IO in the COVID World: Switzerland

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Disclosure

Consultant for: Terumo, Cook, Neuwave

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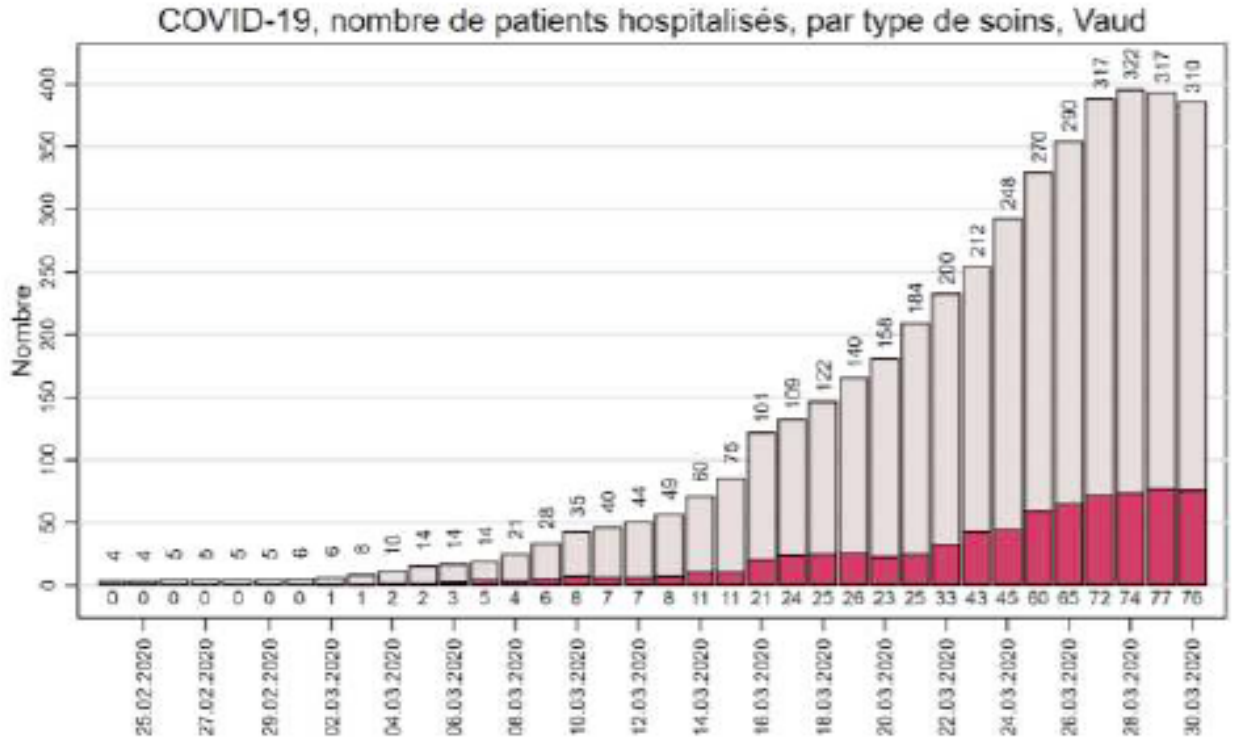
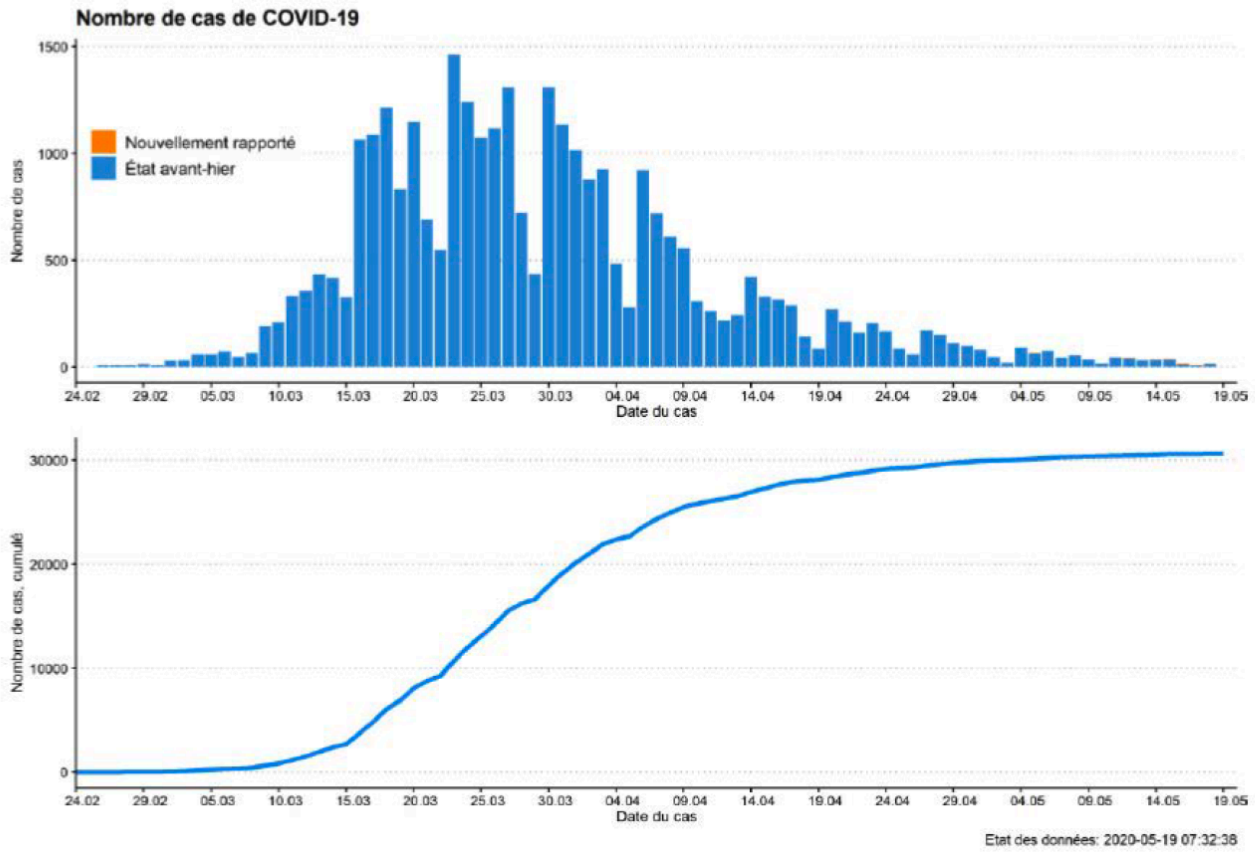
COVID and CHUV



1200 active beds with 35 ICU beds and 30 intermediate care beds.
In 3 weeks the full capacity of ICU beds was COVID 19 patients

