Supplemental Appendix

DNA versus cDNA FLT3-ITD allelic ratio and length measurements in adult acute myeloid leukemia
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Supplemental Methods

Patients

Diagnostic bone marrow samples were obtained from 259 AML (non-APL) patients carrying FLT3-ITD for which additional bone marrow material was bio banked and both DNA and cDNA were available, aged 18-66 years and diagnosed between 2009 and 2017, treated according to the clinical protocol of the Dutch–Belgian Cooperative Trial Group for Hematology–Oncology (HOVON) / Swiss Group for Clinical Cancer Research (SAKK) HOVON102 \(^1\) (\(n = 133\)) and HOVON132 \(^2\) (\(n = 126\)) trials.

In the HOVON102 AML cohort, patients were treated with idarubicine-cytarabine (cycle I) and amsacrine-cytarabine (cycle II) with or without clofarabine (10 mg/m\(^2\) on days 1-5 of each of both cycles).\(^1\) Consolidation treatment was guided by the ELN 2010 risk stratification modified for biallelic CEBPA mutations. FLT3-ITD was only included to discriminate the favorable group of NPM1 mutant AML without FLT3-ITD, whereas the allelic ratio of FLT3-ITD (FLT3-ITD-AR) was not included in this risk stratification protocol.

In the HOVON132 AML cohort, patients were treated with idarubicine-cytarabine (cycle 1) and daunorubicin and intermediate-dose cytarabine (cycle 2) with or without lenalidomide (15 mg orally on days 1-21).\(^2\) Consolidation treatment was guided by risk stratification based on the ELN 2017 classification (with modifications), including measurable residual disease (MRD) status in complete remission. The allelic ratio of FLT3-ITD (FLT3-ITD-AR) was included in risk stratification, with a cut-off for high FLT3-ITD-AR of > 0.6.

In both trials, no targeted FLT3-tyrosine kinase inhibitors were used. Also patients from the dose-finding portion of both trials are included in the analyses as the primary aim was to identify prognostic value of FLT3-ITD-AR and FLT3-ITD-length based on DNA/cDNA measurements and not to investigate the added value of novel therapeutics. Transplanted patients were not analyzed separately and not censored at time of transplantation. All study protocols were performed in accordance with the Declaration of Helsinki and approved by the institutional review boards of the participating centers. All patients included in the study
provided written informed consent. Additional to FLT3 mutation status, relevant molecular characterization and cytogenetic information were available.

Mutational analysis, FLT3-ITD-allelic ratio determination and sequencing of the FLT3-gene

FLT3 analysis on DNA was performed as previously described using capillary fragment length analysis.\(^3\) FLT3 analysis on cDNA was performed as previously described.\(^4\) Mutations with a calculated AR of < 0.01 were considered wild type. Sanger sequencing of the FLT3-gene was performed using bidirectional DNA and cDNA sequencing on an ABI 3500 automated sequencer with the use of BigDye terminator kit (Applied Biosystems Inc., Foster City, CA, USA) and below described primers.

Primers

DNA primers

FLT3-ex14-FW : 5’- GCA ATT TAG GTA TGA AA G CCA GC–3’ (sense)

FLT3-ex15-RV : 5’- 6FAM CTT TCAG CAT TTT GAC GGC AAC C -3’ (antisense)

cDNA primers

FLT3-ex12-FW : 5’ - 6FAM TAA ACT CTC CAG GCC CCT TC – 3’ (sense)

FLT3-ex16-RV : 5’ – Di-Repeat+Tail TGA GTG CCT CTC TTT CAG AGC – 3’ (antisense)

Cytogenetics

Routine chromosome banding analysis at diagnosis was used to detect cytogenetic aberrations.

Statistical analysis

FLT3-ITD-AR and FLT3-ITD-length were compared using Spearman’s rank correlation. Survival analyses were performed using Kaplan-Meier estimates using the R package survival and survminer and multivariable analysis using a Cox regression model for proportional hazards with a forward selection procedure. Candidate variables for the model were: FLT3-ITD-AR, FLT3-ITD-Length, FLT3-TKI-835, NPM1, TP53, RUNX1, ASXL1, CEBPA, Karyotype and Age. To control for erroneous inference due to crossing survival curves, we split the data before and after the crossing point prior to performing Cox analyses using the R package timedep. All analyses were performed in R studio version 3.6.0.
Supplemental Figures

