Supplementary Information

Detection of microsatellite instability with Idylla MSI assay in colorectal and endometrial cancer

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**Supplementary Table S1** Characteristics of the performance of Idylla MSI test in respect of variable tumor cell percentage

| Case | Tumor cells (%) | Tissue area (mm²) | ACVR2A | BTBD7 | DIDO1 | MRE11 | RYR3 | SEC31A | SULF2 | Number of mutated biomarkers | Idylla MSI analysis |
|------|-----------------|------------------|--------|-------|-------|-------|------|--------|-------|-----------------------------|-------------------|
| B04  | 15              | 150              | -      | -     | -     | -     | -    | -      | -     | 0/7                         | MSS               |
|      | 30              | 300              | -      | -     | +     | +     | -    | -      | -     | 2/7                         | MSI               |
|      | 60              | 50               | -      | -     | +     | +     | -    | -      | -     | 2/7                         | MSI               |
| B05  | 10              | 150              | -      | -     | -     | -     | -    | -      | -     | 0/7                         | MSS               |
|      | 30              | 140              | -      | +     | -     | -     | -    | -      | +     | 2/7                         | MSI               |
|      | 70              | 80               | -      | +     | +     | +     | -    | +      | +     | 5/7                         | MSI               |
| B09  | 15              | 300              | -      | -     | -     | -     | -    | -      | -     | 0/7                         | MSS               |
|      | 30              | 25               | -      | +     | +     | +     | +    | +      | +     | 6/7                         | MSI               |
| B10  | 15              | 270              | -      | -     | -     | -     | -    | -      | -     | 0/7                         | MSS               |
|      | 50              | 270              | +      | +     | +     | +     | +    | -      | +     | 6/7                         | MSI               |
| B35  | 15              | 150              | -      | -     | -     | -     | -    | -      | -     | 0/7                         | MSI               |
|      | 40              | 60               | +      | -     | -     | +     | -    | -      | +     | 3/7                         | MSI               |
| B37  | 15              | 300              | -      | +     | +     | -     | +    | -      | -     | 3/7                         | MSI               |
|      | 25              | 100              | -      | -     | +     | -     | +    | -      | -     | 2/7                         | MSI               |
|      | 60              | 25               | -      | +     | +     | -     | +    | +      | +     | 5/7                         | MSI               |
| B38  | 15              | 300              | -      | -     | -     | -     | -    | -      | -     | 0/7                         | MSS               |
|      | 25              | 150              | -      | -     | -     | -     | -    | -      | -     | 0/7                         | MSS               |
|      | 50              | 50               | -      | -     | +     | +     | -    | -      | +     | 3/7                         | MSI               |
| B54  | 15              | 300              | -      | +     | +     | +     | +    | +      | +     | 6/7                         | MSI               |
|      | 25              | 150              | -      | +     | +     | +     | +    | +      | +     | 6/7                         | MSI               |
|      | 60              | 55               | -      | +     | +     | +     | +    | +      | +     | 6/7                         | MSI               |

MSI, microsatellite instable; MSS, microsatellite stable.
Supplementary Fig. S1 Endometrial cancer with heterogeneous loss of MLH1 (case B107). On left is shown solid component with intact MLH1 expression, whereas on the right is glandular endometrioid component with loss of MLH1 expression in cancer cells and intact MLH1 expression in intraepithelial lymphocytes (a concomitant loss of PMS2 protein expression was also detected in cancer cells, whereas MSH2 and MSH6 protein expression was intact, not shown). Original magnification 200x, DAB was used as a chromogen.