

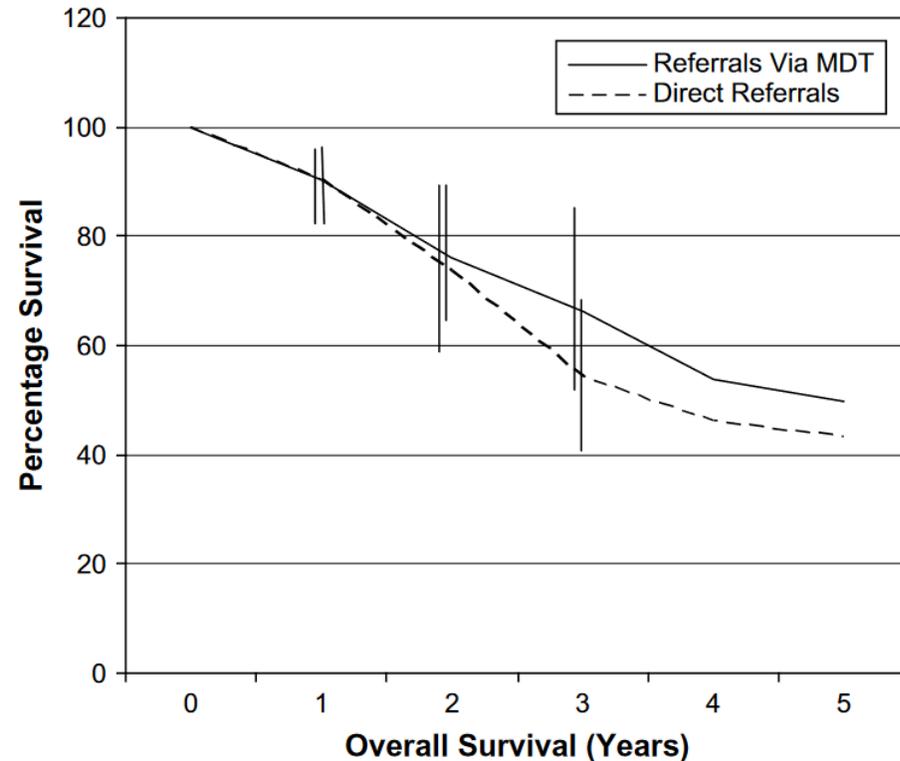


# Sesiones HBP-CHUVI

## SESIÓN 7 :

### Metástasis hepáticas de origen colo-rectal. Abordaje multidisciplinar

# INTRODUCCIÓN: **Abordaje Multidisciplinar**



**P=0.0001**

Figure 1. Overall mortality with 95% confidence intervals.  $P = 0.0001$ .

Table 6

Multivariate predictors of overall survival using Cox regression method

| Referrals via hepatobiliary MDT   | <i>P</i> value |
|---|----------------|
| Post-hepatic resection systemic recurrence                                | 0.004          |
| Septicaemia   | 0.003          |
| Pre-operative chemotherapy  | 0.01           |
| Macroscopic diaphragmatic invasion  | 0.04           |
| Referrals from all other hospitals  |                |
| Severe complications  | 0.001          |
| Days in hospital >10  | 0.01           |
| Pre-operative chemotherapy  | 0.049          |
| Referrals via hepatobiliary MDT versus referrals from all other hospitals | 0.0001         |

# INTRODUCCIÓN: Incidencia

- Indicencia CCR **Galicia: 100/100.000 hab/año**
- 50-60% pacientes con CCR (25% Sincrónicas)
- Resecables 10-20%

- Área Sanitaria de Vigo: 450 casos /año -> 110 Mtx sincrónicas
- 28 resecables al diagnóstico
- 15 resecables tras QT



# INTRODUCCIÓN: Resección

La **resección** es el tratamiento de elección (NCCN. Colon Cancer Versión 3.2022 - January 25,2023)

***La cura es posible***

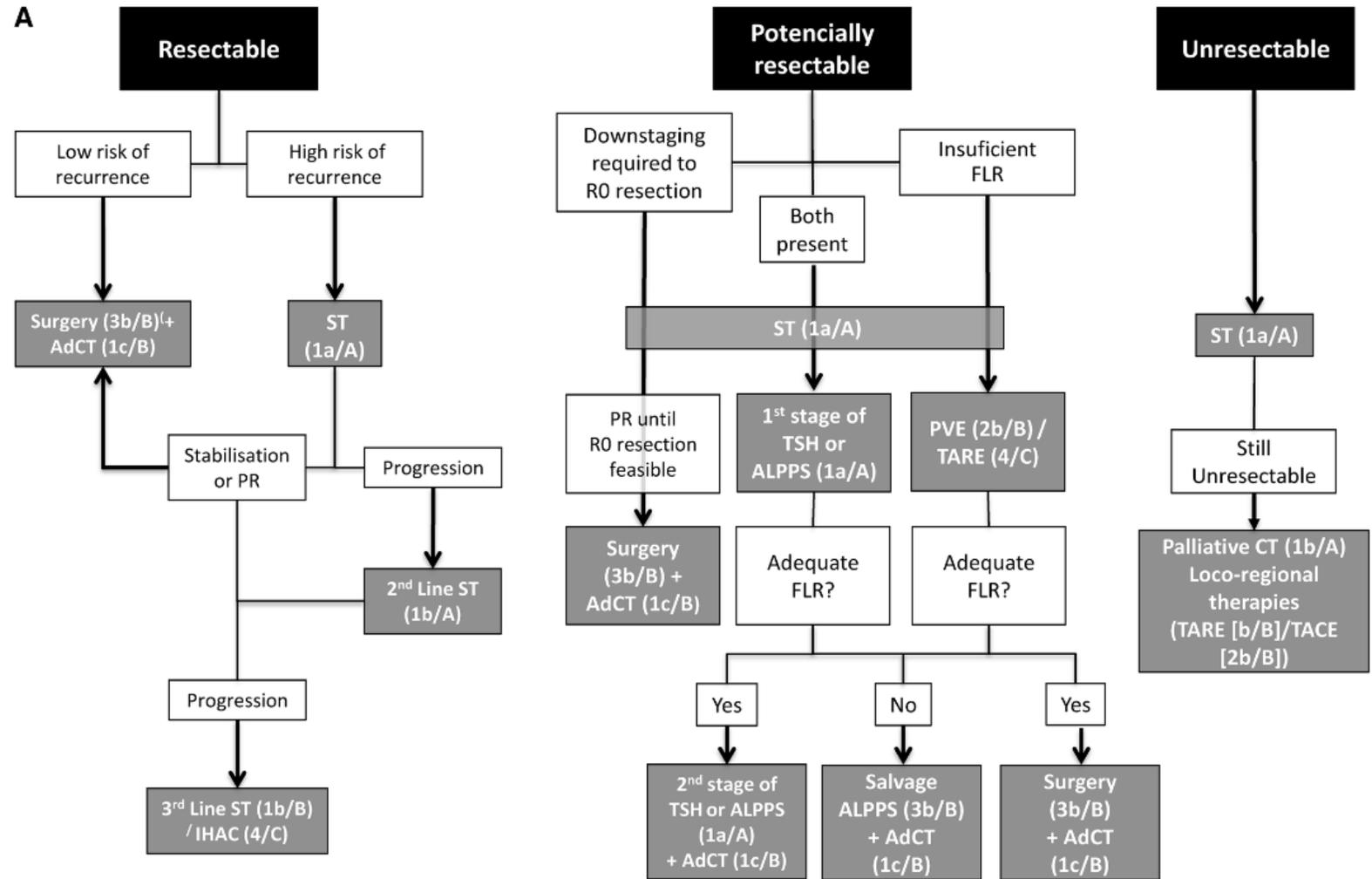
**Supervivencias libres de enfermedad** a los 5 años de hasta el **38% a los 5 años**.

Casos seleccionados de metástasis únicas, **supervivencias a los 5 años del 71 %.**



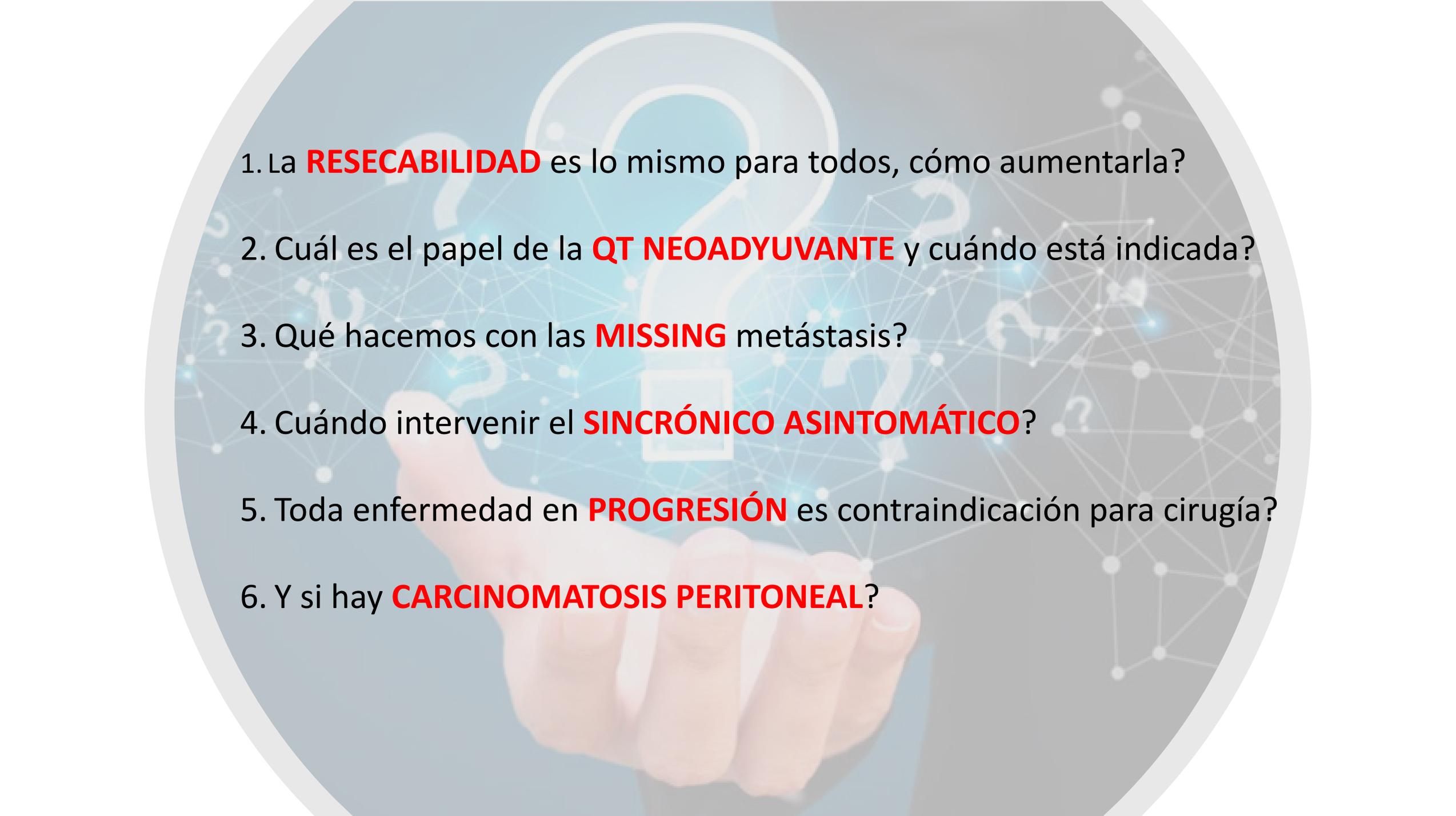
# CONSENSO SEOM, AEC, SEOR, SERVEI Y SEMNIM

(R. Vera et al.. Clinical and Transational ONcology (2020) 22:647-662)



# PREGUNTAS



- 
- A hand is shown holding a glowing question mark. The background is a network of nodes and lines, with several other question marks scattered throughout. The overall theme is one of inquiry and medical decision-making.
1. La **RESECABILIDAD** es lo mismo para todos, cómo aumentarla?
  - 2.Cuál es el papel de la **QT NEOADYUVANTE** y cuándo está indicada?
  3. Qué hacemos con las **MISSING** metástasis?
  4. Cuándo intervenir el **SINCRÓNICO ASINTOMÁTICO**?
  5. Toda enfermedad en **PROGRESIÓN** es contraindicación para cirugía?
  6. Y si hay **CARCINOMATOSIS PERITONEAL**?

# RESECABILIDAD: Es lo mismo para todos?

DEFINICIÓN DE RESECABILIDAD -> Remanente hepático funcional adecuado (20-30% hígado sano / 40% Hepatopatía o post-QT/ total body weight ratio >0,5%) Para obtener R0

*(Jean-Nicolas Vauthey et al. HPB 2010, 12, 289-299)*

RESECABLES( 20-10% )

POTENCIALMENTE RESECABLES:

R0 posible + FLR insuficiente

R0 comprometido (tamaño mtx)

IRRESECABLES

80-90%

# RESECABILIDAD: Es lo mismo para todos?

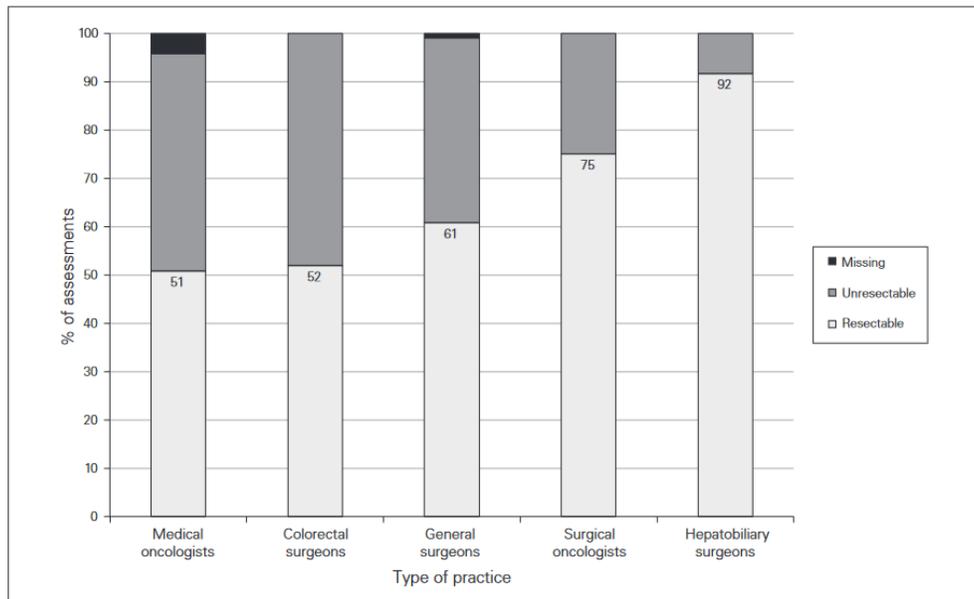


Fig. 1. Proportion of assessments in which colorectal liver metastases were considered resectable according to respondents' type of practice ( $p < 0.001$ ).