Switzerland and COVID 19



30% of the Swiss population is not Swiss citizen
A lot of trans border workers
South and west of Switzerland highly connected to France and Italy

COVID 19 challenges

- Complete rearrangement of the hospital:
  - Multiplied by 6 the ICU capacity
  - Closed all elective activities out of cancer
  - Stopped all the clinical trials
  - Reallocated all resources to COVID 19

- Management
  - Weekly meeting with the CMO
  - Weekly meeting with the interventional teams (endoscopy, IR, cardiology)
  - Communication actions:
    - Internally to the hospital but also with the unit
    - Patient communication: desk activities multiplied by 3

ESMO RECOMMENDATIONS

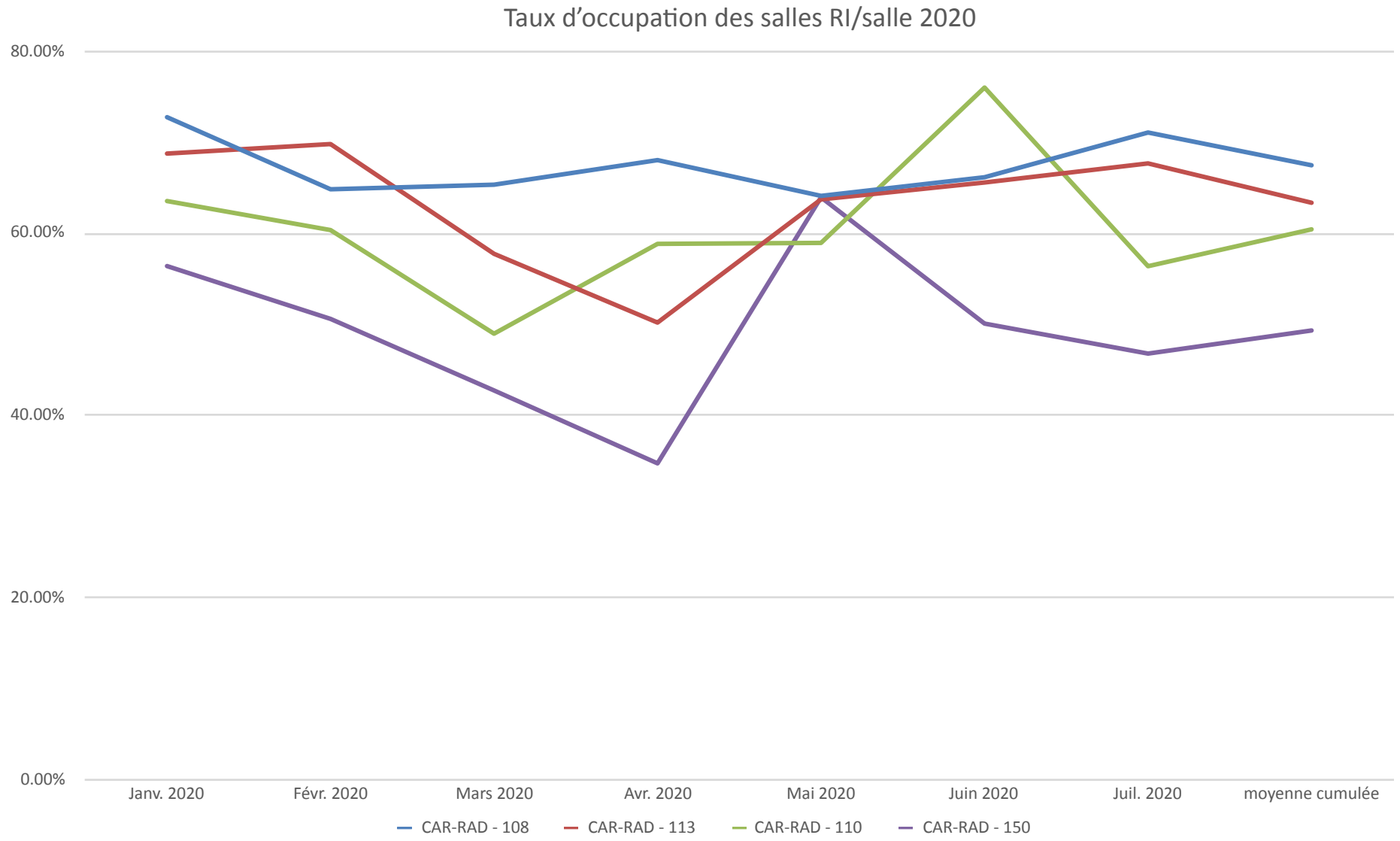
Cancer Patient Management During COVID-19 Pandemic

General Introduction

Treatment Decision Recommendations

- Communication, discussion with other professionals and with patients preferably by phone rather than face-to-face is strongly recommended
- **Decisions for treatment initiation or continuation must be discussed for both uninfected patients and SARS-CoV2-positive patients if they are a- or pauci-symptomatic, still fit to be treated and willing to do so after proper risk/benefit explanation**
- Discuss the benefits and risks of present cancer therapy in the setting of the COVID-19 pandemic: treatment setting, disease prognosis, patient comorbidities, patient preferences, probability and risks from COVID-19 infection
  - If local treatment for early stage (surgery or radiation) is planned, explore possibilities of postponing using a “wait and see” approach (like in some prostate cancers) or prioritise treatment balancing the cost/benefit ratio according to age, comorbidities and impact on outcome of the surgical procedure
  - If an intravenous treatment is ongoing, possibly switch temporarily to an oral treatment, if available, to improve disease control
  - Prioritise **adjuvant therapies** in patients with resected high-risk disease who are expected to derive a significant absolute survival benefit
  - Similarly, discuss the benefits and risks of **palliative therapies** and the options of “therapy holidays” “Stop and Go”, maintenance, switch to oral drugs, if available, during the pandemic
  - Envisage other optional regimens and schedules to reduce hospital visits
  - For patients under oral treatments, prefer telephonic or web-technology contacts for consultation and prescription renewal
  - If needed, favour telephone or web-technology contacts also for toxicity evaluation, dose adaptation and supportive care recommendation
  - Discuss shorter/accelerated or hypo-fractionated radiation schemes with radiation oncologists, where scientifically justified and appropriate for the patient

ESMO


Taux d'occupation des salles RI/salle 2020
80.00%
60.00%
40.00%
20.00%
0.00%
Janv. 2020
Févr. 2020
Mars 2020
Avr. 2020
Mai 2020
Juin 2020
Juil. 2020
moyenne cumulée
CAR-RAD - 108
CAR-RAD - 113
CAR-RAD - 110
CAR-RAD - 150

