

# Immunoscore is the most powerful parameter predicting time to recurrence and disease-free survival in T4N0 stage II colon cancer patients

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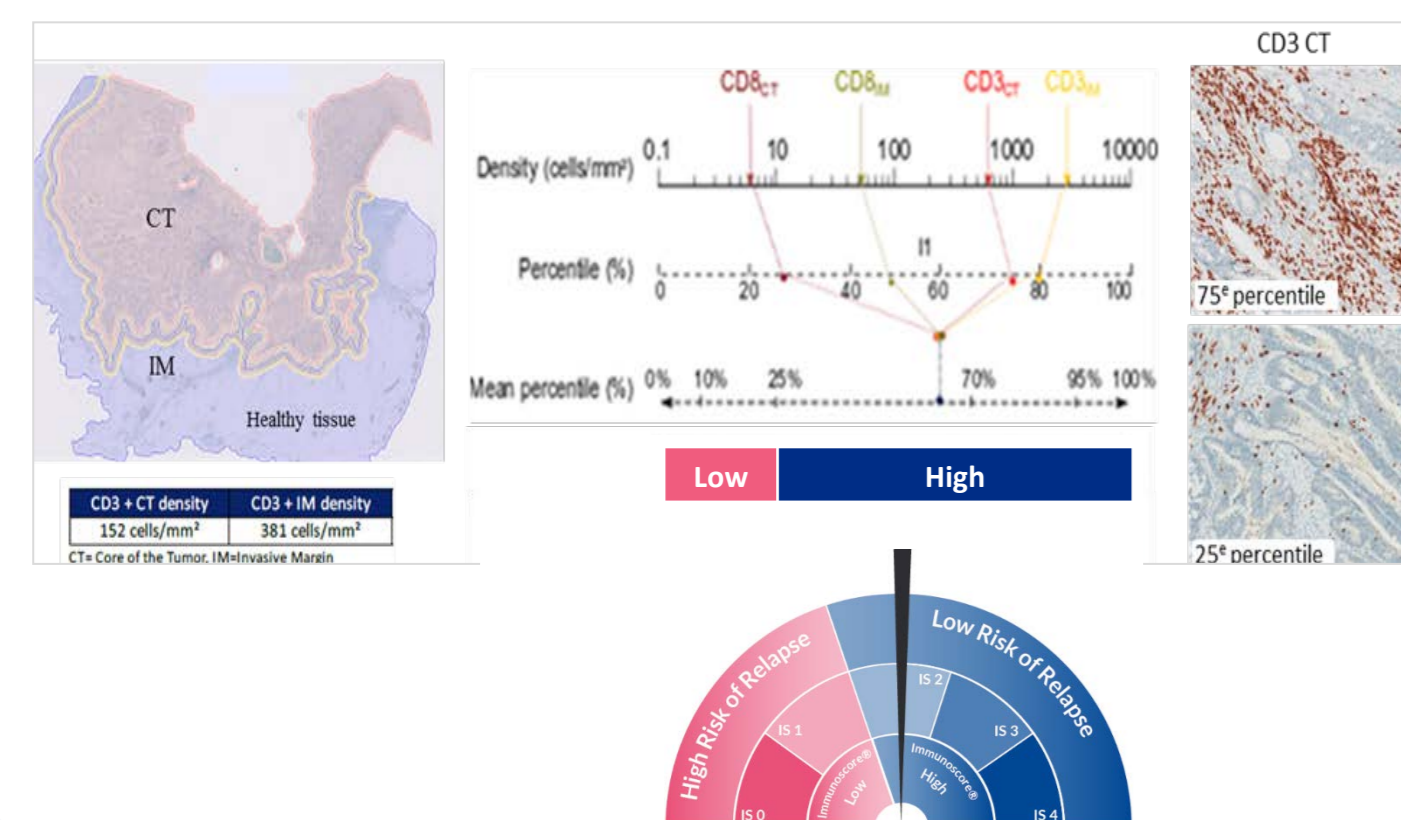
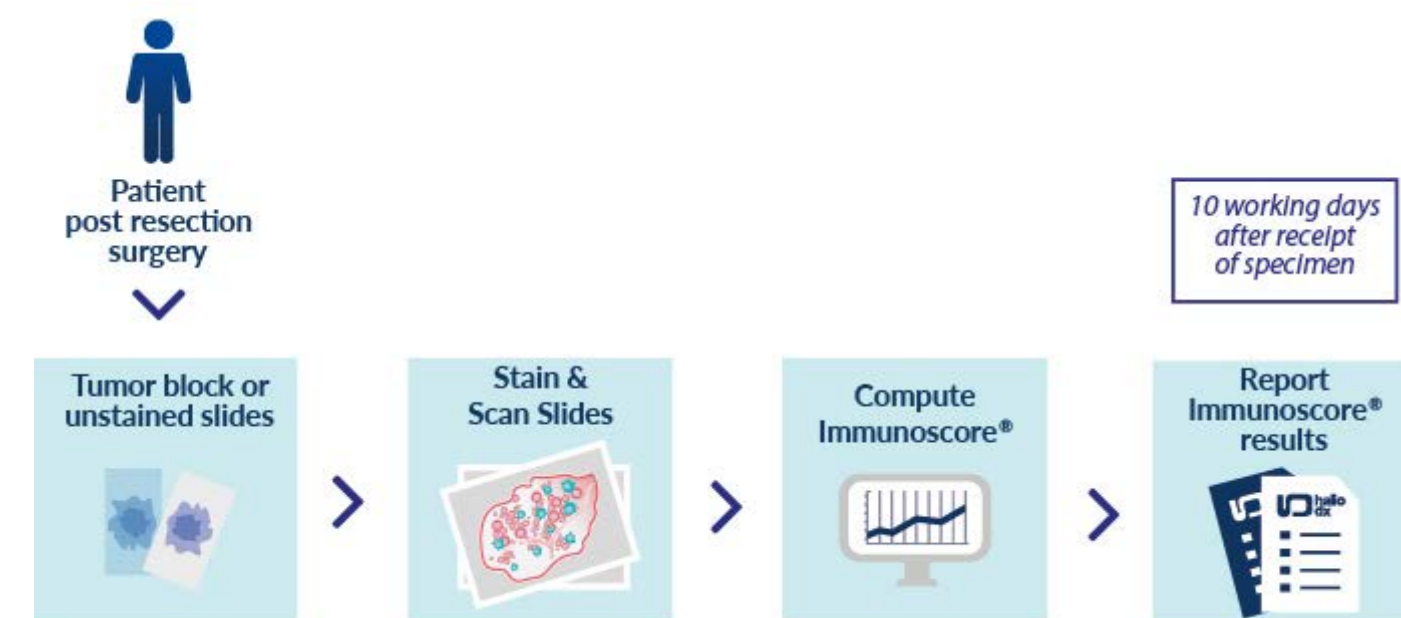
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## Background

