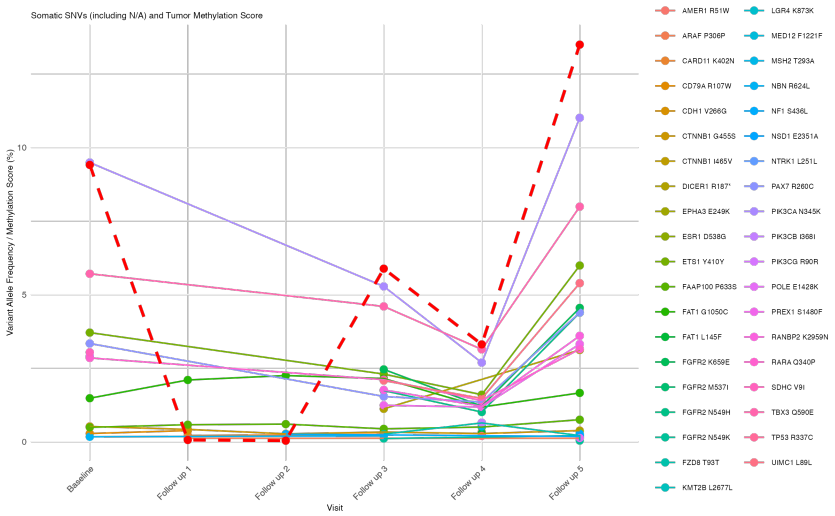
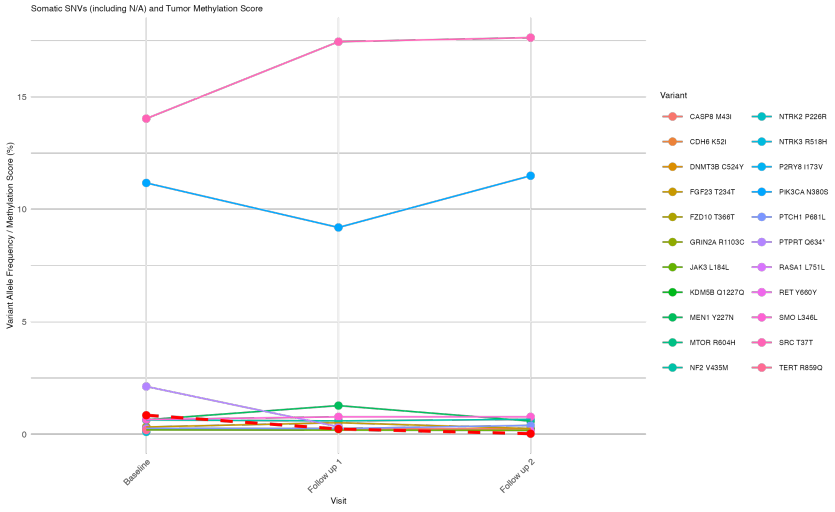
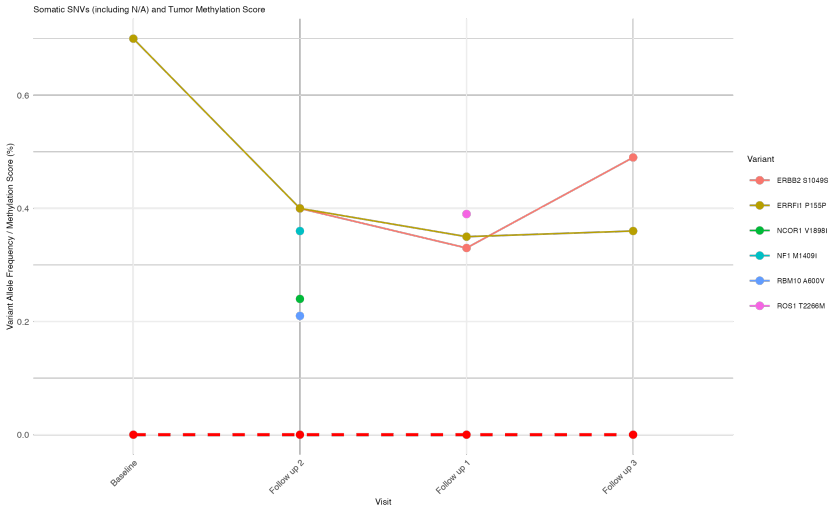
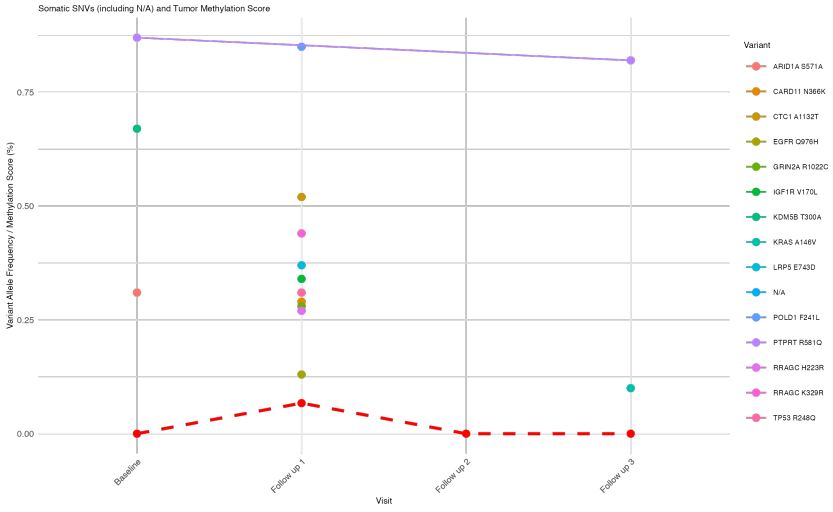
Sup. Data 2

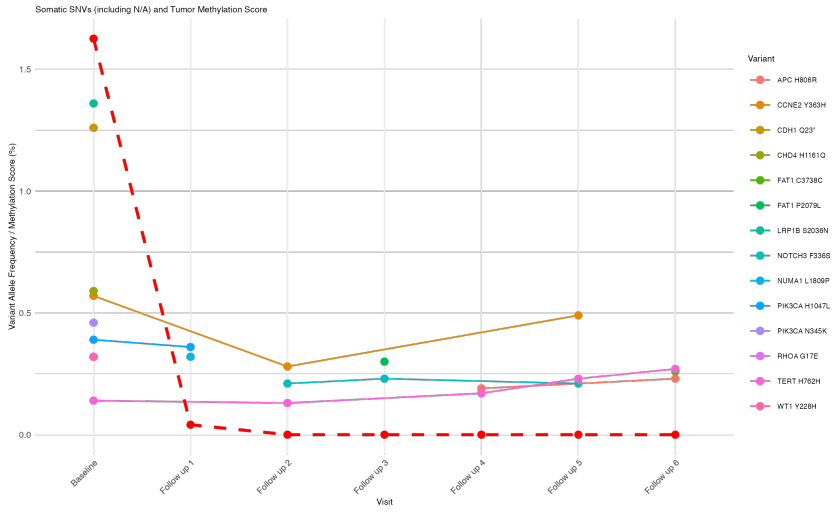


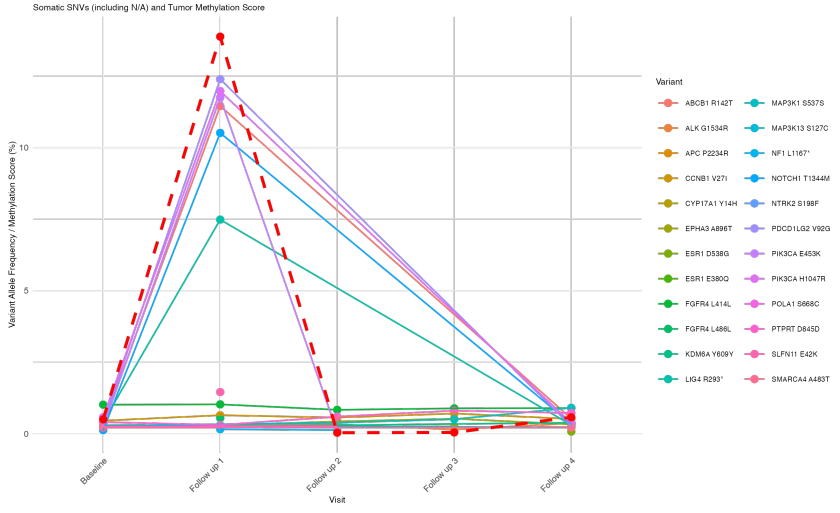
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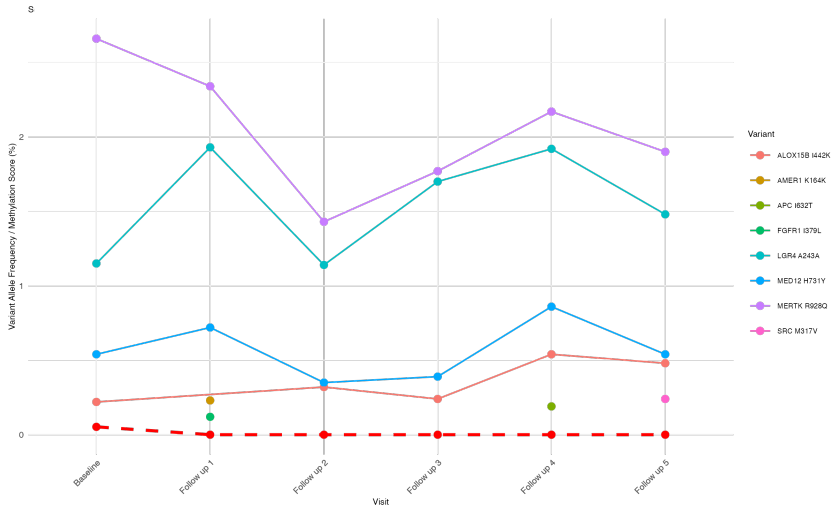


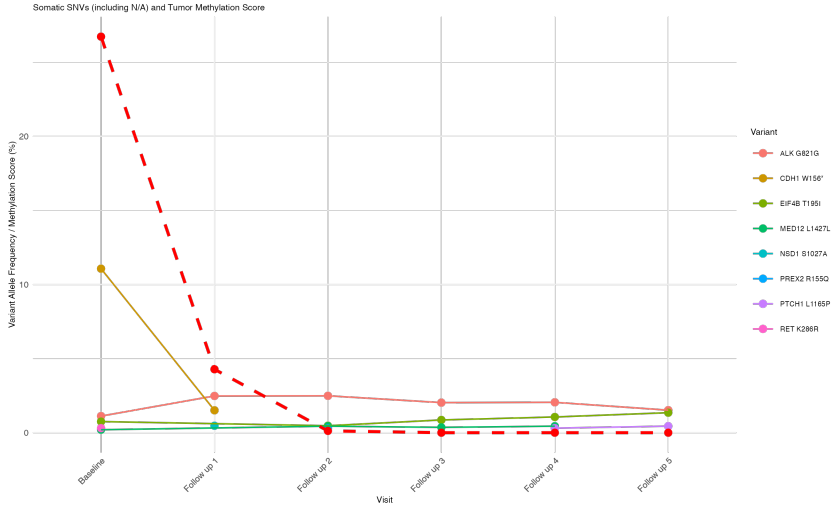

Somatic SNVs (including N/A) and Tumor Methylation Score
Variant Allele Frequency / Methylation Score (%)
0.6
0.4
0.2
0.0
Baseline
Follow up 2
Follow up 1
Follow up 3
Visit
Variant
ERBB2 S1049S
ERRFI1 P155P
NCOR1 V1898I
NF1 M1409I
RBM10 A600V
ROS1 T2266M

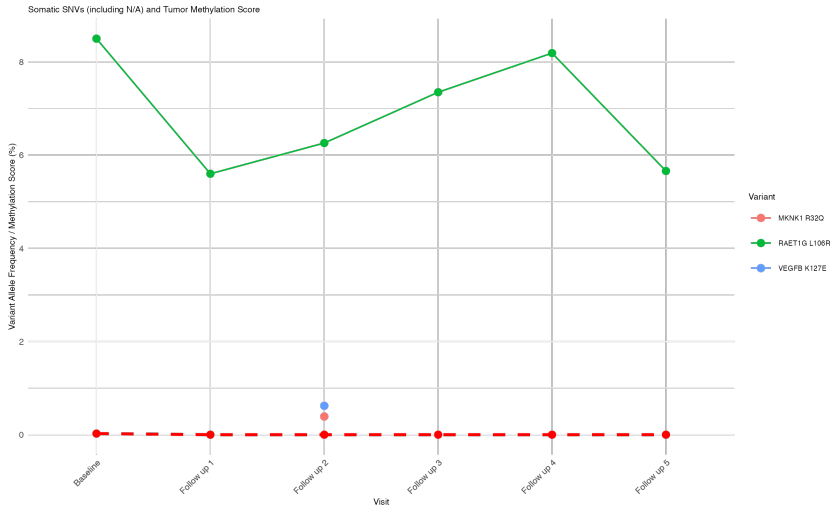

Somatic SNVs (including N/A) and Tumor Methylation Score
Variant Allele Frequency / Methylation Score (%)
0.75
0.50
0.25
0.00
Baseline
Follow up 1
Follow up 2
Follow up 3
Visit
Variant
ARID1A S571A
CARD11 N366K
CTC1 A1132T
EGFR Q976H
GRIN2A R1022C
IGF1R V170L
KDM5B T300A
KRAS A146V
LRP5 E743D
N/A
POLD1 F241L
PTPRT R581Q
RRAGC H223R
RRAGC K329R
TP53 R248Q

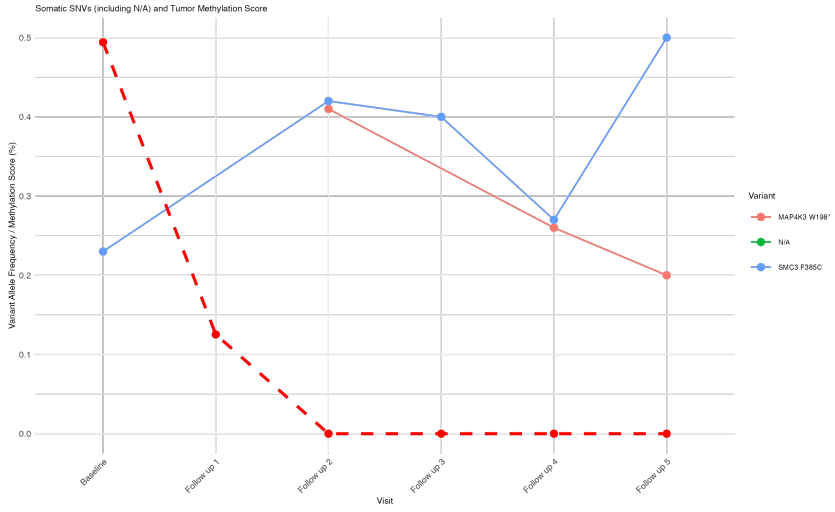

Somatic SNVs (including N/A) and Tumor Methylation Score
Variant Allele Frequency / Methylation Score (%)
1.5
1.0
0.5
0.0
Baseline
Follow up 1
Follow up 2
Follow up 3
Follow up 4
Follow up 5
Follow up 6
Visit
Variant
APC H806R
CCNE2 Y363H
CDH1 Q23*
CHD4 H1161Q
FAT1 C3738C
FAT1 P2079L
LRP1B S2036N
NOTCH3 F336S
NUMA1 L1809P
PIK3CA H1047L
PIK3CA N345K
RHOA G17E
TERT H762H
WT1 Y228H

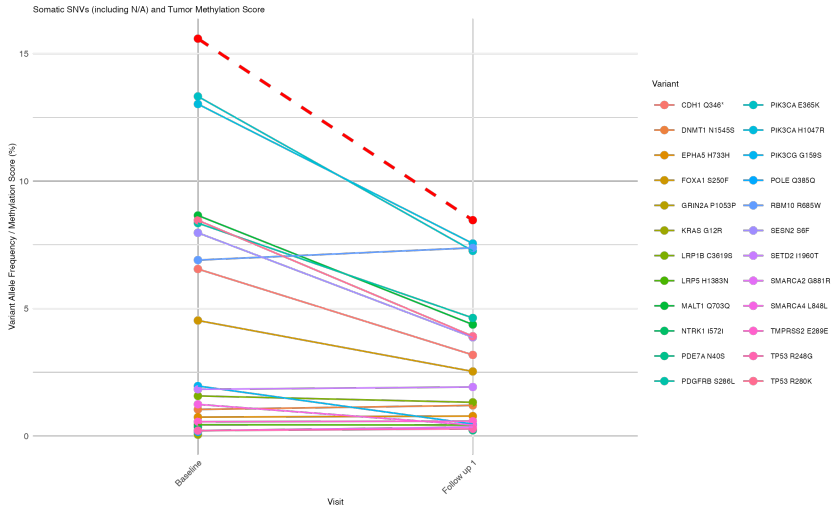

Somatic SNVs (including N/A) and Tumor Methylation Score
Variant Allele Frequency / Methylation Score (%)
10
5
0
Baseline
Follow up 1
Follow up 2
Follow up 3
Follow up 4
Visit
Variant
ABCB1 R142T
ALK G1534R
APC P2234R
CCNB1 V27I
CYP17A1 Y114H
EPHA3 A896T
ESR1 D538G
ESR1 E380Q
FGFR4 L414L
FGFR4 L486L
KDM6A Y609Y
LIG4 R293*
MAP3K1 S537S
MAP3K13 S127C
NF1 L1167*
NOTCH1 T1344M
NTRK2 S198F
PDCD1LG2 V92G
PIK3CA E453K
PIK3CA H1047R
POLA1 S668C
PTPRT D845D
SLFN11 E42K
SMARCA4 A483T

