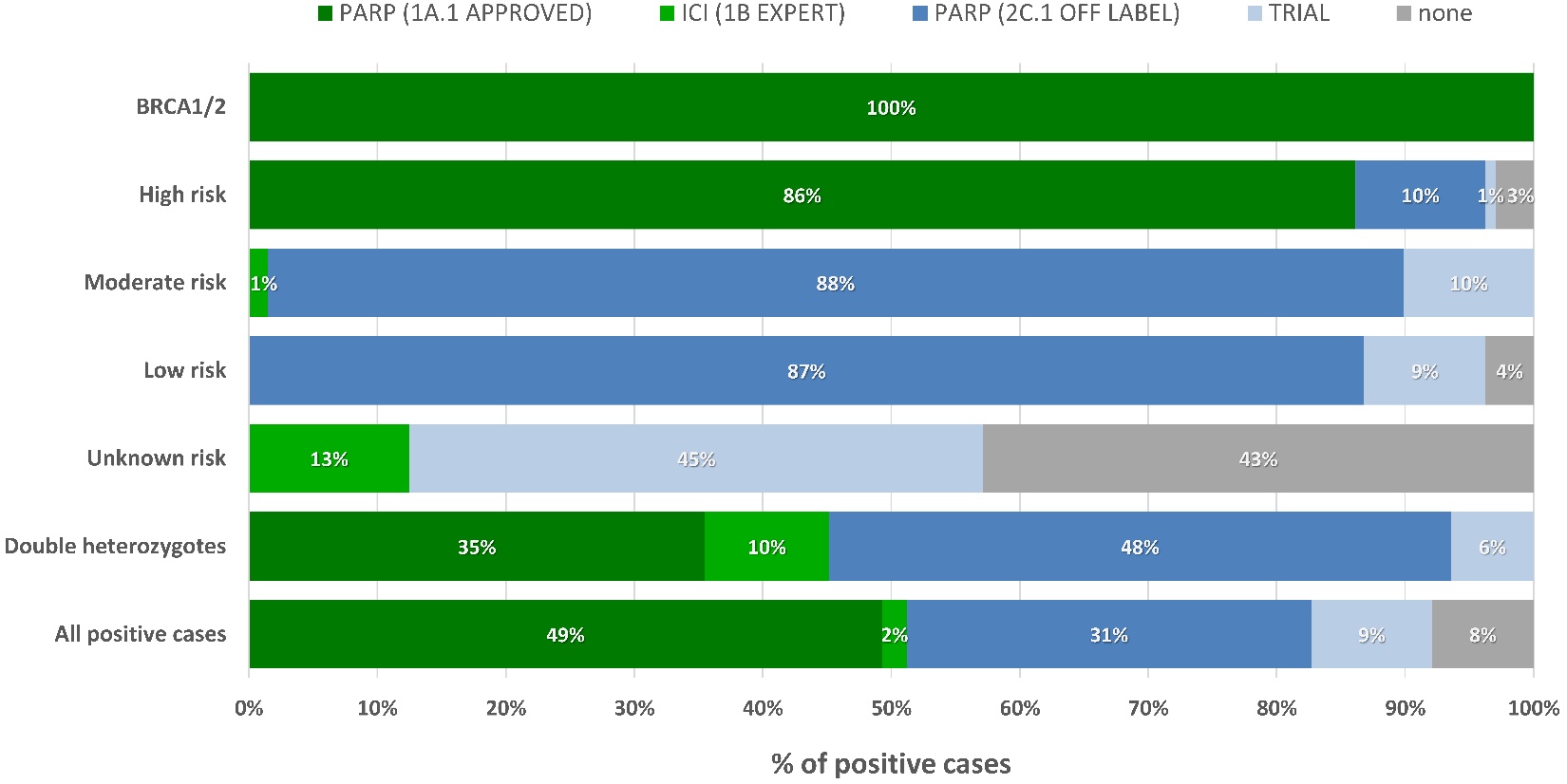
Supplementary material

Revisiting the implications of positive germline testing results using multi-gene panels in a cohort of individuals with personal and/or family history of Breast cancer

Georgios N. Tsaousis, Eirini Papadopoulou, Konstantinos Agiannitopoulos, Georgia Pepe, Nikolaos Tsoulos, Ioannis Boukovinas, Theofanis Floros, Rodoniki Iosifidou, Ourania Katopodi, Anna Koumarianou, Christos Markopoulos, Konstantinos Papazisis, Vasileios Venizelos, Achilleas Kapsimalis, Grigorios Xepapadakis, Amanda Psyrri, Eugeniu Banu, Dan Tudor Eniu, Alexandru Blidaru, Dana Lucia Stanculeanu, Andrei Ungureanu, Vahit Ozmen, Sualp Tansan, Mehmet Tekinel, Suayib Yalcin and George Nasioulas



**Figure S1.** Treatment implications of germline findings in the 415 individuals with P/LP variants grouped by the level of breast cancer risk.

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table S1.** Clinical utility and different levels of information associated with pathogenic/likely pahtogenic variants in genes tested positive in our cohort. | | | | | | | | | | |
|  |  | **Breast cancer risk** | | | **Other cancer risk** | | | | **Treatment actionability** | |
| **Gene** | **Cases** | **Risk** | **Evidence** | **Management** | **Type** | **Risk** | **Evidence** | **Management** | **Category** | **Evidence** |
| *BRCA1* | 136 | High (>60%) | Very strong | RRS, Surveillance |  | | | | PARPi | Approved |
|  | | | | Ovarian | High (>39-58%) | Very strong | RRS, Surveillance | PARPi | Approved |
| Pancreatic | Moderate (<5%) | Strong | Surveillance | PARPi | Approved |
| Prostate | Increased | Limited | Surveillance | PARPi | Approved |
| *BRCA2* | 69 | High (>60%) | Very strong | RRS, Surveillance |  | | | | PARPi | Approved |
|  | | | | Ovarian | High (>39-58%) | Very strong | RRS, Surveillance | PARPi | Approved |
| Pancreatic | Moderate (5-10%) | Strong | Surveillance | PARPi | Approved |
| Prostate | Low | Strong | Surveillance | PARPi | Approved |
| Melanoma | Increased | Limited | Surveillance | PARPi | Off label/Clinical trials |
| *PALB2* | 24 | High (41-60%) | Strong | RRS, Surveillance |  | | | | PARPi | Off label/Clinical trials |
|  | | | | Ovarian | Increased (3-5%) | Strong | RRS, Surveillance | PARPi | Off label/Clinical trials |
| Pancreatic | Moderate (5-10%) | Limited | Surveillance | PARPi | Off label/Clinical trials |
| *PTEN* | 2 | High (>60%) | Strong | RRS, Surveillance |  | | | | − | − |
|  | | | | Colorectal | Increased | Strong | Surveillance | − | − |
| Endometrial | High (19-28%) | Strong | RRS, Surveillance | − | − |
| Melanoma | Increased | Limited | Surveillance | − | − |
| Renal cell | Increased | Limited | Surveillance | − | − |
| Thyroid | Increased | Limited | Surveillance | − | − |
| *TP53* | 7 | High (>60%) | Strong | RRS, Surveillance |  | | | | − | − |
|  | | | | Pancreatic | Moderate (5-10%) | Limited | Surveillance | − | − |
| Colorectal | Increased | Strong | Surveillance | − | − |
| Melanoma | Increased | Limited | Surveillance | − | − |
| Brain | Increased | Limited | Surveillance | − | − |
| Multiple | Increased | Limited | Surveillance | − | − |
| *ATM* | 27 | Moderate (15-40%) | Strong | Surveillance |  | | | | PARPi | Off label/Clinical trials |
|  | | | | Ovarian | Low (<3%) | Strong | Surveillance | PARPi | Off label/Clinical trials |
| Pancreatic | Moderate (5-10%) | Strong | Surveillance | PARPi | Off label/Clinical trials |
| Prostate | Unknown | Insufficient | − | PARPi | Approved |
| Colorectal | Unknown | Limited | − | PARPi | Off label/Clinical trials |
| *CHEK2* \* | 39 | Moderate (15-40%) | Strong | Surveillance |  | | | | PARPi | Off label/Clinical trials |
|  | | | | Colorectal | Increased | Limited | Surveillance | PARPi | Off label/Clinical trials |
| Ovarian | Unknown | Insufficient | − | PARPi | Off label/Clinical trials |
| Prostate | Increased | Limited | − | PARPi | Approved |
| *NBN* \*\* | 7 | Moderate | Limited | based on FH |  | | | | PARPi | Clinical trials |
|  | | | | Ovarian | Unknown | Insufficient | − | PARPi | Clinical trials |
| Prostate | Increased | Limited | − | PARPi | Off label/Clinical trials |
| *BARD1* | 7 | Low | Limited | Surveillance |  | | | | PARPi | Off label/Clinical trials |
|  | | | | Ovarian | Potentially Increased | Limited | − | PARPi | Off label/Clinical trials |
| *BRIP1* | 7 | Low | Limited | based on FH |  | | | | PARPi | Off label/Clinical trials |
|  | | | | Ovarian | High (>10%) | Strong | RRS, Surveillance | PARPi | Off label/Clinical trials |
| Prostate | Potentially Increased | Limited | − | PARPi | Approved |
|  |  | | | |  |  |  |  |  |  |
|  |  | | | |  |  |  |  |  |  |
| **Table S1.** Clinical utility and different levels of information associated with pathogenic /likely pahtogenic variants in genes tested positive in our cohort (continued). | | | | | | | | | | |
|  |  | **Breast cancer risk** | | | **Other cancer risk** | | | | **Treatment actionability** | |
