

Métastases Hépatiques des cancers du sein: Chirurgie – Radiofréquence - Radiothérapie

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MHKS

Surgical management of non colorectal cancer liver metastases.

Page AL & al. Cancer 2014

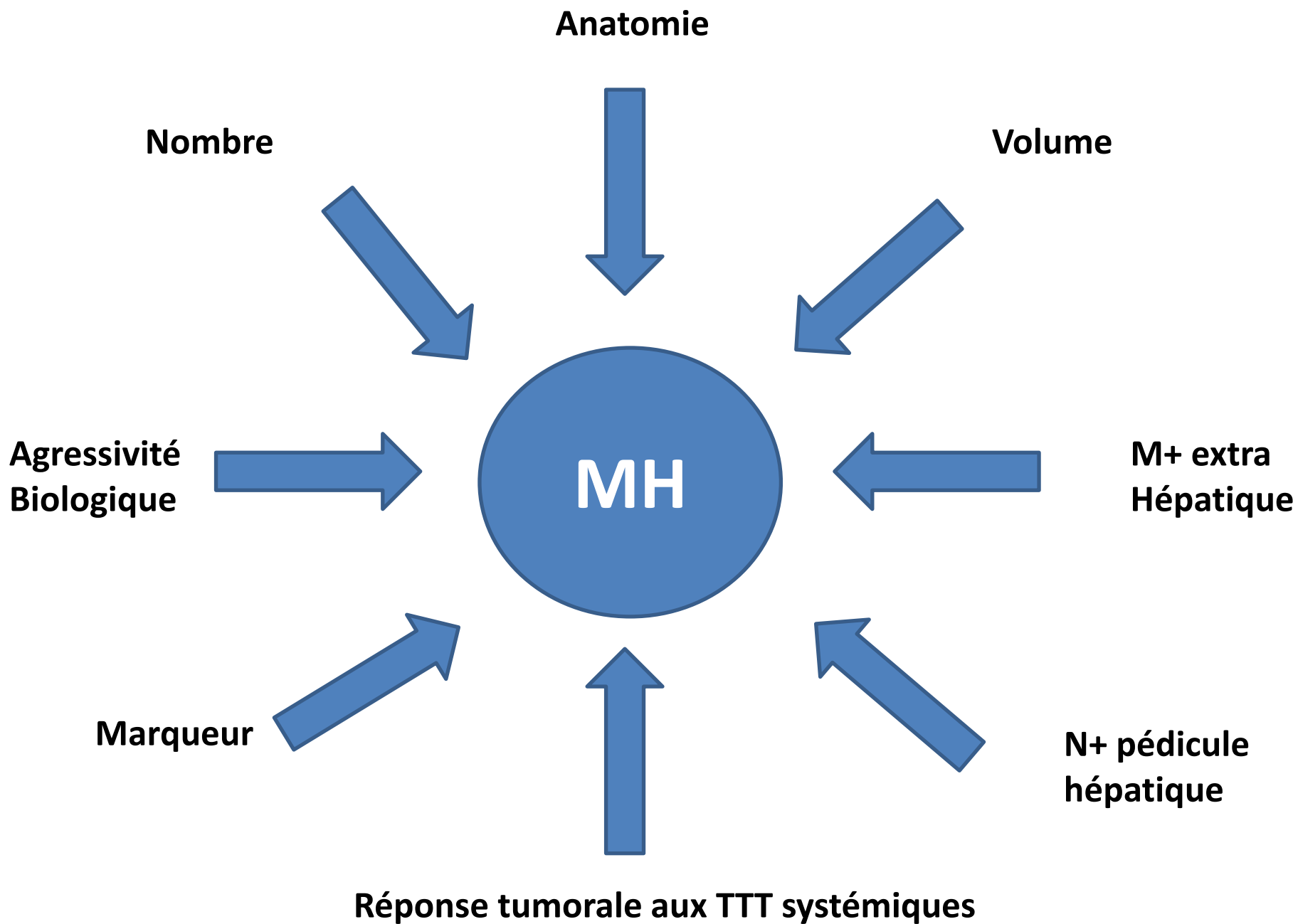
- **5-10% de MHKS synchrones**
- **20% des KS développeront des Mt**
- **50% de ces Mt apparaîtront dans le foie**
- **90% des MHKS sont multifocales et associées**
- **5-10% des MHKS sont solitaires et anatomiquement résécables**
- | | | |
|---------------------|--------------------|-----------------|
| OS5 des MHKS | Tous stades | < 10% |
| | opérées | 40-60% |

Liver resection in selected patients with metastatic breast cancer: a single-centre analysis and review of literature