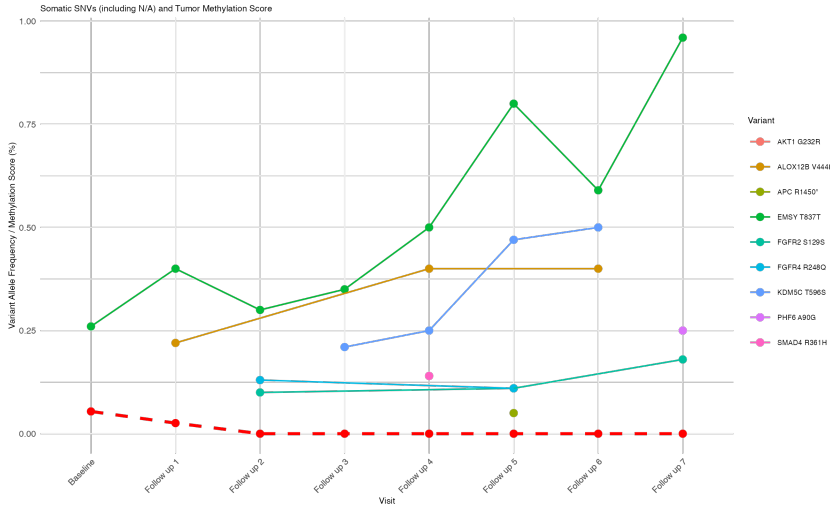

S
Variant Allele Frequency / Methylation Score (%)
2
1
0
Baseline
Follow up 1
Follow up 2
Follow up 3
Follow up 4
Follow up 5
Visit
Variant
ALOX15B I442K
AMER1 K164K
APC I632T
FGFR1 I379L
LGR4 A243A
MED12 H731Y
MERTK R928Q
SRC M317V

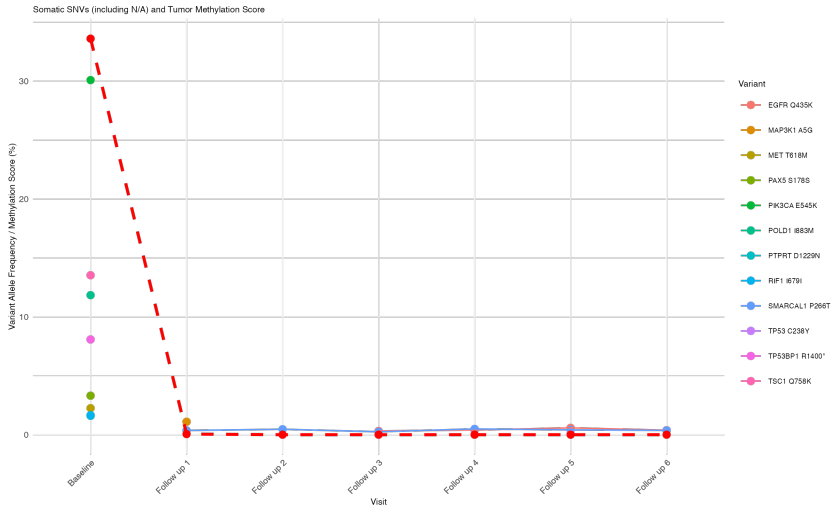

Somatic SNVs (including N/A) and Tumor Methylation Score
Variant Allele Frequency / Methylation Score (%)
20
10
0
Baseline
Follow up 1
Follow up 2
Follow up 3
Follow up 4
Follow up 5
Visit
Variant
ALK G821G
CDH1 W156*
EIF4B T195I
MED12 L1427L
NSD1 S1027A
PREX2 R155Q
PTCH1 L1165P
RET K286R

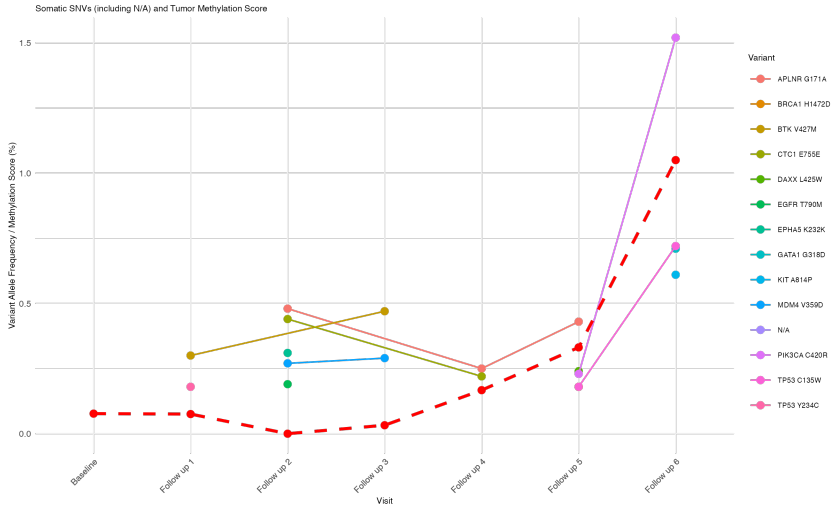

Somatic SNVs (including N/A) and Tumor Methylation Score
Variant Allele Frequency / Methylation Score (%)
8
6
4
2
0
Baseline
Follow up 1
Follow up 2
Follow up 3
Follow up 4
Follow up 5
Visit
Variant
MKNK1 R32Q
RAET1G L106R
VEGFB K127E

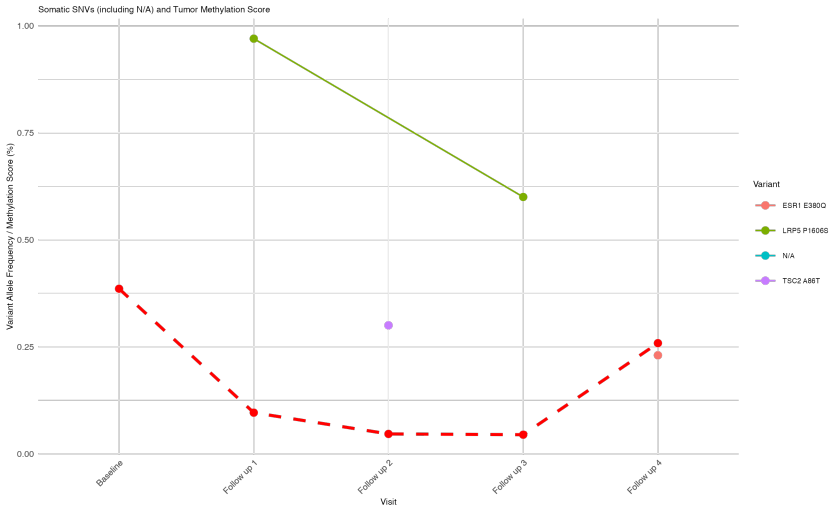

Somatic SNVs (including N/A) and Tumor Methylation Score
Variant Allele Frequency / Methylation Score (%)
0.5
0.4
0.3
0.2
0.1
0.0
Baseline
Follow up 1
Follow up 2
Follow up 3
Follow up 4
Follow up 5
Visit
Variant
MAP4K3 W198*
N/A
SMC3 F385C

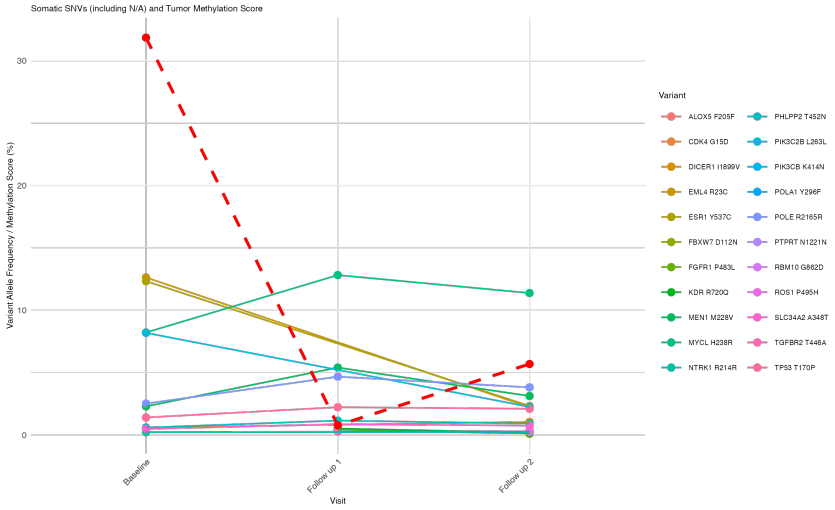

Somatic SNVs (including N/A) and Tumor Methylation Score
Variant Allele Frequency / Methylation Score (%)
15
10
5
0
Baseline
Follow up 1
Visit
Variant
CDH1 Q346*
DNMT1 N1545S
EPHA5 H733H
FOXA1 S250F
GRIN2A P1053P
KRAS G12R
LRP1B C3619S
LRP5 H1383N
MALT1 Q703Q
NTRK1 I572I
PDE7A N40S
PDGFRB S286L
PIK3CA E365K
PIK3CA H1047R
PIK3CG G159S
POLE Q385Q
RBM10 R685W
SESN2 S6F
SETD2 I1960T
SMARCA2 G881R
SMARCA4 L848L
TMPRSS2 E289E
TP53 R248G
TP53 R280K

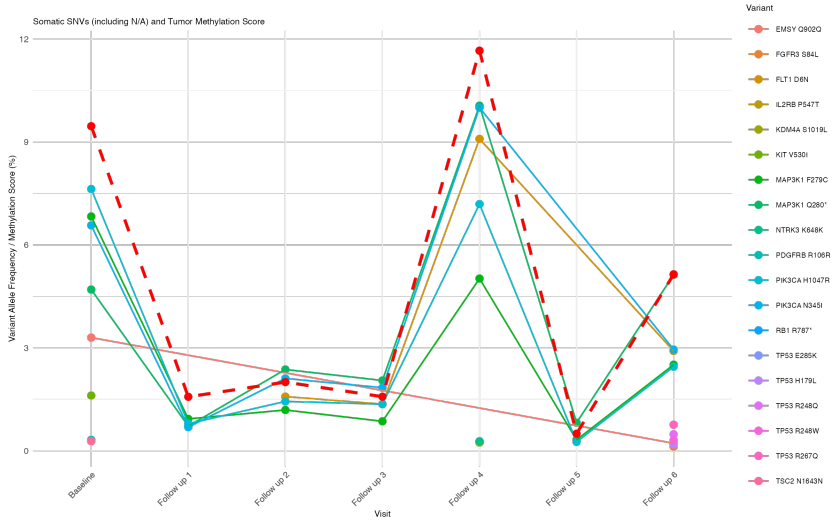

Somatic SNVs (including N/A) and Tumor Methylation Score
Variant Allele Frequency / Methylation Score (%)
1.00
0.75
0.50
0.25
0.00
Baseline
Follow up 1
Follow up 2
Follow up 3
Follow up 4
Follow up 5
Follow up 6
Follow up 7
Visit
Variant
AKT1 G232R
ALOX12B V444I
APC R1450*
EMSY T837T
FGFR2 S129S
FGFR4 R248Q
KDM5C T596S
PHF6 A90G
SMAD4 R361H

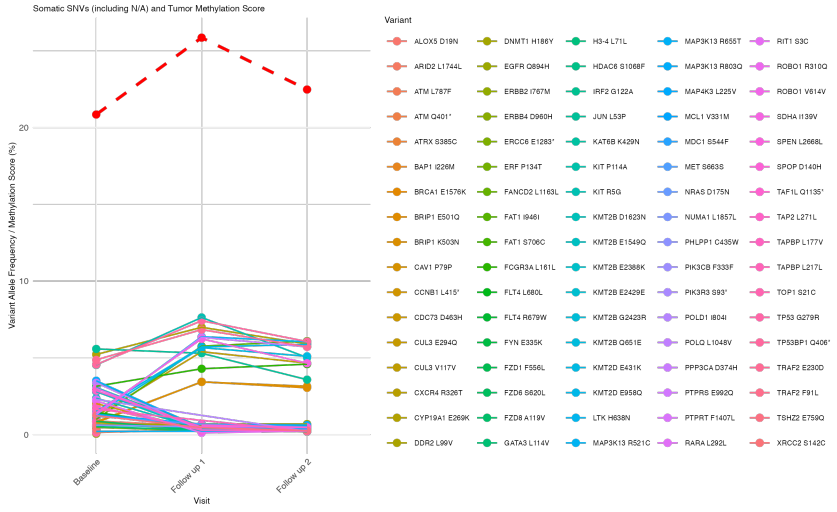

Somatic SNVs (including N/A) and Tumor Methylation Score
Variant Allele Frequency / Methylation Score (%)
30
20
10
0
Baseline
Follow up 1
Follow up 2
Follow up 3
Follow up 4
Follow up 5
Follow up 6
Visit
Variant
EGFR Q435K
MAP3K1 A5G
MET T618M
PAX5 S178S
PIK3CA E545K
POLD1 I883M
PTPRT D1229N
RIF1 I679I
SMARCAL1 P266T
TP53 C238Y
TP53BP1 R1400*
TSC1 Q758K

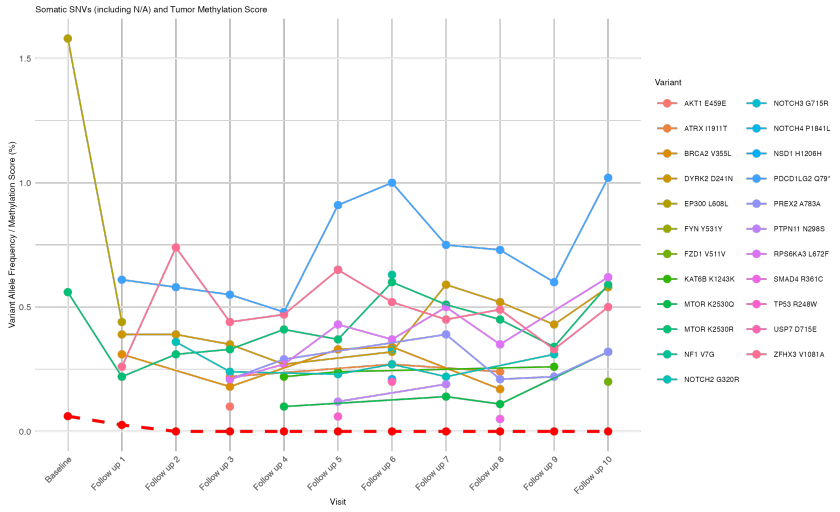

Somatic SNVs (including N/A) and Tumor Methylation Score
Variant Allele Frequency / Methylation Score (%)
1.5
1.0
0.5
0.0
Baseline
Follow up 1
Follow up 2
Follow up 3
Follow up 4
Follow up 5
Follow up 6
Visit
Variant
APLNR G171A
BRCA1 H1472D
BTK V427M
CTC1 E755E
DAXX L425W
EGFR T790M
EPHA5 K232K
GATA1 G318D
KIT A814P
MDM4 V359D
N/A
PIK3CA C420R
TP53 C135W
TP53 Y234C

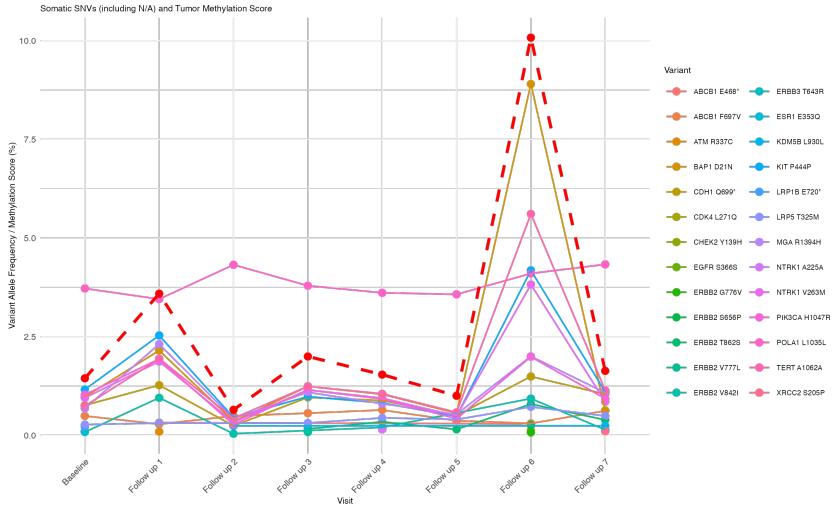

Somatic SNVs (including N/A) and Tumor Methylation Score
Variant Allele Frequency / Methylation Score (%)
1.00
0.75
0.50
0.25
0.00
Baseline
Follow up 1
Follow up 2
Follow up 3
Follow up 4
Visit
Variant
ESR1 E380Q
LRP5 P1606S
N/A
TSC2 A86T

