

Locoregional therapy for liver metastases in neuroendocrine tumors in 2020.

¿New techniques may open new indications?

DR. JOAN NOVO TORRES

INTERVENTIONAL RADIOLOGY

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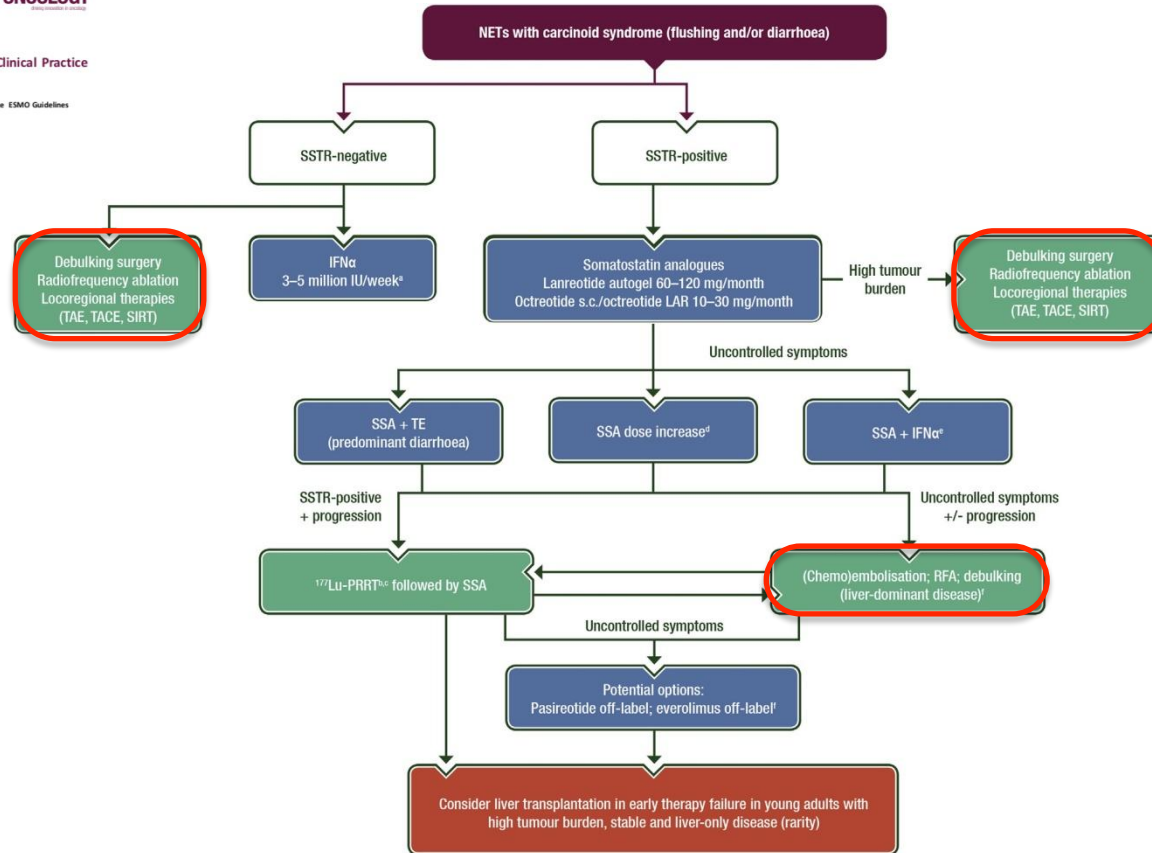
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Conflicts of interest

INTERNATIONAL PROCTOR FOR SIRTEX

Y⁹⁰ RADIOEMBOLIZATION



**WHAT
CAN WE DO
FOR YOU?**



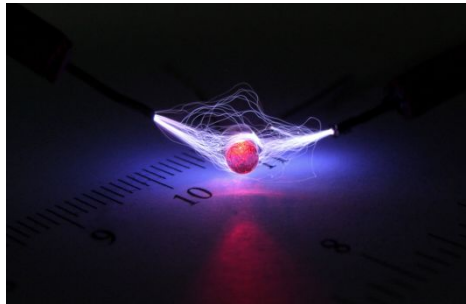
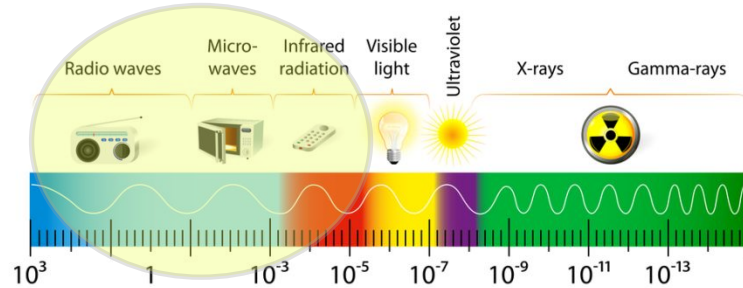
Local Ablation

