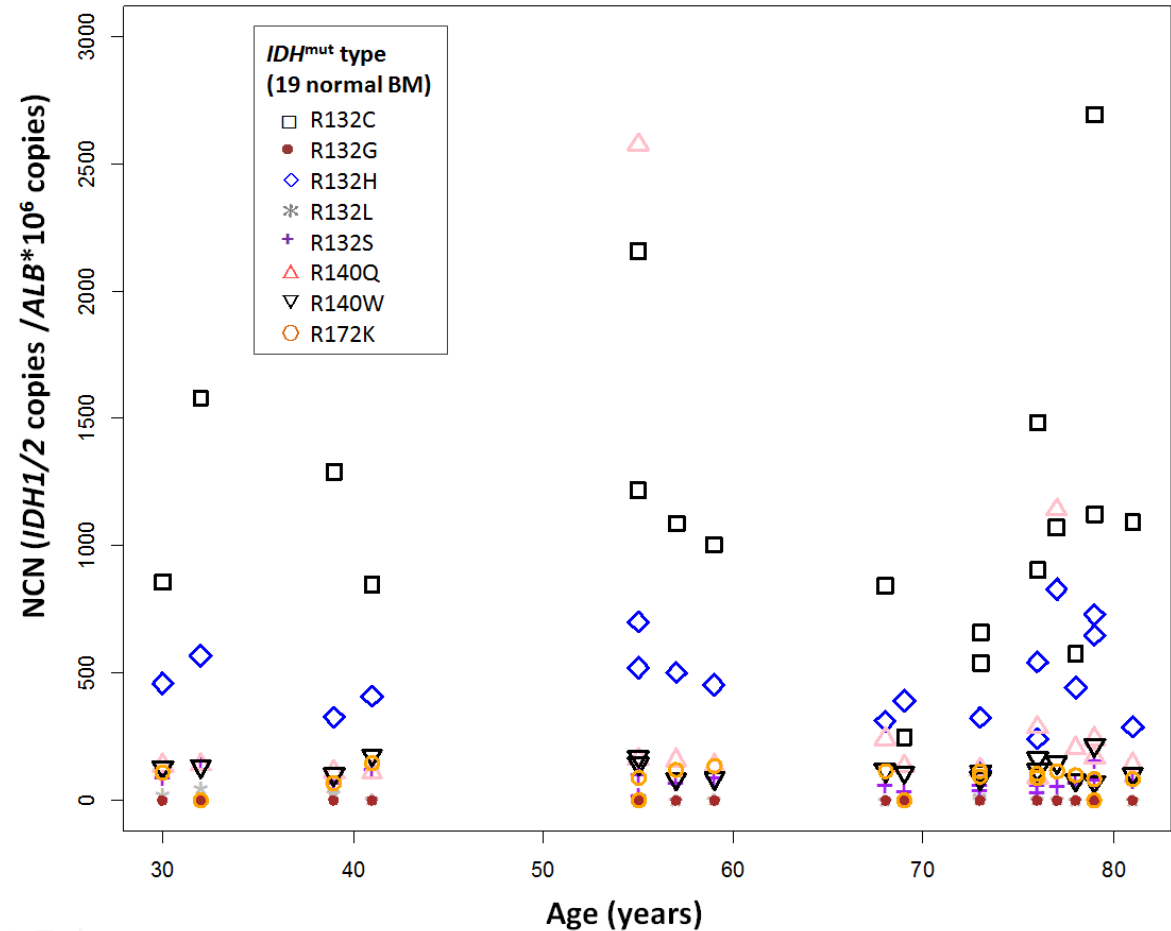


**Table S1** *IDH1/2* LNA-qPCR of 19 normal bone marrow samples from healthy donors

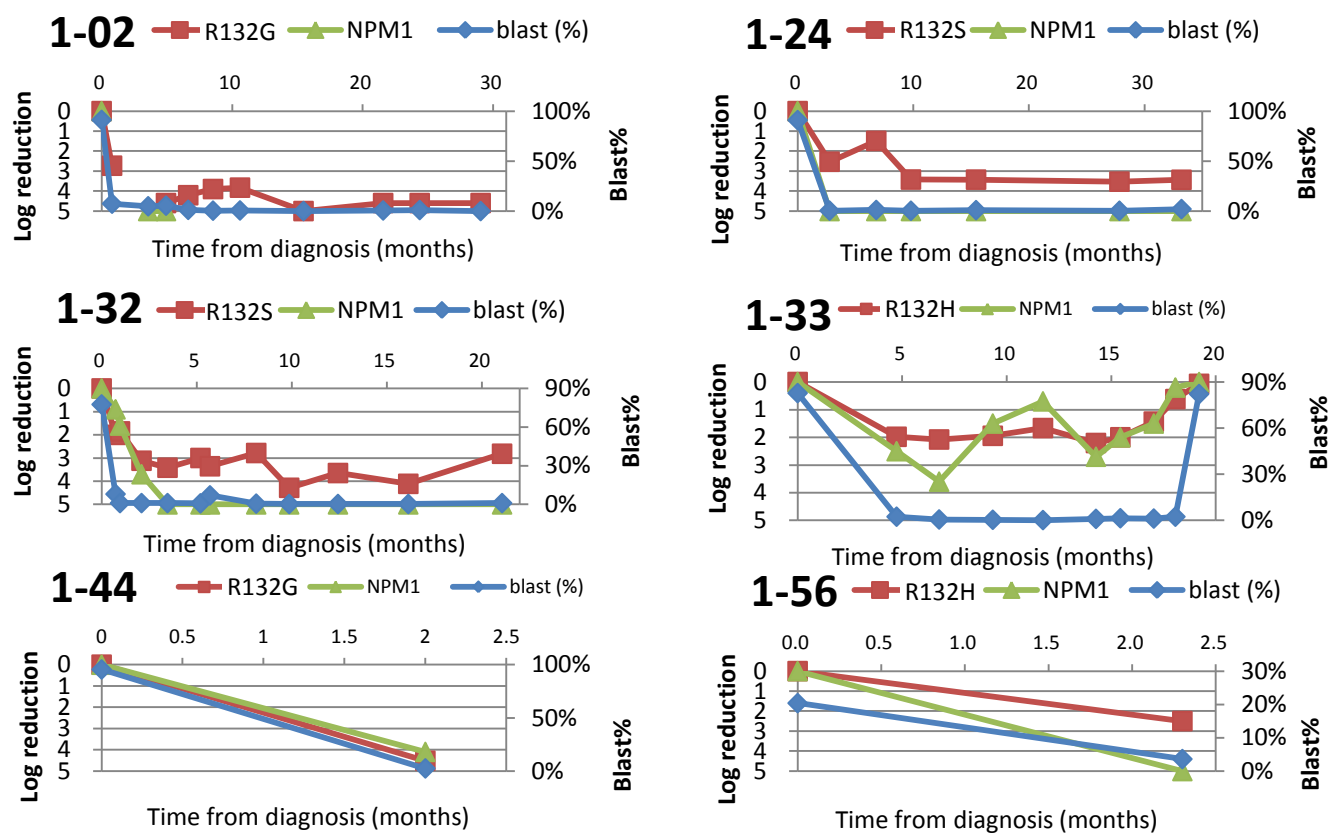
<i>IDH1/2</i> mutant type	Copy	S.D. (Copy)	NCN ( <i>IDH</i> / <i>ALB</i> ×10 <sup>6</sup> )	S.D (NCN)
R132C (c.394C>T)	73.12	28.70	1119.43	569.22
R132G (c.394C>G)	0.01	0	0.20	0.29
R132H (c.395G>A)	33.19	16.14	462.23	181.04
R132L (c.395G>T)	0.90	1.10	11.33	14.24
R132S (c.394C>A)	5.72	2.74	77.22	37.44
R140Q (c.419G>A)	14.11	25.76	337.32	589.66
R140W(c.418C>T)	4.78	1.88	122.52	39.13
R172K (c.515G>A)	3.73	2.12	81.09	46.63