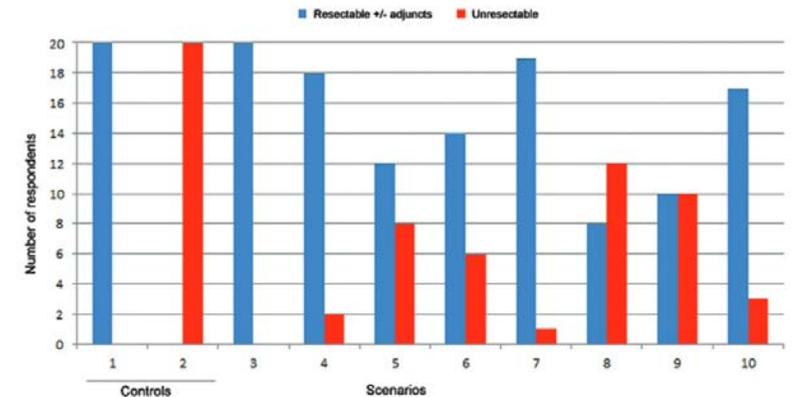


Figure 2 Agreement on resectability per scenario

# RESECABILIDAD: Cómo podemos aumentarla?

- QT CONVERSIÓN:

**Tasas de resección R<sub>0</sub>** hasta el **57%**

*(Karen Bolhuis et al. European Journal of Cancer 141 (2020) 225-238)*



# RESECABILIDAD: Cómo podemos aumentarla?

- QT CONVERSIÓN:

**Tasas de resección R<sub>0</sub>** hasta el **57%**

*(Karen Bolhuis et al. European Journal of Cancer 141 (2020) 225-238)*

**Heterogeneidad  
Definición de resecabilidad!!!!!!**

# Cómo LA **CIRUGÍA** HA COLABORADO CON EL AUMENTO DE **RESECABILIDAD**

A

| PATIENT   | 1st HEPATECTOMY | 2nd HEPATECTOMY | REMNANT LIVER AFTER 2-STAGE HEPATECTOMY |
|-----------|-----------------|-----------------|---|
| Patient 1 | <br>4*+3*       | <br>5+6+7+8     | <br>4 3                                 |
| Patient 2 | <br>5+6+7+8     | <br>2+3         | <br>4 3                                 |
| Patient 3 | <br>2+3+8*      | <br>5*+8*       | <br>4 3                                 |
| Patient 4 | <br>5+6+7+8     | <br>3*          | <br>4 3                                 |
| Patient 5 | <br>3*          | <br>5+6+7+8     | <br>4 3                                 |
| Patient 6 | <br>5+6+7+8+3*  | <br>3           | <br>4 3                                 |

**HEPATECTOMÍA EN DOS TIEMPOS**

Bilobares >3 cm  
> 3 metástasis en FLR insuficiente

|   |  |  |
|---|--|--|
| 1 |  | Resección Mtx futuro remanente<br>Embolización portal -> Hipertrofia |
| 2 |  | Resección hígado embolizado  |

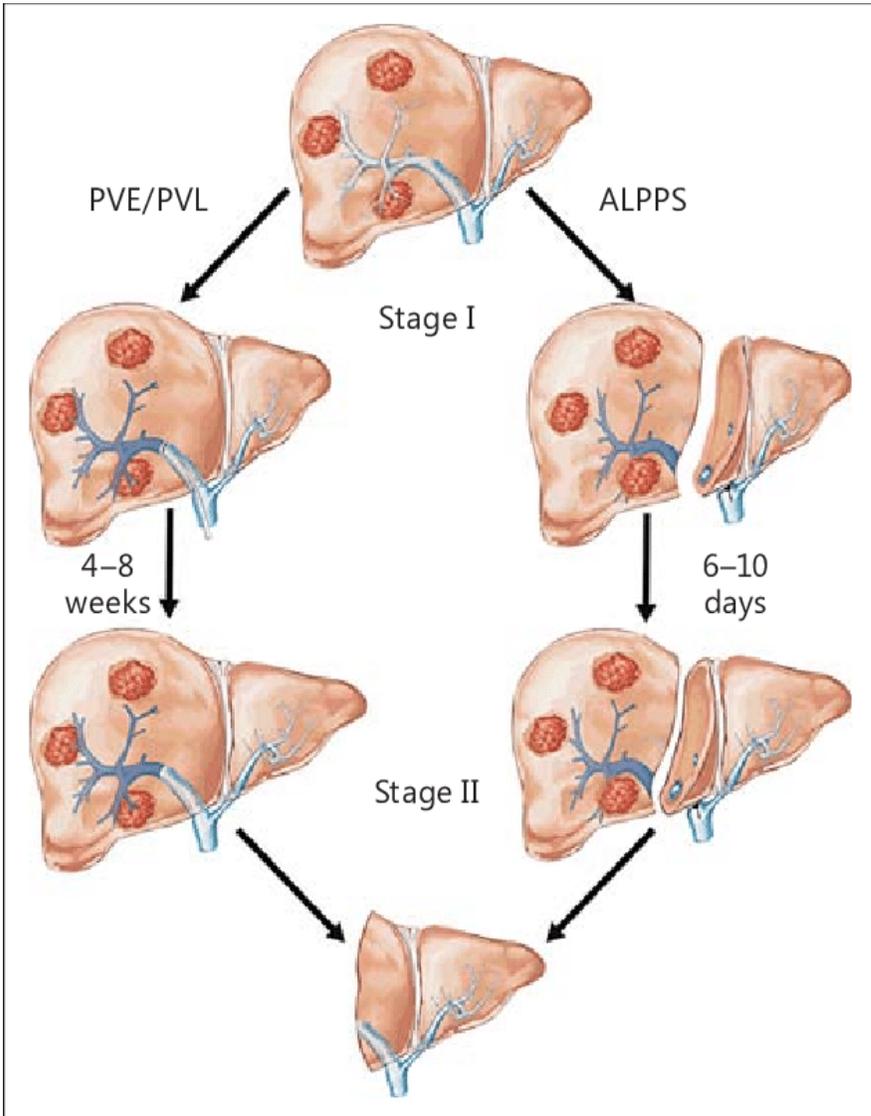
**“DROP OUT”** **35%**

- Progresión
- FLR insuficiente

R. Adam et al Ann Surg 2000 Dc, 232(6):777-85

Guido Torzilli et al. Liver Cancer 2017; 6:80-89

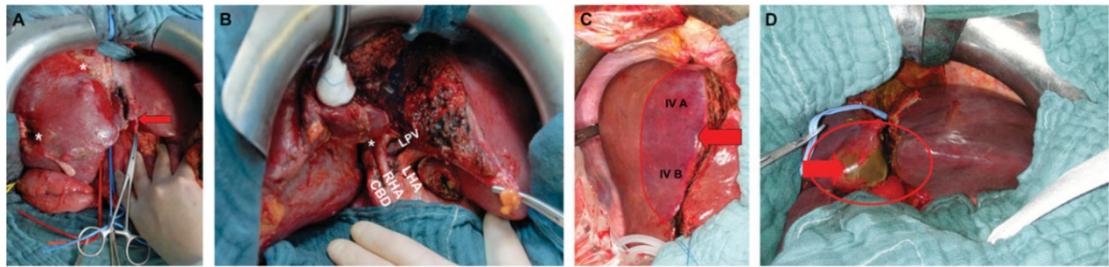
# Cómo LA **CIRUGÍA** HA COLABORADO CON EL AUMENTO DE RESECABILIDAD



**ALPPS**

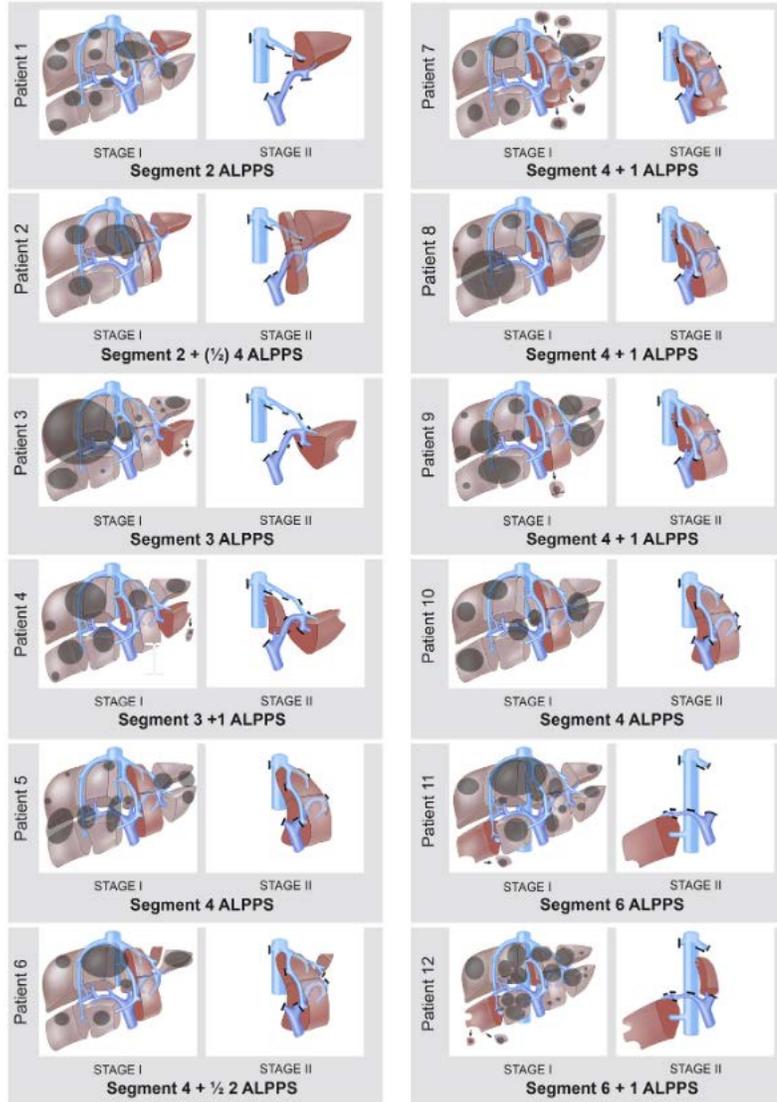
Hipertrofias > 100% en 9 días

|   |  |
|---|--|
| <p><b>1</b></p>  | <p>Resección Mtx futuro remanente<br/>Ligadura portal + Transección hepática</p> |
| <p><b>2</b></p>  | <p>Se completa resección</p>   |



Schnitzbauer et al Ann Surg 2012. 255:3

# Cómo LA CIRUGÍA HA COLABORADO CON EL AUMENTO DE RESECABILIDAD



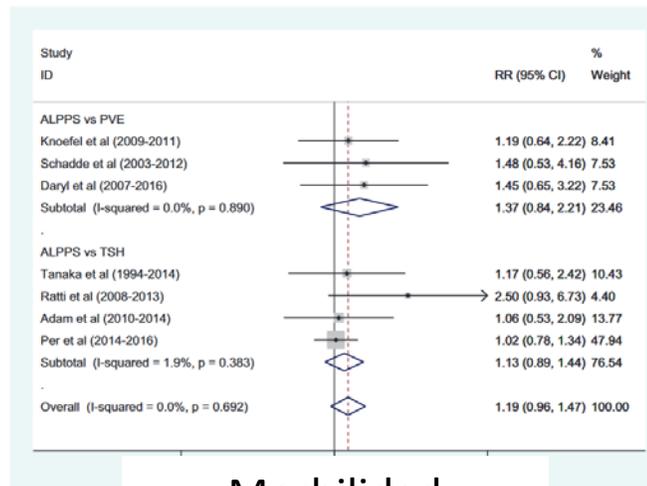
**ALPPS**

**Metaanálisis**

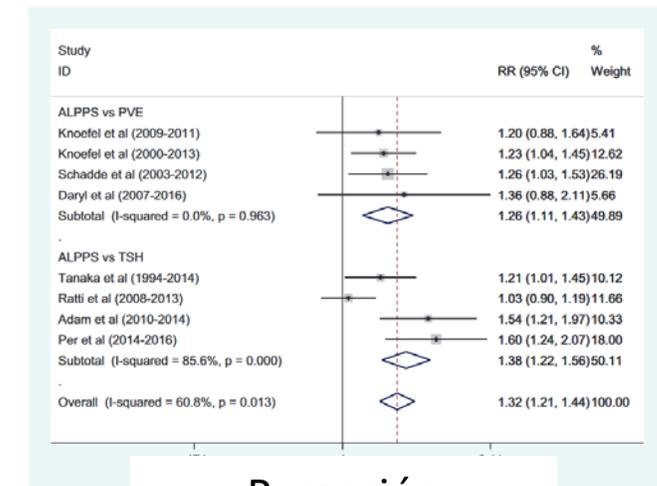
**Morbilidad 71,4%**  
**Mortalidad 15%**

**> Tasa de resección**  
**> Hipertrofia**

*Yanmo Liu et al. Medicine (2019) 98:15*



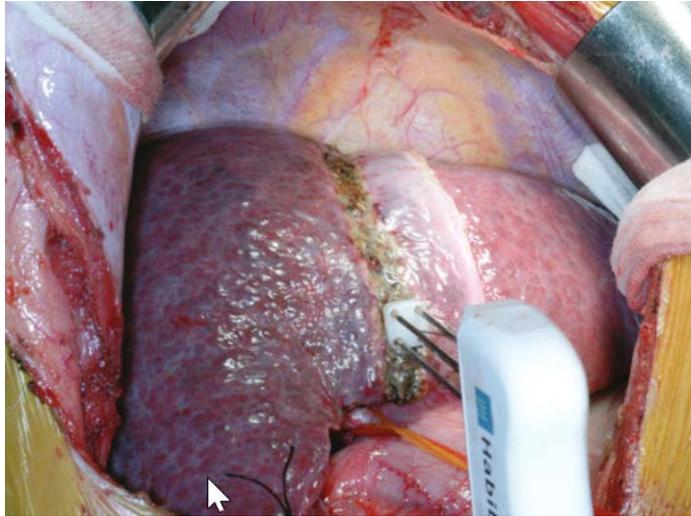
Morbilidad



Resección

*(Erik Schadde et al. 2015; 157:676-89)*

# Cómo LA **CIRUGÍA** HA COLABORADO CON EL AUMENTO DE **RESECABILIDAD**

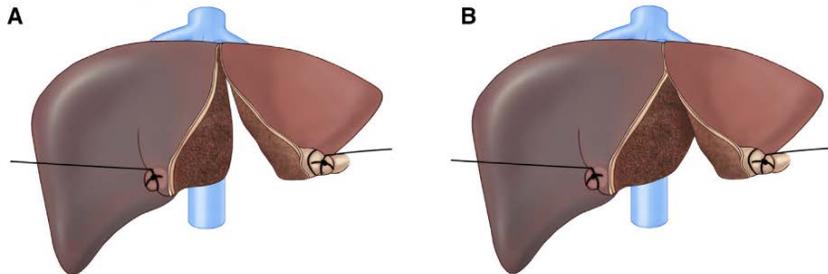


## ALPPS

- Partición parcial
- ALPPS-Torniquete
- RALPPS: Partición parcial con RF
- ALPPS Híbrido (Partición hepática sin manipular hilio)
- ALPSS salvador (Porta embolizada + partición)
- Mejor selección Pacientes

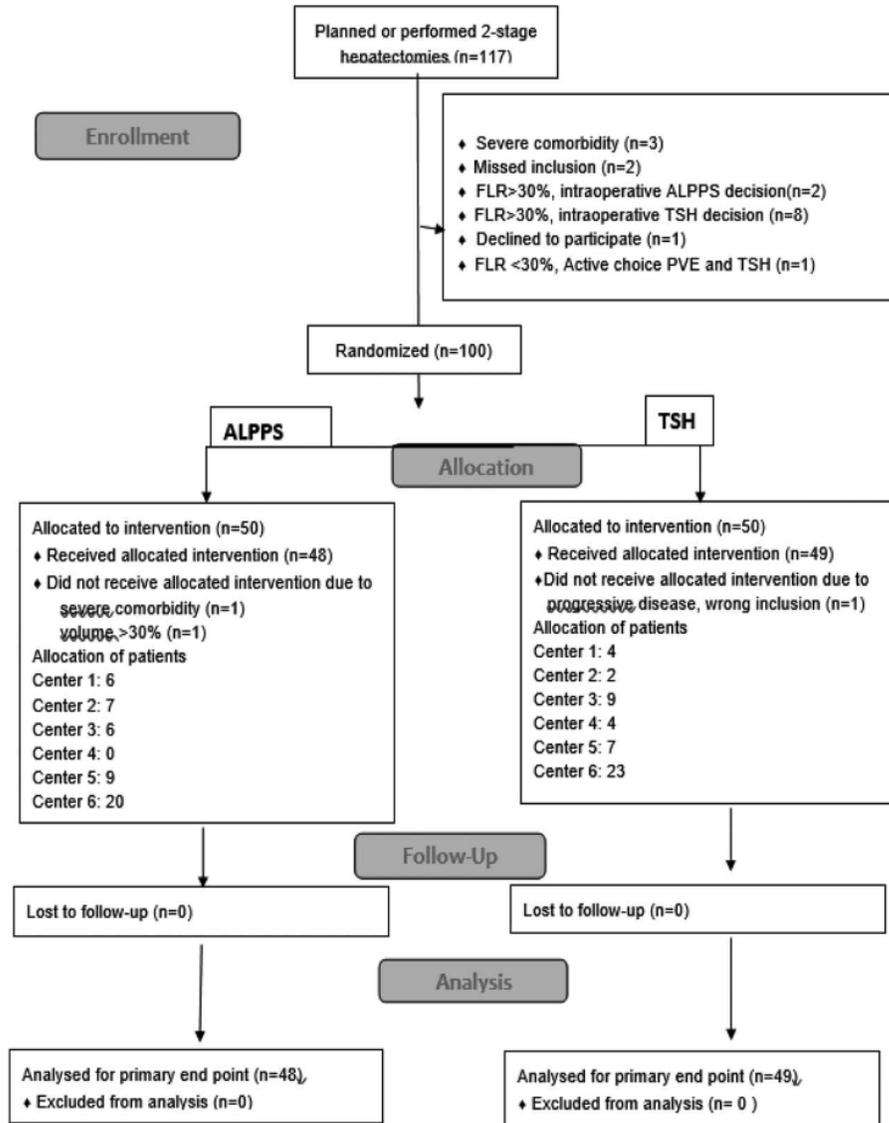


(Qiang Wang et al. Int J Hypertermia,2017. 33:7)



