Potential panel genes of breast cancer are (n=300):

Asia:  
0, PIK3CA (48.8837%)  
1, MED12 (19.389%)  
2, TP53 (13.0435%)  
3, ESR1 (3.2902%)  
4, RARA (3.1727%)  
5, KMT2D (2.5852%)  
6, SETD2 (2.4677%)  
7, BRCA1 (2.3502%)  
8, KMT2C (2.2327%)  
9, GATA3 (2.1152%)  
10, MAP3K1 (1.9976%)  
11, AKT1 (1.7626%)  
12, KRAS (1.5276%)  
13, ERBB2 (1.5276%)  
14, RB1 (1.2926%)  
15, CDH1 (1.1751%)  
16, PTEN (1.0576%)  
17, STK11 (1.0576%)  
18, KIT (0.9401%)  
19, EGFR (0.8226%)  
20, ATM (0.7051%)  
21, TET2 (0.7051%)  
22, ERBB4 (0.7051%)  
23, MLH1 (0.7051%)  
24, ERBB3 (0.5875%)  
25, NOTCH2 (0.5875%)  
26, NF1 (0.5875%)  
27, ALK (0.47%)  
28, CHD4 (0.47%)  
29, CDK12 (0.47%)  
30, RUNX1 (0.47%)  
31, BCOR (0.47%)  
32, FAT1 (0.47%)  
33, PBRM1 (0.47%)  
34, TBX3 (0.47%)  
35, FANCD2 (0.47%)  
36, NCOR1 (0.47%)  
37, NSD1 (0.3525%)  
38, PDGFRB (0.3525%)  
39, JAK3 (0.3525%)  
40, KAT6B (0.3525%)  
41, CHEK2 (0.3525%)  
42, NOTCH1 (0.3525%)  
43, SMAD4 (0.3525%)  
44, ROS1 (0.3525%)  
45, CREBBP (0.3525%)  
46, FGFR1 (0.235%)  
47, GRIN2A (0.235%)  
48, PIK3R1 (0.235%)  
49, STAT3 (0.235%)  
50, MAP2K4 (0.235%)  
51, HRAS (0.235%)  
52, TPR (0.235%)  
53, TSC1 (0.235%)  
54, DAXX (0.235%)  
55, EP300 (0.235%)  
56, TERT (0.235%)  
57, CIC (0.235%)  
58, RAF1 (0.235%)  
59, JAK2 (0.235%)  
60, FBXW7 (0.235%)  
61, TRRAP (0.235%)  
62, KMT2A (0.235%)  
63, PRKAR1A (0.235%)  
64, BRAF (0.235%)  
65, PALB2 (0.235%)  
66, MECOM (0.235%)  
67, AKT2 (0.235%)  
68, ZFHX3 (0.235%)  
69, CDKN1B (0.235%)  
70, MYH9 (0.235%)  
71, FGFR3 (0.235%)  
72, MAP3K13 (0.235%)  
73, RBM15 (0.1175%)  
74, ARHGAP35 (0.1175%)  
75, ETV6 (0.1175%)  
76, FANCE (0.1175%)  
77, CNTRL (0.1175%)  
78, RNF43 (0.1175%)  
79, MLLT3 (0.1175%)  
80, AFDN (0.1175%)  
81, DICER1 (0.1175%)  
82, GNA11 (0.1175%)  
83, HLA-A (0.1175%)  
84, CDC73 (0.1175%)  
85, SS18L1 (0.1175%)  
86, EML4 (0.1175%)  
87, BCL11B (0.1175%)  
88, MSH2 (0.1175%)  
89, KDM5C (0.1175%)  
90, POLD1 (0.1175%)  
91, ARID1A (0.1175%)  
92, TNFAIP3 (0.1175%)  
93, NKX2-1 (0.1175%)  
94, DDR2 (0.1175%)  
95, IRF4 (0.1175%)  
96, RET (0.1175%)  
97, SMARCA4 (0.1175%)  
98, ARID1B (0.1175%)  
99, CARD11 (0.1175%)  
100, LATS1 (0.1175%)  
101, KEAP1 (0.1175%)  
102, BCL11A (0.1175%)  
103, GATA1 (0.1175%)  
104, BRCA2 (0.1175%)  
105, BCL2 (0.1175%)  
106, CD274 (0.1175%)  
107, BCORL1 (0.1175%)  
108, ATRX (0.1175%)  
109, CASP8 (0.1175%)  
110, APC (0.1175%)  
111, PAX7 (0.1175%)  
112, NUMA1 (0.1175%)  
113, ACVR1 (0.1175%)  
114, FOXA1 (0.1175%)  