COVID 19 in practice

- The domino effect:
  - Reallocation of ressources
    - Nurses, anesthesiologists, allocated to ICU or COVID units
  - Scarcity of resources:
    - Less doctors, less anesthesiologists
    - Situation changed every week
    - Controlled use of ventilators, sedation drugs
    - Medical leave for COVID 19 or « quarantine » due to the lack of tests at the beginning of the pandemic
      - Out of 23 staff in Radiology dept 5 medical leave for COVID 19
      - Rad tech at high risk for COVID 19 (rotation in COVID 19 units for X rays)
      - Shortage of face masks at the beginning of the pandemic

COVID 19 and CHUV

- Activity:
  - Complete arrest of elective surgery and intervention out of cancer
  - Cancer patient triage by dedicated team per organ (same as MDT leaders)
    - Triage algorithm decided by the same group
  - Assigned a fellow for COVID patients every week (reduce the risk of contamination)
- Staff protection
  - PPE measures decided and taken according to material supply availability
    - Decision to prioritize for FFP2 anesthesiologists and ICU staff
  - Protection according to patient status
    - Clinical status only first and then 2 weeks later according to RtPCR testing for every patient admitted in the CHUV and particularly for cancer patients
- Weekly meeting with all the interventional teams and medical director for resource allocation and decisions

IO activity

Protective measures
For whom and when?

Selection of procedures at risk who needs special protection measures

Exposure during anesthetic procedures	Procedure at risk of biologic liquid exposure (bronchial expectoration, digestive liquid or blood)
Patient requires intubation/extubation **Patient is receiving a form of ventilatory support associated with the risk of mechanical dispersal of aerosolization (jet ventilation or laryngeal mask)** **Patient requires active airway suctioning (*i.e.*, tracheostomy patient)**	Lung biopsy Lung tumor thermal ablation Thoracentesis Pleural drainage Chest tube placement for pneumothorax Bronchial artery embolization Bronchial stenting Nasogastric tube or orogastric tube placement Any procedure requiring nasogastric tube placement (gastrostomy or junostomy) Gastrointestinal stent placement Bone screwing or bone biopsy using high velocity device

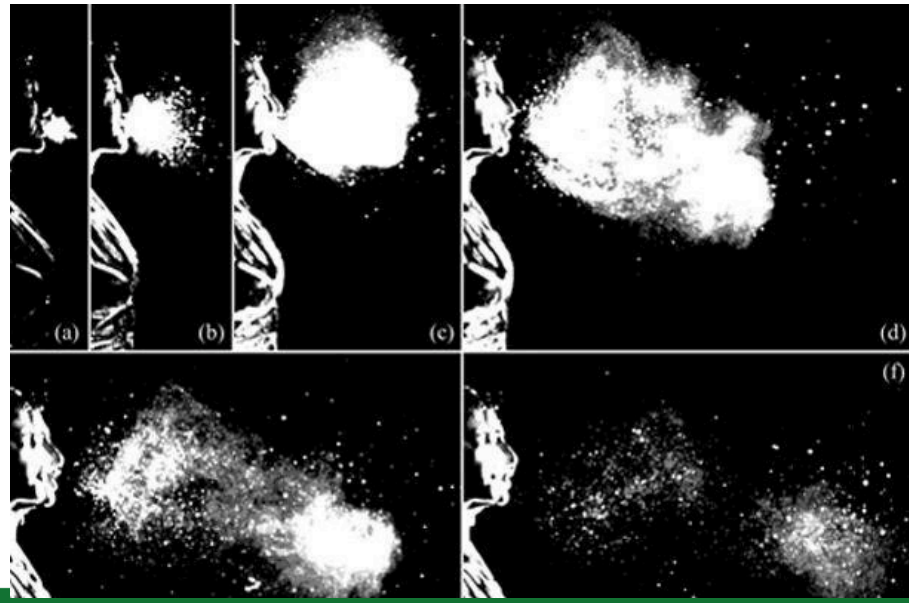
Review
Interventional imaging

Interventional oncology at the time of COVID-19 pandemic: Problems and solutions

A. Denys [a], B. Guiu [b], P. Chevallier [c], A. Digklia [d], E. de Kerviler [e, f], T. de Baere [g]

Show more

https://doi.org/10.1016/j.diii.2020.04.005



COVID

1: Patients hospitalisés et/ou sous AG (ou sédation gerée par anesthésistes (niveau 3))

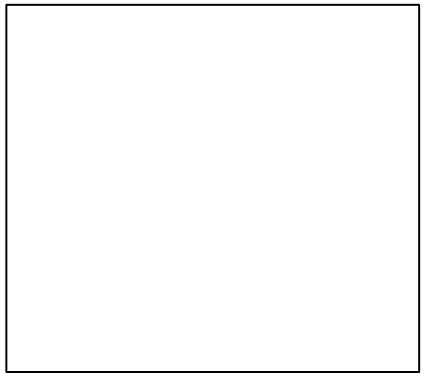
- Un test covid doit être effectué à l'étage avant la procédure en RI. REGARDER le résultat dans SOARIAN avant de faire descendre le patient. Si aucun test n'a été effectué, la procédure est reportée (sauf si URG).

2: Patients ambulatoires + Urgences non testées

- Appliquer les mesures de barrière usuelles.
  - Interroger le patient à son arrivée (sign in), symptômes fièvre et toux.
  - Masque STD au patient + au personnel
  - Lavage des mains
  - Si symptomes : faire un test rapide et reporter la procédure si possible en adressant aux urgences sinon considérer le patient comme COVID + (voir ci-dessous)

3: Procédures à risque (CF LISTE), même si le test est négatif

- S'il existe un risque d'aérosolisation, il faut réduire le nombre de personnes en salle (rester au poste de commande) et les protéger comme suit:
  - Masque FFP2 (à conserver ½ journée SVP)
  - Lunettes nettoyables (ne pas jeter SVP) ou casque RX protection
  - Gants
  - Blouse verte pour ceux qui ne sont pas habillés en stérile



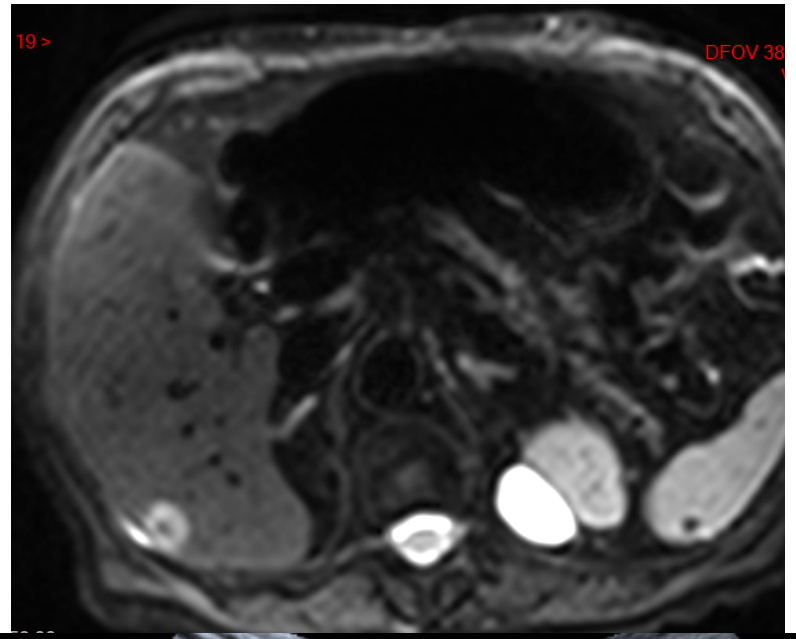
Biopsie pulmonaire et pleurale
Thermoablation pulmonaire
Drainage pleural
Embolisation bronchique
Pose de sonde nasogastrique
Gastrostomie
Gastro-jejunostomie
Geste osseux utilisant une perceuse

