

Imatinib treatment and longitudinal growth in pediatric patients with chronic myeloid leukemia: influence of demographic, pharmacological, and genetic factors in the German CML-PAED cohort

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Supplemental Material

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Content:

- Supplemental Table 1. Results of the association of growth parameters (Δ height standard deviation score after 12-18 months of treatment) with single nucleotide variants reported to affect the metabolism of imatinib
- Supplemental Figure 1. Plot of height standard deviation score (SDS) over time of imatinib therapy for the overall cohort and the cohort of European patients
- Supplemental Figure 2. BMI standard deviation score (SDS) over time on imatinib treatment
- Supplemental Figure 3. Plot growth velocity standard deviation score (SDS) over time on imatinib treatment.

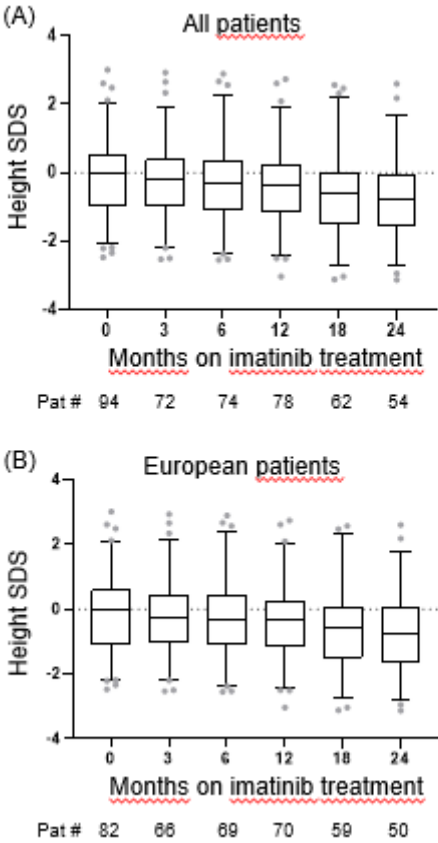
Supplemental Table 1.

Results of the association of growth parameters (Δ height standard deviation score after 12-18 months of treatment) with single nucleotide variants reported to affect the metabolism of imatinib

GENE	CHR	POS	ID	A1	AX	BETA	SE	P	REFERENCE
PTPN22	1	114377568	rs2476601	A	G	0,0983178	0,752287	0,899696	Guillem et al. 2012 [REF. 29]
FASLG	1	172627498	rs763110	T	C	-0,438242	0,387861	0,295746	Zheng et al. 2016 [REF. 30]
cBIM	2	111907691	rs724710	T	C	0,872026	0,334054	0,0348914	Augis et al. 2013 [REF. 31]
XPC	3	14187449	rs2228001	G	T	-0,814256	0,331448	0,0436784	Lakkireddy et al., 2021 [REF. 32]
XPC	3	14199887	rs2228000	A	G	1,10059	0,83897	0,230957	Lakkireddy et al., 2021 [REF. 32]
VEGFR2	4	55972974	rs1870377	A	T	0,108349	0,278736	0,723432	Kim et al., 2010 [REF. 33]
ABCG2	4	89030841	rs12505410	G	T	-0,899621	0,257196	0,0173253	Delord et al., 2013 [REF. 35]
ABCG2	4	89052323	rs2231142	T	G	1,52939	0,514763	0,0207768	Kim et al., 2009 [REF. 34]
ABCG2	4	89061114	rs2231137	T	C	-1,39041	1,0794	0,238642	Kim et al., 2009 [REF. 34]
ABCG2	4	89061910	rs2725252	C	A	-0,765216	0,365662	0,0746734	Delord et al., 2013 [REF. 35]
SLC22A4	5	131629772	rs460089	C	G	0,885938	0,440938	0,0844641	Jaruskova et al., 2017 [REF. 36]
OCTN1	5	131676320	rs1050152	T	C	-0,531585	0,50014	0,323126	Angelini et al., 2013 [REF. 37]
SLC22A5	5	131703578	rs2631372	C	G	0,885938	0,440938	0,0844641	Angelini et al., 2013 [REF. 37]
SLC22A5	5	131705458	rs2631367	C	G	-1,20188	0,588181	0,0803114	Angelini et al., 2013 [REF. 37]
SLC22A4	5	131705949	rs2631365	C	T	0,849799	0,493186	0,128539	Jaruskova et al., 2017 [REF. 36]
VEGFA	6	43736389	rs699947	C	A	0,538488	0,642388	0,434002	Kim et al., 2010 [REF. 33]
SLC22A1	6	160543148	rs12208357	T	C	-0,594187	0,892938	0,527086	Takahashi et al., 2010 [REF. 38]
hOCT2	6	160551204	rs683369	G	C	-0,900789	0,591887	0,178859	Angelini et al., 2013 [REF. 37]
SLC22A1	6	160560845	rs628031	A	G	-0,451191	0,337766	0,223406	Takahashi et al., 2010 [REF. 38]
ABCB1	7	87179601	rs1128503	A	G	-0,0367382	0,341383	0,91732	Dulucq et al., 2008 [REF. 39]
CYP3A5*3	7	99270539	rs776746	T	C	-0,402963	0,755733	0,610393	de Lima et al., 2015 [REF. 40]
FAS	10	90749256	rs2234767	A	G	-0,0997043	0,771816	0,900848	Zheng et al. 2016 [REF. 30]
FAS	10	90749963	rs1800682	G	A	0,988291	0,302777	0,0137864	Zheng et al. 2016 [REF. 30]
FAS	10	90771829	rs2234978	T	C	0,34199	0,579172	0,573429	Zheng et al. 2016 [REF. 30]
CYP2C8 *3	10	96827030	rs11572080	T	C	-0,611091	0,698262	0,415142	Barratt et al., 2017 [REF. 41]
ABCC2	10	101542578	rs717620	T	C	-0,948541	0,502586	0,101072	Au et al., 2014 [REF. 42]
ABCC2	10	101563815	rs2273697	A	G	-0,576777	0,557407	0,335204	Au et al., 2014 [REF. 42]
ABCC2	10	101604207	rs3740066	T	C	-0,019681	0,542018	0,972048	Au et al., 2014 [REF. 42]
SLCO1B3	12	21015760	rs7311358	G	A	-0,259053	0,425014	0,561436	de Lima et al., 2015 [REF. 40]
SLCO1A2	12	21488748	rs4148977	T	C	-0,256069	0,679524	0,717459	Yamakawa et al., 2011 [REF. 43]
IFNG	12	68555011	rs2069705	G	A	0,915962	0,494995	0,106697	Kim et al., 2010 [REF. 33]
ABCA3	16	2328650	rs150929	T	G	-1,85582	0,36339	0,0069488	de Lima et al., 2015 [REF. 40]
CYP2B6	19	41512841	rs3745274	T	G	0,211672	0,638535	0,749973	Kassogue et al., 2013 [REF. 44]
ERCC1	19	45923653	rs11615	G	A	1,05333	0,49271	0,0698584	Kong et al., 2012 [REF. 45]

