

# **Role of Systemic Chemotherapy in the Radical Approach to Peritoneal Metastases**

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# No disclosures

# SAVE THE DATE

## 10<sup>th</sup> International Congress on Peritoneal Surface Malignancies

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Preoperative systemic chemotherapy			
Yes	275	19.2	0.35
No	231	20.4	

Postoperative systemic chemotherapy			
Yes	204	25.2	0.021
No	302	15.6	

**Cytoreductive surgery combined with perioperative intraperitoneal chemotherapy for the management of peritoneal carcinomatosis from colorectal cancer: A multi-institutional study.**

Glehen O, Kwiatkowski F, Sugarbaker PH, Elias D, et al.

*Journal of Clinical Oncology*, 15 August 2004

# Multivariate Analysis of Prognostic Factors for Overall Survival of 523 Patients Treated With Cytoreductive Surgery Combined With Perioperative Intraperitoneal Chemotherapy

Variable	Multivariate Analysis		
	P	Hazard Ratio	95% CI
Peritoneal cancer index <sup>*</sup>	< .001	1.052	1.029 to 1.076
Completeness of surgery <sup>†</sup>	.07	1.398	0.970 to 2.014
Positive lymph nodes <sup>‡</sup>	.02	1.534	1.058 to 2.224
Adjuvant chemotherapy <sup>‡</sup>	.002	0.578	0.407 to 0.820

- \* For each additional point in the peritoneal cancer index, the risk of death of the relative risk increases (ie, by 5.2%).  
 † Completeness was divided into three categories: completeness of the cancer resection (CCR)-0, CCR-1, and CCR-2. Passing from one category to another increases the risk of death by 39%.  
 ‡ Compared in two classes (ie, yes or no).

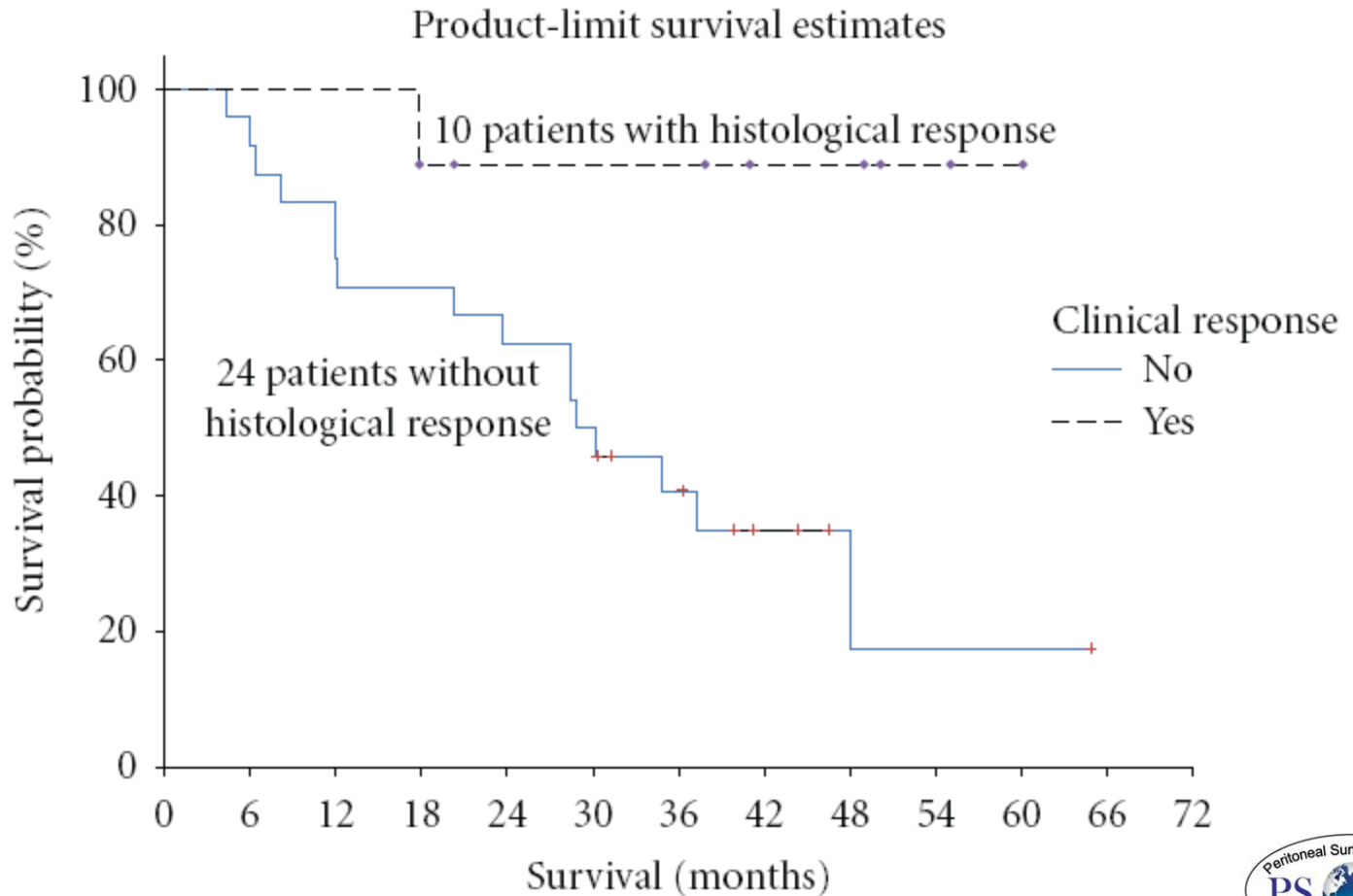
## Peritoneal colorectal carcinomatosis treated with surgery and perioperative intraperitoneal chemotherapy: Retrospective analysis of 523 patients from a multicentric French study.