Figure S1. Comparison of FLT3-ITD-AR measurements between two university medical centers (Erasmus MC, Amsterdam UMC location VUMc) of twelve patients. The outlier sample in panel B was caused by low peaks detected in the fragment analysis, making quantification less reliable.
Figure S2. Sanger sequencing of a FLT3-ITD case harboring a 3-bp deletion. The 3-bp deletion is caused by a combined insertion of 4-bp and a 1-bp deletion (c.1770_1773delinsA).
Figure S3. Scatter plot of DNA FLT3-ITD-length and FLT3-ITD-AR based on (A) DNA and (B) cDNA measurements.
Figure S4. Multivariable analyses of FLT3-ITD-AR and other relevant variables in the H102 AML cohort (DNA and cDNA).
Figure S5. Multivariable analyses of FLT3-ITD-AR and other relevant variables in the HO132 AML cohort (DNA and cDNA).
Figure S6. Multivariable analyses of FLT3-ITD-length and other relevant variables in the HO102 (A-B) and HO132 (C-D) AML cohort (DNA and cDNA).
Figure S7. Multivariable analysis in the H102 AML cohort of FLT3-ITD-AR combined with FLT3-ITD-Length and other relevant variables (DNA and cDNA).
Figure S8. Multivariable analysis in the HO132 AML cohort of FLT3-ITD-AR combined with FLT3-ITD-Length and other relevant variables (DNA and cDNA).
Table S1. Clinical and (cyto)genetic characteristics of the AML cases according to FLT3-ITD status on the cDNA level in the HO102 AML cohort. MK, monosomal karyotype. BM, bone marrow.

| CHARACTERISTIC | All patients | FLT3-ITD absent* | FLT3-ITD present* |
|----------------|-------------|-----------------|-----------------|
| **MALE GENDER** | Median (range) or n (%) | 741 (100) | 608 (82.0) | 133 (17.9) |
|                | 418 (56.4%) | 351 (57.7) | 67 (50.4) |
| **AGE AT DIAGNOSIS (YEARS)** | 55 (18 - 66) | 55 (18 - 65) | 51 (18 - 66) |
| **BM BLAST AT DIAGNOSIS (%)** | 51.0 (0 - 100) | 46.0 (0 - 100) | 75.5 (6 - 96) |
| **KARYOTYPE** | | | |
| T(8;21) - 1 | 45 (6.2) | 42 (7.1) | 3 (2.3) |
| INV(16) - 2 | 27 (3.7) | 26 (4.4) | 1 (0.8) |
| CN-X-Y - 4 | 364 (50.3) | 264 (44.6) | 100 (76.3) |
| OTHER - 5 | 187 (25.9) | 160 (27.0) | 27 (20.6) |
| MK-6 | 100 (13.8) | 100 (16.9) | 0 (0.0) |
| **NOT AVAILABLE** | 18 | 16 | 2 |
| **MUTATION STATUS** | | | |
| NPM1 | 208 (28.4) | 132 (22.0) | 76 (57.1) |
| FLT3-ITD | 133 (18.1) | 0 | 134 (100) |
| FLT3-ITD-AR* | NA | NA | 0.64 (0.01 - 14283) |
| FLT3-ITD LENGTH (BP)* | NA | NA | 43 (3 - 186) |
| FLT3-TKD | 46 (7.2) | 34 (6.7) | 12 (9.2) |
| RUNX1 | 79 (13.3) | 65 (14.0) | 14 (10.8) |
| ASXL1 | 64 (10.8) | 62 (13.4) | 2 (1.5) |
| TP53 | 56 (9.4) | 54 (11.6) | 2 (1.5) |

