

Myeloid lineage switch in *KMT2A*-rearranged acute lymphoblastic leukemia treated with lymphoid lineage-directed therapies

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Supplementary material

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Supplemental table 1

Gene	Exons (codons) tested
ANKRD26(NM_014915)	1 (1-6)
ASXL1 (NM_015338)	11-12 (362-1542)
ASXL2 (NM_018263)	11-12 (381-1436)
BCOR (NM_017745)	2-4 (1-512), 4-6 (514-1080), 7 (1122-1124), 7 (1091-1099), 7-15 (1124-1722)
BCORL1 (NM_021946)	1-6 (1-1261), 6 (1264-1323), 6-11 (1326-1600), 11-12 (1614-1699), 12 (1706-1712)
BRAF (NM_004333)	11 (439-478), 15 (581-620)
BRINP3 (NM_199051)	2-8 (1-471), 8 (475-767)
CALR (NM_004343)	9 (352-418)
CBL (NM_005188)	7-9 (336-477)
CBLB (NM_170662)	7-10 (282-469)
CBLC (NM_012116)	7-9 (336-454), 10 (464-475)
CEBPA (NM_004364)	1 (1-56), 1 (59-91), 1 (96), 1 (128-143), 1 (146-175), 1 (178-201), 1 (249-358)
CREBBP (NM_004380)	2-8 (29-608), 9-10 (615-705), 12-16 (724-1084), 17-31 (1094-1943), 31 (1950-2235), 31 (2238-2443)
CSF3R (NM_156039)	14 (575-622), 17 (681-864)
CUX1 (NM_181552)	2-6 (11-172), 6-9 (174-241), 10-12 (248-359), 13-14 (367-408)
DDX41 (NM_016222)	1-10 (1-366), 11 (369-410), 12-17 (420-623)
DNMT3A (NM_022552)	8-22 (286-862), 23 (866-913)
EED (NM_003797)	1-2 (1-69), 2-8 (71-287), 9-12 (289-442)
ELANE (NM_001972)	1-2 (5-46), 2 (69-75), 4-5 (123-268)
ETNK1 (NM_018638)	3 (228-275)
ETV6 (NM_001987)	1-6 (1-378), 7-8 (385-453)
EZH2 (NM_004456)	2-5 (1-158), 6 (162-205), 7 (209-217), 8-13 (243-512), 14 (516-538), 14-19 (547-732), 20 (752)
FBXW7 (NM_033632)	9-12 (413-708)
FLT3 (NM_004119)	11-17 (437-709), 18-20 (736-847)
GATA1 (NM_002049)	2-3 (1-84)
GATA2 (NM_032638)	2-5 (1-377), 5-6 (379-481)
GFI1 (NM_005263)	2 (2-39)
GNAS (NM_000516)	8 (200-202), 11 (315-324)
HNRNPK (NM_002140)	3-7 (1-96), 7 (101-106), 8-17 (111-465)
HRAS (NM_005343)	2-3 (1-60), 3-4 (87-150)
IDH1 (NM_005896)	4 (132-133)
IDH2 (NM_002168)	4 (125-178)
IKZF1 (NM_006060)	2-8 (1-443), 8 (445-518)
IL2RG (NM_000206)	1-2 (1-45), 2-8 (51-340), 8 (360-370)
IL7R (NM_002185)	5-7 (180-292)
JAK1 (NM_002227)	3-9 (3-445), 10 (453-465), 10-22 (470-1023), 22-24 (1026-1123)
JAK2 (NM_004972)	10 (405-442), 12-14 (505-622), 16 (665-711), 18 (762-802)
JAK3 (NM_000215)	2-23 (1-1069)
KDM6A (NM_021140)	1-19 (1-971), 19-21 (976-1070), 22-29 (1080-1402)
KIT (NM_000222)	8-9 (411-514), 11 (550-592), 17 (788-828)
KMT2A (NM_005933)	2-4 (145-1075), 4-13 (1081-1561), 14-15 (1566-1665), 27 (2178-2195), 27 (2201-2362), 27 (2365-2715), 27 (2721-3216), 27 (3219-3327), 27 (3336-3505), 27 (3521-3582)
KRAS (NM_004985)	2-4 (1-150)
MAP2K1 (NM_002755)	2 (27-90), 3 (98-146)
MPL (NM_005373)	10 (490-522), 12 (552-636)
NF1 (NM_001042492)	2-4 (21-160), 5 (165-190), 6 (201-218), 8-13 (244-468), 13-14 (478-547), 15-17 (568-667), 18 (674-728), 18-22 (746-992), 23-26 (997-1146), 26-30 (1160-