S.D. standard deviation; NCN: normalized copy number

**Figure S1** *IDH1/2* LNA-qPCR of 19 normal bone marrow samples from healthy donors according to age

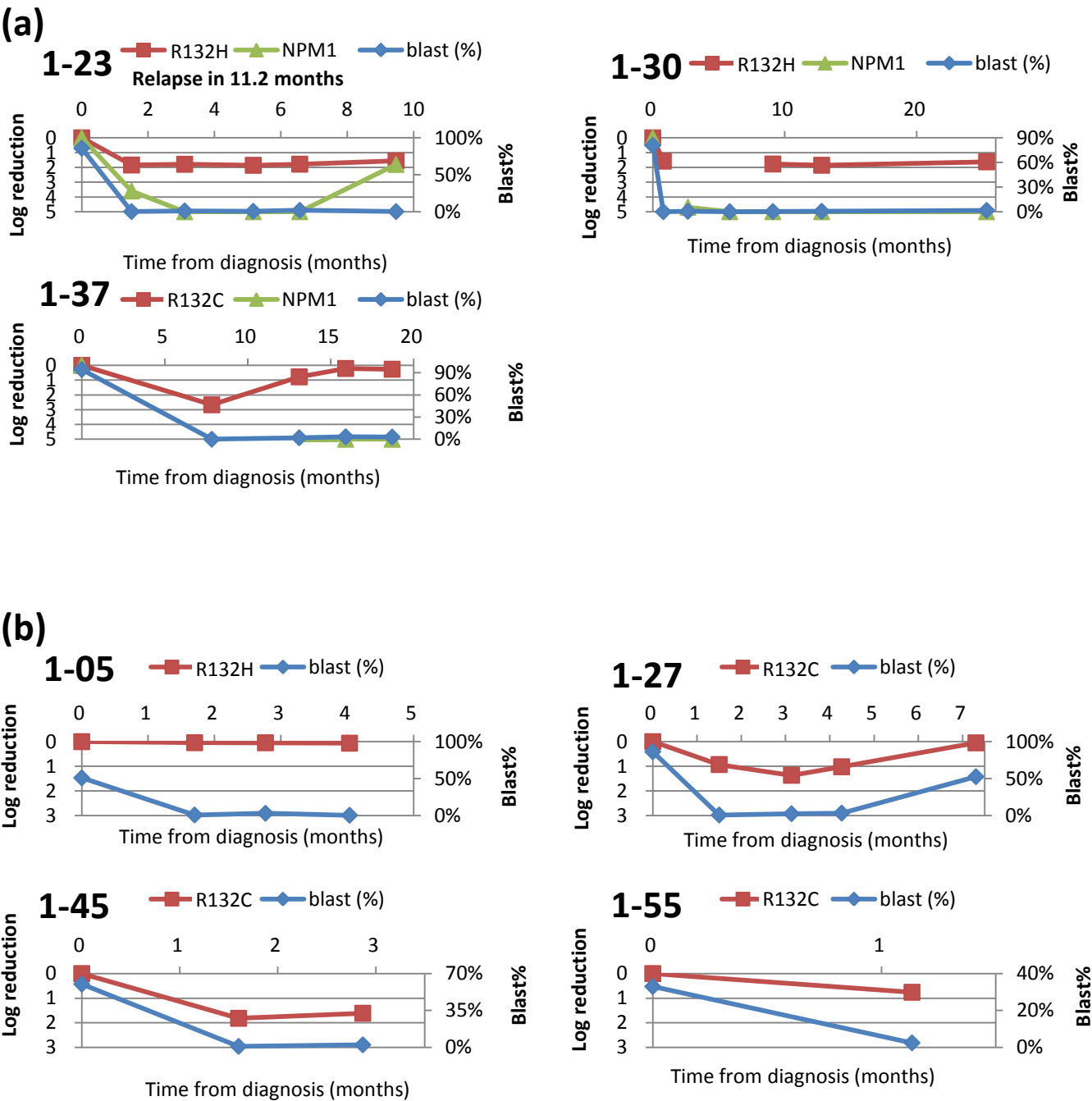


**Figure S2** MRD kinetics of individual patients with good correlation between *IDH1* LNA-qPCR MRD, *NPM1* RT-qPCR, or remission-relapse status