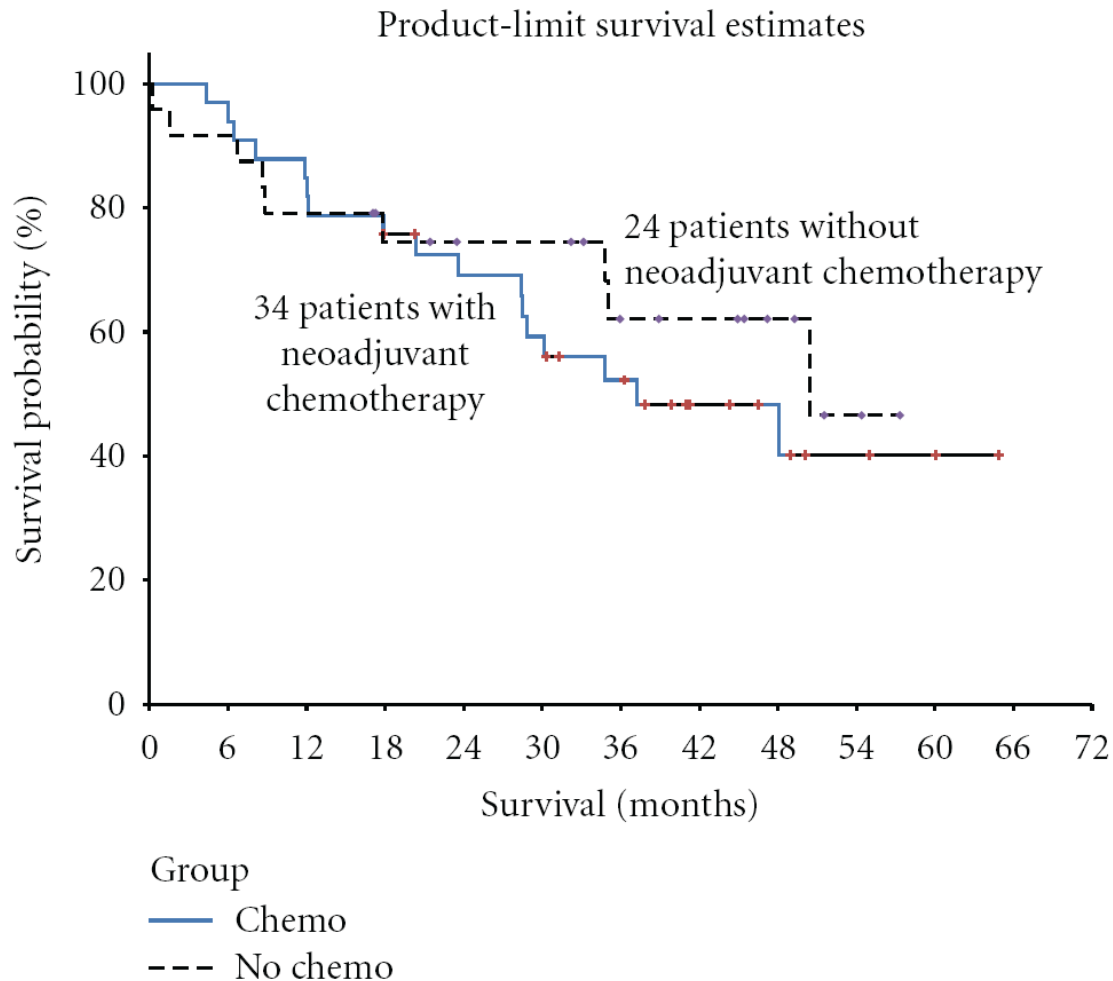
Elias D, Gilly FN, Boutitie F, et al.