Embolization

*Selective internal
radiotherapy*

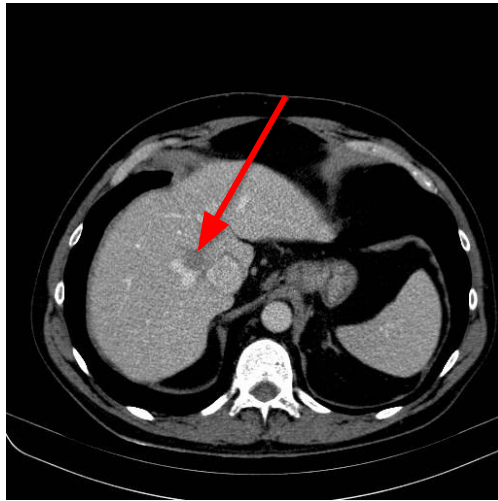
Local Ablation

THE ELECTROMAGNETIC SPECTRUM

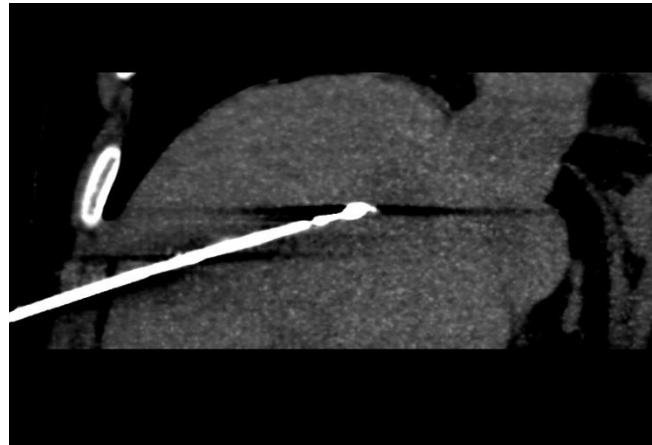
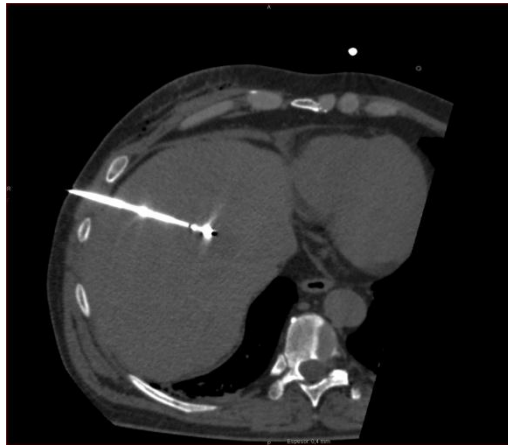


The problem

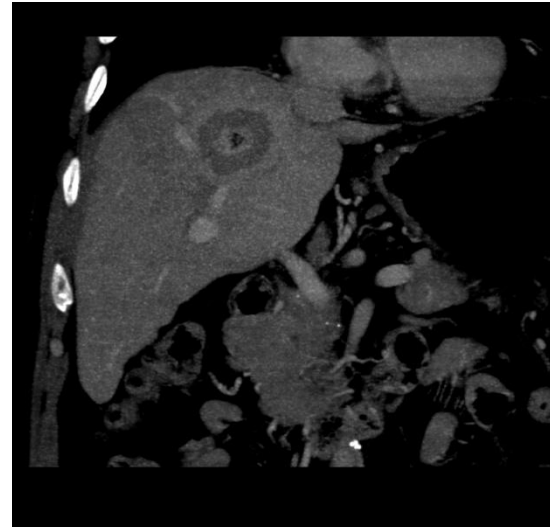
The location of the target sometimes could turn the procedure into a nightmare



The solution



The final result



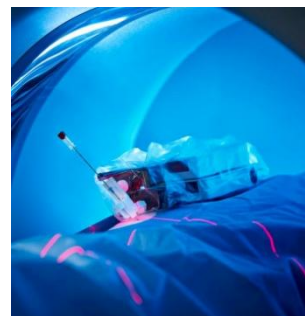
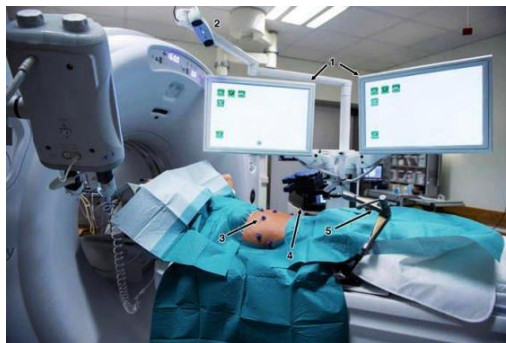
But...



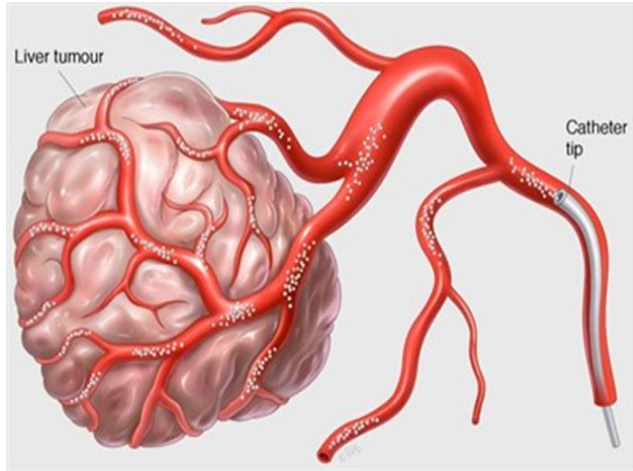
Then...