115, NSD2 (0.1175%)  
116, ATR (0.1175%)  
117, CCNE1 (0.1175%)  
118, ASXL1 (0.1175%)  
119, MEN1 (0.1175%)  
120, BARD1 (0.1175%)  
121, BRIP1 (0.1175%)  
122, SPEN (0.1175%)  
123, POLE (0.1175%)  
124, BCL3 (0.1175%)  
125, CUX1 (0.1175%)  
126, PIK3CB (0.1175%)  
127, MTOR (0.1175%)  
128, RAC1 (0.1175%)  
129, ARHGAP26 (0.1175%)  
130, IKZF3 (0.1175%)  
131, PTCH1 (0.1175%)  
132, POLQ (0.1175%)  
133, CBFB (0.1175%)  
134, DDX10 (0.1175%)  
135, ATP1A1 (0.1175%)  
136, KAT6A (0.1175%)  
137, JAK1 (0.1175%)  
138, ERG (0.1175%)  
139, MAP2K2 (0.1175%)  
140, PPP2R1A (0.1175%)  
141, BAP1 (0.1175%)  
142, PLAG1 (0.1175%)  
143, BCR (0.1175%)  
144, SF3B1 (0.1175%)  
145, CBLB (0.1175%)  
146, ETV1 (0.1175%)  
147, PLCG1 (0.1175%)  
148, IDH1 (0.1175%)  
149, GNAS (0.1175%)  
150, CNOT3 (0.1175%)  
151, LRP1B (0.1175%)  
152, ABL1 (0.1175%)  
153, IDH2 (0.1175%)  
  
  
The world:  
0, PIK3CA (41.3433%)  
1, TP53 (32.9552%)  
2, CDH1 (7.6881%)  
3, GATA3 (6.614%)  
4, ESR1 (6.4631%)  
5, MED12 (6.2519%)  
6, KMT2C (5.9622%)  
7, MAP3K1 (4.6949%)  
8, PTEN (3.9527%)  
9, LRP1B (3.5242%)  
10, NF1 (3.482%)  
11, ERBB4 (3.3975%)  
12, ZFHX3 (3.3734%)  
13, ERBB2 (3.3492%)  
14, ARID1A (3.313%)  
15, AKT1 (3.2949%)  
16, PTPRT (2.9811%)  
17, ALK (2.9208%)  
18, RUNX1 (2.8121%)  
19, NCOR1 (2.6975%)  
20, GRIN2A (2.6552%)  
21, ARID1B (2.4802%)  
22, KMT2D (2.4742%)  
23, FHIT (2.432%)  
24, ATM (2.3837%)  
25, CAMTA1 (2.3475%)  
26, TBX3 (2.2992%)  
27, RB1 (2.257%)  
28, BRCA2 (2.2328%)  
29, AFF3 (2.1966%)  
30, MAP2K4 (2.1363%)  
31, ATRX (2.0699%)  
32, PREX2 (2.0699%)  
33, EGFR (1.9371%)  
34, FOXP1 (1.9311%)  
35, LPP (1.919%)  
36, NOTCH2 (1.8647%)  
37, NTRK3 (1.8526%)  
38, FAT1 (1.8406%)  
39, KMT2A (1.8285%)  
40, ATR (1.8285%)  
41, FOXA1 (1.7983%)  
42, EBF1 (1.7681%)  
43, RAD51B (1.7621%)  
44, SPEN (1.7259%)  
45, PRDM16 (1.7138%)  
46, MTOR (1.6837%)  
47, PTPRK (1.6354%)  
48, GPC3 (1.6173%)  
49, GPHN (1.6112%)  
50, AR (1.5992%)  
51, CREBBP (1.5931%)  
52, BRCA1 (1.5811%)  
53, CUX1 (1.5509%)  
54, PIK3R1 (1.5449%)  
55, ROS1 (1.5207%)  
56, ERG (1.4966%)  
57, RSPO2 (1.4906%)  
58, SETD2 (1.4845%)  
59, STAG2 (1.4785%)  
60, MAML2 (1.4604%)  
61, ERBB3 (1.4483%)  
62, EXT1 (1.4423%)  
63, KDM6A (1.4362%)  
64, RUNX1T1 (1.4302%)  
65, NSD1 (1.4302%)  
66, SND1 (1.4242%)  
67, APC (1.4121%)  
68, ARID2 (1.394%)  
69, CBFB (1.3699%)  
70, BRAF (1.3397%)  
71, MSI2 (1.3035%)  
72, ZNF521 (1.2974%)  
73, TP63 (1.2974%)  
74, ARHGAP26 (1.2974%)  
75, PBX1 (1.2974%)  
