Patient journey nierkanker

Dr. Patricia Zondervan, uroloog

- Voorzitter van nierkanker werkgroep NVU
- Voorzitter van de landelijke tumorwerkgroep nierkanker DRCG

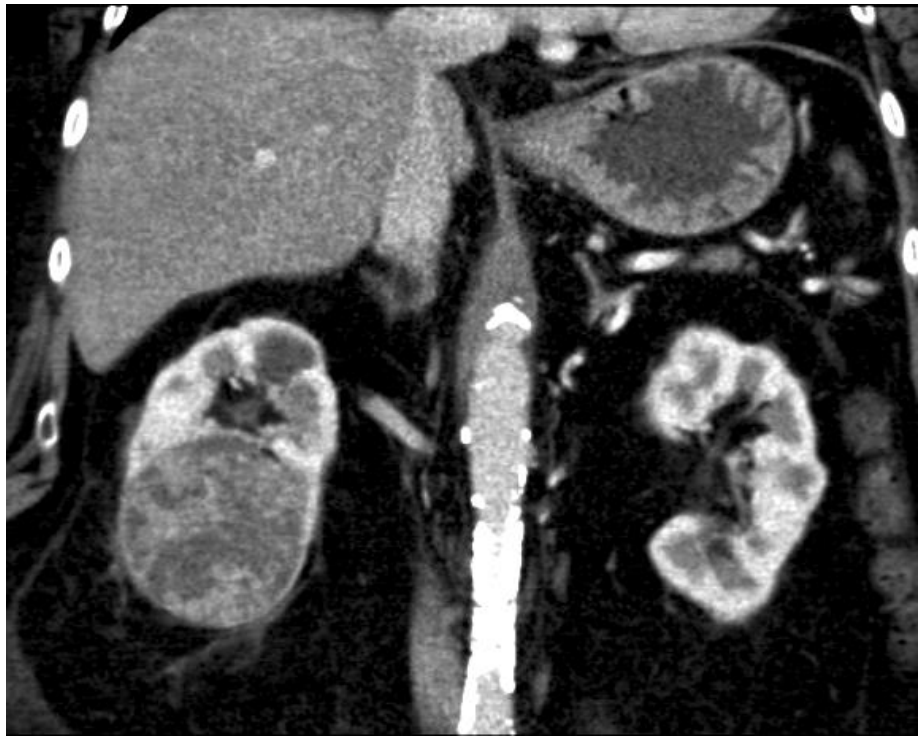
Nierkanker netwerk Amsterdam NKNA (AUMC/AVL/OLVG/Spaarne/NWG

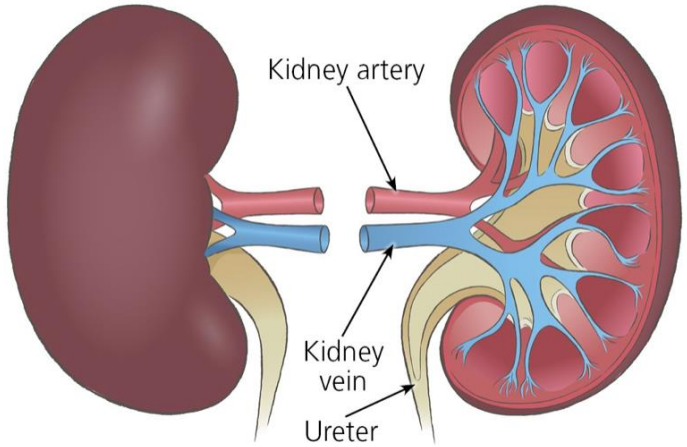
*sinds 2017

Disclosure belangen spreker

(potentiële) belangenverstrengeling	Geen
Voor bijeenkomst mogelijk relevante relaties met bedrijven	Geen
• Sponsoring of onderzoeksgeld • Honorarium of andere (financiële) vergoeding • Aandeelhouder • Andere relatie, namelijk …	• Cure for cancer voor PhDs • Astellas voor AUA review 2021 • Geen • Via cursussen sponsoring van medtronic, intuitive,storz, galilmedical, astellas Via pro-RCC sponosring van ipsen, BMS, Pfizer.

Nierkanker - Niercelcarcinoom

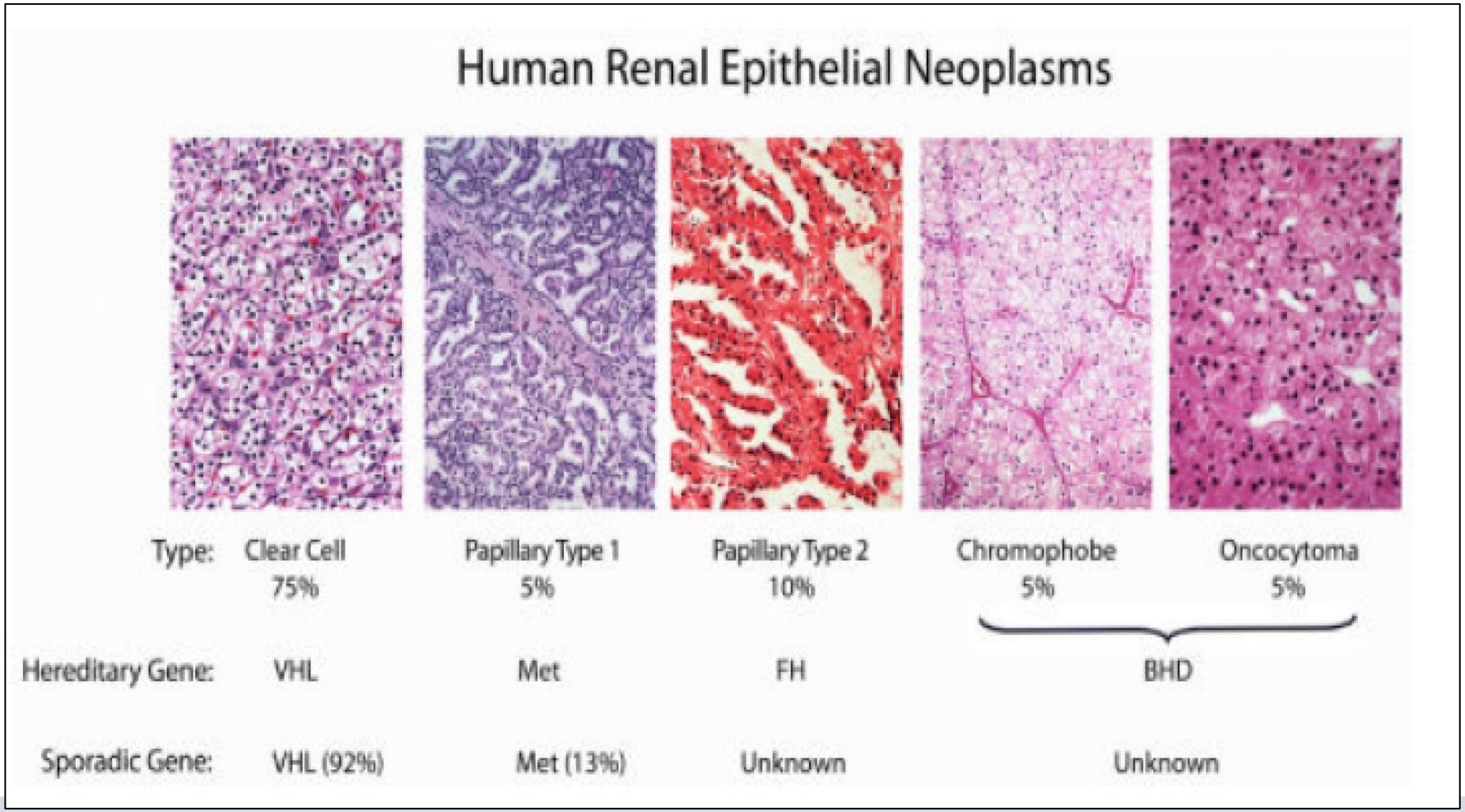




Functie nieren:

1. Filteren bloed
2. Maken hormonen waardoor
    1. Bloeddruk regulatie
    2. Maken rode bloedcellen
3. Calcium regulatie voor botten

Verschillende histologische types RCC



Erfelijke nierkanker (5-8%)

Nierkanker

Risicofactoren	Hoe vaak komt het voor?	Diagnose	Behandelingen	Toekomst
• Roken • Adipositas • Hoge bloeddruk	• Welke leeftijd • NL • Overleving	• Etiologie • Symptomen • Diagnostiek • Behandel keuzes	• Lokaal • Gevorderd • Uitgezaaid • Gedeelde besluitvorming	• Concentratie v nierkankerzorg

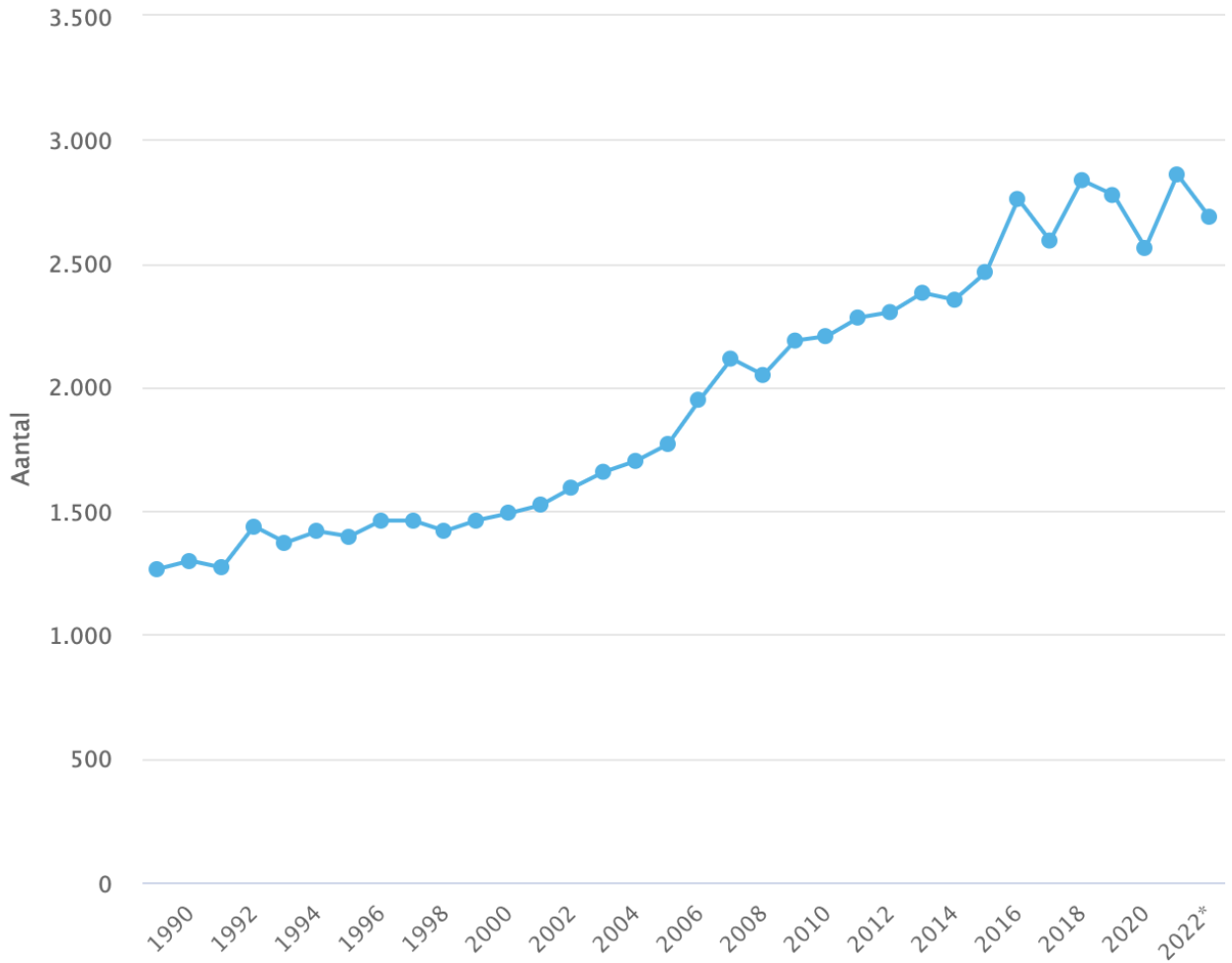
Risicofactoren – leefstijlfactoren!

- Toenemende leeftijd
- Man : vrouw 3:2
- **Overgewicht** (4% toename in kans bij elke 1 punt toename in BMI)
- **Roken** (39% hogere kans) wel dosis afhankelijk
- **Hoge bloeddruk**
- **Diabetes Mellitus**
- Nierfalen

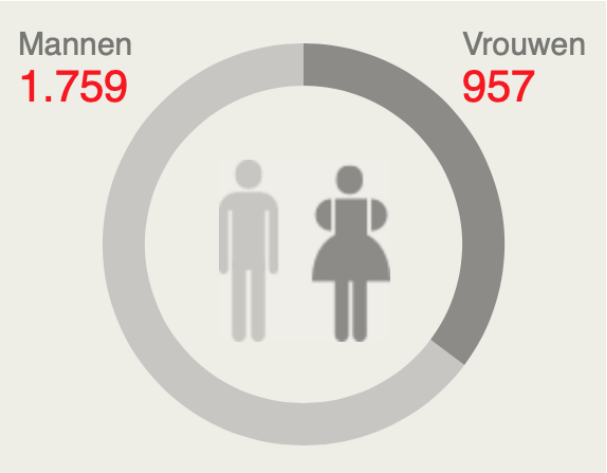
Incidentie per jaar, Aantal

Nierkanker

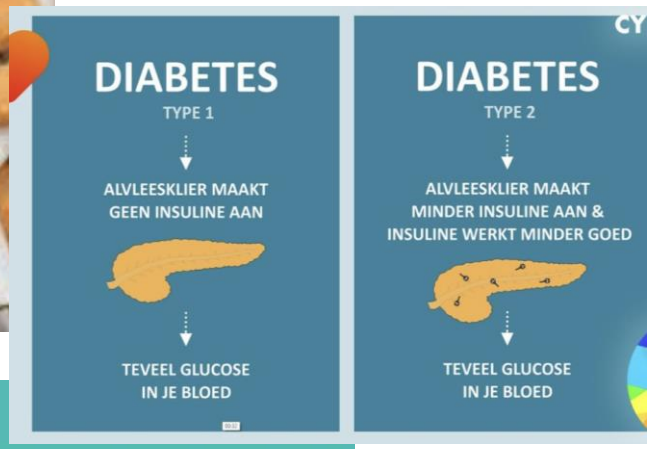
Geslacht: Man en vrouw | **Leeftijdsgroep:** Totaal | **Regio:** Nederland

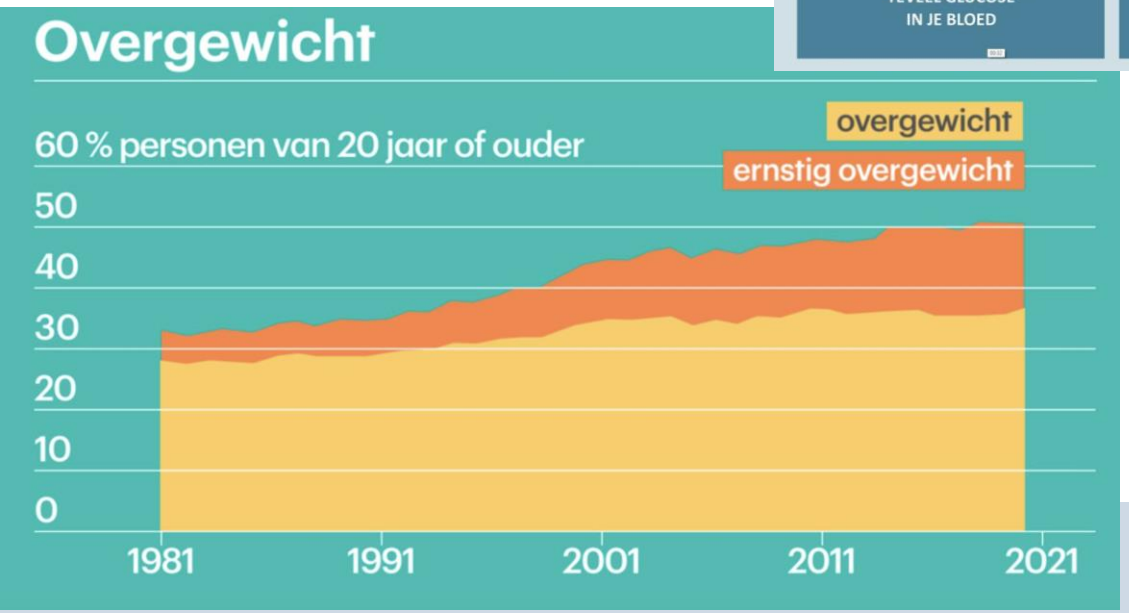


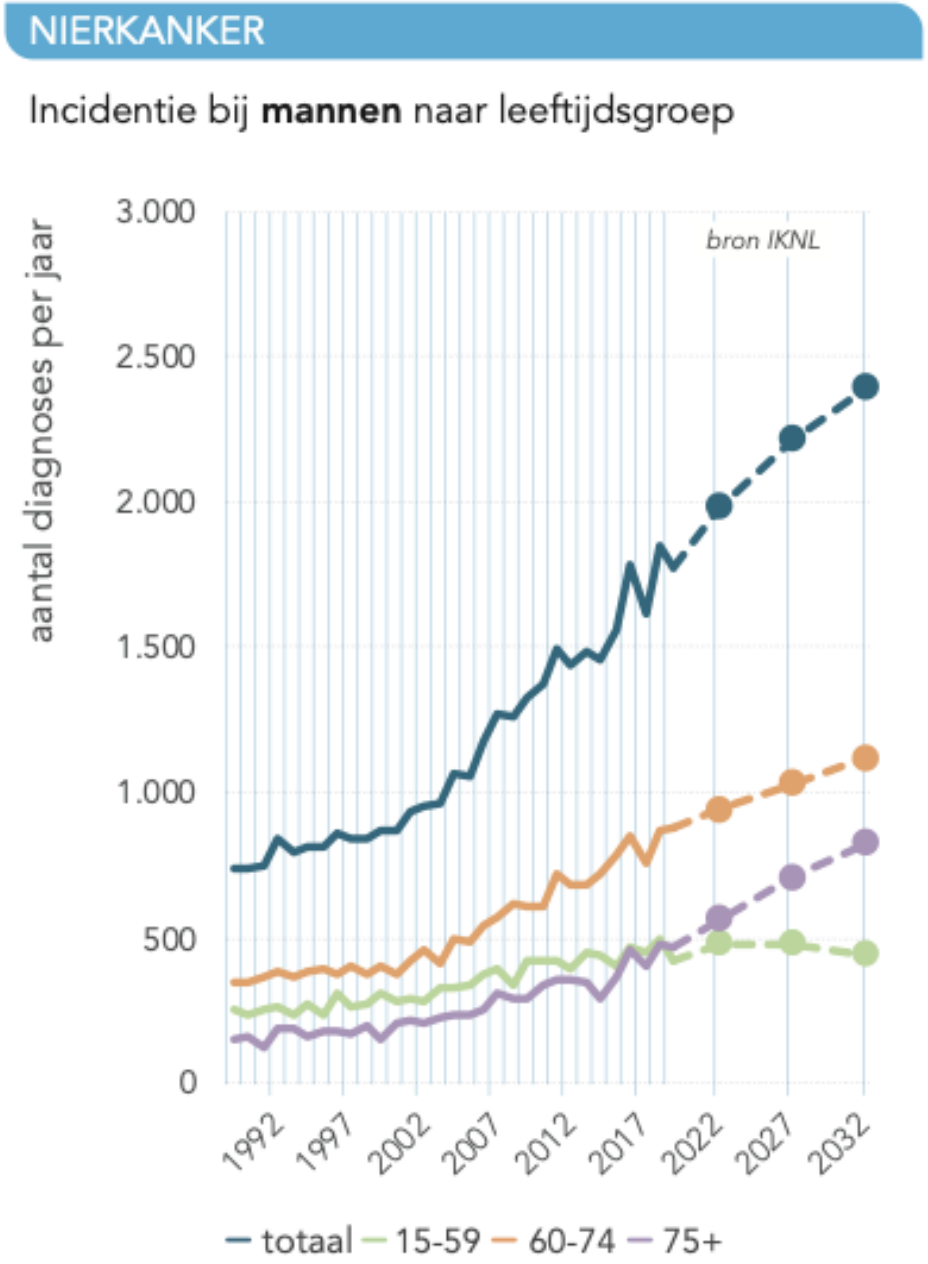
2700 nieuwe RCC/jr (2%)



