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Paired Primary and Metastatic Tumor Analysis of Somatic Mutations in Synchronous and Metachronous Colorectal Cancer

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Supplementary Data

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Supplementary Table 1. Clinicopathologic characteristics of colorectal patients within the tissue bank with OncoMap evaluation

| Characteristic | No. (n=105) |
|--|-------------|
| Sex | |
| Male | 70 (66.7) |
| Female | 35 (33.3) |
| Age (yr) | |
| Median (range) | 58 (32-86) |
| Histology | |
| Well differentiated | 14 (13.3) |
| Moderate differentiated | 85 (81.0) |
| Poor differentiated | 5 (4.8) |
| Mucinous | 1 (1.0) |
| Microsatellite instability ^{a)} | |
| Microsatellite stable | 96 (96.0) |
| Microsatellite instable | 4 (4.0) |
| Loss of heterozygosity ^{a)} | 31 (31.0) |
| Location of primary disease | |
| Ascending | 22 (21.0) |
| Transverse | 5 (4.8) |
| Descending | 42 (40.0) |
| Rectum | 36 (34.3) |
| Stage at initial presentation | |
| I | 7 (6.7) |
| II | 26 (24.8) |
| III | 35 (33.3) |
| IV | 37 (35.2) |
| pT | |
| T1 | 5 (4.8) |
| T2 | 10 (9.5) |
| T3 | 76 (72.4) |
| T4 | 14 (13.3) |
| pN | |
| N0 | 40 (38.1) |
| N1 | 42 (40.0) |
| N2 | 23 (21.9) |
| pM | |
| M0 | 68 (64.8) |
| M1a | 26 (24.8) |
| M1b | 11 (10.5) |
| Resection | (1012) |
| R0 | 94 (89.5) |
| R1 | 6 (5.7) |
| R2 | 5 (4.8) |

Values are presented as number (%) unless otherwise indicated. ^{a)}Microsatellite status and loss of heterozygosity were not assessed in five patients.

Supplementary Table 2. Mutational profile of colorectal patients according to stage of primary lesions within the tissue bank with OncoMap evaluation

| Gene | Stage I (n=7) | Stage II (n=26) | Stage III (n=35) | Stage IV (n=37) |
|--------|---------------|-----------------|------------------|-----------------|
| KRAS | 4 (57.1) | 7 (26.9) | 15 (42.9) | 13 (35.1) |
| APC | 1 (14.3) | 5 (19.2) | 8 (22.9) | 8 (21.6) |
| STK11 | - | - | 1 (2.9) | - |
| TP53 | 2 (28.6) | 4 (15.4) | 9 (25.7) | 9 (24.3) |
| BRAF | - | 1 (3.8) | 2 (5.7) | 2 (5.4) |
| MLH1 | - | 1 (3.8) | 2 (5.7) | 4 (10.8) |
| AKT1 | - | - | - | 1 (2.7) |
| PIK3CA | 2 (28.6) | 1 (3.8) | 4 (11.4) | 5 (13.5) |
| NRAS | - | 1 (3.8) | 1 (2.9) | 3 (8.1) |
| CTNNB1 | - | 1 (3.8) | 1 (2.9) | 1 (2.7) |

Values are presented as number (%).