A
1.3
0.8
0.2
2.2
0.8
0.4
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 X Y
Chromosome

B
dysfunction_sites
150
100
50
0
No_response
response
P01_T P20_T P35_T P18_T P06_T P13_T P10_T P21_T P28_T P09_T P02_T P19_T P32_T P03_T P07_T P24_T P23_T P04_T P12_T P27_T

C
p = 0.041
Sig1.AGE
1.00
0.75
0.50
0.25
0.00
No_response
response

S1.AGE p = 0.041
S10.POLE p = 0.27
S11.Temozolomide
S12.Unknown
S13.APOBEC p = 0.44
S14.Unknown p = 0.26
S15.dDMR p = 0.51
S16.Unknown p = 0.77
S17.Unknown
S18.Unknown p = 0.089
S19.Unknown
S2.APOBEC p = 0.95
S20.dDMR p = 0.15
S21.Unknown p = 0.7
S22.Aristolochic acid p = 0.77
S23.Unknown p = 0.47
S24.Aflatoxin p = 0.063
S25.Unknown p = 0.27
S26.dDMR p = 0.47
S27.Unknown p = 0.15
S28.Unknown p = 0.47
S29.Tobacco p = 0.47
S3.dDSB p = 0.26
S30.Unknown
S4.Smoking p = 0.95
S5.Unknown p = 0.96
S6.dDMR p = 0.38
S7.UV p = 0.087
S8.Unknown p = 0.47
S9.POLH
1.00
0.75
0.50
0.25
0.00

D
TP53 NF1 BRCA1 BRCA2 CDK12 KMT2A KMT2C LATS1 LRP1B MYH9 NOTCH1
group
No_response
response
* P < 0.05
· P < 0.1
>3 (Co−occurence)
−log10(P−value)
> 3 (Mutually exclusive)

E
TP53 NF2 ARID1A ATRX NF1 PIK3CA RB1
* P < 0.05
· P < 0.1
>3 (Co−occurence)
−log10(P−value)
> 3 (Mutually exclusive)