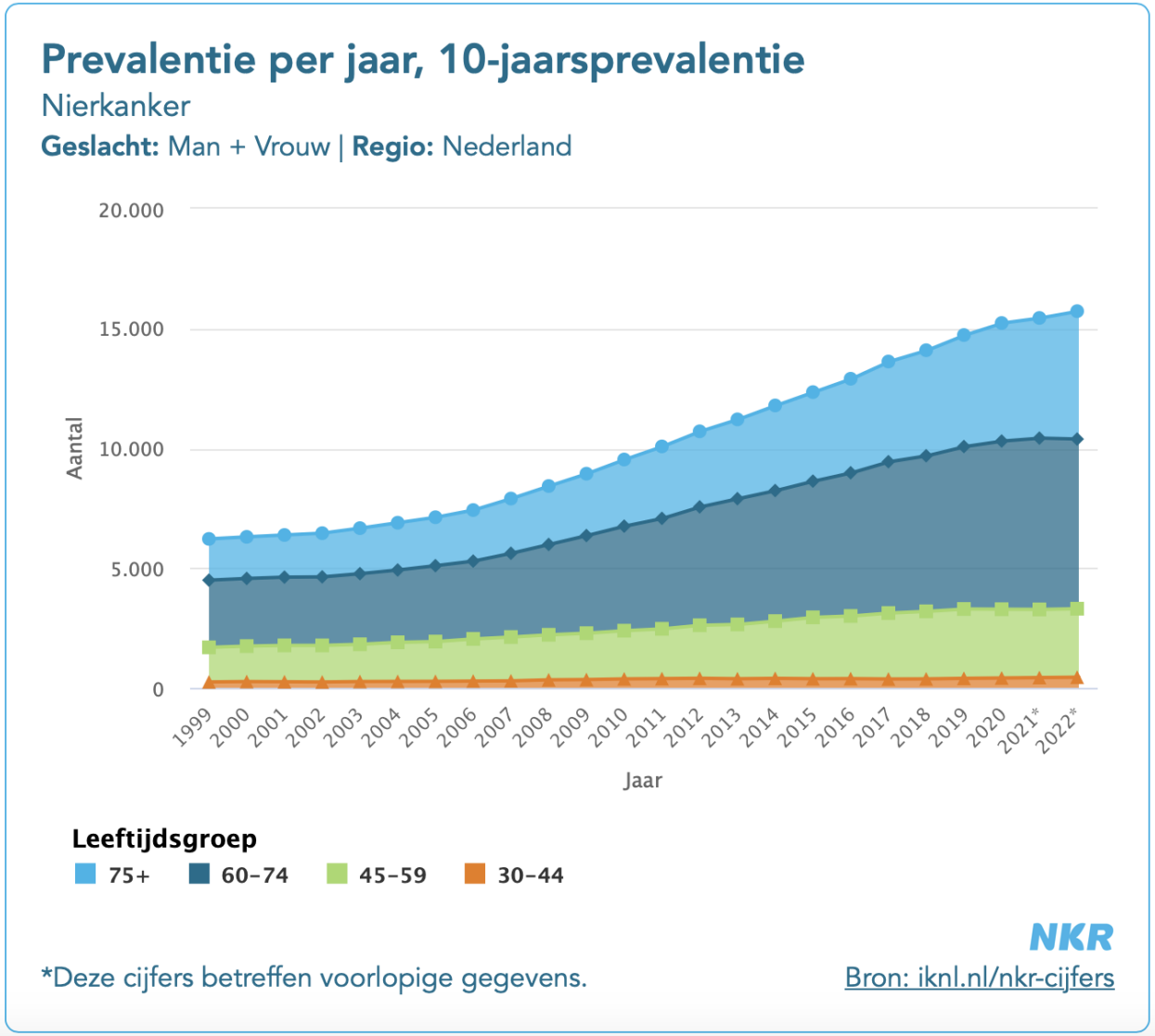
Voorspelling voor 2032







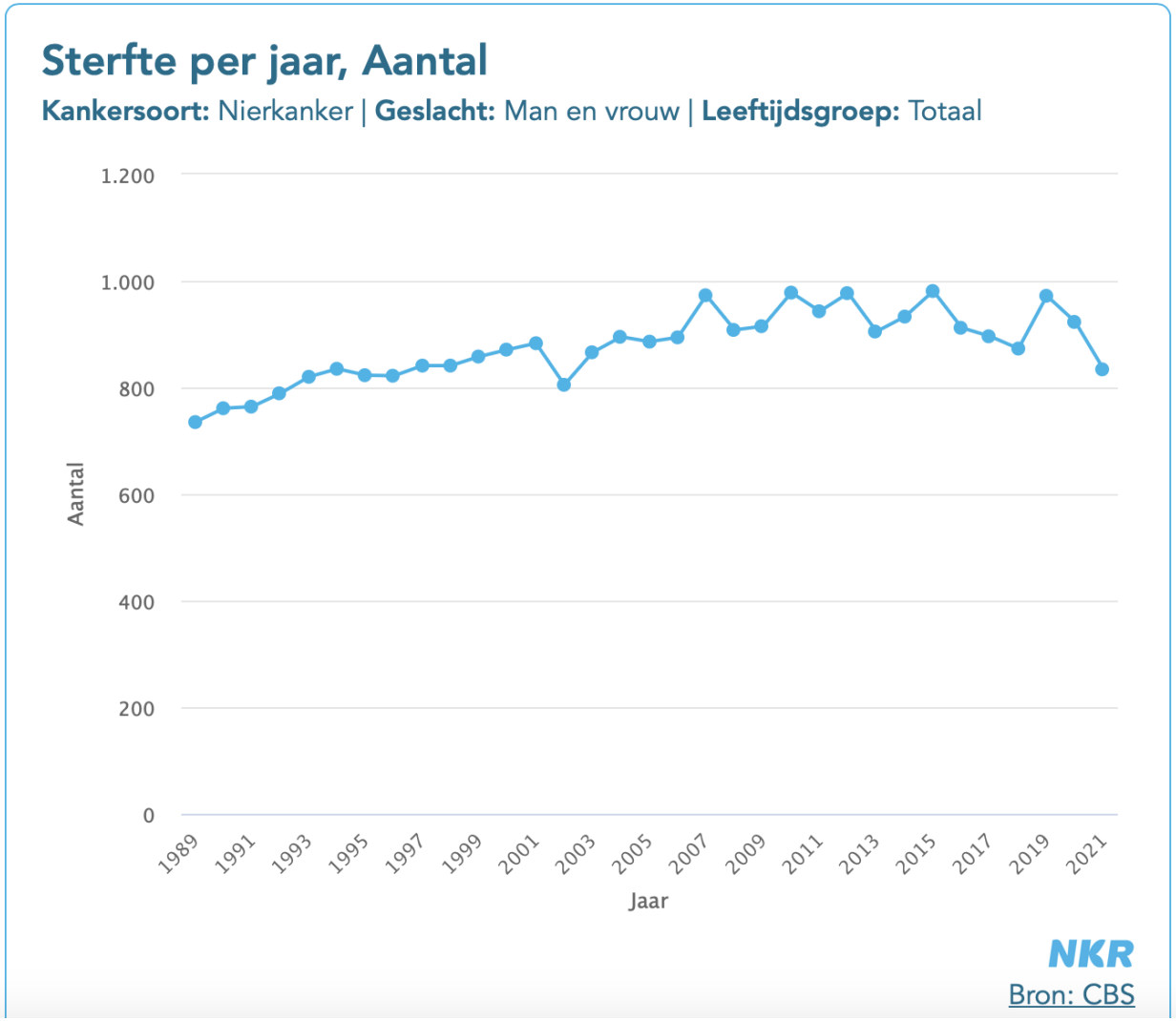
De 10-jaarsprevalentie van nierkanker is de afgelopen decennia gestegen. In Nederland leven bijna 16.000 mensen met of na nierkanker.



*16.000 mensen in NL met of na nierkanker

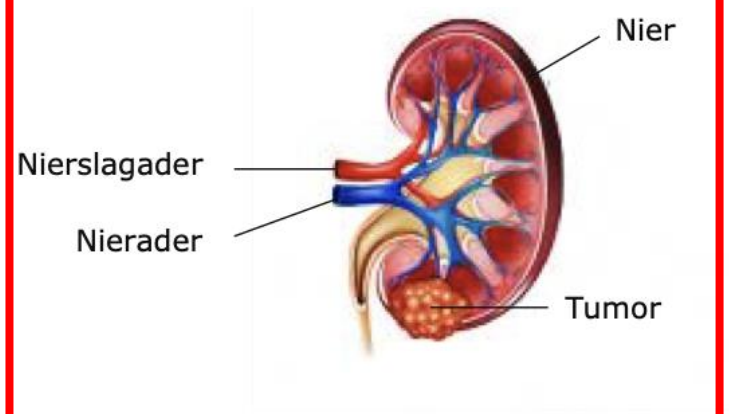
Sterfte nierkanker

Jaarlijks overlijden er in Nederland ongeveer 800-900 mensen aan nierkanker.



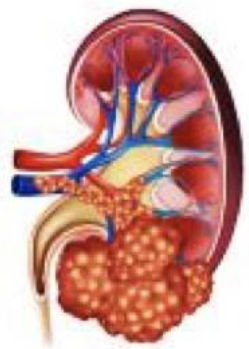
- 873 patienten overlijden aan nierkanker/jr
- 66% 5 jrs overleving
- 53% 10 jrs overleving

Tumor Node Metastase (TNM) stadium

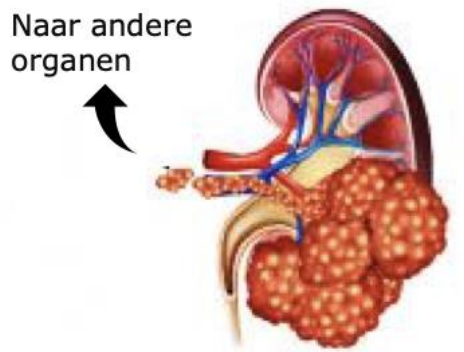


T1a (36%): de tumor is beperkt tot de nier en is <4 cm
T1b (21%): de tumor is beperkt tot de nier en is 4-7 cm

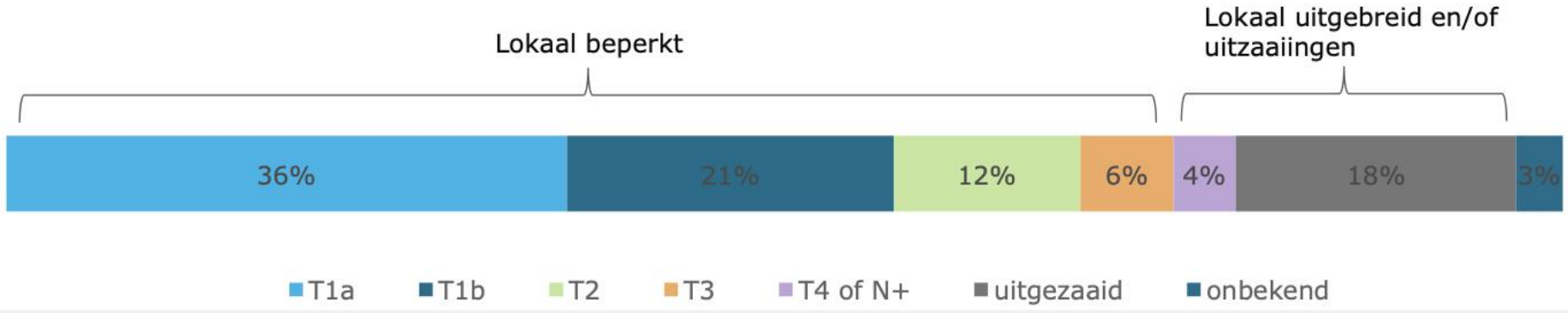
T2 (12%): de tumor is >7 cm maar nog beperkt tot de nier



T3 (6%): de tumor groeit in de naastgelegen grote bloedvaten



T4 of uitgebreider (22%): de tumor groeit voorbij het nierkapsel en/of is uitgezaaid naar regionale lymfeklieren (N+) en/of andere organen (M+)



Patient journey lokaal nierkanker

Gedeelde besluitvorming!!!

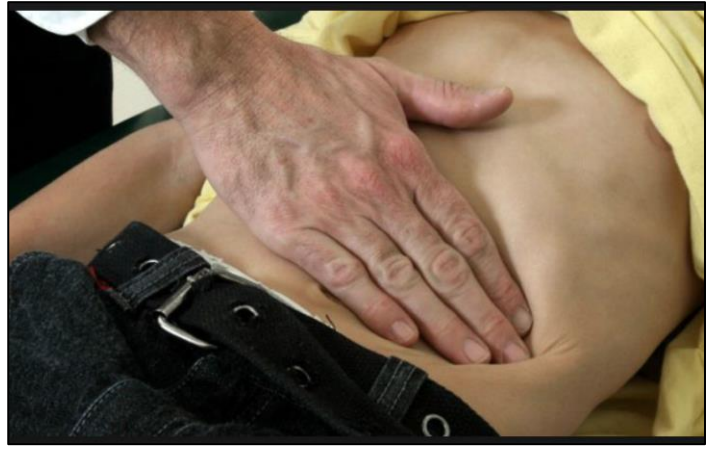
Pt komt binnen
- Symptomen
- Toeval op CT

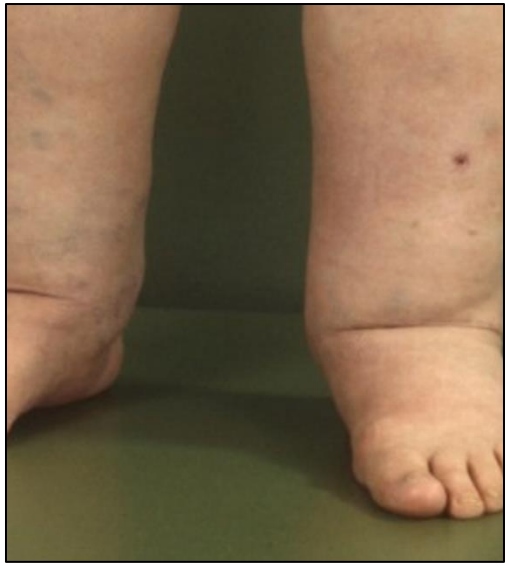
Diagnostiek
- Lab
- CT-4 fasen
- CT thorax
- Biopt?

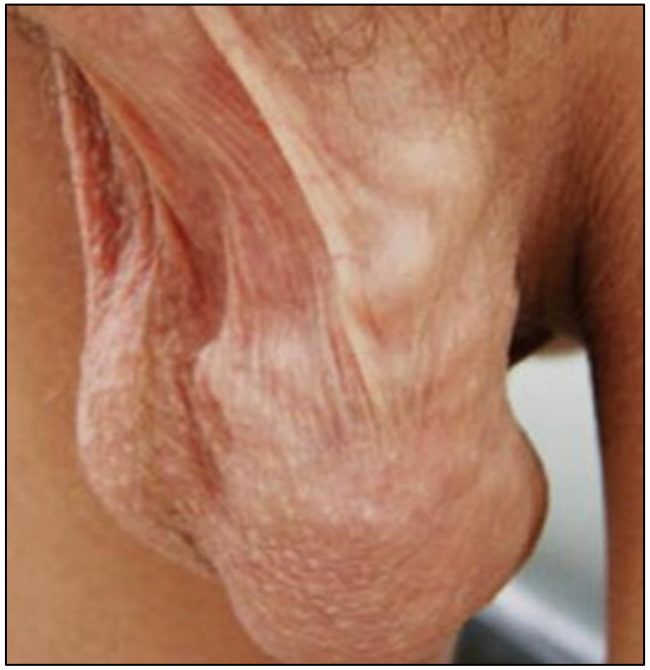
Behandeling
- Niersparend
- Radicaal nefrectomie
- Studie (neoadjuvant)

Symptomen

Incidenteel
Lokale tumor groei Hematurie Flank pijn Abdominale massa Perirenaal hematoom
Metastasen Persisterende hoest Botpijn Cervicale lymfadenopathie Gewichtsverlies, Koorts, Malaise
Obstructie Vena Cava Inferior Bilateraal oedeem onderste extremiteiten Niet-reduceerbare of **rechtszijdige** Varicocele
Paraneoplastich syndroom Hypercalciemie Hypertensie Polycythemia Stauffers Syndroom



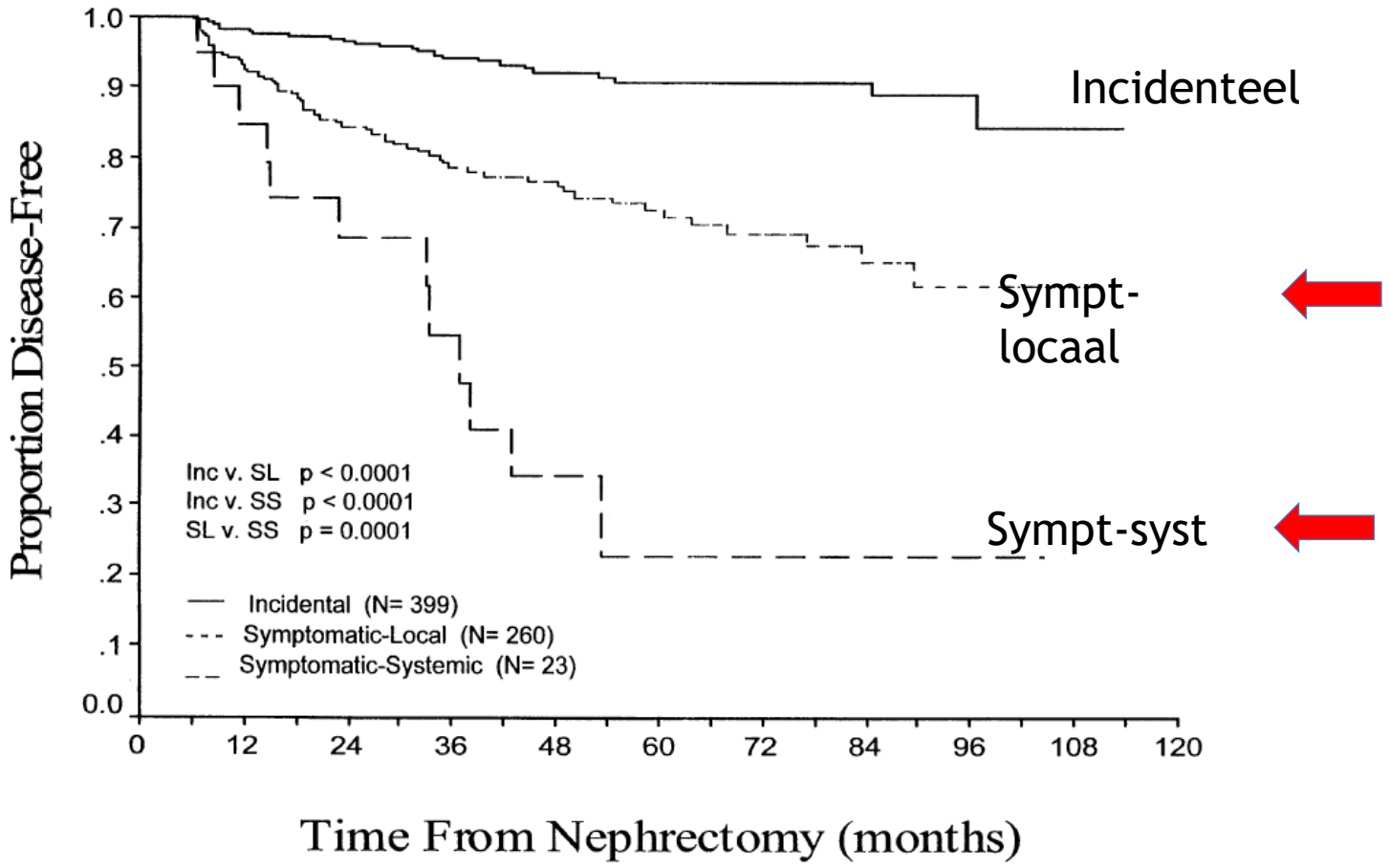




Symptomen = overleving

Klassieke trias: 6-10%

- Hematurie
- Pijn
- Palpabele massa



Patard 2003, Lee 2002

Disease Free Survival

Paraneoplastische syndromen

Syndrome	%
BSE verhoogd	55.6
Hypertensie	37.5
Anemie	36.3
Cachexie, afvallen	34.5
Pyrexie	17.2
Afwijkende leverwaarden	14.4
Hypercalcemie	4.9
Polycythemia	3.5
Neuromyopathie	3.2
Amyoloidosis	2.0

Table 10.2 Common paraneoplastic syndromes associated with renal cell cancer (RCC).

Paraneoplastic syndrome associated with RCC	Cause
Hypertension	Ectopic secretion of renin
Hypercalcaemia	Ectopic secretion of parathyroid hormone-like substance
Anaemia	Haematuria, chronic disease
Polycythaemia	Ectopic secretion of erythropoietin
Stauffer's syndrome (abnormal liver function tests, white blood cell loss, fever, areas of hepatic necrosis)	Unknown: resolves in most patients after nephrectomy

Refs:
Campbell 10th ed
Kim et al 2003

Laboratorium

IMDC score voor gemetastaseerd RCC

- Hb
- Gecorrigeerd calcium
- Neutrofielen
- Trombocyten

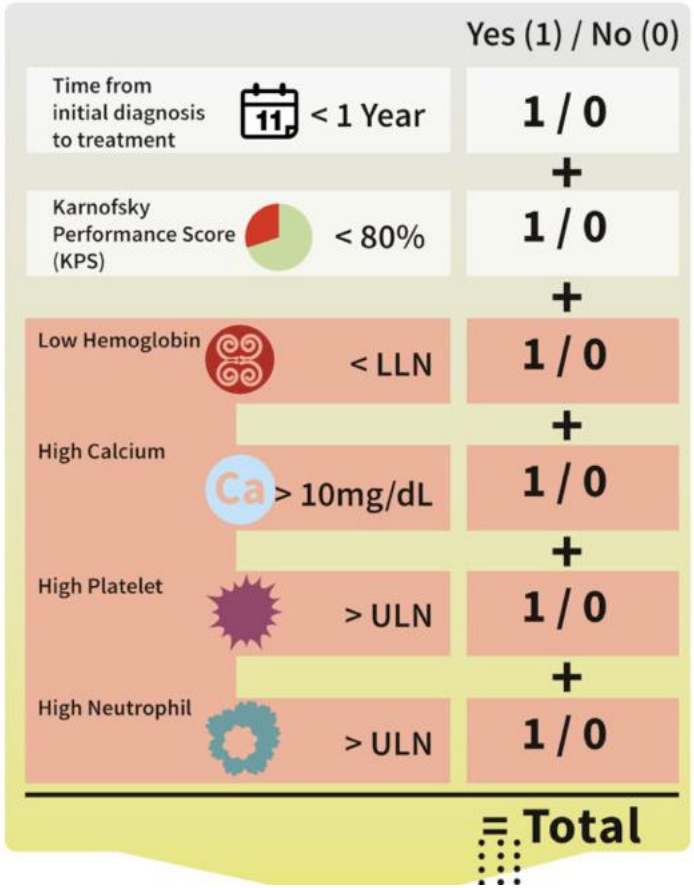
- Kreatinine / eGFR
- CRP, Hb, Leverenzymen

Performance scores

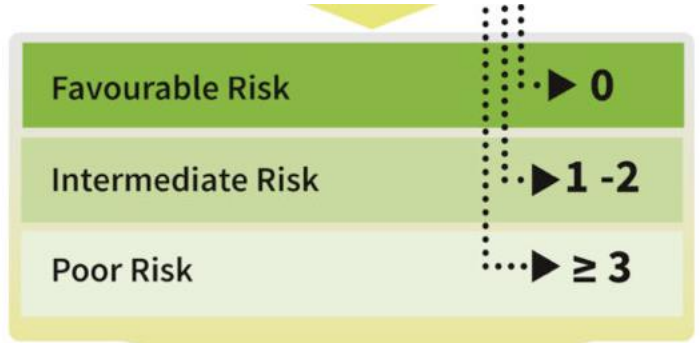
- Karnofsky
- ECOG
- WHO
- ASA

IMDC score bij gemetaseerd RCC

Step 1
Before treatment



Step 2
Risk Categories



Step 3
Treatment Selection

About IMDC Risk Categories

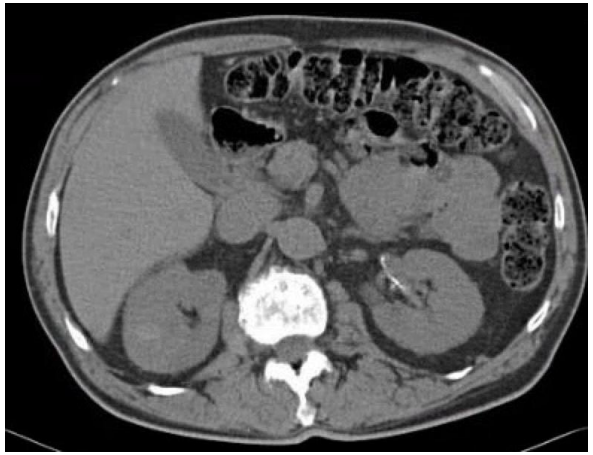
75 – 80% of patients selecting 1st line mRCC treatment options have at least 1 of these risk factors, therefore classifying their mRCC as intermediate/poor risk. Risk classification may change over time and may help in selecting treatments such as immunotherapy.