(Xukin Wu et al. BMC Gastroenterology (2019) 19:170)

# Cómo LA **CIRUGÍA** HA COLABORADO CON EL AUMENTO DE **RESECABILIDAD**



## ALPPS - RCT

| RESULTADOS       | ALPPS | H. EN DOS TIEMPOS | P       |
|------------------|-------|-------------------|---------|
| Finalización     | 92%   | 57%               | <0,0001 |
| Morbilidad (≥ 3) | 43%   | 43%               | 0,99    |
| Mortalidad       | 8,3%  | 6,1%              | 0,68    |
| RO               | 77%   | 57%               | 0,11    |

Per Sandström et al. (LIGRO Trial) Ann Surg 2018. 267:5



**R0**

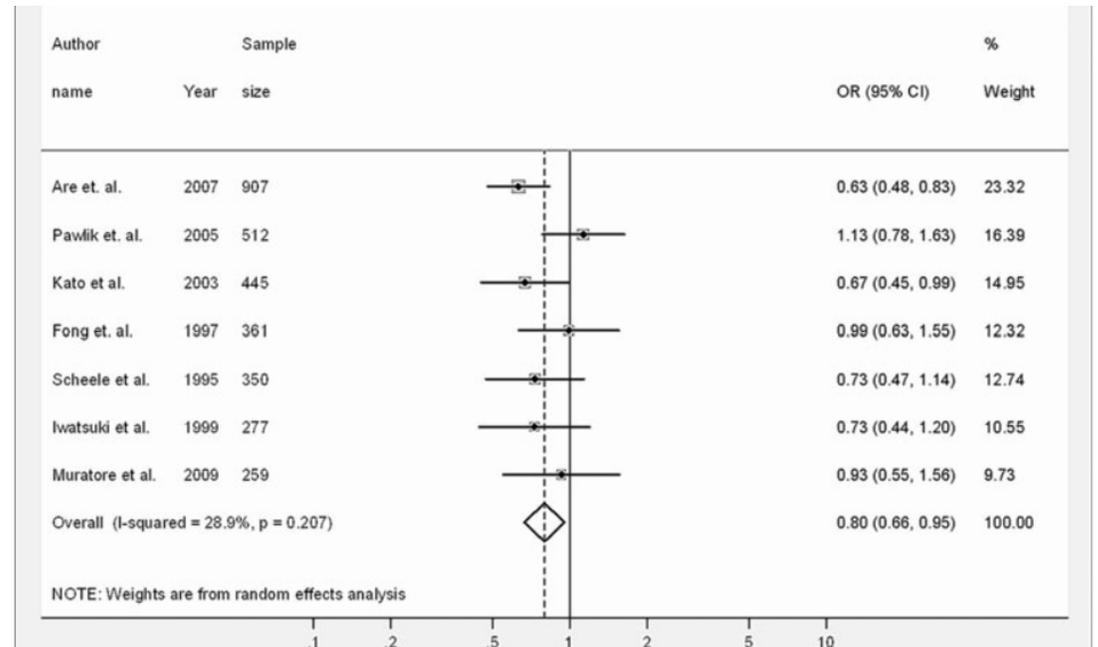
# METAANÁLISIS

## Supervivencia 5 a

46% vs 38% (p=0,009)

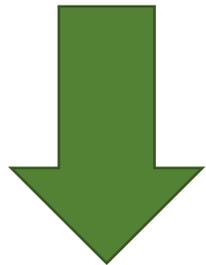
**RO** (>/< 1 cm)

(Mashaal Dhir et al 254 (2). Aug 2011)



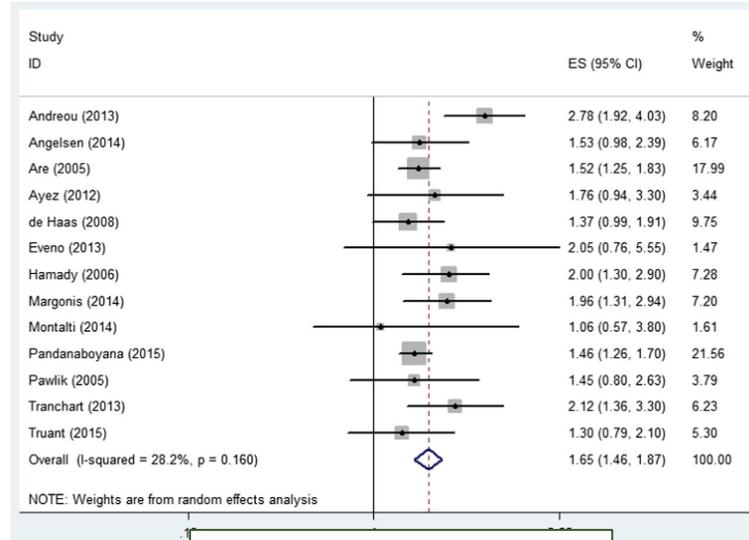
# Metaanálisis

R0 vs R1 (<1 mm)

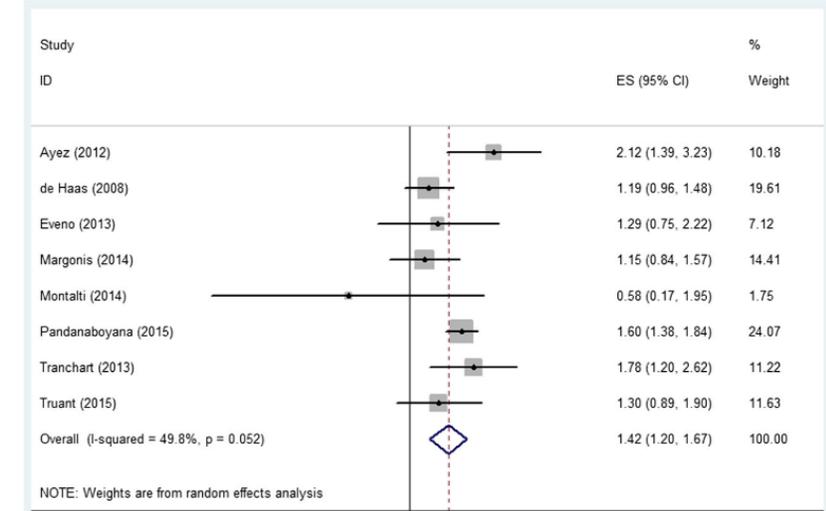


**Supervivencia**

(Wei Liu et al. *Ing J Colorectal Dis* (2015) 30:1365-73)



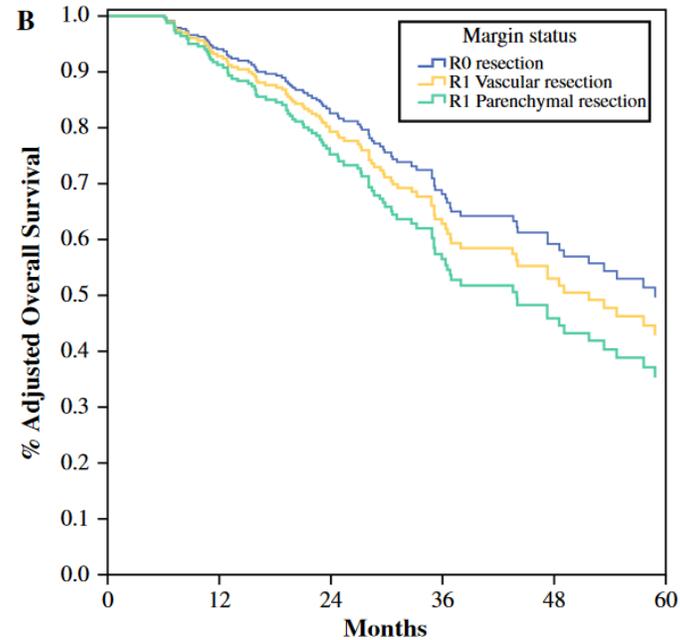
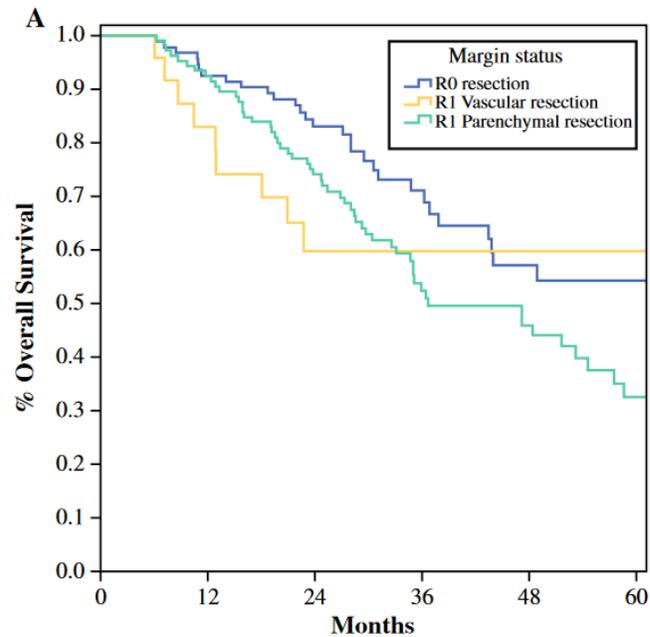
Supervivencia 5 a



Supervivencia libre de enfermedad



# Son todos los R1 iguales?

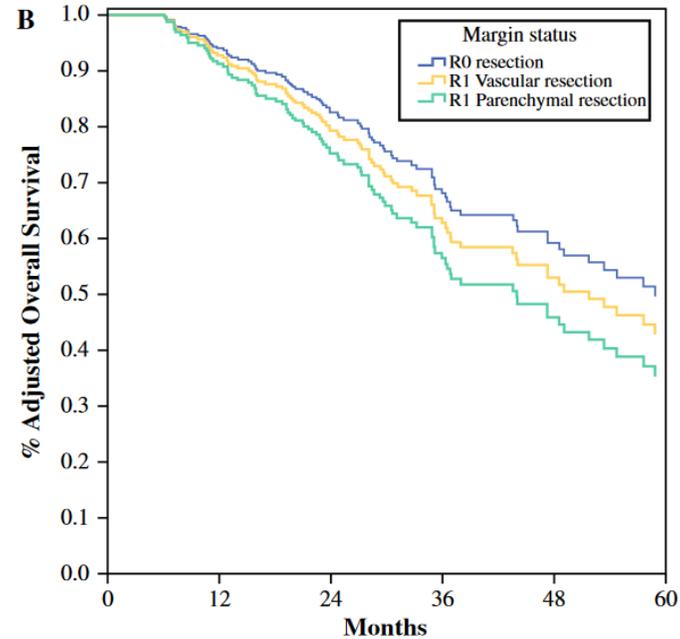
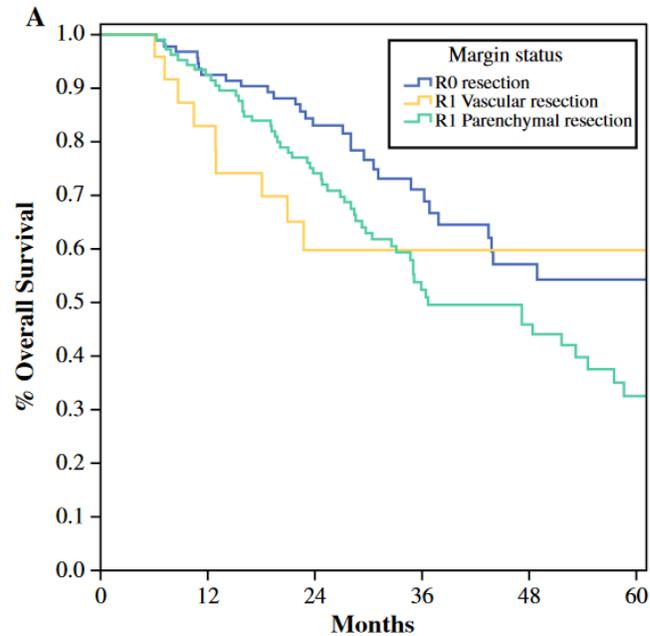


| Patients at risk | Total | 1 year | 2 years | 3 years | 4 years | 5 years |
|------------------|-------|--------|---------|---------|---------|---------|
| R0               | 95    | 86     | 60      | 33      | 20      | 18      |
| R1Vasc           | 24    | 19     | 10      | 8       | 6       | 3       |
| R1Par            | 107   | 97     | 74      | 37      | 25      | 12      |

**FIG. 2** OS curves after LR according to the margin status. **a** OS curves by Kaplan–Meier analysis (univariate analysis R0 vs. R1Par,  $p = 0.023$ , and R0 vs. R1Vasc,  $p = \text{n.s.}$ ). **b** OS curves for all values

of R status (R0, R1Par, and R1Vasc) plotted at mean of the covariates in the Cox model (multivariate analysis R0 vs. R1Par,  $p = 0.034$ , and R0 vs. R1Vasc,  $p = \text{n.s.}$ )

# Son todos los R1 iguales?



**R1 VASCULAR = R0**

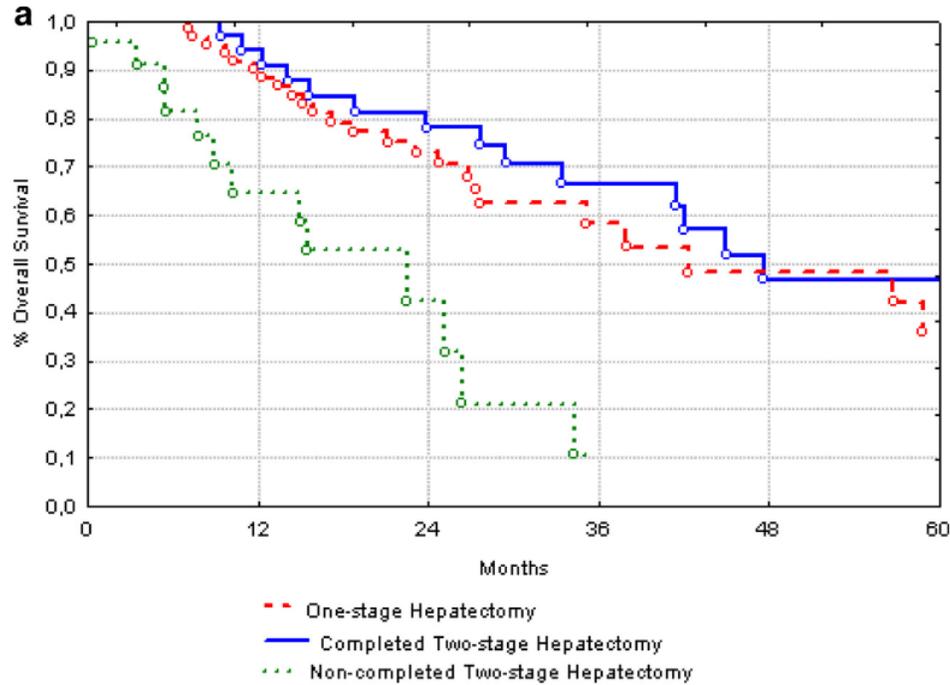
**R1 PARENQUIMATOSO ≠ R0**

| Patients at risk | Total | 1 year | 2 years | 3 years | 4 years | 5 years |
|------------------|-------|--------|---------|---------|---------|---------|
| R0               | 95    | 86     | 60      | 33      | 20      | 18      |
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# Cómo LA **CIRUGÍA** HA COLABORADO CON EL AUMENTO DE **RESECABILIDAD**