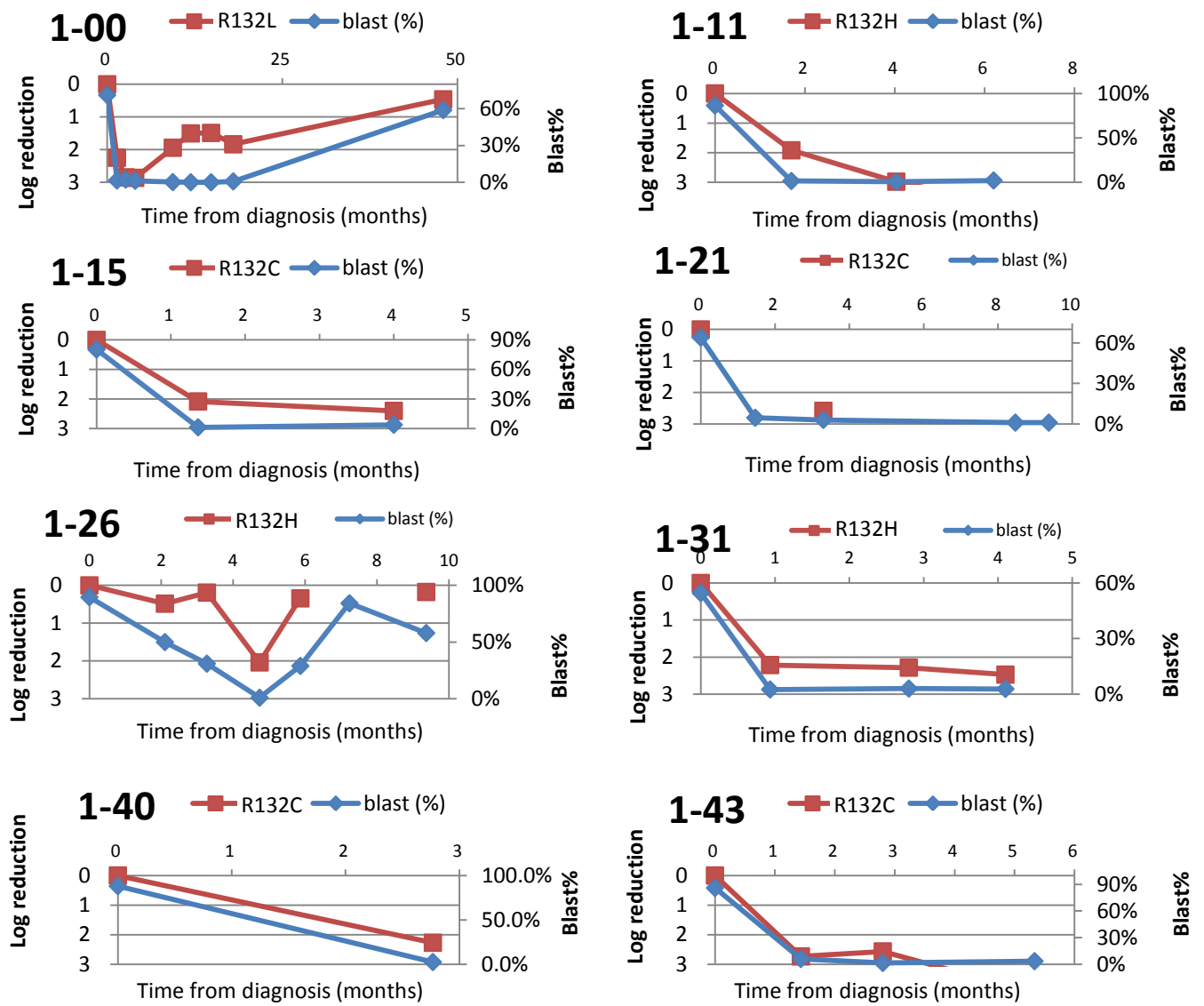
X axis indicating time from diagnosis; left Y axis indicating log reduction of mutated-target gene MRD level compared with that of diagnostic sample; right Y axis Indicating percentage of blasts in bone marrow smear.

**Figure S3** MRD kinetics of individual patients with discordant *IDH1* LNA-qPCR MRD, *NPM1* RT-qPCR, or remission status. **(a)** with *NPM1*-MRD; **(b)** without *NPM1*-MRD.



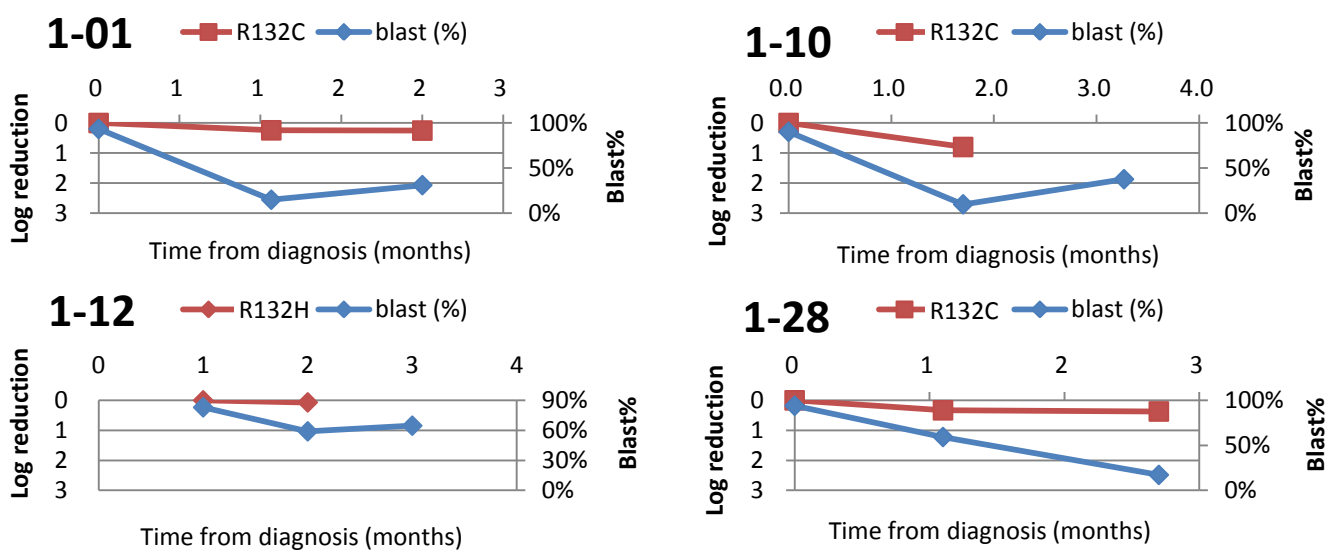
X axis indicating time from diagnosis; left Y axis indicating log reduction of mutated-target gene MRD level compared with that of diagnostic sample; right Y axis Indicating percentage of blasts in bone marrow smear.