Y. Dittmar · A. Altendorf-Hofmann · S. Schüle ·
M. Ardeh · O. Dirsch · L. B. Runnebaum · U. Settmacher

Table 5 5-year survival rates after curative liver resection in literature

References	Number of patients	5 year survival rate (%)	Median survival (months)
Raab et al. (1998)	34	18 %	27
Carlini et al. (2002)	17	46 %	53
Arena and Ferrero (2004)	17	41 %	
Vlastos et al. (2004)	31	61 %	63
Sakamoto et al. (2005)	34	21 %	36
Yedibela et al. (2005)	17	50 %	62
Adam et al. (2006)	85	43 %	43
Elias and Di Pietroantonio (2006)	54	34 %	34
Thelen et al. (2008)	39	61 %	73
Hoffmann et al. (2010)	41	48 %	58
Present study	21	38 %	52



Anatomie

Nombre

Volume

**Agressivité
Biologique**

**M+ extra
Hépatique**

Marqueur

**N+ pédicule
hépatique**

Réponse tumorale aux TTT systémiques

MH

Liver resection and local ablation of breast cancer liver metastases. a systematic review.

Bergenfeldt M & al.
EJSO 2011

32 pub rétrospectives

25 chir seule

22 monocentriques

Nbre chir/an: 2 [0,7 – 7]

Factors influencing survival after surgical resection.

Prognostic factor	Influence on prognosis		
	Positive	Negative	No influence
1. Features of primary BC			
Anatomic site			27
Surgical procedure			27,31,35
Stage (TN-stage)			20–22,24,27,31,35,36
Histology:grade/differentiation			27,31,35,36
Presence of hormone receptors		36	27,31
2. Features of BCLM			
Interval between BC and BCLM	20,22,37		21,24,26,27,31,35,36
Number and size		36	20–22,24,26,27,31,35
Presence of hormone receptors	24	36	20,26,31,35
Invasion of liver vasculature			35
3. Extrahepatic factors			
Patient age (high vs. low)	36		24,26,27,31,35
Presence of extrahepatic disease		27,35	20,21,31
Presence of hilar gland metastases			20,27,31
Presence of abdominal gland metastases			21
4. Therapeutic factors			
R0-resection	18,31,35		24
Type of resection (minor vs. major)	36		20,22,26,27,31
Repeat hepatectomy	31		
Response to preoperative chemotherapy	31		22,26
Blood or plasma transfusion			36

Numbers correspond to reference list.

Hepatic resection for metastatic breast cancer: a systematic review.

Chua TC & al
EJC 2011

1,8 case per annum

Table 5 – Prognostic clinicopathologic factors of patients undergoing hepatectomy for breast cancer associated with poorer overall survival by univariate analysis.

	Association with poorer overall survival	
	Significant (Positive association)	Non-significant (No association)
Younger age	Lubrano, ¹⁵ Martinez ¹² 2 studies	Hoffmann, ¹¹ Thelen, ¹⁹ Adam, ⁹ Vlastos, ¹³ Elias ¹⁴ 5 studies
Advanced primary tumour		Hoffmann, ¹¹ Lubrano, ¹⁵ Thelen, ¹⁹ Adam, ⁹ Sakamoto, ⁷ Vlastos, ¹³ Elias, ¹⁴ Pocard, ¹⁶ 8 studies
Node positive primary	Pocard ¹⁶ 1 studies	Thelen, ¹⁹ Martinez, ¹² Adam, ⁹ Sakamoto, ⁷ Elias, ¹⁴ Selzner, ⁸ 6 studies
Poorly differentiated		Lubrano, ¹⁵ Thelen, ¹⁹ Adam, ⁹ 3 studies
<1 year to liver metastases		
<1 year	Hoffmann, ¹¹ Selzner, ⁸ 2 studies	Lubrano ¹⁵ ($\leq 24 / > 24$ months), Caralt ¹⁰ ($\leq 24 / > 24$ months), Adam, ⁹ Vlastos, ¹³ Elias, ¹⁴ Pocard ¹⁶ ($\leq 24 / > 24$ months) 6 studies
Previous metastases	Thelen ¹⁹ 1 study	Hoffmann, ¹¹ Selzner ⁸ 2 studies
Major hepatectomy		
Major	Lubrano ¹⁵ 1 study	Hoffmann, ¹¹ Thelen, ¹⁹ Vlastos, ¹³ Selzner, ⁸ Pocard ¹⁶ 5 studies
Multiple liver metastases	Lubrano ¹⁵ 1 study	Thelen, ¹⁹ Martinez, ¹² Adam, ⁹ Sakamoto, ⁷ Vlastos, ¹³ Elias, ¹⁴ Pocard ¹⁶ 7 studies
Larger tumour size	Hoffmann ¹¹ 1 study	Thelen, ¹⁹ Adam, ⁹ Vlastos, ¹³ Elias, ¹⁴ Selzner ⁸ 5 studies
Positive resection margin	Hoffmann, ¹¹ Thelen, ¹⁹ Adam ⁹ 3 studies	Elias ¹⁴ 1 study
Extrahepatic disease	Adam ⁹ 1 study	Hoffmann, ¹¹ Sakamoto, ⁷ Selzner ⁸ 3 studies
Hormone sensitive disease	Lubrano ¹⁵ 1 study	
Hormone refractory disease	Hoffmann, ¹¹ Martinez, ¹² Elias ¹⁴ 3 studies	Thelen, ¹⁹ Adam, ⁹ Sakamoto, ⁷ Vlastos ¹³ 4 studies
HER2 positive disease	Martinez ¹² 1 study	Thelen, ¹⁹ Adam ⁹ 2 studies