* cDNA LEVEL
| CHARACTERISTIC | All patients | FLT3-ITD absent* | FLT3-ITD present* |
|---------------|--------------|-----------------|-----------------|
|               | Median (range) or n (%) |                 |                 |
|               | 811 (100) | 685 (84.5) | 126 (15.5) |
| MALE GENDER   | 458 (56.5) | 392 (57.2) | 66 (52.3) |
| AGE AT DIAGNOSIS (YEARS) | 55 (18 - 65) | 55 (18 - 65) | 54 (18 - 65) |
| BM BLAST AT DIAGNOSIS (%) | 48 (0 - 100) | 43 (0 - 97.2) | 75 (11.5 - 100) |
| KARYOTYPE     |             |                 |                 |
| T(8;21) - 1   | 35 (4.5) | 32 (4.8) | 3 (2.4) |
| INV(16) - 2   | 51 (6.5) | 51 (7.7) | 0 (0) |
| CN-X-Y - 4    | 407 (51.8) | 306 (46.3) | 101 (81.5) |
| OTHER - 5     | 207 (26.4) | 188 (28.4) | 19 (15.3) |
| MK- 6         | 85 (10.8) | 84 (12.7) | 1 (0.8) |
| NOT AVAILABLE | 26 | 24 | 2 |
| MUTATION STATUS |             |                 |                 |
| NPM1          | 245 (30.3) | 166 (24.3) | 79 (62.7) |
| FLT3-ITD      | 127 (15.7) | 0 | 127 (100) |
| FLT3-ITD-AR*  | NA | NA | 0.65 (0.02 - 32.9) |
| FLT3-ITD LENGTH (BP)* | NA | NA | 46 (-3 - 178) |
| FLT3-TKD      | 78 (9.7) | 67 (9.9) | 11 (8.7) |
| RUNX1         | 97 (12.0) | 83 (12.2) | 14 (11.1) |
| ASXL1         | 78 (9.7) | 77 (11.3) | 1 (0.8) |
| TP53          | 67 (8.3) | 66 (9.7) | 1 (0.8) |

* CDNA LEVEL

Table S2. Clinical and (cyto)genetic characteristics of the AML cases according to FLT3-ITD status on the cDNA level in the HO132 AML cohort. MK, monosomal karyotype. BM, bone marrow.
|   | FLT3-ITD-AR DNA (VUMC) | FLT3-ITD-AR CDNA (VUMC) | LENGTH DNA (VUMC) | LENGTH CDNA (VUMC) | FLT3-ITD-AR DNA (EMC) | FLT3-ITD-AR CDNA (EMC) | LENGTH DNA (EMC) | LENGTH CDNA (EMC) |
|---|-----------------------|------------------------|-------------------|-------------------|----------------------|----------------------|------------------|------------------|
| 1 | 0.11                  | 0.55                   | 18                | 18                | 0.09                 | 0.55                 | 18               | 18               |
| 2 | 0.11                  | 0.76                   | 57                | 57                | 0.8                  | 0.75                 | 56               | 58               |
| 3 | 0.15                  | 0.28                   | 91                | 90                | 0.13                 | 0.47                 | 89               | 89               |
| 4 | 0.21                  | 0.37                   | 24                | 24                | 0.19                 | 0.3                  | 24               | 24               |
| 5 | 0.22                  | 0.31                   | 21                | 21                | 0.21                 | 0.33                 | 21               | 21               |
| 6 | 0.5                   | 0.59                   | 42                | 42                | 0.74                 | 0.6                  | 42               | 43               |
| 7 | 0.52                  | 0.65                   | 24                | 24                | 0.56                 | 0.7                  | 24               | 24               |
| 8 | 0.62                  | 0.72                   | 54                | 54                | 0.64                 | 0.72                 | 52               | 55               |
| 9 | 0.71                  | 0.66                   | 18                | 18                | 0.69                 | 0.74                 | 18               | 19               |
| 10| 0.8                   | 0.43                   | 123               | 123               | 0.84                 | 0.64                 | 122              | 127              |
| 11| 6.28                  | 45.39                  | 30                | 30                | 7.71                 | 48.01                | 30               | 31               |
| 12| 6.36                  | 16.76                  | 84                | 84                | 8.96                 | 40.08                | 83               | 84               |

