

Supplementary materials

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Correlation between MASPIN levels in different biological samples and pathologic features in colorectal adenocarcinomas

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Table S1. Determination of the concentration of maspin in tumoral tissue, whole blood, saliva and urine using stochastic sensors.

| Patient nr. | Tumoral tissue | | Whole blood | | Saliva | | Urine | |
|-------------|----------------|------|----------------|------|----------------|------|----------------|------|
| | Maspin (pg/mL) | SD | Maspin (pg/mL) | SD | Maspin (pg/mL) | SD | Maspin (pg/mL) | SD |
| 1 | 145.61 | 0.04 | 119.68 | 0.04 | - | - | - | - |
| 2 | 252.5 | 0.03 | 201.9 | 0.05 | 347.38 | 0.03 | - | - |
| 3 | 296.78 | 0.04 | 191.78 | 0.03 | 56.43 | 0.03 | 978 | 0.03 |
| 4 | 222.46 | 0.03 | 454.9 | 0.02 | 208.22 | 0.05 | 45.27 | 0.03 |
| 5 | 131.47 | 0.05 | 454.63 | 0.04 | 210.12 | 0.02 | 50.87 | 0.02 |
| 6 | 222.45 | 0.05 | 59.08 | 0.02 | 473.88 | 0.04 | 521.46 | 0.04 |
| 7 | 100.11 | 0.02 | 366.35 | 0.04 | 157.63 | 0.03 | 16.83 | 0.02 |
| 8 | 602.02 | 0.03 | 274.3 | 0.03 | 391.65 | 0.02 | 106.3 | 0.02 |
| 9 | 556.1 | 0.04 | 182.36 | 0.04 | 35.24 | 0.04 | - | - |
| 10 | 301.86 | 0.03 | 69.08 | 0.03 | 135.11 | 0.02 | 301.01 | 0.04 |
| 11 | 120.65 | 0.08 | 4.56 | 0.06 | 301.84 | 0.06 | 45.69 | 0.03 |
| 12 | 274.49 | 0.07 | 53.14 | 0.02 | 158.89 | 0.03 | 96.53 | 0.04 |
| 13 | 170.3 | 0.03 | 195.6 | 0.04 | 252.5 | 0.02 | 134.51 | 0.01 |
| 14 | 369.47 | 0.03 | 436.87 | 0.03 | 217.08 | 0.04 | - | - |
| 15 | 291.59 | 0.07 | 286.65 | 0.02 | 44.41 | 0.03 | 26.38 | 0.04 |
| 16 | 280.58 | 0.02 | 165.84 | 0.02 | 481.47 | 0.03 | 352.18 | 0.03 |
| 17 | 239.25 | 0.03 | 330.93 | 0.04 | 157.63 | 0.04 | - | - |
| 18 | - | - | 51.68 | 0.03 | 252.5 | 0.03 | 665.25 | 0.05 |
| 19 | 223.75 | 0.04 | 150.91 | 0.05 | 334.73 | 0.03 | 215.19 | 0.03 |
| 20 | 973.14 | 0.02 | 136.41 | 0.03 | - | - | 12.6 | 0.04 |
| 21 | 500.98 | 0.03 | 130.87 | 0.02 | - | - | 14.87 | 0.03 |
| 22 | 125.06 | 0.07 | 189.25 | 0.03 | - | - | 11.61 | 0.04 |
| 23 | 217.99 | 0.04 | 100.7 | 0.04 | 277.8 | 0.05 | 913.1 | 0.04 |
| 24 | 237.32 | 0.02 | 360.72 | 0.05 | 249.34 | 0.02 | - | - |
| 25 | 537.08 | 0.03 | 424.67 | 0.03 | - | - | - | - |
| 26 | 243.74 | 0.04 | 201.9 | 0.03 | - | - | 378.27 | 0.04 |
| 27 | 200.89 | 0.03 | 38.59 | 0.02 | 78.69 | 0.04 | 24.96 | 0.03 |
| 28 | 153.2 | 0.04 | 151.3 | 0.05 | - | - | 847.56 | 0.04 |
| 29 | 219.88 | 0.03 | 147.76 | 0.04 | 360.66 | 0.03 | 42.73 | 0.04 |
| 30 | 393.14 | 0.03 | 69.08 | 0.05 | - | - | - | - |

| | | | | | | | | |
|----|--------|------|--------|------|---|---|--------|------|
| 31 | 295.64 | 0.02 | 198.68 | 0.03 | - | - | 606.57 | 0.03 |
|----|--------|------|--------|------|---|---|--------|------|