Legend:
KPS = Karnofsky Performance Score (e.g., are cancer symptoms affecting normal activities?)
LLN = Lower Limit of Normal
ULN = Upper Limit of Normal
IMDC = International Metastatic Renal Cell Carcinoma Database

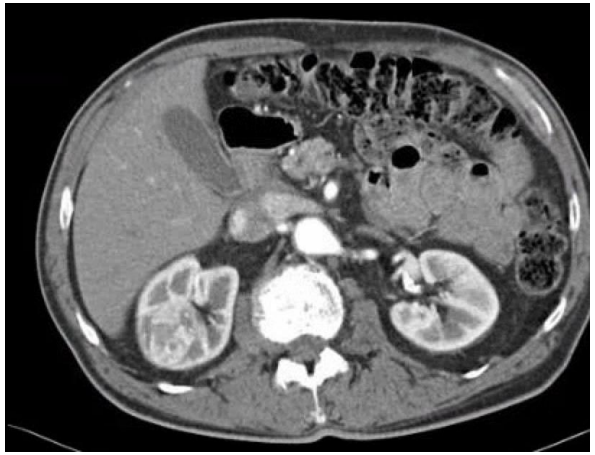
Gouden Standaard: 4 fase CT

CT is niet 100% zeker

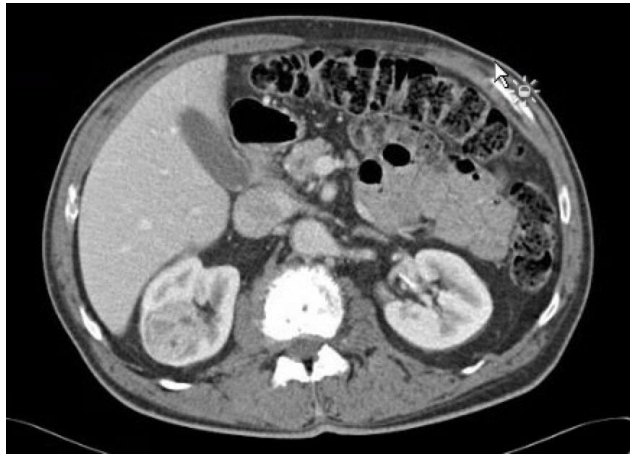
- >15 HU contrast aankleuring (cave papillair RCC 10 HU)



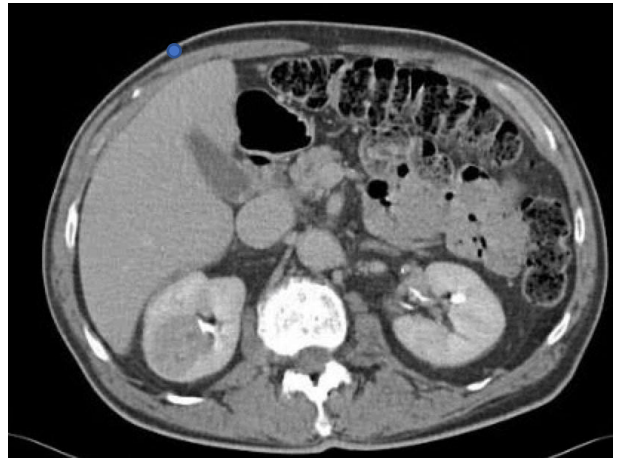
blanco



Corticomedulair of arterieel na 45 sec



Nefrogeen of veneus na 90 sec



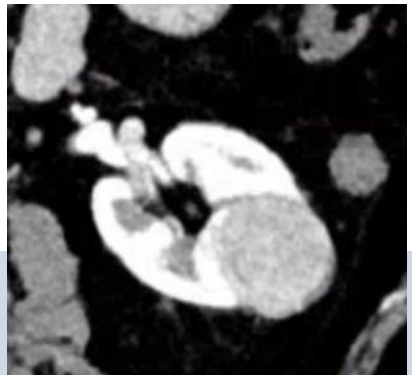
Uitscheidings fase na 10 minutes

Des te groter nierlesie, des te groter kans op kanker

TABLE 3. *Proportion of benign versus RCC tumors according to tumor size*

Tumor Size (cm)	No. Benign (%)	No. RCC (%)
0.0–Less than 1.0	37 (46.3)	43 (53.8)
1.0–Less than 2.0	38 (22.4)	132 (77.7)
2.0–Less than 3.0	75 (22.0)	266 (78.0)
3.0–Less than 4.0	71 (19.9)	285 (80.1)
4.0–Less than 5.0	37 (9.9)	336 (90.1)
5.0–Less than 6.0	40 (13.0)	267 (87.0)
6.0–Less than 7.0	11 (4.5)	232 (95.5)
7.0 or Greater	67 (6.3)	998 (93.7)

Percentages indicate the proportion of tumors in each size category that are benign or RCC, respectively.

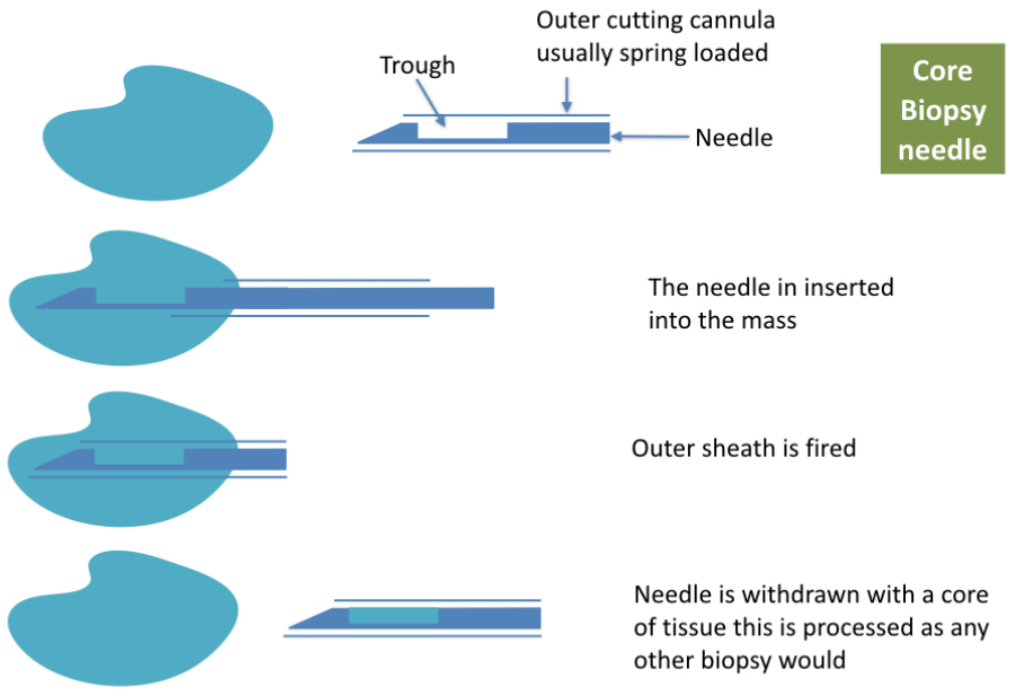


Ref: Frank et al, J Urol 2003

Niertumor Biopt (echo of CT-geleid)

92% accuraatheid

18 Gauge **Core Needle Biopsy**



- Onduidelijke lesies
- Pt die Active Surveillance willen
- Vooraf aan ablatie
- Bij uitgezaaide RCC

Histologie & gradering (1-4)

Abdominal Radiology (2021) 46:373–379
https://doi.org/10.1007/s00261-020-02613-4

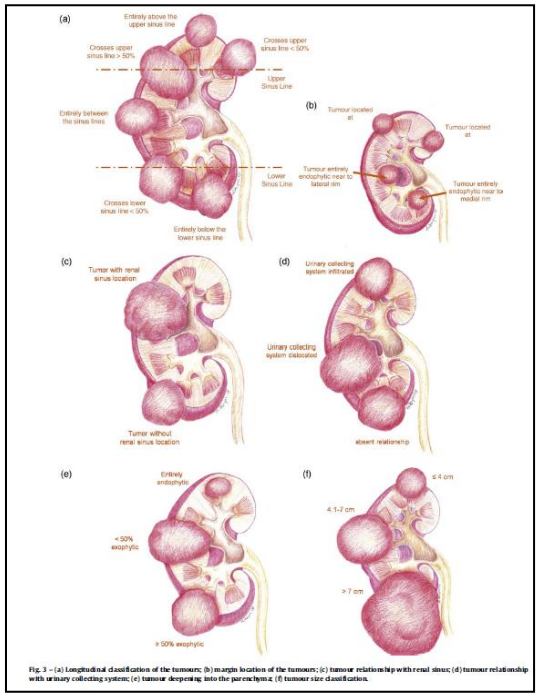
KIDNEYS, URETERS, BLADDER, RETROPERITONEUM

Renal biopsies performed before versus during ablation of T1 renal tumors: implications for prevention of overtreatment and follow-up

Christiaan V. Widdershoven[1] · Brigitte M. Aarts[2,3] · Patricia J. Zondervan[1] · Michaël M. E. L. Henderickx[1] · Elisabeth G. Klompenhouwer[2] · Otto M. van Delden[4] · Warner Prevoo[2,5] · Alexander D. Montauban van Swijndregt[5] · Reindert J. A. van Moorselaar[1] · Axel Bex[6,7] · Brunolf W. Lagerveld[8]

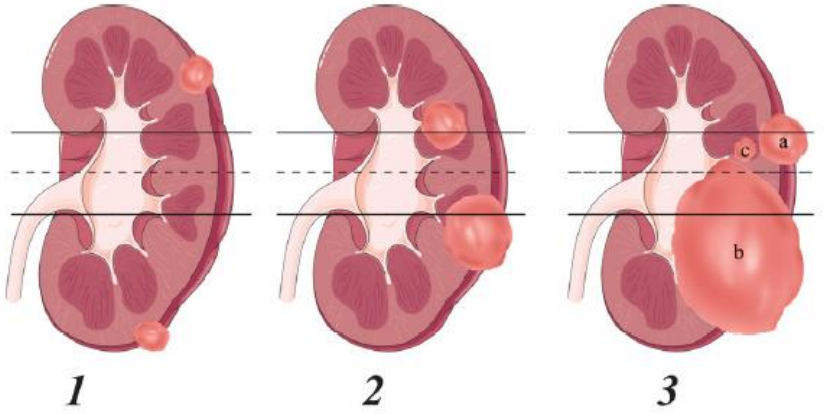
* Ref EAU guidelines

Anatomische Classificatie



PADUA score

	1pt	2pts	3 pts
(R)adius (maximal diameter in cm)	≤4	>4 but < 7	≥ 7
(E)xophytic/endophytic properties	≥ 50%	<50%	Entirely endophytic
(N)earness of the tumor to the collecting system or sinus (mm)	≥7	>4 but <7	≤4
(A)nterior/Posterior	No points given. Mass assigned a descriptor of a, p, or x		
(L)ocation relative to the polar lines* * suffix "h" assigned if the tumor touches the main renal artery or vein	Entirely above the upper or below the lower polar line	Lesion crosses polar line	>50% of mass is across polar line (a) or mass crosses the axial renal midline (b) or mass is entirely between the polar lines (c)

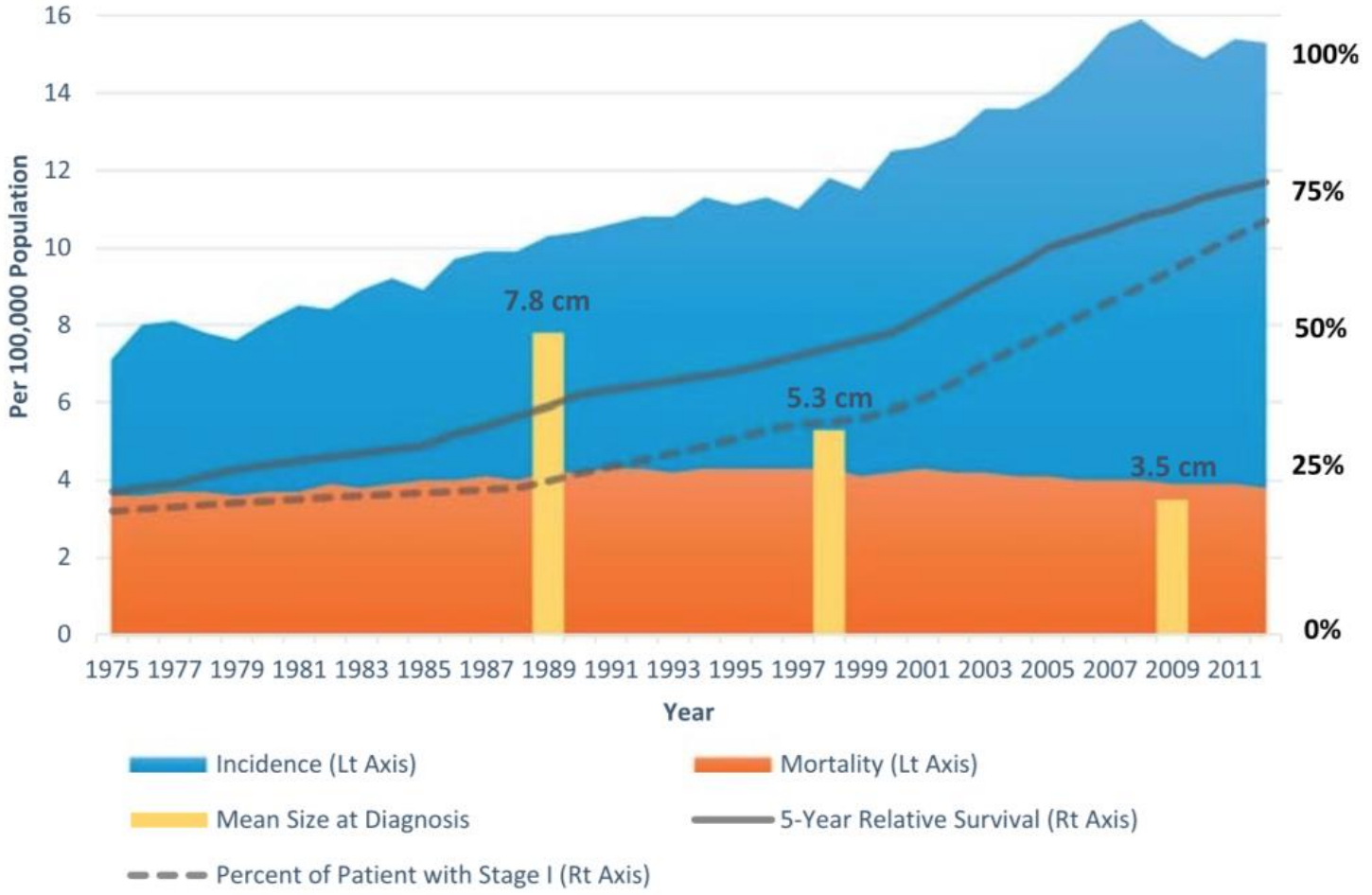


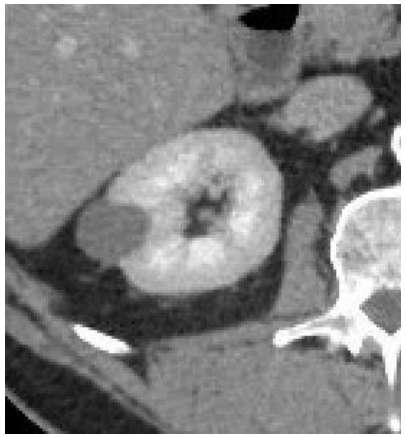
RENAL score

Scores gerelateerd:
- moeilijkheidsgraad van operatie van een niertumor
- Complicaties van ingreep

Klatte 2016, kutikov 2009, ficarra 2009

Small Renal Mass toename!!! (0-4cm)

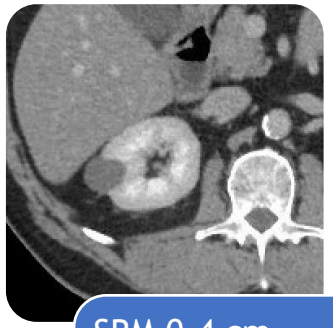




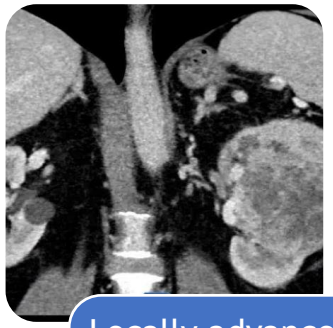
*SEER database

Beslismomenten nierkanker

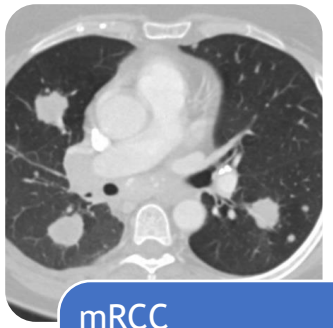
40%



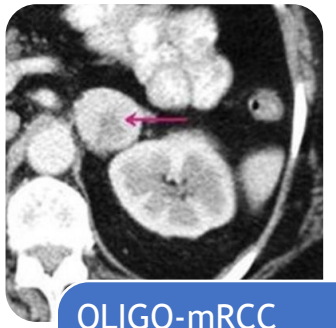
SRM 0-4 cm
- AS
- Focal Therapy
- Partial Nephrectomy
- MRIdian
- Watchfull waiting



Locally advanced RCC
- Radical Nephrectomy
- LND
- Neoadjuvant ST



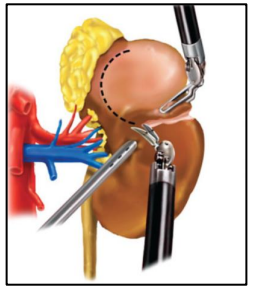
mRCC
- Cytoreductive Nephrectomy
- NA SYSTEEMTHERAPIE



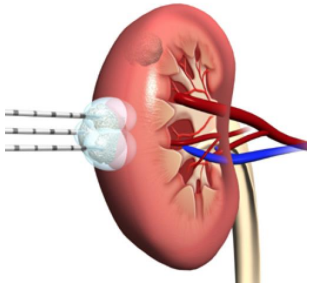
OLIGO-mRCC
- Cytoreductive Nephrectomy
- Surgical resection
- SABR
- other

Behandeling cT1a - Small Renal Mass (0-4) cm

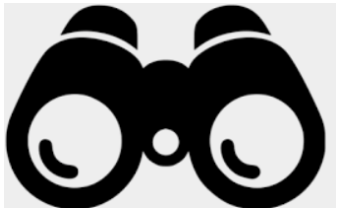
- Partial nephrectomy



- Focal Therapy
  - Cryo-ablation
  - MWA/RFA



- Active Surveillance

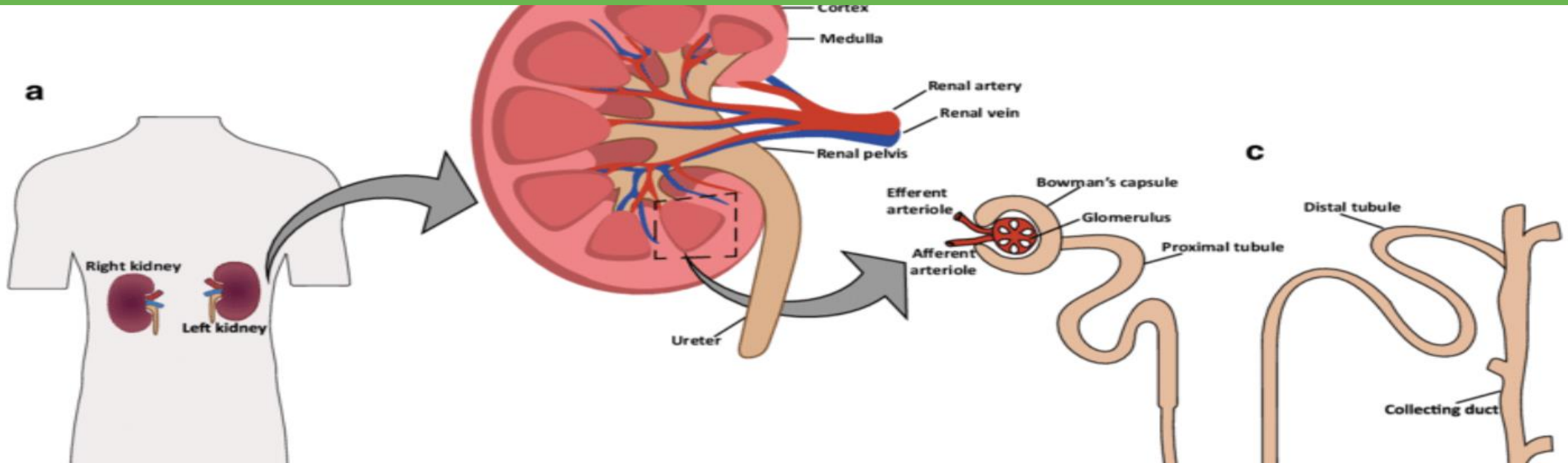


→ Delayed treatment

- Watchfull waiting
- MRIDIAN

Amsterdam UMC
Universitair Medische Centra

Nier sparend !!



Chronic Kidney Disease (CKD): toename van risico op overlijden, cardiovaculaire events en ziekenhuisopname!