Stereotactic Guiding System

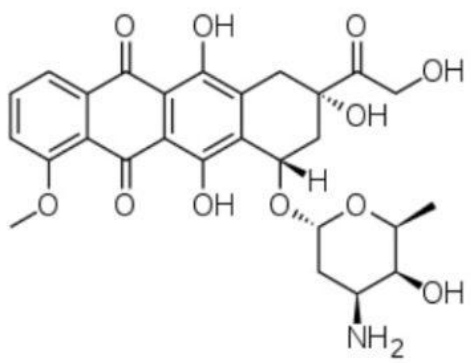


Embolization



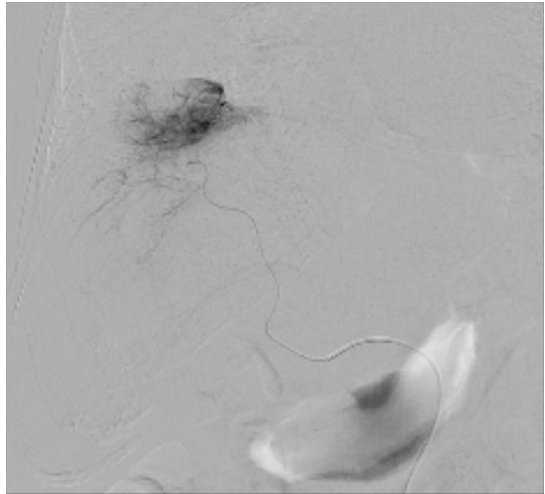
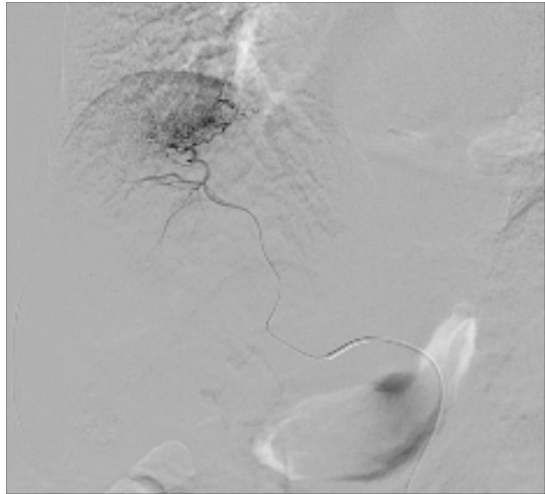
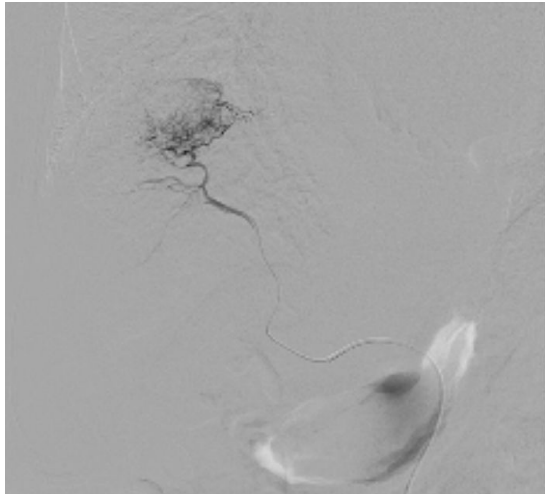
¿What is de basis?

WHAT
DO WE
DO?



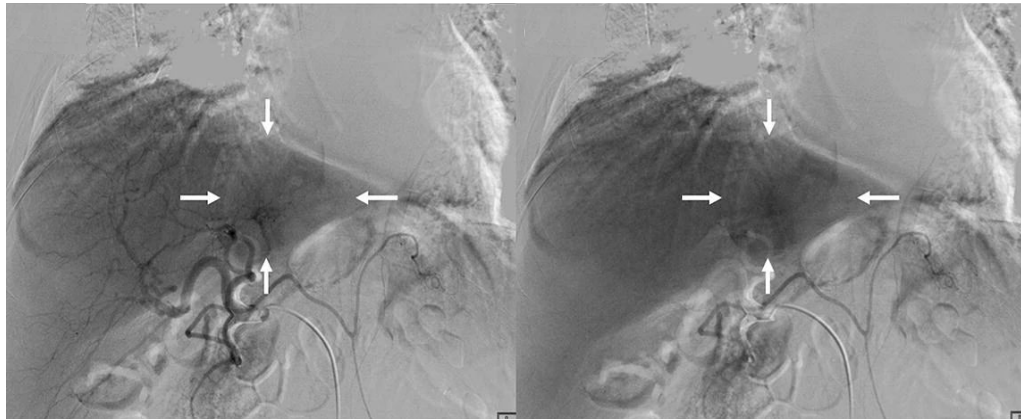
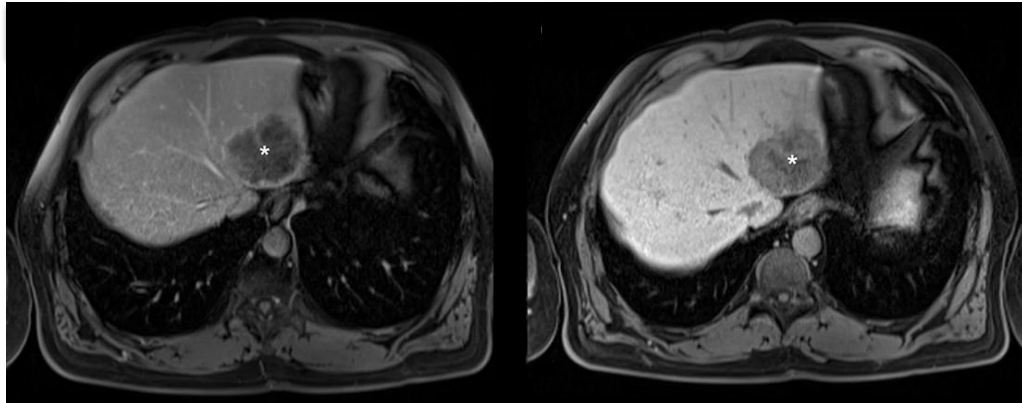