76, ERC1 (1.2914%)  
77, NCOR2 (1.2854%)  
78, UBR5 (1.2793%)  
79, SETBP1 (1.2492%)  
80, MET (1.2492%)  
81, FAT4 (1.2431%)  
82, BRIP1 (1.2431%)  
83, NCOA2 (1.2371%)  
84, DDR2 (1.2311%)  
85, RNF213 (1.219%)  
86, FBXW7 (1.213%)  
87, JAK1 (1.2009%)  
88, NOTCH1 (1.1949%)  
89, PDE4DIP (1.1888%)  
90, CARD11 (1.1768%)  
91, KIT (1.1405%)  
92, NRG1 (1.1164%)  
93, CTCF (1.1104%)  
94, CACNA1D (1.1104%)  
95, GAS7 (1.0862%)  
96, GNAQ (1.0862%)  
97, SF3B1 (1.0742%)  
98, KAT6B (1.0742%)  
99, TET1 (1.0561%)  
100, ETV6 (1.0561%)  
101, PTPN13 (1.044%)  
102, SMARCA4 (1.038%)  
103, JAK2 (1.038%)  
104, PDGFRA (1.0199%)  
105, TCF12 (1.0078%)  
106, NCOA1 (1.0018%)  
107, EP300 (0.9957%)  
108, MAP3K13 (0.9776%)  
109, MYH11 (0.9655%)  
110, HIP1 (0.9655%)  
111, TCF7L2 (0.9655%)  
112, KRAS (0.9655%)  
113, PAX5 (0.9595%)  
114, TET2 (0.9535%)  
115, PBRM1 (0.9474%)  
116, CDC73 (0.9474%)  
117, MLLT3 (0.9414%)  
118, IKZF1 (0.9414%)  
119, DNMT3A (0.9293%)  
120, MLLT10 (0.9293%)  
121, FGFR2 (0.9293%)  
122, CDK6 (0.8992%)  
123, PTPRC (0.8992%)  
124, FANCC (0.8931%)  
125, PIK3CB (0.8931%)  
126, TRRAP (0.8931%)  
127, CDK12 (0.8871%)  
128, TSHR (0.8811%)  
129, PTPRB (0.8811%)  
130, NFIB (0.875%)  
131, MYH9 (0.875%)  
132, FLT4 (0.863%)  
133, SMAD4 (0.8448%)  
134, RET (0.8388%)  
135, TSC2 (0.8388%)  
136, DDX10 (0.8328%)  
137, MYO5A (0.8328%)  
138, ASXL1 (0.8267%)  
139, PTCH1 (0.8267%)  
140, ABL1 (0.8207%)  
141, MITF (0.8147%)  
142, KDM5A (0.8086%)  
143, NFATC2 (0.8086%)  
144, AFF1 (0.7966%)  
145, BLM (0.7905%)  
146, POLE (0.7845%)  
147, KAT6A (0.7845%)  
148, CBLB (0.7785%)  
149, BCOR (0.7724%)  
150, PPFIBP1 (0.7664%)  
151, CLIP1 (0.7604%)  
152, ABL2 (0.7543%)  
153, FGFR1 (0.7483%)  
154, CDH11 (0.7483%)  
155, AFDN (0.7302%)  
156, ZBTB16 (0.7302%)  
157, PRRX1 (0.7242%)  
158, TBL1XR1 (0.7242%)  
159, NUP98 (0.7181%)  
160, WWTR1 (0.7181%)  
161, POLQ (0.7181%)  
162, XPO1 (0.7121%)  
163, FLT3 (0.7061%)  
164, PALB2 (0.7061%)  
165, GNAS (0.7%)  
166, TRIM33 (0.7%)  
167, MEN1 (0.694%)  
168, DROSHA (0.694%)  
169, BCL2 (0.694%)  
170, LATS2 (0.694%)  
171, EPS15 (0.6879%)  
172, KDR (0.6879%)  
173, TERT (0.6819%)  
174, EXT2 (0.6759%)  
175, RAP1GDS1 (0.6698%)  
176, SMAD2 (0.6698%)  
177, RARA (0.6698%)  
178, TRIM24 (0.6638%)  
179, TSC1 (0.6638%)  
180, FANCA (0.6638%)  
181, CDKN1B (0.6638%)  
182, KDM5C (0.6638%)  
183, TGFBR2 (0.6638%)  
184, ETV1 (0.6578%)  
185, SYK (0.6578%)  
186, BMPR1A (0.6517%)  
187, NSD3 (0.6517%)  