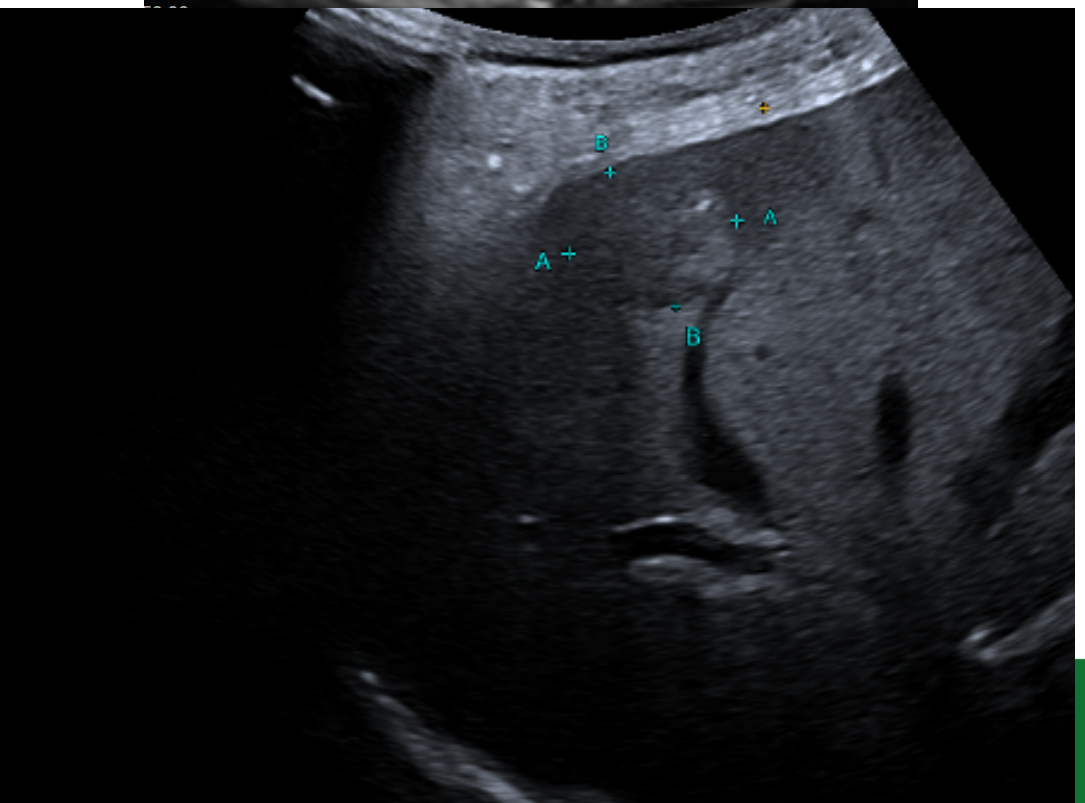
No more anesthesiologist!

- We have usually 4 days of general anesthesia a week for oncology
- At the peak of COVID 19 pandemic
  - 20% of usually allocated resources
  - Change of habits
    - No more Jet ventilation
    - COVID 19 testing for all patients
    - Continuation of cancer treatment when curative intent was aimed
- Solutions:
  - Substitution
    - Of anesthetic method
    - Of ablation method
    - Of treatment modality

Substitution of ablation method

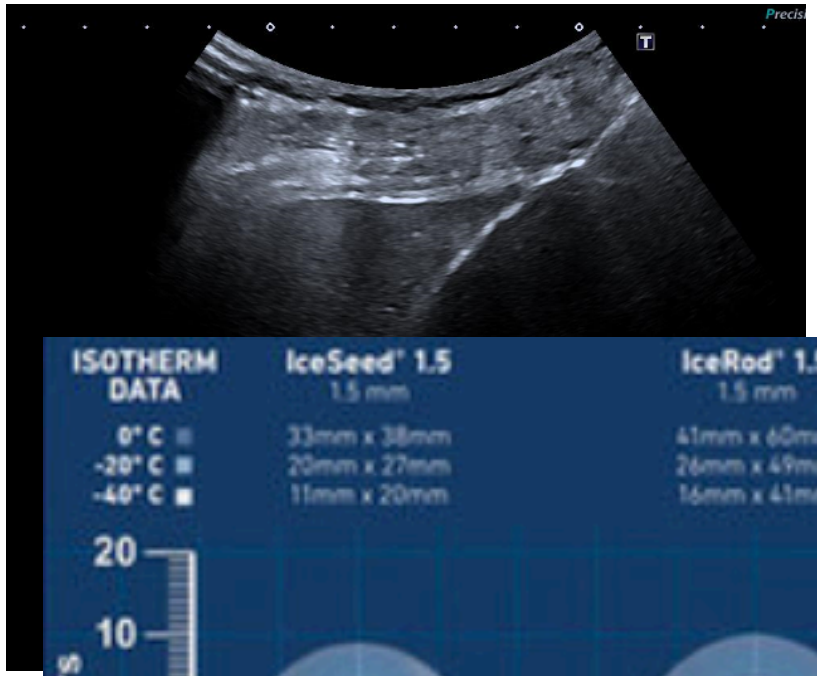
- Switch from radiofrequency to cryotherapy
- Rationale
  - No pain, can be done under local anesthesia only, early discharge
  - Same targeting
  - No tract ablation
  - Shape of the ablation zone not that easy depending on the location