Table S2a. Pathological features.

| Patient nr. | Type | Sex | Age | Exact Location | Macroscopic features | Microscopic type |
|-------------|-------------------------|--------|-----|-----------------------------|------------------------|--------------------------|
| 1 | colorectal cancer | Male | 85 | Rectosigmoid colon | Ulceroinfiltrative | Adenocarcinoma |
| 2 | colorectal cancer | Male | 72 | Rectum | Vegetant | Adenocarcinoma |
| 3 | colorectal cancer | Male | 69 | Transverse colon | Ulceroinfiltrative | Adenocarcinoma |
| 4 | colorectal cancer | Male | 75 | Rectum | Ulceroinfiltrative | Adenocarcinoma |
| 5 | colorectal cancer | Male | 70 | Rectum | Vegetant and ulcerated | Adenocarcinoma |
| 6 | colorectal cancer | Female | 79 | Rectum | Vegetant and ulcerated | Adenocarcinoma |
| 7 | colorectal cancer | Female | 57 | Transverse colon | Ulceroinfiltrative | Adenocarcinoma |
| 8 | colorectal cancer | Male | 55 | Rectosigmoid colon | Ulceroinfiltrative | Adenocarcinoma |
| 9 | colorectal cancer | Male | 83 | Ascending colon | Vegetant and ulcerated | Adenocarcinoma |
| 10 | colorectal cancer | Male | 67 | Rectum | Ulceroinfiltrative | Adenocarcinoma |
| 11 | colorectal cancer | Male | 70 | Descending colon | Ulceroinfiltrative | Adenocarcinoma |
| 12 | colorectal cancer | Male | 72 | Rectosigmoid colon | Vegetant and ulcerated | Adenocarcinoma |
| 13 | colorectal cancer | Female | 73 | Ascending colon | Vegetant and ulcerated | Adenocarcinoma |
| 14 | colorectal cancer | Male | 81 | Ascending colon | - | Adenocarcinoma |
| 15 | colorectal cancer | Male | 80 | Rectosigmoid colon | Ulceroinfiltrative | Adenocarcinoma |
| 16 | sigmoid cancer | Female | 47 | Rectum | Ulceroinfiltrative | Adenocarcinoma |
| 17 | sigmoid cancer | Male | 79 | Rectosigmoid and anal canal | Ulceroinfiltrative | Adenocarcinoma |
| 18 | Rectosigmoid cancer | Male | 45 | Rectosigmoid colon | Ulceroinfiltrative | Adenocarcinoma |
| 19 | sigmoid cancer | Male | 63 | Sigmoid colon | Vegetant | Adenocarcinoma |
| 20 | Rectal cancer | Male | 75 | Rectum | Vegetant | Adenocarcinoma |
| 21 | ascending colon cancer | Male | 76 | Ascending colon | Vegetant and ulcerated | Adenocarcinoma |
| 22 | Rectal cancer | Female | 63 | Rx Rectum | Ulceroinfiltrative | Adenocarcinoma |
| 23 | Rectal cancer | Female | 56 | Rectum | - | Adenocarcinoma |
| 24 | sigmoid cancer | Male | 78 | Sigmoid colon | Ulceroinfiltrative | Adenocarcinoma |
| 25 | ascending colon cancer | Female | 72 | Ascending colon | Ulceroinfiltrative | Medullary adenocarcinoma |
| 26 | sigmoid cancer | Male | 75 | Sigmoid colon | Ulceroinfiltrative | Adenocarcinoma |
| 27 | descending colon cancer | Female | 64 | Descending colon | Ulceroinfiltrative | Adenocarcinoma |
| 28 | sigmoid cancer | Female | 86 | Sigmoid colon | Ulceroinfiltrative | Adenocarcinoma |

| | | | | | | |
|----|-------------------------|------|----|------------------|---------------------|--------------------------|
| 29 | rectal cancer | Male | 68 | Rectum | Ultero-infiltrative | Adenocarcinoma |
| 30 | transverse colon cancer | Male | 70 | Transverse colon | Ultero-infiltrative | Adenocarcinoma |
| 31 | cecum carcinoma | Male | 76 | Ascending colon | Vegetant | Medullary adenocarcinoma |