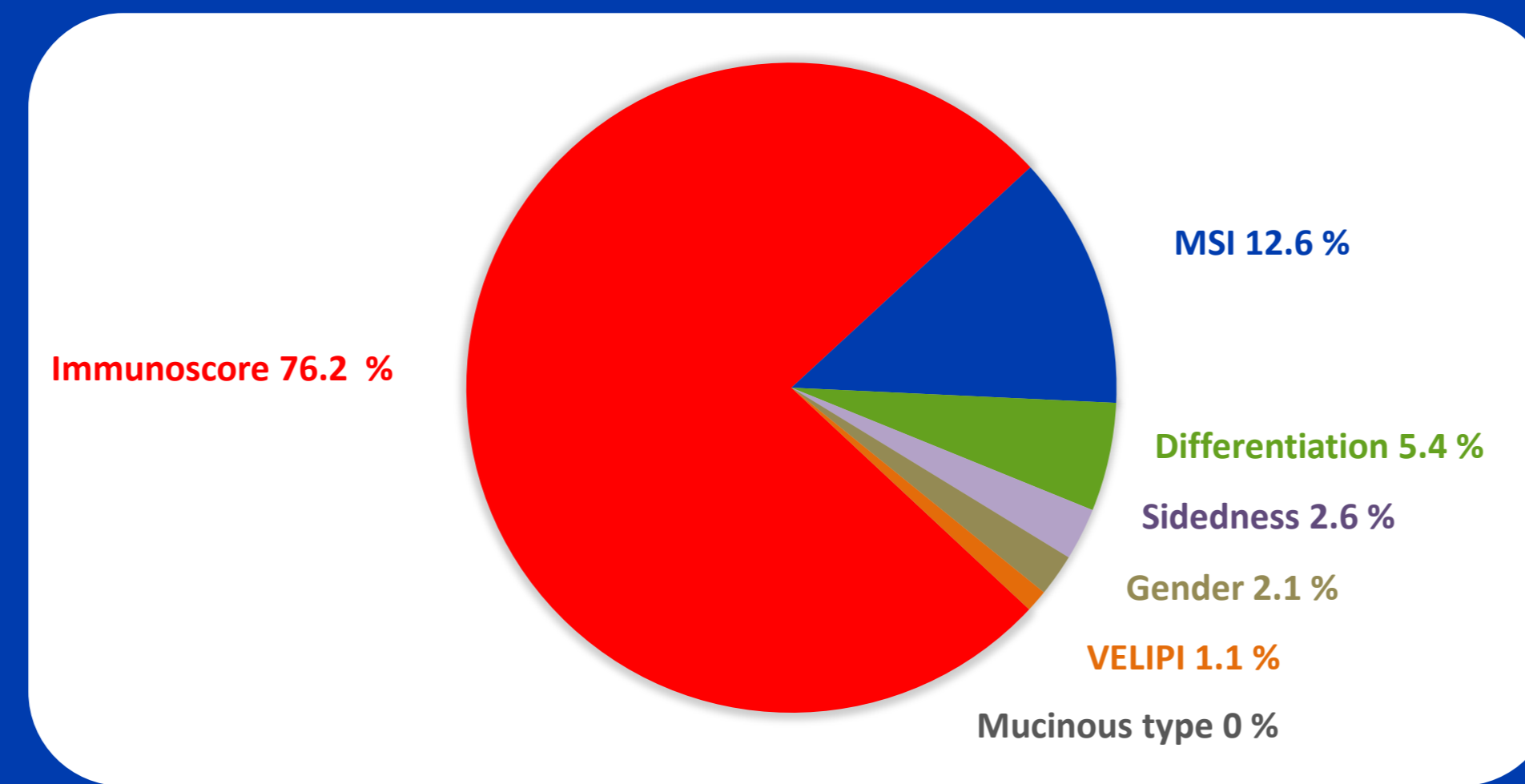
- Risk assessment is particularly important to decide when to propose an **adjuvant treatment for Stage II Colon Cancer (CC) patients**.
- The current tumor risk features are imperfect and additional risk factors are needed.
- No specific randomized trial has been designed to address the benefit of chemotherapy in High-risk Stage II CC patients.
- in Immunoscore® (IS) by measuring the host immune response at the tumor site could be a good tool to better define individual patient prognosis.