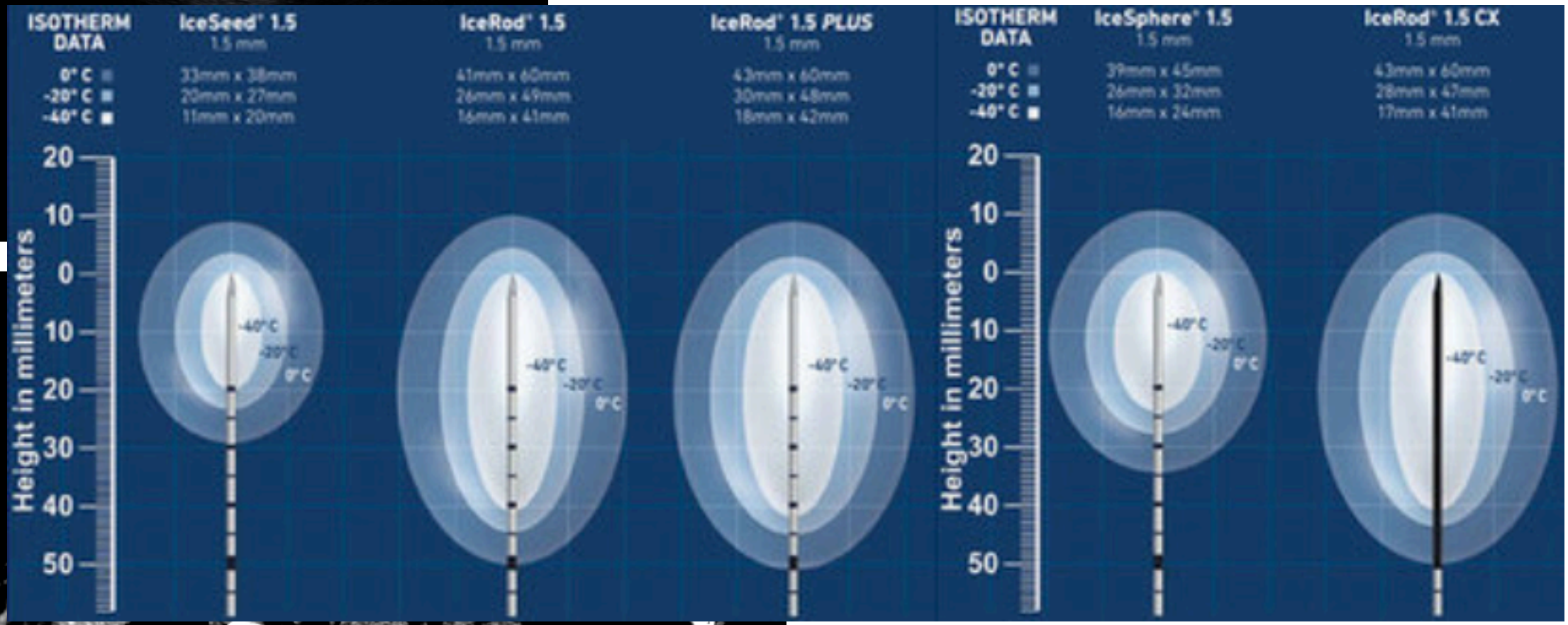


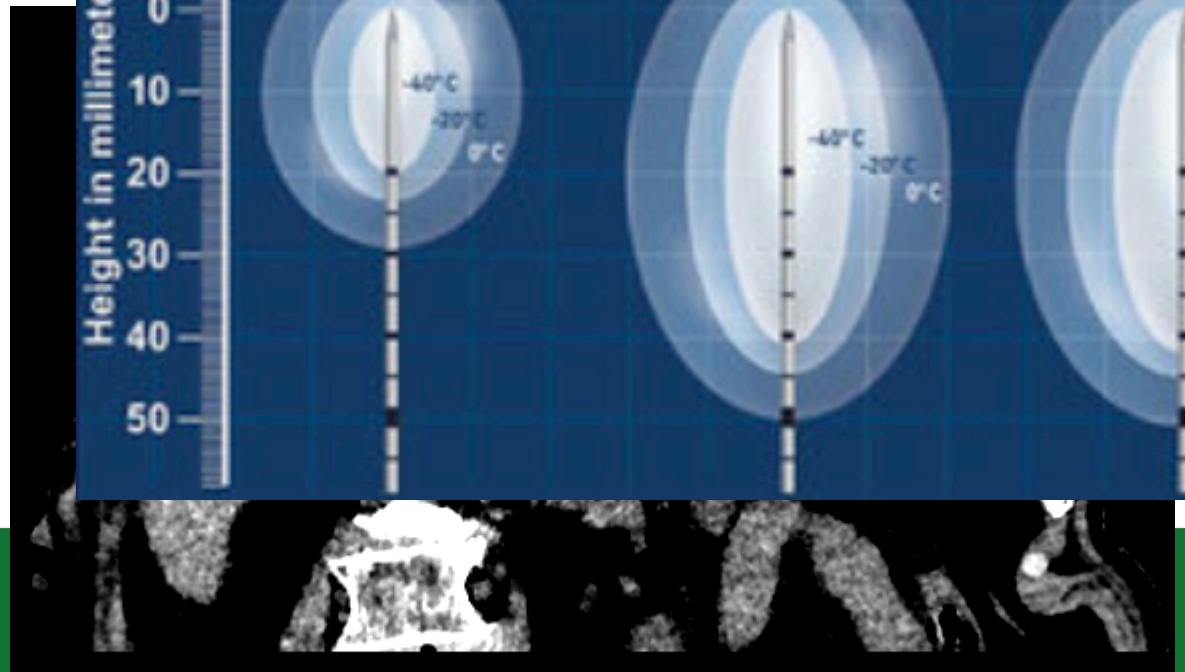
Mr G
78y.o. man with a T3 left colon cancer
T2N1 Mo cancer treated 2 years ago
One single liver met in segt 6 PET FDG+ no other met
Candidate for surgery of ablation