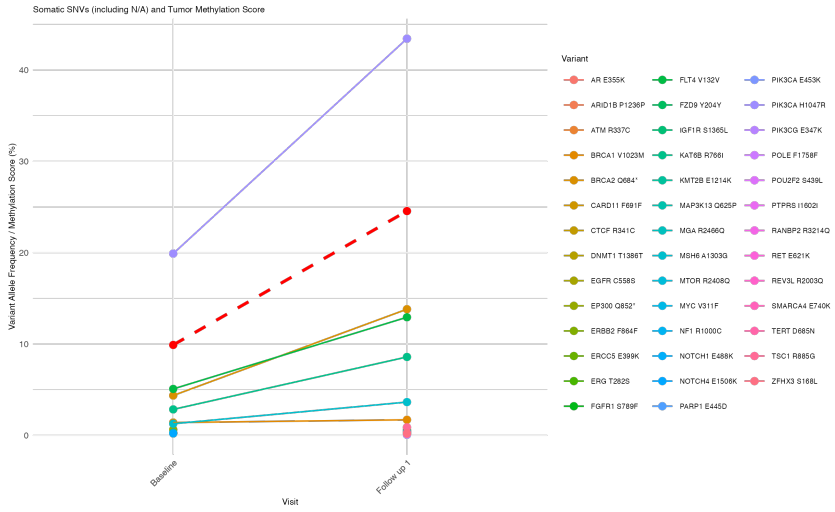

Somatic SNVs (including N/A) and Tumor Methylation Score
Variant Allele Frequency / Methylation Score (%)
30
20
10
0
Baseline
Follow up 1
Follow up 2
Visit
Variant
ALOX5 F205F
CDK4 G15D
DICER1 I1899V
EML4 R23C
ESR1 Y537C
FBXW7 D112N
FGFR1 P483L
KDR R720Q
MEN1 M228V
MYCL H238R
NTRK1 R214R
PHLPP2 T452N
PIK3C2B L263L
PIK3CB K414N
POLA1 Y296F
POLE R2165R
PTPRT N1221N
RBM10 G862D
ROS1 P495H
SLC34A2 A348T
TGFBR2 T446A
TP53 T170P

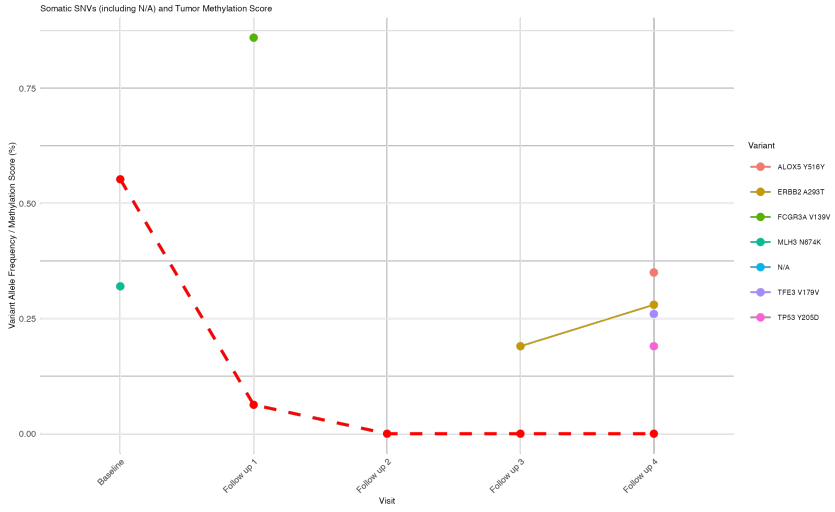

Somatic SNVs (including N/A) and Tumor Methylation Score
Variant Allele Frequency / Methylation Score (%)
12
9
6
3
0
Baseline
Follow up 1
Follow up 2
Follow up 3
Follow up 4
Follow up 5
Follow up 6
Visit
Variant
EMSY Q902Q
FGFR3 S84L
FLT1 D6N
IL2RB P547T
KDM4A S1019L
KIT V530I
MAP3K1 F279C
MAP3K1 Q280*
NTRK3 K648K
PDGFRB R106R
PIK3CA H1047R
PIK3CA N345I
RB1 R787*
TP53 E285K
TP53 H179L
TP53 R248Q
TP53 R248W
TP53 R267Q
TSC2 N1643N

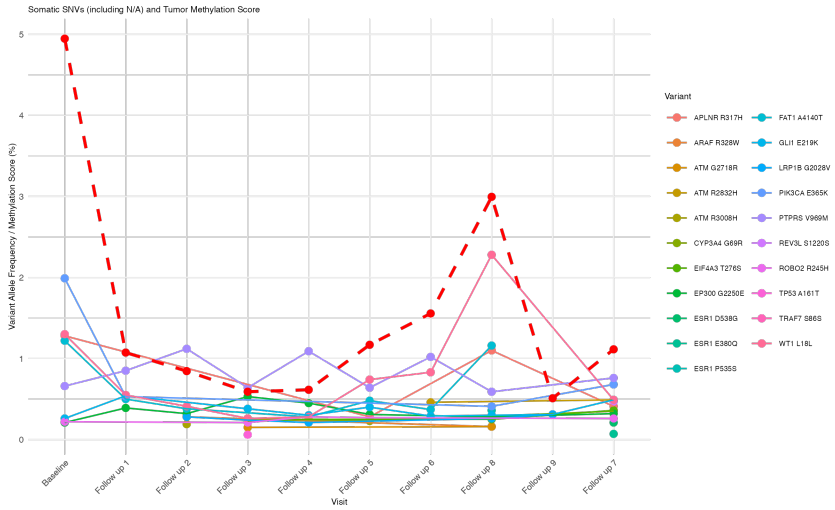

Somatic SNVs (including N/A) and Tumor Methylation Score
Variant Allele Frequency / Methylation Score (%)
20
10
0
Baseline
Follow up 1
Follow up 2
Visit
Variant
ALOX5 D19N
ARID2 L1744L
ATM L787F
ATM Q401*
ATRX S385C
BAP1 I226M
BRCA1 E1576K
BRIP1 E501Q
BRIP1 K503N
CAV1 P79P
CCNB1 L415*
CDC73 D463H
CUL3 E294Q
CUL3 V117V
CXCR4 R326T
CYP19A1 E269K
DDR2 L99V
DNMT1 H186Y
EGFR Q894H
ERBB2 I767M
ERBB4 D960H
ERCC6 E1283*
ERF P134T
FAT1 I946I
FAT1 S706C
FCGR3A L161L
FLT4 L680L
FLT4 R679W
FYN E335K
FZD1 F556L
FZD6 S620L
FZD8 A119V
GATA3 L114V
H3-4 L71L
HDAC6 S1068F
IRF2 G122A
JUN L53P
KAT6B K429N
KIT P114A
KIT R5G
KMT2B D1623N
KMT2B E1549Q
KMT2B E2388K
KMT2B E2429E
KMT2B G2423R
KMT2B Q651E
KMT2D E431K
KMT2D E958Q
LTK H638N
MAP3K13 R521C
MAP3K13 R655T
MAP3K13 R803Q
MAP4K3 L225V
MCL1 V331M
MDC1 S544F
MET S663S
NRAS D175N
NUMA1 L1857L
PHLPP1 C435W
PIK3CB F333F
PIK3R3 S93*
POLD1 I804I
POLQ L1048V
PPP3CA D374H
PTPRS E992Q
PTPRT F1407L
RARA L292L
RIT1 S3C
ROBO1 R310Q
ROBO1 V614V
SDHA I139V
SPEN L2668L
SPOP D140H
TAF1L Q1135*
TAP2 L271L
TAPBP L177V
TAPBP L217L
TOP1 S21C
TP53 G279R
TP53BP1 Q406*
TRAF2 E230D
TRAF2 F91L
TSHZ2 E759Q
XRCC2 S142C

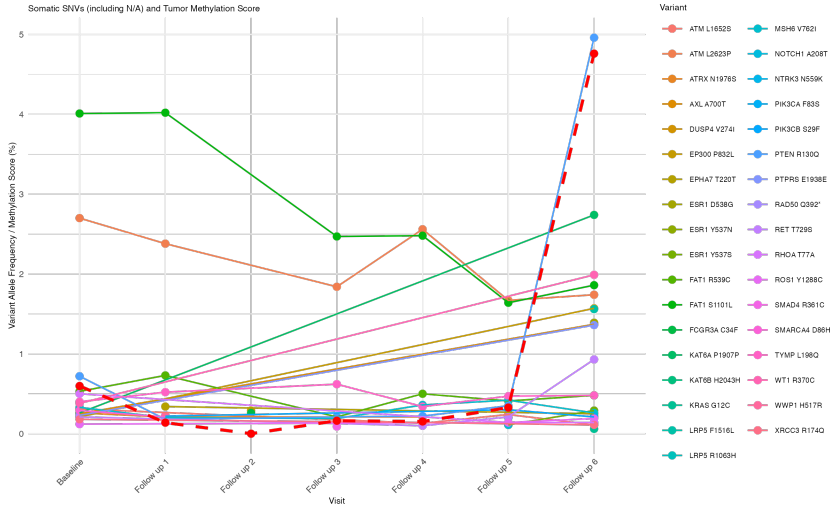

Somatic SNVs (including N/A) and Tumor Methylation Score
Variant Allele Frequency / Methylation Score (%)
1.5
1.0
0.5
0.0
Baseline
Follow up 1
Follow up 2
Follow up 3
Follow up 4
Follow up 5
Follow up 6
Follow up 7
Follow up 8
Follow up 9
Follow up 10
Visit
Variant
AKT1 E459E
ATRX I1911T
BRCA2 V355L
DYRK2 D241N
EP300 L608L
FYN Y531Y
FZD1 V511V
KAT6B K1243K
MTOR K2530Q
MTOR K2530R
NF1 V7G
NOTCH2 G320R
NOTCH3 G715R
NOTCH4 P1841L
NSD1 H1206H
PDCD1LG2 Q79*
PREX2 A783A
PTPN11 N298S
RPS6KA3 L672F
SMAD4 R361C
TP53 R248W
USP7 D715E
ZFHX3 V1081A

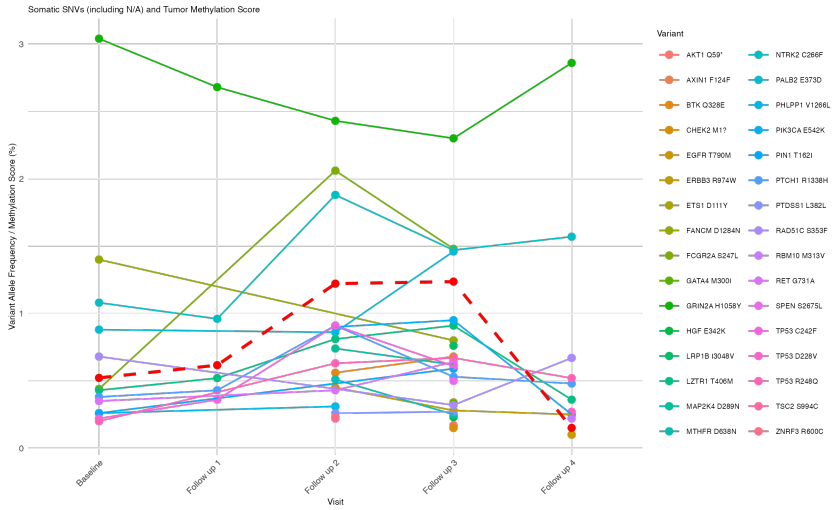

Somatic SNVs (including N/A) and Tumor Methylation Score
Variant Allele Frequency / Methylation Score (%)
10.0
7.5
5.0
2.5
0.0
Baseline
Follow up 1
Follow up 2
Follow up 3
Follow up 4
Follow up 5
Follow up 6
Follow up 7
Visit
Variant
ABCB1 E468*
ABCB1 F697V
ATM R337C
BAP1 D21N
CDH1 Q699*
CDK4 L271Q
CHEK2 Y139H
EGFR S366S
ERBB2 G776V
ERBB2 S656P
ERBB2 T862S
ERBB2 V777L
ERBB2 V842I
ERBB3 T643R
ESR1 E353Q
KDM5B L930L
KIT P444P
LRP1B E720*
LRP5 T325M
MGA R1394H
NTRK1 A225A
NTRK1 V263M
PIK3CA H1047R
POLA1 L1035L
TERT A1062A
XRCC2 S205P

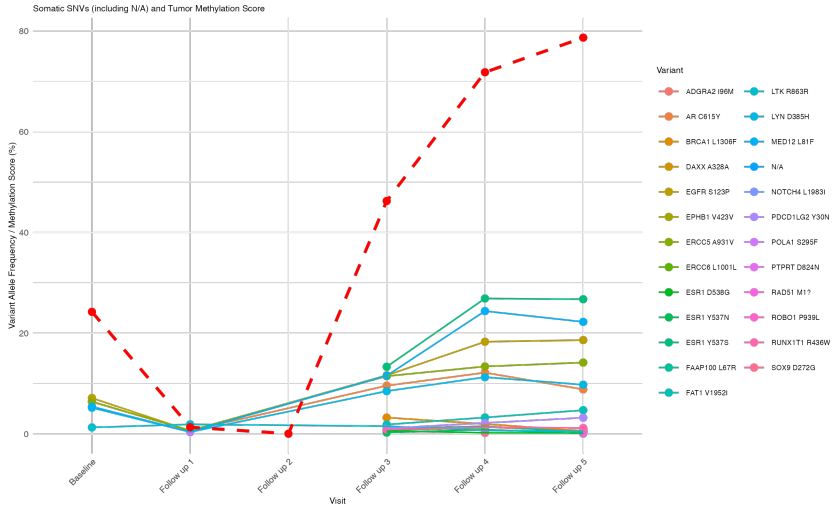

Somatic SNVs (including N/A) and Tumor Methylation Score
Variant Allele Frequency / Methylation Score (%)
0
10
20
30
40
Baseline
Follow up 1
Visit
Variant
AR E355K
ARID1B P1236P
ATM R337C
BRCA1 V1023M
BRCA2 Q684*
CARD11 F691F
CTCF R341C
DNMT1 T1386T
EGFR C558S
EP300 Q852*
ERBB2 F864F
ERCC5 E399K
ERG T282S
FGFR1 S789F
FLT4 V132V
FZD9 Y204Y
IGF1R S1365L
KAT6B R766I
KMT2B E1214K
MAP3K13 Q625P
MGA R2466Q
MSH6 A1303G
MTOR R2408Q
MYC V311F
NF1 R1000C
NOTCH1 E488K
NOTCH4 E1506K
PARP1 E445D
PIK3CA E453K
PIK3CA H1047R
PIK3CG E347K
POLE F1758F
POU2F2 S439L
PTPRS I1602I
RANBP2 R3214Q
RET E621K
REV3L R2003Q
SMARCA4 E740K
TERT D685N
TSC1 R885G
ZFHX3 S168L

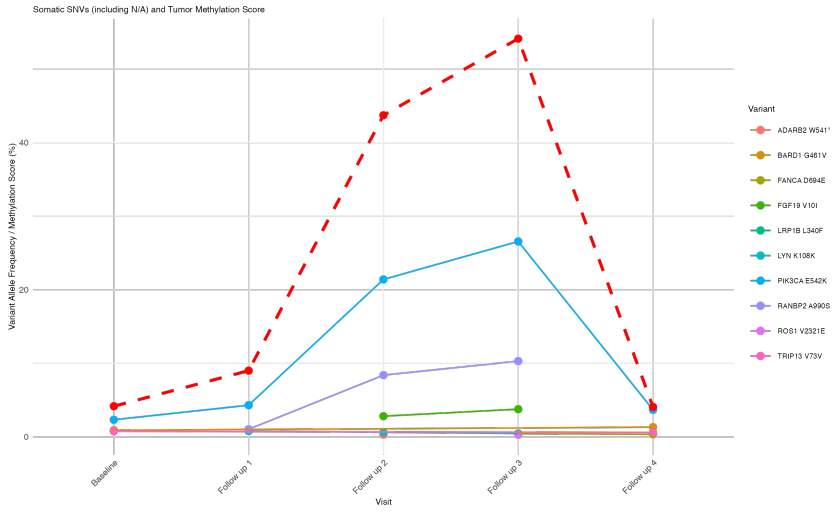

Somatic SNVs (including N/A) and Tumor Methylation Score
Variant Allele Frequency / Methylation Score (%)
0.00
0.25
0.50
0.75
Baseline
Follow up 1
Follow up 2
Follow up 3
Follow up 4
Visit
Variant
ALOX5 Y516Y
ERBB2 A293T
FCGR3A V139V
MLH3 N674K
N/A
TFE3 V179V
TP53 Y205D