188, FLI1 (0.6517%)  
189, MAP2K1 (0.6457%)  
190, ACVR1 (0.6457%)  
191, QKI (0.6457%)  
192, BCR (0.6457%)  
193, EML4 (0.6397%)  
194, IKZF3 (0.6397%)  
195, SPOP (0.6397%)  
196, ARHGEF12 (0.6397%)  
197, BCL9 (0.6336%)  
198, BARD1 (0.6276%)  
199, ABI1 (0.6216%)  
200, TOP1 (0.6155%)  
201, DNM2 (0.6095%)  
202, CREB3L2 (0.6095%)  
203, LIFR (0.6095%)  
204, ARHGAP35 (0.6095%)  
205, TPR (0.6035%)  
206, DICER1 (0.6035%)  
207, FANCD2 (0.6035%)  
208, CNTRL (0.6035%)  
209, CLTC (0.5914%)  
210, RBM10 (0.5914%)  
211, EZH2 (0.5854%)  
212, ZMYM2 (0.5854%)  
213, JAK3 (0.5854%)  
214, HOOK3 (0.5793%)  
215, ATP2B3 (0.5793%)  
216, BCL11A (0.5793%)  
217, MSN (0.5793%)  
218, SMAD3 (0.5793%)  
219, NUMA1 (0.5733%)  
220, RAF1 (0.5733%)  
221, MAPK1 (0.5673%)  
222, BCL11B (0.5673%)  
223, CBL (0.5612%)  
224, AXIN1 (0.5612%)  
225, MSH2 (0.5612%)  
226, HMGA2 (0.5612%)  
227, CLTCL1 (0.5612%)  
228, MSH6 (0.5612%)  
229, RANBP2 (0.5552%)  
230, ITK (0.5492%)  
231, CASP8 (0.5492%)  
232, BCORL1 (0.5431%)  
233, CCDC6 (0.5431%)  
234, CHD4 (0.5431%)  
235, WRN (0.5431%)  
236, KTN1 (0.5431%)  
237, PAX3 (0.5371%)  
238, BTK (0.5371%)  
239, PPM1D (0.5371%)  
240, NF2 (0.525%)  
241, AMER1 (0.525%)  
242, LEF1 (0.525%)  
243, MECOM (0.519%)  
244, CIC (0.519%)  
245, NSD2 (0.519%)  
246, FOXO3 (0.519%)  
247, EPAS1 (0.5129%)  
248, FOXO1 (0.5129%)  
249, CDKN2A (0.5069%)  
250, LATS1 (0.5069%)  
251, CHEK2 (0.5069%)  
252, FBXO11 (0.5009%)  
253, STRN (0.5009%)  
254, MDM2 (0.5009%)  
255, STK11 (0.4948%)  
256, HRAS (0.4948%)  
257, MLH1 (0.4948%)  
258, FGFR4 (0.4948%)  
259, STAT3 (0.4888%)  
260, PLAG1 (0.4888%)  
261, KNL1 (0.4888%)  
262, PDGFRB (0.4888%)  
263, PTPN11 (0.4888%)  
264, ETV5 (0.4828%)  
265, NIN (0.4828%)  
266, NFE2L2 (0.4828%)  
267, NDRG1 (0.4828%)  
268, ERCC4 (0.4767%)  
269, SMO (0.4767%)  
270, NUP214 (0.4767%)  
271, AKT2 (0.4767%)  
272, TRIP11 (0.4707%)  
273, SRC (0.4707%)  
274, SUZ12 (0.4707%)  
275, RNF43 (0.4647%)  
276, NTRK1 (0.4647%)  
277, WIF1 (0.4647%)  
278, SUFU (0.4647%)  
279, WT1 (0.4586%)  
280, BRD4 (0.4586%)  
281, CBFA2T3 (0.4586%)  
282, REL (0.4586%)  
283, RABEP1 (0.4526%)  
284, POT1 (0.4526%)  
285, PPP2R1A (0.4526%)  
286, BAP1 (0.4526%)  
287, RHOA (0.4526%)  
288, RECQL4 (0.4466%)  
289, ERCC5 (0.4466%)  
290, POLD1 (0.4466%)  
291, PAX7 (0.4466%)  
292, CRTC3 (0.4466%)  
293, NBN (0.4405%)  
294, ACVR2A (0.4405%)  
295, PCM1 (0.4285%)  
296, PRDM1 (0.4285%)  
297, AFF4 (0.4224%)  
298, CRTC1 (0.4224%)  
299, ARNT (0.4224%)