RAD51 immunofluorescence

BRCA carrier:
RAD51 negative/ HRD

Control patient:
RAD51 positive/HR+
Figure S2
| Sample | RECAP | CHORD | B1 & B2-classifier | BRCA status                |
|--------|-------|-------|---------------------|----------------------------|
| M248   | HRD   | HRD   | B1 & B2-like        | germline BRCA1 mut         |
| M131   | HRD   | HRD   | B1 & B2-like        | BRCA1 methylation          |
| M232   | HRD   | HRD   | B1 & B2-like        | WT                         |
| M182   | HRD   | HRD   | B1-like             | BRCA1 methylation          |
| M231   | HRD   | HRD   | B2-like             | BRCA1 methylation          |
| M317   | HRD   | HRD   | NS                  | germline BRCA2 mut         |
| M365   | HRD   | HRD   | NS                  | BRCA1 methylation          |
| M260   | HRD   | HRD   | B1 & B2-like        | WT                         |
| M106   | HRD   | HRD   | B1 & B2-like        | BRCA2 VUS                  |
| M077   | HRD   | HRD   | B1-like             | WT                         |
| M362   | HRD   | NS    | B1-like             | germline BRCA2 mut         |
| M094   | HRD   | HRD   | B2-like             | WT                         |
| M296   | HRD   | HRP   | Spor-like           | somatic BRCA2 mut          |
| M271   | HRD   | HRP   | Spor-like           | WT                         |
| M356   | HRD   | HRP   | Spor-like           | WT                         |
| M211   | HRD   | HRP   | Spor-like           | BRCA2 VUS                  |
| M093   | HRD   | HRP   | Spor-like           | WT                         |
| M282   | HRD   | HRP   | NS                  | WT                         |
| M390   | HRD   | HRP   | NS                  | WT                         |
| P002   | HRD   | NS    | B1 & B2-like        | germline BRCA2 mut         |
| M188   | HRD   | NS    | B1 & B2-like        | germline BRCA2 mut         |
| M270   | HRD   | NS    | B1-like             | WT                         |
| M057   | HRD   | NS    | B1-like             | somatic BRCA2 mut          |
| M275   | HRD   | NS    | B2-like             | germline BRCA2 mut         |
| M119   | HRD   | NS    | Spor-like           | BRCA1 methylation          |
| M277   | HRD   | NS    | Spor-like           | BRCA1 methylation          |
| M141   | HRI   | HRI   | Spor-like           | BRCA1 methylation          |
| M367   | HRI   | HRI   | NS                  | WT                         |
| M055   | HRI   | HRP   | B2-like             | WT                         |
| M313   | HRI   | HRP   | B1-like             | WT                         |
| M298   | HRI   | HRP   | B1-like             | BRCA2 VUS                  |
| M253   | HRI   | NS    | B1-like             | WT                         |
| M278   | HRI   | NS    | B2-like             | WT                         |
| M112   | HRI   | HRP   | Spor-like           | WT                         |
| M209   | HRI   | NS    | Spor-like           | WT                         |
| M273   | HRP   | HRP   | NS                  | mono-allelic germline BRCA2 mut |
| M062   | HRP   | HRP   | B1 & B2-like        | WT                         |
| M046   | HRP   | HRP   | B2-like             | WT                         |
| M072   | HRP   | HRP   | B2-like             | BRCA2 VUS                  |
| M213   | HRP   | HRP   | B2-like             | WT                         |
| P003   | HRP   | HRP   | B2-like             | WT                         |
| M023   | HRP   | HRP   | Spor-like           | WT                         |
| M043   | HRP   | HRP   | Spor-like           | BRCA1 VUS                  |
| M048   | HRP   | HRP   | Spor-like           | WT                         |
| M058   | HRP   | HRP   | Spor-like           | WT                         |
| M060   | HRP   | HRP   | Spor-like           | WT                         |
| M063   | HRP   | HRP   | Spor-like           | WT                         |
| M071   | HRP   | HRP   | Spor-like           | WT                         |
| M110   | HRP   | HRP   | Spor-like           | WT                         |
| M114   | HRP   | HRP   | Spor-like           | WT                         |
| M133   | HRP   | HRP   | Spor-like           | WT                         |
| M153   | HRP   | HRP   | Spor-like           | WT                         |
| M159   | HRP   | HRP   | Spor-like           | WT                         |
| P009   | HRP   | HRP   | Spor-like           | BRCA2 VUS                  |