	1330), 30-31 (1353-1378), 31-34 (1382-1493), 34-35 (1512-1550), 35 (1563-1575), 36-38 (1601-1868), 39 (1870-1884), 39-40 (1886-1947), 40-47 (1952-2322), 47-49 (2325-2438), 50-51 (2441-2491), 51-52 (2494-2555), 53-58 (2580-2840)
NOTCH1 (NM_017617)	26 (1529-1600), 26-28 (1604-1795), 34 (2061-2228), 34 (2234-2274), 34 (2290-2309), 34 (2290-2556), 34 (2061-2228), 34 (2234-2274), 34 (2309-2556)
NPM1 (NM_002520)	11 (283-295)
NRAS (NM_002524)	2-4 (1-150)
PAX5 (NM_016734)	1-10 (1-392)
PHF6 (NM_032458)	2-3 (1-79), 4-10 (81-366)
PIGA (NM_002641)	2 (1-6), 2-5 (15-396), 6 (399-485)
PML (NM_033238)	3 (201-255)
PRPF40B (NM_001031698)	2-19 (2-609), 19-20 (611-658), 20-24 (661-807), 25-26 (815-893)
PTEN (NM_000314)	7-8 (212-340)
PTPN11 (NM_002834)	3-4 (46-125), 7 (253-285), 12 (460-462), 12-13 (465-533)
RAD21 (NM_006265)	2-12 (1-540), 13 (544-560), 14 (569-632)
RARA (NM_000964)	6-7 (211-338)
RUNX1 (NM_001754)	2-9 (1-419), 9 (426-437), 9 (456-474)
SETBP1 (NM_015559)	4 (838-885)
SF1 (NM_004630)	1-2 (1-31), 2 (39-54), 3-12 (57-524), 13 (544-578), 13 (596-600), 13 (605-640)
SF3A1 (NM_005877)	2-7 (22-322), 7-9 (355-424), 9-12 (427-646), 13-16 (651-794)
SF3B1 (NM_012433)	13-16 (574-790)
SH2B3 (NM_005475)	2 (1-40), 2 (43-119), 2 (132-164), 2-6 (233-374), 6-8 (380-576)
SMC1A (NM_006306)	1-25 (1-1234)
SMC3 (NM_005445)	1 (1-5), 2-6 (19-110), 6-11 (113-299), 11-15 (308-477), 15-16 (498-504), 16-17 (507-580), 17-19 (591-706), 20-25 (708-975), 25 (979-1035), 26-29 (1038-1217)
SRSF2 (NM_003016)	1 (1-38), 1 (45-121)
STAG1 (NM_005862)	2 (1-5), 3-5 (10-101), 5-12 (121-392), 13-20 (402-703), 21-22 (724-738), 22-27 (740-953), 27 (955-979), 28 (985-1008), 29-34 (1022-1259)
STAG2 (NM_006603)	2-8 (1-273), 9-16 (287-518), 16 (521-539), 17-22 (547-751), 23-33 (756-1232)
STAT3 (NM_139276)	17 (489-509), 17-22 (521-715)
STAT5A (NM_003152)	3-6 (1-177), 6-7 (181-189), 8-20 (261-795)
STAT5B (NM_012448)	16 (636-673)
SUZ12 (NM_015355)	1 (20-44), 1 (46-84), 2 (92-97), 4-5 (129-169), 7-11 (198-431), 12-16 (468-740)
TERC (NR_001566)	1 (1-36)
TERT (NM_198253)	1-2 (1-172), 2 (258-342), 2 (349-474), 2-4 (477-630), 4-5 (633-692), 6 (711-749), 6-12 (753-954), 12-16 (957-1133)
TET2 (NM_001127208)	3 (1-77), 3 (91-92), 3 (98-815), 3 (829-853), 3-10 (867-1453), 10-11 (1465-2003)
TP53 (NM_000546)	2 (1-25), 4-11 (80-394)
U2AF1 (NM_006758)	2 (15-44), 6 (117-161)
U2AF2 (NM_007279)	1-5 (1-161), 6-12 (163-437), 12 (441-476)
WT1 (NM_024426)	1 (1-5), 1 (7-63), 1-10 (127-518)
ZRSR2 (NM_005089)	1-4 (1-90), 5 (105-130), 6-8 (134-257), 9-11 (260-419), 11 (465-483)