Table S3. Comparison of FLT3-ITD AR and length measurements between laboratories. VUMC, Amsterdam University Medical Center location; VUMC; EMC, ErasmusMC
|   | FLT3-ITD-AR (DNA) | FLT3-ITD-AR (CDNA) | FLT3-ITD-LENGTH (DNA) | FLT3-ITD-LENGTH (CDNA) |
|---|------------------|--------------------|----------------------|-----------------------|
| 1 | 0                | 0.01               | NA                   | 12                    |
| 2 | 0                | 0.02               | NA                   | 86                    |
| 3 | 0                | 0.03               | NA                   | 12                    |
| 4 | 0                | 0.03               | NA                   | 15                    |
| 5 | 0                | 0.04               | NA                   | 12                    |
| 6 | 0                | 0.04               | NA                   | 34                    |
| 7 | 0                | 0.05               | NA                   | 186                   |
| 8 | 0                | 0.06               | NA                   | 12                    |
| 9 | 0                | 0.08               | NA                   | 85                    |
| 10| 0                | 0.09               | NA                   | 58                    |
| 11| 0                | 0.14               | NA                   | 87                    |
| 12| 0.01             | 0.03               | 71                   | 72                    |
| 13| 0.01             | 0.04               | 47                   | 49                    |
| 14| 0.01             | 0.05               | 36                   | 37                    |
| 15| 0.01             | 0.06               | 157                  | 69                    |
| 16| 0.01             | 0.13               | 35                   | 36                    |
| 17| 0.02             | 0.02               | 32                   | 34                    |
| 18| 0.02             | 0.04               | 10                   | 43                    |
| 19| 0.02             | 0.04               | 38                   | 40                    |
| 20| 0.02             | 0.06               | 33                   | 34                    |
| 21| 0.02             | 0.1                | 101                  | 101                   |
| 22| 0.03             | 0.03               | 6                    | 6                     |
| 23| 0.03             | 0.07               | 55                   | 58                    |
| 24| 0.04             | 0.01               | 47                   | 49                    |
| 25| 0.04             | 0.05               | 59                   | 61                    |
| 26| 0.04             | 0.06               | 30                   | 30                    |
| 27| 0.04             | 0.12               | 67                   | 69                    |
| 28| 0.04             | 0.15               | 70                   | 72                    |
| 29| 0.05             | 0.05               | 19                   | 18                    |
| 30| 0.05             | 0.09               | 79                   | 81                    |
| 31| 0.05             | 0.25               | 47                   | 52                    |
| 32| 0.05             | 0.3                | 30                   | 30                    |
