

SUPPLEMENTARY FILE

Supplementary File

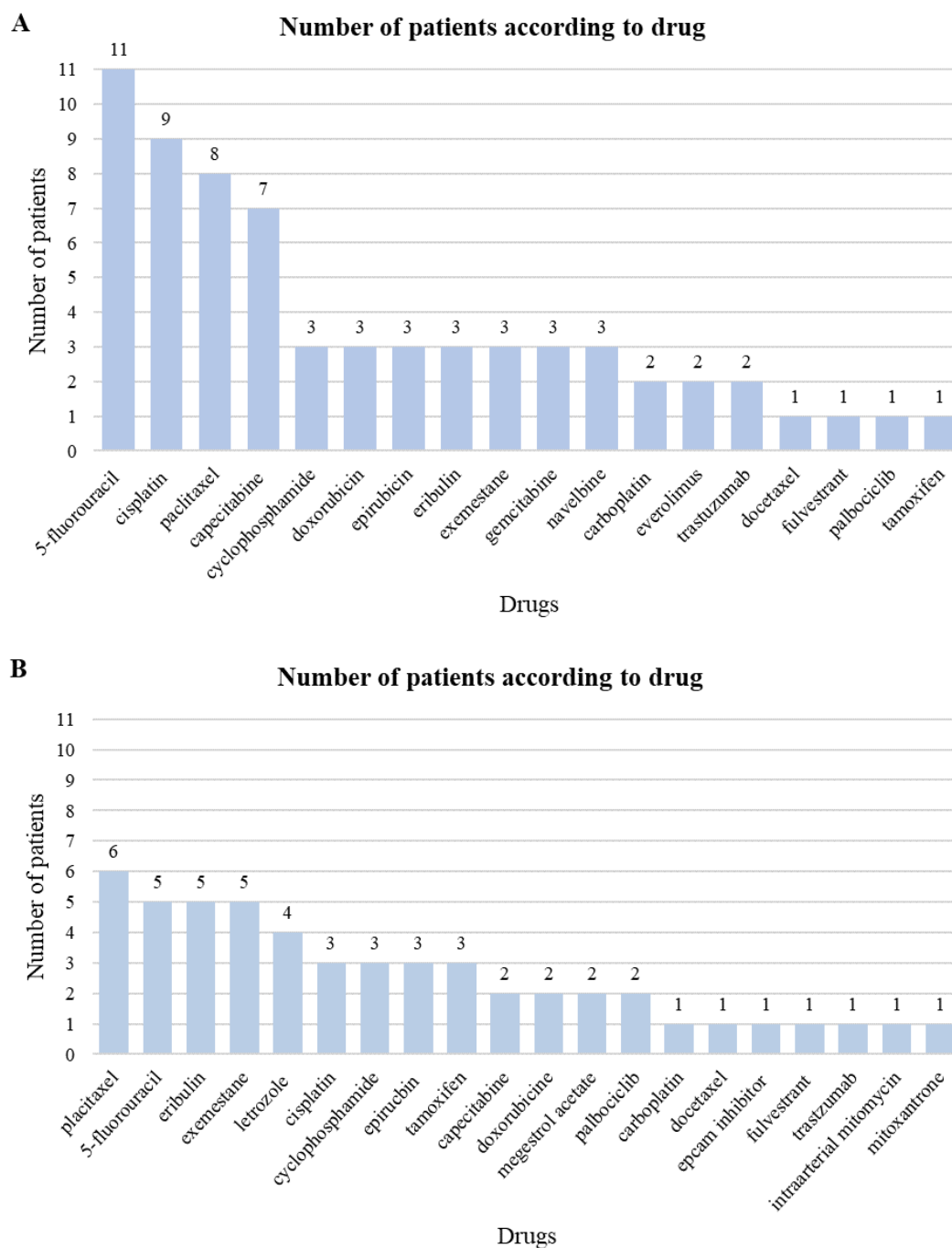


Figure 2: Ongoing treatment during the first description of diffuse liver contour abnormalities (A) and the previous line of treatment (B). The drugs administered in combination were dissociated for analysis.

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Table S-1: Patients reported in the literature with hepatic metastases and who developed liver contour abnormalities during chemotherapy

Authors	No. of cases	Tumor	Year	Journal (Abbreviation)
Shirkoda A. ‡	4	Breast	1994	Abdom Imaging
Young ST.*	22	Breast	1994	Am J Roentgenol
Chandrakar V.*	1	Breast, ductal HER2+	2005	Breast J
Qayyum A. ¶	16	Breast	2007	Clin Imaging
Cervoni J-P.†	1	Breast	2008	Semin Liver Dis
Gomez C. ‡	7	Breast	2008	Clin Transl Oncol
Kang SP.*	1	Pancreas	2008	World J Gastroenterol
Shitara K.	1	Breast	2008	Gan To Kagaku Ryoho
Kobashigawa C.*	1	Esophagus	2010	South Med J
Liu CH.*	1	Breast, HER2+	2011	J Gastroenterol Hepatol Hepatol
Sonnenblick A.*	5	Breast, ductal (4), mixed (1), luminal (4), HER2+ (1)	2011	Oncology
Harry BL.*	1	Thyroid	2012	Curr Oncol
Deprez FC.†	1	Breast	2013	JBR-BTR
Jeong WK.*	2	Breast, ductal	2013	Clin Mol Hepatol
Battisti S.*	1	Settler	2014	Colorectal Cancer Clin
Mizuyama Y.*	2	Breast	2014	Gan To Kagaku Ryoho
Alberti N.†	5	Breast	2015	Diagn Interv Imaging
Adike A.*	6	Breast, luminal (5), HER2+ (1)	2016	Gastroenterol Rep Case
Kumamoto K.*	1	Rectal	2016	Mol Clin Oncol
Mitani S.*	1	Gastric	2016	Case Rep Uncol
Zeina AR.*	1	Breast, luminal	2017	Isr Med Assoc J
Aoyagi T.*	3	Breast, ductal, luminal	2018	Breast Cancer
Kashyap R.*	1	Breast, luminal	2018	Indian J Nucl Med
Leshchinskiy S.*	1	Breast	2018	Abdom Radiol
Geeroms B.*	3	Breast, ductal (2), lobular (1)	2018	J Vasc Interv Radiol
Oliai C.*	37	Breast	2019	Breast Cancer Res Treat