**Figure S4** MRD kinetics of individual patients with good correlation between *IDH1* LNA-qPCR MRD and hematological remission-relapse status



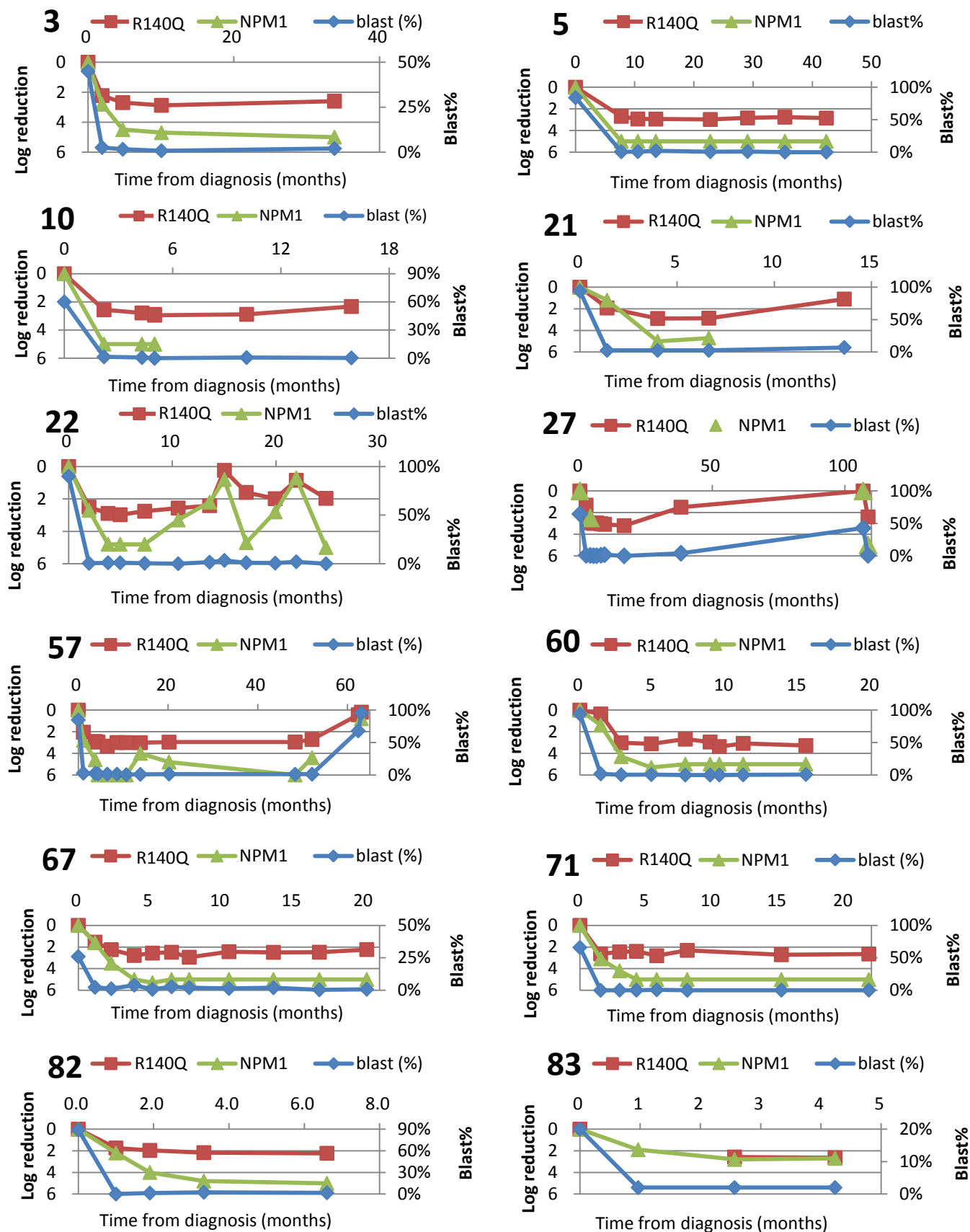
X axis indicating time from diagnosis; left Y axis indicating log reduction of mutated-target gene MRD level compared with that of diagnostic sample; right Y axis Indicating percentage of blasts in bone marrow smear.

**Figure S5** MRD kinetics of individual patients with persistent high *IDH1* LNA-qPCR MRD and relapsed or refractory status