| **Gene** | **Cases** | **Risk** | **Evidence** | **Management** | **Type** | **Risk** | **Evidence** | **Management** | **Category** | **Evidence** |
| *MLH1* | 1 | Low (<15%) | Limited | based on FH |  |  |  |  | ICI | Well-powered studies |
|  | | | | Ovarian | High (4-20%) | Strong | RRS, Surveillance | ICI | Well-powered studies |
| Colorectal | High (46-61%) | Strong | Surveillance | ICI | Well-powered studies |
| Endometrial | High (34-54%) | Strong | RRS, Surveillance | ICI | Well-powered studies |
| Gastric | High (5-7%) | Strong | Surveillance | ICI | Well-powered studies |
| Pancreatic | Low (5%) | Limited | Surveillance | ICI | Well-powered studies |
| Prostate | Low (4-12%) | Limited | − | ICI | Well-powered studies |
| *MSH2* | 1 | Low (<15%) | Limited | based on FH |  |  |  |  | ICI | Well-powered studies |
|  | | | | Ovarian | High (>10%) | Strong | RRS, Surveillance | ICI | Well-powered studies |
| Colorectal | High (33-52%) | Strong | Surveillance | ICI | Well-powered studies |
| Endometrial | High (21-57%) | Strong | RRS, Surveillance | ICI | Well-powered studies |
| Gastric | High (<9%%) | Strong | Surveillance | ICI | Well-powered studies |
| Pancreatic | Low (1-2%) | Limited | Surveillance | ICI | Well-powered studies |
| Prostate | Low (4-16%) | Limited | − | ICI | Well-powered studies |
| *MSH6* | 3 | Low (<15%) | Limited | based on FH |  |  |  |  | ICI | Well-powered studies |
|  | | | | Ovarian | High (>10%) | Strong | RRS, Surveillance | ICI | Well-powered studies |
| Colorectal | High (10-44%) | Strong | Surveillance | ICI | Well-powered studies |
| Endometrial | High (16-49%) | Strong | RRS, Surveillance | ICI | Well-powered studies |
| Gastric | High (1-8%) | Strong | Surveillance | ICI | Well-powered studies |
| Pancreatic | Low (1-2%) | Limited | Surveillance | ICI | Well-powered studies |
| Prostate | Low (3-12%) | Limited | − | ICI | Well-powered studies |
| *NF1* | 2 | Low (15-40%) | Strong | Surveillance |  | | | | − | − |
|  | | | | Brain, MPNST | High (14-22%) | Limited | Surveillance | − | − |
| *RAD51C* | 3 | Low (15-40%) | Limited | based on FH |  | | | | PARPi | Off label/Clinical trials |
|  | | | | Ovarian | High (>10%) | Strong | RRS, Surveillance | PARPi | Off label/Clinical trials |
| *BLM* | 2 | Unknown | Insufficient | − |  | | | | PARPi | Clinical trials |
|  | | | | Colorectal | Unknown | Limited | − | PARPi | Clinical trials |
| *ABRAXAS1 (FAM175A)* | 1 | Unknown | Insufficient | − |  | | | | − | − |
| *FANCA* | 4 | Unknown | Insufficient | − |  | | | | PARPi | Off label/Clinical trials |
|  |  |  |  | Ovarian | Unknown | Insufficient | − | PARPi | Clinical trials |
|  | | | | Prostate | Unknown | Insufficient | − | PARPi | Off label/Clinical trials |
| *FANCM* | 4 | Unknown | Insufficient | − |  | | | | PARPi | Off label/Clinical trials |
|  | | | | Ovarian | Unknown | Insufficient | − | PARPi | Clinical trials |
| Prostate | Unknown | Insufficient | − | PARPi | Off label/Clinical trials |
| *MRE11* | 1 | Unknown | Insufficient | based on FH |  | | | | PARPi | Clinical trials |
|  | | | | Prostate | Unknown | Insufficient | − | PARPi | Off label/Clinical trials |
| *MUTYH* monoallelic | 30 | Unknown | Insufficient | based on FH |  | | | | − | − |
|  | | | | Colorectal | Increased | Limited | Surveillance | − | − |
| Endometrial | Potentially Increased | Limited | − | − | − |
| Gastric | Increased | Limited | − | − | − |
|  |  | | | |  |  |  |  |  |  |
|  |  | | | |  |  |  |  |  |  |
| **Table S1.** Clinical utility and different levels of information associated with pathogenic /likely pahtogenic variants in genes tested positive in our cohort (continued). | | | | | | | | | | |
|  |  | **Breast cancer risk** | | | **Other cancer risk** | | | | **Treatment actionability** | |
| **Gene** | **Cases** | **Risk** | **Evidence** | **Management** | **Type** | **Risk** | **Evidence** | **Management** | **Category** | **Evidence** |
| *PMS2* | 9 | Unknown/Low(<12%) | Insufficient | based on FH |  | | | | ICI | 1B |
|  | | | | Ovarian | Low (1-2%) | Limited | RRS, Surveillance | ICI | 1B |
| Colorectal | High (9-20%) | Strong | Surveillance | ICI | 1B |
| Endometrial | High (13-26%) | Strong | RRS, Surveillance | ICI | 1B |
| Gastric | Unknown | Insufficient | − | ICI | 1B |
| Pancreatic | Unknown | Insufficient | − | ICI | 1B |
| Prostate | Unknown | Insufficient | − | ICI | 1B |
| *RAD50* | 18 | Unknown | Insufficient | based on FH |  | | | | PARP | Clinical trials |
| *RAD51B* | 1 | Unknown | Insufficient | − |  | | | | − | − |
| *XRCC2* | 1 | Unknown | Insufficient | − |  | | | | − | − |

RRS: Risk-reducing surgery, FH: Family history, PARPi: poly (ADP-ribose) polymerase inhibitors, ICI: Immune checkpoint inhibitors

\* Risk estimates are based on only on frameshift pathogenic/likely pathogenic variants. For the c.470T>C(p.Ile157Thr) variant the risk for breast cancer appears to be lower.

\*\* Breast cancer risks refer only to the c.657del5 variant.