Is there a Role for Surgical Resections of Hepatic Breast Cancer Metastases?

Beatrix Elsberger¹, Campbell S. Roxburgh² and Paul G. Horgan²

Hepato-Gastroenterology 61 (2014)

TABLE 2. Overview of prognostic factors.

[illegible]

Is liver resection justified for patients with hepatic metastases from breast cancer? Adam R & al. Ann Surg 2006

- 108 MHKS opérées => 85 réséquées (79%)
- 85 MHKS ; 84-04; Hôpital Paul Brousse
- MH solitaire: 38% / MH >3: 31%
- Hépatectomie majeure (>3 segments) : 63%
- 0 DC opératoire
- R0: 65% - R1: 11%
- RL hépatique (median: 10 mois)/ isolée: 48%
- C: 55: 21%

Sécurité de la chirurgie hépatique

Absence de réponse au TTT systémique

R2

absence de chirurgie hépatique itérative

25 RLH -> 12: 2nd Hepatect -> 4: 3rd Hepatect

Liver metastases from breast cancer: Surgical resection or not?

A case-matched control study in highly selected patients.

Mariani P & al. EJSO 2013

- Etude cas-témoin appariés: 51 / 50
- 88-07 ; - de 4 Mt ; FU: 36 mois
- Patient non opéré, aurait pu l'être ! (CL)
- Fact pronostics:

- N0/ N1

- 69.5% / 60.2%

- Nbre

- 77% p:0.0003

- N/O

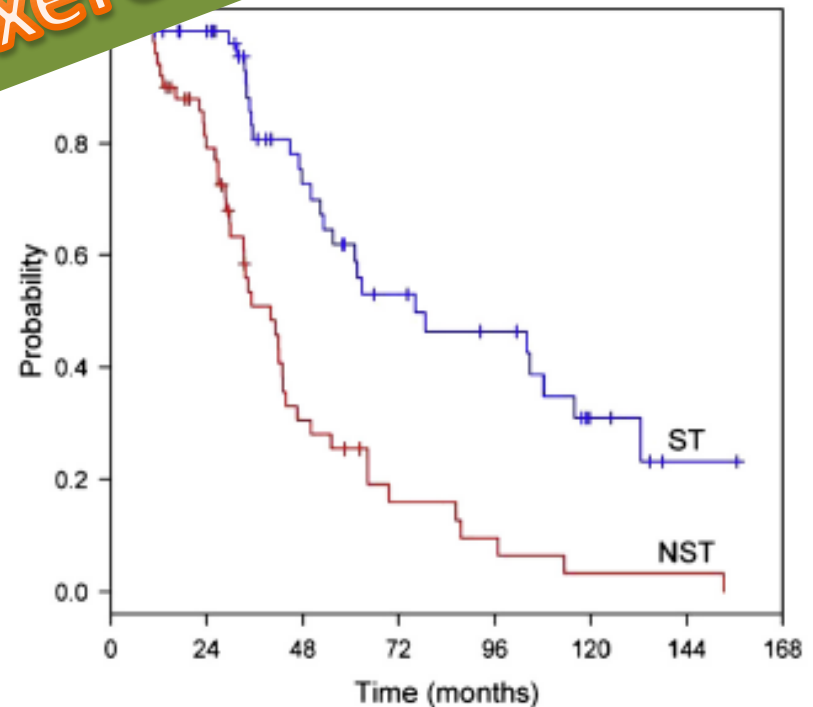
- 75% / 31% p:0.0009

- Chir Hepat O/N

- 80% / 51% p<0.0001

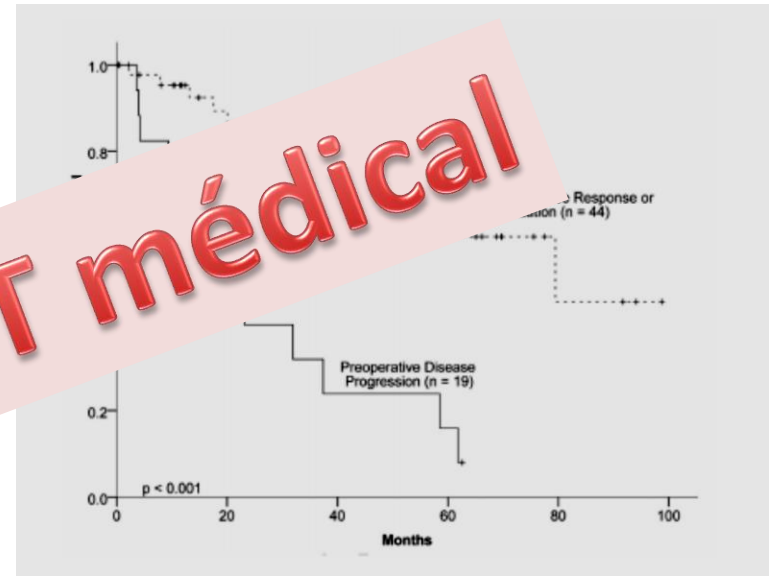
- NS: Age, RH, HER2, IL

Impact favorable de l'exérèse chirurgicale



**Resection of liver metastases from breast cancer:
Estrogen receptor status and response to chemotherapy before
metastasectomy define outcome. Abbott DE & al. Surgery 2012**

- 86 chir pour MHKS au MD Anderson (97-2010)
- 30% de MH synchrone
- RH+ 70% / HER2+ 37%
- M+ unique 62%
- Résection > 3 segments
- R0 90% / DC on
- DFS mé
- O
- Co réponse au TTT / RH + / résection R0
- HER2+ (n: 24) : 46% de pCR



Réponse au TTT médical

ORIGINAL PAPER

Liver resection in selected patients with metastatic breast cancer: a single-centre analysis and review of literature

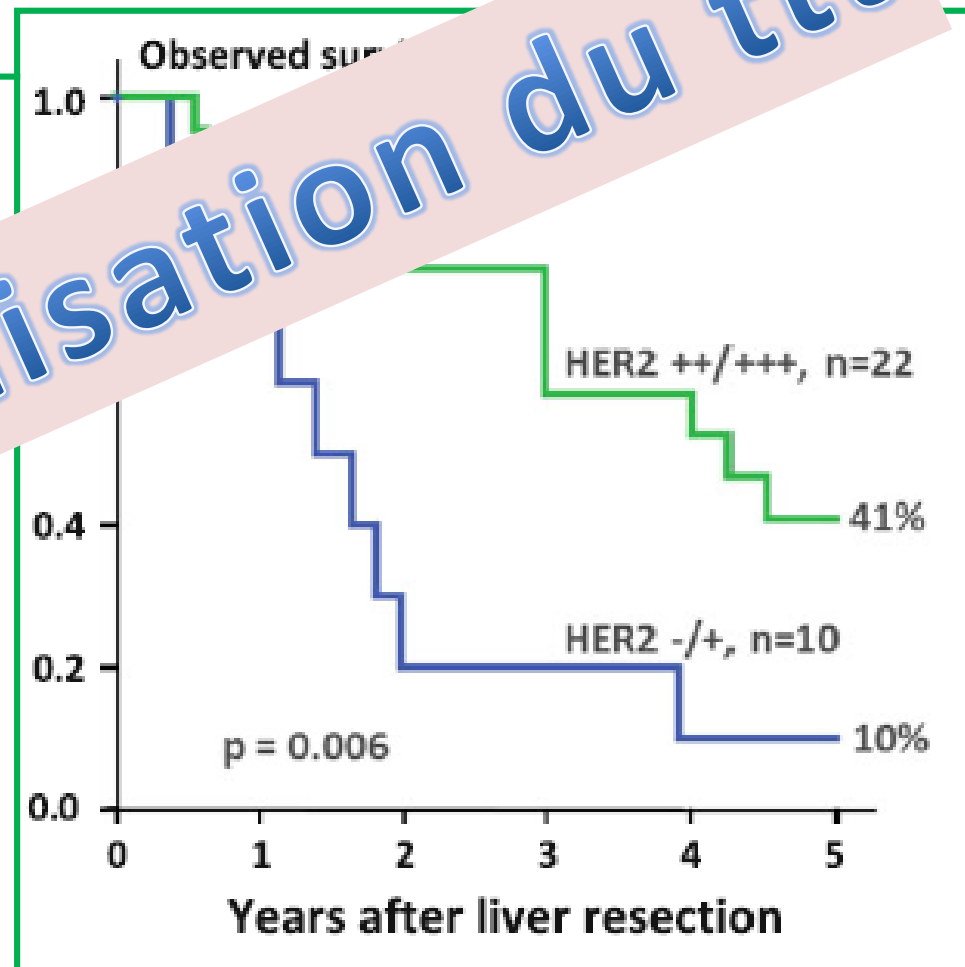
Y. Dittmar · A. Altendorf-Hofmann · S. Schüle ·
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34 résections MHKS

