BCOR and *BCORL1* mutations in pediatric acute myeloid leukemia

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Supplemental data

Supplementary table 1a. Overview of *BCOR* primers

PCR cycle; 10'95^{0}C, 40x(15"95^{0}C, 1'60^{0}C, 30"72^{0}C), 10'72^{0}C		
Exon	**Direction**	**Primer**
2	Forward Reverse	5'-GGCTCCCAGACCACTGT-3' 5'-GCGGGAAGCTCTTTCTCT-3'
3	Forward Reverse	5'-GCGGAGGGTTAAGGACA-3' 5'-GGGGCCTTGTCCTCTC-3'
4.1	Forward Reverse	5'-GCCGGAAGCCTGTCTT-3' 5'-GGCAGCCGCAGATAAC-3'
4.2	Forward Reverse	5'-GCCAGCGACAAACAGAG-3' 5'-GGGGGCAACAGGAGA-3'
4.3	Forward Reverse	5'-CCACGCCTATCCTCACA-3' 5'-AGCTTTGGAAGCATCTACATC-3'
4.4	Forward Reverse	5'-AGCGGTTCAAGACAGAAAA-3' 5'-GCCCACGTGCTGAATAA-3'
4.5	Forward Reverse	5'-CACCGATGCTGTCATCAC-3' 5'-GTGCCCAGGAAACAGACT-3'
4.6	Forward Reverse	5'-GAGGGCATTGCTGTAAGTC-3' 5'-TCGCTTTTGACAACAGTCTT-3'
4.7	Forward Reverse	5'-TCCCCACCGACAAGAA-3' 5'-GGGGGTCACATCCACA-3'
4.8	Forward Reverse	5'-TGGCCCTGCTGTAACTTT-3' 5'-CCCCAATCCTGTTTACACA-3'
5	Forward Reverse	5'-AAAGGTTGCTTAAAGGGATAGA-3' 5'-ACCATGGCCCACAAACT-3'
6	Forward Reverse	5'-TTTGGGCACTTTTCTTTGA-3' 5'-GGTTGCCACCATTCATAAG-3'
7	Forward Reverse	5'-CCCTCCCTCTGGAAAGTT-3' 5'-CCGCACATCCACATCTC-3'
8	Forward Reverse	5'-CCCCCACCCCATTAGT-3' 5'-CCCGCATACCTTGTTCA-3'
9	Forward Reverse	5'-CGCCCGCTTCTTCTC-3' 5'-AAGCCGGGGTCAAGAG-3'
10	Forward Reverse	5'-CTCTCCACGCAGGTTTG-3' 5'-CTCGCCCACCACAGTC-3'
11	Forward Reverse	5'-GCCCGAGAGGTTCTCAG-3' 5'-ATTGGGAGCTTTACATCTACATT-3'
12	Forward Reverse	5'-TGGCGGTGACTGTGC-3' 5'-TCGGCTGCTCTCCTAAAA-3'
13	Forward Reverse	5'-CTTCCAGCCTGTCATGAAT-3' 5'-GCCCACCATCCACTTTC-3'
14	Forward Reverse	5'-CTGGGAAAGAATCTTGTTATTTA-3' 5'-CCCCCCACCACACTG-3'
15	Forward Reverse	5'-GGCGCACTTTTCATTTTAC-3' 5'-CCAGCTTGCTCACCAGTAG-3'
RT-qPCR[1]	Forward Reverse	5'-ACCGATTCAAATGTGTCACT-3' 5'-GGCCACCTTCTCTTTCTT-3'

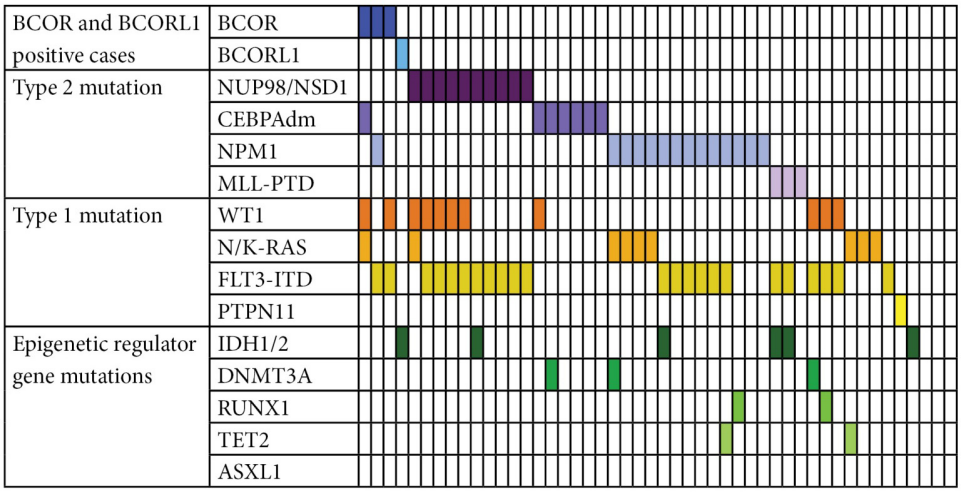
[1] PCR cycle; 10'95^{0}C, 40x(15"95^{0}C, 1'60^{0}C)

Supplementary table 1b. Overview of *BCORL1* primers.