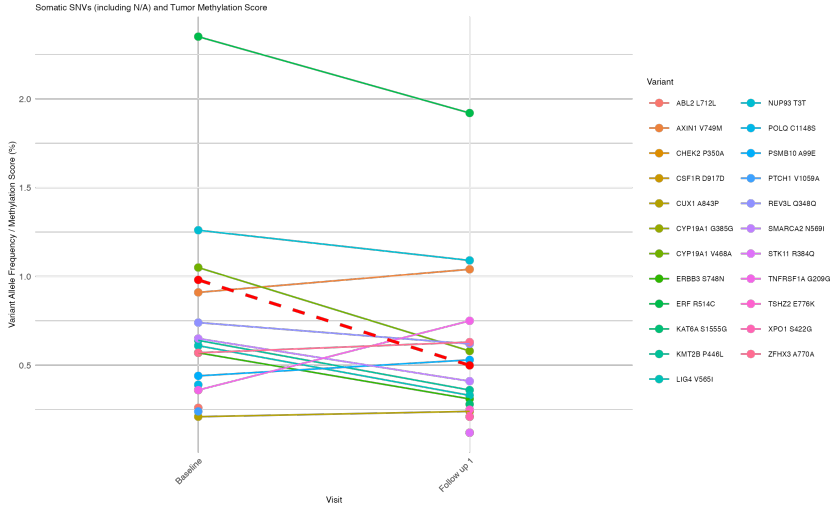

Somatic SNVs (including N/A) and Tumor Methylation Score
Variant Allele Frequency / Methylation Score (%)
0
1
2
3
4
5
Baseline
Follow up 1
Follow up 2
Follow up 3
Follow up 4
Follow up 5
Follow up 6
Follow up 8
Follow up 9
Follow up 7
Visit
Variant
APLNR R317H
ARAF R328W
ATM G2718R
ATM R2832H
ATM R3008H
CYP3A4 G69R
EIF4A3 T276S
EP300 G2250E
ESR1 D538G
ESR1 E380Q
ESR1 P535S
FAT1 A4140T
GLI1 E219K
LRP1B G2028V
PIK3CA E365K
PTPRS V969M
REV3L S1220S
ROBO2 R245H
TP53 A161T
TRAF7 S86S
WT1 L18L

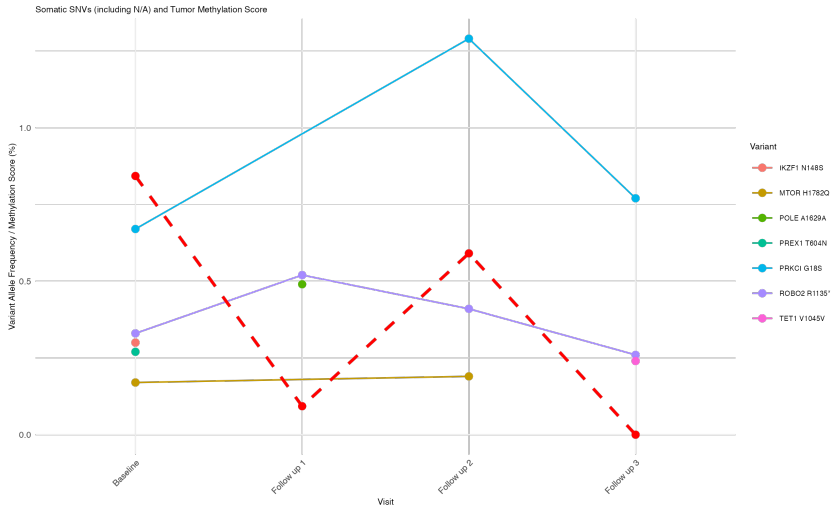

Somatic SNVs (including N/A) and Tumor Methylation Score
Variant Allele Frequency / Methylation Score (%)
0
1
2
3
4
5
Baseline
Follow up 1
Follow up 2
Follow up 3
Follow up 4
Follow up 5
Follow up 6
Visit
Variant
ATM L1652S
ATM L2623P
ATRX N1978S
AXL A700T
DUSP4 V274I
EP300 P832L
EPHA7 T220T
ESR1 D538G
ESR1 Y537N
ESR1 Y537S
FAT1 R539C
FAT1 S1101L
FCGR3A C34F
KAT6A P1907P
KAT6B H2043H
KRAS G12C
LRP5 F1516L
LRP5 R1063H
MSH6 V762I
NOTCH1 A208T
NTRK3 N559K
PIK3CA F83S
PIK3CB S29F
PTEN R130Q
PTPRS E1938E
RAD50 Q392*
RET T729S
RHOA T77A
ROS1 Y1288C
SMAD4 R361C
SMARCA4 D86H
TYMP L198Q
WT1 R370C
WWP1 H517R
XRCC3 R174Q

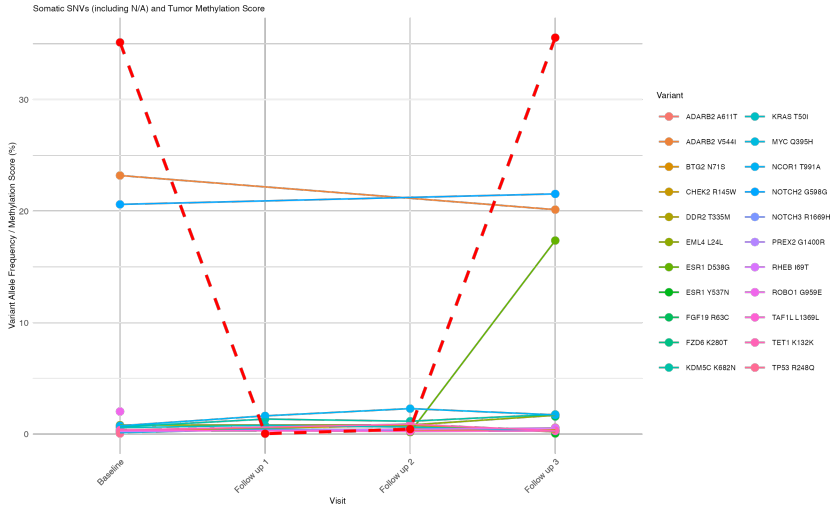

Somatic SNVs (including N/A) and Tumor Methylation Score
Variant Allele Frequency / Methylation Score (%)
3
2
1
0
Baseline
Follow up 1
Follow up 2
Follow up 3
Follow up 4
Visit
Variant
AKT1 Q59*
AXIN1 F124F
BTK Q328E
CHEK2 M1?
EGFR T790M
ERBB3 R974W
ETS1 D111Y
FANCM D1284N
FCGR2A S247L
GATA4 M300I
GRIN2A H1058Y
HGF E342K
LRP1B I3048V
LZTR1 T406M
MAP2K4 D289N
MTHFR D638N
NTRK2 C266F
PALB2 E373D
PHLPP1 V1266L
PIK3CA E542K
PIN1 T162I
PTCH1 R1338H
PTDSS1 L382L
RAD51C S353F
RBM10 M313V
RET G731A
SPEN S2675L
TP53 C242F
TP53 D228V
TP53 R248Q
TSC2 S994C
ZNRF3 R600C

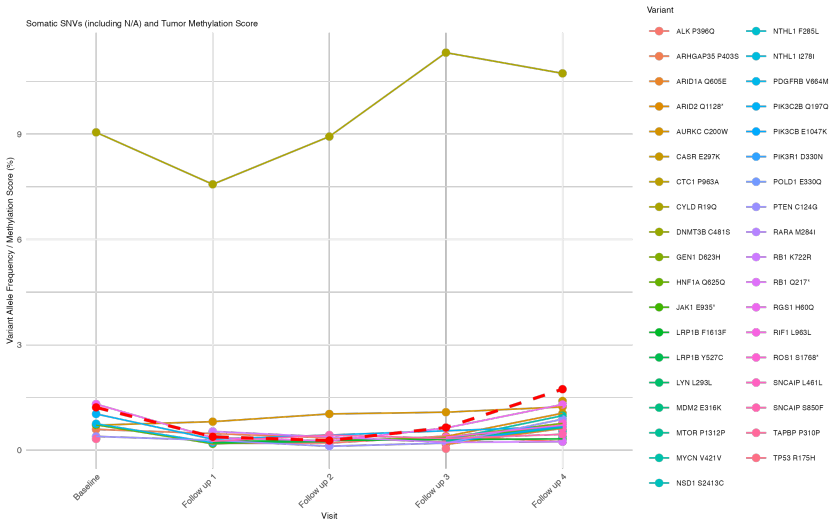

Somatic SNVs (including N/A) and Tumor Methylation Score
Variant Allele Frequency / Methylation Score (%)
80
60
40
20
0
Baseline
Follow up 1
Follow up 2
Follow up 3
Follow up 4
Follow up 5
Visit
Variant
ADGRA2 I96M
AR C615Y
BRCA1 L1306F
DAXX A328A
EGFR S123P
EPHB1 V423V
ERCC5 A931V
ERCC6 L1001L
ESR1 D538G
ESR1 Y537N
ESR1 Y537S
FAAP100 L67R
FAT1 V1952I
LTK R863R
LYN D385H
MED12 L81F
N/A
NOTCH4 L1983I
PDCD1LG2 Y30N
POLA1 S295F
PTPRT D824N
RAD51 M1?
ROBO1 P939L
RUNX1T1 R436W
SOX9 D272G

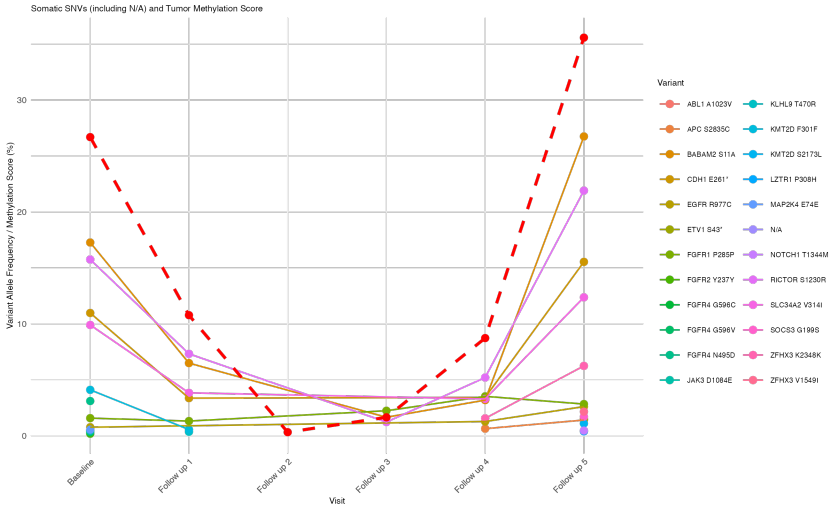

Somatic SNVs (including N/A) and Tumor Methylation Score
Variant Allele Frequency / Methylation Score (%)
40
20
0
Baseline
Follow up 1
Follow up 2
Follow up 3
Follow up 4
Visit
Variant
ADARB2 W541*
BARD1 G461V
FANCA D694E
FGF19 V10I
LRP1B L340F
LYN K108K
PIK3CA E542K
RANBP2 A990S
ROS1 V2321E
TRIP13 V73V

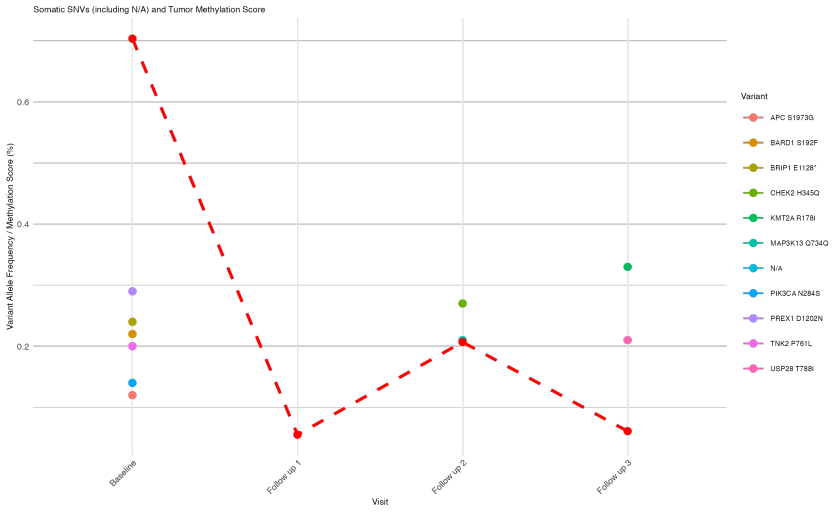

Somatic SNVs (including N/A) and Tumor Methylation Score
Variant Allele Frequency / Methylation Score (%)
2.0
1.5
1.0
0.5
Baseline
Follow up 1
Visit
Variant
ABL2 L712L
AXIN1 V749M
CHEK2 P350A
CSF1R D917D
CUX1 A843P
CYP19A1 G385G
CYP19A1 V468A
ERBB3 S748N
ERF R514C
KAT6A S1555G
KMT2B P446L
LIG4 V565I
NUP93 T3T
POLQ C1148S
PSMB10 A99E
PTCH1 V1059A
REV3L Q348Q
SMARCA2 N569I
STK11 R384Q
TNFRSF1A G209G
TSHZ2 E776K
XPO1 S422G
ZFHX3 A770A

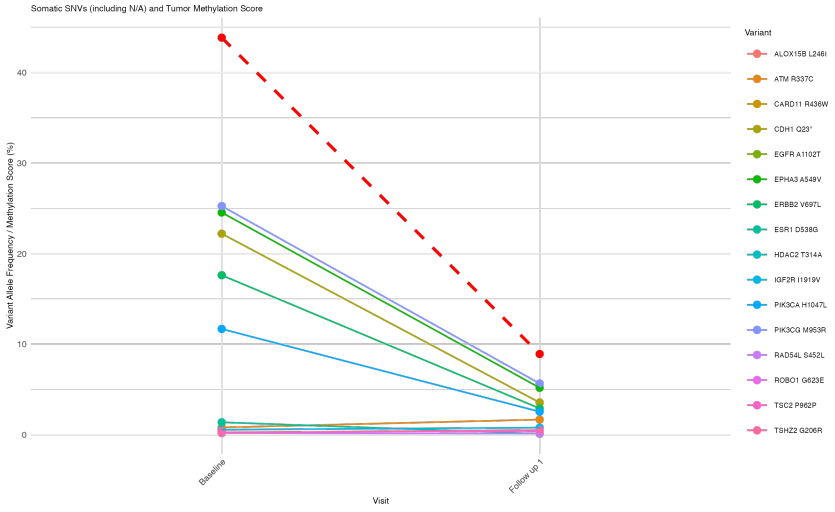

Somatic SNVs (including N/A) and Tumor Methylation Score
Variant Allele Frequency / Methylation Score (%)
1.0
0.5
0.0
Baseline
Follow up 1
Follow up 2
Follow up 3
Visit
Variant
IKZF1 N148S
MTOR H1782Q
POLE A1629A
PREX1 T604N
PRKCI G18S
ROBO2 R1135*
TET1 V1045V

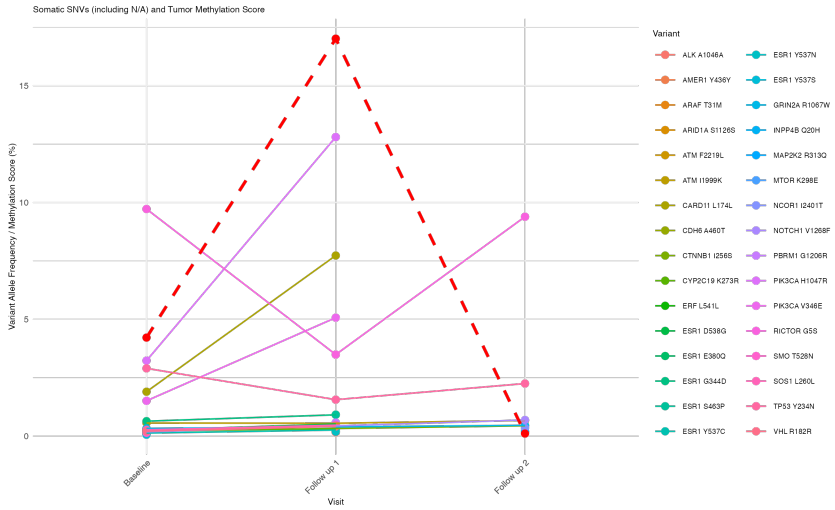

Somatic SNVs (including N/A) and Tumor Methylation Score
Variant Allele Frequency / Methylation Score (%)
30
20
10
0
Baseline
Follow up 1
Follow up 2
Follow up 3
Visit
Variant
ADARB2 A611T
ADARB2 V544I
BTG2 N71S
CHEK2 R145W
DDR2 T335M
EML4 L24L
ESR1 D538G
ESR1 Y537N
FGF19 R63C
FZD6 K280T
KDM5C K682N
KRAS T50I
MYC Q395H
NCOR1 T991A
NOTCH2 G598G
NOTCH3 R1669H
PREX2 G1400R
RHEB I69T
ROBO1 G959E
TAF1L L1369L
TET1 K132K
TP53 R248Q