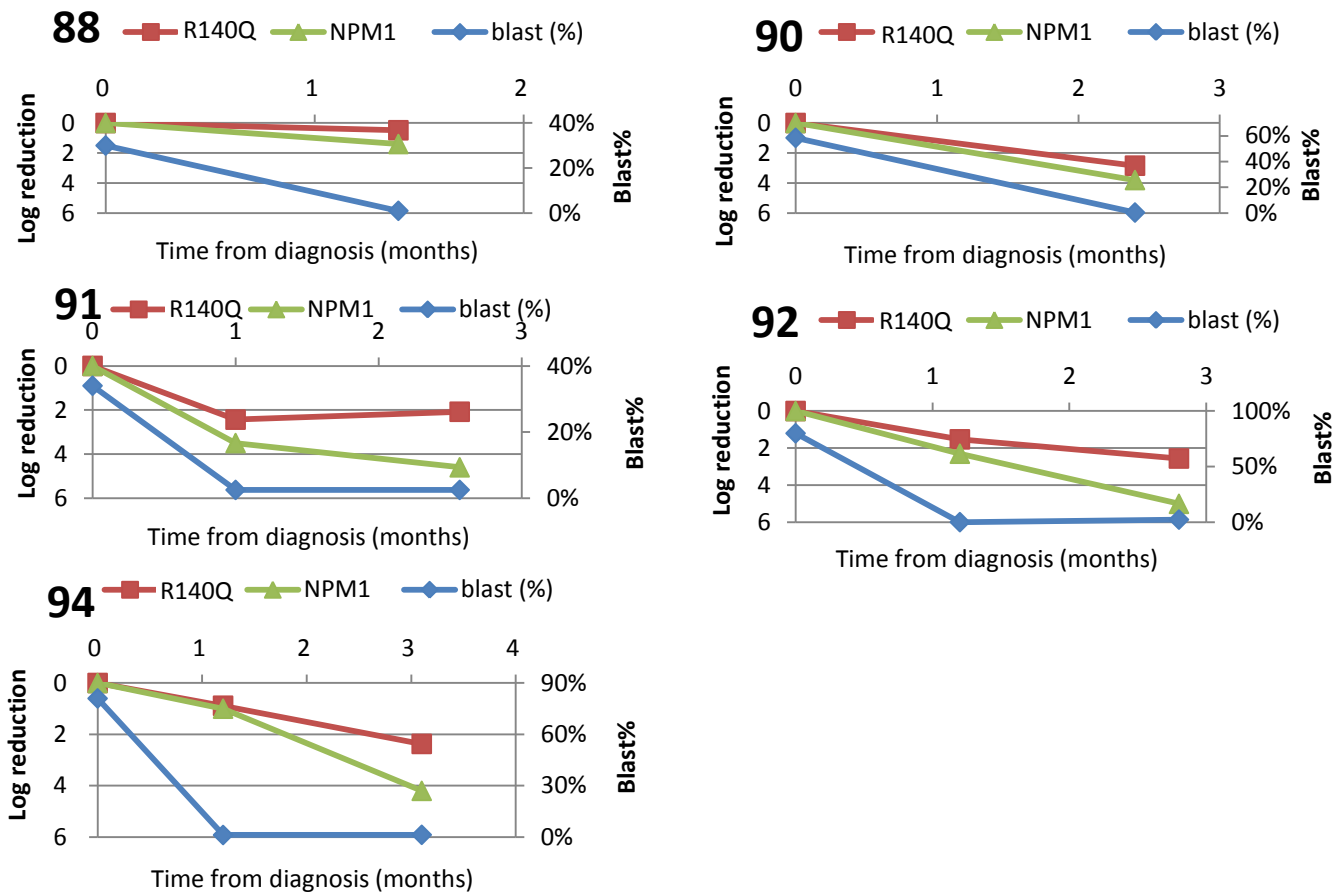


X axis indicating time from diagnosis; left Y axis indicating log reduction of mutated-target gene MRD level compared with that of diagnostic sample; right Y axis Indicating percentage of blasts in bone marrow smear.

**Figure S6** MRD kinetics of individual patients with good correlation between *IDH2* LNA-qPCR MRD, *NPM1* RT-qPCR, or remission-relapse status



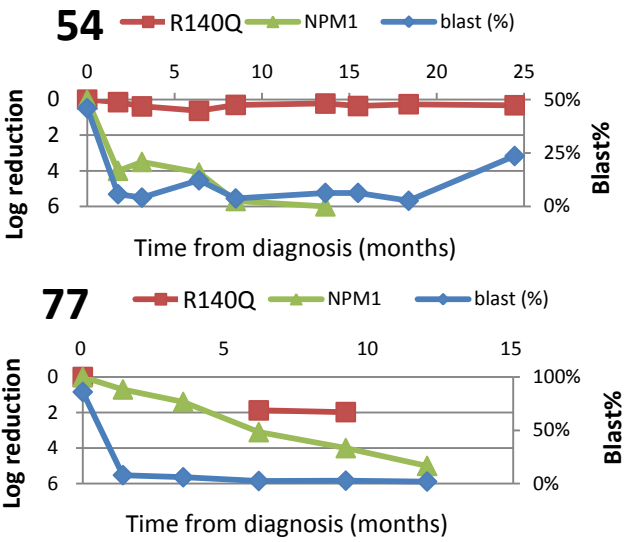
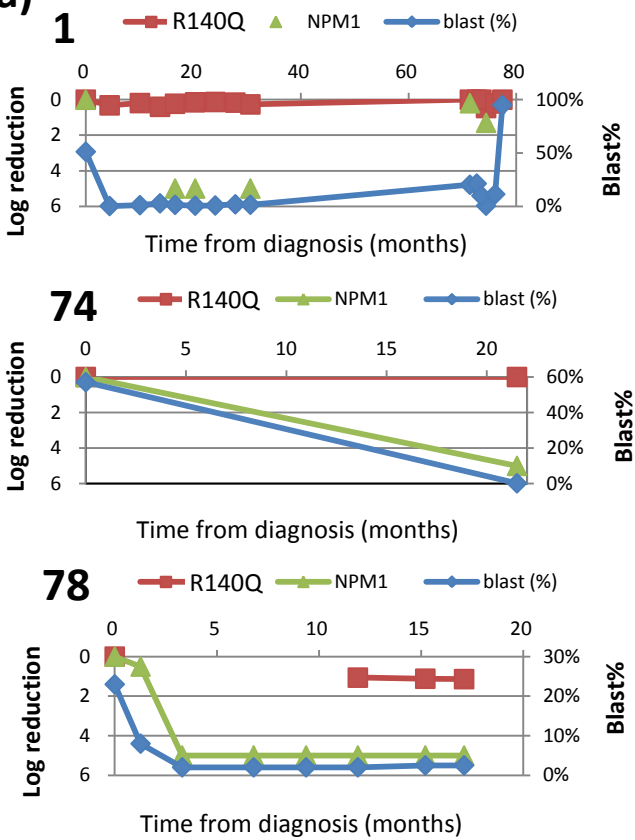
**Figure S6 (cont.)** MRD kinetics of individual patients with good correlation between *IDH2* LNA-qPCR MRD, *NPM1* RT-qPCR, or remission-relapse status



