antigen  
(**PSMA**) PET imaging

Prostate cancer recurrence  
detection at PSA 0.2ng/ml



Role of PSMApet in M1 disease treatment selection unclear

30 June to 2 July 2022

European Conference of Oncology Pharmacy



# EAU22

## AMSTERDAM

### 1-4 July 2022

Cutting-edge Science at  
Europe's largest Urology Congress



[www.eau22.org](http://www.eau22.org)  
30 June to 2 July 2022

European Conference of Oncology Pharmacy



## Conclusions Urological Cancer



1. From niche profession to multidisciplinary care (chair)
2. Minimal invasive surgery
3. Increase in systemic therapy options
4. Strong European Organization
5. Care and research networks
6. Technology / genetics driven

## Conclusions Urological Cancer

1. From niche profession to multidisciplinary care (chair)
2. Minimal invasive surgery
3. Increase in systemic therapy options
4. Strong European Organization
5. Care and research networks
6. Technology / genetics driven



30 June to 2 July 2022

European Conference of Oncology Pharmacy



## Conclusions Urological Cancer

1. From niche profession to multidisciplinary care (chair)
2. Minimal invasive surgery
3. Increase in systemic therapy options
4. Strong European Organization
5. Care and research networks
6. Technology / genetics driven



30 June to 2 July 2022

European Conference of Oncology Pharmacy



## Conclusions Urological Cancer

1. From niche profession to multidisciplinary care (chair)
2. Minimal invasive surgery
3. Increase in systemic therapy options
4. Strong European Organization
5. Care and research networks
6. Technology / genetics driven



**EAU22** | AMSTERDAM  
1-4 July 2022

30 June to 2 July 2022

European Conference of Oncology Pharmacy



## Conclusions Urological Cancer

1. From niche profession to multidisciplinary care (chair)
2. Minimal invasive surgery
3. Increase in systemic therapy options
4. Strong European Organization
5. Care and research networks
6. Technology / genetics driven



**EAU22** | AMSTERDAM  
1-4 July 2022



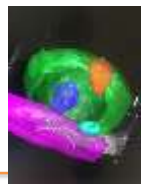
30 June to 2 July 2022

European Conference of Oncology Pharmacy



## Conclusions Urological Cancer

1. From niche profession to multidisciplinary care (chair)
2. Minimal invasive surgery
3. Increase in systemic therapy options
4. Strong European Organization
5. Care and research networks
6. Technology / genetics driven



**EAU22** | AMSTERDAM  
1-4 July 2022

30 June to 2 July 2022

European Conference of Oncology Pharmacy