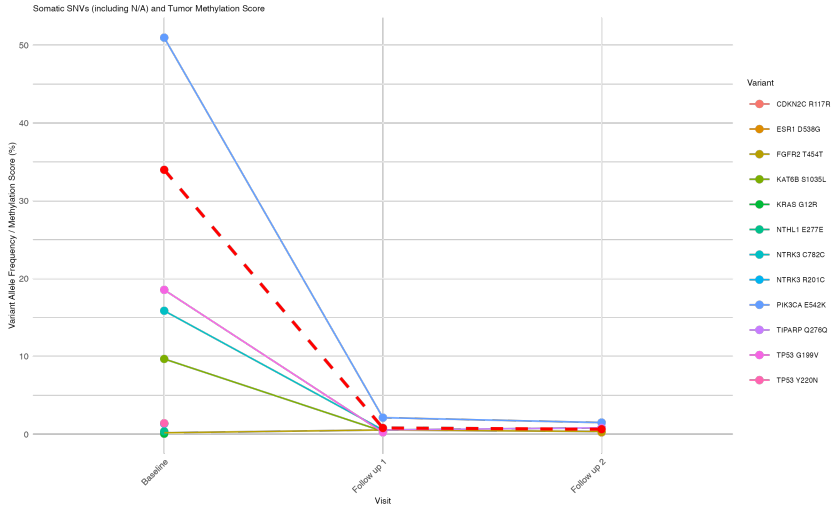

Somatic SNVs (including N/A) and Tumor Methylation Score
Variant Allele Frequency / Methylation Score (%)
0
3
6
9
Baseline
Follow up 1
Follow up 2
Follow up 3
Follow up 4
Visit
Variant
ALK P396Q
ARHGAP35 P403S
ARID1A Q605E
ARID2 Q1128*
AURKC C200W
CASR E297K
CTC1 P963A
CYLD R19Q
DNMT3B C481S
GEN1 D623H
HNF1A Q625Q
JAK1 E935*
LRP1B F1613F
LRP1B Y527C
LYN L293L
MDM2 E316K
MTOR P1312P
MYCN V421V
NSD1 S2413C
NTHL1 F285L
NTHL1 I278I
PDGFRB V664M
PIK3C2B Q197Q
PIK3CB E1047K
PIK3R1 D330N
POLD1 E330Q
PTEN C124G
RARA M284I
RB1 K722R
RB1 Q217*
RGS1 H60Q
RIF1 L963L
ROS1 S1768*
SNCAIP L461L
SNCAIP S850F
TARBP P310P
TP53 R175H

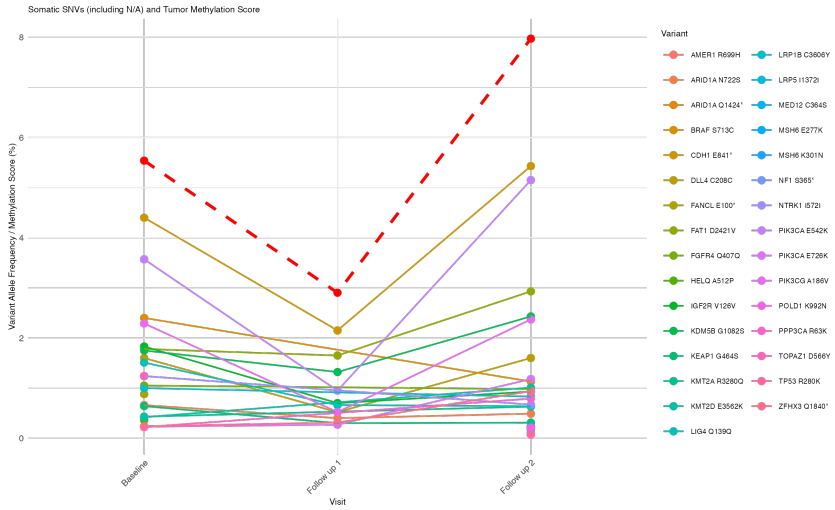

Somatic SNVs (including N/A) and Tumor Methylation Score
Variant Allele Frequency / Methylation Score (%)
0
10
20
30
Baseline
Follow up 1
Follow up 2
Follow up 3
Follow up 4
Follow up 5
Visit
Variant
ABL1 A1023V
APC S2835C
BABAM2 S11A
CDH1 E261*
EGFR R977C
ETV1 S43*
FGFR1 P285P
FGFR2 Y237Y
FGFR4 G596C
FGFR4 G596V
FGFR4 N495D
JAK3 D1084E
KLHL9 T470R
KMT2D F301F
KMT2D S2173L
LZTR1 P308H
MAP2K4 E74E
N/A
NOTCH1 T1344M
RICTOR S1230R
SLC34A2 V314I
SOCS3 G199S
ZFHX3 K2348K
ZFHX3 V1549I

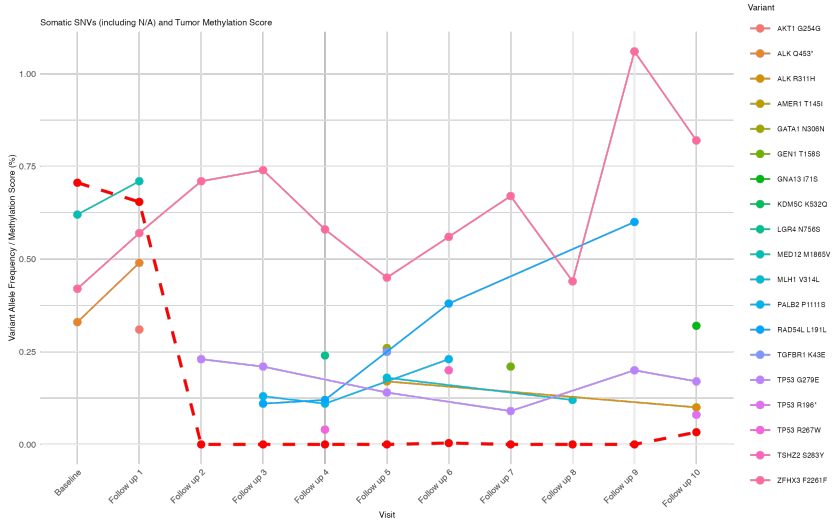

Somatic SNVs (including N/A) and Tumor Methylation Score
Variant Allele Frequency / Methylation Score (%)
0.6
0.4
0.2
Baseline
Follow up 1
Follow up 2
Follow up 3
Visit
Variant
APC S1973G
BARD1 S192F
BRIP1 E1128*
CHEK2 H345Q
KMT2A R178I
MAP3K13 Q734Q
N/A
PIK3CA N284S
PREX1 D1202N
TNK2 P761L
USP28 T788I

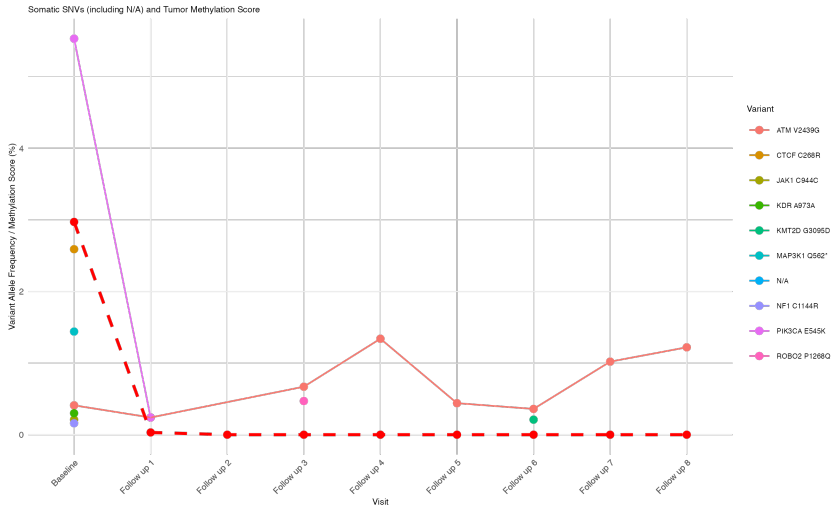

Somatic SNVs (including N/A) and Tumor Methylation Score
Variant Allele Frequency / Methylation Score (%)
40
30
20
10
0
Baseline
Follow up 1
Visit
Variant
ALOX15B L246I
ATM R337C
CARD11 R436W
CDH1 Q23*
EGFR A1102T
EPHA3 A549V
ERBB2 V697L
ESR1 D538G
HDAC2 T314A
IGF2R I1919V
PIK3CA H1047L
PIK3CG M953R
RAD54L S452L
ROBO1 G623E
TSC2 P862P
TSHZ2 G206R

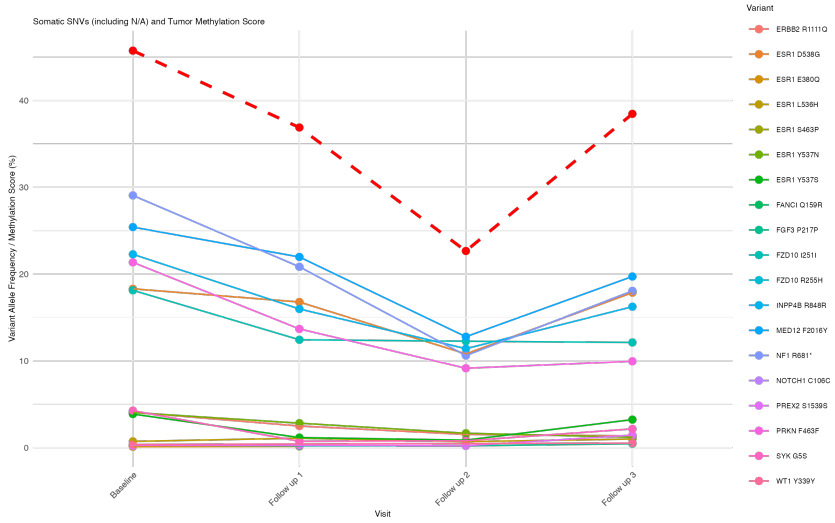

Somatic SNVs (including N/A) and Tumor Methylation Score
Variant Allele Frequency / Methylation Score (%)
0
5
10
15
Baseline
Follow up 1
Follow up 2
Visit
Variant
ALK A1046A
AMER1 Y436Y
ARAF T31M
ARID1A S1126S
ATM F2219L
ATM I1999K
CARD11 L174L
CDH6 A460T
CTNNB1 I256S
CYP2C19 K273R
ERF L541L
ESR1 D538G
ESR1 E380Q
ESR1 G344D
ESR1 S463P
ESR1 Y537C
ESR1 Y537N
ESR1 Y537S
GRIN2A R1067W
INPP4B Q20H
MAP2K2 R313Q
MTOR K298E
NCOR1 I2401T
NOTCH1 V1268F
PBRM1 G1206R
PIK3CA H1047R
PIK3CA V346E
RICTOR G5S
SMO T528N
SOS1 L260L
TP53 Y234N
VHL R182R

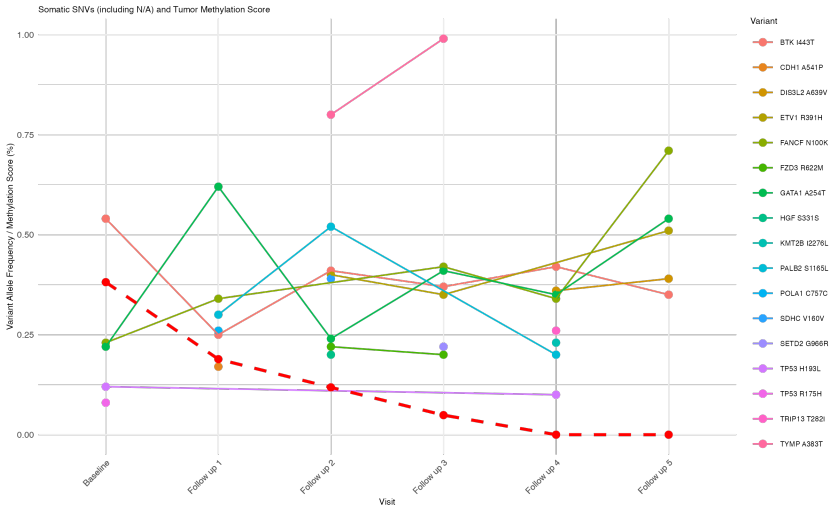

Somatic SNVs (including N/A) and Tumor Methylation Score
Variant Allele Frequency / Methylation Score (%)
0
10
20
30
40
50
Baseline
Follow up 1
Follow up 2
Visit
Variant
CDKN2C R117R
ESR1 D538G
FGFR2 T454T
KAT6B S1035L
KRAS G12R
NTHL1 E277E
NTRK3 C782C
NTRK3 R201C
PIK3CA E542K
TIPARP Q276Q
TP53 G199V
TP53 Y220N

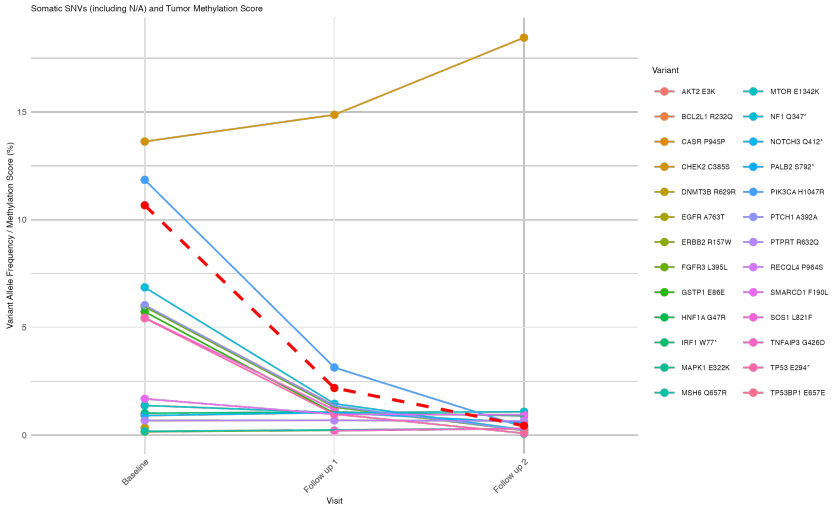

Somatic SNVs (including N/A) and Tumor Methylation Score
Variant Allele Frequency / Methylation Score (%)
8
6
4
2
0
Baseline
Follow up 1
Follow up 2
Visit
Variant
AMER1 R699H
ARID1A N722S
ARID1A Q1424*
BRAF S713C
CDH1 E841*
DLL4 C208C
FANCL E100*
FAT1 D2421V
FGFR4 Q407Q
HELQ A512P
IGF2R V126V
KDM5B G1082S
KEAP1 G464S
KMT2A R3280Q
KMT2D E3562K
LIG4 Q139Q
LRP1B C3606Y
LRP5 I1372I
MED12 C364S
MSH6 E277K
MSH6 K301N
NF1 S365*
NTRK1 I572I
PIK3CA E542K
PIK3CA E726K
PIK3CG A186V
POLD1 K992N
PPP3CA R63K
TOPAZ1 D566Y
TP53 R280K
ZFHX3 Q1840*

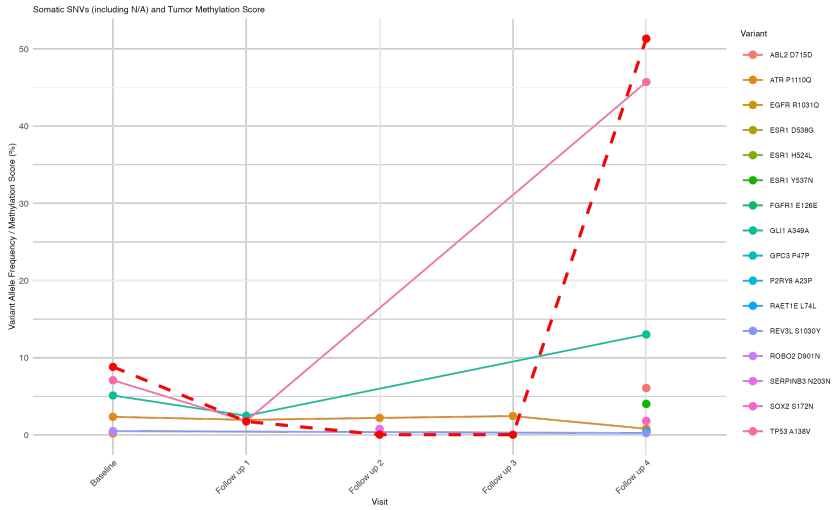

Somatic SNVs (including N/A) and Tumor Methylation Score
Variant Allele Frequency / Methylation Score (%)
1.00
0.75
0.50
0.25
0.00
Baseline
Follow up 1
Follow up 2
Follow up 3
Follow up 4
Follow up 5
Follow up 6
Follow up 7
Follow up 8
Follow up 9
Follow up 10
Visit
Variant
AKT1 G254G
ALK Q453*
ALK R311H
AMER1 T145I
GATA1 N306N
GEN1 T158S
GNA13 I71S
KDM5C K532Q
LGR4 N756S
MED12 M1865V
MLH1 V314L
PALB2 P1111S
RAD54L L191L
TGFBR1 K43E
TP53 G279E
TP53 R196*
TP53 R267W
TSHZ2 S283Y
ZFHX3 F2261F