Table 2. Adjusted Hazard Ratio for Death from Any Cause, Cardiovascular Events, and Hospitalization among 1,120,295 Ambulatory Adults, According to the Estimated GFR.*

Estimated GFR	Death from Any Cause	Any Cardiovascular Event	Any Hospitalization
	adjusted hazard ratio (95 percent confidence interval)		
≥60 ml/min/1.73 m²†	1.00	1.00	1.00
45–59 ml/min/1.73 m²	1.2 (1.1–1.2)	1.4 (1.4–1.5)	1.1 (1.1–1.1)
30–44 ml/min/1.73 m²	1.8 (1.7–1.9)	2.0 (1.9–2.1)	1.5 (1.5–1.5)
15–29 ml/min/1.73 m²	3.2 (3.1–3.4)	2.8 (2.6–2.9)	2.1 (2.0–2.2)
<15 ml/min/1.73 m²	5.9 (5.4–6.5)	3.4 (3.1–3.8)	3.1 (3.0–3.3)

(Go, New Engl J med 2004

Radicale nefrectomie is significante risico factor voor nierinsufficientie

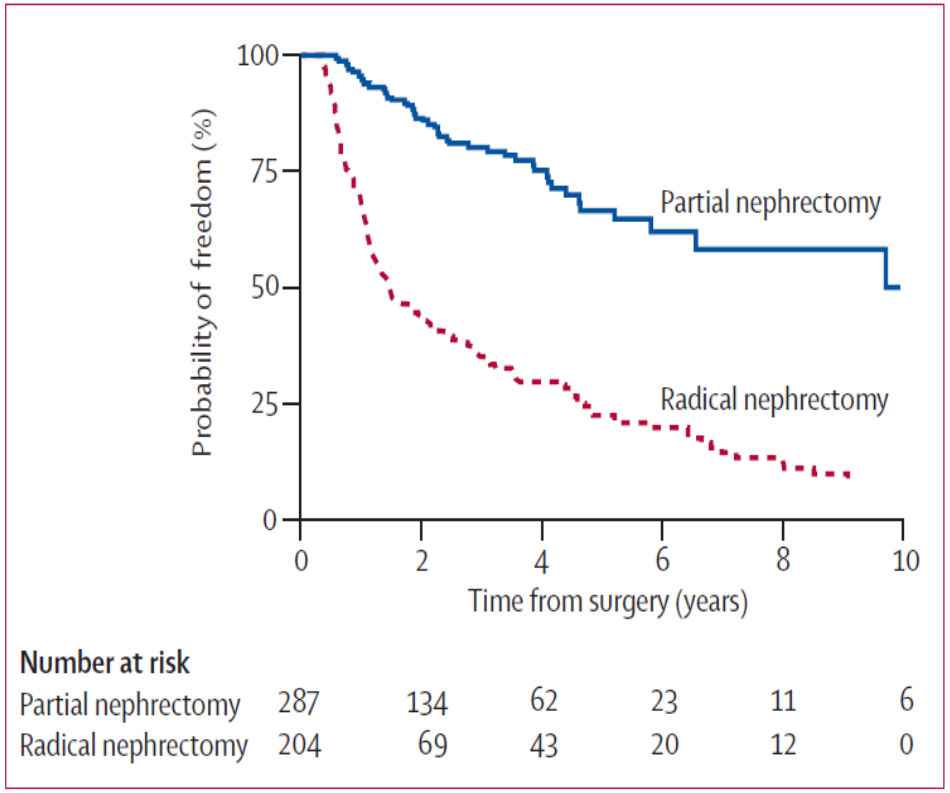


Figure 2: Probability of freedom from new onset of GFR lower than 60 mL/min per 1·72 m^2, by operation type

<60 ml/min

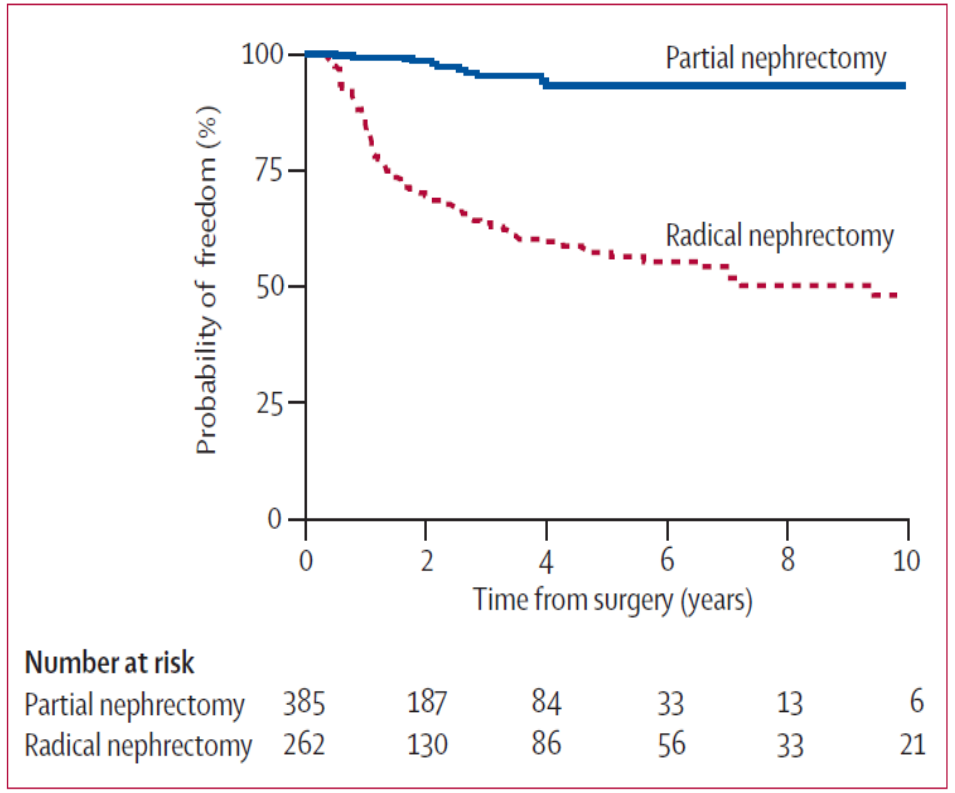
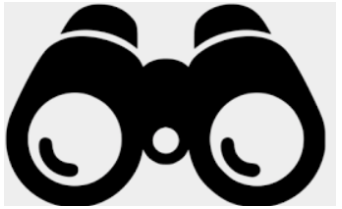


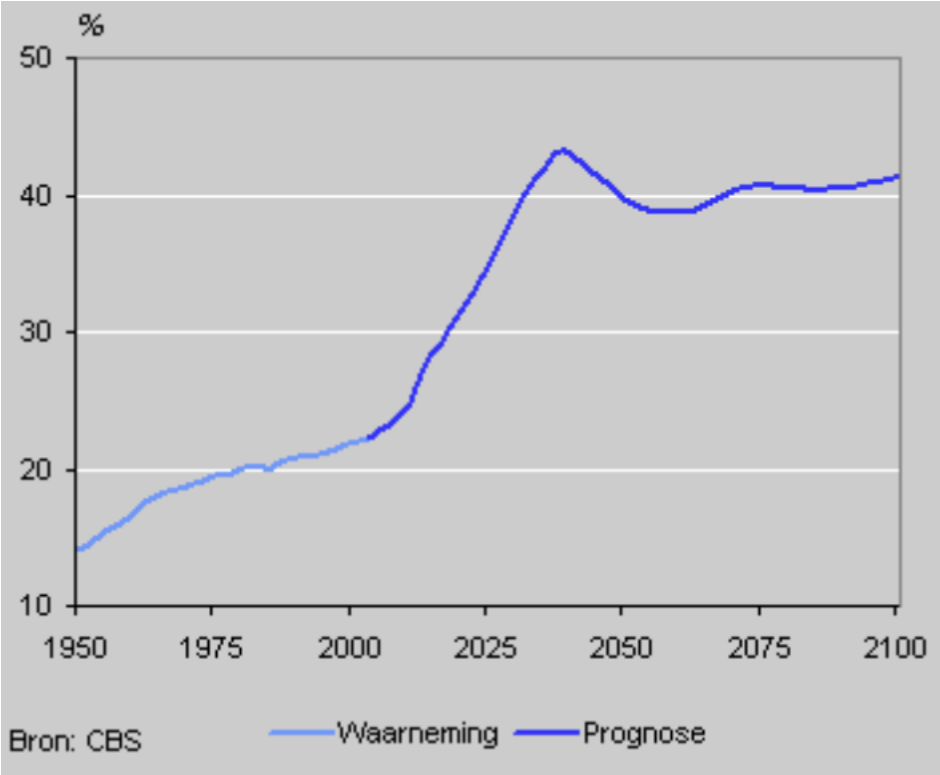
Figure 3: Probability of freedom from new onset of GFR lower than 45 mL/min per 1·72 m^2, by operation type

<45 ml/min

Huang et al. *The Lancet Oncology*, 2006



Active surveillance (ultiem niersparend!)

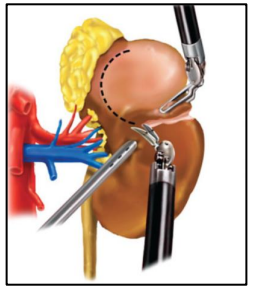


- Vergrijzing slaat toe!!!

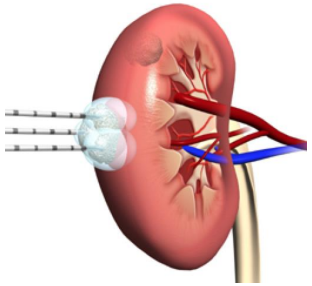
Nierkanker groeit langzaam!!!!

Behandeling cT1a - Small Renal Mass (0-4) cm

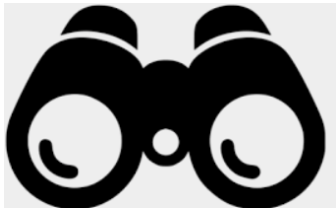
- Partial nephrectomy



- Focal Therapy
  - Cryo-ablation
  - MWA/RFA



- Active Surveillance



→ Delayed treatment

- Watchfull waiting
- MRIDIAN

Active Surveillance - uitgestelde behandeling

>75 yrs: Surigcal management is not associated with increased survival

Original Article

Active Treatment of Localized Renal Tumors May Not Impact Overall Survival in Patients Aged 75 Years or Older

Brian R. Lane, MD, PhD[1]; Robert Abouassaly, MD[1]; Tianming Gao, MS[2]; Christopher J. Weight, MD[1]; Adrian V. Hernandez, MD, PhD[2]; Benjamin T. Larson, MD[1]; Jihad H. Kaouk, MD[1]; Inderbir S. Gill, MD[1]; and Steven C. Campbell, MD, PhD[1]

- 537 patients >75 yr with cT1 RCC
- 20% AS, 53% NSS, 27% RN
- 29% cardiovascular deaths, 4% cancer progression deaths

Lane, 2012 Cancer

Active Surveillance: maakt het uit?

EUROPEAN UROLOGY 60 (2011) 39–44

available at www.sciencedirect.com
journal homepage: www.europeanurology.com

European Association of Urology

Platinum Priority – Kidney Cancer

Editorial by David R. Yates and Morgan Rouprêt on pp. 45–47 of this issue

Active Surveillance of Small Renal Masses: Progression Patterns of Early Stage Kidney Cancer

Michael A.S. Jewett[a,], Kamal Mattar[a], Joan Basiuk[a], Christopher G. Morash[b], Stephen E. Pautler[c], D. Robert Siemens[d], Simon Tanguay[e], Ricardo A. Rendon[f], Martin E. Gleave[g], Darrel E. Drachenberg[h], Raymond Chow[i], Hannah Chung[a], Joseph L. Chin[j], Neil E. Fleshner[a], Andrew J. Evans[k], Brenda L. Gallie[l], Masoom A. Haider[m], John R. Kachura[m], Ghada Kurban[a], Kimberly Fernandes[n], Antonio Finelli[a]*

[a] *Division of Urology, Departments of Surgery and of Surgical Oncology, Princess Margaret Hospital and the University Health Network, University of Toronto,*

Multicenter study
209 SRMs
2004-2009
Delayed treatment until progression (4cm)
RMB
12% local progression
1.1% metastasis
0.13cm/yr growrate

Active Surveillance – wanneer wel behandelen?

Choice for AS:
-age
-growth rate

Selecting those who can be agressive

Published in final edited form as:
Cancer. 2012 February 15; 118(4): 997–1006. doi:10.1002/cncr.26369.

Small Renal Masses Progressing to Metastases under Active Surveillance: A Systematic Review and Pooled Analysis

Marc C. Smaldone[1], **Alexander Kutikov**[1], **Brian L. Egleston**[2], **Daniel J. Canter**[1], **Rosalia Viterbo**[1], **David Y.T. Chen**[1], **Michael A. Jewett**[3], **Richard E. Greenberg**[1], and **Robert G. Uzzo**[1]

299 pt met RCC SRM

- 30% showed no growth: no metastasis during FU
- 45,5% underwent delayed intervention (57% pt choice, tumor growth 35%)
- Progression to metastases: growth rates more than double (0.8cm/year) compared to non-progressors (0.3cm/year)

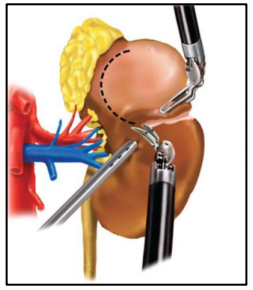
Active Surveillance schema

- Biopt doen?
- 3 mnd echo
- 6 mnd CT
- Echo en CT alternerend

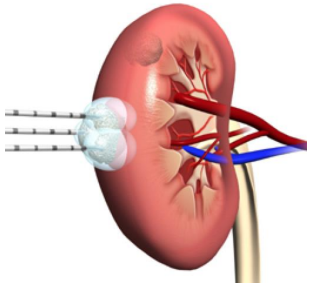
➢Er is geen vast schema….

Behandeling cT1a - Small Renal Mass (0-4) cm

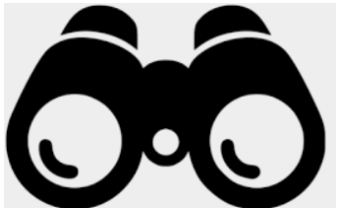
- Partial nephrectomy



- Focal Therapy
  - Cryo-ablation
  - MWA/RFA



- Active Surveillance

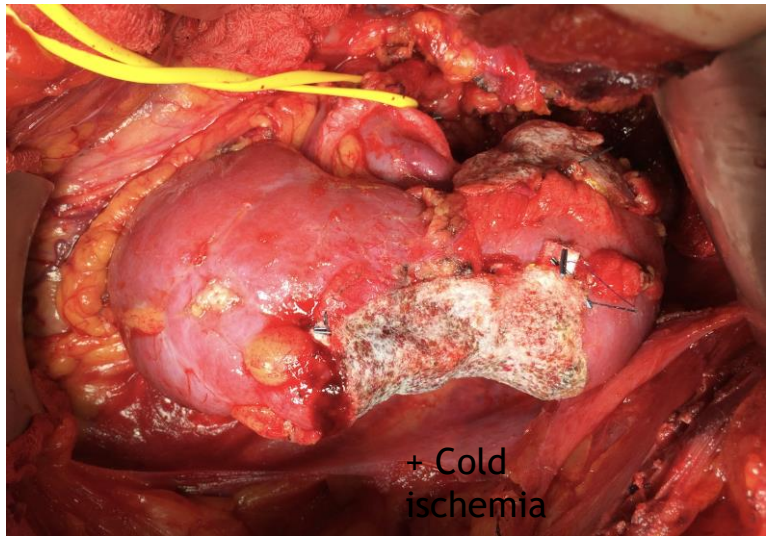


→ Delayed treatment

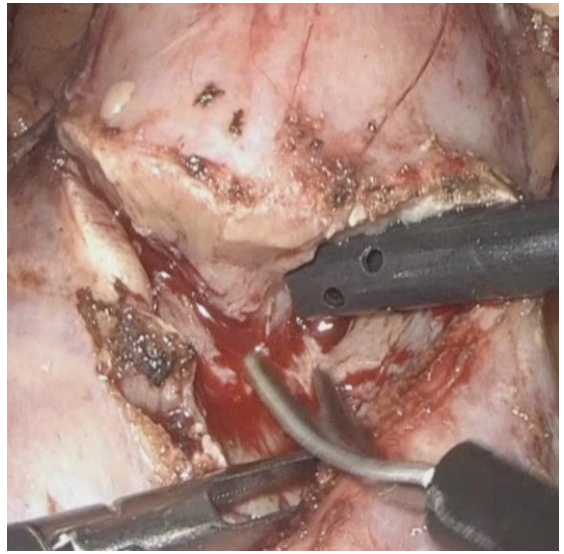
- Watchfull waiting
- MRIDIAN

Partiele Nefrectomie & it’s evolution

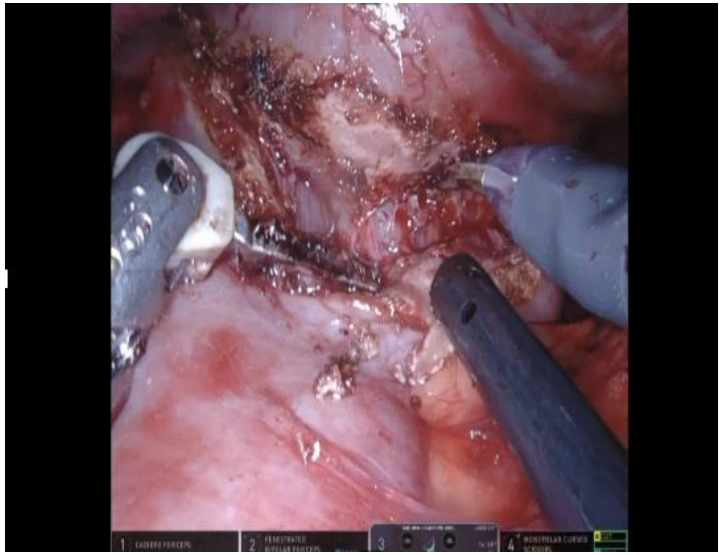
open



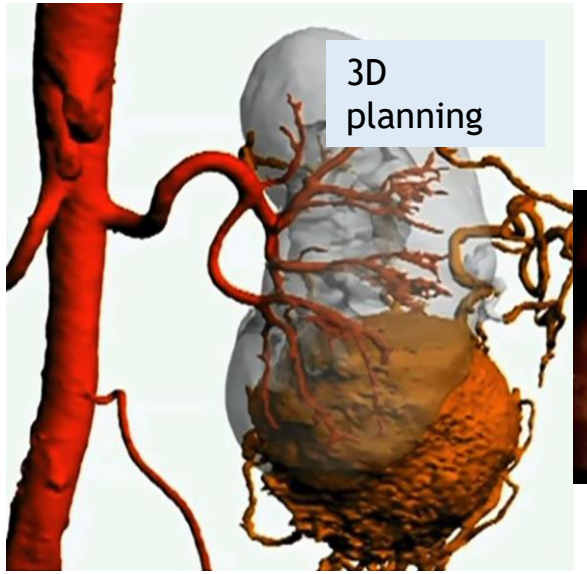
laparoscopic



robotic



Warm ischemia or zero? Selective clamping?



Selective?

ELSEVIER

European Urology

Volume 58, Issue 3, September 2010, Pages 340-345

25 mn

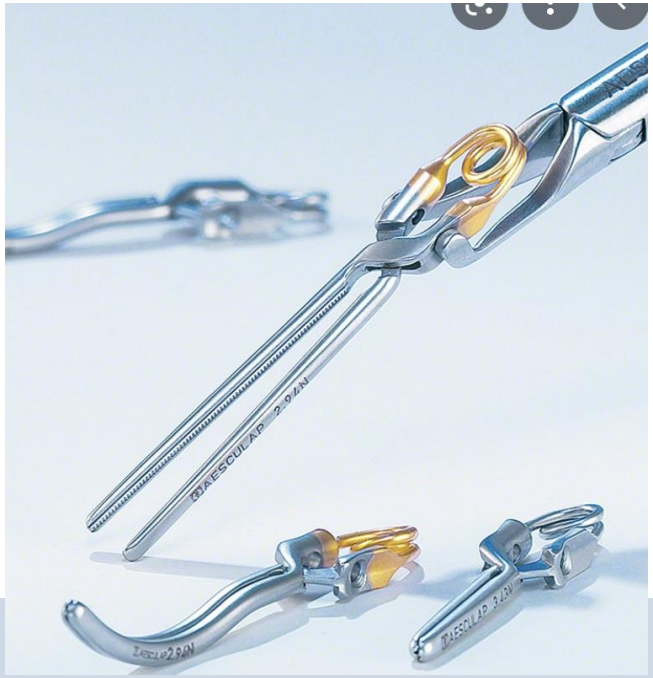
Platinum Priority – Kidney Cancer

Editorial by Antonio Alcaraz on pp. 346–348 of this issue

Every Minute Counts When the Renal Hilum Is Clamped During Partial Nephrectomy EU ACME ☆

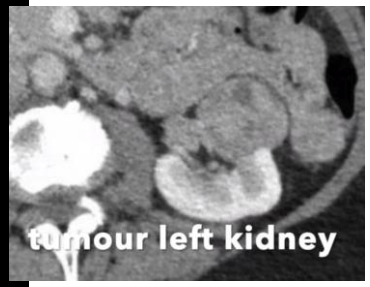
R. Houston Thompson [a] [1] ✉, Brian R. Lane [b, 1], Christine M. Lohse [a], Bradley C. Leibovich [a], Amr Fergany [b], Igor Frank [a], Inderbir S. Gill [c], Michael L. Blute [a], Steven C. Campbell [b]

Frank [a], Inderbir S. Gill [c], Michael L. Blute [a], Steven C. Campbell [b]



ROBOTIC PARTIAL NEPHRECTOMY LEFT SIDE

PATRICIA ZONDERVAN

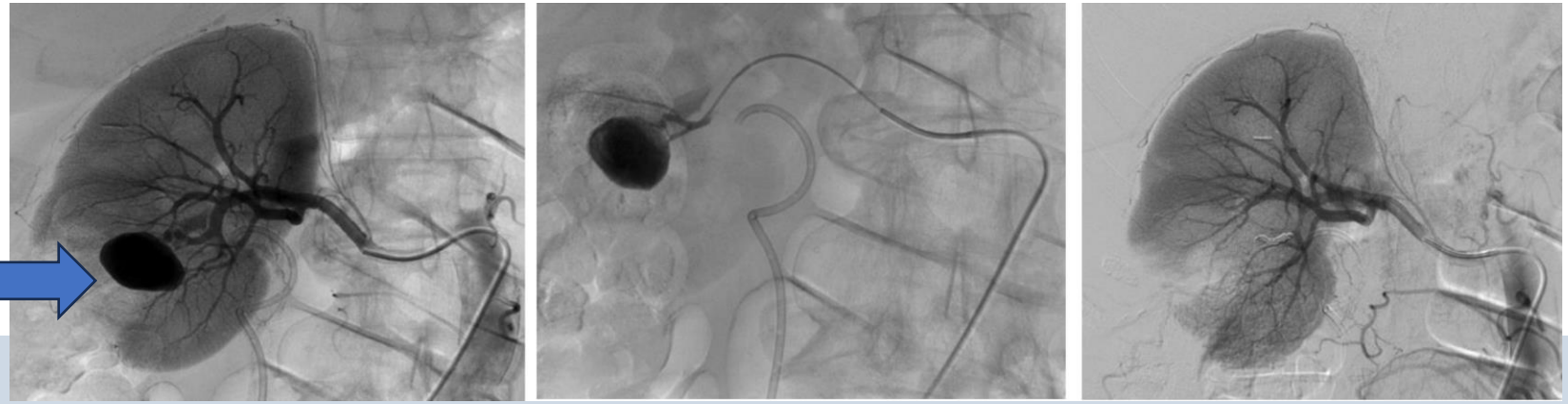


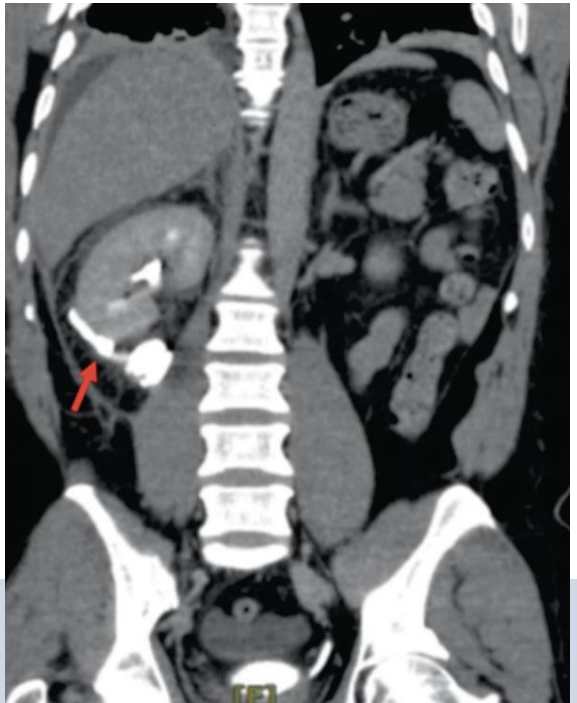
RAPN left side
4,5 cm
RENAL 10a

WIT 19 min
PA: pRCC type 2, R0
No complications

Risico's/ complicaties van RA Partiele Nefrectomie

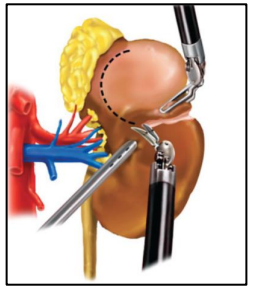
- Bloeding/nabloeding (1-5%)
  - Pt heeft pijn, plots, Hb is gedaald
  - ACTIE: CT-A
  - Selectieve embolisatie door IR
- Urinelekkage (<1%)
  - Meestal conservatief, evt drain
  - Indien nodig JJ.



