Supplementary table 11

Differential ecological network in control and CRC at family taxonomic level in independent Chinese validation cohort V1.

Differential bacterial-fungal inter-kingdom co-exclusive interactions in control and CRC

|  |  |  |  |
| --- | --- | --- | --- |
| Diagnosis | Correlation coefficients >0.2  | Correlation coefficients < -0.2  | P value |
| Control | 1478 | 2719 | <0.00001 |
| CRC | 1515 | 4862 |

|  |  |  |  |
| --- | --- | --- | --- |
| Diagnosis | Correlation coefficients >0.3  | Correlation coefficients < -0.3  | P value |
| Control | 493 | 373 | <0.00001 |
| CRC | 448 | 966 |

|  |  |  |  |
| --- | --- | --- | --- |
| Diagnosis | Correlation coefficients >0.4 | Correlation coefficients < -0.4  | P value |
| Control | 145 | 30 | <0.00001 |
| CRC | 111 | 149 |

|  |  |  |  |
| --- | --- | --- | --- |
| Diagnosis | Correlation coefficients >0.5  | Correlation coefficients < -0.5 | P value |
| Control | 35 | 2 | 0.06 |
| CRC | 23 | 7 |

Differential intra-fungal co-occurrence interactions in control and CRC

|  |  |  |  |
| --- | --- | --- | --- |
| Diagnosis | Correlation coefficients >0.2  | Correlation coefficients < -0.2  | P value |
| Control | 446 | 52 | 0.004414 |
| CRC | 1070 | 73 |

|  |  |  |  |
| --- | --- | --- | --- |
| Diagnosis | Correlation coefficients >0.3 | Correlation coefficients < -0.3  | P value |
| Control | 96 | 6 | 0.0295 |
| CRC | 323 | 6 |

|  |  |  |  |
| --- | --- | --- | --- |
| Diagnosis | Correlation coefficients >0.4 | Correlation coefficients < -0.4 | P value |
| Control | 27 | - | NA |
| CRC | 86 | - |

|  |  |  |  |
| --- | --- | --- | --- |
| Diagnosis | Correlation coefficients >0.5 | Correlation coefficients < -0.5  | P value |
| Control | 8 | - | NA |
| CRC | 23 | - |

Fisher’s exact test was performed to compare the ratio of significant co-occurrence and co-excluding correlation coefficients (>0.2 or < -0.2, >0.3 or < -0.3, >0.4 or < -0.4, >0.5 or < -0.5. FDR < 0.05). Control; n=112, CRC; n=111