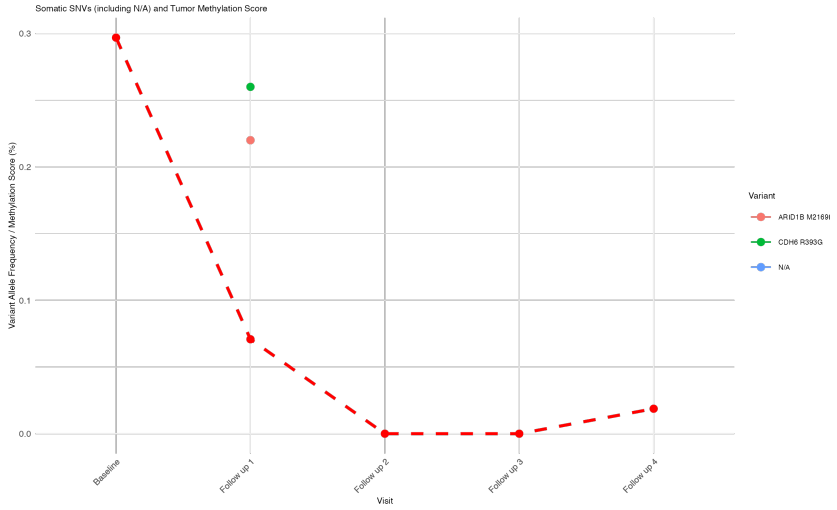

Somatic SNVs (including N/A) and Tumor Methylation Score
Variant Allele Frequency / Methylation Score (%)
0
2
4
Baseline
Follow up 1
Follow up 2
Follow up 3
Follow up 4
Follow up 5
Follow up 6
Follow up 7
Follow up 8
Visit
Variant
ATM V2439G
CTCF C268R
JAK1 C944C
KDR A973A
KMT2D G3095D
MAP3K1 Q562*
N/A
NF1 C1144R
PIK3CA E545K
ROBO2 P1268Q

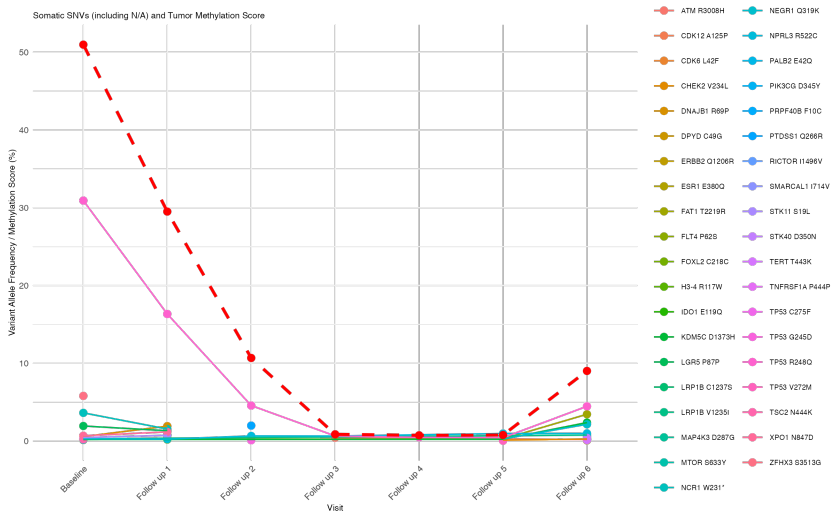

Somatic SNVs (including N/A) and Tumor Methylation Score
Variant Allele Frequency / Methylation Score (%)
0
10
20
30
40
Baseline
Follow up 1
Follow up 2
Follow up 3
Visit
Variant
ERBB2 R1111Q
ESR1 D538G
ESR1 E380Q
ESR1 L536H
ESR1 S463P
ESR1 Y537N
ESR1 Y537S
FANCI Q159R
FGF3 P217P
FZD10 I251I
FZD10 R255H
INPP4B R848R
MED12 F2016Y
NF1 R681*
NOTCH1 C106C
PREX2 S1539S
PRKN F463F
SYK G5S
WT1 Y339Y

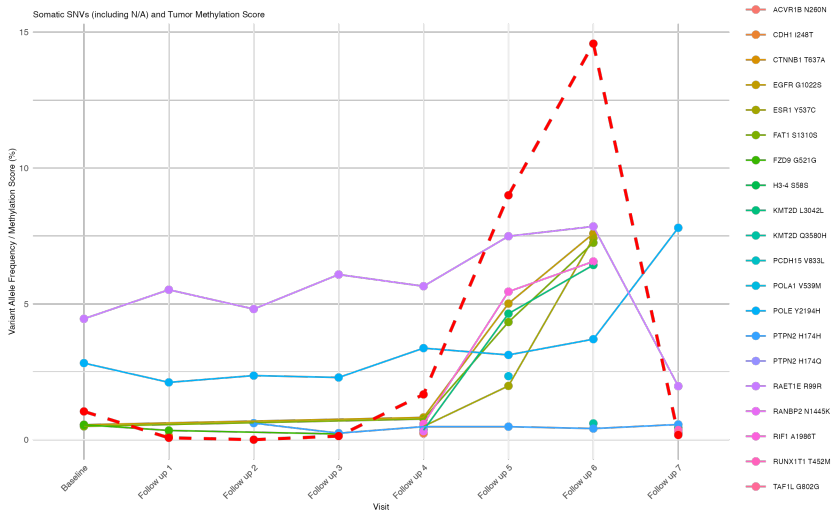

Somatic SNVs (including N/A) and Tumor Methylation Score
Variant Allele Frequency / Methylation Score (%)
1.00
0.75
0.50
0.25
0.00
Baseline
Follow up 1
Follow up 2
Follow up 3
Follow up 4
Follow up 5
Visit
Variant
BTK I443T
CDH1 A541P
DIS3L2 A639V
ETV1 R391H
FANCF N100K
FZD3 R622M
GATA1 A254T
HGF S331S
KMT2B I2276L
PALB2 S1165L
POLA1 C757C
SDHC V160V
SETD2 G966R
TP53 H193L
TP53 R175H
TRIP13 T282I
TYMP A383T

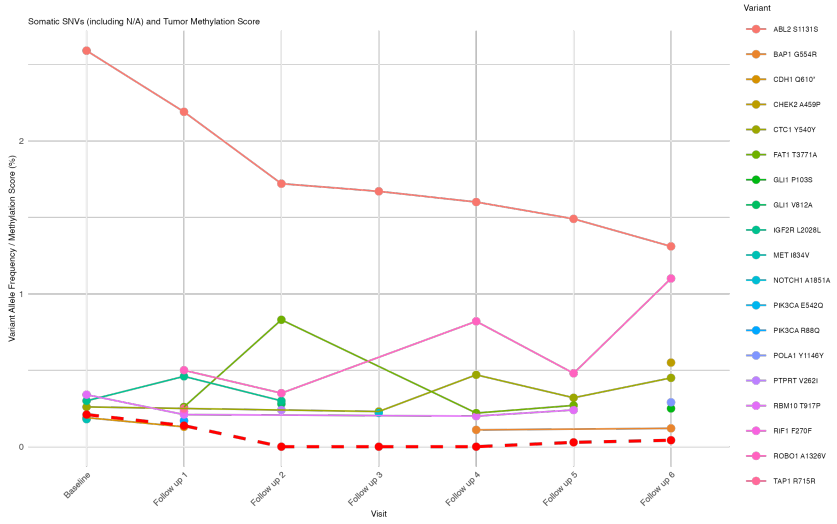

Somatic SNVs (including N/A) and Tumor Methylation Score
Variant Allele Frequency / Methylation Score (%)
15
10
5
0
Baseline
Follow up 1
Follow up 2
Visit
Variant
AKT2 E3K
BCL2L1 R232Q
CASR P945P
CHEK2 C385S
DNMT3B R629R
EGFR A763T
ERBB2 R157W
FGFR3 L395L
GSTP1 E86E
HNF1A G47R
IRF1 W77*
MAPK1 E322K
MSH6 Q657R
MTOR E1342K
NF1 Q347*
NOTCH3 Q412*
PALB2 S792*
PIK3CA H1047R
PTCH1 A392A
PTPRT R632Q
RECQL4 P964S
SMARCD1 F190L
SOS1 L821F
TNFAIP3 G426D
TP53 E294*
TP53BP1 E657E

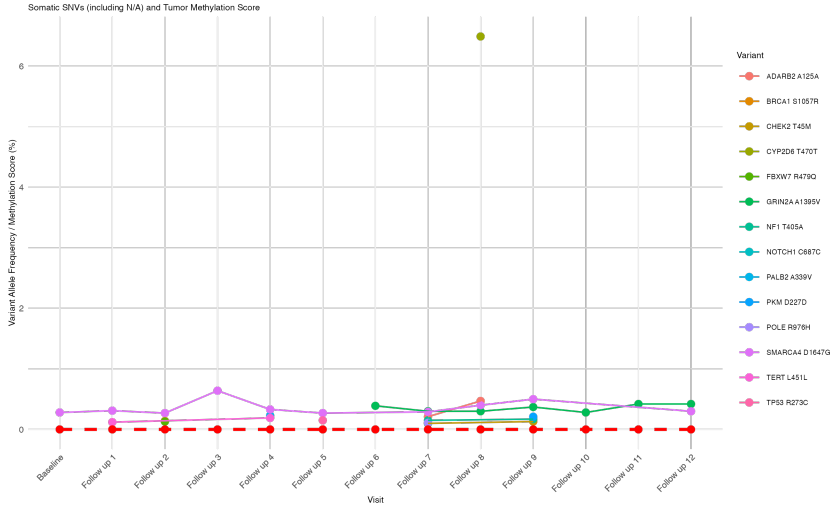

Somatic SNVs (including N/A) and Tumor Methylation Score
Variant Allele Frequency / Methylation Score (%)
50
40
30
20
10
0
Baseline
Follow up 1
Follow up 2
Follow up 3
Follow up 4
Visit
Variant
ABL2 D715D
ATR P1110Q
EGFR R1031Q
ESR1 D538G
ESR1 H524L
ESR1 Y537N
FGFR1 E126E
GLI1 A349A
GPC3 P47P
P2RY8 A23P
RAET1E L74L
REV3L S1030Y
ROBO2 D901N
SERPINB3 N203N
SOX2 S172N
TP53 A138V

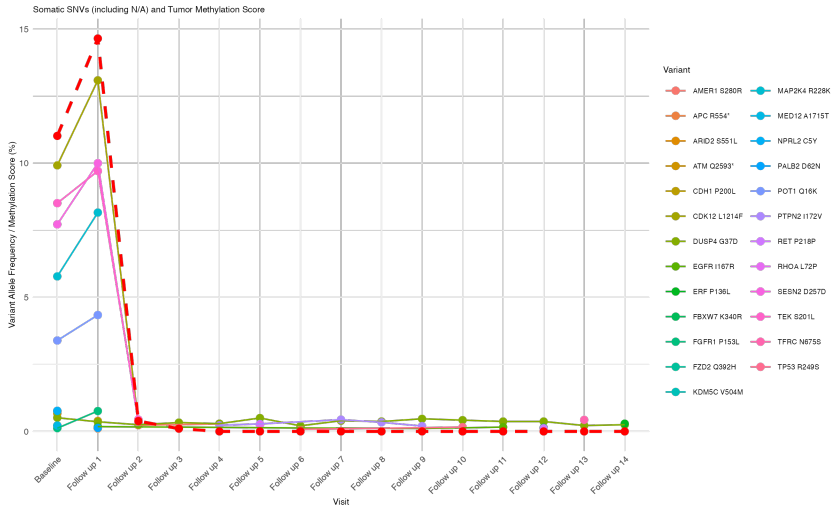

Somatic SNVs (including N/A) and Tumor Methylation Score
Variant Allele Frequency / Methylation Score (%)
0.3
0.2
0.1
0.0
Baseline
Follow up 1
Follow up 2
Follow up 3
Follow up 4
Visit
Variant
ARID1B M2169I
CDH6 R393G
N/A

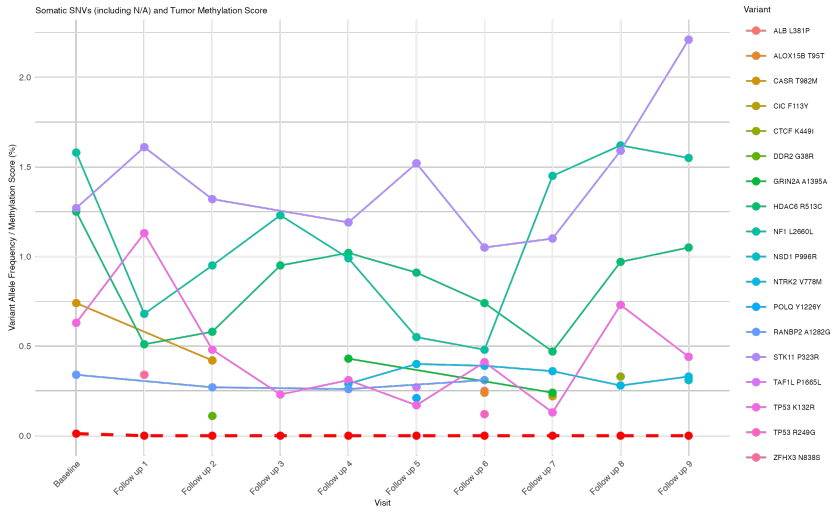

Somatic SNVs (including N/A) and Tumor Methylation Score
Variant Allele Frequency / Methylation Score (%)
50
40
30
20
10
0
Baseline
Follow up 1
Follow up 2
Follow up 3
Follow up 4
Follow up 5
Follow up 6
Visit
ATM R3008H
CDK12 A125P
CDK6 L42F
CHEK2 V234L
DNAJB1 R69P
DPYD C49G
ERBB2 Q1206R
ESR1 E380Q
FAT1 T2219R
FLT4 P62S
FOXL2 C218C
H3-4 R117W
IDO1 E119Q
KDM5C D1373H
LGR5 P87P
LRP1B C1237S
LRP1B V1235I
MAP4K3 D287G
MTOR S633Y
NCR1 W231*
NEGR1 Q319K
NPRL3 R522C
PALB2 E42Q
PIK3CG D345Y
PRPF40B F10C
PTDSS1 Q266R
RICTOR I1496V
SMARCAL1 I714V
STK11 S19L
STK40 D350N
TERT T443K
TNFRSF1A P444P
TP53 C275F
TP53 G245D
TP53 R248Q
TP53 V272M
TSC2 N444K
XPO1 N847D
ZFHX3 S3513G

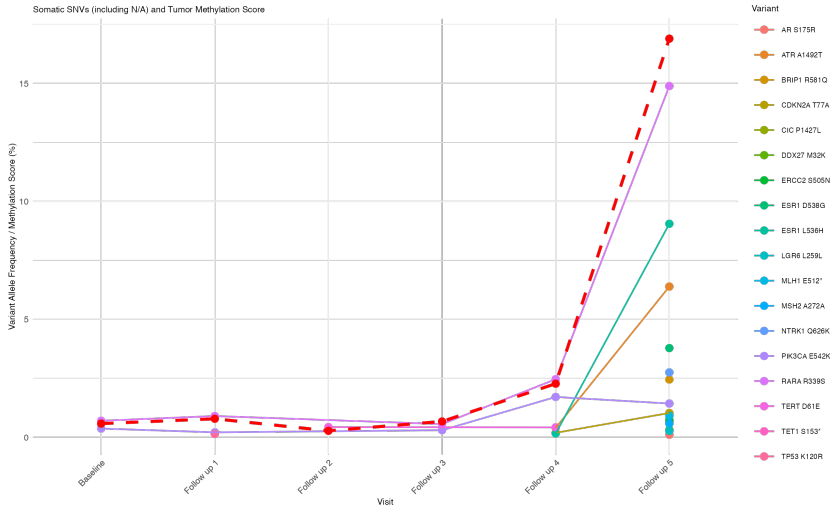

Somatic SNVs (including N/A) and Tumor Methylation Score
Variant Allele Frequency / Methylation Score (%)
15
10
5
0
Baseline
Follow up 1
Follow up 2
Follow up 3
Follow up 4
Follow up 5
Follow up 6
Follow up 7
Visit
ACVR1B N260N
CDH1 I248T
CTNNB1 T637A
EGFR G1022S
ESR1 Y537C
FAT1 S1310S
FZD9 G521G
H3-4 S58S
KMT2D L3042L
KMT2D Q3580H
PCDH15 V833L
POLA1 V539M
POLE Y2194H
PTPN2 H174H
PTPN2 H174Q
RAET1E R99R
RANBP2 N1445K
RIF1 A1986T
RUNX1T1 T452M
TAF1L G802G