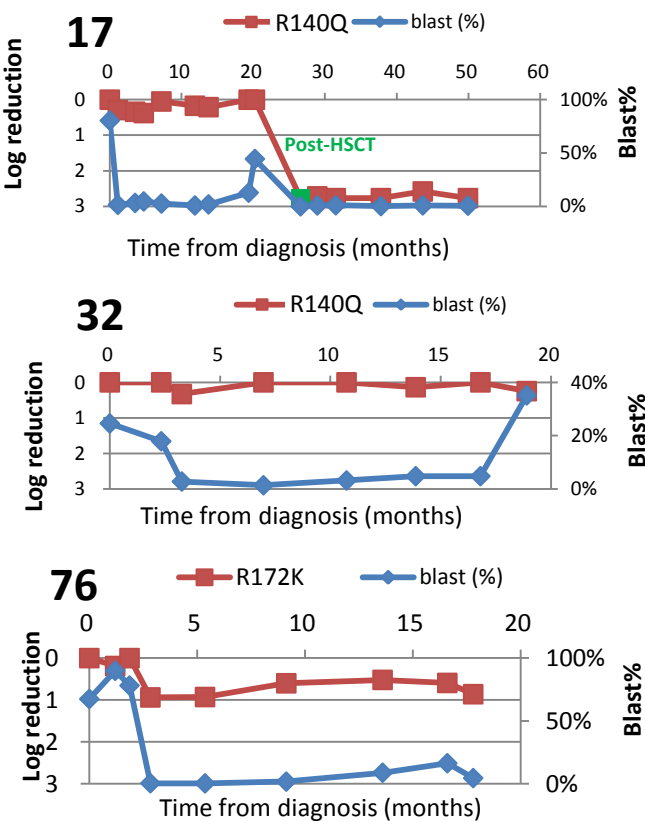
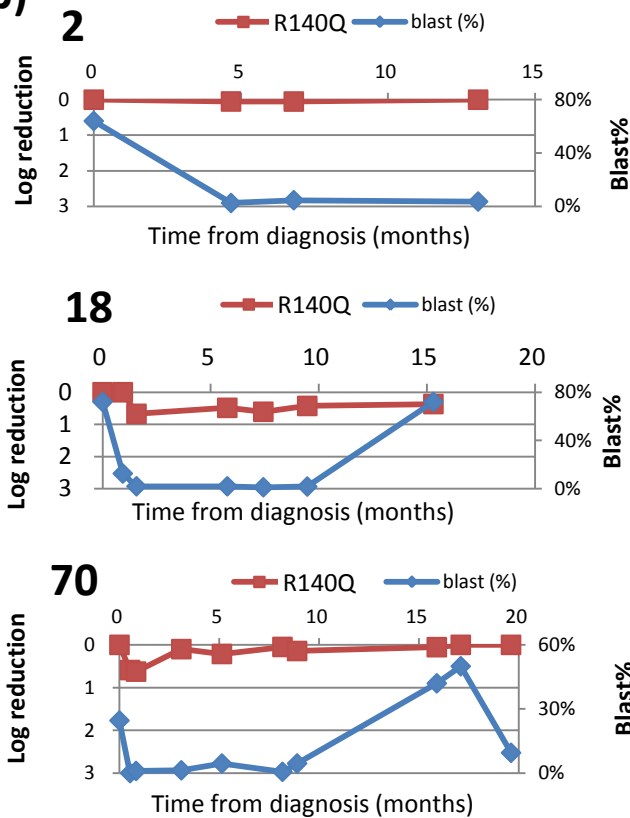
X axis indicating time from diagnosis; left Y axis indicating log reduction of mutated-target gene MRD level compared with that of diagnostic sample; right Y axis Indicating percentage of blasts in bone marrow smear.

**Figure S7** MRD kinetics of individual patients with discordant *IDH2* LNA-qPCR MRD, *NPM1* RT-qPCR MRD, and hematology remission status. **(a)** with *NPM1*-MRD; **(b)** without *NPM1*-MRD.