**Table S2.** Information for the 415 individuals with personal and/or family history of breast cancer (BC) tested positive with a multi-gene panel for pathogenic/likely pathogenic variants. Results for double heterozygotes are indicated with genes and variants separated with a ‘/’.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Patient ID** | **Gene** | **Variant** | **Sex** | **Patient diagnosis** | **BC risk** | **Meeting NCCN Selection criteria** | **Treatment implications** |
| GTBC386 | *ATM* | c.(-30+1\_-29-1)\_(331+1\_332-1)del | F | breast cancer, thyroid cancer | moderate | YES | PARPi (Off-Label) |
| GTBC116 | *ATM* | c.1564\_1565delGA p.Glu522Ilefs\*43 | F | breast cancer | moderate | YES | PARPi (Off-Label) |
| GTBC320 | *ATM* | c.2125-1G>T | F | breast cancer | moderate | YES | PARPi (Off-Label) |
| GTBC072 | *ATM* | c.2250G>A p.= | F | breast cancer | moderate | YES | PARPi (Off-Label) |
| GTBC183 | *ATM* | c.2250G>A p.= | F | breast cancer | moderate | YES | PARPi (Off-Label) |
| GTBC285 | *ATM* | c.3327dupA (p.Ala1110Serfs\*12) | F | breast cancer | moderate | YES | PARPi (Off-Label) |
| GTBC223 | *ATM* | c.3576G>A (p.=) | F | breast cancer | moderate | YES | PARPi (Off-Label) |
| GTBC247 | *ATM* | c.3576G>A (p.=) | F | breast cancer | moderate | YES | PARPi (Off-Label) |
| GTBC016 | *ATM* | c.3577-1G>C | F | breast cancer | moderate | YES | PARPi (Off-Label) |
| GTBC209 | *ATM* | c.5932G>T, p.(Glu1978\*) | F | breast cancer | moderate | YES | PARPi (Off-Label) |
| GTBC140 | *ATM* | c.5979\_5983delTAAAG p.Ser1993Argfs\*23 | F | breast cancer | moderate | YES | PARPi (Off-Label) |
| GTBC293 | *ATM* | c.6628delC (p.Gln2210Serfs\*25) | F | breast cancer | moderate | YES | PARPi (Off-Label) |
| GTBC311 | *ATM* | c.6679C>T (p.Arg2227Cys) | F | breast cancer | moderate | YES | PARPi (Off-Label) |
| GTBC173 | *ATM* | c.6679C>T p.Arg2227Cys | F | breast cancer | moderate | NO | PARPi (Off-Label) |
| GTBC069 | *ATM* | c.7630-2A>C | F | breast cancer | moderate | YES | PARPi (Off-Label) |
| GTBC305 | *ATM* | c.8122G>A (p.Asp2708Asn) | F | breast cancer | moderate | YES | PARPi (Off-Label) |
| GTBC278 | *ATM* | c.8147T>C (p.Val2716Ala) | F | breast cancer | moderate | YES | PARPi (Off-Label) |
| GTBC382 | *ATM* | c.8585-2A>C | F | breast cancer | moderate | YES | PARPi (Off-Label) |
| GTBC316 | *ATM* | c.8766dupT (p.Val2923Cysfs\*2) | F | breast cancer | moderate | YES | PARPi (Off-Label) |
| GTBC161 | *ATM* | c.8988-1G>C | F | breast cancer | moderate | NO | PARPi (Off-Label) |
| GTBC336 | *ATM/CHEK2* | c.4002\_4004delinsTTGCAGATTG (p.Leu1335Cysfs\*6) / c.1100delC (p.Thr367Metfs\*15) | F | breast cancer | moderate+moderate | YES | PARPi (Off-Label) |
| GTBC379 | *ATM/CHEK2* | c.5932G>T (p.Glu1978Ter) / c.1100delC (p.Thr367Metfs\*15) | F | breast cancer | moderate+moderate | NO | PARPi (Off-Label) |
| GTBC252 | *ATM/CHEK2* | c.9007\_9034del (p.Asn3003Aspfs\*6) / c.(792+1\_793-1)\_(846+1\_847-1) | F | bilateral breast cancer | moderate+moderate | YES | PARPi (Off-Label) |
| GTBC358 | *ATM/FANCA* | c.5980A>T (p.Lys1994Ter) / c.1A>G (p.Ser2\_Met116del) | F | breast cancer | moderate+unknown | NO | PARPi (Off-Label) |
| GTBC373 | *ATM/FANCA* | c.6095G>A (p.Arg2032Lys) / c.(893+1\_894-1)\_(1359+1\_1360-1)del | F | breast cancer | moderate+unknown | NO | PARPi (Off-Label) |
| GTBC219 | *ATM/MUTYH* | c.5318delA (p.Lys1773Serfs\*3) / c.721C>T (p.Arg241Trp) | F | breast cancer | moderate+unknown | YES | PARPi (Off-Label) |
| GTBC310 | *ATM/RAD51C* | c.7542T>A (p.Tyr2514Ter) / c.181\_182delCT (p.Leu61Alafs\*11) | F | breast cancer | moderate+low | YES | PARPi (Off-Label) |
| GTBC284 | *BARD1* | c.1690C>T (p.Gln564Ter) | F | breast cancer | low | YES | PARPi (Off-Label) |
| GTBC044 | *BARD1* | c.1690C>T p.Gln564\* | F | breast cancer | low | YES | PARPi (Off-Label) |
| GTBC172 | *BARD1* | c.1690C>T p.Gln564\* | F | breast cancer | low | YES | PARPi (Off-Label) |
| GTBC193 | *BARD1* | c.1690C>T p.Gln564\*/ | F | breast cancer | low | YES | PARPi (Off-Label) |
| GTBC206 | *BARD1* | c.1690C>T, p.(Gln564\*) | F | unaffected | low | YES | PARPi (Off-Label) |
| GTBC288 | *BARD1* | c.632T>A (p.Leu211Ter) | F | uterus cancer, breast cancer | low | NO | PARPi (Off-Label) |
| GTBC043 | *BARD1* | c.632T>A p.Leu211Ter | F | unaffected | low | YES | PARPi (Off-Label) |
| GTBC055 | *BLM/BRCA1* | c.1642C>T p.Gln548\*/c.3700\_3704delGTAAA p.Val1234\_Asn1235?fs | F | breast cancer | high+unknown | YES | PARPi (Approved) |
| GTBC048 | *BLM/CHEK2* | c.1642C>T p.Gln548\*/c.1283C>T p.Ser428Phe | F | breast cancer | moderate+unknown | YES | PARPi (Off-Label) |
| GTBC130 | *BRCA1* | c.(?\_-19)\_(80+1\_81-1)del | F | bilateral breast cancer | high | YES | PARPi (Approved) |
| GTBC154 | *BRCA1* | c.(?\_-19)\_(80+1\_81-1)del | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC210 | *BRCA1* | c.(212+1\_213-1)\_(670+1\_671-1) | F | breast cancer, ovarian cancer | high | YES | PARPi (Approved) |
| GTBC070 | *BRCA1* | c.(441+1\_442-1)\_(547+1\_548-1)del | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC037 | *BRCA1* | c.(5075-?\_5193+?)del | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC274 | *BRCA1* | c.(5193+1\_5194-1)-(5277+1\_5278-1)del | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC235 | *BRCA1* | c.(5406+1\_5407-1)\_(\*1\_?)del | F | unaffected | high | YES | PARPi (Approved) |
| GTBC324 | *BRCA1* | c.(5406+1\_5407-1)\_(\*1\_?)del | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC370 | *BRCA1* | c.(5406+1\_5407-1)\_(\*1\_?)del | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC390 | *BRCA1* | c.(5406+1\_5407-1)\_(\*1\_?)del | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC395 | *BRCA1* | c.(5406+1\_5407-1)\_(\*1\_?)del | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC074 | *BRCA1* | c.(5467+1\_5468-1)-(\*1\_?)del | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC255 | *BRCA1* | c.(5467+1\_5468-1)-(\*1\_?)del | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC299 | *BRCA1* | c.(5467+1\_5468-1)-(\*1\_?)del | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC368 | *BRCA1* | c.(5467+1\_5468-1)-(\*1\_?)del | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC139 | *BRCA1* | c.(80+1\_81-1)\_(134+1\_135-1)del | F | bilateral breast cancer | high | YES | PARPi (Approved) |
| GTBC269 | *BRCA1* | c.(80+1\_81-1)\_(441+1\_442-1)del | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC071 | *BRCA1* | c.1504\_1508delTTAAA p.Leu502Alafs\*2 | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC360 | *BRCA1* | c.1612C>T (p.Gln538Ter) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC077 | *BRCA1* | c.1714G>T p.Glu572Ter | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC053 | *BRCA1* | c.1789G>T p.Glu597\* | F | ovarian cancer+breast cancer | high | YES | PARPi (Approved) |
| GTBC218 | *BRCA1* | c.181T>G (p.Cys61Gly) | F | breast cancer, ovarian cancer | high | YES | PARPi (Approved) |
| GTBC276 | *BRCA1* | c.181T>G (p.Cys61Gly) | F | breast cancer | high | NO | PARPi (Approved) |