| M252   | HRP   | HRP   | NS                  | WT                         |
| M314   | HRP   | HRP   | NS                  | WT                         |
| M294   | HRP   | HRP   | NS                  | WT                         |
| M299   | HRP   | HRP   | NS                  | WT                         |
| M336   | HRP   | HRP   | NS                  | WT                         |
| M359   | HRP   | HRP   | NS                  | WT                         |
| M363   | HRP   | HRP   | Spor-like           | WT                         |
| M368   | HRP   | HRP   | NS                  | WT                         |
| M392   | HRP   | HRP   | NS                  | WT                         |
| M396   | HRP   | HRP   | NS                  | WT                         |
| M100   | HRP   | NS    | B1-like             | WT                         |
| M109   | HRP   | NS    | B2-like             | WT                         |
| M018   | HRP   | NS    | Spor-like           | WT                         |
| M021   | HRP   | NS    | Spor-like           | WT                         |
| M061   | HRP   | NS    | Spor-like           | WT                         |
| M074   | HRP   | NS    | Spor-like           | WT                         |
| M181   | HRP   | NS    | Spor-like           | WT                         |
| Tumor | HRDetect score | HRDetect | CHORD score | CHORD |
|-------|----------------|----------|-------------|-------|
| M023  | 0.024          | proficient| 0           | proficient |
| M043  | 0.094          | proficient| 0           | proficient |
| M046  | 0.034          | proficient| 0.002       | proficient |
| M048  | 0.002          | proficient| 0.002       | proficient |
| M055  | 0.289          | proficient| 0           | proficient |
| M058  | 0.000          | proficient| 0           | proficient |
| M060  | 0.001          | proficient| 0           | proficient |
| M062  | 0.213          | proficient| 0           | proficient |
| M063  | 0.001          | proficient| 0           | proficient |
| M071  | 0.002          | proficient| 0           | proficient |
| M072  | 0.000          | proficient| 0           | proficient |
| M077  | 0.026          | proficient| 0.004       | proficient |
| M093  | 0.001          | proficient| 0           | proficient |
| M094  | 0.019          | proficient| 0           | proficient |
| M106  | 0.157          | proficient| 0           | proficient |
| M110  | 0.000          | proficient| 0           | proficient |
| M112  | 0.002          | proficient| 0.002       | proficient |
| M114  | 0.000          | proficient| 0.034       | proficient |
| M131  | 1.000          | deficient  | 0.94        | deficient  |
| M141  | 0.982          | deficient  | 0.912       | deficient  |
| M153  | 0.000          | proficient| 0           | proficient |
| M156  | 0.002          | proficient| 0           | proficient |
| M159  | 0.000          | proficient| 0.008       | proficient |
| M182  | 0.998          | deficient  | 0.91        | deficient  |
| M211  | 0.188          | proficient| 0           | proficient |
| M213  | 0.030          | proficient| 0           | proficient |
| M231  | 0.967          | deficient  | 0.864       | deficient  |
| M232  | 0.995          | deficient  | 0.618       | deficient  |
| M248  | 0.998          | deficient  | 0.904       | deficient  |
| M260  | 0.032          | proficient| 0           | proficient |
| M271  | 0.000          | proficient| 0.002       | proficient |
| P003  | 0.001          | proficient| 0           | proficient |
| P009  | 0.003          | proficient| 0           | proficient |
Comparison BRCA1/2-like classifier and CHORD

38 samples analyzed using both methods

25 concordant (66%)

- 5 BRCA-like /CHORD-HRD
  - 5 > 0.7
  - 5 HRD
    - 2 germline BRCA1/2 mutation
    - 2 BRCA1 methylation
    - 1 BRCA WT

- 20 spor-like /CHORD-HRP

13 different (34%)

- 1 CHORD-HRD /spor-like
  - 1 BRCA1 methylation

- 12 BRCA-like /CHORD-HRP
  - 10 > 0.7
  - 2 > 0.5
    - 3 BRCA2 VUS
    - 9 BRCA WT
Figure S8

Proportion of the mutations assigned to sig 3

Proportion of the mutations assigned to sig 8

Proportion of rearrangements assigned to rearrangement sig 1

Proportion of rearrangements assigned to rearrangement sig 2

Proportion of rearrangements assigned to rearrangement sig 3

Proportion of rearrangements assigned to rearrangement sig 4

Proportion of rearrangements assigned to rearrangement sig 5

Proportion of rearrangements assigned to rearrangement sig 6

P=0.0011

ns
Figure S9
Figure S10