Terms used to describe the clinical presentation:

* Pseudocirrhosis

† Hepar lobatum carcinomatosum

‡ Cirrhosis/Cirrhosis-like

¶ Diffuse nodular appearance resembling cirrhosis

| According to the abstract only, article in Japanese

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Table S-2: Terms for coded and automated text search

Bulge/Dented liver
Irregular liver
Dysmorphic liver
Cirrhotic liver
Liver cirrhosis
Hepatic cirrhosis
Indented liver
Liver fibrosis
Hepatic fibrosis
Hepatic fibrotic evolution
Liver fibrotic evolution
Evolution of fibrotic liver
Liver fibrosis evolution
Cirrhotic evolution after chemotherapy
Post-chemotherapy cirrhosis evolution
Induced cirrhosis
Meta-induced cirrhosis
Portal hypertension
Hypersplenism
Breast cancer
Breast Neoplasia
Mammary tumor
Hepatic metastasis
Liver metastasis
Recurrent liver metastasis
Liver metastasis recurrence
Generalization to the liver
Hepatic generalization
Hepatic meta
Meta liver
Liver extension
Hepatic extension
Metastatic infiltration of the liver
Focal hepatic lesion
Focal liver lesion
Chemotherapy
Chemo
Cycle
Line
Febrile neutropenia

The results identified contained at least one item from each of the four categories. Our research was done in French using equivalent words.

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Table S-3: Oncological management (N=48)	
Local treatments	n (%) (95% CI for %)
Neoadjuvant chemotherapy	5 (10.4) (4.5 – 22.2)
Breast conserving surgery	22 (45.8) (32.6 – 59.7)
Lymphadenectomy	15
Sentinel node	4
None	3
Mastectomy	26 (54.2) (40.3 – 67.4)
Lymphadenectomy	21
Sentinel node	1
None	3
Adjuvant radiotherapy	37 (77.1) (63.5 – 86.7)
Adjuvant chemotherapy	16 (33.3) (21.7 – 47.5)
Adjuvant hormonal therapy	33 (68.8) (54.7 – 80.1)
Metastatic treatments*	n (%) (95% CI for %)
Hormonal therapy	35 (72.9) (59.0 – 83.4)
Tamoxifen	18
Aromatase inhibitors	33
Other	9
Anti-metabolites	33 (68.8) (54.7 – 80.1)
Taxanes	30 (62.5) (48.4 – 74.8)
Anthracyclines	26 (54.2) (36.4 – 63.6)
Alkylating agents	19 (40.0) (27.0 – 53.7)
Platinum based	18 (37.5) (25.2 – 51.6)
Other microtubule inhibitors	17 (35.4) (23.4 – 49.7)
Targeted therapies	9 (18.8) (10.2 – 31.9)
Anti-HER2	5 (10.4) (4.5 – 22.2)
Topoisomerase inhibitors	1 (2.1) (0.4 – 10.9)
Metastatic data (N=48)	
Median time from primitive to first metastatic lesion - years (95% CI)	4.62 (3.00 – 6.10)
Median time from primitive to first hepatic lesion - years (95% CI)	6.12 (3.15 – 8.21)
Average number of metastatic sites - average ± SD	2.19 ± 1.28
Metastasis site (excluding liver)	n (%) (95% CI for %)
Bone	41 (85.4) (72.8 – 92.8)
Nodal (excluding axillary)	15 (31.3) (19.9 – 45.3)
Pleuropulmonary	12 (25.0) (14.9 – 38.8)
Peritoneal carcinomatosis	10 (20.8) (11.7 – 34.3)
Brain	10 (20.8) (11.7 – 34.3)
Meninges	3 (6.3) (2.1 – 16.8)
Spleen	3 (6.3) (2.1 – 16.8)
Contralateral breast	2 (4.2) (1.2 – 14.0)
Adrenal gland	2 (4.2) (1.2 – 14.0)
Orbit	1 (2.1) (0.4 – 10.9)
Ovary	1 (2.1) (0.4 – 10.9)

* Treatments administered until the development of liver contour abnormalities

SD = standard deviation

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N = number of patients analyzed

n = number of patients in the category

95% CI= 95% confidence interval

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Table S-4: Most common radiological terms used to describe liver contour abnormalities (N=48)

Term	n (%) (95% CI for %)
Bulge/Dented	39 (81.3) (68.1 – 89.8)
Irregular	36 (75.0) (61.2 – 85.1)
Dysmorphic	27 (56.3) (42.3 – 69.3)
Cirrhosis/cirrhotic	16 (33.3) (21.7 – 47.5)
Lobular	15 (31.3) (19.9 – 45.3)
Atrophic	9 (18.8) (10.2 – 31.9)
Nodular	5 (10.4) (4.5 – 22.2)
Hepar lobatum carcinomatosum	4 (8.3) (3.3 – 19.6)
Pseudocirrhosis	2 (4.2) (1.2 – 14.0)

n = number of patients in the category

N = number of patients analyzed

95% CI= 95% confidence interval