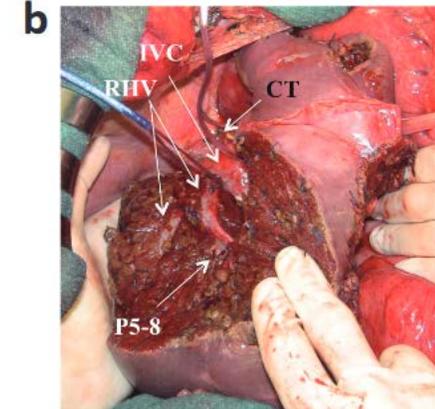
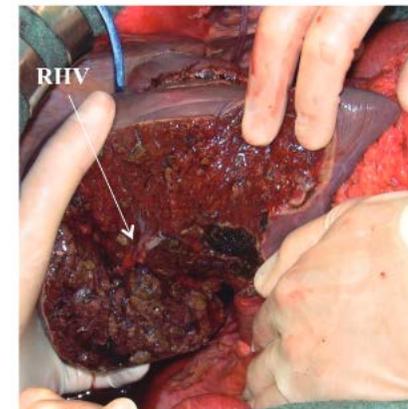
| Patients at risk  | Total | 1 year | 2 years | 3 years | 4 years | 5 years |
|-------------------|-------|--------|---------|---------|---------|---------|
| OSH               | 63    | 54     | 33      | 13      | 9       | 5       |
| Completed TSH     | 39    | 31     | 24      | 15      | 9       | 6       |
| Non-completed TSH | 24    | 11     | 4       | -       | -       | -       |

(L. Viganò et al. *EJSO* 42 (2019) 1385-1393)

Cirugía ahorradora de parénquima

| RESULTADOS              | CAP | C. EN 2 TIEMPOS | P    |
|-------------------------|-----|-----------------|------|
| Morbilidad ( $\geq 3$ ) | 14% | 36%             | 0,04 |
| Tasa R0                 | 17% | 11%             |      |

(Guido Torzilli et al. 2017; 6:80-89)



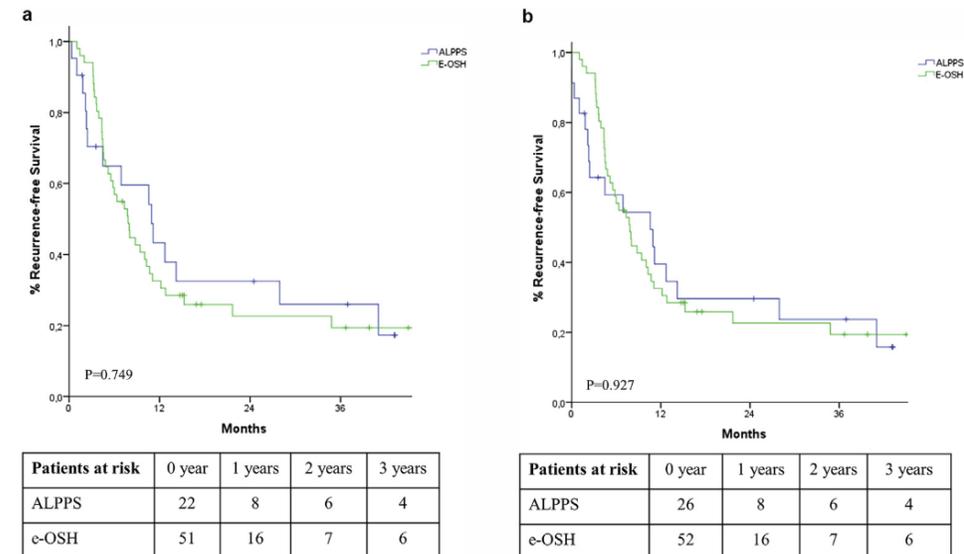
# Cómo LA CIRUGÍA HA COLABORADO CON EL AUMENTO DE RESECABILIDAD

**Table 2** Postoperative details between matched-in groups

|                                   | ALPPS (26 pts) | e-OSH (52 pts) | p value |
|-----------------------------------|----------------|----------------|---------|
|                                   | n (%)          | n (%)          |         |
| Patient characteristics           |                |                |         |
| Mortality                         | 2 (7.7)        | 1 (1.9)        | 0.256   |
| Overall morbidity                 | 18 (69.2)      | 24 (46.2)      | 0.054   |
| Severe morbidity (grade 3–4)      | 7 (26.9)       | 4 (7.7)        | 0.036   |
| PHLF                              | 10 (38.5)      | 9 (17.3)       | 0.040   |
| ISGLS Grade B/C                   | 2 (7.7)        | 1 (1.9)        | 0.256   |
| Bilirubin peak >7 mg/dL           | 5 (19.2)       | 3 (5.8)        | 0.109   |
| “50-50” criteria                  | 3 (11.5)       | 1 (1.9)        | 0.105   |
| Blood transfusions                | 13 (50.0)      | 12 (23.1)      | 0.016   |
| Hospital stay, median (IQR), days | 21 (15–30)     | 8 (8–14)       | <0.001  |
| Resection margins                 |                |                |         |
| R0 resection                      | 21 (80.8)      | 11 (21.2)      | <0.001  |
| R1                                | 3 (11.5)       | 39 (75.0)      | <0.001  |
| R2 (drop-out)                     | 2 (7.7)        | –              | 0.108   |

ALPPS = Associating Liver Partition and Portal vein Ligation;  
 PSH = parenchyma-sparing hepatectomy; PHLF = post-hepatectomy liver failure; ISGLS = international study group of liver surgery.

## Cirugía ahorradora de parénquima



**Figure 3** Disease-free survival for the whole series (a) and by intention-to-treat (b)

(Guido Torzilli et al. HPB 2019, 21, 1411-1418)

# Cómo LA **CIRUGÍA** HA COLABORADO CON EL AUMENTO DE **RESECABILIDAD**

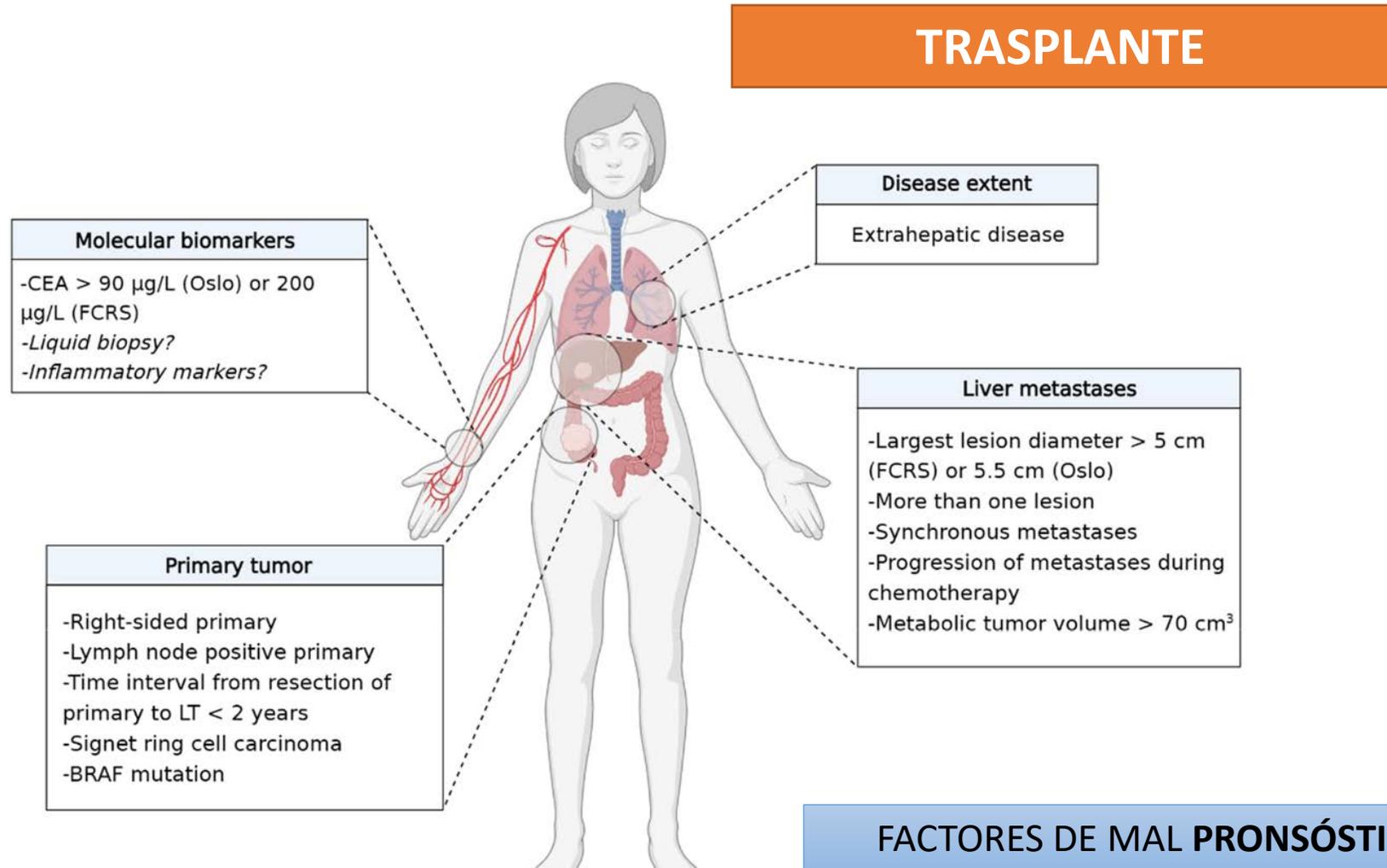
|  | ✓ Available evidence  | ? Open Issues  |
|--|---|--|
|  | <b>Post-transplant survival</b><br>Disease free-survival after LT seems to be comparable to progression-free survival after chemotherapy, however LT seems to offer better long-term survival to patients with unresectable CRLM than any available chemotherapeutic regimen.   | <ul style="list-style-type: none"> <li>No randomized controlled trial on chemotherapy versus transplantation</li> <li>No data on quality of life after LT versus "chronic" chemotherapy</li> </ul>   |
|  | <b>Prognostic factors</b><br>Some selection criteria for LT are now considered well-established. LT should be avoided in patients with <ul style="list-style-type: none"> <li>Progressive disease</li> <li>Extrahepatic dissemination</li> <li>BRAF mutation</li> </ul>   | Many potential prognostic factors and selection criteria have been identified through retrospective analyses, however those results may change with the emergence of prospective evidence and larger datasets.   |
|  | <b>Transplant vs resection</b><br>Retrospective studies have identified LT as superior to LR in case of high tumor burdens requiring portal vein embolization.  | Some patients with tumors that are technically resectable may benefit from LT. No comparison has been made between parenchymal-sparing resection and LT. The definition of resectability is not univocal.  |
|  | <b>Endpoints</b><br>Recurrence-free survival may not be an appropriate endpoint. Recurrence is common after LT, however overall survival may be excellent also after recurrence.  | Establishing appropriate trial endpoints is going to be crucial if CRLM become an established indication for LT. Overall survival and transplant benefit may be candidate endpoints.   |
|  | <b>Ethical considerations</b><br>The current number of patients eligible to LT for CRLM is low and unlikely to have a substantial impact on a waiting list. Patients who have been on systemic chemotherapy for 1-2 years are likely to be stable enough to wait 3-4 months for LT without progressing and dropping out of the waitlist. For now, prioritization should be tailored on the local situation. | <ul style="list-style-type: none"> <li>The number of eligible patients would dramatically increase if resectable patients were included</li> <li>Whether LDLT is an acceptable option for this indication remains to be established</li> <li>The RAPID procedure may be an option, however the risk of tumor diffusion between the two steps needs to be investigated</li> </ul> |
|  | <b>Medical management</b><br>Patients should remain on maintenance chemotherapy while on the waiting list. Most trials involved an immunosuppressive switch to mTOR.  | There is limited evidence of the effect of different immunosuppressive regimens on post-LT outcomes.   |
|  | <b>Treatment of recurrent disease</b><br>Post-recurrence survival can be good in case of curative-intent treatment. Post-LT recurrences should be managed aggressively.   | Treatment of post-LT recurrence should follow oncological principles.  |

## TRASPLANTE

## Supervivencias

**85%** a los 5 años

# Cómo LA **CIRUGÍA** HA COLABORADO CON EL AUMENTO DE **RESECABILIDAD**



(Marianna Maspero et al. Cancers 2023. 15, 345)

# Cómo LA **CIRUGÍA** HA COLABORADO CON EL AUMENTO DE **RESECABILIDAD**

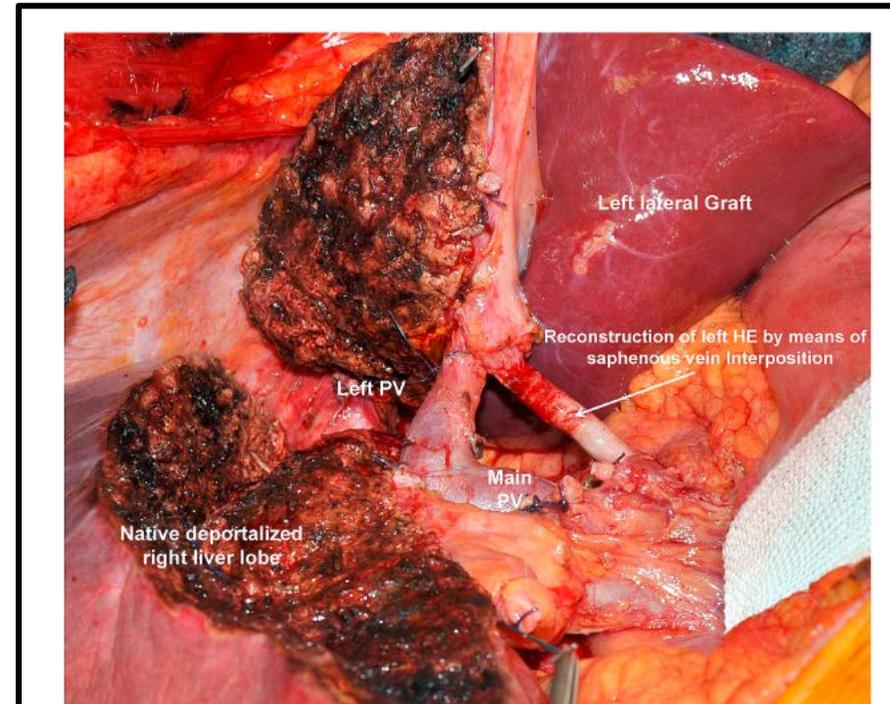
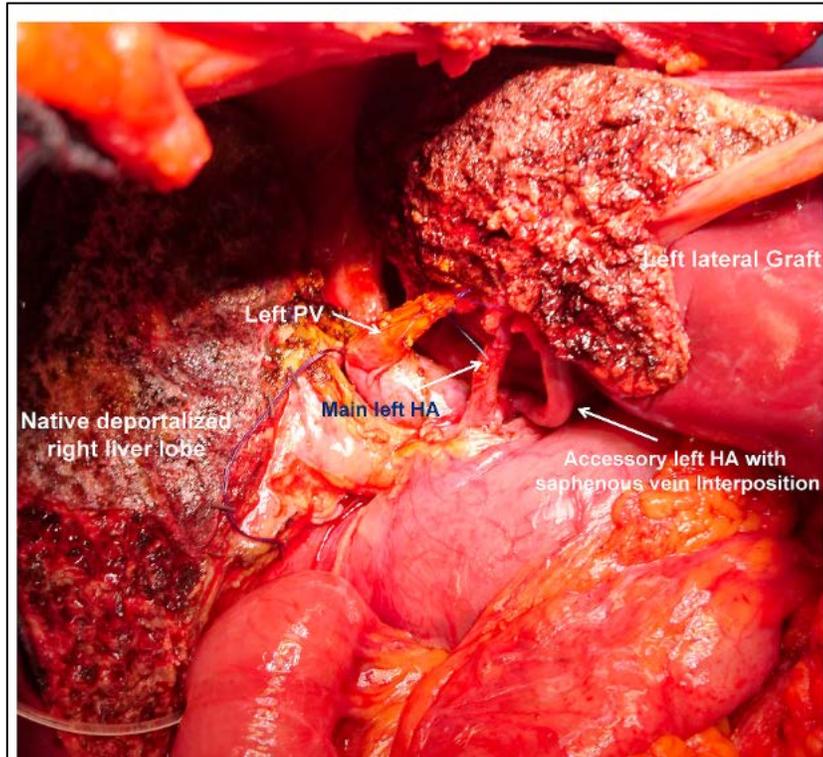
## TRASPLANTE

| Clinical Trial Identifier Acronym | Timeline  | Country | Interventions | Inclusion & Exclusion Criteria   | Expected Enrollment |
|-----------------------------------|-----------|---------|---------------|--|---------------------|
| NCT05398380                       | 2022–2026 | Spain   | LT            | <ul style="list-style-type: none"><li>- Unresectable CRLM</li><li>- No extrahepatic disease</li><li>- Primary pT3N1 max</li><li>- At least 2 months of CT, max 2 lines</li><li>- At least 1 year from primary tumor resection to LT</li><li>- -BRAF wild type</li><li>- Liver mets &lt; 5.5 cm at latest imaging</li><li>- CEA &lt; 80 ng/mL</li><li>- ≥3 months tumor control after CT (SD or PR on RECIST)</li></ul> | 35                  |

