### Supplementary Table 1. Comparison of the HGP and the TME by clinical risk score.

|                  | All patients |                  |                  |                  |                  |
|------------------|--------------|------------------|------------------|------------------|------------------|
|                  | Low risk     |                  |                  |                  |                  |
|                  | (CRS 0-2)    |                  |                  |                  |                  |
|                  | n = 158 (%)  |                  |                  |                  |                  |
|                  | High risk    |                  |                  |                  |                  |
|                  | (CRS 3-5)    |                  |                  |                  |                  |
|                  | n = 33 (%)   |                  |                  |                  |                  |
| **Histopathological growth pattern** | **dHGP**  | 41 (26) | 4 (12) | 0.089 |
|                  | **non-dHGP** | 117 (74) | 29 (88) |                  |                  |

**Cohort A: semi-quantitative IHC**

|                  | n = 101 (%)  |                  |                  |                  |                  |
|                  | n = 16 (%)   |                  |                  |                  |                  |
| **Histopathological growth pattern** | **dHGP**  | 30 (30) | 2 (12) | 0.151 |
|                  | **non-dHGP** | 71 (70) | 14 (88) |                  |                  |
| CD8 - high peritumoural |                      | 67 (66) | 10 (62) | 0.764 |
| CD8 - high stromal |                      | 48 (48) | 11 (69) | 0.123 |
| CD8 - high intratumoural |                      | 36 (36) | 6 (38) | 0.886 |
| CD4 - high peritumoural |                      | 28 (28) | 2 (12) | 0.195 |
| CD4 - high stromal |                      | 17 (17) | 3 (19) | 0.877 |
| FoxP3 - high peritumoural |                      | 73 (73) | 11 (69) | 0.724 |
| FoxP3 - high stromal |                      | 63 (64) | 9 (56) | 0.571 |

**Cohort B: quantitative IHC**

|                  | n = 22 (%)  |                  |                  |                  |                  |
|                  | n = 8 (%)   |                  |                  |                  |                  |
| **Histopathological growth pattern** | **dHGP**  | 7 (32) | 2 (25) | 0.719 |
|                  | **non-dHGP** | 15 (68) | 6 (75) |                  |                  |
| CD8 - intratumoural counts/mm² - (median [IQR]) |                      | 50.9 [26.1, 77.4] | 76.4 [55.8, 168.0] | 0.159 |
| CD8 - peritumoural counts/mm² - (median [IQR]) |                      | 918.2 [694.6, 1093.3] | 892.0 [702.7, 1257.4] | 0.851 |
| FoxP3 - intratumoural counts/mm² - (median [IQR]) |                      | 24.1 [11.8, 46.8] | 32.0 [5.4, 103.0] | 0.888 |
| FoxP3 - peritumoural counts/mm² - (median [IQR]) |                      | 126.5 [75.1, 254.4] | 150.2 [52.5, 366.2] | 0.851 |

**Cohort C: flow cytometry (fresh tumour tissues)**

|                  | n = 57 (%)  |                  |                  |                  |                  |
|                  | n = 17 (%)  |                  |                  |                  |                  |
| **Histopathological growth pattern** | **dHGP**  | 10 (18) | 2 (12) | 0.570 |
|                  | **non-dHGP** | 47 (82) | 15 (88) |                  |                  |
| % CD8+ T-cells* - (median [IQR]) |                      | 27.2 [22.3, 37.0] | 28.5 [24.5, 34.4] | 0.928 |
| % CD4+ T-cells* - (median [IQR]) |                      | 62.0 [47.2, 69.2] | 60.5 [56.7, 69.9] | 0.363 |
| % CD4+ FoxP3- T-cells* - (median [IQR]) |                      | 51.3 [38.5, 61.0] | 54.7 [50.6, 59.9] | 0.317 |
| % CD4+ FoxP3+ T-cells* - (median [IQR]) |                      | 6.7 [4.0, 10.0] | 8.8 [5.6, 11.4] | 0.371 |

* Expressed as percentage of CD3+ T-cells gate

Abbreviations in alphabetical order: CRS: clinical risk score; dHGP: desmoplastic type histopathological growth pattern; HGP: histopathological growth pattern; IHC: immunohistochemistry; IQR: interquartile range; non-dHGP: non-desmoplastic type histopathological growth pattern; TME: tumour microenvironment.