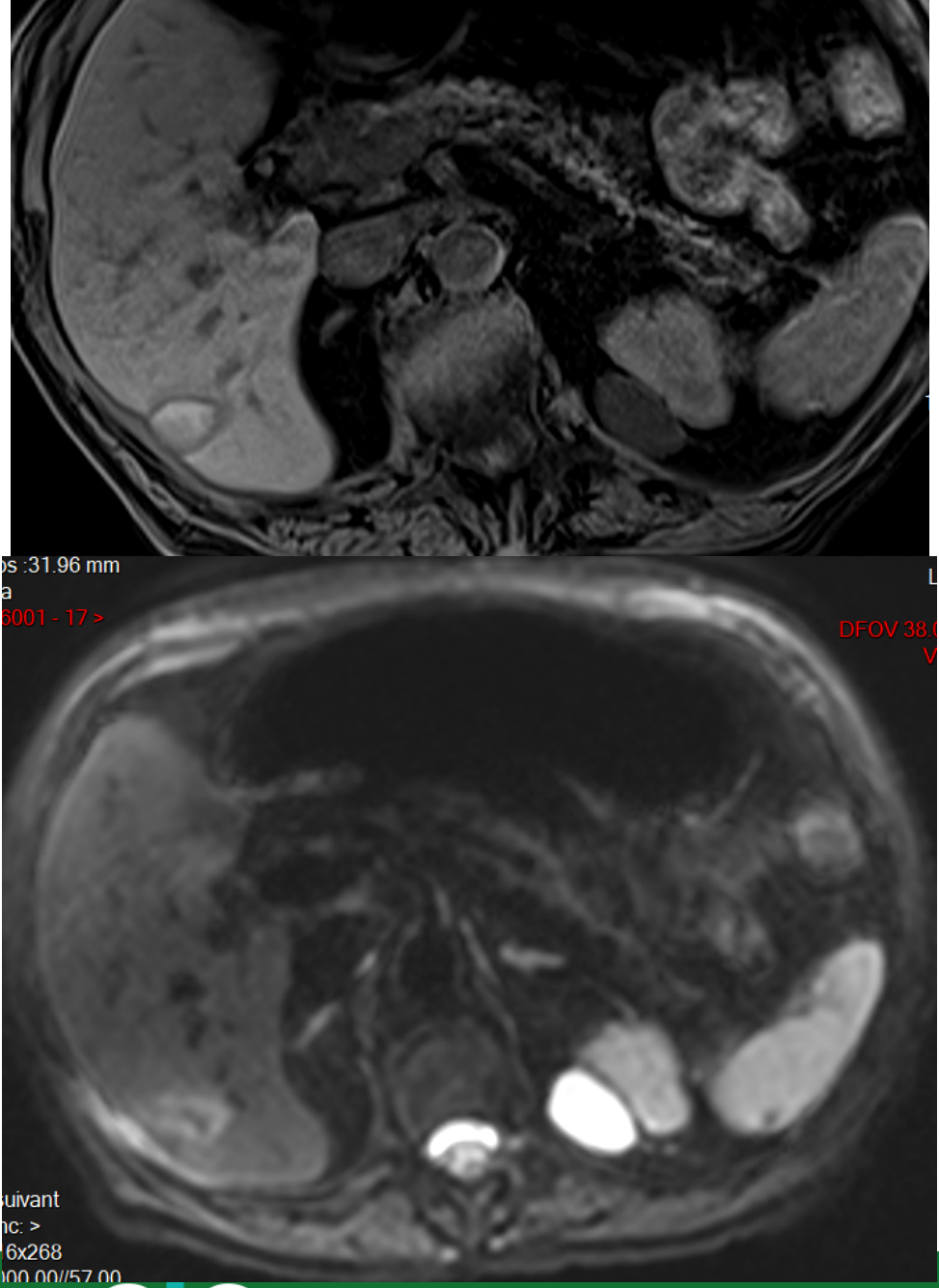
French national recommendation for colon cancer management under COVID 19: “when possible, namely for lesion smaller than 3cm, namely for liver metastases to favor percutaneous thermal ablation that use less or no intensive care or post-operative care resources and allows for very short hospital stay” https://wwwsnfgeorg/content/21-prise-en-charge-des-cancers-digestifs-en-fonction-de-la-situation-epidemique-covid-19 (2020)



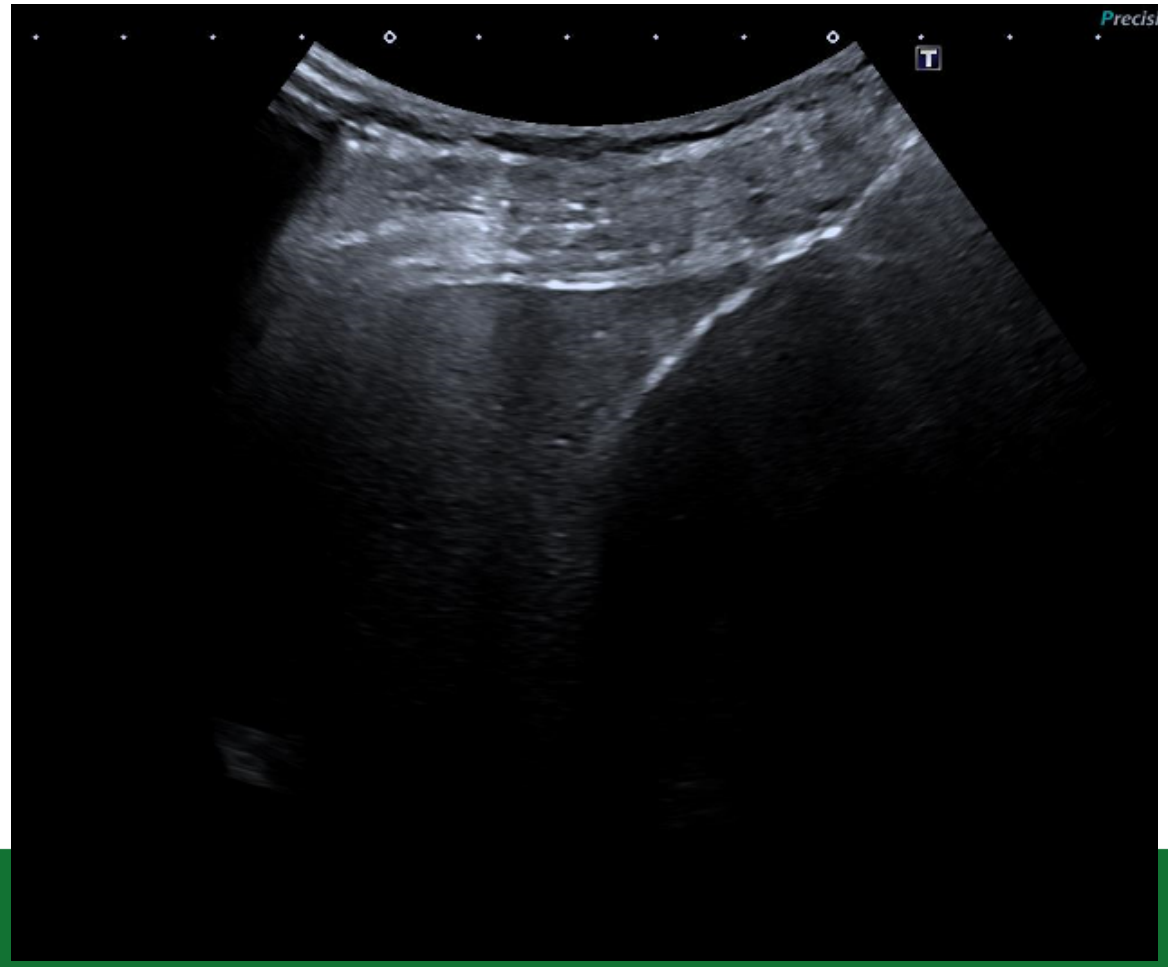
Needle placement not easy since the ablation area is oval and sometimes complex to manage