(Marianna Maspero et al. *Cancers* 2023. 15, 345)

# Cómo LA **CIRUGÍA** HA COLABORADO CON EL AUMENTO DE **RESECABILIDAD**

RAPID

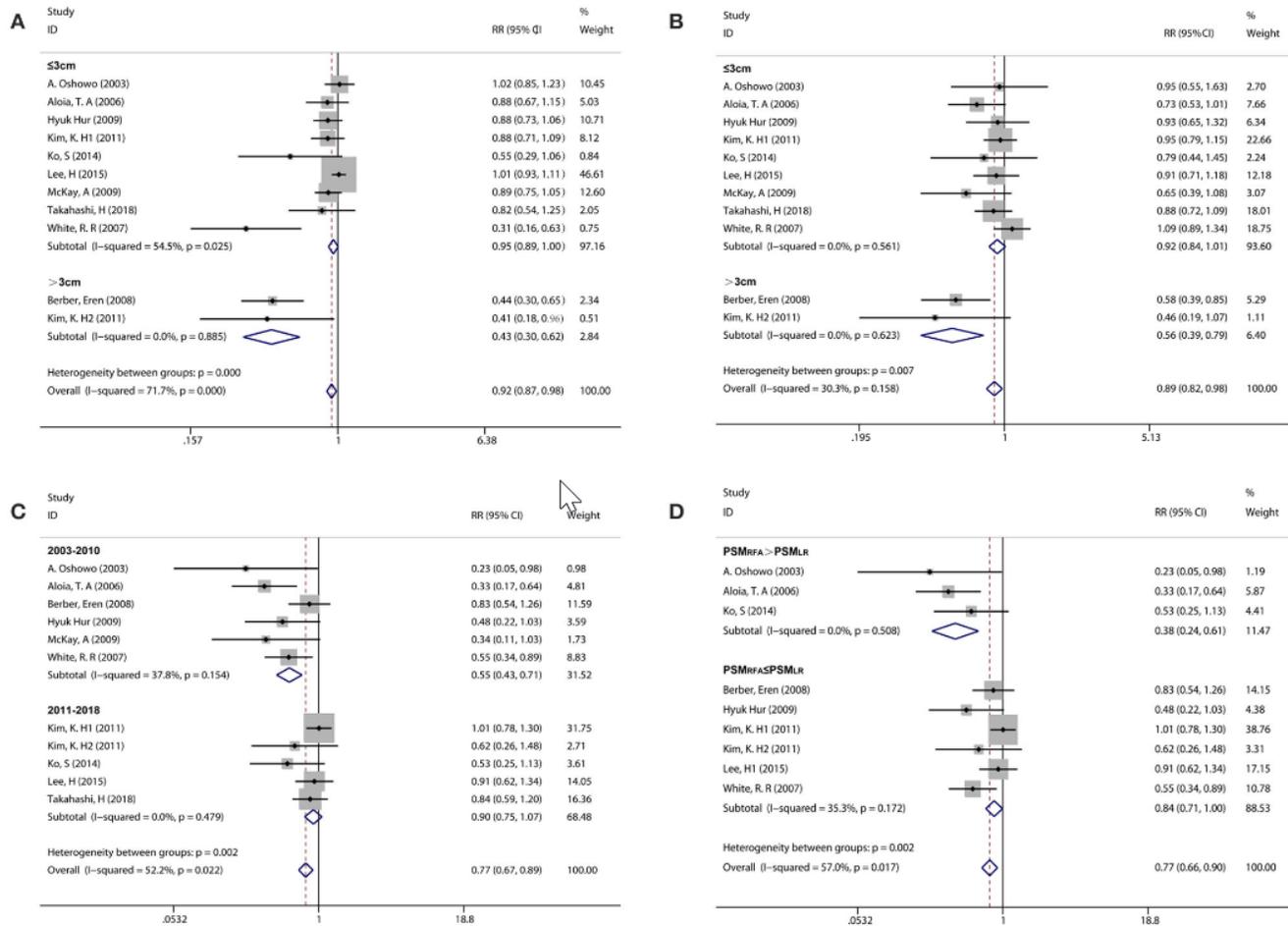


*(Nadalin S et al. RAPID procedure for colorectal cancer liver metastasis. Int J Surg. 2020)*

# Es la RESECCIÓN LA ÚNICA POSIBILIDAD?

## RADIOFRECUENCIA

Resultados equivalentes en  
casos en los de  
**única metástasis ≤3 cm**



**FIGURE 3 |** Subgroup analysis comparing the survival rate between RFA and LR groups. **(A)** Subgroup analysis for tumor size in the 1-year PFS. **(B)** Subgroup analysis for tumor size in the 3-year OS. **(C)** Subgroup analysis for publication year in the 5-year OS. **(D)** Subgroup analysis for the percentage of patients with synchronous metastasis in the 5-year OS.

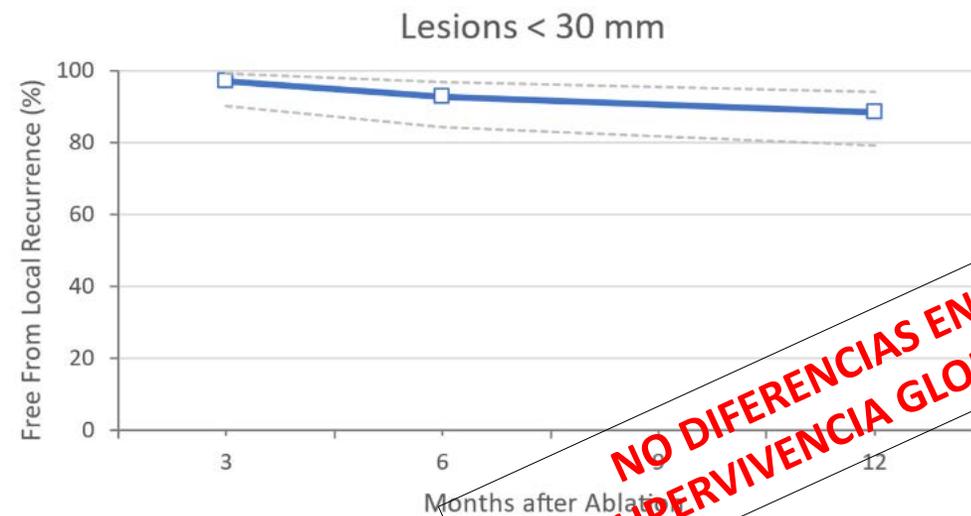
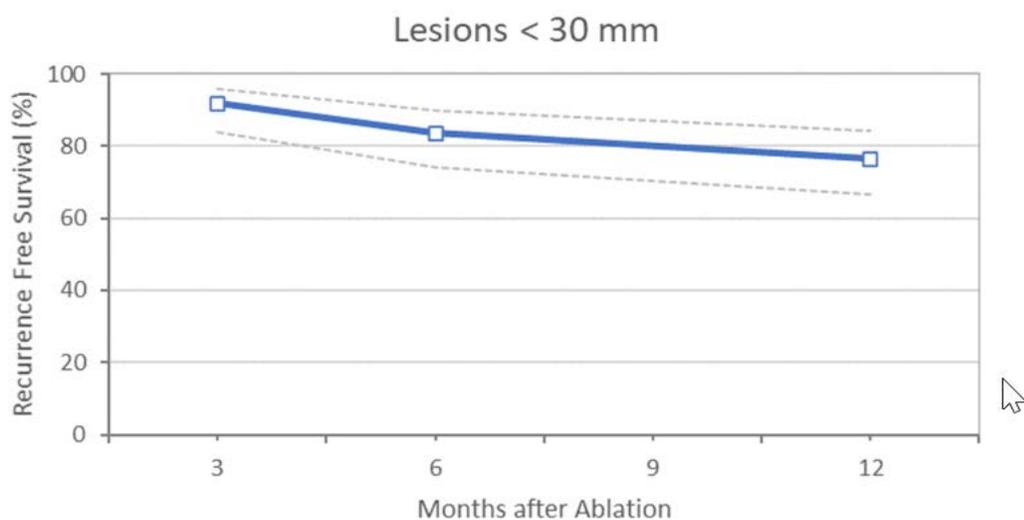


# Es la **RESECCIÓN** LA ÚNICA POSIBILIDAD?

MICROONDAS

**Supervivencia libre de Enfermedad** 1,3 y 5 años del 65,1%, 44,6% y **34,3%**

**SUPERVIVENCIAS** a 1,3 y 5 años del 86,7%, 59,6% y **44,8%**. (Antonio Mimmo et al. Cancers 2022, 14)



**NO DIFERENCIAS EN  
SUPERVIVENCIA GLOBAL**

(Gang Yang et al. International Journal of Surgery 77 (2020)85-93)

1. La **RESECABILIDAD** es lo mismo para todos, cómo aumentarla?

2.Cuál es el papel de la **QT NEOADYUVANTE** y cuándo está indicada?

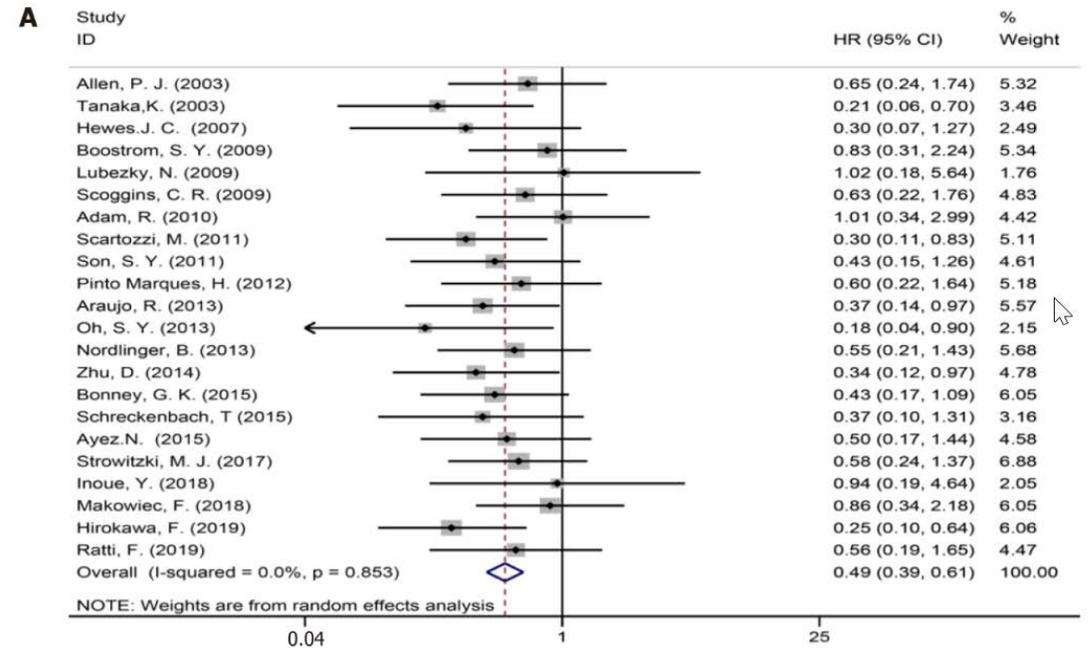
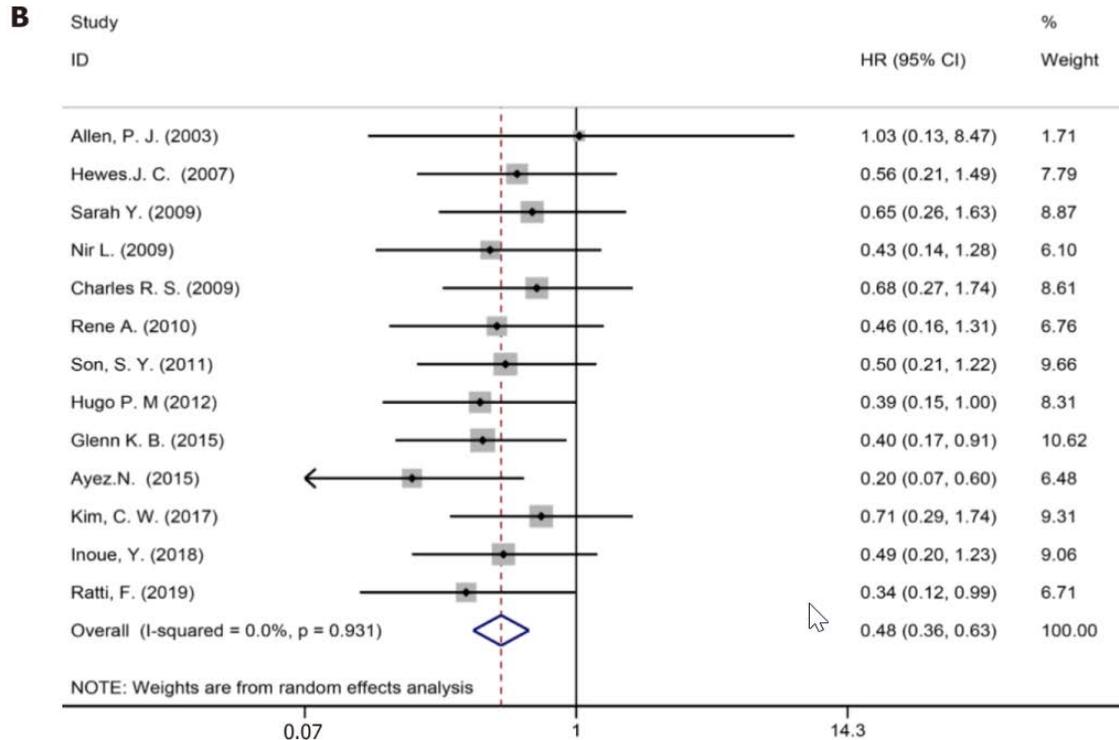
3. Qué hacemos con las **MISSING** metástasis?