Supplemental table 1. 81-gene NGS panel coverage

Supplemental table 2

Gene	Exons (codons) tested
<i>ABL1</i> (NM_005157)	1-11 (1-985), 11 (1029-1150)
<i>ASXL1</i> (NM_015338)	2-12 (20-1542)
<i>BRAF</i> (NM_004333)	1 (1-23), 1-2 (34-59), 2-5 (64-204), 5-18 (222-717), 18 (725-767)
<i>DNMT3A</i> (NM_022552)	2-23 (1-913)
<i>EGFR</i> (NM_005228)	1 (1-24), 2-20 (30-786), 20-23 (792-927), 23-26 (935-1043), 26-28 (1047-1211)
<i>EZH2</i> (NM_004456)	2-5 (1-162), 6-7 (171-217), 8-18 (243-696), 18-20 (700-752)
<i>FLT3</i> (NM_004119)	2-24 (15-994)
<i>GATA1</i> (NM_002049)	2-6 (1-481)
<i>GATA2</i> (NM_032638)	2-5 (1-377), 5-6 (379-481)
<i>HRAS</i> (NM_005343)	2-5 (1-190)
<i>IDH1</i> (NM_005896)	3-10 (1-415)
<i>IDH2</i> (NM_002168)	1 (1-14), 1-11 (26-453)
<i>IKZF1</i> (NM_006060)	2-8 (1-527)
<i>JAK2</i> (NM_004972)	3-18 (1-806), 19-25 (812-1133)
<i>KIT</i> (NM_000222)	1-6 (1-333), 6-16 (367-784), 16-21 (786-977)
<i>KMT2A</i> (NM_005933)	1 (1-27), 1-28 (103-3609), 29-36 (3631-3970)
<i>KRAS</i> (NM_004985)	2-5 (1-189)
<i>MDM2</i> (NM_004985)	1-11 (1-498)
<i>MPL</i> (NM_005373)	1-9 (1-488), 10-12 (490-636)
<i>MYD88</i> (NM_002468)	1-5 (1-310)
<i>NOTCH1</i> (NM_017617)	1-34 (18-2552)
<i>NPM1</i> (NM_002520)	1-7 (1-181), 7-11 (187-295)
<i>NRAS</i> (NM_002524)	2-5 (1-190)
<i>PTPN11</i> (NM_002834)	1-4 (1-137), 5-9 (176-364), 10-15 (377-594)
<i>RUNX1</i> (NM_001754)	2-9 (1-437), 9 (479-481)
<i>TET2</i> (NM_001127208)	3 (1-854), 3-11 (866-2003)
<i>TP53</i> (NM_000546)	2-11 (1-394)
<i>WT1</i> (NM_024426)	1-10 (1-518)

Supplemental table 2. 28-gene NGS panel coverage