Table S2b. Pathological features.

| Patient nr. | Adenocarcinoma Grading | Maximum diameter (mm) | Maximum depth (mm) | Mucinous compound | Molecular subtype | Survival | pT | pN | Budding | Stroma |
|-------------|------------------------|-----------------------|--------------------|-------------------|-------------------|----------|----|----|---------|----------------------|
| 1 | G2 | 60 | 22 | No | Hybrid | Dead | 3 | 0 | 1 | fibrous-inflammatory |
| 2 | G2 | 40 | 21 | No | Epithelial | Alive | 2 | 0 | 0 | - |
| 3 | G2 | 40 | | No | Hybrid | Dead | 4 | 0 | 2 | fibrous-inflammatory |
| 4 | G2 | 50 | 25 | Yes | Epithelial | Alive | 3 | 1 | 2 | fibrous-inflammatory |
| 5 | G2 | 60 | 16 | No | Hybrid | Alive | 3 | 1 | 2 | fibrous-inflammatory |
| 6 | G2 | 40 | 25 | Yes | Epithelial | Alive | 4 | 1 | 3 | fibrous-inflammatory |
| 7 | G2 | 22 | 12 | No | Hybrid | Alive | 3 | 1 | 2 | fibrous-inflammatory |
| 8 | G2 | 60 | - | No | Hybrid | Dead | 4 | 1 | 2 | fibrous-inflammatory |
| 9 | G2 | 80 | - | No | Epithelial | Alive | 3 | 0 | 1 | fibrous-inflammatory |
| 10 | G2 | 70 | 13 | No | Epithelial | Alive | 3 | 0 | 1 | fibrous-inflammatory |
| 11 | G2 | 30 | 9 | No | Epithelial | Alive | 3 | 1 | 2 | fibrous-inflammatory |
| 12 | G2 | 23 | 10 | No | - | Alive | 3 | 0 | 2 | fibrous-inflammatory |
| 13 | G2 | 40 | 12 | Yes | Epithelial | Alive | 4 | 1 | 3 | - |
| 14 | G2 | - | - | No | Epithelial | Alive | 3 | 2 | 2 | fibrous-inflammatory |
| 15 | G2 | 45 | 10 | No | Hybrid | Alive | 3 | 0 | 1 | fibrous-inflammatory |
| 16 | G2 | 30 | 12 | Yes | Hybrid | Alive | 3 | 2 | 1 | - |
| 17 | G2 | 40 | 12 | No | Hybrid | Alive | 4 | 1 | 1 | inflammatory |
| 18 | G2 | 30 | 7 | No | Epithelial | Alive | 4 | 0 | 2 | fibrous-inflammatory |
| 19 | G2 | 60 | 20 | Yes | Hybrid | Alive | 4 | 1 | 3 | inflammatory |
| 20 | G2 | 38 | - | No | Mesenchymal | Alive | 3 | 0 | 3 | fibrous-inflammatory |
| 21 | G2 | 65 | 13 | Yes | Hybrid | Alive | 3 | 0 | 3 | fibrous-inflammatory |
| 22 | G2 | 20 | - | No | Epithelial | Alive | 2 | 0 | - | - |
| 23 | G3 | 30 | 12 | No | Hybrid | Alive | 4 | 0 | - | fibrous-inflammatory |
| 24 | G2 | 30 | 13 | Yes | Epithelial | Alive | 4 | 0 | - | - |
| 25 | G1 | 65 | 15 | No | Epithelial | Alive | 2 | 0 | 1 | - |
| 26 | G2 | 30 | - | No | Epithelial | Alive | 4 | 1 | 3 | fibrous-inflammatory |

| | | | | | | | | | | |
|----|----|----|----|----|------------|-------|---|---|---|----------------------|
| 27 | G2 | 30 | 15 | No | - | Alive | 4 | 2 | 3 | fibrous-inflammatory |
| 28 | G2 | 50 | 30 | No | - | Alive | 4 | 0 | 2 | - |
| 29 | G2 | 20 | 15 | No | - | Dead | 4 | 1 | 2 | - |
| 30 | G2 | 45 | 17 | No | Epithelial | Alive | 4 | 1 | 3 | - |
| 31 | G1 | 95 | 77 | No | Epithelial | Alive | 4 | 0 | 0 | fibrous-inflammatory |