| GTBC325 | *BRCA1* | c.181T>G (p.Cys61Gly) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC363 | *BRCA1* | c.181T>G (p.Cys61Gly) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC042 | *BRCA1* | c.181T>G p.Cys61Gly | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC049 | *BRCA1* | c.181T>G p.Cys61Gly | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC063 | *BRCA1* | c.181T>G p.Cys61Gly | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC266 | *BRCA1* | c.2019del (p.Glu673fs) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC066 | *BRCA1* | c.2241dupC p.Lys748Glnfs\*14 | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC137 | *BRCA1* | c.2504dupA p.His835Glnfs\*2 | F | unaffected | high | YES | PARPi (Approved) |
| GTBC163 | *BRCA1* | c.2681\_2682delAA p.Lys894Thrfs\*8 | F | Breast cancer, Ovarian cancer, Lung cancer | high | YES | PARPi (Approved) |
| GTBC176 | *BRCA1* | c.2761C>T p.Gln921\* | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC367 | *BRCA1* | c.2921+1G>A | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC004 | *BRCA1* | c.3607C>T (p.Arg1203\*) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC019 | *BRCA1* | c.3607C>T (p.Arg1203\*) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC008 | *BRCA1* | c.3607C>T (p.Arg1203\*) | F | unaffected | high | YES | PARPi (Approved) |
| GTBC340 | *BRCA1* | c.3607C>T (p.Arg1203Ter) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC350 | *BRCA1* | c.3607C>T (p.Arg1203Ter) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC415 | *BRCA1* | c.3607C>T (p.Arg1203Ter) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC047 | *BRCA1* | c.3607C>T p.Arg1203\* | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC061 | *BRCA1* | c.3607C>T p.Arg1203\* | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC081 | *BRCA1* | c.3607C>T p.Arg1203\* | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC099 | *BRCA1* | c.3700\_3704delGTAAA p.Val1234\_Asn1235?fs | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC101 | *BRCA1* | c.3756\_3759delGTCT p.Ser1253Argfs\*10 | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC244 | *BRCA1* | c.3770\_3771delAG (p.Glu1257Glyfs\*9) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC040 | *BRCA1* | c.4035delA p.Glu1346Lysfs\*20 | F | breast cancer | high | NO | PARPi (Approved) |
| GTBC088 | *BRCA1* | c.4035delA p.Glu1346Lysfs\*20 | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC083 | *BRCA1* | c.4096+1G>A | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC134 | *BRCA1* | c.4096+1G>A | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC017 | *BRCA1* | c.4372\_4373delCA p.Gln1458Glufs\*3 | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC408 | *BRCA1* | c.4391\_4393delinsTT (p.Pro1464Leufs\*2) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC036 | *BRCA1* | c.4391\_4393delinsTT p.Pro1464Leufs\*2 | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC175 | *BRCA1* | c.4391\_4393delinsTT p.Pro1464Leufs\*2 | F | ovarian cancer, breast cancer | high | NO | PARPi (Approved) |
| GTBC052 | *BRCA1* | c.4484+1G>A | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC062 | *BRCA1* | c.4487C>A p.Ser1496\* | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC409 | *BRCA1* | c.4576G>T (p.Glu1526Ter) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC337 | *BRCA1* | c.4689C>G (p.Tyr1563Ter) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC120 | *BRCA1* | c.4818delA p.Val1607Leufs\*26 | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC313 | *BRCA1* | c.493\_494delCT (p.Leu165Glufs\*16) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC132 | *BRCA1* | c.4986+6T>C | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC289 | *BRCA1* | c.5030\_5033delCTAA (p.Thr1677Ilefs\*2) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC127 | *BRCA1* | c.5075-1G>A | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC398 | *BRCA1* | c.5123C>A (p.Ala1708Glu) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC082 | *BRCA1* | c.5194-10\_5236dup, p.(His1746Leufs\*37) | F | unaffected | high | YES | PARPi (Approved) |
| GTBC231 | *BRCA1* | c.5212G>A (p.Gly1738Arg) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC307 | *BRCA1* | c.5212G>A (p.Gly1738Arg) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC366 | *BRCA1* | c.5212G>A (p.Gly1738Arg) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC399 | *BRCA1* | c.5212G>A (p.Gly1738Arg) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC107 | *BRCA1* | c.5212G>A p.Gly1738Arg | F | endometrial cancer+ breast cancer | high | YES | PARPi (Approved) |
| GTBC135 | *BRCA1* | c.5212G>A p.Gly1738Arg | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC136 | *BRCA1* | c.5212G>A p.Gly1738Arg | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC151 | *BRCA1* | c.5212G>A p.Gly1738Arg | F | bilateral breast cancer | high | YES | PARPi (Approved) |
| GTBC304 | *BRCA1* | c.5251C>T (p.Arg1751Ter) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC345 | *BRCA1* | c.5251C>T (p.Arg1751Ter) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC357 | *BRCA1* | c.5251C>T (p.Arg1751Ter) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC383 | *BRCA1* | c.5251C>T (p.Arg1751Ter) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC384 | *BRCA1* | c.5251C>T (p.Arg1751Ter) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC396 | *BRCA1* | c.5251C>T (p.Arg1751Ter) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC009 | *BRCA1* | c.5260G>T (p.Glu1754\*) | F | breast cancer | high | NO | PARPi (Approved) |
| GTBC003 | *BRCA1* | c.5266dupC (p.Gln1756Profs\*74) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC018 | *BRCA1* | c.5266dupC (p.Gln1756Profs\*74) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC045 | *BRCA1* | c.5266dupC (p.Gln1756Profs\*74) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC050 | *BRCA1* | c.5266dupC (p.Gln1756Profs\*74) | F | ovarian cancer+breast cancer | high | YES | PARPi (Approved) |
| GTBC051 | *BRCA1* | c.5266dupC (p.Gln1756Profs\*74) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC064 | *BRCA1* | c.5266dupC (p.Gln1756Profs\*74) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC091 | *BRCA1* | c.5266dupC (p.Gln1756Profs\*74) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC092 | *BRCA1* | c.5266dupC (p.Gln1756Profs\*74) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC093 | *BRCA1* | c.5266dupC (p.Gln1756Profs\*74) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC095 | *BRCA1* | c.5266dupC (p.Gln1756Profs\*74) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC098 | *BRCA1* | c.5266dupC (p.Gln1756Profs\*74) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC103 | *BRCA1* | c.5266dupC (p.Gln1756Profs\*74) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC105 | *BRCA1* | c.5266dupC (p.Gln1756Profs\*74) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC110 | *BRCA1* | c.5266dupC (p.Gln1756Profs\*74) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC128 | *BRCA1* | c.5266dupC (p.Gln1756Profs\*74) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC129 | *BRCA1* | c.5266dupC (p.Gln1756Profs\*74) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC143 | *BRCA1* | c.5266dupC (p.Gln1756Profs\*74) | F | unaffected | high | YES | PARPi (Approved) |
