

# Deletion mutations of the *ABL1* gene in Philadelphia chromosome-positive acute lymphoblastic leukemia: high prevalence with limited clinical impact

## Authors

Hirofumi Takano,<sup>1</sup> Shinsuke Takagi,<sup>1-3</sup> Kana Kato,<sup>1</sup> Otoy Watanabe,<sup>1</sup> Kyosuke Yamaguchi,<sup>4</sup> Kosei Kageyama,<sup>4</sup> Daisuke Kaji,<sup>1,5,6</sup> Yuki Taya,<sup>1,5,6</sup> Aya Nishida,<sup>1</sup> Kazuya Ishiwata,<sup>4</sup> Hisashi Yamamoto,<sup>1,2</sup> Yuki Asano-Mori,<sup>2,5,6</sup> Go Yamamoto,<sup>1,6</sup> Atsushi Wake,<sup>2,4</sup> Shuichi Taniguchi<sup>1</sup> and Naoyuki Uchida<sup>1,3</sup>

<sup>1</sup>Department of Hematology, Toranomon Hospital, Tokyo; <sup>2</sup>Center for Long-Term Follow-Up after Hematopoietic Cell Transplantation, Toranomon Hospital, Tokyo; <sup>3</sup>Okinaka Memorial Institute for Medical Research, Tokyo; <sup>4</sup>Department of Hematology, Toranomon Hospital Kajigaya, Kanagawa; <sup>5</sup>Department of Transfusion and Cellular Therapy, Toranomon Hospital, Tokyo and <sup>6</sup>Center for Cellular

Therapy, Toranomon Hospital, Tokyo, Japan

Correspondence:

H. TAKANO - htm.hoshi3@gmail.com

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Case No.	Age/Sex	Disease	From diagnosis (days)	Status	<i>ABL1</i> mutations	Treatment (pre-deletion)	Treatment (post-deletion)	Best Response	OS from diagnosis (months)
1	56/F	MPAL	3978	Rel2 (post SCT)	p.L184_K274del	Ima+Chemo, mCR, rPBSCT, Rel, Dasa+PSL, Ima+DLI, mCR, Rel	Pona+DLI, InO, hCR, Rel, Blina, Chemo, PD, Death	hCR	Dead (15M)
2	68/M	MPAL	1299	Rel1	p.L184_K274del	Ima+Chemo, mCR, Rel	Chemo, hCR, CBT, mCR, VOD, Death	mCR	Dead (56M)
3	65/M	B-ALL	753	Rel1	p.L184_K274del, T315I	Ima+Chemo, nonCR, Dasa+PSL, hCR, Rel	Pona, CBT, mCR, BO, Death	mCR	Dead (27M)
4	39/M	MPAL	544	Rel2 (post SCT)	p.L184_K274del	Dasa+Chemo, CNS Rel, RT, mCR, rPBSCT, Rel, Pona, hCR, Rel	Ima, PD, CBT, mCR, IPS, Death	mCR	Dead (23M)
5	75/M	MPAL	480	Rel1	p.L184_K274del, T315I	Ima+Chemo, Rel	Dasa+PSL, nonCR, Pona, PD, PSL, Death	PR	Dead (25M)
6	35/F	B-ALL	441	Rel1 (post SCT)	p.L184_K274del	Ima+Chemo, mCR, CBT, CNS Rel	Dasa+IT+RT, mCR	mCR	Alive (66M)
7	70/M	MPAL	304	Rel1 (post SCT)	p.L184_K274del	Dasa+PSL, nonCR, Pona+Chemo, nonCR, Dasa+InO, nonCR, Blina, mCR, CBT, Rel	Pona, PD, Death	PR	Dead (13M)
8	50/M	B-ALL	242	Rel1	p.L184_K274del, T315I	Dasa+PSL, hCR, Nilo+Chemo, mCR, Rel	Pona+Chemo, hCR, Pona+Blina, mCR, CBT, Rel, Pona+Blina, mCR	mCR	Alive (24M)
9	64/M	MPAL	216	Rel1	p.L184_K274del, T315I	Dasa+Chemo, hCR, Chemo, mCR, Rel	Pona+PSL, mCR, Blina, CBT, mCR	mCR	Alive (28M)
10	55/F	B-ALL	138	CR1	p.L184_K274del	Ima+Chemo, mCR	Pona+Chemo, mCR	mCR	Alive (41M)
11	39/M	B-ALL	96	CR1	p.L184_K274del, p.C475fs*11	Dasa+PSL, hCR, Chemo, mCR	CBT, Rel, Pona, 2ndCBT, mCR	mCR	Alive (45M)
12	42/M	B-ALL	15	Untreated	p.L184_K274del	None	Dasa+PSL, hCR, Chemo, mCR, CBT, BO, Death	mCR	Dead (11M)
13	54/F	MPAL	11	Untreated	p.L184_K274del	None	Dasa+PSL, hCR, Chemo, mCR, rPBSCT, Rel, Pona+Blina, mCR, CBT, mCR	mCR	Alive (38M)
14	27/M	MPAL	10	Untreated	p.R362fs*21	None	Dasa+PSL, mCR, Pona+Chemo, CBT, mCR	mCR	Alive (41M)
15	25/F	B-ALL	4	Untreated	p.L184_K274del	None	Dasa+PSL, hCR, CBT, mCR	mCR	Alive (51M)

Supplementary Table 1. Summary of clinical course of patients with deletion mutations in *BCR::ABL1*

Abbreviations: CR1: first complete remission; Rel1: first relapse; Rel2: second relapse; post SCT: after stem cell transplantation; Ima: imatinib; Nilo: nilotinib; Dasa: dasatinib; Pona: ponatinib; PSL: prednisolone; Chemo: chemotherapy; RT: radiotherapy; IT: intrathecal injection; DLI: donor lymphocyte infusion; Blina: blinatumomab; InO: inotuzumab ozogamicin; CNS: central nervous system; mCR: molecular complete remission; hCR: hematological complete remission; nonCR: non-complete remission; PR: partial response; PD: progressive disease; Rel: relapse; CBT: cord blood transplantation; rPBSCT: related peripheral blood stem cell transplantation; VOD: veno-occlusive disease; BO: bronchiolitis obliterans; IPS: idiopathic pneumonia syndrome.