Embolization

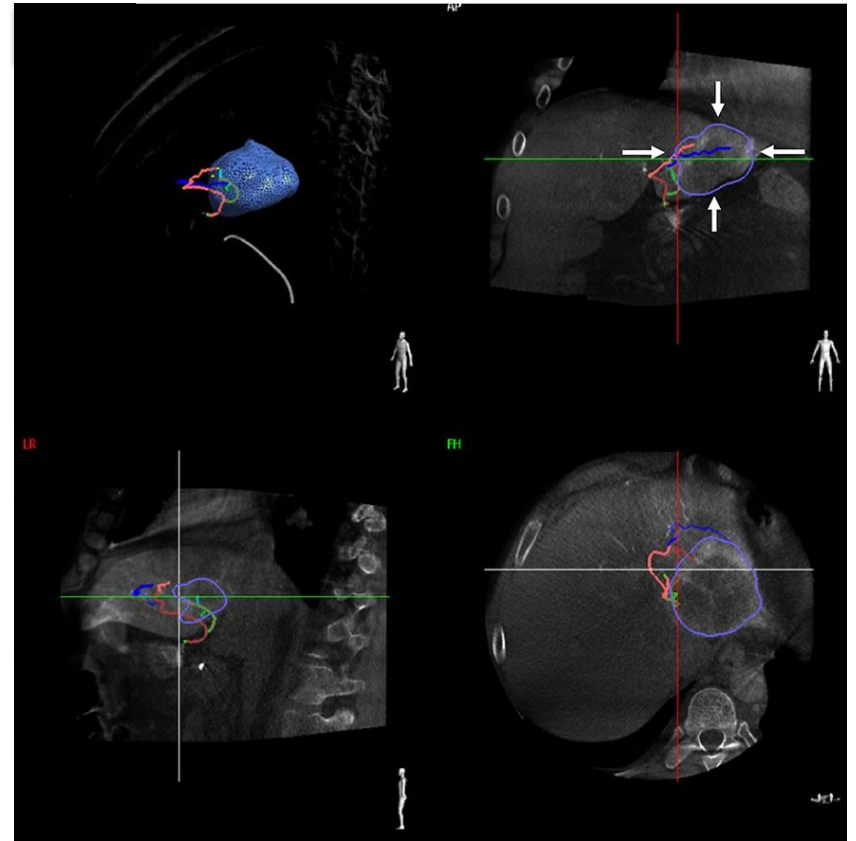
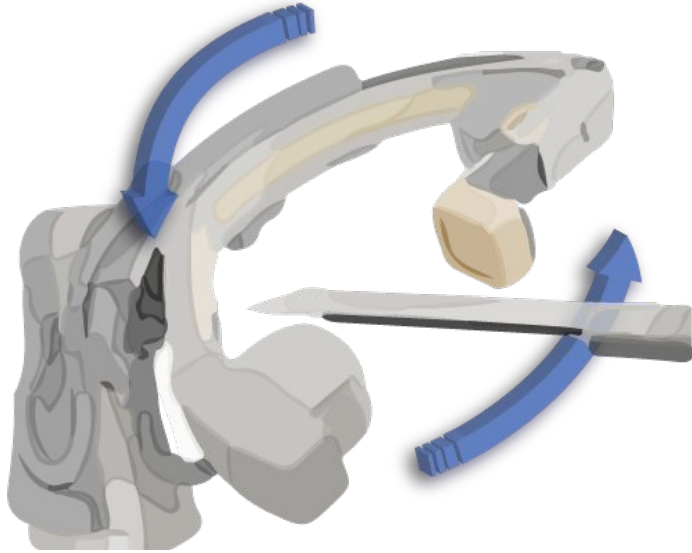