4. Cuándo intervenir el **SINCRÓNICO ASINTOMÁTICO**?

5. Toda enfermedad en **PROGRESIÓN** es contraindicación para cirugía?

6. Y si hay **CARCINOMATOSIS PERITONEAL**?

# Neoadyuvancia



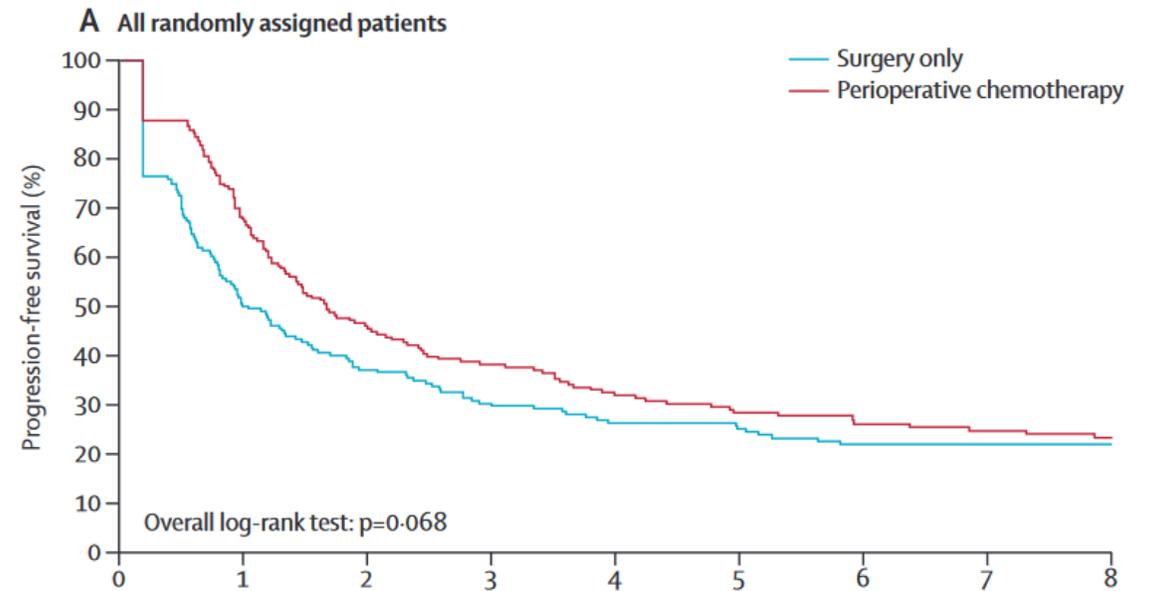
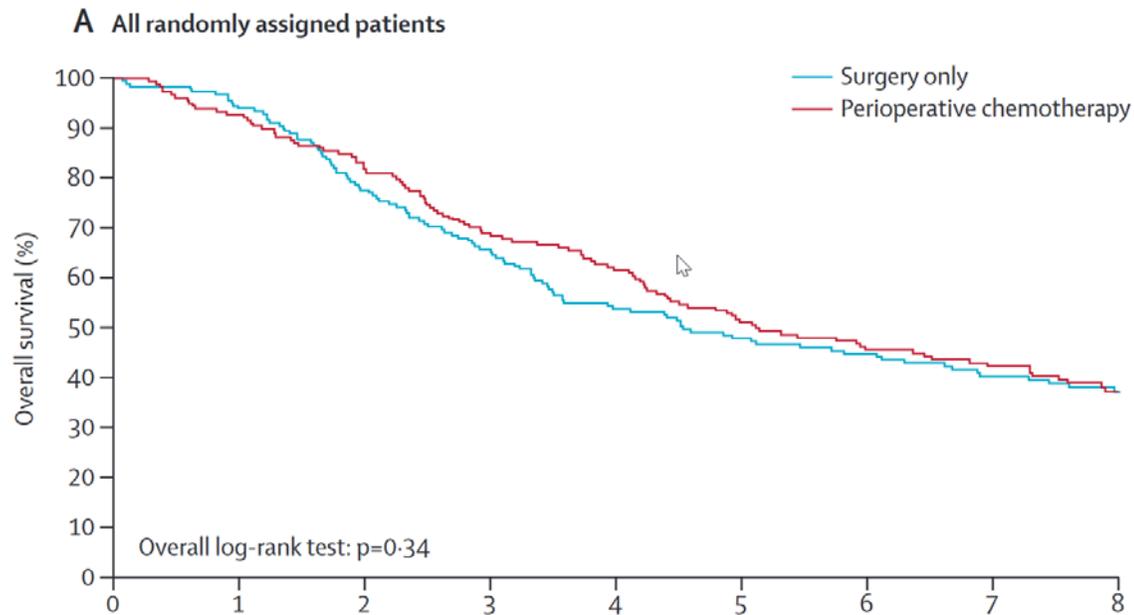
**Supervivencia global y libre de enfermedad**

(Yue Zhang et al. WJCC. Aug 6, 2021. 6:22)

# Neoadjuvancia



**RCT**



( Bernard Nordlinger et al. *Lancet Oncol.* 2013 Nov; 14(12):1208-15)

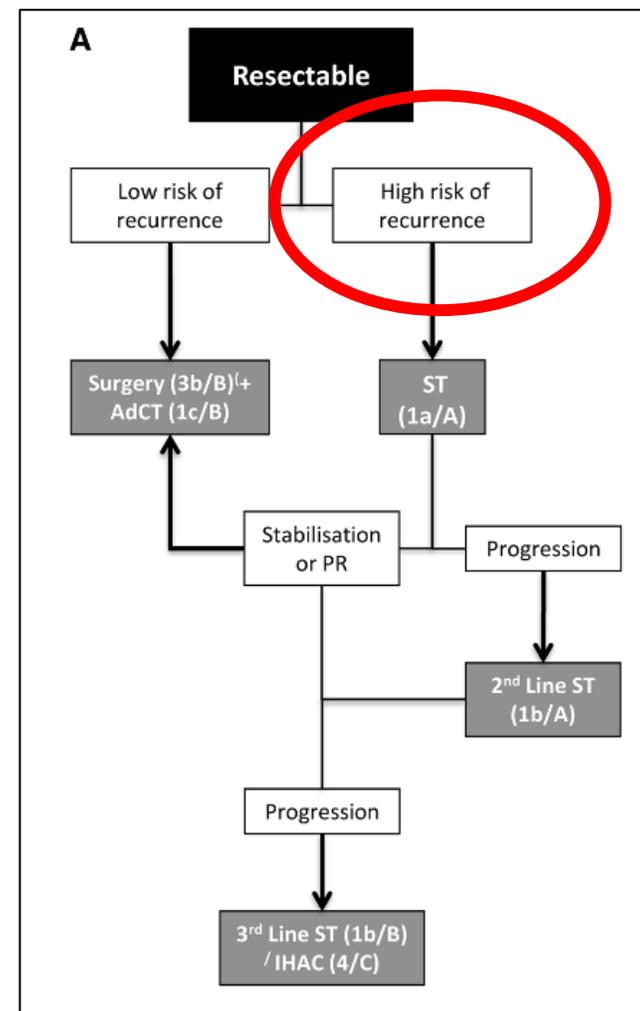
# Neoadyuvancia, en **QUÉ** casos?

## GAME SCORE

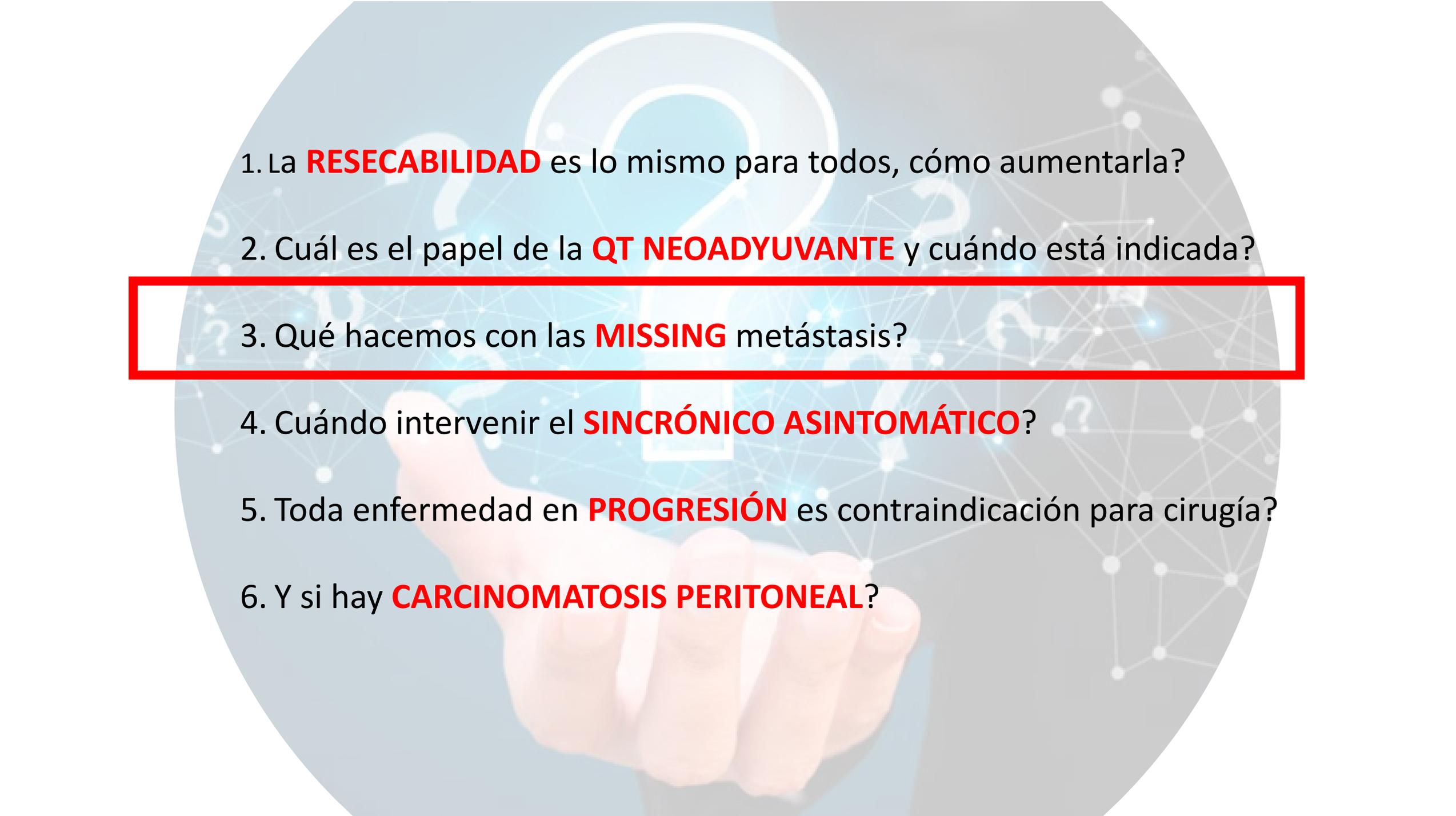
| Variable                 | Puntos |
|--------------------------|--------|
| KRAS mutado *            | 1      |
| CEA $\geq$ 20 ng/mL      | 1      |
| Afectación ganglionar    | 1      |
| TBS <sup>**</sup> : 3-8  | 1      |
| TBS <sup>**</sup> > 8    | 2      |
| Enfermedad Extrahepática | 2      |

\* Mutaciones KRAS exón 2 codones 12 y 13 y exón 3 codón 61

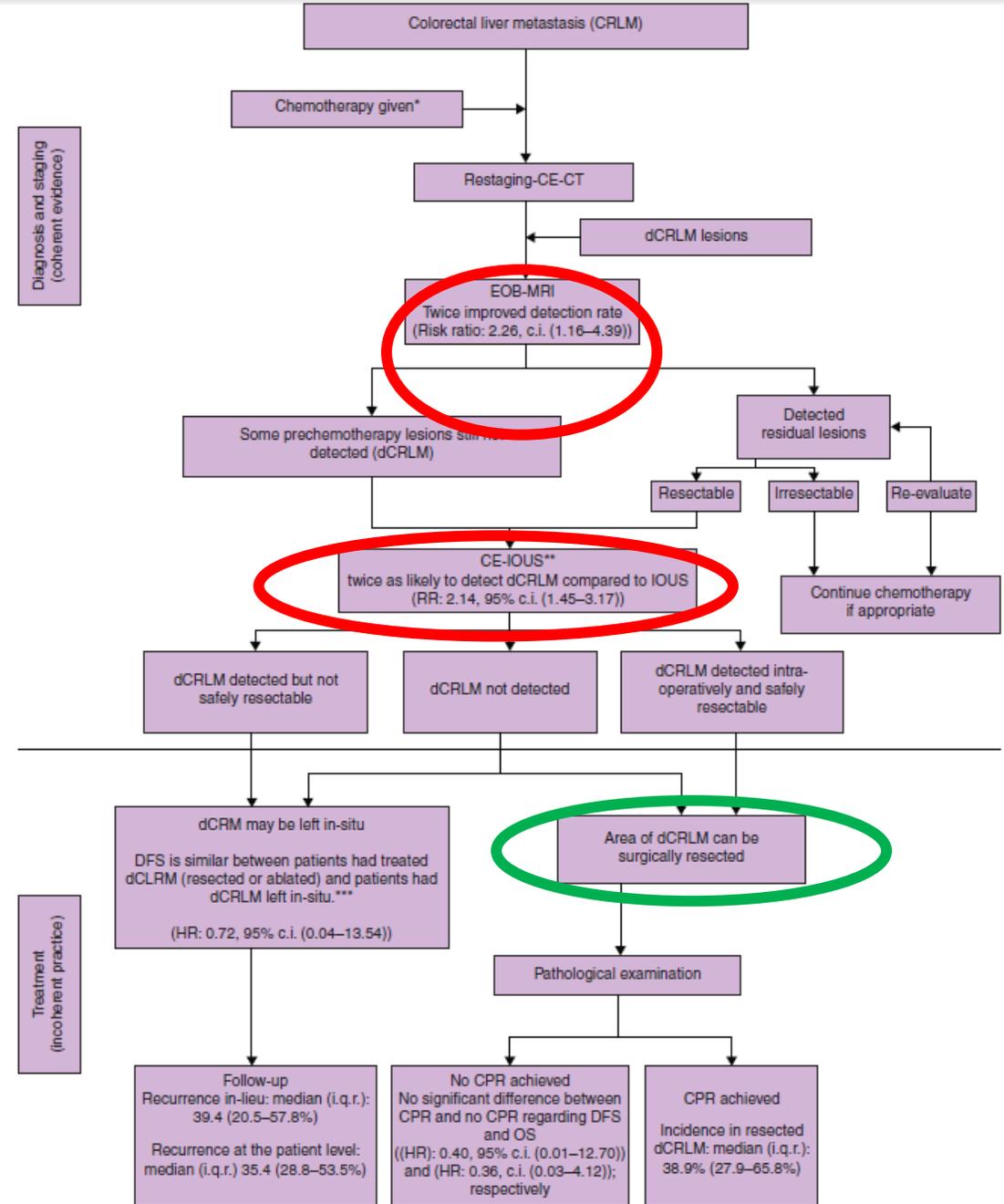
\*\*TBS<sup>2</sup>=(diámetro máximo lesión hepática)<sup>2</sup>+ (nº metástasis hepáticas)<sup>2</sup>



| Grupos de Riesgo | Puntos   |
|------------------|----------|
| Bajo             | 0-1      |
| Medio            | 2-3      |
| Alto             | $\geq$ 4 |

- 
- A hand is shown pointing towards a list of six questions. The background is a circular graphic with a network of nodes and lines, and several question marks are scattered throughout. The text is in black, with key terms in red. The third question is enclosed in a red rectangular box.
1. La **RESECABILIDAD** es lo mismo para todos, cómo aumentarla?
  - 2.Cuál es el papel de la **QT NEOADYUVANTE** y cuándo está indicada?
  3. Qué hacemos con las **MISSING** metástasis?
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  5. Toda enfermedad en **PROGRESIÓN** es contraindicación para cirugía?
  6. Y si hay **CARCINOMATOSIS PERITONEAL**?

