

**Table S1:** Antibodies used for the mismatch repair immunohistochemistry assay

| Antibody | Clone   | Source                       | Antigen retrieval              | Visualization system | Dilution        |
|----------|---------|------------------------------|--------------------------------|----------------------|-----------------|
| MSH2     | FE11    | Oncogene/CalBiochem          | Dako retrieval solution (pH 9) | Dako EnVision+       | 1:100 overnight |
| MSH6     | 44      | BD Transduction Laboratories | Dako retrieval solution (pH 9) | Dako EnVision+       | 1:100 overnight |
| MLH1     | G168-15 | BD Pharmingen                | Dako retrieval solution (pH 9) | Dako EnVision+       | 1:50 overnight  |
| PMS2     | C-20    | Santa Cruz Biotechnology     | Dako retrieval solution (pH 9) | Dako EnVision+       | 1:100 overnight |

**Table S2:** PD-L1 expression stratified by proportion of immunohistochemical staining

| Proportion of positively stained cells | Number of cases (%) |
|--|---------------------|
| 0%                                     | 720 (62.7)          |
| 1-20%                                  | 91 (7.9)            |
| 21-40%                                 | 102 (8.9)           |
| 41-60%                                 | 89 (7.7)            |
| 61-80%                                 | 81 (7.1)            |
| 81-100%                                | 65 (5.7)            |