

Supplementary material

Table S1. BAX/BAK localization for the test cohort

sample	rel. BAX loc.	rel. BAK loc.	de novo	status	OS
1	0.049	0.049	yes	0	160
2	0.774	0.774	no	0	480
3	-0.349	-0.349	yes	1	396
4	0.410	0.410	yes	1	370
5	0.456	0.456	yes	0	151
6	0.660	0.660	yes	0	87
7	0.471	0.471	yes	1	7
8	0.773	0.773	no	1	71
9	-0.407	-0.407	yes	0	1709
10	0.759	0.759	no	1	563
11	0.044	0.044	no	1	78
12	0.102	0.102	yes	0	693
13	-0.575	-0.575	yes	0	2192
14	1.114	1.114	no	0	2192
15	0.908	0.908	no	0	75
16	-0.371	-0.371	yes	1	463
17	0.550	0.550	yes	0	1447
18	0.479	0.479	yes	1	2
19	1.043	1.043	yes	0	61
20	0.577	0.577	n/a	n/a	n/a
21	0.270	0.270	yes	1	1
22	0.039	0.039	yes	0	785
23	0.743	0.743	yes	0	971
24	0.459	0.459	no	0	971
25	-0.568	-0.568	yes	1	24
26	-1.122	-1.122	yes	1	89
27	0.999	0.999	n/a	0	35
28	1.024	1.024	no	0	1302
29	-0.704	-0.704	no	0	1049
30	0.463	0.463	yes	0	142
31	1.123	1.123	yes	0	345
32	-0.119	-0.119	yes	0	729
33	-0.275	-0.275	no	0	321
34	0.254	0.254	yes	1	25
35	-0.063	-0.063	yes	0	66
36	0.421	0.421	yes	0	123
37	-0.315	-0.315	no	1	189
38	0.626	0.626	no	1	401
39	-1.843	-1.843	yes	0	1113
40	-0.459	-0.459	yes	0	94
41	0.781	0.781	yes	0	379
42	0.781	0.781	yes	0	105
43	0.768	0.768	yes	0	217
44	0.893	0.893	yes	0	626
45	-0.624	-0.624	yes	0	77
46	0.363	0.363	yes	1	312
47	-0.542	-0.542	yes	1	461
48	-0.446	-0.446	yes	1	237

Table S2. Clinical characterization of patient cohorts

	Test Cohort (n=48)	Validation Cohort (n=80)	Test Cohort >60 y (n=26)
Age (y)			
Mean	59.2	68.7	69.9
Median	60.5	68.6	72.0
Range	22.2-81.3	60.2-79.4	60.0 -81.3
Sex (n, %)			
Male	28 (58.3)	49(61.3)	14 (53.8)
Female	20 (41.7)	31 (38.7)	12 (46.2)
ELN Risk (n, %)			
Low	8 (16.7)	14 (17.5)	3 (11.5)
Int-1	12 (25)	31 (38.75)	8 (30.8)
Int-2	9 (18.8)	15 (18.75)	5 (19.2)
High	13 (27.1)	20 (25)	7 (26.9)
N/A	4 (8.3)	0	2 (7.7)
FLT3-ITD Status (n, %)			
ITD positive	9 (18.75)	27 (33.75)	7 (26.9)
ITD negative	35 (72.9)	53 (66.25)	16 (61.5)
N/A	4 (8.3)	0 (0)	3 (11.5)
Treatment (n, %)			
Myelosuppressive	44 (91.7)	80 (100)	22 (84.6)
Palliative	4 (8.3)	0 (0)	4 (15.4)
SCT	20 (41.7)	18 (22.5)	8 (30.8)
De novo AML	34 (70.8)	59 (73.75)	18 (69.2)
Secondary AML	12 (25)	21 (26.25)	6 (23.1)