# Qué hacemos con las MISSING MTX?

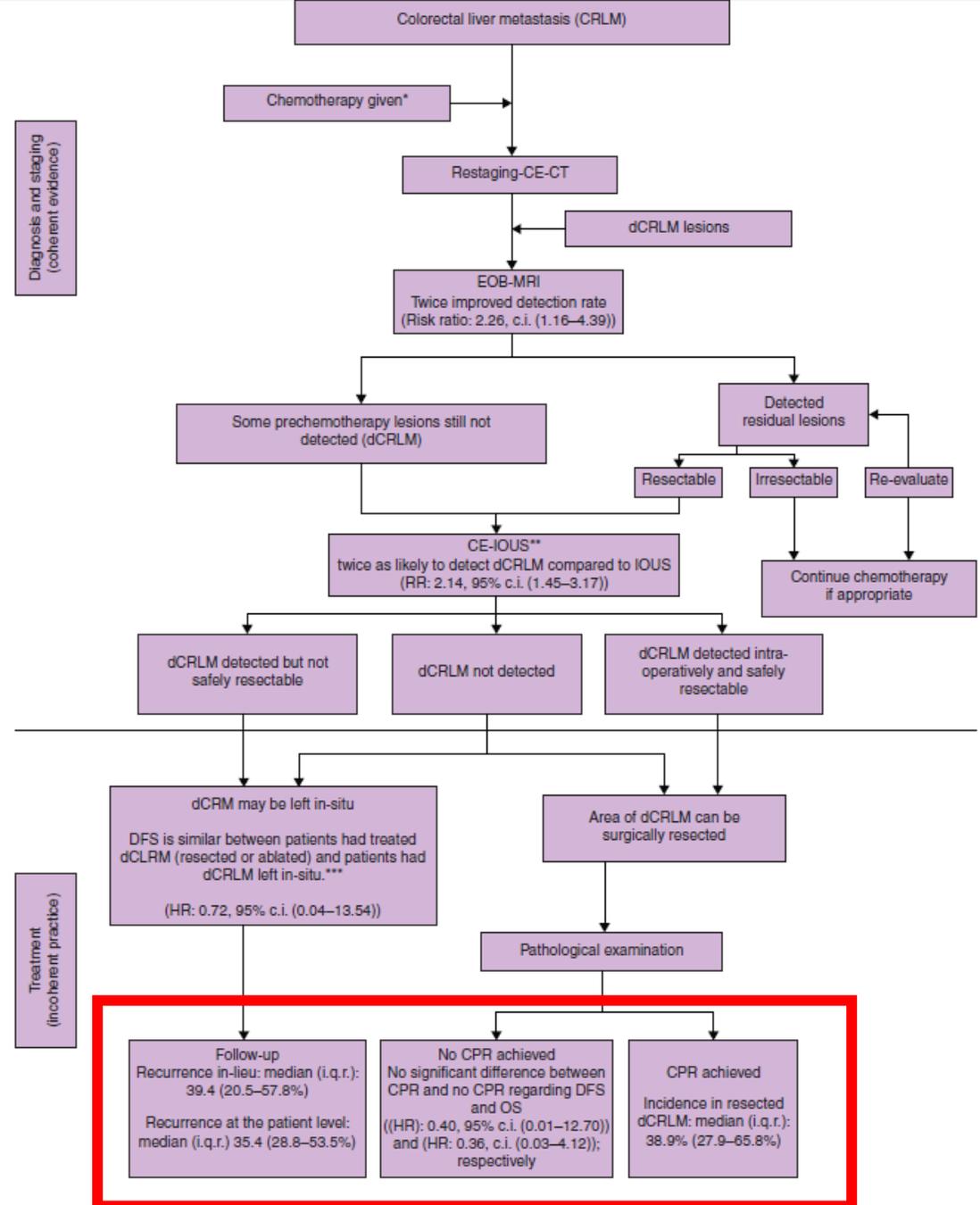


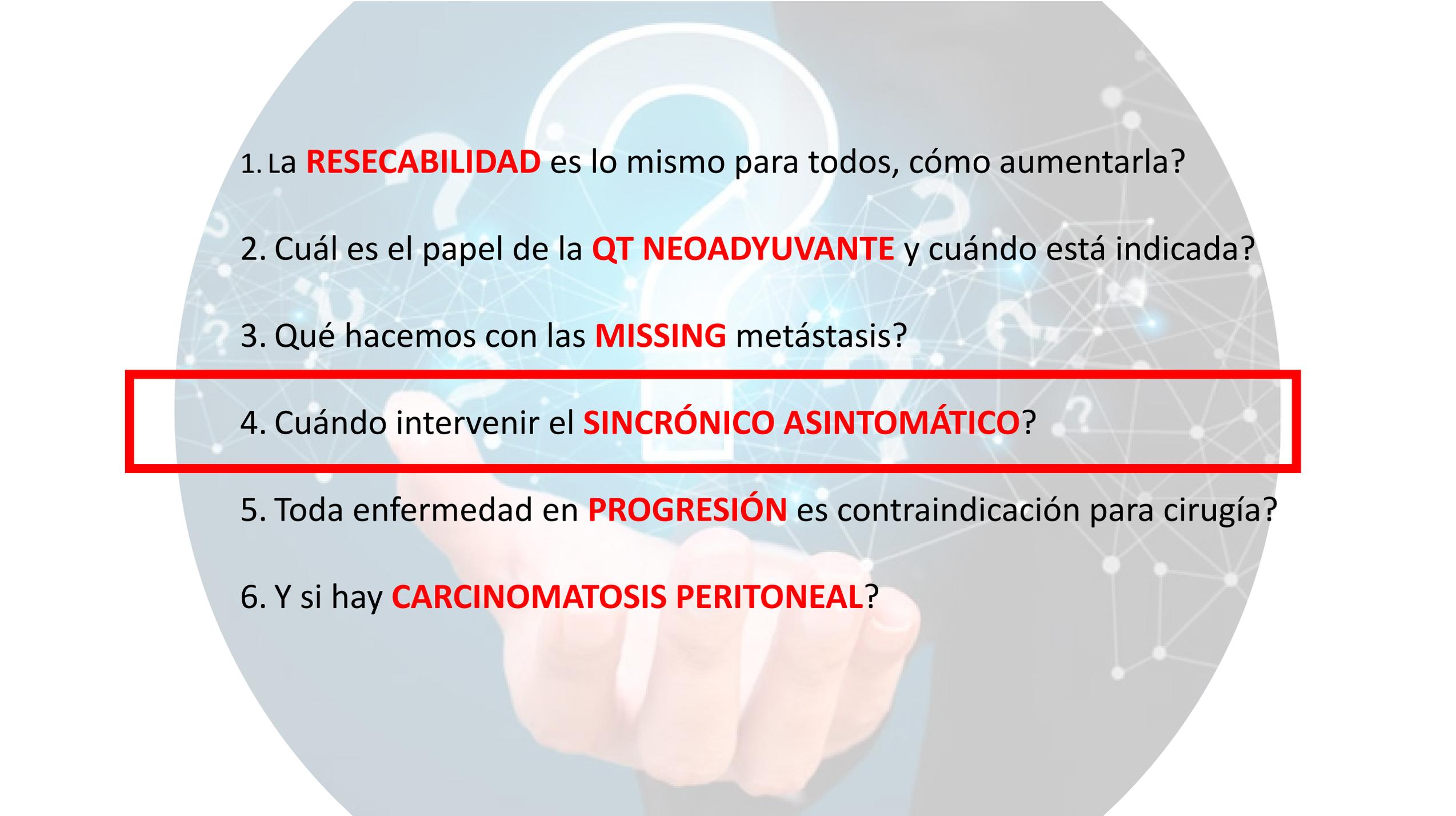
# MISSING MTX

**Respuesta patológica  
COMPLETA  
97,8%**

**NO DIFERENCIAS** SLE Y SG: Respuesta completa / no

**NO DIFERENCIAS** SLE: Tratadas /seguidas



- 
1. La **RESECABILIDAD** es lo mismo para todos, cómo aumentarla?
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# Cuándo intervenir **sincrónico** **ASINTOMÁTICO?**

**Table 3** Pooled results of the comparison of all outcomes between the two groups

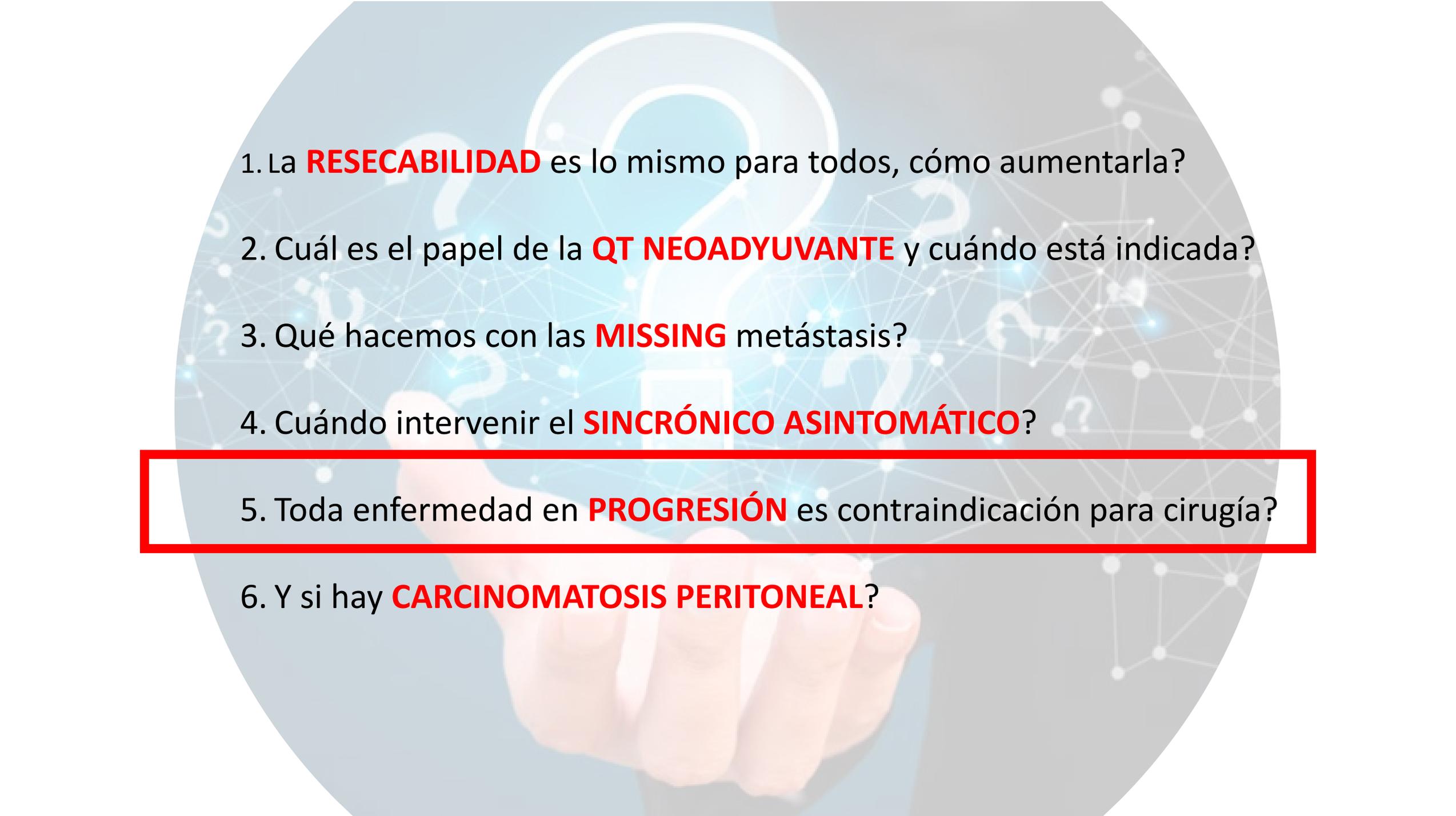
| Outcomes                       | Number of studies | Number of patients     |                  | WMD/SMD/OR/HR | 95% CI         | Heterogeneity         | P value   |
|--------------------------------|-------------------|------------------------|------------------|---------------|----------------|-----------------------|-----------|
|                                |                   | Simultaneous resection | Staged resection |               |                |                       |           |
| Complications                  |                   |                        |                  |               |                |                       |           |
| Total complications            | 17                | 1342                   | 1891             | OR=0.88       | 0.66–1.19      | $I^2=61.3\%, P<0.001$ | $P=0.409$ |
| Gastrointestinal complications | 16                | 1358                   | 1627             | OR=1.19       | 0.89–1.59      | $I^2=21.6\%, P=0.208$ | $P=0.241$ |
| Hepatic complications          | 17                | 1398                   | 1806             | OR=1.04       | 0.83–1.31      | $I^2=0.0\%, P=0.529$  | $P=0.734$ |
| Perioperative characteristics  |                   |                        |                  |               |                |                       |           |
| Perioperative mortality        | 10                | 730                    | 1470             | OR=1.79       | 0.88–3.64      | $I^2=8.5\%, P=0.364$  | $P=0.108$ |
| Intraoperative blood loss      | 9                 | 599                    | 950              | SMD=-0.39     | -0.60 to -0.18 | $I^2=69.1\%, P=0.001$ | $P<0.001$ |
| Total hospital stay            | 13                | 648                    | 946              | WMD=-5.43     | -7.29 to -3.58 | $I^2=76.9\%, P<0.001$ | $P<0.001$ |
| Long-term prognosis            |                   |                        |                  |               |                |                       |           |
| 5-year DFS                     | 4                 | 208                    | 150              | HR=1.26       | 0.96–1.66      | $I^2=18.1\%, P=0.300$ | $P=0.098$ |
| 5-year OS                      | 10                | 1017                   | 1337             | HR=1.13       | 0.95–1.34      | $I^2=34.6\%, P=0.131$ | $P=0.164$ |

- No diferencias: complicaciones, mortalidad perioperatoria y SG a 5 años.
- < Estancia resección simultánea.

*(Shi-hao Wang et al. European Journal of Medial Research (2022)27:297)*

**RCT**. *METASYNC Study group. Ann Surg 2021 Jan. 1;273(1):49-56*

- No diferencias complicaciones postoperatorias.
- > SLE a 2 a en resección simultánea.

- 
- A hand is shown holding a glowing question mark. The background features a network diagram with nodes and connecting lines, suggesting a complex or interconnected system. The overall theme is one of inquiry and decision-making.
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# Progresión, es el **FIN**?