*Journal of Clinical Oncology*, 1 January 2010

# Response to Neoadjuvant Chemotherapy

Bijelic L, Kumar AS, Stuart OA, Sugarbaker PH. Systemic chemotherapy prior to cytoreductive surgery and HIPEC for carcinomatosis from appendix cancer: Impact on perioperative outcomes and short-term survival. **Gastroenterol Res Pract** 2012





**Systemic chemotherapy prior to cytoreductive surgery and HIPEC for carcinomatosis from appendix cancer: Impact on perioperative outcomes and short-term survival.**

Bijelic L, Kumar AS, Stuart OA, Sugarbaker PH

*Gastroenterol Res Pract*, 26 Jul 2012

# **Pathological Response to Neoadjuvant Chemotherapy: A New Prognosis Tool for the Curative Management of Peritoneal Colorectal Carcinomatosis**

Passot G, You B, Boschetti G, Fontaine J, Isaac S, Decullier E, Maurice C, Vaudoyer D, Gilly FN, Cotte E, Glehen O.

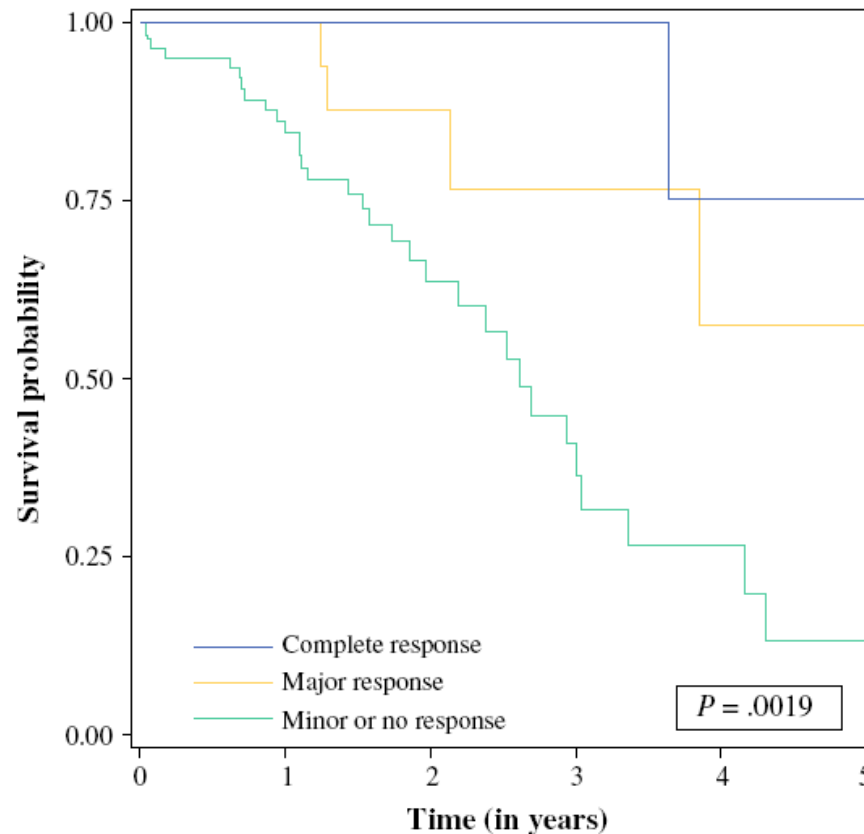
Ann Surg Oncol. 2014 Aug;21(8):2608-14.

Pathological response was based on the determination of the percentage of viable tumor cells with respect to the area of each nodule, independent of the presence of chemotherapy-related tissue injury, fibrosis, or necrosis. Three groups were created for statistical analysis; no residual cancer cells in all specimens (complete response), 1 to 49% residual cancer cells (major response), and >50% residual cancer cells (minor or no response).



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Patients at risk	0	1	2	3	4	5
Complete response	12	10	7	5	2	2
Major response	23	16	11	5	3	2
Minor or no response	80	54	21	9	4	1

Overall survival according to pathological response

# Conclusion:

Complete or near complete response (10-20% of patients) to systemic chemotherapy outperforms the effects of CRS and HIPEC for colorectal cancer or high grade appendiceal neoplasms. The degree of pathological response can be assessed and represented as a new prognostic indicator for treatment with curative intent.

# Concept – Neoadjuvant Chemotherapy PRN (solo necessario)

- NAC only used to select from a very poor prognosis group of patients those who respond and therefore may benefit from CRS and HIPEC (gastric cancer with peritoneal metastases).

# Response to Neoadjuvant Chemotherapy

Borderline resectable patients given neoadjuvant chemotherapy separated into 3 groups

No Response (80%)	Partial Response (20%)	Complete Response (10%)
Palliative benefit from resection, HIPEC of no benefit	Expect benefit from CRS and HIPEC	CRS of value for staging, benefit from HIPEC questionable