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

Methods
- 208 T4N0 Stage II CC patients from the international Immunoscore consortium study (n=2681) (Pagès et al. The Lancet 2018)
- Immunoscore test:
  - MSI 12.6%
  - Differentiation 5.4%
  - Sidedness 2.6%
  - Gender 2.1%
  - VULPI 1.1%
  - Mucinous type 0%

Immunoscore shows the highest contribution to predict relapse

Conclusions:
- Immunoscore has been shown previously to be significantly prognostic in stage II patients; among the untreated patients, IS identified a proportion of clinically pathologically high-risk patients with IS-high tumors (69.5%) with comparable time to recurrence (TTR) to clinically pathologically low-risk patients; 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.

Results
- 136 T4N0 Stage II patients were IS-High (65.4%) and 72 were IS-Low (34.6%) patients
- 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

Whole cohort (n=208)
- HRHi = 0.21 (95% CI 0.11-0.40); p<0.0001
- Restricted Mean Survival Time (RMST) difference 80.9 mths (95% CI 51.1-110.6) p<0.0001

Patients without Chemotherapy (n=132)
- HRHi = 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

5 yr-TTR
- IS-High: 84.6% (78.3-91.5) vs IS-Low: 46.3% (35.1-61.6)
- RMST difference: 14.2 mths (95% CI 7.7-20.7) p<0.0001

5 yr-DFS Patients without Chemotherapy
- IS-High: 87.5% (80.1-95.5) vs IS-Low: 40.8% (26.9-61.7)
- RMST difference: 46.7 mths (95% CI 35.1-58.2) p<0.0001

Cox Multivariate Analysis

<table>
<thead>
<tr>
<th>Variable</th>
<th>HR (95% CI)</th>
<th>P-value</th>
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</thead>
<tbody>
<tr>
<td>Gender</td>
<td>1.33 (1.55-3.20)</td>
<td>0.54</td>
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<tr>
<td>Sidedness</td>
<td>3.22 (1.49-6.97)</td>
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<tr>
<td>VULPI</td>
<td>0.02 (1.2-1.48)</td>
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<tr>
<td>Differentiation</td>
<td>0.49 (1.0-2.15)</td>
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<td>Mucinous type</td>
<td>0.53 (0.11-4.35)</td>
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<tr>
<td>Mucinous type</td>
<td>0.50 (0.25-0.99)</td>
<td>0.001</td>
</tr>
<tr>
<td>Immunoscore</td>
<td>0.15 (0.05-0.46)</td>
<td>0.0001</td>
</tr>
</tbody>
</table>

Immunoscore was the only remaining significant parameter