| 33| 0.05             | 1.9                | 22                   | 21                    |
| 34| 0.06             | 0.04               | 3                    | 3                     |
| 35| 0.06             | 0.05               | 62                   | 63                    |
| 36| 0.06             | 0.05               | 56                   | 58                    |
| 37| 0.06             | 0.18               | 56                   | 58                    |
| 38| 0.06             | 0.37               | 24                   | 24                    |
| 39| 0.07             | 0.07               | 24                   | 24                    |
| 40| 0.07             | 0.11               | 6                    | 6                     |
| 41| 0.07             | 0.15               | 18                   | 18                    |
| 42| 0.07             | 0.16               | 21                   | 21                    |
| 43| 0.07             | 0.4                | 21                   | 21                    |
| 44| 0.09             | 0.06               | 39                   | 40                    |
|   |   |   |   |   |
|---|---|---|---|---|
| 45 | 0.09 | 0.09 | 89 | 90 |
| 46 | 0.09 | 0.16 | 202 | 113 |
| 47 | 0.09 | 0.55 | 18 | 18 |
| 48 | 0.1 | 0.11 | 50 | 52 |
| 49 | 0.1 | 0.17 | 32 | 34 |
| 50 | 0.12 | 0.18 | 21 | 21 |
| 51 | 0.12 | 0.29 | 56 | 58 |
| 52 | 0.13 | 0.19 | 71 | 72 |
| 53 | 0.13 | 0.47 | 89 | 89 |
| 54 | 0.14 | 0.12 | 61 | 64 |
| 55 | 0.14 | 0.2 | 24 | 25 |
| 56 | 0.14 | 0.48 | 179 | 90 |
| 57 | 0.16 | 0.1 | -3 | -3 |
| 58 | 0.16 | 0.22 | 83 | 83 |
| 59 | 0.16 | 0.4 | 65 | 66 |
| 60 | 0.16 | 0.6 | 41 | 43 |
| 61 | 0.17 | 0.22 | 36 | 37 |
| 62 | 0.17 | 0.32 | 32 | 34 |
| 63 | 0.17 | 0.34 | 39 | 40 |
| 64 | 0.17 | 0.38 | 41 | 43 |
| 65 | 0.18 | 0.53 | 79 | 81 |
| 66 | 0.18 | 0.64 | 27 | 27 |
| 67 | 0.19 | 0.3 | 24 | 24 |
| 68 | 0.19 | 0.97 | 30 | 31 |
| 69 | 0.21 | 0.17 | 41 | 43 |
| 70 | 0.21 | 0.33 | 21 | 21 |
| 71 | 0.21 | 1.15 | 47 | 49 |
| 72 | 0.22 | 0.09 | 22 | 21 |
| 73 | 0.22 | 0.26 | 21 | 21 |
| 74 | 0.22 | 0.55 | 27 | 28 |
| 75 | 0.22 | 0.68 | 77 | 78 |
| 76 | 0.23 | 0.16 | 41 | 43 |
| 77 | 0.23 | 0.33 | 55 | 58 |
| 78 | 0.24 | 0.17 | 38 | 40 |
| 79 | 0.24 | 0.4 | 176 | 86 |
| 80 | 0.24 | 0.41 | 30 | 31 |
| 81 | 0.25 | 0.44 | 95 | 96 |
| 82 | 0.26 | 0.09 | 58 | 61 |
| 83 | 0.26 | 0.2 | 39 | 40 |
| 84 | 0.26 | 0.28 | 18 | 18 |
| 85 | 0.26 | 0.69 | 36 | 37 |
| 86 | 0.27 | 1.16 | 22 | 21 |
| 87 | 0.28 | 4.87 | 76 | 78 |
| 88 | 0.29 | 0.25 | 39 | 40 |
| 89 | 0.3 | 0.52 | 95 | 96 |
| 90 | 0.32 | 0.2 | 104 | 106 |
|   | 0.33 | 0.59 | 24 | 24 |
|---|------|------|----|----|
| 91| 0.33 | 0.81 | 35 | 37 |
| 92| 0.33 | 0.86 | 24 | 24 |
| 93| 0.34 | 0.58 | 47 | 49 |
| 94| 0.35 | 0.24 | 45 | 46 |
| 95| 0.35 | 0.51 | 30 | 30 |
| 96| 0.35 | 0.59 | 179| 90 |
| 97| 0.38 | 0.3  | 91 | 92 |
| 98| 0.39 | 0.29 | 79 | 81 |
| 99| 0.39 | 0.39 | 65 | 66 |
| 100| 0.4  | 0.65 | 56 | 58 |
| 101| 0.41 | 0.43 | 70 | 72 |
| 102| 0.41 | 0.5  | 21 | 21 |
| 103| 0.41 | 0.58 | 41 | 43 |
| 104| 0.44 | 0.39 | 49 | 52 |
| 105| 0.44 | 0.4  | 27 | 27 |
| 106| 0.44 | 0.76 | 27 | 27 |
| 107| 0.44 | 0.79 | 18 | 18 |
| 108| 0.45 | 0.45 | 165| 78 |
| 109| 0.45 | 0.65 | 83 | 83 |
| 110| 0.46 | 0.65 | 152| 67 |
| 111| 0.46 | 0.69 | 263| 178|