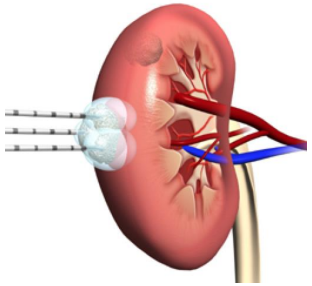


Behandeling cT1a - Small Renal Mass (0-4) cm

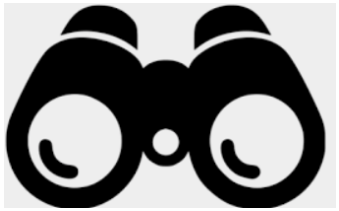
- Partial nephrectomy



- Focal Therapy
  - Cryo-ablation
  - MWA/RFA



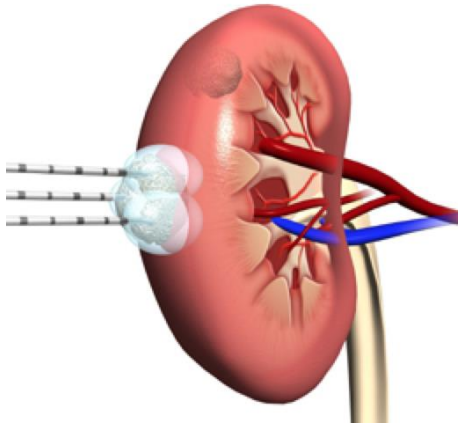
- Active Surveillance



→ Delayed treatment

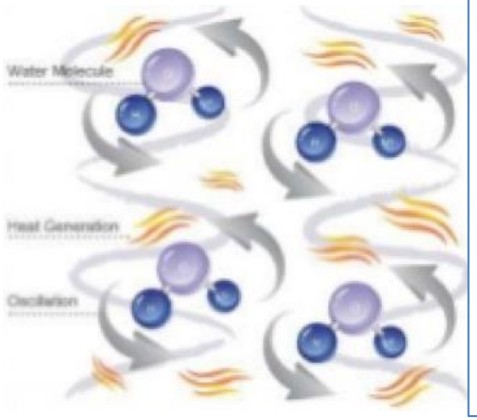
- Watchfull waiting
- MRIDIAN

Focale therapie



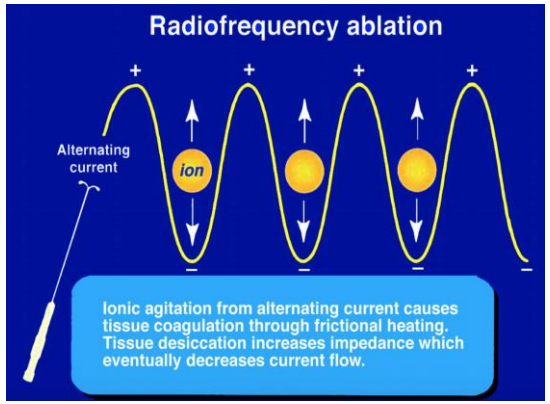
Since 1995
-40°C
Ice ball
Argon/helium
2x freeze-thaw Cycle

Cryoablation



Microwave heath through rapid H+ ions
Higher temp
+100 °C
Faster

MWA

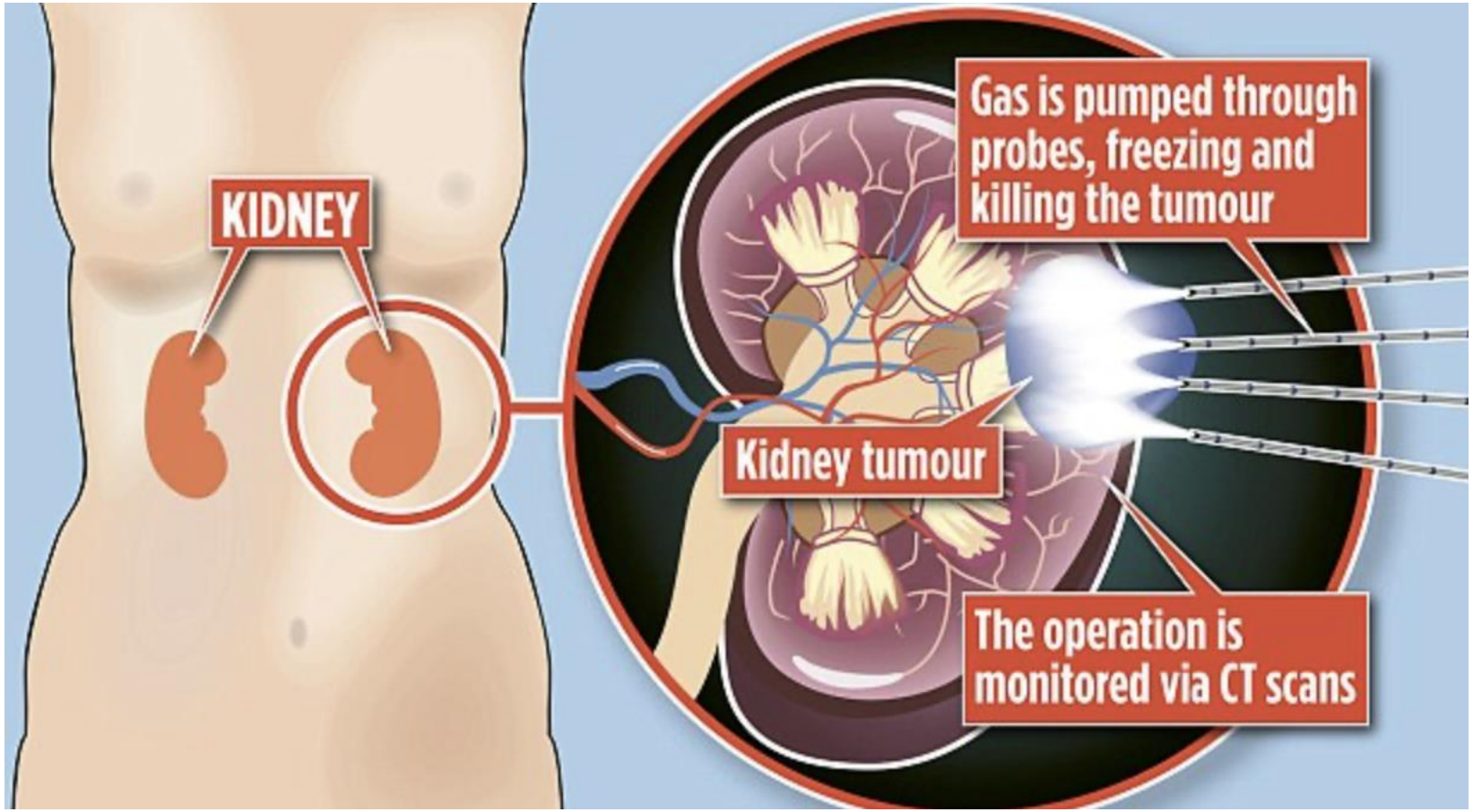


Since 1997
+70 °C
Fire ball
Energy/high freq current

RFA

Risico's/complicaties:
- Bloeding/nabloeding
- Urinelekkage
- pneumothorax

Cryoablatie niertumor

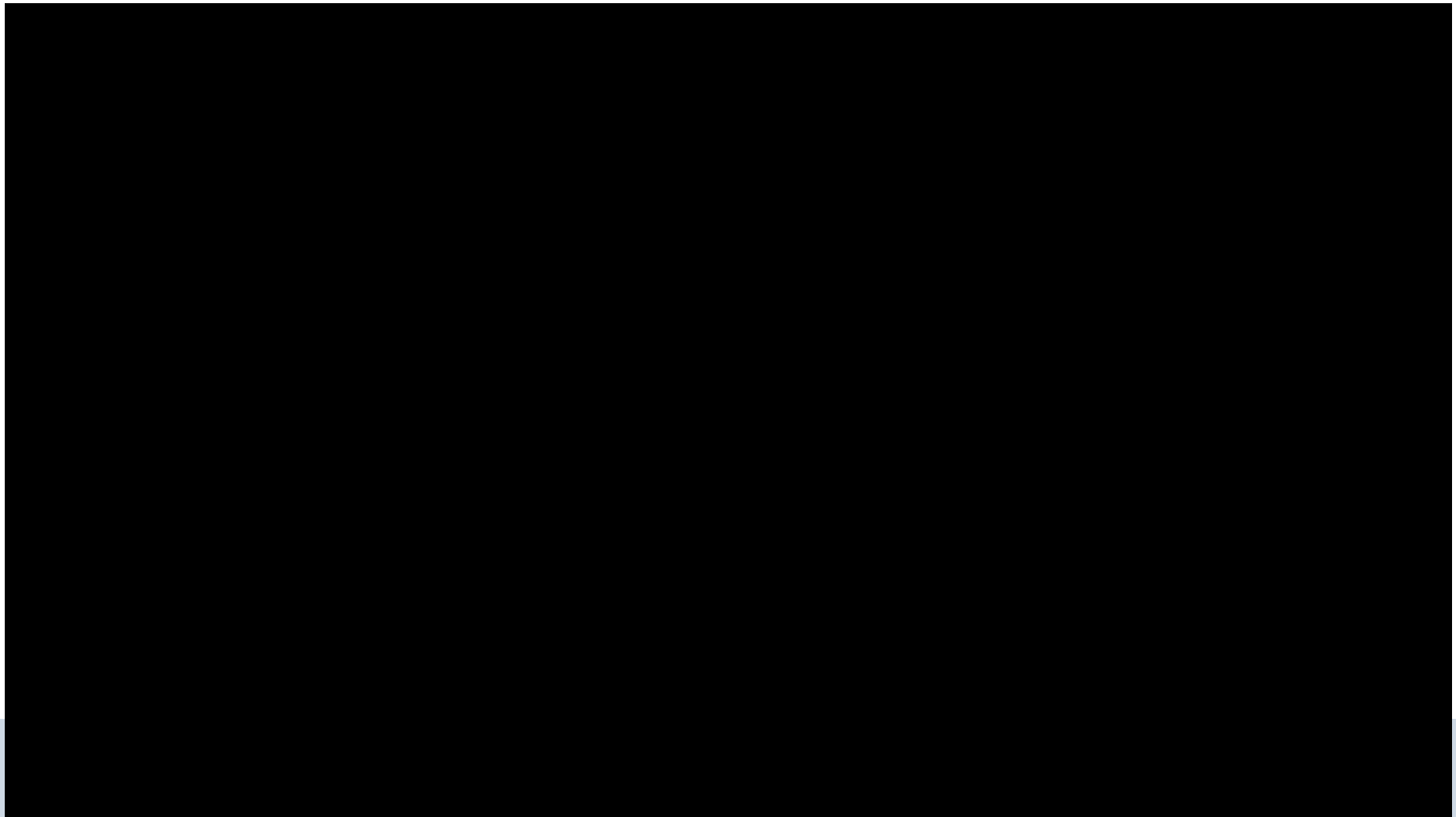


Argon = vriezen

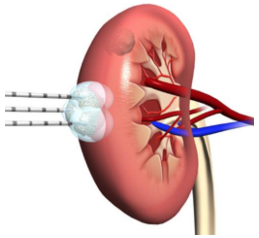
Helium = dooien

10 min vriezen
5 min dooien
10 min vriezen
5 min dooien

Focal therapy CT-guided cryoablation

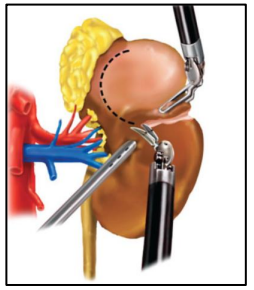


Is er verschil tussen ablatie of operatie (PN)?



Ablatie:

- Geen definitieve PA
- Kans op recidief lokaal ong 7-10%
- CT nodig voor detective lokaal recidief
- Meer nierfunctiesparend
- Minder invasief
- Weinig pijn, snel herstel 2wkn



Partiele nefrectomie:

- Definitieve PA
- Kans op lokaal recidief ong 4-6%
- Snijvlak geef richting
- Meer risico op nierfunctie impact
- Invasief
- Meer pijn, langer herstel 6wkn

New in techinques:
MRIdian

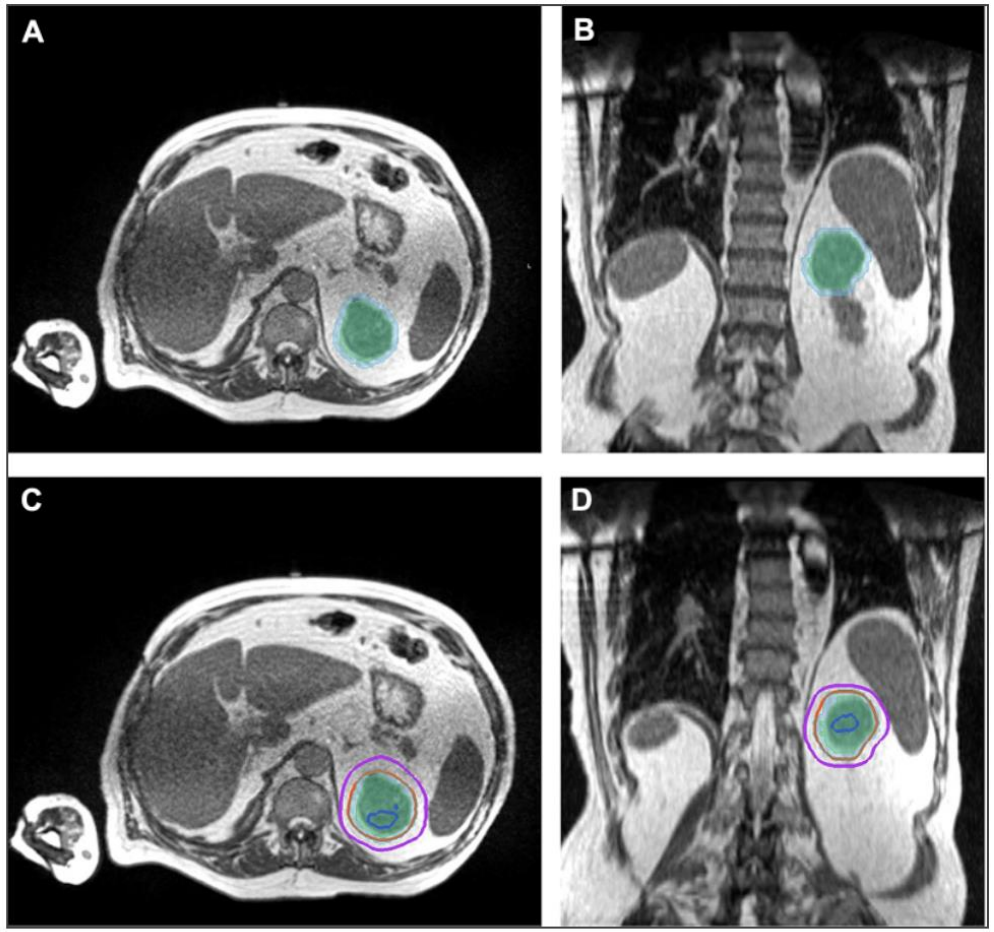
MRIdian

MRI-bestralingsapparaat

Amsterdam UMC heeft het eerste MRI-bestralingsapp

De MRIdian is een nieuw bestralingsapparaat dat MRI combineert met l

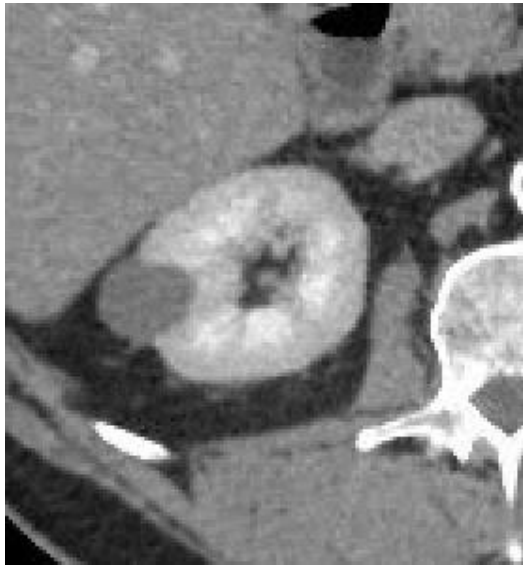
wordt het apparaat in enkele ziekenhuizen in de wereld gebruikt. Amst



Even een momentje om je te realiseren wat jij zelf zou doen....

Stel….

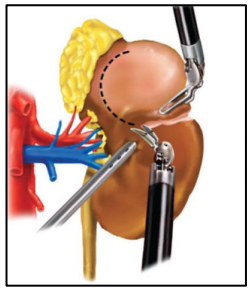
Jij hebt een tumor van 1,5 cm in je rechter nier



Wat zou jij voor behandeling willen?

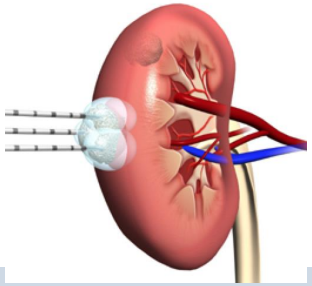
Wat zou jij voor behandeling willen?

A. Partial nephrectomy

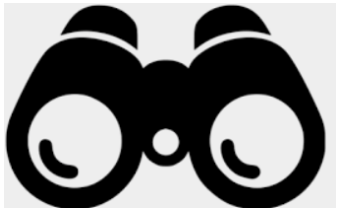


B. Focal Therapy

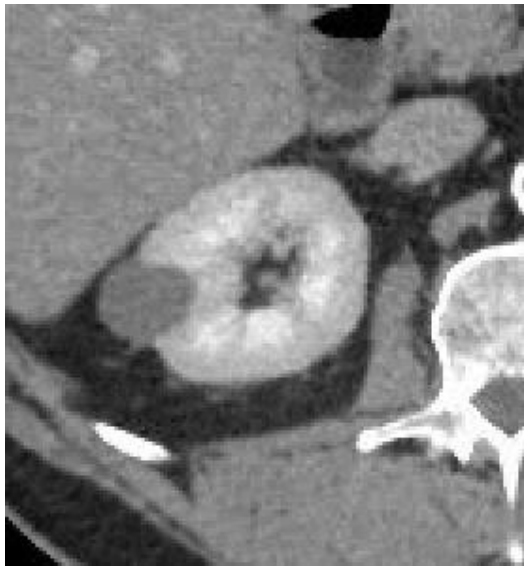
- Cryo-ablation
- MWA/RFA



C. Active Surveillance



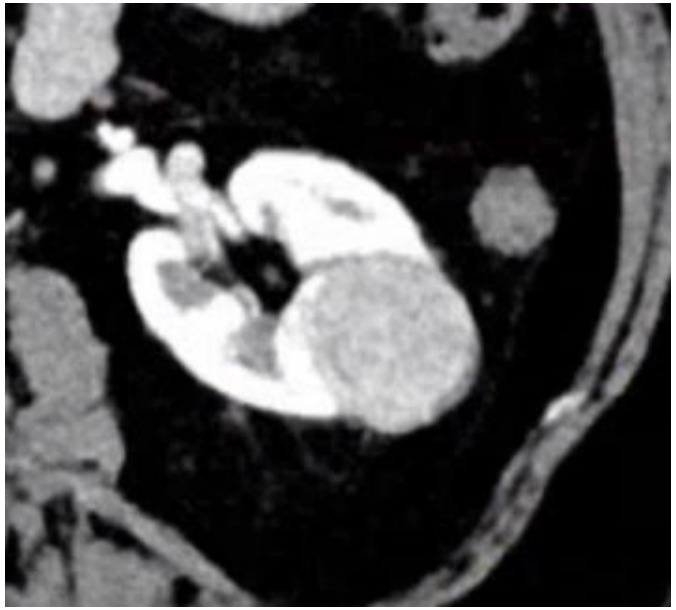
Delayed treatment



Maar stel ….

Als dit je vader of moeder van 80 jaar betreft?

En wat als deze tumor… 3,5 cm is ??



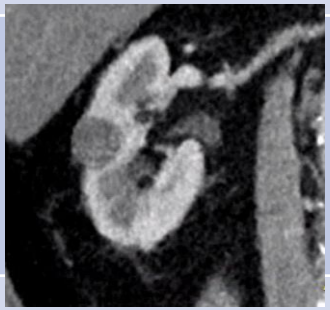
Hoe benader je de SRM??

Bekijk die patient

-CCI

-ECOG

-ASA



Analyseer tumor

-RENAL/PADUA

-Biopsy grade/histology

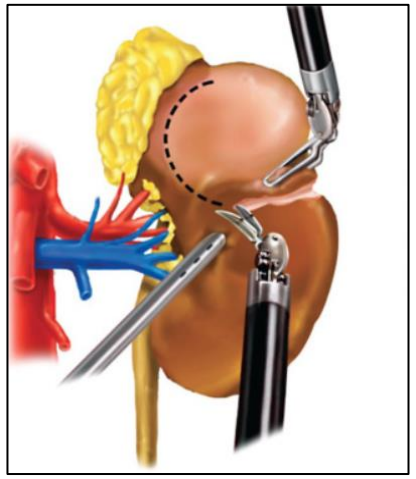
Shared decision making

AS, FT, PN, MRIdian

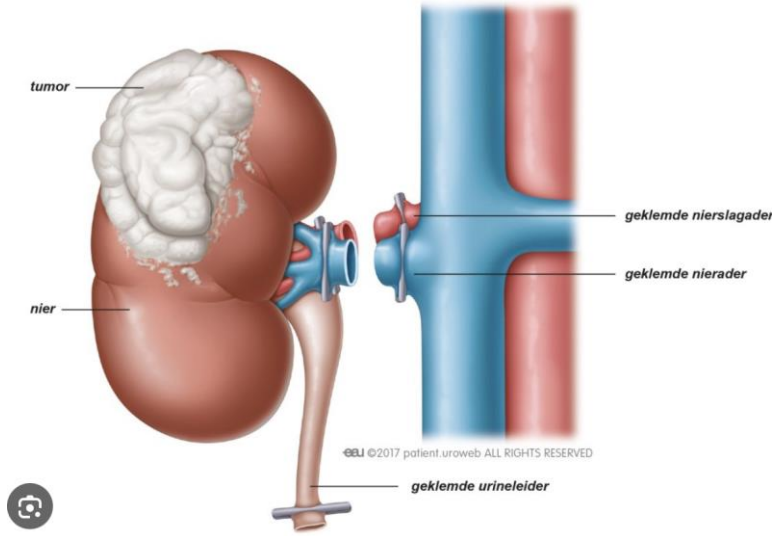
SRM = Small Renal Mass

Behandeling cT1b 4-7 cm

- Partiele nefrectomie



- Radicale Nefrectomie



Bewijs voor PN of RN bij T1b?