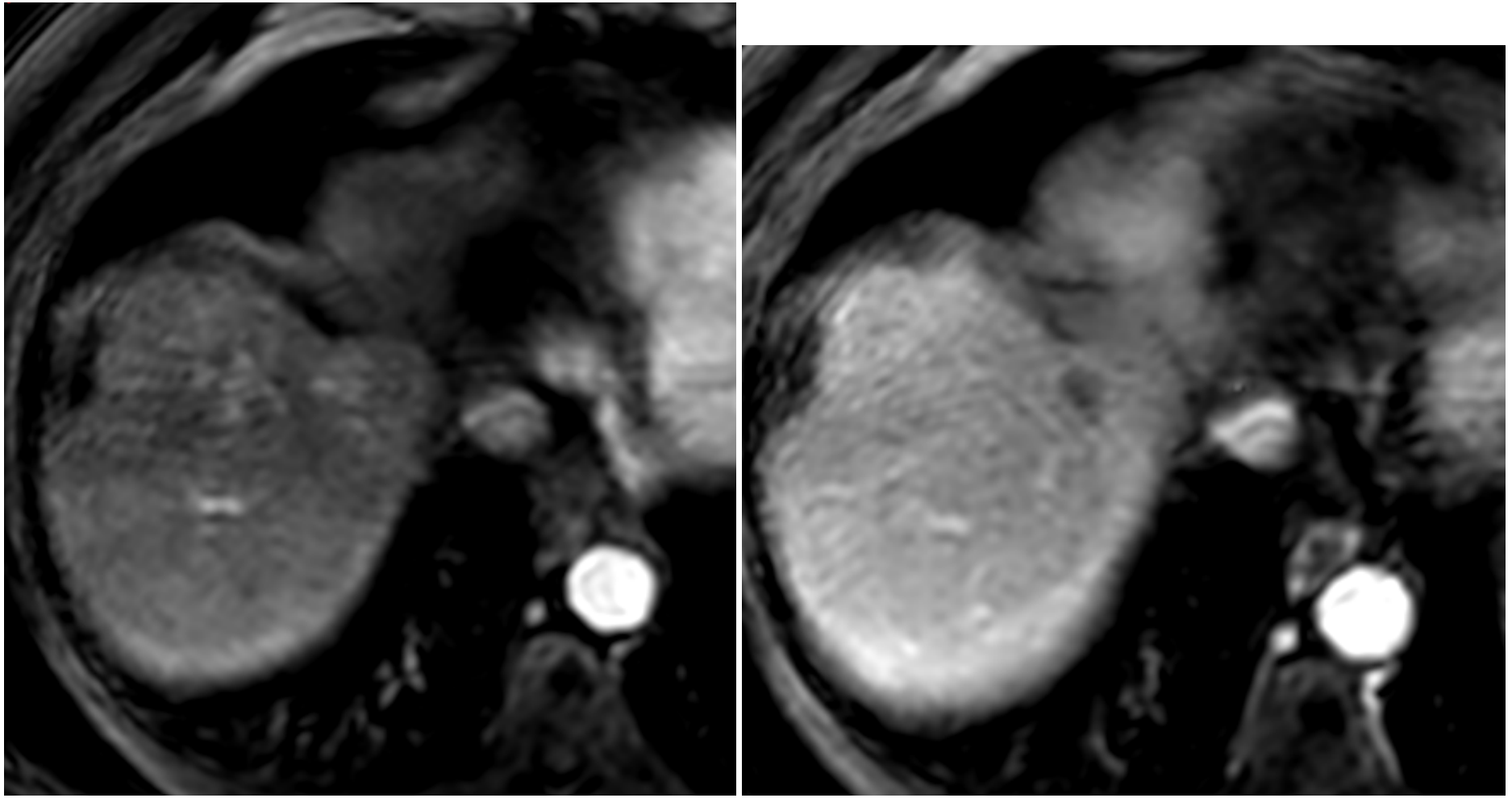


6 Weeks control MRI
No residual tumor
Abdominal wall inflamation



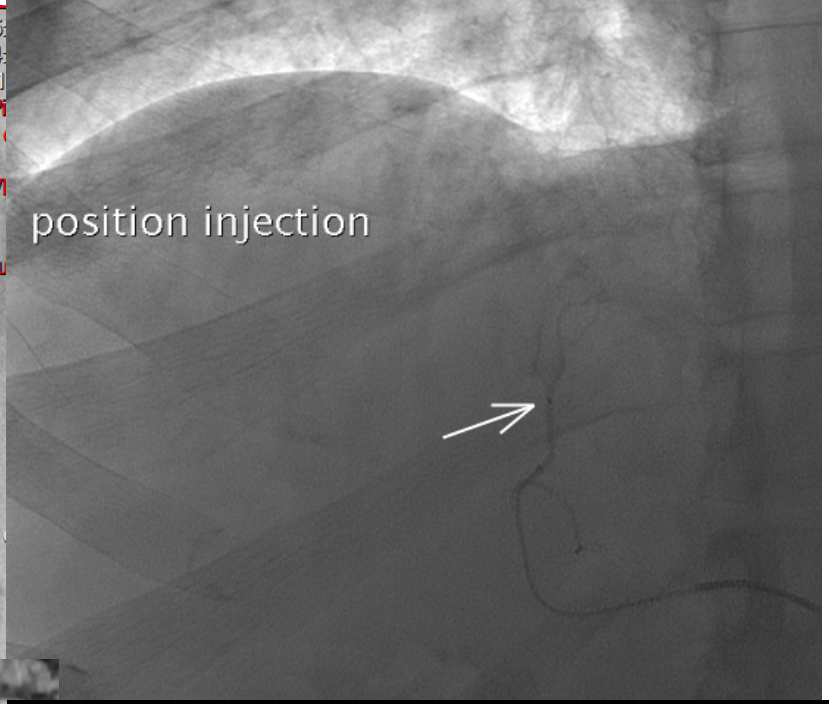
Substitute thermal ablation method by SIRT

- Benefit
  - 2 5 hours out patient hospital stay instead of 2-3 days in house
  - No need for general anesthesia
  - No early visit post treatment
  - Low toxicity
  - Only for HCC