Table S4. BAX/BAK localization for the validation cohort

sample	rel. BAX loc.	rel. BAK loc.	status	OS
1	0,01861144	1,08547302	1	38
2	-0,5757353	0,20231529	1	679
3	-1,57281792	-1,18771575	1	367
4	-3,08613895	-0,9068428	1	528
5	-1,1776875	-0,33591227	1	280
6	-2,88085321	-2,0615314	1	137
7	-0,38946961	1,03645572	1	1035
8	-1,28897799	-0,79777996	1	578
9	-0,28203642	0,98209765	1	1291
10	-0,52239426	0,95090669	1	146
11	-0,79024638	0,95454005	1	43
12	-1,52144644	-1,15474214	1	356
13	-2,2051766	-0,79659765	1	214
14	-1,26305192	0,19328275	1	406
15	-2,48083816	-1,70446375	1	399
16	-2,15526272	-0,66719364	1	27
17	-2,90816305	-2,20603096	1	2186
18	-1,84683772	-0,97264255	1	292
19	-0,93530696	0,49561157	1	232
20	0,88685391	3,08729824	1	420
21	-1,05921976	0,03654451	1	873
22	-1,22595806	-1,04487813	1	353
23	-0,57228343	0,61598167	1	83
24	-1,04053545	-0,32011081	1	100
25	-0,07018631	1,16490489	0	2447
26	-2,297169	-1,85535901	1	197
27	-2,92602904	-1,47308329	1	61
28	0,8409892	1,71457822	1	280
29	-1,30235298	-0,17594955	1	196
30	-1,04116186	-0,4388957	1	951
31	-1,01949761	-0,64598899	0	2259
32	0,24341435	1,29478839	1	362
33	-0,48428676	0,52063996	1	637
34	-0,38245671	0,65712597	1	264
35	-0,9140033	0,84888837	1	16
36	-0,79872759	-0,41863974	0	2912
37	-1,28673883	-0,9532984	1	1431
38	0,0172081	1,68213134	1	427
39	-1,55713653	-0,97096297	1	67
40	-0,84654882	-0,04267673	1	379
41	-1,42696133	0,44107167	1	766
42	-2,80445892	-2,35449829	0	911
43	-1,10974933	1,04236804	1	94
44	-3,17503219	-1,59877848	1	405
45	-1,89485799	-0,78907296	1	245
46	0,36438092	1,39204317	1	124
47	-0,80790809	1,18643895	0	68
48	0,25658637	1,73730281	1	26
49	0,85473694	2,11966812	1	73
50	-3,85299199	-2,53343386	1	189
51	0,59678337	2,0445045	1	421
52	-1,91301768	-0,25671069	0	2777
53	-0,93619065	0,17524216	1	507
54	0,48775527	1,6667229	0	527
55	0,63295821	1,43296014	0	1200
56	0,43588703	0,68145032	0	1969
57	n/a	-2,07920579	1	25
58	-0,51107744	0,10724646	1	1107
59	0,84126501	1,79907335	1	80
60	-2,07780883	-0,74394398	1	542
61	-1,14528481	0,24638523	1	28
62	1,20904108	2,31777152	1	6
63	-0,02660003	0,69488811	1	41
64	0,01609701	1,29243733	1	1422
65	-0,80955682	0,02676375	1	65
66	0,47971604	1,96652891	1	1231
67	0,20804117	0,13737186	1	281
68	-0,6433164	-0,46016451	1	1078
69	0,15664374	0,83580791	1	166

70	0,84164379	2,37408577	1	441
71	0,15318716	1,18700705	1	33
72	0,98122454	2,57712546	0	195
73	-1,69705465	-0,97095716	1	246
74	0,87407989	1,69408488	1	151
75	1,73215895	2,63379146	1	547
76	-0,05797517	0,24038254	1	58
77	0,39283004	1,44305571	1	16
78	0,30190165	1,28423015	0	55
79	-0,57340424	0,61288762	1	70
80	-0,58715102	0,25900425	1	91

Table S5. Multivariate analysis of variance for human AML survival probability

Analysis of Maximum-Likelihood-Valuer					
Parameter	DF	Value	SEM	Waldsches Chi-Quadrate	Pr > ChiSq
intercept	1	0.3584	1.2784	0.0786	0.7792
rel. Bax localization	1	0.4798	0.1922	6.2318	0.0125
sex	1	0.3580	0.4651	0.5924	0.4415
FLT3ITD	1	-0.9921	0.5709	3.0201	0.0822
ELN_risk	1	-0.2519	0.3861	0.4258	0.5141
risk	1	-0.2636	0.4366	0.3645	0.5460

Odds-Ratio-Valuer			
Effect	Valuer	95% Wald confidence	
rel. Bax localization	1.616	1.109	2.355
sex	1.430	0.575	3.559
FLT3ITD	0.371	0.121	1.135
ELN_risk	0.777	0.365	1.657
risk	0.768	0.326	1.808