PCR cycle; 10'95^{0}C, 40x(15"95^{0}C, 1'60^{0}C, 30"72^{0}C), 10'72^{0}C		
Exon	**Direction**	**Primer**
2	Forward Reverse	5'-CTTCCCGGTTTAGACCTTAAT-3' 5'-CCCAGGCCCTATTGTATG-3'
3	Forward Reverse	5'-CCCCCTCACAAGTTACTACAG-3' 5'-AGCCAGCCAATTTGTGTC-3'
4.1	Forward Reverse	5'-CGGGCCTCAGGACAC-3' 5'-GGGCTGGCAGAGGACT-3'
4.2	Forward Reverse	5'-AGGCCAGCAACAGCAG-3' 5'-AGGGGGTTCGAGTCAGA-3'
4.3	Forward Reverse	5'-TGTTCCAGTCCAAGTTGCCACTTC-3' 5'-ATGGGTGTAGGGGCTGGAGTAAA-3'
4.4	Forward Reverse	5'-TGCCCACGCTCATCTC-3' 5'-TGGAGGCGGGATATATACC-3'
4.5	Forward Reverse	5'-CCGGCCTCCTTCAGTT-3' 5'-CAGGGGAGCCTGTTCA-3'
4.6	Forward Reverse	5'-CCCGAGCTCCGTTCTT-3' 5'-CAGGCAGGAGGTGACATT-3'
4.7	Forward Reverse	5'-CCCCCATGCCTGTGT-3' 5'-GTGGGTTTCCACAAAGAGA-3'
4.8	Forward Reverse	5'-AGCCCCATCTCCATCATTG-3' 5'-AGGCCCCTGATTCATTC-3'
4.9	Forward Reverse	5'-CTGCCAAGCCTTATGAAG-3' 5'-GCCCAACAGGACTGTGT-3'
5	Forward Reverse	5'-ACCCCTGGAGAGCTTTCT-3' 5'-CTGCCCTCACCACTGTG-3'
6	Forward Reverse	5'-TGGGCTTTCTGGTCTTTAAG-3' 5'-GTGGGCAATATTTGAGGACT-3'
7	Forward Reverse	5'-GTCCAGGGCATTCACTTC-3' 5'-AGCACCGGGTTTCTCTG-3'
8	Forward Reverse	5'-GGGCTGGGAGCTGTCT-3' 5'-CGCCACACACACCTTCTA-3'
9	Forward Reverse	5'-GTGGCTCAGGACTGATGTT-3' 5'-GGCAAGGTCTTTTGAGTGA-3'
10	Forward Reverse	5'-TTCCCCTGATGCAGTAGC-3' 5'-GCCCCAAGGACAACAGT-3'
11	Forward Reverse	5'-TGGCAGTCTCTGACTGAGAA-3' 5'-TGAGGGATGGCTGTGTC-3'
12	Forward Reverse	5'-GTGCCCTCTGAAGGATGT-3' 5'-AGCCTTTGTCATGTGTGATG-3'
13	Forward Reverse	5'-TGGGCTTTGCAGAGTGT-3' 5'-GGTCGGGGAAAGACAAG-3'
RT-qPCR[1]	Forward Reverse	5'-TGCCTCCAGAAAGACAGT-3' 5'-CCACCGCATCATGAAC-3'

[1] PCR cycle; 10'95^{0}C, 40x(15"95^{0}C, 1'60^{0}C)

Supplementary table 2. Characteristics of pediatric CN-AML cases (n=48) screened for *BCOR* and *BCORL1* mutations.



Each column represent a single case. A colored field means this case is positive for a mutation or translocation in the corresponding gene(s). A white field indicates the case was tested negative for a mutation or translocation in the corresponding gene(s).

Supplementary figure 1. *BCOR* expression levels determined by RT-qPCR per cytogenetic subgroup. Graphs showing expression levels of *BCOR* for a selected cohort of pediatric AML patients (n=65, initial cohort). Each dot represents a patient and horizontal bars represent median expression for every cytogenetic subgroup. Black indicates wild-type for *BCOR*, red indicates mutated for *BCOR*. 11q23 indicates *MLL*-rearranged or *MLL*-ptd; t(8;21), the *RUNX1/RUNX1T1* translocation; t(15;17), *PML/RARA;* inv(16), *CBFB/MYH11*. Other or unknown indicates patient group without the other mentioned aberrations. Expression levels of two *BCOR*-mutated cases seemed lower than the other pediatric AML cases, but the 4 mutated cases did not significantly deviate from the non-mutated pediatric AML patients.

Supplementary figure 1