**(a)**



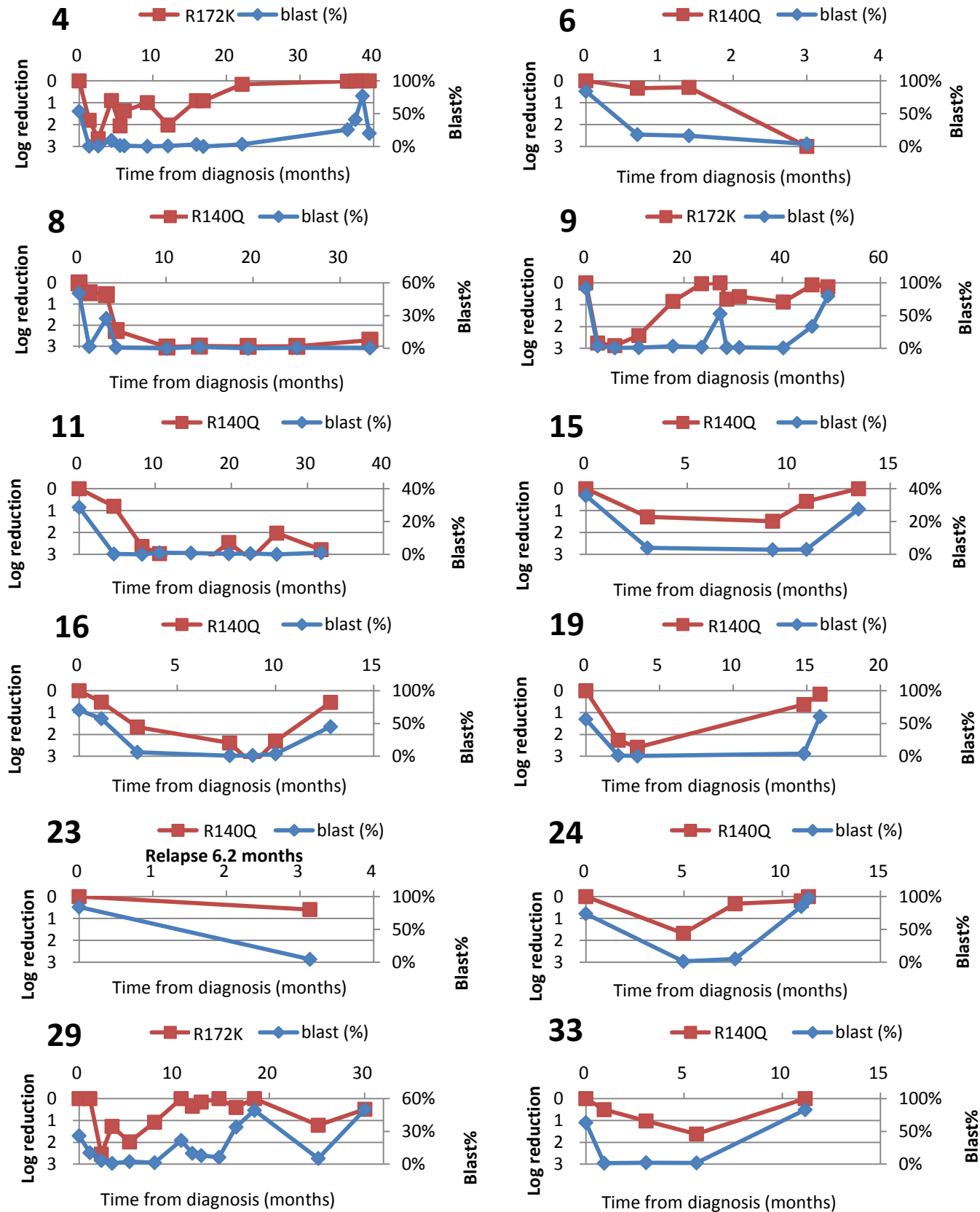
**(b)**



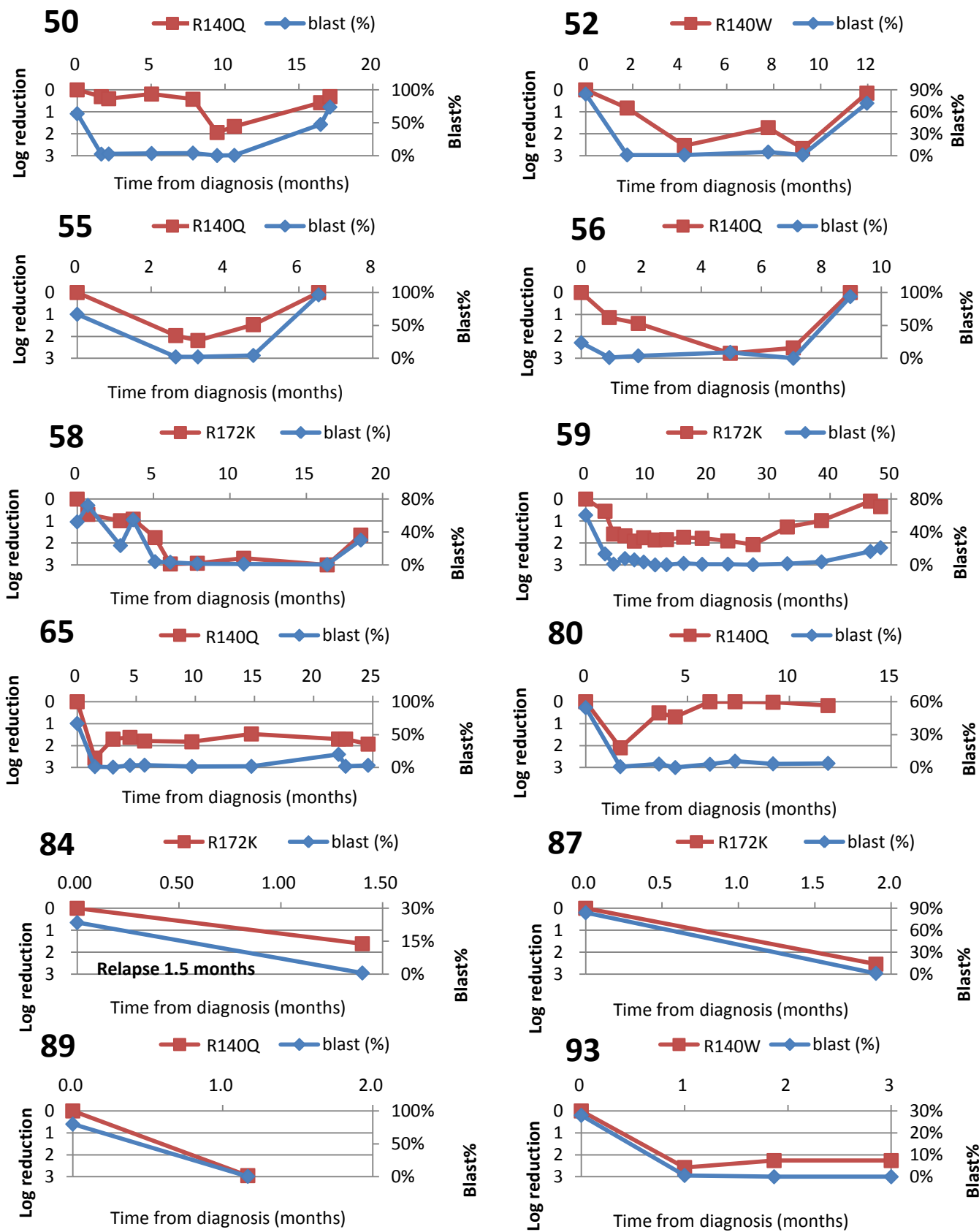
X axis indicating time from diagnosis; left Y axis indicating log reduction of mutated-target gene MRD level compared with that of diagnostic sample; right Y axis Indicating percentage of blasts in bone marrow smear.



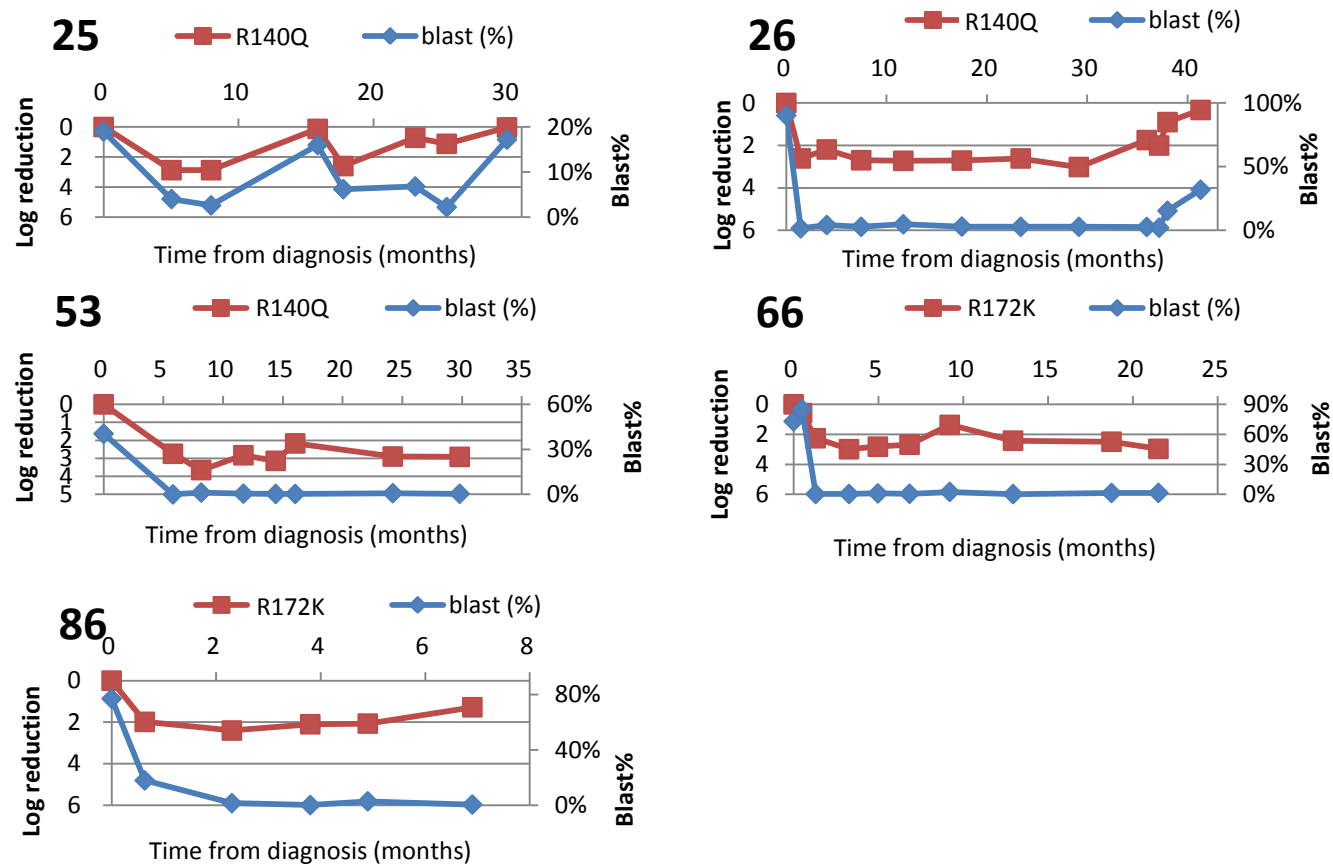
**Figure S8** MRD kinetics of individual patients with good correlation between *IDH2* LNA-qPCR MRD and hematological remission-relapse status