| GTBC166 | *BRCA1* | c.5266dupC (p.Gln1756Profs\*74) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC184 | *BRCA1* | c.5266dupC (p.Gln1756Profs\*74) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC190 | *BRCA1* | c.5266dupC (p.Gln1756Profs\*74) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC199 | *BRCA1* | c.5266dupC (p.Gln1756Profs\*74) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC208 | *BRCA1* | c.5266dupC (p.Gln1756Profs\*74) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC212 | *BRCA1* | c.5266dupC (p.Gln1756Profs\*74) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC215 | *BRCA1* | c.5266dupC (p.Gln1756Profs\*74) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC225 | *BRCA1* | c.5266dupC (p.Gln1756Profs\*74) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC257 | *BRCA1* | c.5266dupC (p.Gln1756Profs\*74) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC265 | *BRCA1* | c.5266dupC (p.Gln1756Profs\*74) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC287 | *BRCA1* | c.5266dupC (p.Gln1756Profs\*74) | F | breast cancer, colon cancer | high | YES | PARPi (Approved) |
| GTBC290 | *BRCA1* | c.5266dupC (p.Gln1756Profs\*74) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC302 | *BRCA1* | c.5266dupC (p.Gln1756Profs\*74) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC319 | *BRCA1* | c.5266dupC (p.Gln1756Profs\*74) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC326 | *BRCA1* | c.5266dupC (p.Gln1756Profs\*74) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC380 | *BRCA1* | c.5266dupC (p.Gln1756Profs\*74) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC393 | *BRCA1* | c.5266dupC (p.Gln1756Profs\*74) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC410 | *BRCA1* | c.5266dupC (p.Gln1756Profs\*74) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC413 | *BRCA1* | c.5266dupC (p.Gln1756Profs\*74) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC006 | *BRCA1* | c.5266dupC (p.Gln1756Profs\*74) | F | bilateral breast cancer | high | YES | PARPi (Approved) |
| GTBC201 | *BRCA1* | c.5266dupC p.(Gln1756Profs\*74) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC260 | *BRCA1* | c.5382delG (p.Glu1794Aspfs\*40) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC054 | *BRCA1* | c.5468 ?\_\*? | F | bilateral breast cancer | high | YES | PARPi (Approved) |
| GTBC033 | *BRCA1* | c.5468 ?\_\*?del | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC195 | *BRCA1* | c.68\_69delAG (p.Glu23Valfs\*17), Exon 2 | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC067 | *BRCA1* | c.68\_69delAG p.Glu23Valfs\*17 | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC100 | *BRCA1* | c.68\_69delAG p.Glu23Valfs\*17 | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC239 | *BRCA1* | c.843\_846del (p.Ser282fs) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC267 | *BRCA1* | c.843\_846delCTCA (p.Ser282Tyrfs\*15) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC152 | *BRCA1* | g.(?\_43057046)\_(43057141\_?)del | F | breast cancer | high | NO | PARPi (Approved) |
| GTBC224 | *BRCA1* | g.(?\_43057046)\_(43057141\_?)del | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC280 | *BRCA1/CHEK2* | c.5266dupC (p.Gln1756Profs\*74) / c.470T>C (p.Ile157Thr) | F | breast cancer | high+low | YES | PARPi (Approved) |
| GTBC150 | *BRCA1/BRIP1* | c.5212G>A (p.Gly1738Arg) / c.2947delA (p.Ile983Leufs\*2) | F | breast cancer | high+low | YES | PARPi (Approved) |
| GTBC010 | *BRCA1/CHEK2* | c.181T>G (p.Cys61Gly) /c.470T>C (p.Ile157Thr) | F | breast cancer | high+low | YES | PARPi (Approved) |
| GTBC349 | *BRCA1/CHEK2* | c.181T>G (p.Cys61Gly) /c.470T>C (p.Ile157Thr) | F | breast cancer | high+low | YES | PARPi (Approved) |
| GTBC309 | *BRCA1/CHEK2* | c.5266dupC (p.Gln1756Profs\*74) / c.470T>C (p.Ile157Thr) | F | breast cancer | high+low | YES | PARPi (Approved) |
| GTBC030 | *BRCA1/CHEK2* | c.737delT p.Leu246\*/c.470T>C (p.Ile157Thr) | F | breast cancer | high+low | YES | PARPi (Approved) |
| GTBC102 | *BRCA1/CHEK2* | c.843\_846delCTCA p.Ser282Tyrfs\*15 / c.470T>C (p.Ile157Thr) | F | breast cancer | high+low | YES | PARPi (Approved) |
| GTBC115 | *BRCA2* | c.10G>T p.Gly4\* | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC179 | *BRCA2* | c.1117C>T p.Gln373\* | F | breast cancer | high | NO | PARPi (Approved) |
| GTBC094 | *BRCA2* | c.1189C>T p.Gln397\* | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC270 | *BRCA2* | c.1310\_1313delAAGA (p.Lys437Ilefs\*22) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC065 | *BRCA2* | c.1389\_1390delAG p.Val464Glyfs\*3 | F | breast cancer | high | NO | PARPi (Approved) |
| GTBC029 | *BRCA2* | c.1405\_1406delGA p.Asp469\* | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC122 | *BRCA2* | c.2095\_2096delCA p.Gln699Valfs\*8 | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC279 | *BRCA2* | c.2095C>T (p.Gln699Ter) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC321 | *BRCA2* | c.2490\_2491insT (p.Val831Cysfs\*2) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC164 | *BRCA2* | c.2490\_2491insT p.Val831Cysfs\*2 | F | unaffected | high | YES | PARPi (Approved) |
| GTBC317 | *BRCA2* | c.2808\_2811delACAA (p.Ala938Profs\*21) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC344 | *BRCA2* | c.2808\_2811delACAA (p.Ala938Profs\*21) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC352 | *BRCA2* | c.2808\_2811delACAA (p.Ala938Profs\*21) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC041 | *BRCA2* | c.3975\_3978dupTGCT p.Ala1327Cysfs\*4 | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC263 | *BRCA2* | c.4140delT (p.Glu1382Lysfs\*6) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC080 | *BRCA2* | c.4769delA p.Lys1590Serfs\*27 | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC339 | *BRCA2* | c.4889C>G (p.Ser1630Ter) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC181 | *BRCA2* | c.4936\_4939delGAAA p.Glu1646Glnfs\*23 | F | unaffected | high | YES | PARPi (Approved) |
| GTBC236 | *BRCA2* | c.5213\_5216delCTTA (p.Thr1738Ilefs\*2) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC281 | *BRCA2* | c.537dupT (p.Ile180Tyrfs\*3) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC178 | *BRCA2* | c.537dupT p.Ile180Tyrfs\*3 | F | unaffected | high | YES | PARPi (Approved) |
| GTBC189 | *BRCA2* | c.5557dupT p.Cys1853Leufs\*5 | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC356 | *BRCA2* | c.5645C>A (p.Ser1882Ter) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC341 | *BRCA2* | c.5796\_5797delTA (p.His1932Glnfs\*12) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC169 | *BRCA2* | c.5925delT p.Cys1975Trpfs\*29 | F | unaffected | high | YES | PARPi (Approved) |
| GTBC377 | *BRCA2* | c.6267\_6269delinsC (p.Glu2089Aspfs\*2) | F | breast cancer | high | NO | PARPi (Approved) |
| GTBC400 | *BRCA2* | c.6389\_6390delTT (p.Phe2130Ter) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC402 | *BRCA2* | c.6466\_6469delTCTC (p.Ser2156\_Gln2157Asnfs) | F | bilateral breast cancer | high | YES | PARPi (Approved) |
| GTBC242 | *BRCA2* | c.6490C>T (p.Gln2164Ter) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC372 | *BRCA2* | c.6490delC (p.Gln2164Serfs\*4) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC203 | *BRCA2* | c.6771delC, p.Glu2258Lysfs\*22 | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC002 | *BRCA2* | c.6842-?\_c.7007+? | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC282 | *BRCA2* | c.6941delC (p.Thr2314Lysfs) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC200 | *BRCA2* | c.7007G>C p.Arg2336Pro | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC119 | *BRCA2* | c.7209\_7212delinsGG p.Lys2404Glyfs\*7 | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC023 | *BRCA2* | c.7806-2A>T | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC391 | *BRCA2* | c.7878G>C (p.Trp2626Cys) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC097 | *BRCA2* | c.793+1G>A splicing | F | breast cancer | high | NO | PARPi (Approved) |