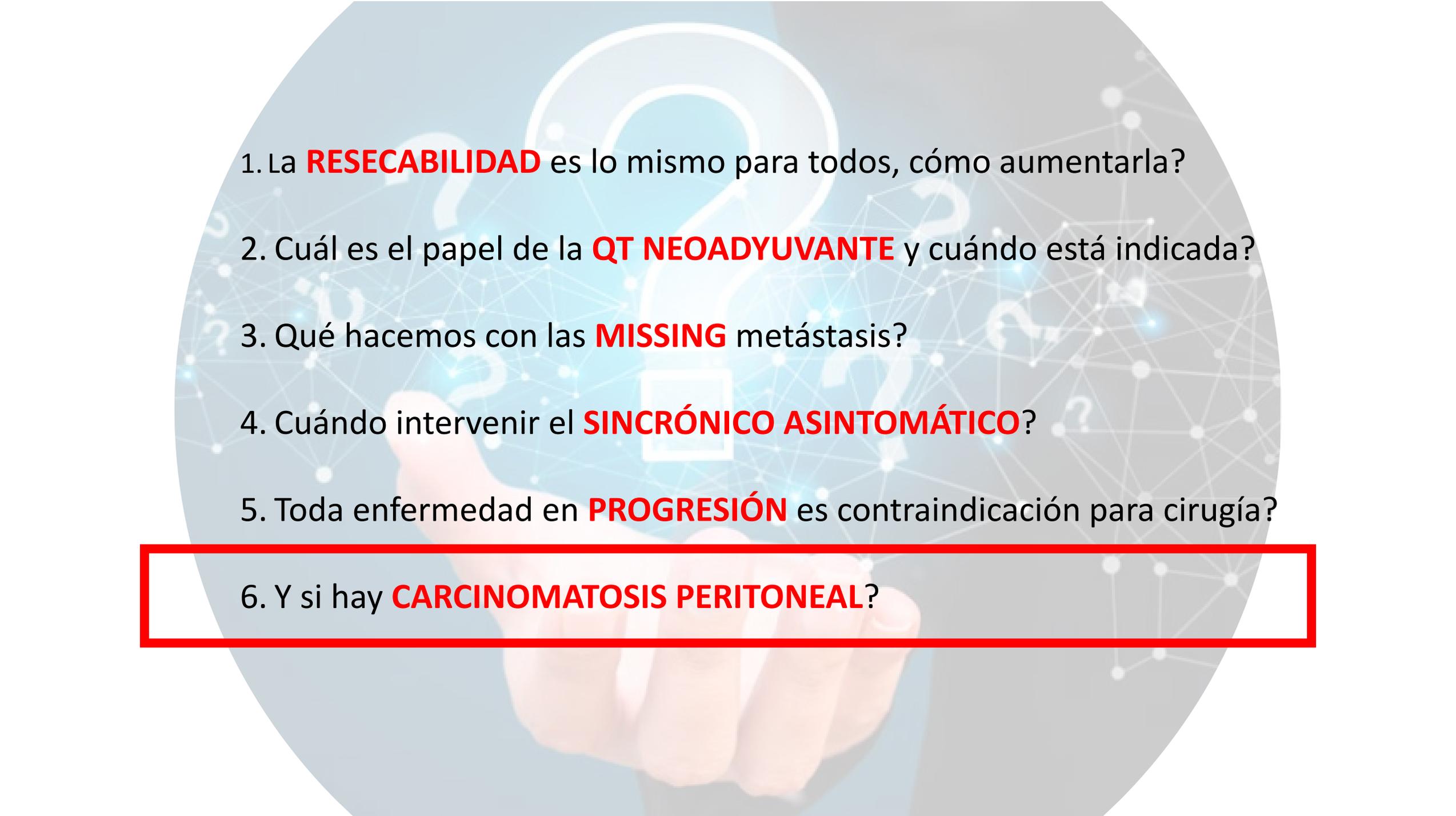
- Series en las que La progresión durante la **QT no influyó en la supervivencia** a largo plazo (*Neuman et al , Gallagher et al*)
- La **progresión en el remanente tras embolización portal** no impide el segundo tiempo.( *Jouffret et al*)
- Existe posibilidad de **resección tras 2ª línea** (*Bouquet e al, Adam et al.*)

## Oncologic aspects of the decision-making process for surgical approach for colorectal liver metastases progressing during chemotherapy

Raphael L C Araujo, Camila G C Y Carvalho, Carlos T Maeda, Jean Michel Milani, Diogo G Bugano, Pedro Henrique Z de Moraes, Marcelo M Linhares

### Abstract

Colorectal cancer represents the third most diagnosed malignancy in the world. The liver is the main site of metastatic disease, affected in 30% of patients with newly diagnosed disease. Complete resection is considered the only potentially curative treatment for colorectal liver metastasis (CRLM), with a 5-year survival rate ranging from 35% to 58%. However, up to 80% of patients have initially unresectable disease, due to extrahepatic disease or bilobar multiple liver nodules. The availability of increasingly effective systemic chemotherapy has contributed to converting patients with initially unresectable liver metastases to resectable disease, improving long-term outcomes, and accessing tumor biology. In recent years, response to preoperative systemic chemotherapy before liver resection has been established as a major prognostic factor. Some studies have demonstrated that patients with regression of hepatic metastases while on chemotherapy have improved outcomes when compared to patients with stabilization or progression of the disease. Even if disease progression during chemotherapy represents an independent negative prognostic factor, some patients may still benefit from surgery, given the role of this modality as the main treatment with curative intent for patients with CRLM. In selected cases, based on size, the number of lesions, and tumor markers, surgery may be offered despite the less favorable prognosis and as an option for non-chemo responders.

- 
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  6. Y si hay **CARCINOMATOSIS PERITONEAL**?

# Carcinomatosis peritoneal, es el **FIN**?

[Langenbecks Arch Surg.](#) 2019 Jun;404(4):477-488. doi: 10.1007/s00423-019-01787-w.  
Epub 2019 Apr 25.

## Synchronous liver metastases and peritoneal carcinomatosis from colorectal cancer: different strategies for curative treatment?

Amandine Pinto <sup>1 2</sup>, Christian Hobeika <sup>2</sup>, Antoine Philis <sup>1</sup>, Sylvain Kirzin <sup>1</sup>, Nicolas Carrère <sup>1</sup>, Laurent Ghouti <sup>3</sup>

**Background:** Management of patients with resectable hepatic metastases (HMs) and colorectal peritoneal carcinomatosis (CRPC) is not currently standardised.

**Objective:** The aims of this study were to evaluate the safety of cytoreductive surgery with hyperthermic intraperitoneal chemotherapy (CRS/HIPEC) and hepatic surgery for patients with CRPC with synchronous hepatic metastases (HM), and its impact on survival rates.

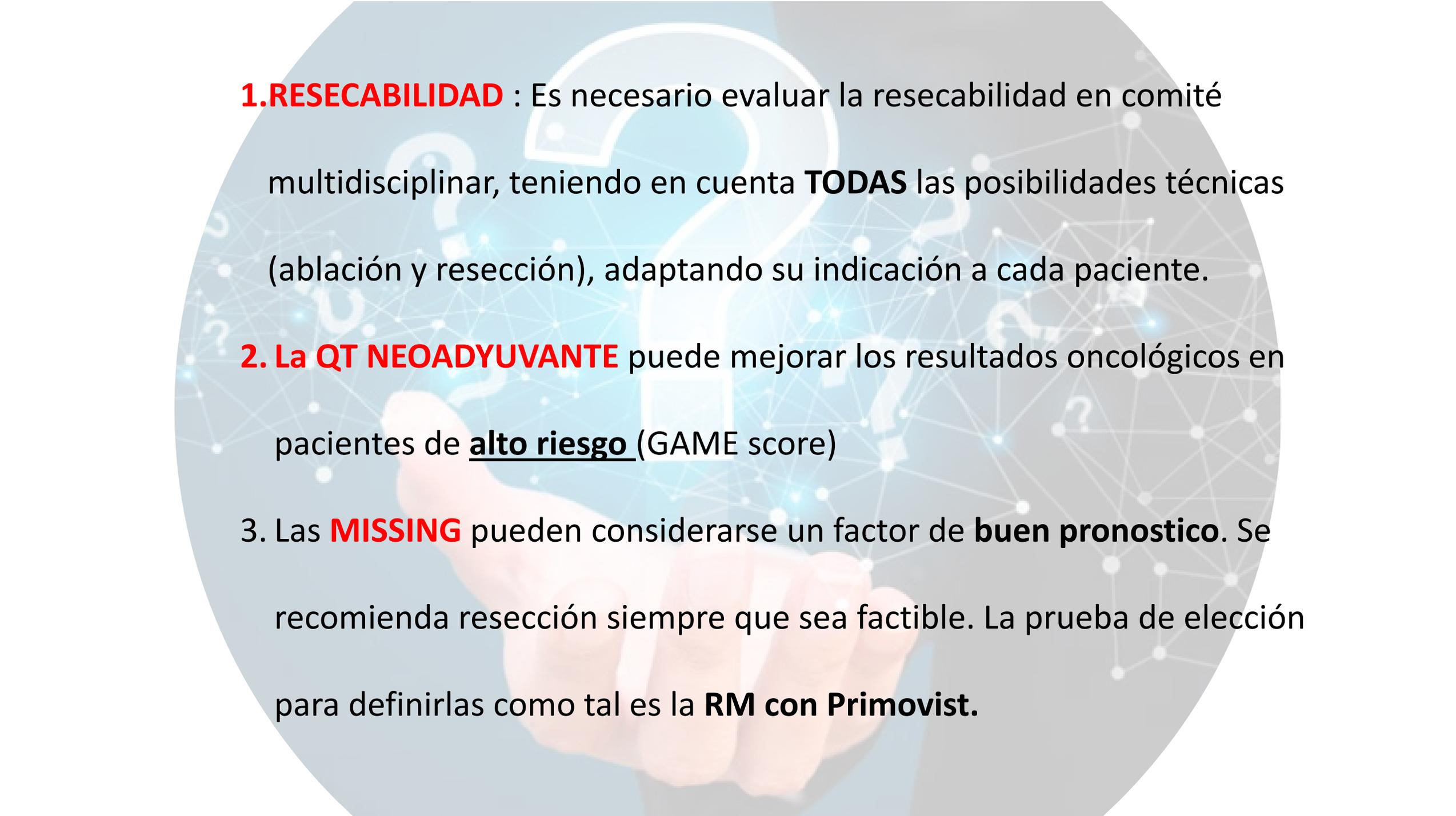
**Methods:** A retrospective analysis was performed, including patients undergoing CRS/HIPEC for CRPC from 2007 to September 2016 in two groups, with (HM+) and without (HM-) synchronous hepatic metastases. Patients with extra-abdominal metastases were excluded. The hepatic strategy was described. Morbimortality and survival were compared between the two groups.

**Results:** One hundred nine patients underwent CRS/HIPEC for CRPC with or without hepatic surgery with curative intent: 33 patients with (HM+) and 76 patients without (HM-) synchronous HM. The median follow-up was 30 months. All patients with HM (HM+) received neoadjuvant chemotherapy vs. 88.1% in the HM- group ( $p = 0.04$ ) associated with monoclonal antibody in 66.6% of cases in the HM+ group vs. 57% in the HM- group ( $p = 0.01$ ). In the HM+ group, two steps were implemented to treat peritoneal and hepatic metastases in 15 patients (45%). In this group, planned hepatic resection in two procedures was performed for eight patients, all presenting bilobar HM. Postoperative morbidity did not differ between the two groups. No deaths occurred. Median overall survival (OS) and recurrence-free survival (RFS) were 31 and 65 months ( $p = 0.188$ ), versus 21 and 24 months ( $p = 0.119$ ), respectively, in the HM+ versus HM- groups. In multivariate analysis, the peritoneal cancer index (PCI) was the only significant prognostic factor whereas synchronous HM was not a significant prognostic factor.

**Conclusion:** Curative surgical treatment for CRPC with synchronous HM seems to be feasible and safe, and could facilitate long survival rates, compared to patients without HM. The hepatic strategy is not standardised. However, a "two-step" surgical strategy could be proposed in order to reduce postoperative morbidity rates.

A hand is shown from the bottom, holding a large, glowing white question mark. The background is a dark blue field filled with a network of white nodes connected by thin lines, with several nodes glowing with a bright blue light. Several smaller, semi-transparent question marks are scattered throughout the network. The word "CONCLUSIONES" is written across the center in a bold, orange, sans-serif font with a white outline.

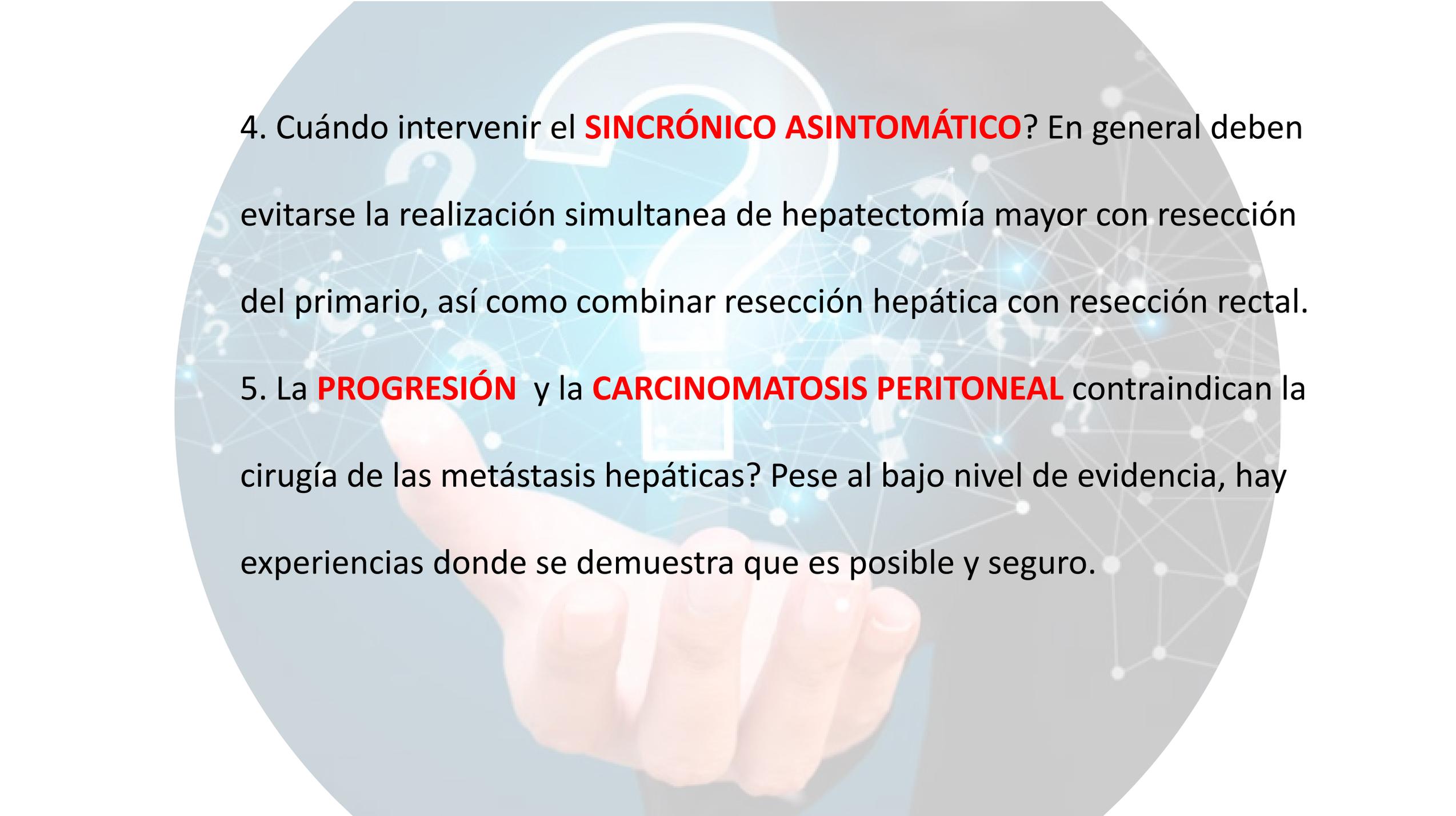
**CONCLUSIONES**



**1. RESECABILIDAD** : Es necesario evaluar la resecabilidad en comité multidisciplinar, teniendo en cuenta **TODAS** las posibilidades técnicas (ablación y resección), adaptando su indicación a cada paciente.

**2. La QT NEOADYUVANTE** puede mejorar los resultados oncológicos en pacientes de alto riesgo (GAME score)

3. Las **MISSING** pueden considerarse un factor de **buen pronóstico**. Se recomienda resección siempre que sea factible. La prueba de elección para definir las como tal es la **RM con Primovist**.

- 
- A hand is shown holding a glowing question mark. The background features a network diagram with nodes and connecting lines, suggesting a complex or interconnected system. The overall theme is one of inquiry and decision-making.
4. Cuándo intervenir el **SINCRÓNICO ASINTOMÁTICO**? En general deben evitarse la realización simultánea de hepatectomía mayor con resección del primario, así como combinar resección hepática con resección rectal.
5. La **PROGRESIÓN** y la **CARCINOMATOSIS PERITONEAL** contraindican la cirugía de las metástasis hepáticas? Pese al bajo nivel de evidencia, hay experiencias donde se demuestra que es posible y seguro.



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18 y 19 de mayo 2023



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**GRACIAS**

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