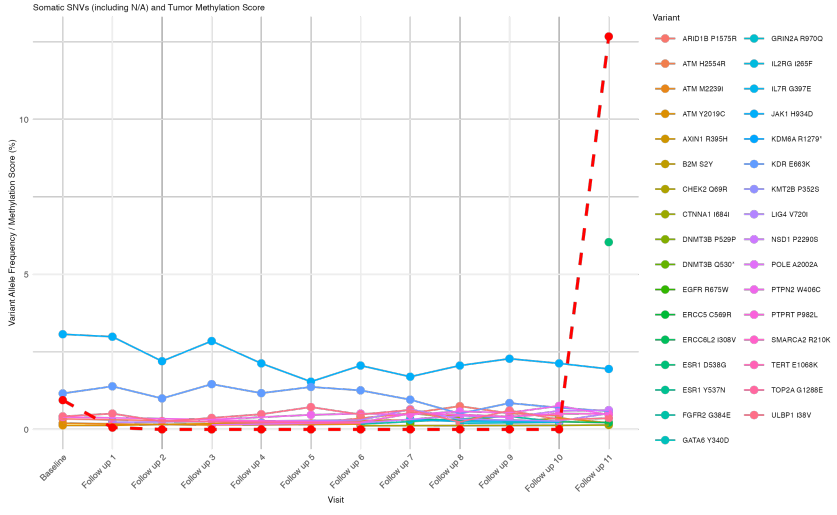

Somatic SNVs (including N/A) and Tumor Methylation Score
Variant Allele Frequency / Methylation Score (%)
0
1
2
Baseline
Follow up 1
Follow up 2
Follow up 3
Follow up 4
Follow up 5
Follow up 6
Visit
Variant
ABL2 S1131S
BAP1 G554R
CDH1 Q610*
CHEK2 A459P
CTC1 Y540Y
FAT1 T3771A
GLI1 P103S
GLI1 V812A
IGF2R L2028L
MET I834V
NOTCH1 A1851A
PIK3CA E542Q
PIK3CA R88Q
POLA1 Y1146Y
PTPRT V262I
RBM10 T917P
RIF1 F270F
ROBO1 A1326V
TAP1 R715R

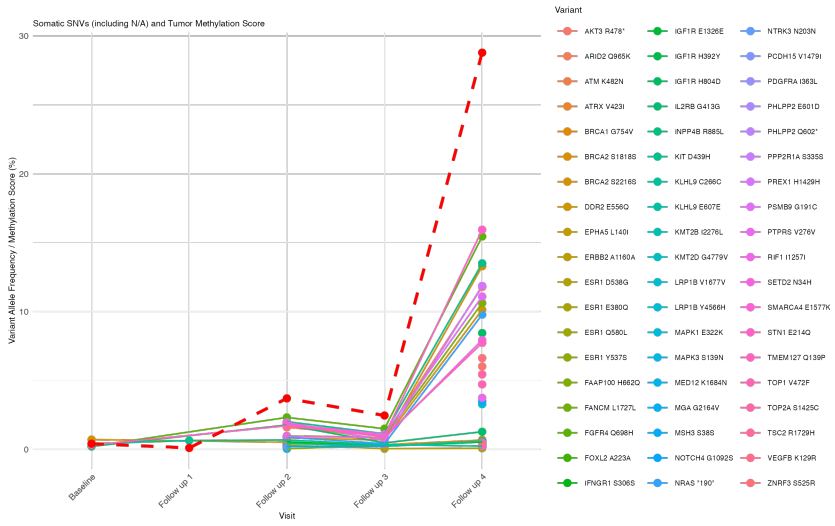

Somatic SNVs (including N/A) and Tumor Methylation Score
Variant Allele Frequency / Methylation Score (%)
0
2
4
6
Baseline
Follow up 1
Follow up 2
Follow up 3
Follow up 4
Follow up 5
Follow up 6
Follow up 7
Follow up 8
Follow up 9
Follow up 10
Follow up 11
Follow up 12
Visit
Variant
ADARB2 A125A
BRCA1 S1057R
CHEK2 T45M
CYP2D6 T470T
FBXW7 R479Q
GRIN2A A1395V
NF1 T405A
NOTCH1 C687C
PALB2 A339V
PKM D227D
POLE R976H
SMARCA4 D1647G
TERT L451L
TP53 R273C

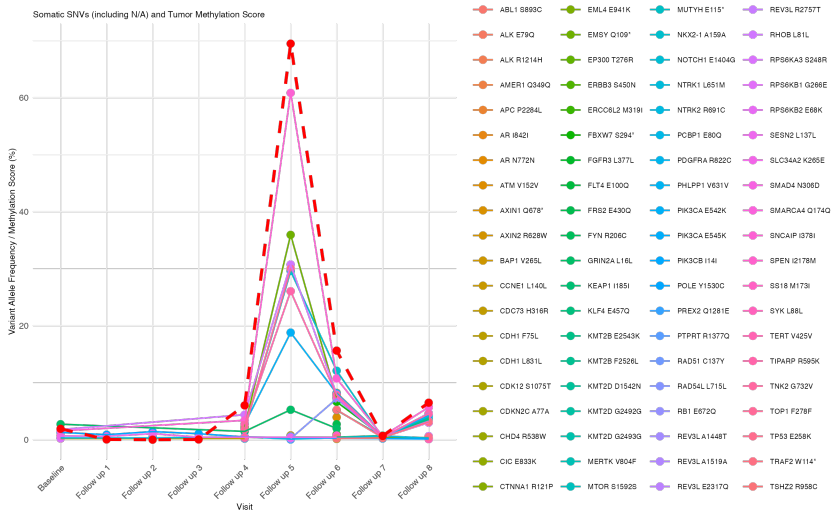

Somatic SNVs (including N/A) and Tumor Methylation Score
Variant Allele Frequency / Methylation Score (%)
15
10
5
0
Baseline
Follow up 1
Follow up 2
Follow up 3
Follow up 4
Follow up 5
Follow up 6
Follow up 7
Follow up 8
Follow up 9
Follow up 10
Follow up 11
Follow up 12
Follow up 13
Follow up 14
Visit
Variant
AMER1 S280R
APC R554*
ARID2 S551L
ATM Q2593*
CDH1 P200L
CDK12 L1214F
DUSP4 G37D
EGFR I167R
ERF P136L
FBXW7 K340R
FGFR1 P153L
FZD2 Q392H
KDM5C V504M
MAP2K4 R228K
MED12 A1715T
NPRL2 C5Y
PALB2 D62N
POT1 Q16K
PTPN2 I172V
RET P218P
RHOA L72P
SESN2 D257D
TEK S201L
TFRC N675S
TP53 R249S

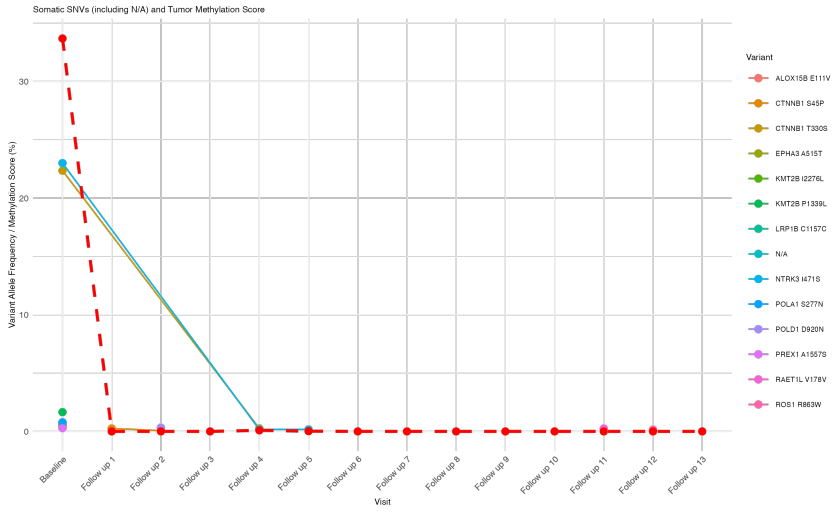

Somatic SNVs (including N/A) and Tumor Methylation Score
Variant Allele Frequency / Methylation Score (%)
2.0
1.5
1.0
0.5
0.0
Baseline
Follow up 1
Follow up 2
Follow up 3
Follow up 4
Follow up 5
Follow up 6
Follow up 7
Follow up 8
Follow up 9
Visit
Variant
ALB L381P
ALOX15B T95T
CASR T982M
CIC F113Y
CTCF K449I
DDR2 G38R
GRIN2A A1395A
HDAC6 R513C
NF1 L2660L
NSD1 P996R
NTRK2 V778M
POLQ Y1226Y
RANBP2 A1282G
STK11 P323R
TAF1L P1665L
TP53 K132R
TP53 R249G
ZFHX3 N838S

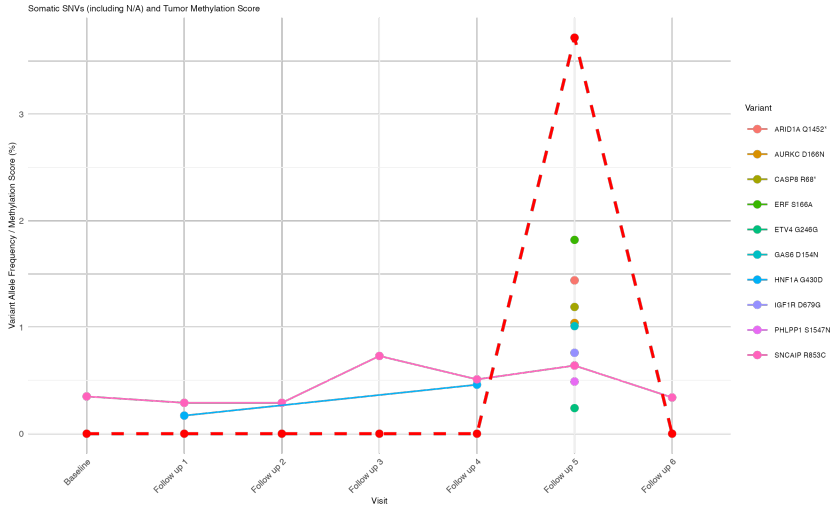

Somatic SNVs (including N/A) and Tumor Methylation Score
Variant Allele Frequency / Methylation Score (%)
15
10
5
0
Baseline
Follow up 1
Follow up 2
Follow up 3
Follow up 4
Follow up 5
Visit
Variant
AR S175R
ATR A1492T
BRIP1 R581Q
CDKN2A T77A
CIC P1427L
DDX27 M32K
ERCC2 S505N
ESR1 D538G
ESR1 L536H
LGR6 L259L
MLH1 E512*
MSH2 A272A
NTRK1 Q626K
PIK3CA E542K
RARA R339S
TERT D61E
TET1 S153*
TP53 K120R

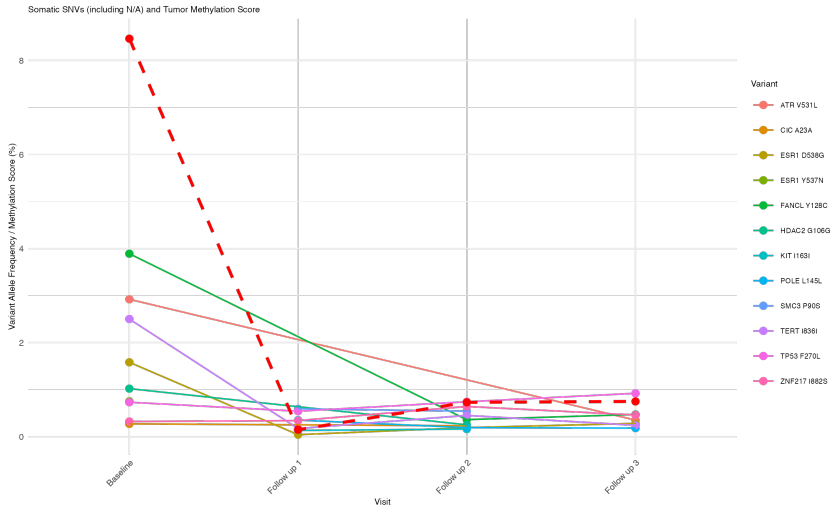

Somatic SNVs (including N/A) and Tumor Methylation Score
Variant Allele Frequency / Methylation Score (%)
10
5
0
Baseline
Follow up 1
Follow up 2
Follow up 3
Follow up 4
Follow up 5
Follow up 6
Follow up 7
Follow up 8
Follow up 9
Follow up 10
Follow up 11
Visit
Variant
ARID1B P1575R
ATM H2554R
ATM M2239I
ATM Y2019C
AXIN1 R395H
B2M S2Y
CHEK2 Q69R
CTNNA1 I684I
DNMT3B P529P
DNMT3B Q530*
EGFR R675W
ERCC5 C569R
ERCC6L2 I908V
ESR1 D538G
ESR1 Y537N
FGFR2 G384E
GATA6 Y340D
GRIN2A R970Q
IL2RG I265F
IL7R G397E
JAK1 H934D
KDM6A R1279*
KDR E663K
KMT2B P352S
LIG4 V720I
NSD1 P2290S
POLE A2002A
PTPN2 W406C
PTPRT P982L
SMARCA2 R210K
TERT E1068K
TOP2A G1288E
ULBP1 I38V


Somatic SNVs (including N/A) and Tumor Methylation Score
Variant Allele Frequency / Methylation Score (%)
30
20
10
0
Baseline
Follow up 1
Follow up 2
Follow up 3
Follow up 4
Visit
Variant
AKT3 R478*
ARID2 Q965K
ATM K482N
ATRX V423I
BRCA1 G754V
BRCA2 S1818S
BRCA2 S2216S
DDR2 E556Q
EPHA5 L140I
ERBB2 A1160A
ESR1 D538G
ESR1 E380Q
ESR1 Q580L
ESR1 Y537S
FAAP100 H662Q
FANCM L1727L
FGFR4 Q698H
FOXL2 A223A
IFNGR1 S306S
IGF1R E1326E
IGF1R H392Y
IGF1R H804D
IL2RB G413G
INPP4B R885L
KIT D439H
KLHL9 C266C
KLHL9 E607E
KMT2B I2276L
KMT2D G4779V
LRP1B V1677V
LRP1B Y4566H
MAPK1 E322K
MAPK3 S139N
MED12 K1684N
MGA G2164V
MSH3 S38S
NOTCH4 G1092S
NRAS *190*
NTRK3 N203N
PCDH15 V1479I
PDGFRA I363L
PHLPP2 E601D
PHLPP2 Q602*
PPP2R1A S335S
PREX1 H1429H
PSMB9 G191C
PTPRS V276V
RIF1 I1257I
SETD2 N34H
SMARCA4 E1577K
STN1 E214Q
TMEM127 Q139P
TOP1 V472F
TOP2A S1425C
TSC2 R1729H
VEGFB K129R
ZNRF3 S525R

