

**Table S2.** Univariate COX analysis per tumor type

| Parameter                 | Categories                 | N patients  |
|---------------------------|----------------------------|-------------|
| <b>Colorectal cancer</b>  |                            |             |
| MMR status                | Negative vs. Positive      | 114 vs. 877 |
| MLH1                      | Negative vs. Positive      | 63 vs. 909  |
| PMS2                      | Deficiency vs. Proficiency | 69 vs. 910  |
| MSH2                      | Negative vs. Positive      | 30 vs. 957  |
| MSH6                      | Negative vs. Positive      | 23 vs. 959  |
| MLH1/PMS2 both negative   | Deficient vs. Proficient   | 49 vs. 916  |
| MSH2/MSH6 both negative   | Deficient vs. Proficient   | 13 vs. 971  |
| <b>Endometrial cancer</b> |                            |             |
| MMR status                | Negative vs. Positive      | 80 vs. 87   |
| MLH1                      | Negative vs. Positive      | 20 vs. 132  |
| PMS2                      | Deficiency vs. Proficiency | 18 vs. 118  |
| MSH2                      | Negative vs. Positive      | 58 vs. 109  |
| MSH6                      | Negative vs. Positive      | 4 vs. 155   |
| MLH1/PMS2 both negative   | Deficient vs. Proficient   | 10 vs. 138  |
| MSH2/MSH6 both negative   | Deficient vs. Proficient   | 2 vs. 157   |

\* Firth's correction was used due to 0 events.

▲ Stratified by protocol

| COX        |       |             |              |
|------------|-------|-------------|--------------|
| N events   | HR^   | 95% CI      | Wald's p     |
| 27 vs. 252 | 0.73  | 0.49-1.09   | 0.13         |
| 14 vs. 262 | 0.68  | 0.40-1.17   | 0.17         |
| 16 vs. 261 | 0.74  | 0.45-1.23   | 0.24         |
| 6 vs. 271  | 0.59  | 0.26-1.32   | 0.2          |
| 6 vs. 270  | 0.79  | 0.35-1.78   | 0.58         |
| 10 vs. 264 | 0.62  | 0.33-1.17   | 0.14         |
| 2 vs. 274  | 0.43  | 0.11-1.74   | 0.24         |
| <hr/>      |       |             |              |
| 12 vs. 30  | 0.38  | 0.20-0.76   | <b>0.006</b> |
| 6 vs. 33   | 1.21  | 0.50-2.91   | 0.67         |
| 5 vs. 35   | 1.07  | 0.42-2.74   | 0.89         |
| 6 vs. 36   | 0.26  | 0.11-0.61   | <b>0.002</b> |
| 1 vs. 41   | 0.81  | 0.11-5.89   | 0.83         |
| 4 vs. 35   | 1.91  | 0.68-5.39   | 0.22         |
| 0 vs. 42   | 0.68* | 0.04-11.54* | 0.79*        |