| GTBC158 | *BRCA2* | c.8002A>T p.Arg2668Ter | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC194 | *BRCA2* | c.8023A>G (p.Ile2675Val), Exon 18 | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC141 | *BRCA2* | c.8087T>A p.Leu2696\* | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC298 | *BRCA2* | c.8164dupA (p.Thr2722Asnfs\*8) | M | breast cancer | high | YES | PARPi (Approved) |
| GTBC412 | *BRCA2* | c.8168A>G (p.Asp2723Gly) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC407 | *BRCA2* | c.8331+1G>A | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC148 | *BRCA2* | c.8548delG p.Glu2850Lysfs\*13 | M | breast cancer | high | YES | PARPi (Approved) |
| GTBC291 | *BRCA2* | c.8655dupA (p.Pro2886Thrfs\*21) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC111 | *BRCA2* | c.8655dupA p.Pro2886Thrfs\*21 | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC228 | *BRCA2* | c.8800delC (p.Gln2934Lysfs\*3) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC273 | *BRCA2* | c.8800delC (p.Gln2934Lysfs\*3) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC197 | *BRCA2* | c.9097dupA (p.Thr3033Asnfs\*11) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC312 | *BRCA2* | c.9097dupA (p.Thr3033Asnfs\*11) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC394 | *BRCA2* | c.9117G>A (p.Pro3039=) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC160 | *BRCA2* | c.9154C>T p.Arg3052Trp | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC214 | *BRCA2* | c.9253delA (p.Thr3085Glnfs\*19) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC059 | *BRCA2* | c.9317G>A p.Trp3106\* | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC211 | *BRCA2* | c.9371A>T (p.Asn3124Ile) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC227 | *BRCA2* | c.9371A>T (p.Asn3124Ile) | F | unaffected | high | YES | PARPi (Approved) |
| GTBC334 | *BRCA2* | c.9371A>T (p.Asn3124Ile) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC348 | *BRCA2* | c.9371A>T (p.Asn3124Ile) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC031 | *BRCA2* | c.9371A>T p.Asn3124Ile | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC108 | *BRCA2* | c.9371A>T p.Asn3124Ile | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC146 | *BRCA2* | c.9371A>T p.Asn3124Ile | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC180 | *BRCA2* | c.9371A>T p.Asn3124Ile | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC221 | *BRCA2* | c.9376C>T (p.Gln3126Ter) | F | unaffected | high | YES | PARPi (Approved) |
| GTBC277 | *BRCA2* | c.966\_970delAGTAA (p.Val323Asnfs\*2) | F | breast cancer | high | YES | PARPi (Approved) |
| GTBC114 | *BRCA2* | c.9682delA p.Ser3228Valfs\*21 | F | unaffected | high | YES | PARPi (Approved) |
| GTBC331 | *BRCA2/CHEK2* | c.5946delT (p.Ser1982Argfs\*22) / c.(908+1\_909-1)\_(1095+1\_1096-1)del | F | breast cancer | high+moderate | YES | PARPi (Approved) |
| GTBC159 | *BRCA2/CHEK2* | c.9371A>T p.Asn3124Ile / c.902delT p.Leu301Trpfs\*3 | F | breast cancer | high+moderate | YES | PARPi (Approved) |
| GTBC073 | *BRCA2/MUTYH* | c.9154C>T p.Arg3052Trp / c.1187G>A p.Gly396Asp | F | breast cancer | high+unknown | YES | PARPi (Approved) |
| GTBC365 | *BRIP1* | c.2392C>T (p.Arg798Ter) | F | breast cancer | low | YES | PARPi (Off-Label) |
| GTBC106 | *BRIP1* | c.2392C>T p.Arg798\* | F | breast cancer | low | YES | PARPi (Off-Label) |
| GTBC104 | *BRIP1* | c.298delA p.Met100\* | F | unaffected | low | YES | PARPi (Off-Label) |
| GTBC165 | *BRIP1* | c.747delG p.Thr250Hisfs\*24 | F | bilateral breast cancer | low | YES | PARPi (Off-Label) |
| GTBC359 | *BRIP1* | c.761\_764delAGCA (p.Lys254Argfs\*19) | F | breast cancer | low | YES | PARPi (Off-Label) |
| GTBC338 | *BRIP1/ MUTYH* | c.751C>T (p.Arg251Cys) / c.536A>G (p.Tyr179Cys) | F | breast cancer | low+unknown | YES | PARPi (Off-Label) |
| GTBC205 | *CHEK2* | c.(908+1\_909-1)\_(1095+1\_1096-1)del | F | breast cancer | moderate | YES | PARPi (Off-Label) |
| GTBC246 | *CHEK2* | c.1100delC (p.Thr367Metfs\*15) | F | breast cancer | moderate | YES | PARPi (Off-Label) |
| GTBC262 | *CHEK2* | c.1100delC (p.Thr367Metfs\*15) | F | unaffected | moderate | YES | PARPi (Off-Label) |
| GTBC375 | *CHEK2* | c.1100delC (p.Thr367Metfs\*15) | F | breast cancer | moderate | YES | PARPi (Off-Label) |
| GTBC038 | *CHEK2* | c.1100delC p.Thr367Metfs\*15 | F | breast cancer | moderate | YES | PARPi (Off-Label) |
| GTBC087 | *CHEK2* | c.1164delC p.Thr389Profs\*25 | F | breast cancer | moderate | YES | PARPi (Off-Label) |
| GTBC406 | *CHEK2* | c.1188delT (p.Val397Phefs\*17) | F | breast cancer | moderate | YES | PARPi (Off-Label) |
| GTBC232 | *CHEK2* | c.1232G>A (p.Trp411Ter) | M | unaffected | moderate | YES | PARPi (Off-Label) |
| GTBC261 | *CHEK2* | c.1232G>A (p.Trp411Ter) | F | breast cancer | moderate | YES | PARPi (Off-Label) |
| GTBC058 | *CHEK2* | c.1232G>A p.Trp411\* | F | bilateral breast cancer | moderate | YES | PARPi (Off-Label) |
| GTBC157 | *CHEK2* | c.1232G>A p.Trp411\* | F | breast cancer | moderate | YES | PARPi (Off-Label) |
| GTBC123 | *CHEK2* | c.1427C>T p.Thr476Met | F | breast cancer | moderate | YES | PARPi (Off-Label) |
| GTBC124 | *CHEK2* | c.1427C>T p.Thr476Met | F | breast cancer | moderate | YES | PARPi (Off-Label) |
| GTBC177 | *CHEK2* | c.1427C>T p.Thr476Met | F | breast cancer | moderate | YES | PARPi (Off-Label) |
| GTBC057 | *CHEK2* | c.1461+2T>C | F | breast cancer | moderate | YES | PARPi (Off-Label) |
| GTBC078 | *CHEK2* | c.444+1G>A | F | breast cancer | moderate | YES | PARPi (Off-Label) |
| GTBC414 | *CHEK2* | c.444+1G>A | F | breast cancer | moderate | YES | PARPi (Off-Label) |
| GTBC021 | *CHEK2* | c.470T>C (p.Ile157Thr) | F | breast cancer | low | YES | PARPi (Off-Label) |
| GTBC024 | *CHEK2* | c.470T>C (p.Ile157Thr) | F | breast cancer | low | NO | PARPi (Off-Label) |
| GTBC034 | *CHEK2* | c.470T>C (p.Ile157Thr) | F | breast cancer | low | YES | PARPi (Off-Label) |
| GTBC090 | *CHEK2* | c.470T>C (p.Ile157Thr) | F | unaffected | low | YES | PARPi (Off-Label) |
| GTBC162 | *CHEK2* | c.470T>C (p.Ile157Thr) | F | breast cancer | low | YES | PARPi (Off-Label) |
| GTBC167 | *CHEK2* | c.470T>C (p.Ile157Thr) | F | breast cancer | low | YES | PARPi (Off-Label) |
| GTBC185 | *CHEK2* | c.470T>C (p.Ile157Thr) | F | breast cancer | low | NO | PARPi (Off-Label) |
| GTBC186 | *CHEK2* | c.470T>C (p.Ile157Thr) | F | bilateral breast cancer | low | YES | PARPi (Off-Label) |
| GTBC192 | *CHEK2* | c.470T>C (p.Ile157Thr) | F | breast cancer | low | YES | PARPi (Off-Label) |
| GTBC213 | *CHEK2* | c.470T>C (p.Ile157Thr) | F | breast cancer | low | YES | PARPi (Off-Label) |
| GTBC238 | *CHEK2* | c.470T>C (p.Ile157Thr) | F | breast cancer | low | YES | PARPi (Off-Label) |
| GTBC241 | *CHEK2* | c.470T>C (p.Ile157Thr) | F | breast cancer | low | YES | PARPi (Off-Label) |
| GTBC243 | *CHEK2* | c.470T>C (p.Ile157Thr) | F | breast cancer | low | NO | PARPi (Off-Label) |
| GTBC254 | *CHEK2* | c.470T>C (p.Ile157Thr) | F | breast cancer | low | YES | PARPi (Off-Label) |