**Figure 8 (cont.)** MRD kinetics of individual patients with good correlation between *IDH2* LNA-qPCR MRD and hematological remission-relapse status

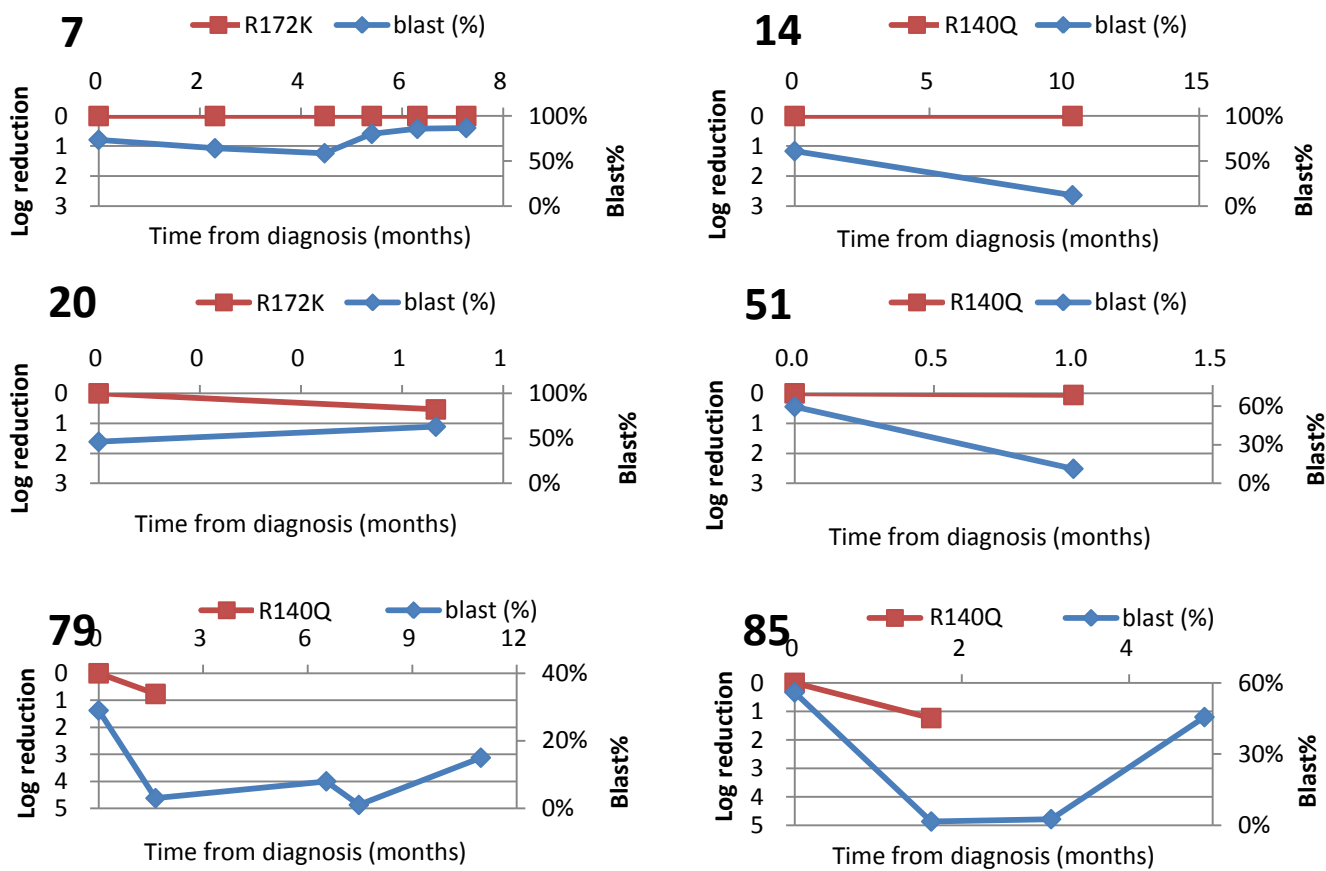


**Figure S8 (cont.)** MRD kinetics of individual patients with good correlation between *IDH2* LNA-qPCR MRD and hematological remission-relapse status



X axis indicating time from diagnosis; left Y axis indicating log reduction of mutated-target gene MRD level compared with that of diagnostic sample; right Y axis Indicating percentage of blasts in bone marrow smear.

**Figure S9** MRD kinetics of individual patients with persistent high *IDH2* LNA-qPCR MRD and relapsed refractory status



X axis indicating time from diagnosis; left Y axis indicating log reduction of mutated-target gene MRD level compared with that of diagnostic sample; right Y axis Indicating percentage of blasts in bone marrow smear.

**Figure S10** Summary of MRD kinetics according to the concordance between *IDH1/2* LNA-qPCR MRD and the disease status. *IDH1/2*-MRD kinetics of **(a)** concordant patients who achieved complete remission and without relapse, **(b)** concordant patients who achieved complete remission and with relapse, **(c)** primary refractory patients, **(d)** patients with persistent high *IDH1/2*-MRD during complete remission.