The problem



The solution

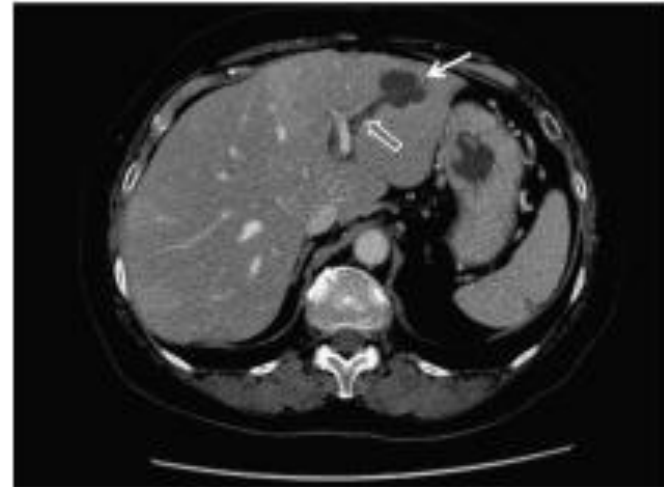
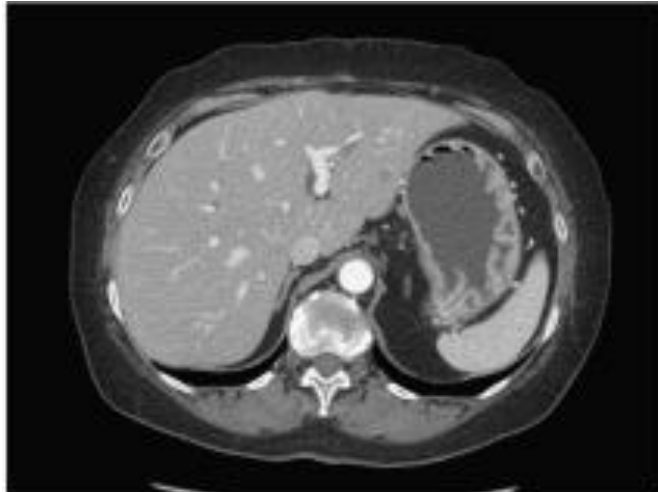


What else?

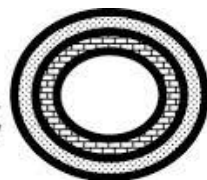
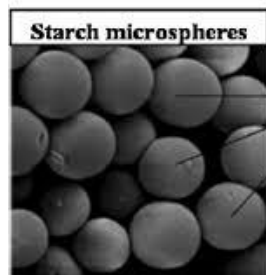


We should avoid DEB-TACE specially in metastases of intestinal origin

Because...



MAYBE

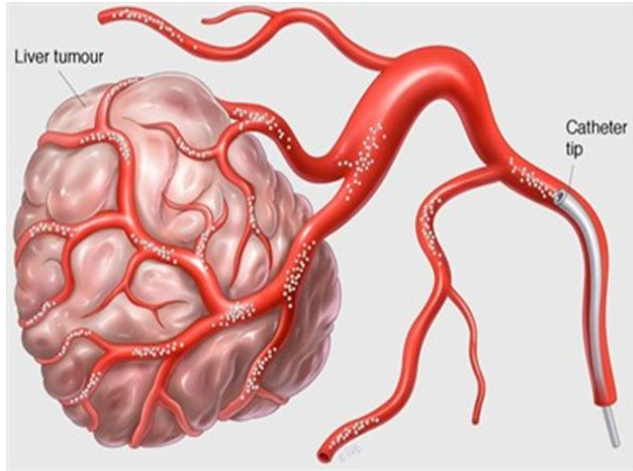


○ - starch
■ - insulin
□ - dodecane



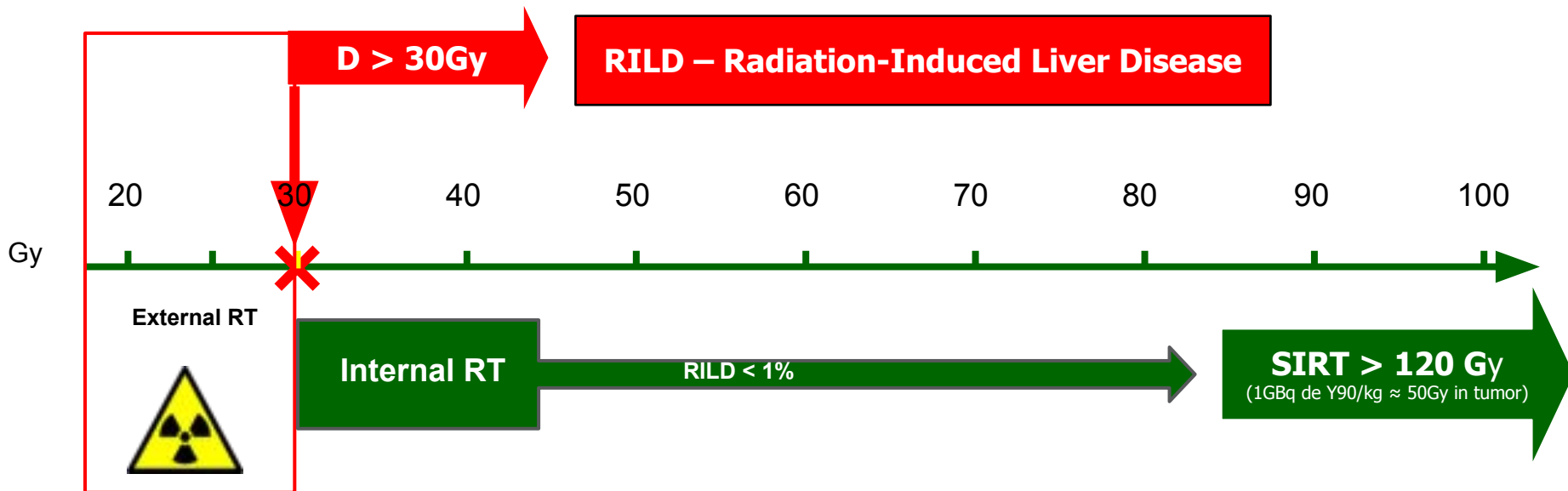
Docetaxel	75 mg/ml
Paclitaxel	175 mg/ml
Carboplatino	300 mg/ml
Cisplatino	100 mg/ml
Doxorubicina	100 mg/ml
Zelix	30 mg/ml
Gemcitabina	1000 mg/ml
Irinotecan	200 mg/ml
Mitomicina	10 mg/ml
Oxaliplatino	60 – 80 mg/ml
Fotemustina	100 mg/ml
Novantron	14 mg/ml