Oncological & functional outcomes

European Association of Urology

Platinum Priority – Kidney Cancer
Editorial by Carlo Terrone and Alessandro Volpe on pp. 553–555 of this issue

A Prospective, Randomised EORTC Intergroup Phase 3 Study Comparing the Oncologic Outcome of Elective Nephron-Sparing Surgery and Radical Nephrectomy for Low-Stage Renal Cell Carcinoma

Hendrik Van Poppel[a,], Luigi Da Pozzo[b,1], Walter Albrecht[c], Vsevolod Matveev[d], Aldo Bono[e], Andrzej Borkowski[f], Marc Colombel[g], Laurence Klotz[h], Eila Skinner[i], Thomas Keane[j], Sandrine Marreaud[k], Sandra Collette[k], Richard Sylvester[k]*

Oncological: Both RN and PN excellent oncological results (PN not inferior)
Functional: PN reduced drop in eGFR BUT eGFR <30 and <15 not different between the groups, did not improve OS

* Geen OS winst gezien

(5 cm tumours)
10 yrs OS rate
RN 81.1%
PN 75.7%

EUROPEAN UROLOGY 65 (2014) 372–377

available at www.sciencedirect.com
journal homepage: www.europeanurology.com

European Association of Urology

Platinum Priority – Kidney Cancer
Editorial by R. Houston Thompson on pp. 378–379 of this issue

Renal Function After Nephron-sparing Surgery Versus Radical Nephrectomy: Results from EORTC Randomized Trial 30904

Emil Scosyrev[a], Edward M. Messing[a,], Richard Sylvester[b], Steven Campbell[c], Hendrik Van Poppel[d]*

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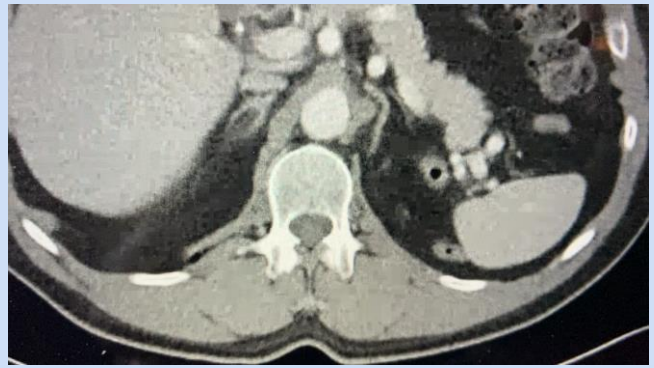
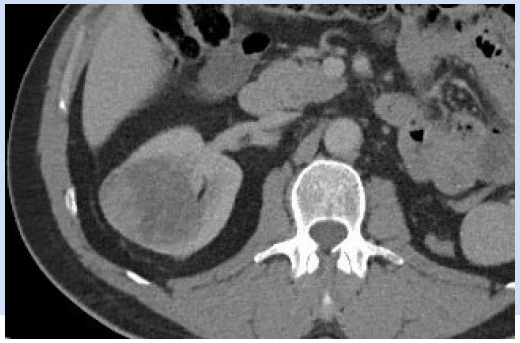
RAPN cT1b solitary kidney

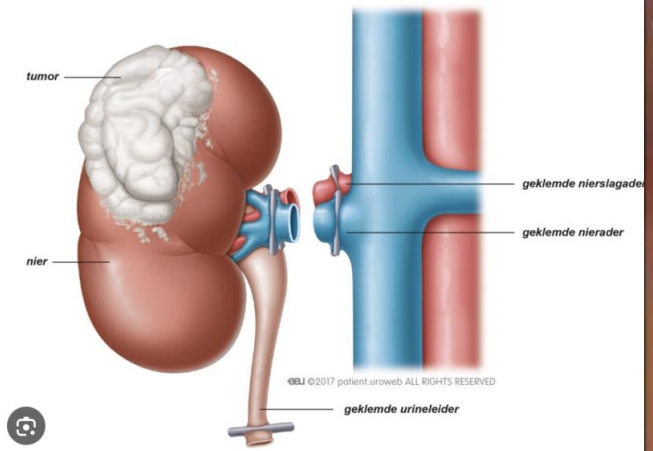
Male, 52 yrs:

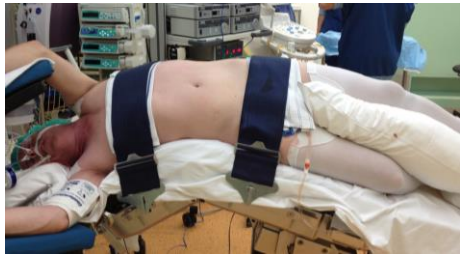
- Hypertension
- Congenital solitary kidney
- eGFR 40, CKD3b
- cT1b, no mets
- RENAL 11ph

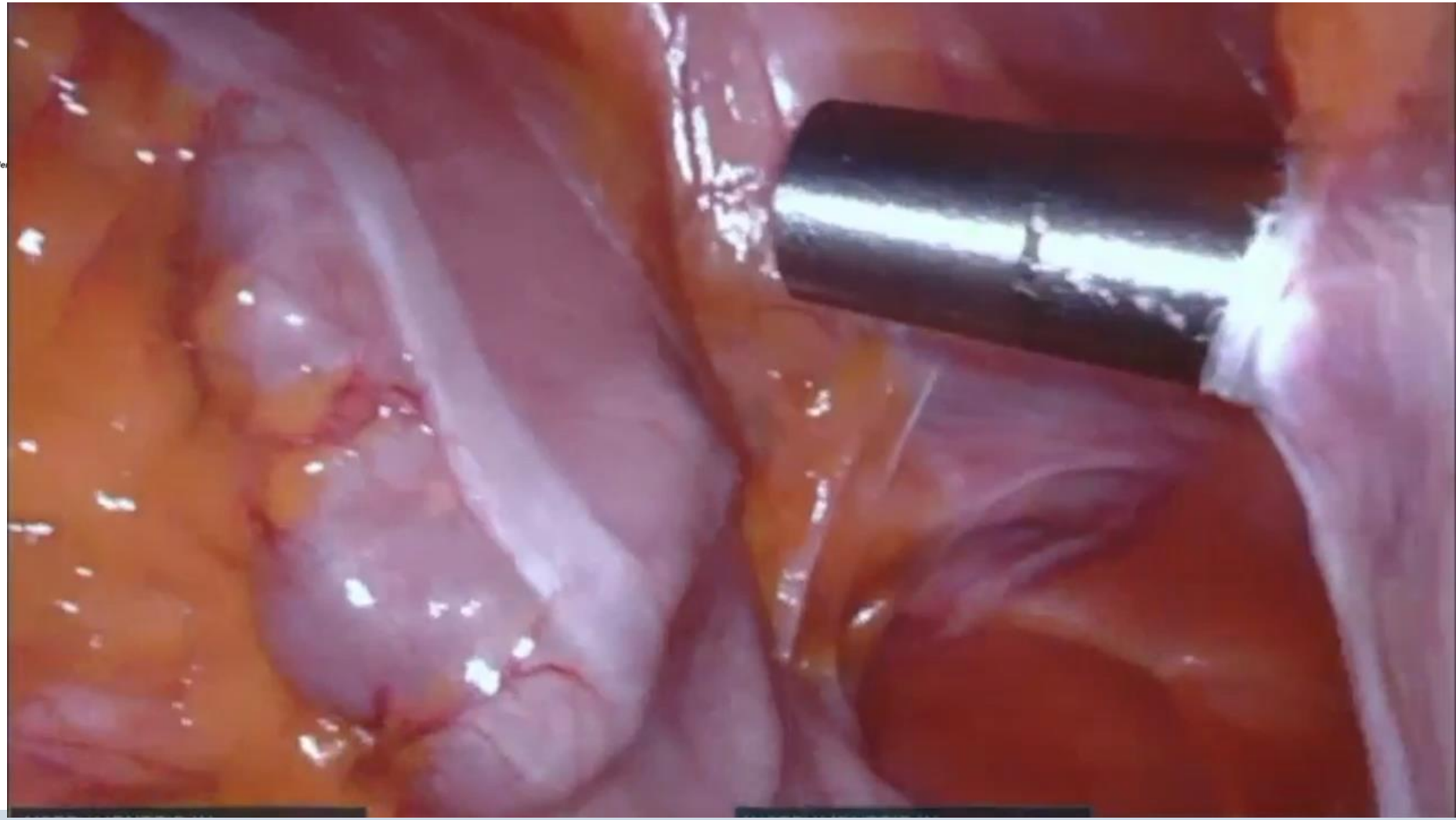




Radicale nefrectomie

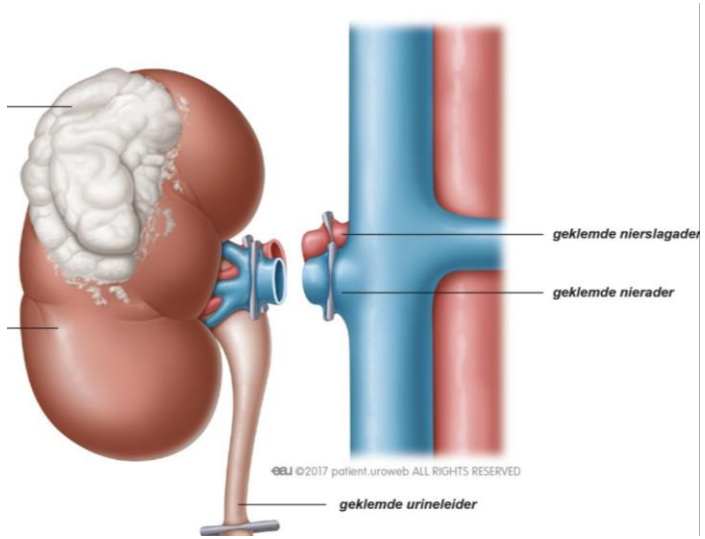




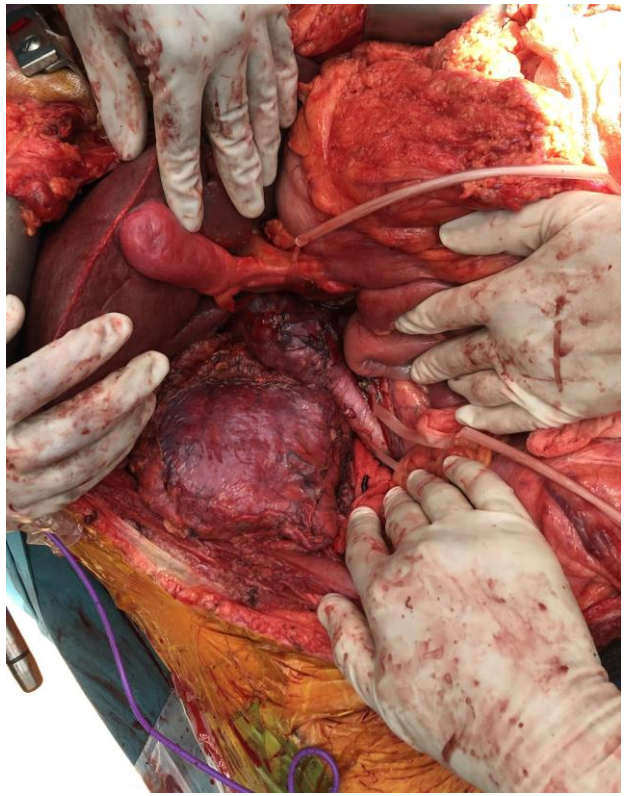


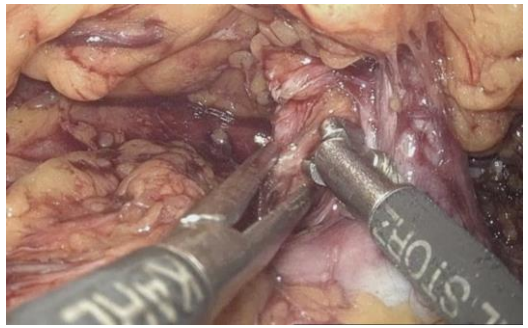
Behandeling T2 en T3 tumoren

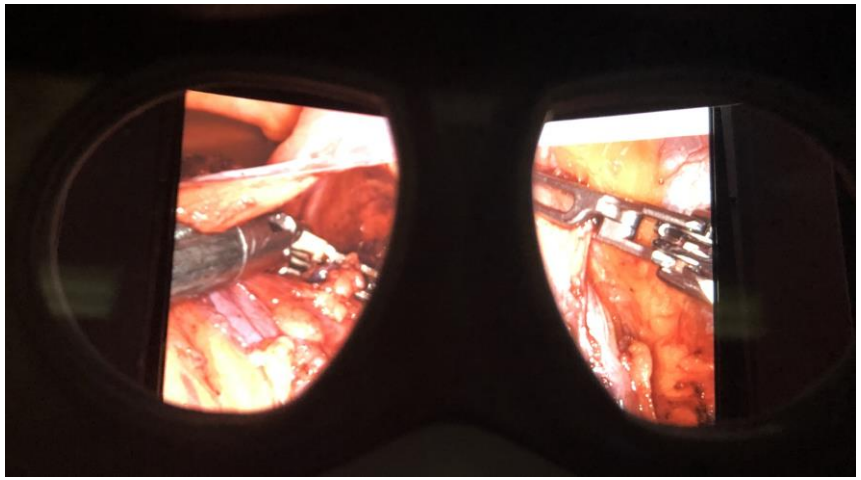
Radicale Nefrectomie



>T2 RCC (>10cm)
Open versus lap/robot….

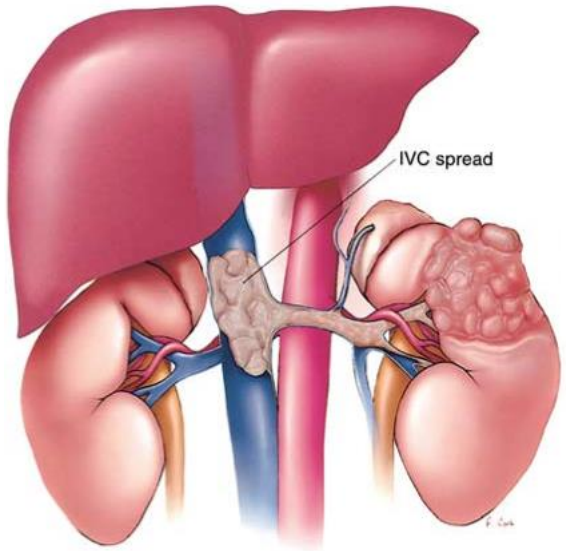


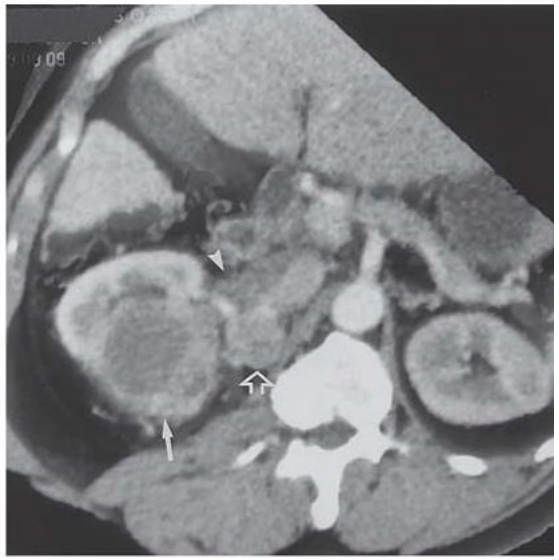




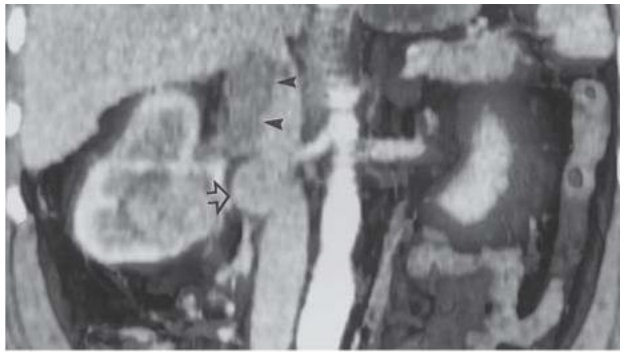
Offer PN to patients with T2 tumours and a solitary kidney or chronic kidney disease, if technically feasible.	Weak

