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

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

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| **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 |
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| **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 |