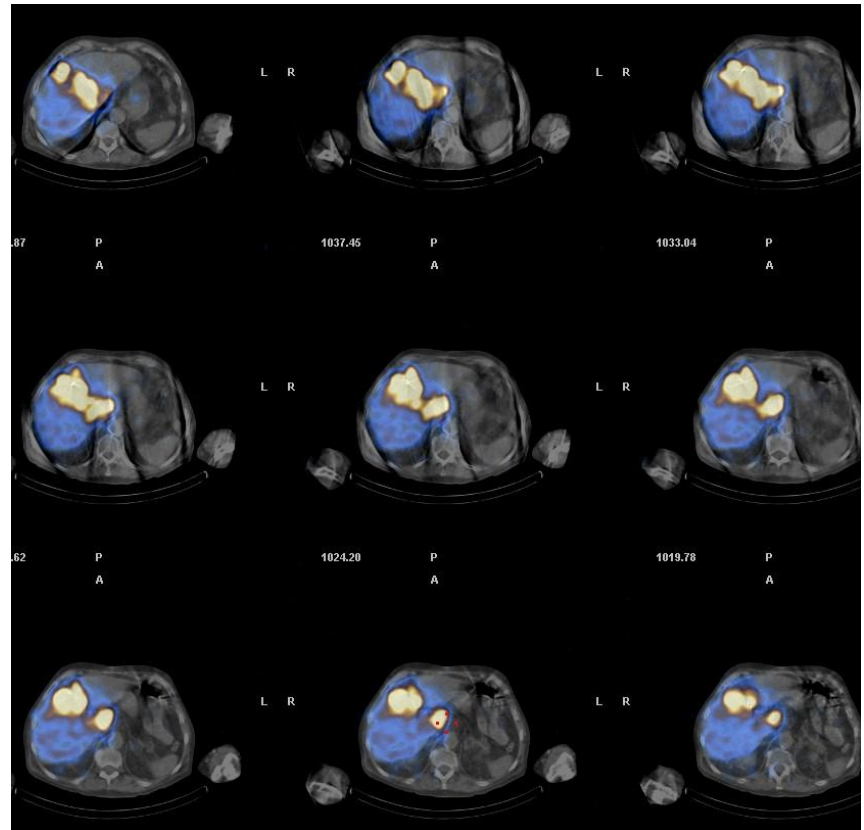
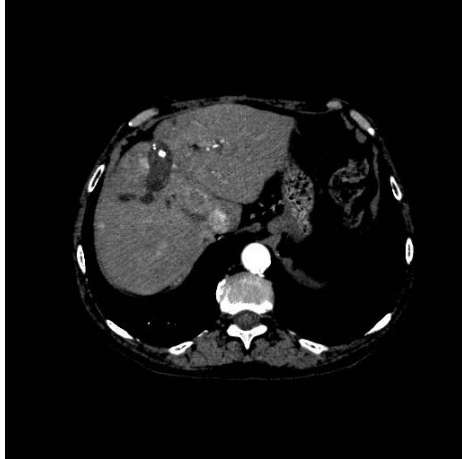
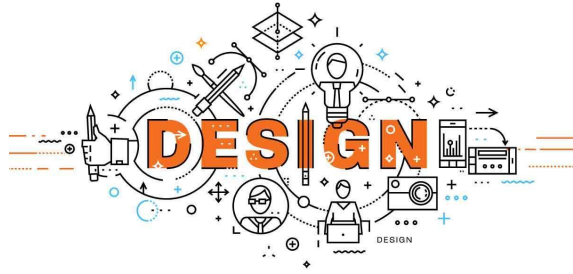
Selective Internal Radiotherapy