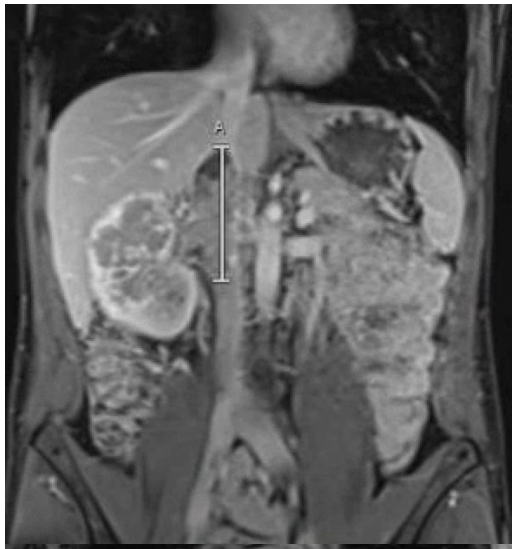
cT3b onder diafragma

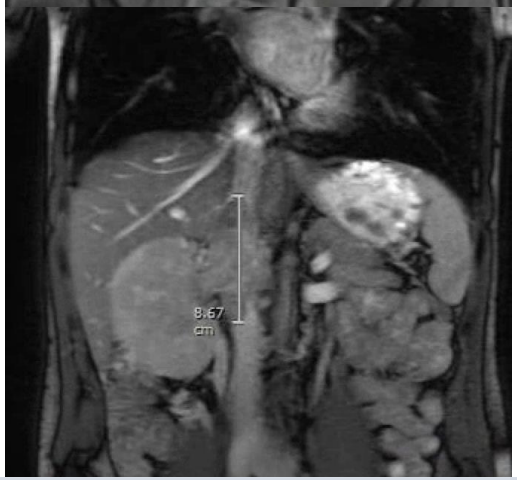




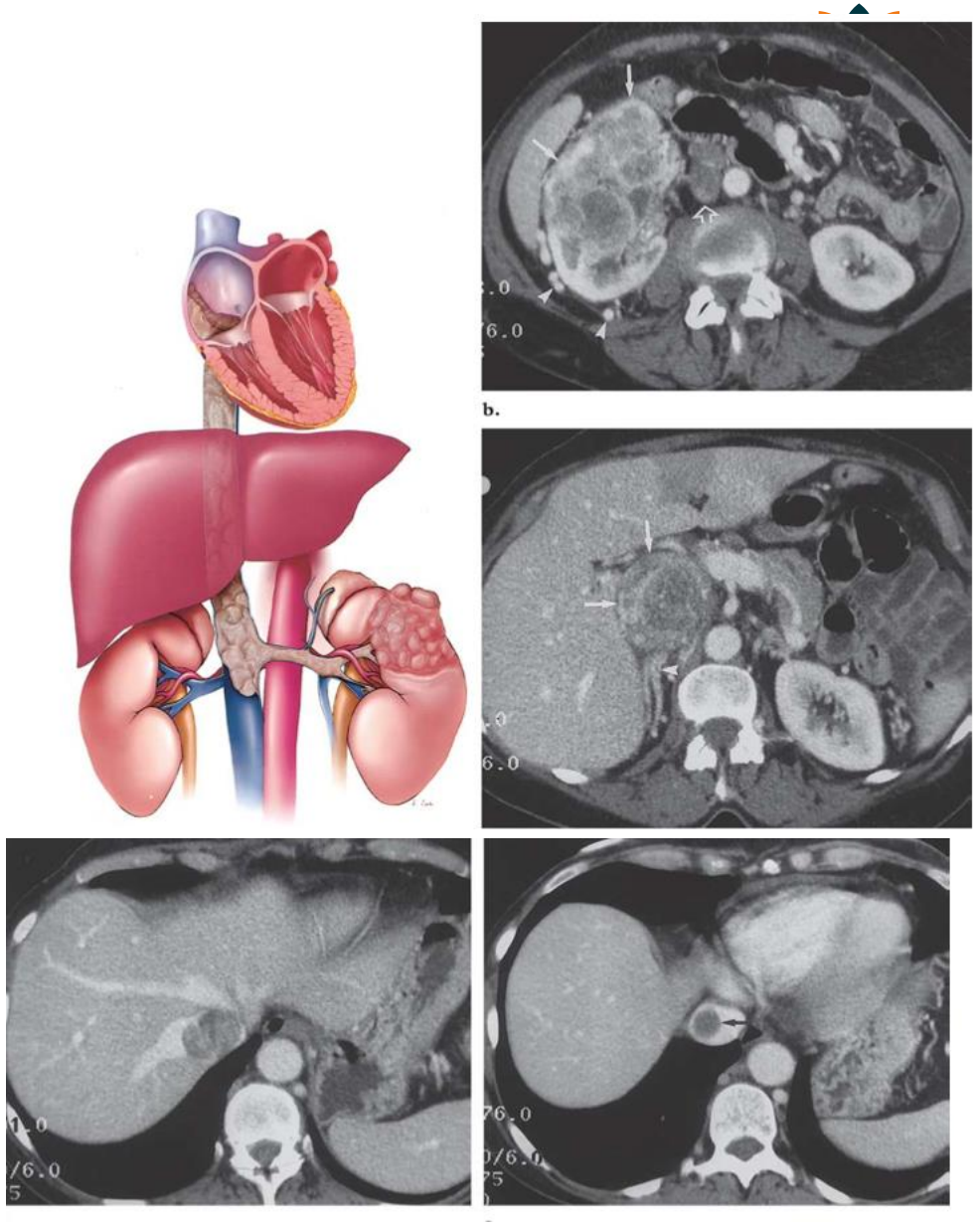
Sheth et al 2001

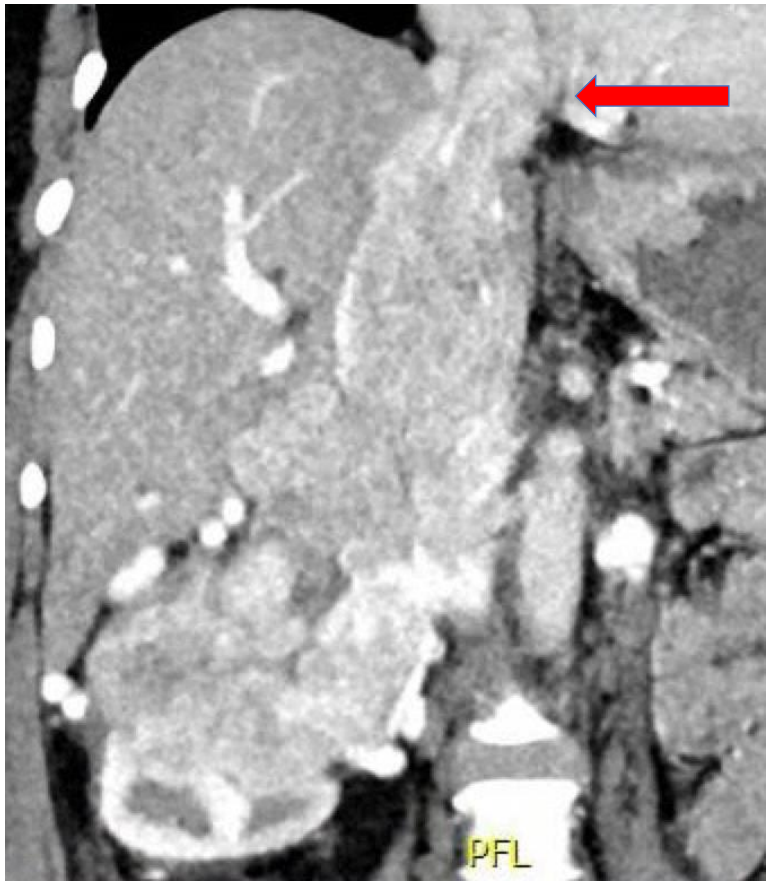




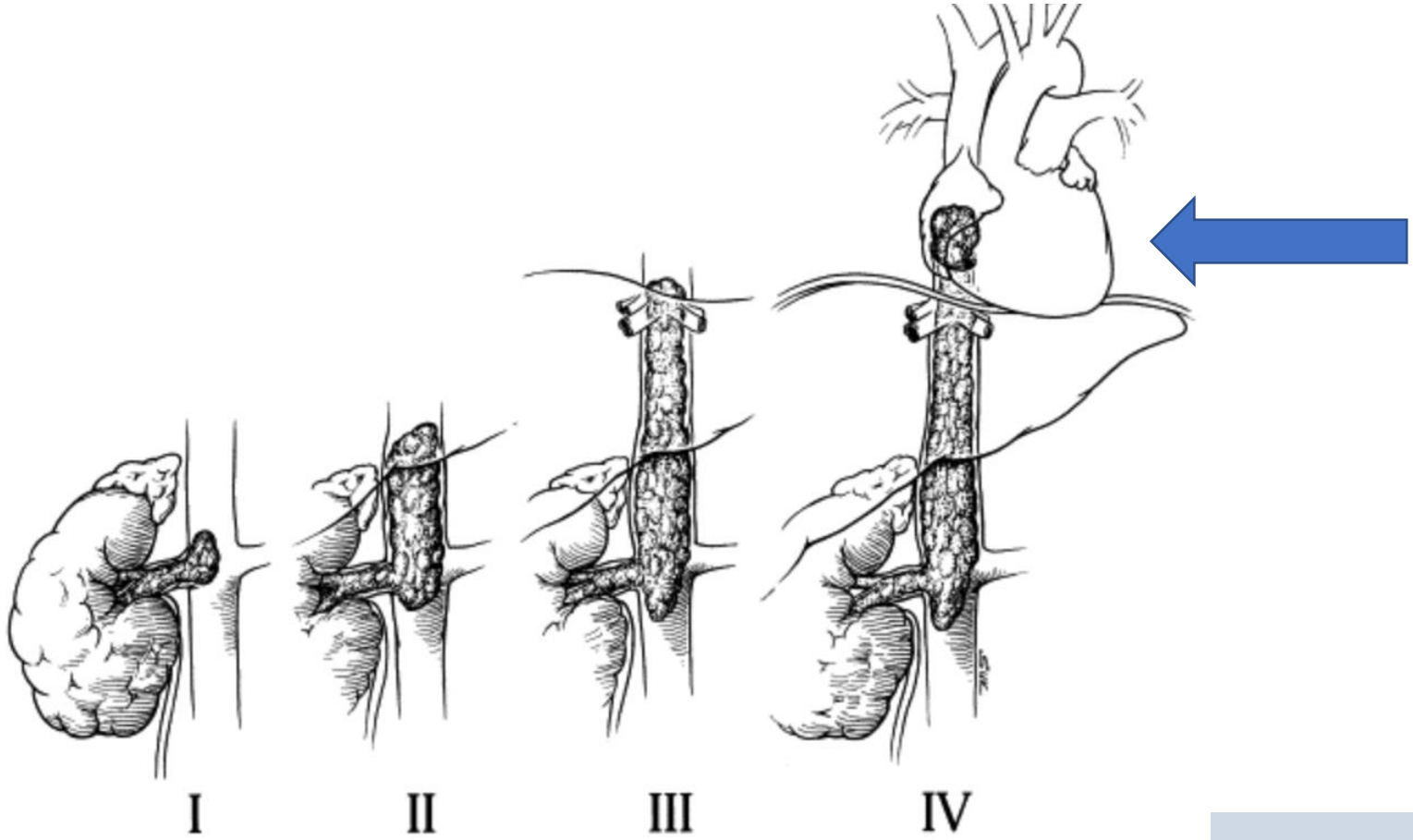


cT3c RCC boven diafragma





Vrouw 76 yr met level IV trombus



Oedeem benen als signaal

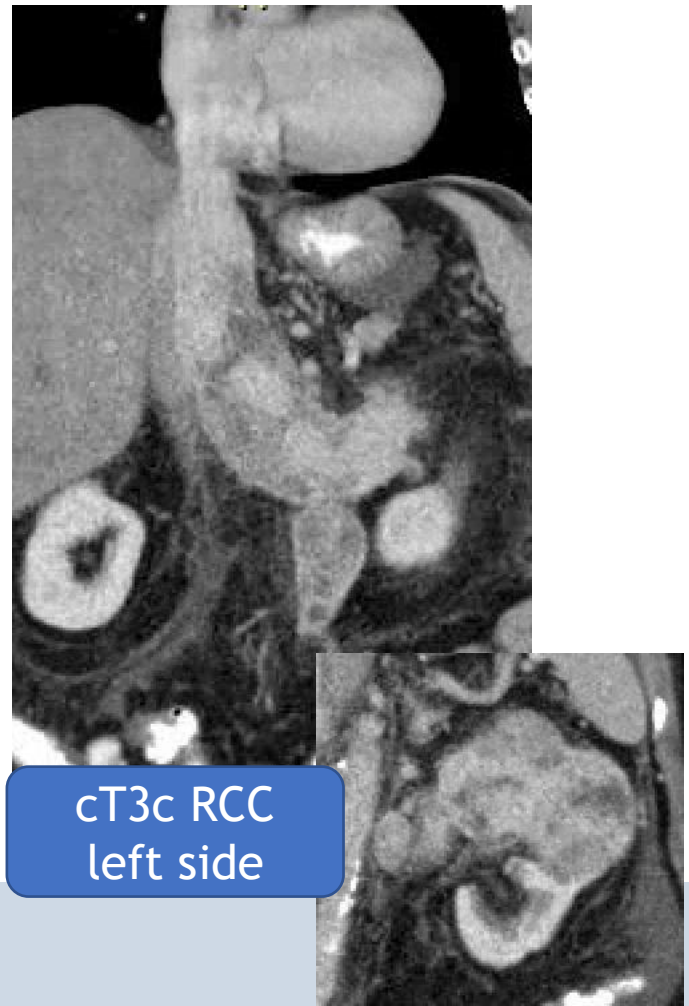
*no metastasis

Algemene Voorgeschiedenis:
1992 hypertensie
hypercholesterolemie
proctociolitis
1994 DM II, sinds 1996 insuline
2005 opname cardiologoie ivm thoracale klachten zonder cardiale oorzaak
2006 EF 58%
2007 beginnende polyneuropathie
2008 cataractwxtractie OS
2010 thoracale klachten met LVH
2012 pancolitis clostridium OLVG
2013 candida oesofagitis
2013 stenose L1-4
2014 herpes zoster

Intoxicaties:
nooit gerookt, geen alcohol

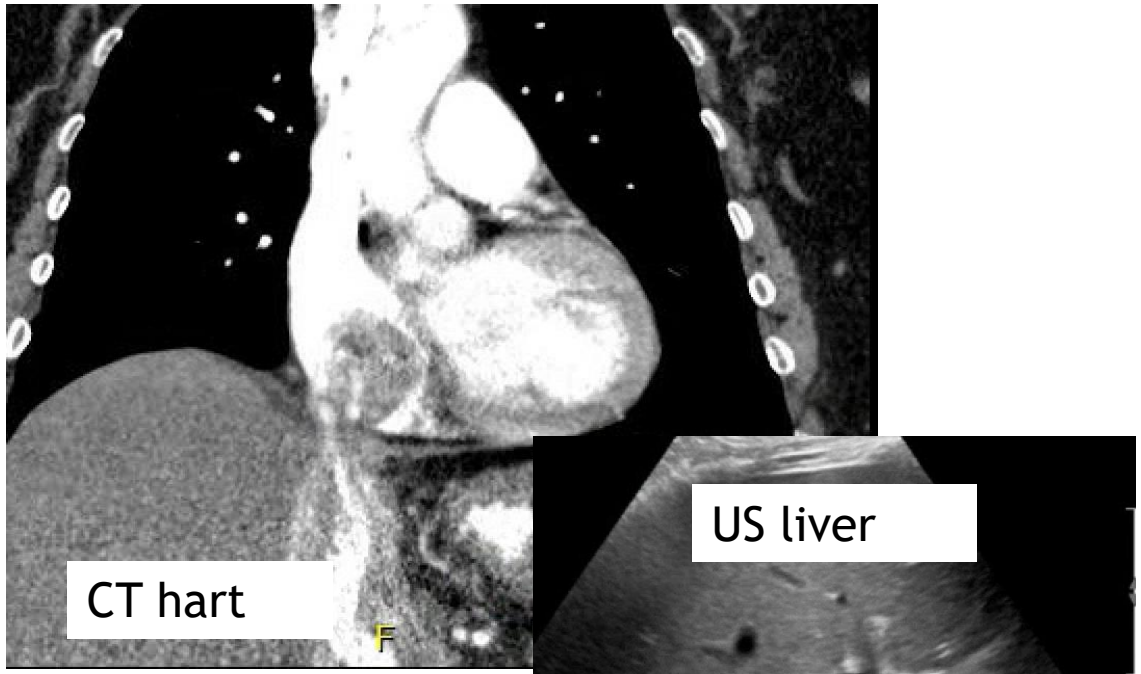
Med: o.a.
verapimil 3 x 80 mg
metformine 3 dd 500 mg
Pantozol.
Insuline novomix

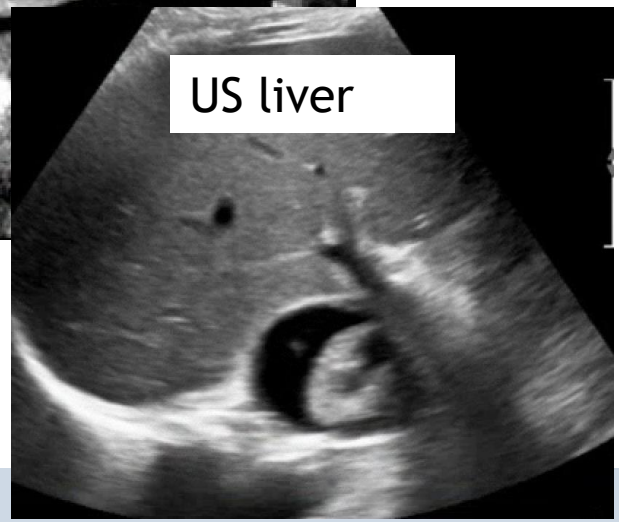
Lab: abnormal:
Hb 7.3
eGFR 57
AF 174
GGT 142
LDH 353



cT3c RCC
left side

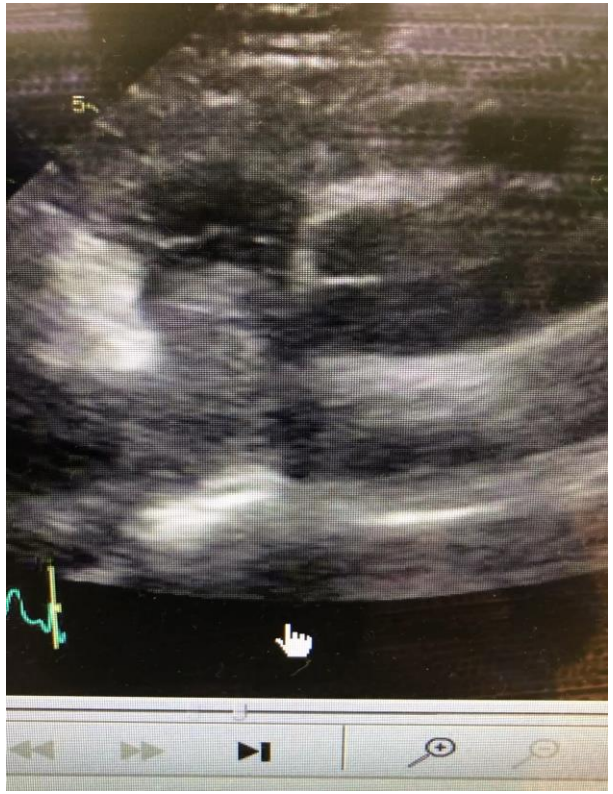
Beeldvorming extra!





+ultrasound caval vein & iliaca

US hart



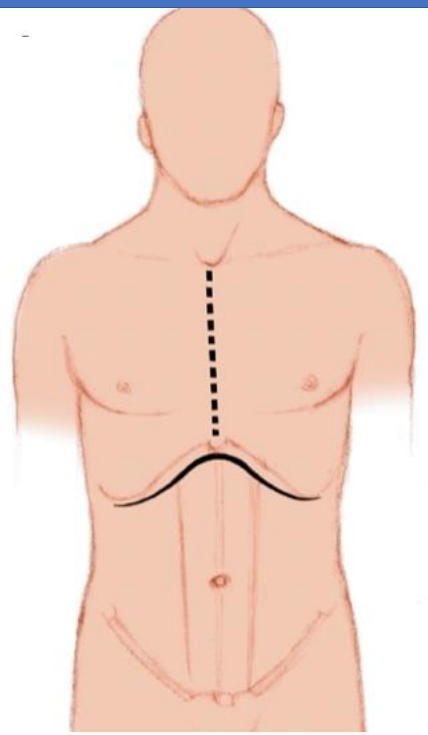
Indication for Surgery

Hoe benader je dit?

TEAM:

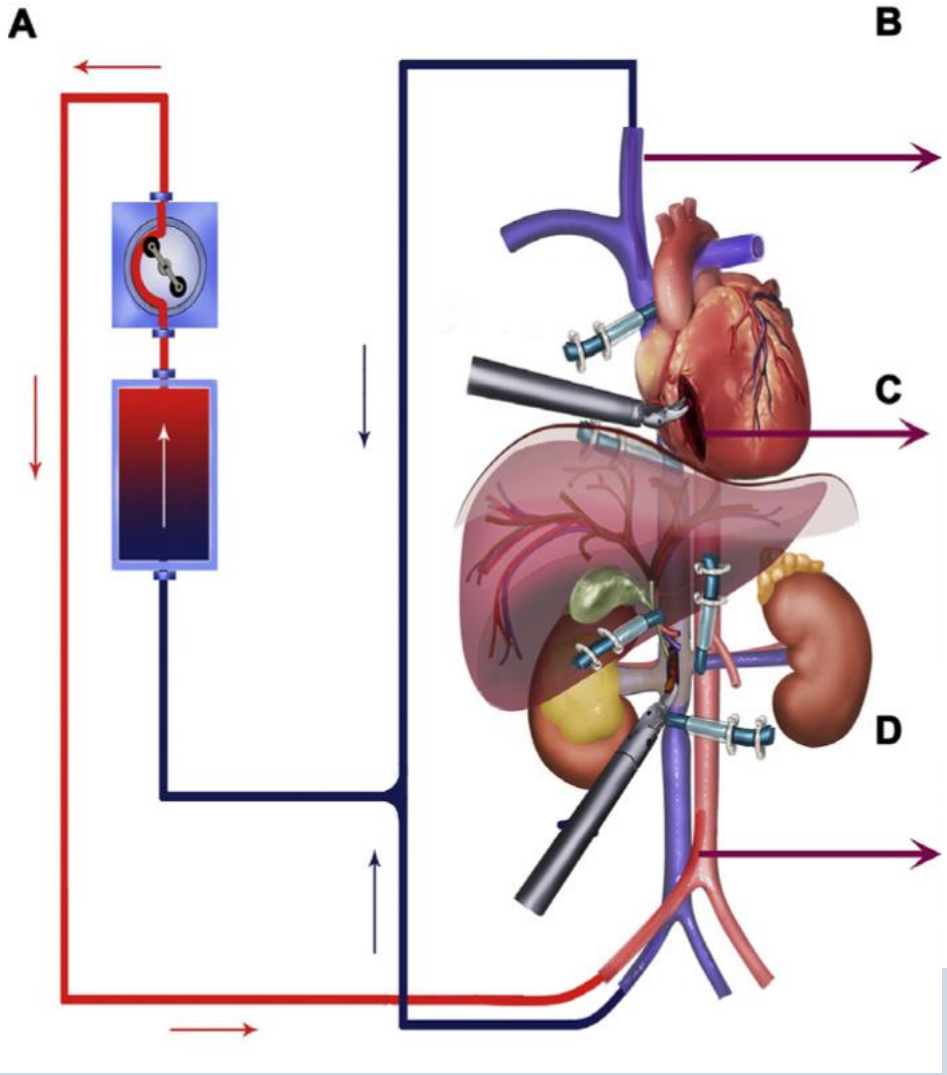
- **Cardiothoracic surgeon** incl heart-lung machine & TEAM
- **Vascular/hepatic surgeon**
- **Urologist**

Chevron & median Sternotomie



Adv: later space
Disadv: distal extension

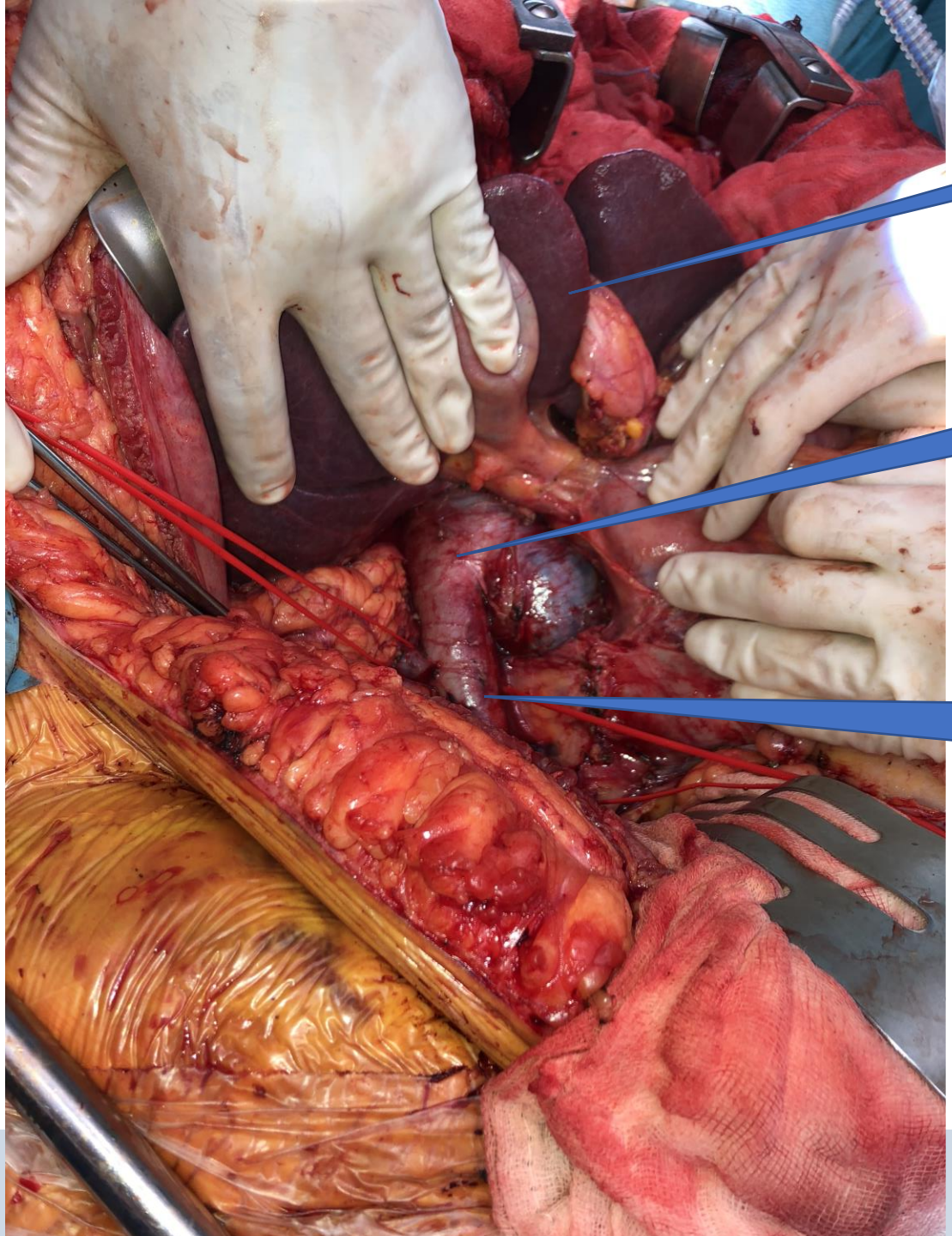
Cardiopulmonary bypass
& deep hypothermic circulatory arrest