| GTBC264 | *CHEK2* | c.470T>C (p.Ile157Thr) | F | breast cancer | low | YES | PARPi (Off-Label) |
| GTBC271 | *CHEK2* | c.470T>C (p.Ile157Thr) | F | breast cancer | low | YES | PARPi (Off-Label) |
| GTBC275 | *CHEK2* | c.470T>C (p.Ile157Thr) | F | breast cancer | low | YES | PARPi (Off-Label) |
| GTBC196 | *CHEK2* | c.470T>C (p.Ile157Thr), Exon 4 | F | breast cancer | low | YES | PARPi (Off-Label) |
| GTBC376 | *CHEK2* | c.470T>C, p.(Ile157Thr) L.P | F | breast cancer | low | YES | PARPi (Off-Label) |
| GTBC389 | *CHEK2* | c.499G>A (p.Gly167Arg) | F | breast cancer | moderate | YES | PARPi (Off-Label) |
| GTBC112 | *CHEK2* | c.499G>A p.Gly167Arg | F | breast cancer | moderate | YES | PARPi (Off-Label) |
| GTBC388 | *CHEK2* | c.507delT (p.Phe169Leufs\*2) | F | breast cancer | moderate | YES | PARPi (Off-Label) |
| GTBC237 | *CHEK2* | c.793-1G>A | F | unaffected | moderate | YES | PARPi (Off-Label) |
| GTBC001 | *CHEK2* | c.(908+1\_909-1)\_(1095+1\_1096-1)del | F | breast cancer | moderate | YES | PARPi (Off-Label) |
| GTBC286 | *CHEK2* | c.(792+1\_793-1)\_(846+1\_847-1) | F | breast cancer | moderate | NO | PARPi (Off-Label) |
| GTBC355 | *CHEK2* | c.(908+1\_909-1)\_(1095+1\_1096-1)del | F | breast cancer | moderate | YES | PARPi (Off-Label) |
| GTBC351 | *CHEK2* | c.(908+1\_909-1)\_(1095+1\_1096-1)del | F | breast cancer | moderate | YES | PARPi (Off-Label) |
| GTBC330 | *CHEK2* | c.1188delT (p.Val397Phefs\*17) | F | breast cancer | moderate | YES | PARPi (Off-Label) |
| GTBC329 | *CHEK2* | c.1427C>T (p.Thr476Met) | F | breast cancer | moderate | NO | PARPi (Off-Label) |
| GTBC294 | *CHEK2* | c.470T>C (p.Ile157Thr) | F | breast cancer | low | YES | PARPi (Off-Label) |
| GTBC303 | *CHEK2* | c.470T>C (p.Ile157Thr) | F | breast cancer | low | YES | PARPi (Off-Label) |
| GTBC315 | *CHEK2* | c.470T>C (p.Ile157Thr) | F | breast cancer | low | YES | PARPi (Off-Label) |
| GTBC327 | *CHEK2* | c.470T>C (p.Ile157Thr) | F | breast cancer | low | NO | PARPi (Off-Label) |
| GTBC332 | *CHEK2* | c.470T>C (p.Ile157Thr) | F | bilateral breast cancer | low | YES | PARPi (Off-Label) |
| GTBC342 | *CHEK2* | c.470T>C (p.Ile157Thr) | F | breast cancer | low | YES | PARPi (Off-Label) |
| GTBC346 | *CHEK2* | c.470T>C (p.Ile157Thr) | F | breast cancer | low | YES | PARPi (Off-Label) |
| GTBC283 | *CHEK2* | c.470T>C (p.Ile157Thr) | F | breast cancer | low | YES | PARPi (Off-Label) |
| GTBC292 | *CHEK2* | c.470T>C (p.Ile157Thr) | F | breast cancer | low | NO | PARPi (Off-Label) |
| GTBC204 | *CHEK2* | c.470T>C (p.Ile157Thr) Homozygous | F | breast cancer | low\* | YES | PARPi (Off-Label) |
| GTBC306 | *CHEK2* | c.499G>A (p.Gly167Arg) | F | breast cancer, thyroid cancer | moderate | YES | PARPi (Off-Label) |
| GTBC308 | *CHEK2* | c.499G>A (p.Gly167Arg) | F | breast cancer | moderate | YES | PARPi (Off-Label) |
| GTBC343 | *CHEK2* | c.499G>A (p.Gly167Arg) | F | breast cancer | moderate | YES | PARPi (Off-Label) |
| GTBC118 | *CHEK2/CHEK2* | c.470T>C p.Ile157Thr / c.499G>A p.Gly167Arg | F | breast cancer | moderate+low | YES | PARPi (Off-Label) |
| GTBC013 | *CHEK2/PMS2* | c.1232G>A (p.Trp411\*) / c.(?\_-87)\_(\*160\_?)del | F | breast cancer | moderate+low | YES | PARPi (Off-Label) / ICI (Well-poered studies) |
| GTBC392 | *CHEK2/RAD50* | c.499G>A (p.Gly167Arg) / c.326\_329delCAGA (p.Thr109Asnfs\*20) | F | breast cancer | moderate+unknown | YES | PARPi (Off-Label) |
| GTBC075 | *FAM175A/RAD50* | c.1106dupG p.Ser370Ilefs\*2 / c.3779\_3791dupGTAACTTCCAGCT p.Leu1265\* | F | breast cancer | unknown+unknown | YES | Clinical Trials |
| GTBC364 | *FANCA* | c.(1626+1\_1627-1)\_ (2852+1\_2853-1)del | F | breast cancer, thyroid cancer | unknown | NO | Clinical Trials |
| GTBC314 | *FANCA* | c.82G>T (p.Gly28Ter) | F | breast cancer | unknown | YES | Clinical Trials |
| GTBC347 | *FANCM* | c.4368\_4369dupCA (p.Arg1457Thrfs\*5) | F | breast cancer | unknown | YES | Clinical Trials |
| GTBC323 | *FANCM* | c.5791C>T (p.Arg1931Ter) | F | breast cancer | unknown | YES | Clinical Trials |
| GTBC362 | *FANCM* | c.5791C>T (p.Arg1931Ter) | F | breast cancer | unknown | YES | Clinical Trials |
| GTBC353 | *FANCM/NBN* | c.5791C>T (p.Arg1931Ter) / c.657\_661delACAAA (p.Lys219Asnfs\*16) | F | breast cancer | moderate+unknown | YES | Clinical Trials |
| GTBC027 | *MLH1* | c.199G>A (p.Gly67Arg) | F | breast cancer | LOW | YES | ICI (Well-powered studies) |
| GTBC378 | *MRE11* | c.1714C>T (p.Arg572Ter) | F | breast cancer | unknown | YES | Clinical Trials |
| GTBC248 | *MSH2* | c.(1076+1\_1077-1)\_(1386+1\_1387-1)del | F | Colon, Breast | low | YES | ICI (Well-powered studies) |
| GTBC216 | *MSH6* | c.2764C>T (p.Arg922Ter) | F | unaffected | low | NO | ICI (Well-powered studies) |
| GTBC171 | *MSH6* | c.3261dupC p.Phe1088Leufs\*5 | F | breast cancer | low | YES | ICI (Well-powered studies) |
| GTBC011 | *MSH6/MUTYH* | c.2136delG (p.Asp713Ilefs\*23)/c.1187G>A (p.Gly396Asp) | F | breast cancer | low+unknown | YES | ICI (Well-powered studies) |
| GTBC233 | *MUTYH* | c.1187G>A (p.Gly396Asp) | F | breast cancer | unknown | YES | None |
| GTBC251 | *MUTYH* | c.1187G>A (p.Gly396Asp) | F | breast cancer | unknown | YES | None |
| GTBC256 | *MUTYH* | c.1187G>A (p.Gly396Asp) | F | breast cancer | unknown | NO | None |
| GTBC268 | *MUTYH* | c.1187G>A (p.Gly396Asp) | F | breast cancer | unknown | NO | None |
| GTBC297 | *MUTYH* | c.1187G>A (p.Gly396Asp) | F | breast cancer | unknown | NO | None |
| GTBC322 | *MUTYH* | c.1187G>A (p.Gly396Asp) | F | breast cancer | unknown | YES | None |
| GTBC403 | *MUTYH* | c.1187G>A (p.Gly396Asp) | F | breast cancer | unknown | YES | None |
| GTBC015 | *MUTYH* | c.1187G>A p.Gly396Asp | F | breast cancer | unknown | YES | None |
| GTBC230 | *MUTYH* | c.1227\_1228dupGG (p.Glu410Glyfs\*43) | F | breast cancer | unknown | NO | None |
| GTBC138 | *MUTYH* | c.1437\_1439delGGA | F | breast cancer | unknown | YES | None |
| GTBC234 | *MUTYH* | c.1437\_1439delGGA (p.Glu479\_Glu480delinsGlu) | F | Breast, kidney | unknown | YES | None |
| GTBC300 | *MUTYH* | c.1437\_1439delGGA (p.Glu479\_Glu480delinsGlu) | F | breast cancer | unknown | YES | None |
| GTBC354 | *MUTYH* | c.1437\_1439delGGA (p.Glu479\_Glu480delinsGlu) | F | breast cancer | unknown | YES | None |
| GTBC220 | *MUTYH* | c.536A>G (p.Tyr179Cys) | F | breast cancer | unknown | YES | None |
| GTBC385 | *MUTYH* | c.536A>G (p.Tyr179Cys) | F | breast cancer | unknown | YES | None |
| GTBC401 | *MUTYH* | c.536A>G (p.Tyr179Cys) | F | breast cancer | unknown | NO | None |
| GTBC039 | *MUTYH* | c.536A>G p.Tyr179Cys | F | breast cancer | unknown | YES | None |
| GTBC089 | *MUTYH* | c.536A>G p.Tyr179Cys | F | breast cancer | unknown | YES | None |
| GTBC133 | *MUTYH* | c.536A>G p.Tyr179Cys | F | unaffected | unknown | YES | None |
| GTBC153 | *MUTYH* | c.536A>G p.Tyr179Cys | F | breast cancer | unknown | YES | None |
| GTBC191 | *MUTYH* | c.536A>G p.Tyr179Cys | F | breast cancer | unknown | NO | None |
| GTBC258 | *MUTYH* | c.734G>A (p.Arg245His) | F | breast cancer | unknown | YES | None |
| GTBC253 | *MUTYH* | c.884C>T (p.Pro295Leu) | F | breast cancer | unknown | YES | None |
| GTBC207 | *MUTYH* | c.884C>T p.(Pro295Leu) | F | breast cancer | unknown | YES | None |
| GTBC126 | *MUTYH/PALB2* | c.734G>A p.Arg245His / c.2257C>T p.Arg753\* | F | breast cancer | high+unknown | YES | PARPi (Off-Label) |