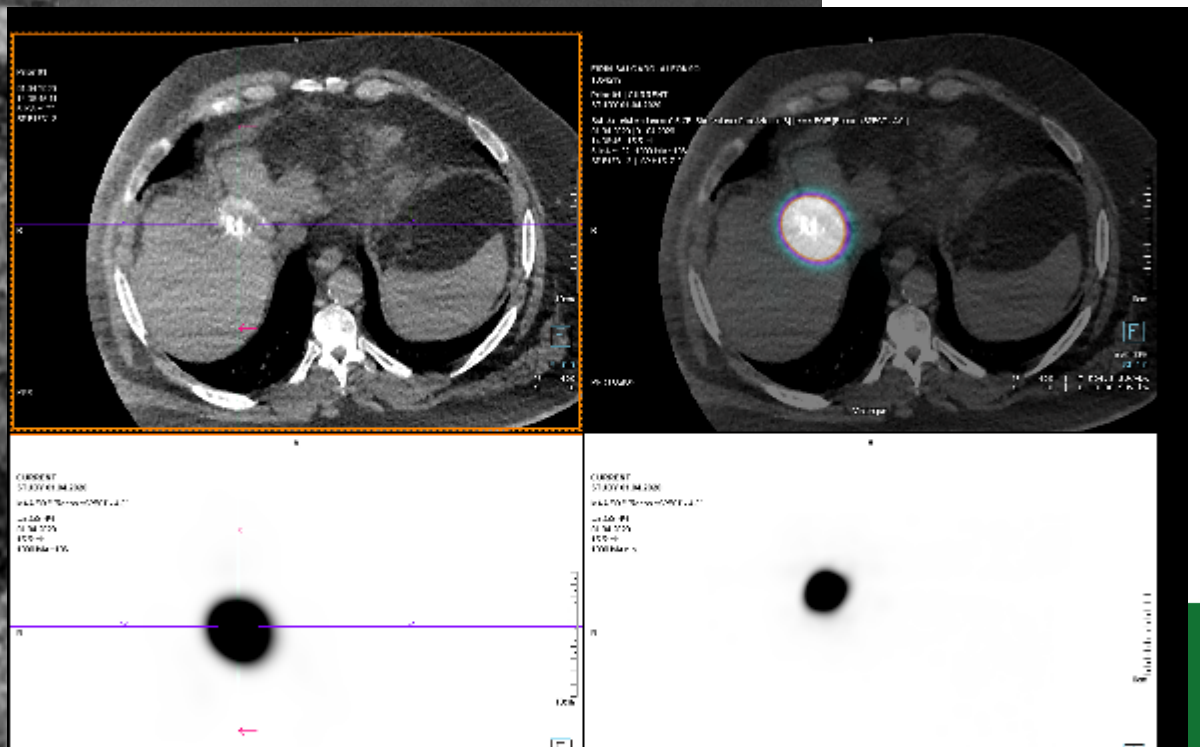


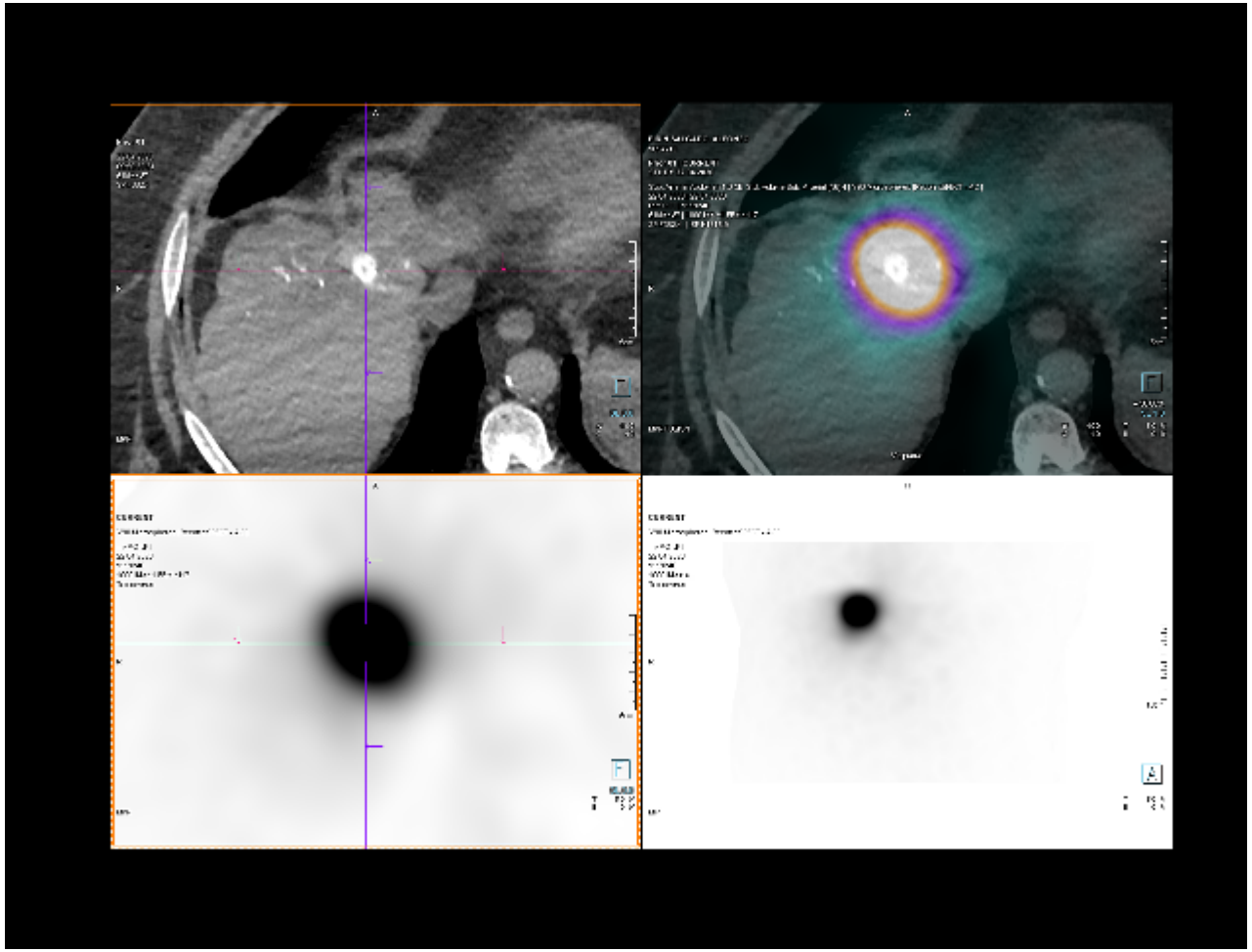
Mr E Child A Thrombo 67G/l
Small unique HCC LIRADS 5 below the dome
Typical candidate for thermal ablation……


81% Pi
DFOV 18.1 x 17.8
Soustraction DÉSACTIVI
Visionneu


position injection


logie CHUV
132 >





PET Y90 at the end of the procedure

420 Gy delivered in the lesion
No complication

Did we follow the recommandations?

- HCC:
  - EASL recommandations for COVID pandemic:
    - Maintain care for these patients BUT
      - No liver transplantation
      - No clinical trial
      - No immunotherapy
      - No delay more than one month for treatment
  - More bridging, less invasive procedures
- EUA:
  - Wait and see strategy for renal cancer
- ESMO colorectal cancer group
  - Keep the curative options as possible

BONNE CHANCE !

Hope for no similar second wave