## Methods

- 208 T4N0 Stage II CC** patients from the international Immunoscore consortium study (n=2681) (Pagès et al. *The Lancet* 2018)
- Immunoscore test:



## Immunoscore is the most powerful parameter to predict recurrence risk in T4N0 patients



### Immunoscore shows the highest contribution to predict relapse

## Conclusions:

- Immunoscore has been shown previously to be significantly prognostic in stage II patients<sup>1</sup>; among the untreated patients, IS identified a proportion of clinicopathologically high-risk patients with IS-high tumors (69.5%) with comparable time to recurrence (TTR) to clinicopathologically low-risk patients<sup>2</sup>; these patients could potentially be spared chemotherapy
- Here we show that Immunoscore significantly (p<0.0001) predicts TTR in the T4N0 patients (n=208), and in the subgroup of untreated T4N0 patients (n=132), with the highest contribution to the risk (>76%)
- The prognostic power of IS in stage II CC may enhance risk assessment and decision-making, improving patient management and outcome

- Pagès et al. *Lancet*. 2018 May 26; 391(10135):2128-2139;
- Galon et al. ASCO Gastrointestinal Cancers Symposium 2019.

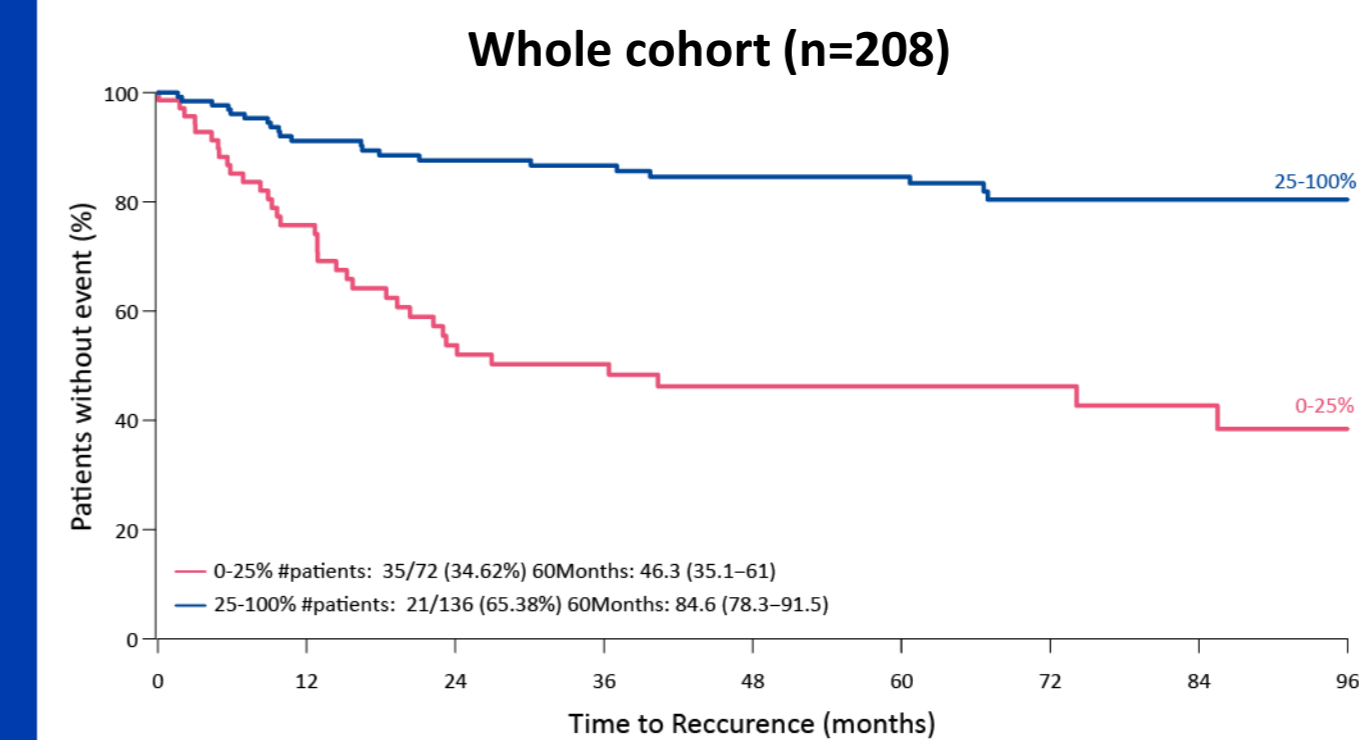


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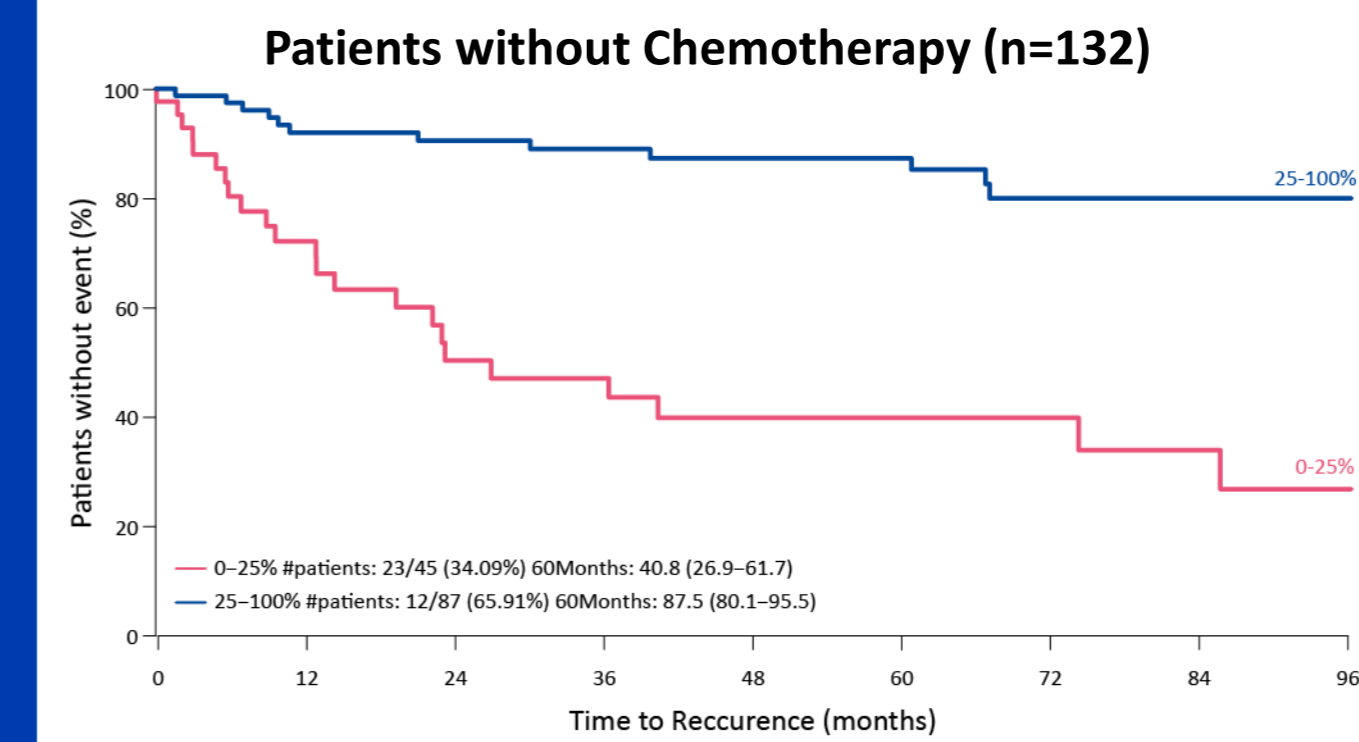
## Results

- 136 T4N0 Stage II patients were IS-High (65.4 %) and 72 were IS-Low (34.6 %)
- Patients with High Immunoscore had a significantly prolonged survival compared to Low-IS pts