| GTBC147 | *MUTYH/RAD51C* | c.536A>G p.Tyr179Cys / c.905-2A>G | F | breast cancer | low+unknown | YES | PARPi (Off-Label) |
| GTBC084 | *NBN* | c.2140C>T p.Arg714\* | F | breast cancer | unknown | YES | Clinical Trials |
| GTBC245 | *NBN* | c.657\_661delACAAA (p.Lys219Asnfs\*16) | F | breast cancer | moderate | YES | Clinical Trials |
| GTBC113 | *NBN* | c.657\_661delACAAA (p.Lys219Asnfs\*16) | F | breast cancer | moderate | NO | Clinical Trials |
| GTBC117 | *NBN* | c.657\_661delACAAA (p.Lys219Asnfs\*16) | F | breast cancer | moderate | YES | Clinical Trials |
| GTBC125 | *NBN* | c.657\_661delACAAA (p.Lys219Asnfs\*16) | F | breast cancer | moderate | YES | Clinical Trials |
| GTBC374 | *NBN* | c.657\_661delACAAA (p.Lys219Asnfs\*16) | F | breast cancer | moderate | NO | Clinical Trials |
| GTBC096 | *NBN/PMS2* | c.657\_661delACAAA (p.Lys219Asnfs\*16) / c.1261C>T p.Arg421\* | F | breast cancer | moderate+unknown | YES | ICI (Well-powered studies) |
| GTBC381 | *NF1* | c.2033dupC (p.Ile679Aspfs\*21) | F | breast cancer, ovarian cancer | low | NO | None |
| GTBC170 | *NF1* | c.2455delC p.His819Metfs\*2 | F | Breast cancer, NF1 | low | YES | None |
| GTBC226 | *PALB2* | c.1037\_1041delAAGAA (p.Lys346Thrfs\*13) | F | breast cancer | high | YES | PARPi (Off-Label) |
| GTBC397 | *PALB2* | c.1317dupG (p.Phe440Valfs\*2) | F | breast cancer | high | YES | PARPi (Off-Label) |
| GTBC240 | *PALB2* | c.172\_175delTTGT (p.Gln60Argfs\*7) | F | breast cancer | high | YES | PARPi (Off-Label) |
| GTBC335 | *PALB2* | c.172\_175delTTGT (p.Gln60Argfs\*7) | F | breast cancer | high | YES | PARPi (Off-Label) |
| GTBC387 | *PALB2* | c.172\_175delTTGT (p.Gln60Argfs\*7) | F | breast cancer | high | YES | PARPi (Off-Label) |
| GTBC079 | *PALB2* | c.172\_175delTTGT p.Gln60Argfs\*7 | F | breast cancer | high | YES | PARPi (Off-Label) |
| GTBC121 | *PALB2* | c.2257C>T (p.Arg753Ter) | F | bilateral breast cancer | high | YES | PARPi (Off-Label) |
| GTBC145 | *PALB2* | c.2257C>T (p.Arg753Ter) | F | breast cancer | high | YES | PARPi (Off-Label) |
| GTBC301 | *PALB2* | c.2257C>T (p.Arg753Ter) | F | breast cancer | high | YES | PARPi (Off-Label) |
| GTBC411 | *PALB2* | c.2257C>T (p.Arg753Ter) | F | breast cancer | high | YES | PARPi (Off-Label) |
| GTBC022 | *PALB2* | c.2747\_2748+4delAGGTAA | F | breast cancer | high | YES | PARPi (Off-Label) |
| GTBC168 | *PALB2* | c.3271C>T p.Gln1091\* | F | breast cancer | high | YES | PARPi (Off-Label) |
| GTBC371 | *PALB2* | c.3340C>T (p.Gln1114Ter) | F | breast cancer | high | YES | PARPi (Off-Label) |
| GTBC028 | *PALB2* | c.3549C>G p.Tyr1183\* | F | unaffected | high | YES | PARPi (Off-Label) |
| GTBC155 | *PALB2* | c.49-1G>A | F | breast cancer | high | YES | PARPi (Off-Label) |
| GTBC014 | *PALB2* | c.509\_510delGA p.Arg170Ilefs\*14 | F | breast cancer | high | YES | PARPi (Off-Label) |
| GTBC056 | *PALB2* | c.509\_510delGA p.Arg170Ilefs\*14 | F | breast cancer | high | NO | PARPi (Off-Label) |
| GTBC026 | *PALB2* | c.79G>T p.Glu29\* | F | breast cancer | high | YES | PARPi (Off-Label) |
| GTBC202 | *PALB2* | c.868G>T p.Glu290\* | F | breast cancer | high | YES | PARPi (Off-Label) |
| GTBC369 | *PALB2* | c.93dupA (p.Leu32Thrfs\*11) | F | breast cancer, colon cancer | high | NO | PARPi (Off-Label) |
| GTBC007 | *PALB2* | c.93dupA (p.Leu32Thrfs\*11) | F | breast cancer | high | YES | PARPi (Off-Label) |
| GTBC046 | *PALB2* | c.93dupA p.Leu32Thrfs\*11 | F | breast cancer | high | YES | PARPi (Off-Label) |
| GTBC068 | *PALB2* | c.93dupA p.Leu32Thrfs\*11 | F | breast cancer | high | YES | PARPi (Off-Label) |
| GTBC405 | *PMS2* | c.(705+1\_706-1)\_(2006+1\_2007-1)del | F | breast cancer | unknown | NO | ICI (Well-powered studies) |
| GTBC328 | *PMS2* | c.(903+1\_904-1)\_(988+1\_989-1)del | F | breast cancer, colon cancer | unknown | NO | ICI (Well-powered studies) |
| GTBC333 | *PMS2* | c.1239dupA (p.Asp414Argfs\*44) | F | breast cancer | unknown | YES | ICI (Well-powered studies) |
| GTBC144 | *PMS2* | c.1239dupA p.Asp414Argfs\*44 | F | breast cancer | unknown | YES | ICI (Well-powered studies) |
| GTBC188 | *PMS2* | c.1239dupA p.Asp414Argfs\*44 | F | breast cancer | unknown | YES | ICI (Well-powered studies) |
| GTBC005 | *PMS2* | c.1297A>T (p.Lys433\*) | F | breast cancer | unknown | YES | ICI (Well-powered studies) |
| GTBC086 | *PMS2* | c.1414A>T p.Lys472\* | F | breast cancer | unknown | YES | ICI (Well-powered studies) |
| GTBC249 | *PTEN* | c.1117G>T (p.Glu373Ter) | F | bilateral breast cancer | high | YES | Clinical Trials |
| GTBC109 | *PTEN* | c.389G>T p.Arg130Leu | F | breast cancer | high | YES | Clinical Trials |
| GTBC187 | *RAD50* | c.1245+1G>A | F | breast cancer | unknown | YES | Clinical Trials |
| GTBC361 | *RAD50* | c.1636-2A>G | F | breast cancer | unknown | NO | Clinical Trials |
| GTBC182 | *RAD50* | c.1875C>G p.Tyr625\* | F | breast cancer | unknown | YES | Clinical Trials |
| GTBC012 | *RAD50* | c.2260\_2266del (p.Leu754Metfs\*9) | F | breast cancer | unknown | NO | Clinical Trials |
| GTBC174 | *RAD50* | c.3103G>T p.Glu1035\* | F | unaffected | unknown | YES | Clinical Trials |
| GTBC198 | *RAD50* | c.326\_329delCAGA (p.Thr109Asnfs\*20) | F | breast cancer | unknown | YES | Clinical Trials |
| GTBC222 | *RAD50* | c.326\_329delCAGA (p.Thr109Asnfs\*20) | F | breast cancer | unknown | NO | Clinical Trials |
| GTBC250 | *RAD50* | c.326\_329delCAGA (p.Thr109Asnfs\*20) | F | unaffected | unknown | YES | Clinical Trials |
| GTBC272 | *RAD50* | c.326\_329delCAGA (p.Thr109Asnfs\*20) | F | breast cancer | unknown | YES | Clinical Trials |
| GTBC296 | *RAD50* | c.326\_329delCAGA (p.Thr109Asnfs\*20) | F | breast cancer | unknown | YES | Clinical Trials |
| GTBC318 | *RAD50* | c.326\_329delCAGA (p.Thr109Asnfs\*20) | F | breast cancer | unknown | YES | Clinical Trials |
| GTBC035 | *RAD50* | c.326\_329delCAGA p.Thr109Asnfs\*20 | F | breast cancer | unknown | YES | Clinical Trials |
| GTBC060 | *RAD50* | c.326\_329delCAGA p.Thr109Asnfs\*20 | F | breast cancer | unknown | YES | Clinical Trials |
| GTBC404 | *RAD50* | c.3553C>T (p.Arg1185Ter) | F | breast cancer | unknown | YES | Clinical Trials |
| GTBC131 | *RAD50* | c.8756G>A p.Gly2919Asp/c.326\_329delCAGA p.Thr109Asnfs\*20 | F | breast cancer | unknown | YES | Clinical Trials |
| GTBC295 | *RAD50/CHEK2* | c.470T>C (p.Ile157Thr) / c.326\_329delCAGA (p.Thr109Asnfs\*20) | F | breast cancer | low+unknown | YES | PARPi (Off-Label) |
| GTBC156 | *RAD51B* | c.84G>A p.= | F | breast cancer+Kidney cancer+Thyroid cancer | unknown | YES | Clinical Trials |
| GTBC229 | *RAD51C* | c.706-2A>G | F | breast cancer, ovarian cancer | low | YES | PARPi (Off-Label) |
| GTBC142 | *RAD51C* | c.904+5G>T | F | breast cancer | low | YES | PARPi (Off-Label) |
| GTBC032 | *TP53* | c.1025G>C p.Arg342Pro | F | breast cancer | high | YES | None |
| GTBC025 | *TP53* | c.469G>T p.Val157Phe | F | breast cancer | high | YES | None |
| GTBC259 | *TP53* | c.586C>T (p.Arg196Ter) | F | breast cancer | high | YES | None |
| GTBC149 | *TP53* | c.673-1G>A | F | breast cancer | high | YES | None |
| GTBC217 | *TP53* | c.736A>G (p.Met246Val) | F | breast cancer | high | YES | None |
| GTBC076 | *TP53* | c.743G>A p.Arg248Gln | F | breast cancer | high | YES | None |
| GTBC020 | *TP53* | c.818G>A p.Arg273His | F | breast cancer | high | YES | None |
| GTBC085 | *XRCC2* | c.190C>T p.Arg64\* | F | breast cancer | unknown | NO | Clinical Trials |