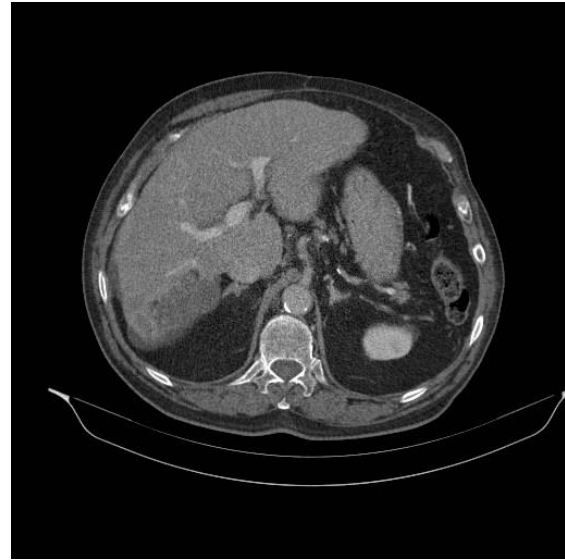
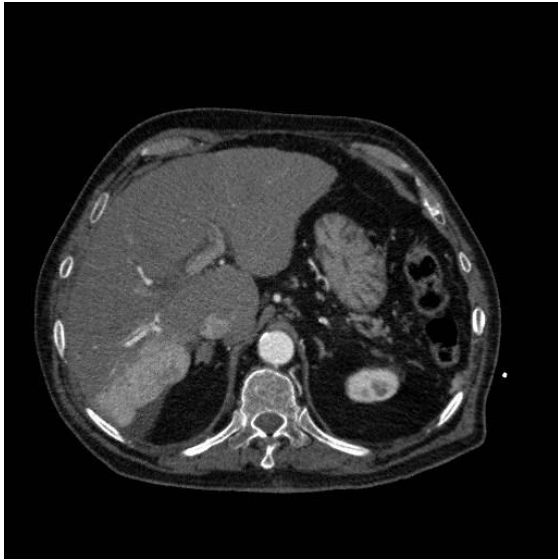
¿What is de basis?

Selective Internal Radiotherapy

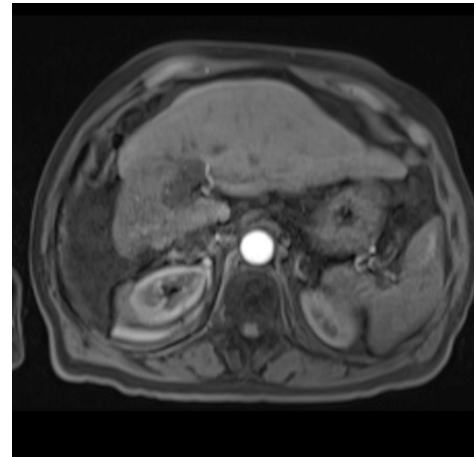
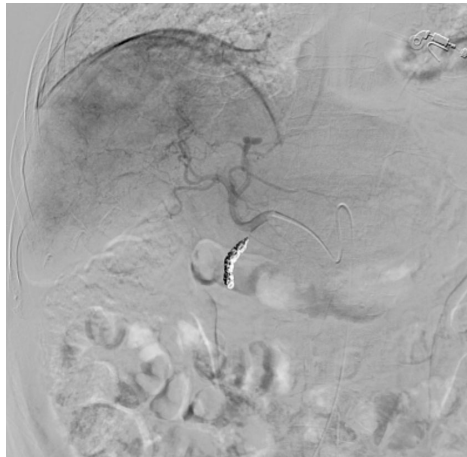
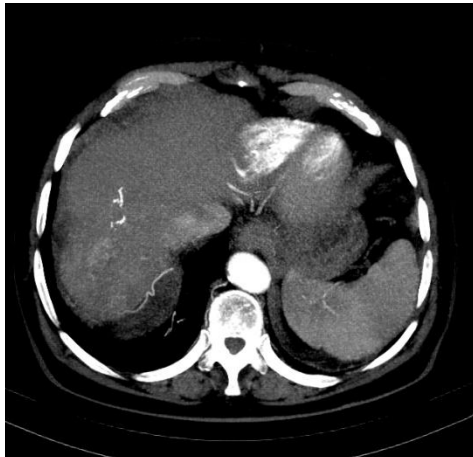