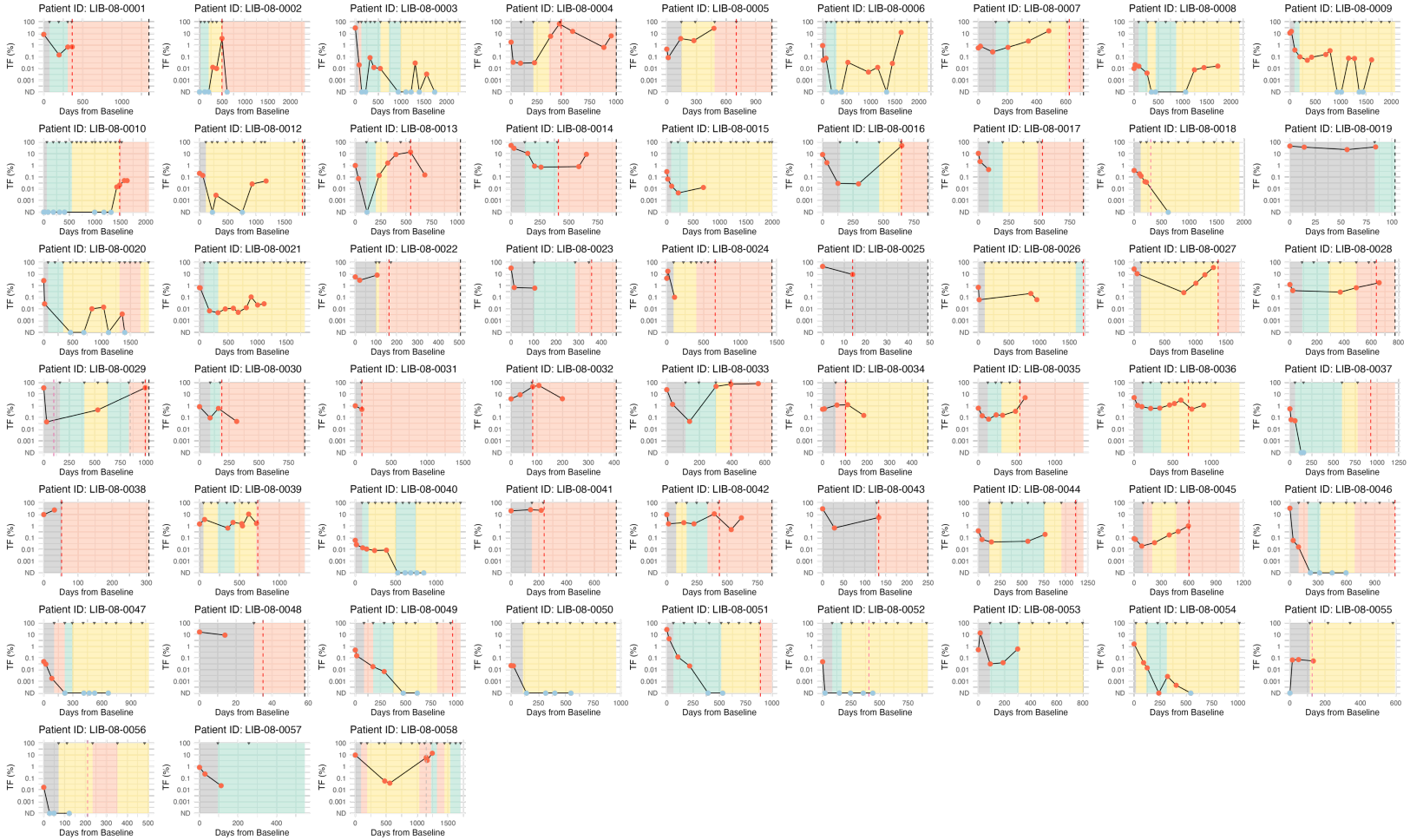

Somatic SNVs (including N/A) and Tumor Methylation Score
Variant Allele Frequency / Methylation Score (%)
60
40
20
0
Baseline
Follow up 1
Follow up 2
Follow up 3
Follow up 4
Follow up 5
Follow up 6
Follow up 7
Follow up 8
Visit
ABL1 S893C
ALK E79Q
ALK R1214H
AMER1 Q349Q
APC P2284L
AR I642I
AR N772N
ATM V152V
AXIN1 Q678*
AXIN2 R628W
BAP1 V265L
CCNE1 L140L
CDC73 H316R
CDH1 F75L
CDH1 L831L
CDK12 S1075T
CDKN2C A77A
CHD4 R538W
CIC E833K
CTNNA1 R121P
EML4 E941K
EMSY Q109*
EP300 T276R
ERBB3 S450N
ERCC6L2 M319I
FBXW7 S294*
FGFR3 L377L
FLT4 E100Q
FRS2 E430Q
FYN R206C
GRIN2A L16L
KEAP1 I185I
KLF4 E457Q
KMT2B E2543K
KMT2B F2526L
KMT2D D1542N
KMT2D G2492G
KMT2D G2493G
MERTK V804F
MTOR S1592S
MUTYH E115*
NKX2-1 A159A
NOTCH1 E1404G
NTRK1 L651M
NTRK2 R691C
PCBP1 E60Q
PDGFRA R822C
PHLPP1 V631V
PIK3CA E542K
PIK3CA E545K
PIK3CB I14I
POLE Y1530C
PREX2 Q1281E
PTPRT R1377Q
RAD51 C137Y
RAD54L L715L
RB1 E672Q
REV3L A1448T
REV3L A1519A
REV3L E2317Q
REV3L R2757T
RHOB L81L
RPS6KA3 S248R
RPS6KB1 G266E
RPS6KB2 E68K
SESN2 L137L
SLC34A2 K265E
SMAD4 N306D
SMARCA4 Q174Q
SNCAIP I378I
SPEN I2178M
SS18 M173I
SYK L88L
TERT V425V
TIPARP R595K
TNK2 G732V
TOP1 F278F
TP53 E258K
TRAF2 W114*
TSHZ2 R958C

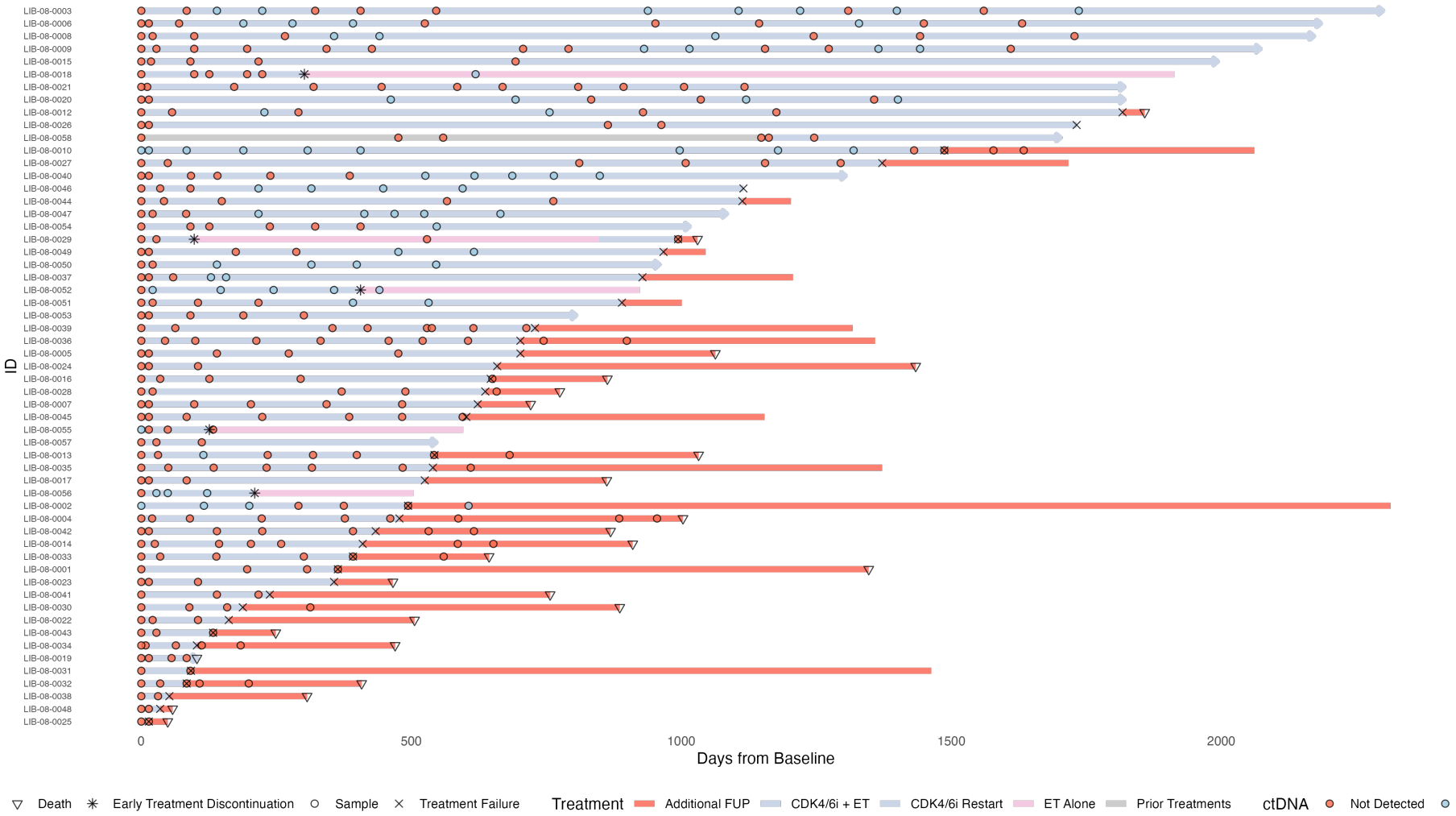

Somatic SNVs (including N/A) and Tumor Methylation Score
Variant Allele Frequency / Methylation Score (%)
30
20
10
0
Baseline
Follow up 1
Follow up 2
Follow up 3
Follow up 4
Follow up 5
Follow up 6
Follow up 7
Follow up 8
Follow up 9
Follow up 10
Follow up 11
Follow up 12
Follow up 13
Visit
Variant
ALOX15B E111V
CTNNB1 S45P
CTNNB1 T330S
EPHA3 A515T
KMT2B I2276L
KMT2B P1339L
LRP1B C1157C
N/A
NTRK3 I471S
POLA1 S277N
POLD1 D920N
PREX1 A1557S
RAET1L V178V
ROS1 R863W

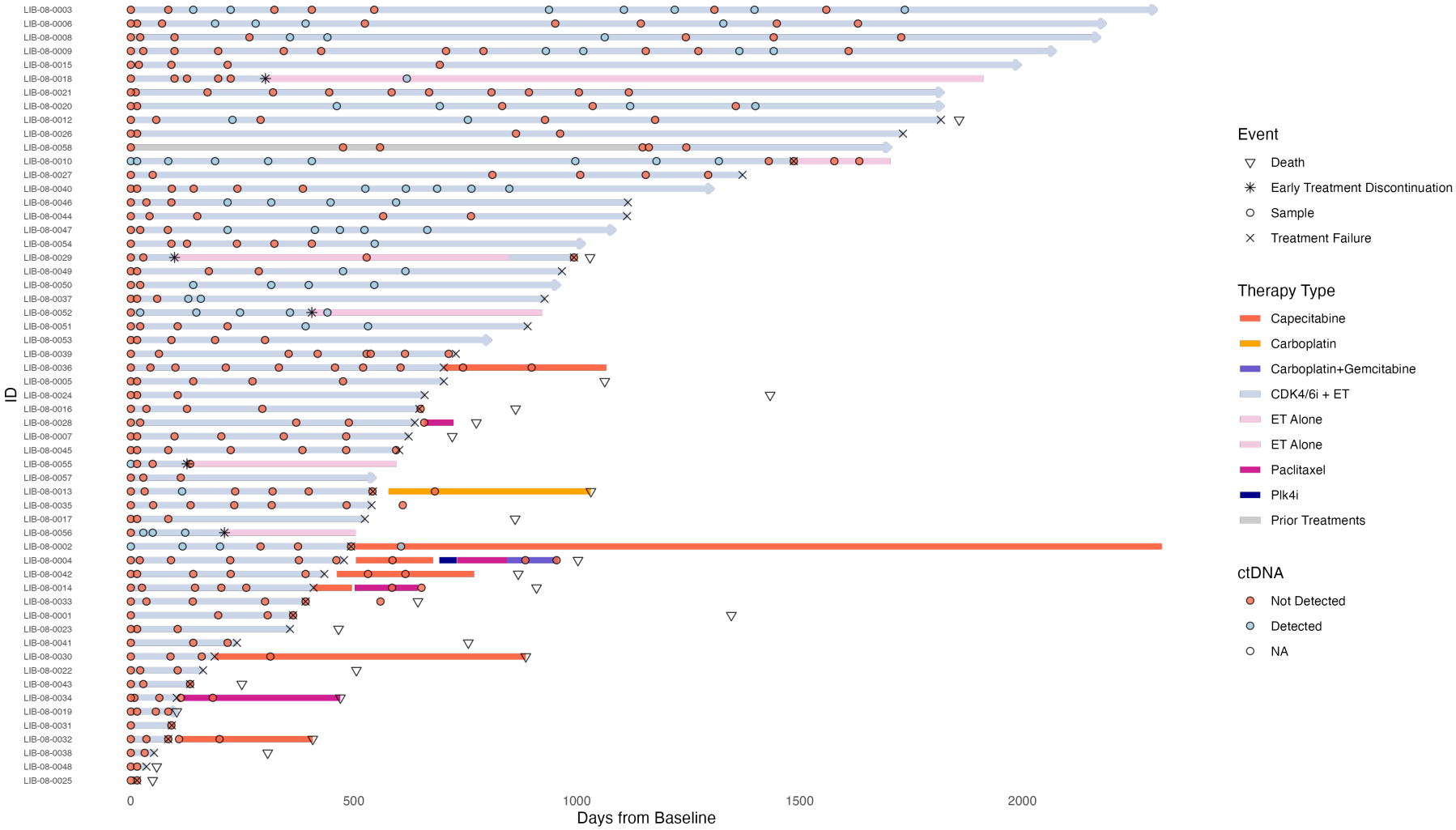

Somatic SNVs (including N/A) and Tumor Methylation Score
Variant Allele Frequency / Methylation Score (%)
3
2
1
0
Baseline
Follow up 1
Follow up 2
Follow up 3
Follow up 4
Follow up 5
Follow up 6
Visit
Variant
ARID1A Q1452*
AURKC D166N
CASP8 R68*
ERF S166A
ETV4 G246G
GAS6 D154N
HNF1A G430D
IGF1R D679G
PHLPP1 S1547N
SNCAIP R853C


Somatic SNVs (including N/A) and Tumor Methylation Score
Variant Allele Frequency / Methylation Score (%)
0
2
4
6
8
Baseline
Follow up 1
Follow up 2
Follow up 3
Visit
Variant
ATR V531L
CIC A23A
ESR1 D538G
ESR1 Y537N
FANCL Y128C
HDAC2 G106G
KIT I163I
POLE L145L
SMC3 P90S
TERT I836I
TP53 F270L
ZNF217 I882S

Sup. Data 4


Patient ID: LIB-08-0001
Patient ID: LIB-08-0002
Patient ID: LIB-08-0003
Patient ID: LIB-08-0004
Patient ID: LIB-08-0005
Patient ID: LIB-08-0006
Patient ID: LIB-08-0007
Patient ID: LIB-08-0008
Patient ID: LIB-08-0009
Patient ID: LIB-08-0010
Patient ID: LIB-08-0012
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Patient ID: LIB-08-0051
Patient ID: LIB-08-0052
Patient ID: LIB-08-0053
Patient ID: LIB-08-0054
Patient ID: LIB-08-0055
Patient ID: LIB-08-0056
Patient ID: LIB-08-0057
Patient ID: LIB-08-0058
TF (%)
Days from Baseline
Event
CDK4/6i Start/Restart
Death
Early CDK4/6i Discontinuation
CDK4/6i Treatment End
Status by Imaging
Improving/responding
Stable
Worsening/enlarging
ctDNA
Not Detected
Detected


ID
LIB-08-0003
LIB-08-0006
LIB-08-0008
LIB-08-0009
LIB-08-0015
LIB-08-0018
LIB-08-0021
LIB-08-0020
LIB-08-0012
LIB-08-0026
LIB-08-0058
LIB-08-0010
LIB-08-0027
LIB-08-0040
LIB-08-0046
LIB-08-0044
LIB-08-0047
LIB-08-0054
LIB-08-0029
LIB-08-0049
LIB-08-0050
LIB-08-0037
LIB-08-0052
LIB-08-0051
LIB-08-0053
LIB-08-0039
LIB-08-0036
LIB-08-0005
LIB-08-0024
LIB-08-0016
LIB-08-0028
LIB-08-0007
LIB-08-0045
LIB-08-0055
LIB-08-0057
LIB-08-0013
LIB-08-0035
LIB-08-0017
LIB-08-0056
LIB-08-0002
LIB-08-0004
LIB-08-0042
LIB-08-0014
LIB-08-0033
LIB-08-0001
LIB-08-0023
LIB-08-0041
LIB-08-0030
LIB-08-0022
LIB-08-0043
LIB-08-0034
LIB-08-0019
LIB-08-0031
LIB-08-0032
LIB-08-0038
LIB-08-0048
LIB-08-0025
0
500
1000
1500
2000
Days from Baseline
Death
Early Treatment Discontinuation
Sample
Treatment Failure
Treatment
Additional FUP
CDK4/6i + ET
CDK4/6i Restart
ET Alone
Prior Treatments
ctDNA
Not Detected


ID
LIB-08-0003
LIB-08-0006
LIB-08-0008
LIB-08-0009
LIB-08-0015
LIB-08-0018
LIB-08-0021
LIB-08-0020
LIB-08-0012
LIB-08-0026
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LIB-08-0029
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LIB-08-0033
LIB-08-0001
LIB-08-0023
LIB-08-0041
LIB-08-0030
LIB-08-0022
LIB-08-0043
LIB-08-0034
LIB-08-0019
LIB-08-0031
LIB-08-0032
LIB-08-0038
LIB-08-0048
LIB-08-0025
0
500
1000
1500
2000
Days from Baseline
Event
Death
Early Treatment Discontinuation
Sample
Treatment Failure
Therapy Type
Capecitabine
Carboplatin
Carboplatin+Gemcitabine
CDK4/6i + ET
ET Alone
ET Alone
Paclitaxel
Plk4i
Prior Treatments
ctDNA
Not Detected
Detected
NA