

### Supplementary Table 3

List of cancer-predisposing genes filtered in WES analysis

| Gene name | Reference sequence |
|-----------|--------------------|
| APC       | NM_000038          |
| ATM       | NM_000051          |
| BARD1     | NM_000465          |
| BMPR1A    | NM_004329          |
| BRIP1     | NM_032043          |
| CDH1      | NM_004360          |
| CHEK2     | NM_001005735       |
| EPCAM     | NM_002354          |
| MLH1      | NM_000249          |
| MRE11     | NM_005591          |
| MSH2      | NM_000251          |
| MSH6      | NM_000179          |
| MUTYH     | NM_012222          |
| NBN       | NM_002485          |
| PALB2     | NM_024675          |
| PTEN      | NM_000314          |
| RAD50     | NM_005732          |
| RAD51B    | NM_133509          |
| RAD51C    | NM_058216          |
| RAD51D    | NM_002878          |
| SMAD4     | NM_005359          |
| STK11     | NM_000455          |
| TP53      | NM_000546          |