Supplemental Figure 1

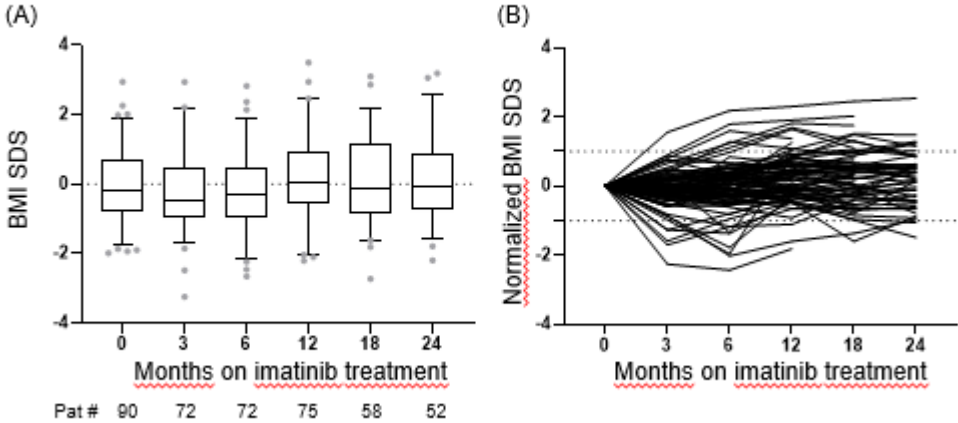
Plot of height standard deviation score (SDS) over time of imatinib therapy for the overall cohort and the cohort of European patients.



(A) presents data for the whole study cohort and (B) depicts results after exclusion of non-European patients. No significant difference was observed between the cohorts.

Supplemental Figure 2

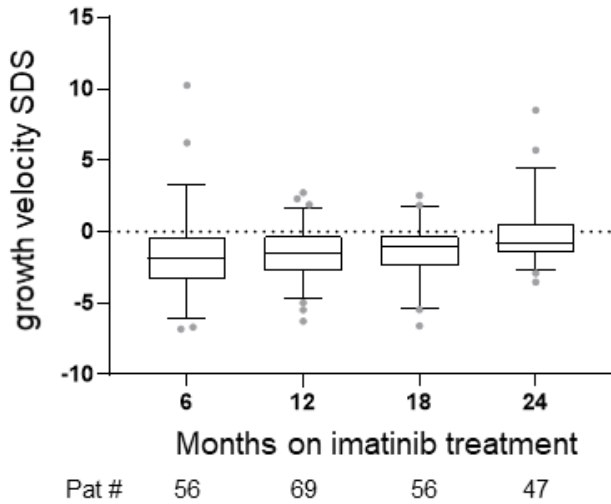
BMI standard deviation score (SDS) over time on imatinib treatment.



(A) The box-and-whisker plot shows the median, first, and third quartiles; whiskers extend to the 95th and 5th percentile. (B) Shows the individual courses of normalized BMI SDS (Δ BMI SDS).

Supplemental Figure 3

Plot growth velocity standard deviation score (SDS) over time on imatinib treatment.



The box-and-whisker plot shows the median, first, and third quartiles; whiskers extend to the 95th and 5th percentile.