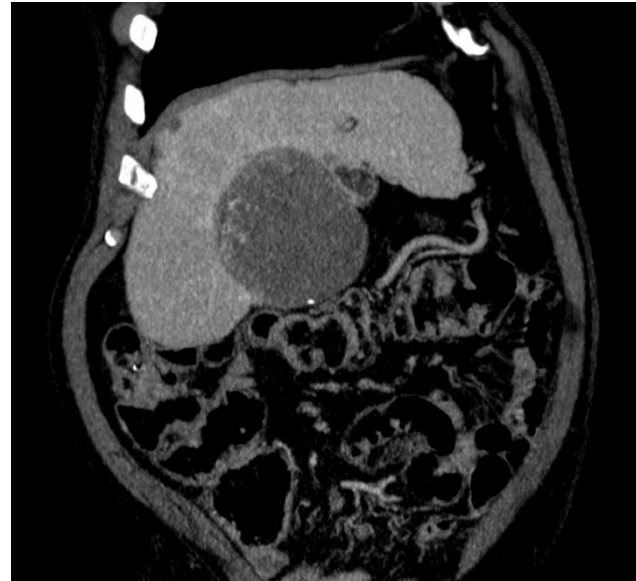
Radiation Segmentectomy



Radiation Lobectomy

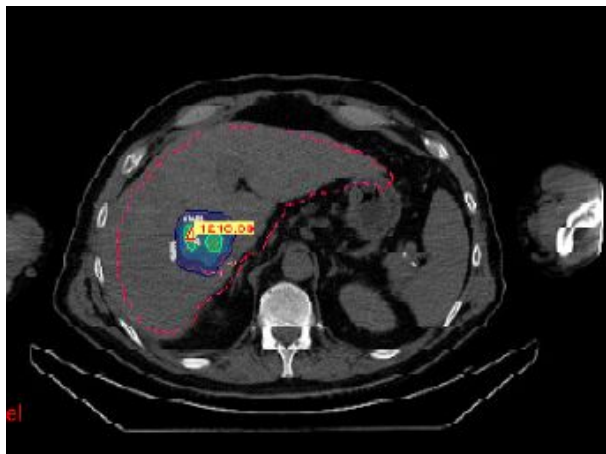


*Bi lobar
treatment*

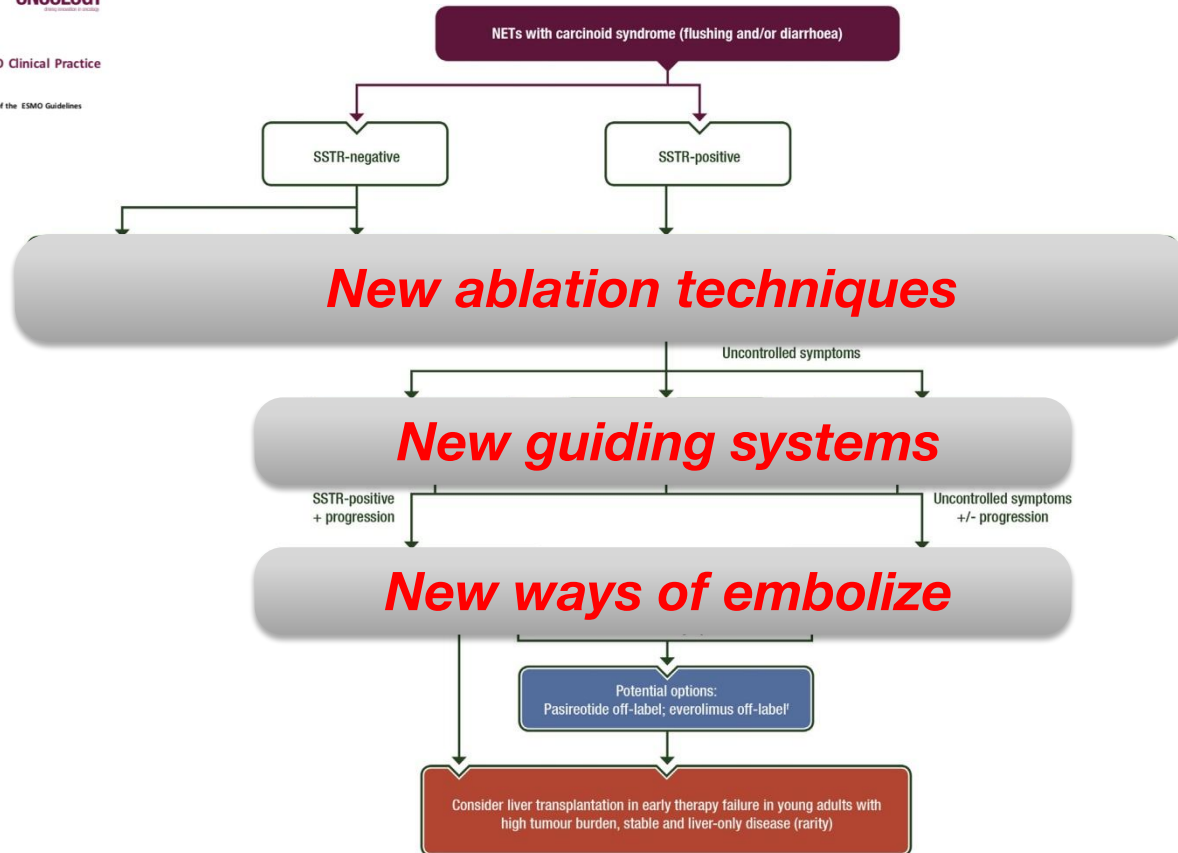




PLANET® Dose



Structure	Higado Sano - R	Tumor - R
Geom. Vol. (cm3)	1327.31	31.21
Number of Points	40630	1139
Dose Min. (Gy)	0.00	0.00
Dose Max. (Gy)	1841.49	1807.26
Dose Med. (Gy)	32.74	561.14
Dose Mean (Gy)	40.73	614.53
Standard deviation	84.20	331.71
Dose Bound Min. (Gy)	0.00	0.00
Dose Bound Max. (Gy)	1841.49	1841.49
Selection vol. (cm3)	1326.60	27.18
Selection vol. (%)	99.95	99.91
Dose at 98 % (Gy)	0.03	40.39
Dose at 95 % (Gy)	1.63	113.53
Dose at 70 % (Gy)	11.61	389.09
Dose at 50 % (Gy)	32.69	560.53
Dose at 40 % (Gy)	40.99	650.04
Dose at 20 % (Gy)	61.03	912.97





**ALWAYS
-ON-
MY MIND**



Remember





**KEEP
CALM
AND**

**CALL INTERVENTIONAL
RADIOLOGY**



Thank
You!

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