### TTR according to Immunoscore (IS-Low vs IS-High) in T4N0 CC Patients



**5 yr-TTR**  
**IS-High: 84.6%** (78.3-91.5) vs **IS-Low: 46.3%** (35.1-61)  
 HR<sub>Hi vs Lo</sub> = **0.21** (95% CI 0.11-0.4); p<0.0001  
**Restricted Mean Survival Time (RMST) difference**  
**80.9 mths** (95% CI 51.1-110.6) p<0.0001



**5 yr-TTR**  
**IS-High: 87.5%** (80.1-95.5) vs **IS-Low: 40.8%** (26.9-61.7)  
 HR<sub>Hi vs Lo</sub> = **0.12** (95% CI 0.05-0.28); p<0.0001  
**RMST difference**  
**99.3 mths** (95% CI 61.6-136.9) p<0.0001

### Disease free survival (DFS) according to Immunoscore in T4N0 CC Patients

**5 yr-DFS Whole cohort**  
**IS-High: 70.5%** (62.7-79.1) vs **IS-Low: 38.5%** (28.2-52.5)  
 HR<sub>Hi vs Lo</sub> = **0.31** (95% CI 0.19-0.49); p<0.0001  
**RMST difference: 60.4 mths** (32.6-88.1); p<0.0001

**5 yr-DFS Patients without Chemotherapy**  
**IS-High: 68.4%** (58.8-79.5) vs **IS-Low: 29.1%** (17.7-47.8)  
 HR<sub>Hi vs Lo</sub> = **0.25** (95% CI 0.15-0.44); p<0.0001  
**RMST difference: 60.8 mths** (29.4-92.3); p<0.0001

### Cox Multivariable Analysis

Cox Multivariate Analysis	TTR	
	HR (95% CI)	Wald P-Value
Gender	1.33 (0.53-3.30)	0.54
Sidedness	1.32 (0.49-3.57)	0.58
MSI	0.42 (0.12-1.48)	0.18
Differentiation (mod vs well)	0.49 (0.10-2.35)	0.38
Differentiation (poor vs well)	0.53 (0.06-4.53)	0.56
Mucinous colloid	1.00 (0.35-2.85)	0.99
VELIPI	0.79 (0.25-2.46)	0.69
<b>Immunoscore</b>	<b>0.15 (0.05-0.46)</b>	<b>0.0009</b>

**Immunoscore was the only remaining significant parameter**