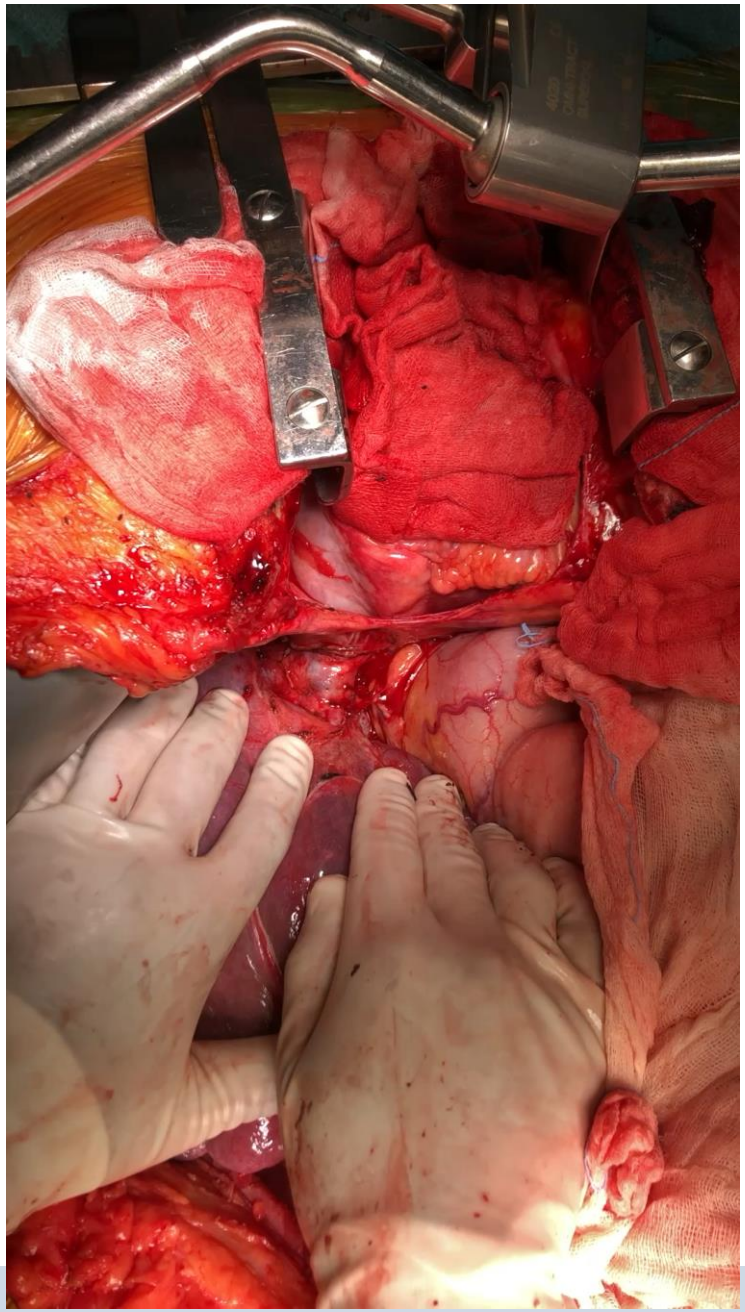


Cannulate heart and the ascending aorta for arterial circulation

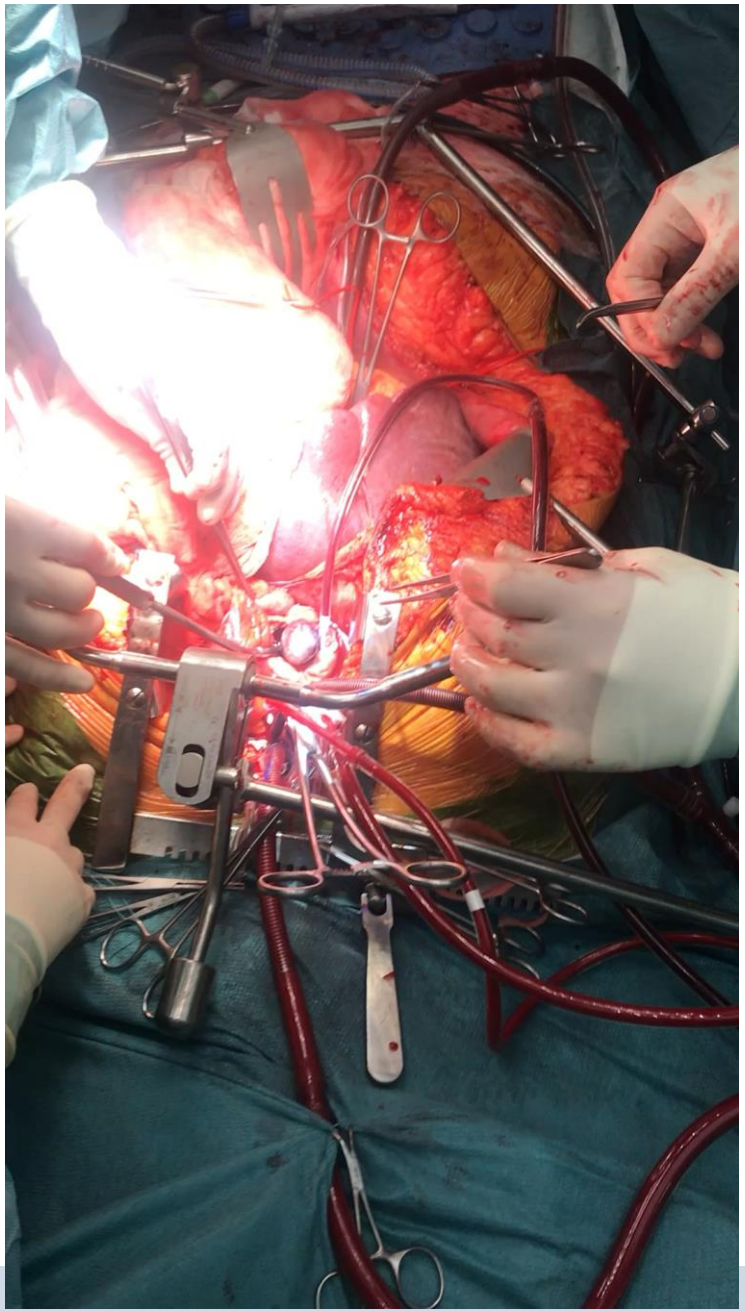
Cannulate the vena cava superior and vena femoralis for venous circulation

*heparinize the patient


Liver
Caval vein with Thombus
Caval vein without thombus

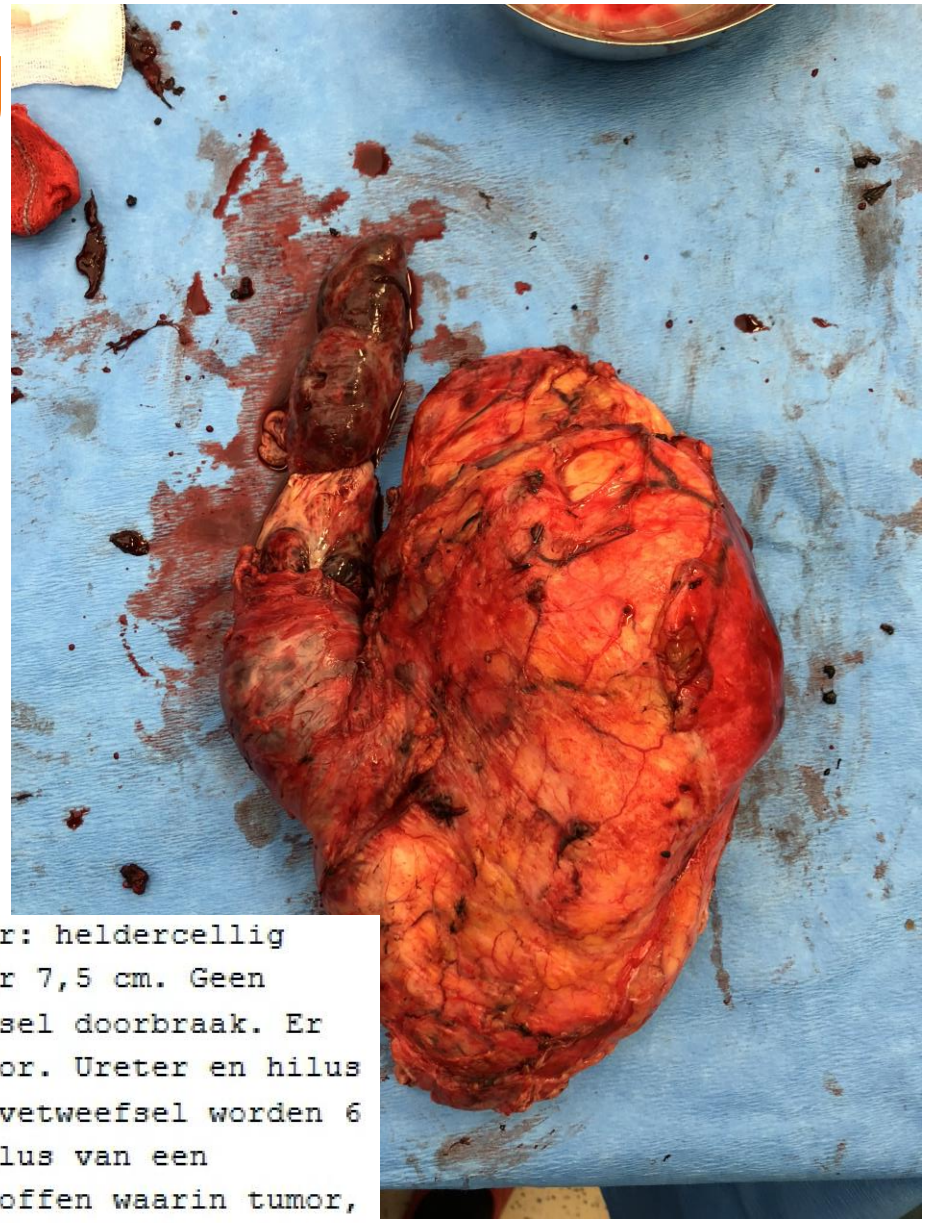


Supra-diafragmatisch



Intra-cardiaal Rechter Atrium

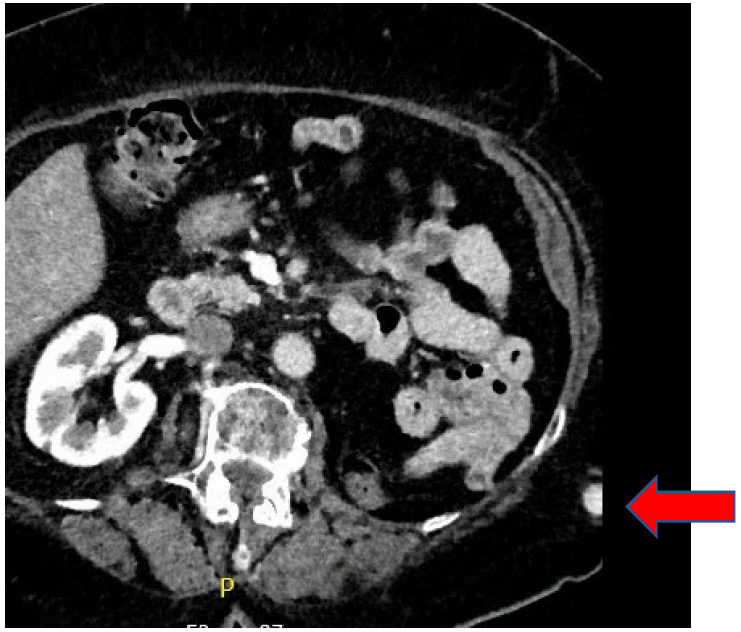
Pathology



I: nefrectomie links met fragment vena cava inferior: heldercellig niercelcarcinoom, Fuhrman graad 2, maximale diameter 7,5 cm. Geen necrose, geen sarcomatoide differentiatie. Geen kapsel doorbraak. Er is uitbreiding van de tumor tot in vena cava inferior. Ureter en hilus vaatresectievlakken zijn tumorvrij. In het hilaire vetweefsel worden 6 lymfeklieren aangetroffen, tumor negatief. In de hilus van een lymfeklier wordt een fors gedilateerde vaat aangetroffen waarin tumor, niet duidelijk of te beschouwen als lymfekliermetastasen of vaso-invasie.
II: excisie weefsel bij vena cava boven diafragma: lokalisatie heldercellig niercelcarcinoom.

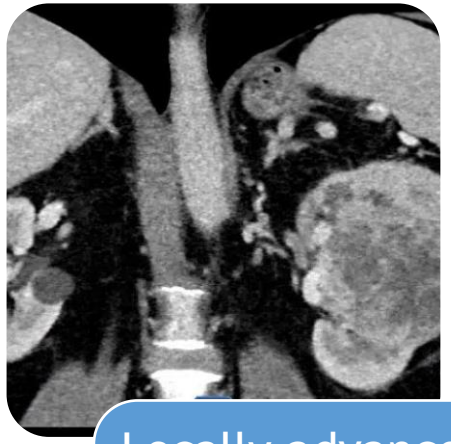
Follow up

- Surgery 8-10-2018
- Sept 2019 suspicion Lymfeklier para-aortal
  - EBRT
- Sept 2020 nodus in abdominal wall
- Resection: metastasis ccRCC
- June 2021 enlargement mesenterial 1,6 cm



Gevorderd nierkanker, wat t doen?

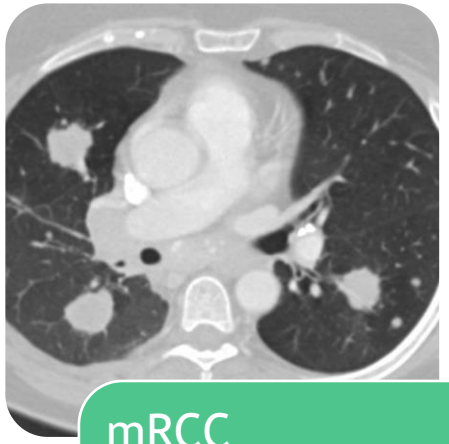
Geen metastase



Locally advanced RCC

- Radical Nephrectomy
- LND
- Neoadjuvant ST

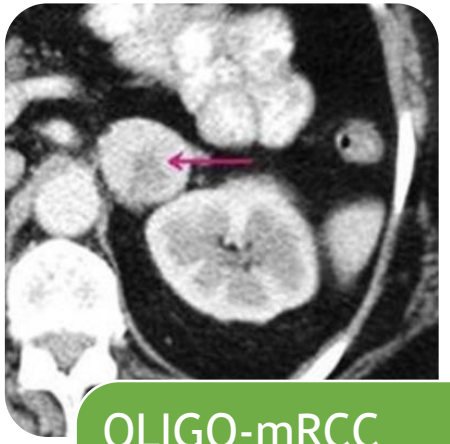
multipele metastasen



mRCC

- Soms Cytoreductive Nephrectomy
- **ONCOLOOG:**
  - Immunotherapie
  - Targeted therapy

Oligo-metastase

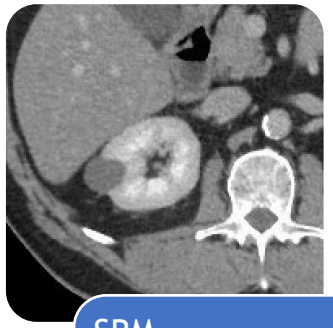


OLIGO-mRCC

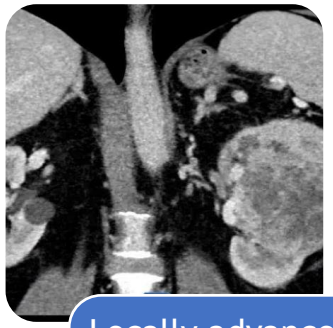
- Cytoreductive Nephrectomy
- Surgical resection
- SABR
- other

nierkanker netwerk amsterdam

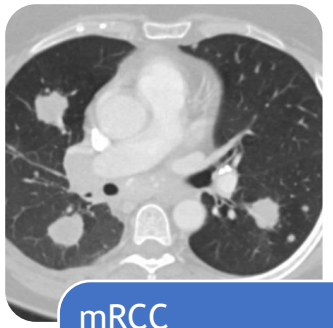
Gedeelde besluitvorming
Multidisciplinairy Tumour Board Meeting



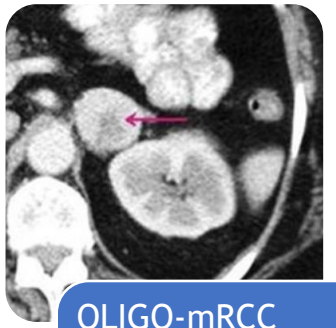
SRM
- AS
- Focal Therapy
- Partial Nephrectomy
- MRIdian
- Watchfull waiting



Locally advanced RCC
- Radical Nephrectomy
- LND
- Neoadjuvant ST

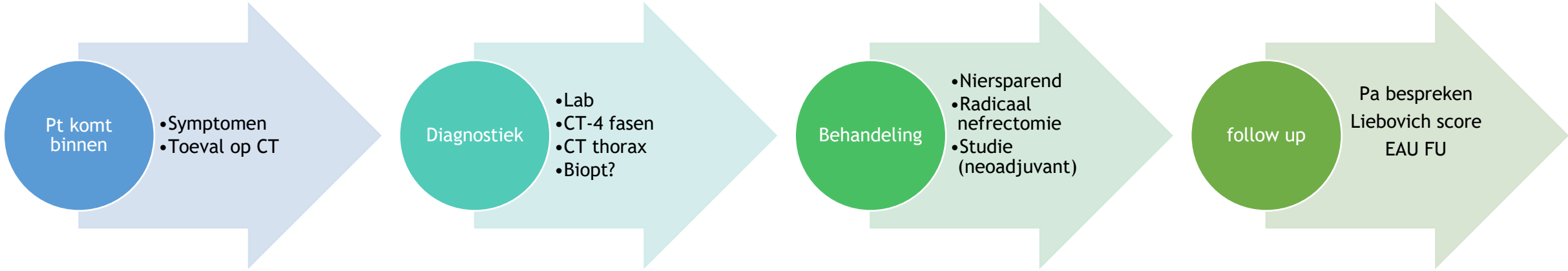


mRCC
- Cytoreductive Nephrectomy



OLIGO-mRCC
- Cytoreductive Nephrectomy
- Surgical resection
- SABR
- other

Patient journey lokaal nierkanker uroloog



Prognostische hulpmiddelen: Leibovich score

Feature	Score
Primary tumor / T-stage	
T1a or pT1a	0
pT1b	2
pT2	3
pT3a-b / pT4	4
Tumor size	
< 10 cm	0
> 10 cm	1
Regional lymph node status	
pNx / pN0	0
pN1 – pN2	2
Nuclear grade (Three tiers grade)	
Grade 1 - 2 1	0
Grade 3 2	1
Grade 4 3	3
Tumor necrosis	
No necrosis	0
Necrosis	1
TOTAL SCORE	

Score	Risk group	Cumulative risk M^+ at 5 years	Cumulative risk M^+ at 10 years
0 - 2	Low	2.9 %	7.5 %
3 - 5	Intermediate	26.2 %	35.7 %
≥ 6	High	68.8 %	76.4 %

Foolow up vlgs EAU

Table 2: Proposed surveillance schedule following treatment for RCC, taking into account patient risk profile and treatment efficacy (expert opinion [LE: 4])

Risk profile (*)	Oncological follow-up after date of surgery								
	3 mo	6 mo	12 mo	18 mo	24 mo	30 mo	36 mo	> 3 yr	> 5 yr (optional)
Low risk of recurrence	-	CT	-	CT	-	CT	-	CT every two yrs	-
Intermediate risk of recurrence	-	CT	CT	-	CT	-	CT	CT once yr	CT every two yrs
High risk of recurrence	CT	CT	CT	CT	CT	-	CT	CT once yr	CT every two yrs

**Leibovich Score 0-2 / 3-5 / ≥ 6; for non-ccRCC: pT1NX-0, grade 1-2 / pT1b, grade 3-4 / vs. high risk: pT2-4, grade 1-4, or pT any, N1, grade 1-4.*

Verwijzen naar klinisch genetica?

Criteria for referral to clinical genetics
RCC < 45 yrs
RCC & 1 other cancer <60 yrs
Bilateral and multifocal RCC, any age
Papillary type RCC, any age
RCC at 2 or more 1st degree family < 70 yrs

* STOET richtlijnen 2022

5 jaar NKNA netwerk: impact van een regio MDO

nierkanker netwerk amsterdam

- 2651 casus besproken
- In 95.8% MDO advies opgevolgd
- 29.6% ruimte voor shared decision making
- 3.4% deelname klinische studies

Drs. L van den Brink, PhD
l.vandenbrink@amsterdamumc.nl

In 2020 werd Stichting PRO-RCC opgericht, met het doel een infrastructuur te bieden voor het verzamelen van klinische gegevens en patiënt-gerapporteerde uitkomsten van nierkanker patiënten in Nederland. Door een prospectief cohort van nierkanker patiënten te beheren, faciliteert PRO-RCC wetenschappelijk onderzoek om de

DRCG
Dutch Renal Cancer Group

Doel IZA: concentratie van zorg versnellen & netwerkzorg versterken

voor Nierkanker

Integraal Zorg Akkoord

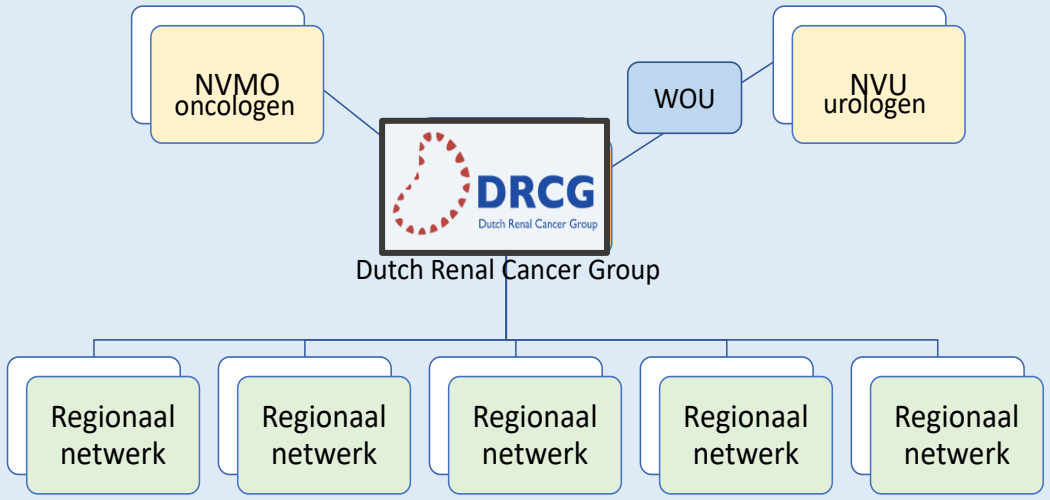
- Afspraken tussen VWS en alle partijen in de zorg (Zvw) als vervolg op het regeerakkoord VVD, D66, CDA en CU
- Eerder waren er hoofdlijnakkoorden (HLA) per sector
  - 2012 – 2014
  - 2015 – 2018
  - 2019 – 2022

- Netwerkzorg al opgestart, begin is er.
- Landelijke tumorwerkgroep multidisciplinair DRCG

- Zorg is versnippert over vele ziekenhuizen, case-mix onbekend
- Geen nationaal real-time kwaliteitsregistratie met transparantie van zorg
- Er wordt niet gestuurd op uitkomsten

Sturen op 2 pijlers

- Volume norm omhoog!
- Netwerk vorming verder door ontwikkelen



*Elk netwerk 2 voorzitters:
- Uroloog
- Medisch oncoloog

Ronde Tafel Gesprekken tussen deze netwerken

Amsterdam UMC
Universitair Medische Centra

Dank voor de aandacht!

Patricia Zondervan