Analyse multivariée

Facteurs

- Extra hépat
- Age > 50

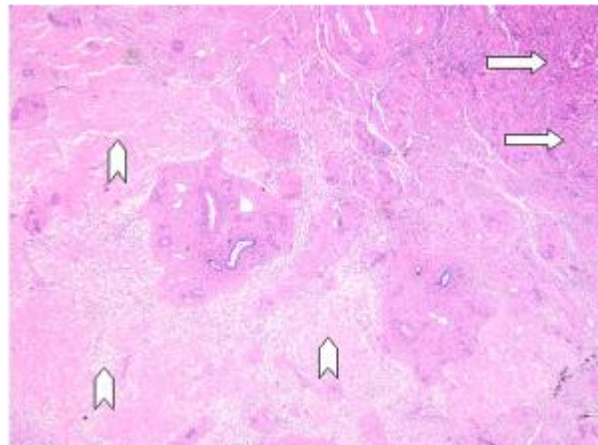
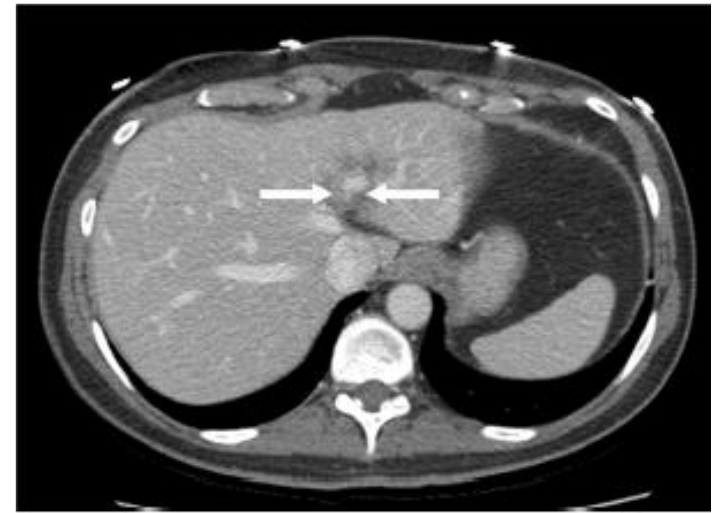


Complete pathologic response of HER2-positive breast cancer liver metastasis with dual Anti-HER2 antagonism

Schoellhammer et al. *BMC Cancer* 2014, **14**:242



F, 54 ans
Gr III, RH-, HER2+
MHKS synchrone
8 cycles:
• Docetaxel
• Trastuzumab
• Pertuzumab
Mastectomie ypT0
Residual CCIS



5 mois > M
ypM0

MHKS Perspectives

- **Sélection des patientes** (5% ? ; 2 procédures/an)
- **Chirurgie: adjuvant du ttt systémique**
- **Réponse tumorale prescrit l'acte opératoire**
- **Prédiction fx des sous-types moléculaires**
- **Exérèse Chirurgicale = Destruction locale**
- **Impact de la pCR ?**

Phase III prospective: MHKS avec bonne réponse au 1° TS ?

Randomisation

- **Destruction**
- **Surveillance**

Les questions

- Impact de la chir sur les malades sélectionnés?
- Peut on rendre résécable des Mt initialement non résécables?
- Résécabilité anat = résécabilité onco ?
- Existe-t-il des RC après CT ?
- La réponse tumorale résume t elle le pronostic ?

MHKS Facteurs mauvais pronostics

			OS	DFS
Treska	14	24 - 13 LR - 11 RFA	Age < 50 IL (< 4 ans) M+ extra hépatique	Age < 50 IL (< 4 ans) Diam > 35 mm RH-
Dittmar	13	34	HER2 - M+ extra hepat Age > 50	

