



Unclassified Hyperdiploid Cyclin D MMSET MAF

Number of drivers

Translocation

Point mutation
Small indel

Copy number
Abnormality

Structural
Variant

N = 1,030

Significance
 $-\log_{10}(\text{FDR})$

Association MM vs MGUS/SMM
(log odds ratio)

Trisomies
t(11;14)(CCND1)
t(6;14)(CCND3)
t(12;14)(CCND2)
t(4;14)(MMSET)
t(14;18)(MAF)
t(14;20)(MAFB)
t(8;14)(MAFA)
t(MYC;IGH/K/L)

KRAS
NRAS
DIS3
FAM46C
BRAF
TP53
FGFR3
MAX
HIST1H1E
SP140
CYLD
DUSP2
PRDM1
TRAF3
IRF4
PTEN11
PRKD2
ATM
KLHL6
SAMHD1
LTB
IKZF3
CCND1
IKBKB
BCL7A
HIST1H1B
HNRNP1
TCL1A
RB1
PIM1
CDKN1B
ESR1
FIP1L1
SGPP1
SETD2
TRAF2
HIST1H1D
RAS2
NRK1A
SP3
ACTG1
EHD1
SF3B1
HNRNPA2B1
RFTN1
ZNF292

IMWG

Unclassified
Hyperdiploid
Cyclin D
MMSET
MAF

Stage

MGUS
SMM
MM

+1q
+6p
-18q
-1p22.1
-1p12
-18q12.1
-4p16.3
-6q25.2
-13q14.3
-16q
-8p
-16p13.3
-1p32.3
-8q24.21a
-14q23.3
-14q31.1
-2q37.1
-20q13.12
-11q22.3
+18p
-8p23.3
+18q
-10q24.32
+1q21.2
-12q24.33
+16p13.13
-13q12.11
-8q24.21b
-6q19
-4q34.3
-13q31.2
-17q21.2
+3q25.2
+8q24.21
-22q12.1
-7p22.3
-12p13.33
TRAF3 / AMN
NSD2
SP140 / SP140L
PRSS2 / MTRNR2L6
CDKN2C
WWOX (MAF)
PRRT14
MFF
EMSY
RBT1 SV
SDCCAG8