| 112| 0.47 | 0.46 | 47 | 48 |
| 113| 0.47 | 0.51 | 79 | 81 |
| 114| 0.47 | 0.86 | 27 | 28 |
| 115| 0.48 | 0.51 | 56 | 58 |
| 116| 0.49 | 0.82 | 50 | 52 |
| 117| 0.5  | 0.6  | 66 | 69 |
| 118| 0.51 | 0.56 | 48 | 49 |
| 119| 0.52 | 0.6  | 24 | 24 |
| 120| 0.52 | 0.84 | 53 | 43 |
| 121| 0.53 | 0.4  | 102| 102|
| 122| 0.53 | 0.66 | 47 | 49 |
| 123| 0.54 | 0.43 | 203| 113|
| 124| 0.55 | 0.46 | 250| 163|
| 125| 0.56 | 0.51 | 92 | 93 |
| 126| 0.56 | 0.59 | 38 | 40 |
| 127| 0.56 | 0.64 | 205| 116|
| 128| 0.56 | 0.78 | 27 | 28 |
| 129| 0.56 | 0.93 | 71 | 72 |
| 130| 0.57 | 0.38 | 47 | 49 |
| 131| 0.57 | 0.46 | 30 | 30 |
| 132| 0.57 | 0.7  | 22 | 21 |
| 133| 0.57 | 0.79 | 24 | 24 |
| 134| 0.57 | 1.15 | 79 | 81 |
| 135| 0.58 | 0.82 | 30 | 31 |
|   |   |   |   |   |
|---|---|---|---|---|
| 137 | 0.58 | 0.88 | 30 | 31 |
| 138 | 0.58 | 1.27 | 38 | 40 |
| 139 | 0.59 | 0.6 | 30 | 30 |
| 140 | 0.59 | 0.6 | 53 | 55 |
| 141 | 0.6 | 0.77 | 169 | 81 |
| 142 | 0.6 | 0.83 | 35 | 37 |
| 143 | 0.61 | 0.72 | 53 | 56 |
| 144 | 0.62 | 0.8 | 35 | 37 |
| 145 | 0.63 | 0.77 | 64 | 66 |
| 146 | 0.63 | 0.89 | 44 | 46 |
| 147 | 0.64 | 0.33 | 107 | 110 |
| 148 | 0.64 | 0.42 | 107 | 109 |
| 149 | 0.64 | 0.72 | 52 | 55 |
| 150 | 0.64 | 0.73 | 18 | 18 |
| 151 | 0.65 | 0.49 | 54 | 55 |
| 152 | 0.65 | 0.56 | 73 | 75 |
| 153 | 0.65 | 0.68 | 80 | 80 |
| 154 | 0.66 | 0.43 | 67 | 69 |
| 155 | 0.66 | 0.53 | 45 | 46 |
| 156 | 0.66 | 0.68 | 50 | 52 |
| 157 | 0.66 | 0.82 | 19 | 18 |
| 158 | 0.66 | 1.08 | 41 | 43 |
| 159 | 0.67 | 0.41 | 101 | 103 |
| 160 | 0.67 | 0.82 | 30 | 31 |
| 161 | 0.67 | 0.97 | 15 | 15 |
| 162 | 0.69 | 0.68 | 46 | 49 |
| 163 | 0.69 | 0.8 | 50 | 52 |
| 164 | 0.7 | 0.5 | 82 | 81 |
| 165 | 0.7 | 0.87 | 38 | 40 |
| 166 | 0.71 | 0.7 | 18 | 18 |
| 167 | 0.71 | 0.86 | 24 | 24 |
| 168 | 0.72 | 0.49 | 79 | 81 |
| 169 | 0.72 | 0.58 | 44 | 46 |
| 170 | 0.72 | 0.74 | 30 | 31 |
| 171 | 0.72 | 0.96 | 21 | 21 |
| 172 | 0.72 | 1.07 | 38 | 40 |
| 173 | 0.73 | 0.47 | 59 | 61 |
| 174 | 0.73 | 0.75 | 67 | 69 |
| 175 | 0.73 | 0.9 | 24 | 24 |
| 176 | 0.73 | 0.98 | 70 | 72 |
| 177 | 0.73 | 1.61 | 18 | 18 |
| 178 | 0.74 | 0.46 | 101 | 102 |
| 179 | 0.74 | 0.6 | 42 | 43 |
| 180 | 0.74 | 0.82 | 18 | 18 |
| 181 | 0.75 | 0.56 | 101 | 102 |
| 182 | 0.75 | 0.74 | 38 | 40 |
|   |   |   |   |   |
|---|---|---|---|---|
| 183 | 0.76 | 0.51 | 92 | 93 |
| 184 | 0.76 | 0.65 | 36 | 37 |
| 185 | 0.76 | 0.66 | 33 | 34 |
| 186 | 0.76 | 0.8 | 15 | 15 |
| 187 | 0.76 | 0.85 | 91 | 92 |
| 188 | 0.76 | 1.18 | 21 | 21 |
| 189 | 0.77 | 1.02 | 53 | 55 |
| 190 | 0.78 | 0.74 | 45 | 46 |
| 191 | 0.78 | 0.76 | 67 | 69 |
| 192 | 0.79 | 0.76 | 18 | 18 |
| 193 | 0.79 | 0.77 | 62 | 64 |
| 194 | 0.8 | 0.75 | 56 | 58 |
| 195 | 0.8 | 0.83 | 24 | 24 |
| 196 | 0.8 | 0.99 | 44 | 46 |
| 197 | 0.81 | 0.87 | 24 | 25 |
| 198 | 0.81 | 1.15 | 116 | 120 |
| 199 | 0.82 | 0.8 | 62 | 64 |
| 200 | 0.82 | 0.81 | 16 | 15 |
| 201 | 0.82 | 0.86 | 24 | 24 |
| 202 | 0.83 | 0.81 | 62 | 64 |
| 203 | 0.84 | 0.64 | 122 | 127 |
| 204 | 0.84 | 0.86 | 17 | 19 |
| 205 | 0.85 | 0.68 | 38 | 40 |
| 206 | 0.85 | 0.7 | 53 | 55 |
| 207 | 0.85 | 0.8 | 22 | 21 |
| 208 | 0.85 | 0.8 | 41 | 43 |
| 209 | 0.85 | 0.86 | 26 | 28 |
| 210 | 0.85 | 0.88 | 50 | 52 |
| 211 | 0.87 | 0.92 | 18 | 18 |
| 212 | 0.88 | 0.92 | 50 | 52 |
| 213 | 0.89 | 2.52 | 29 | 31 |
| 214 | 0.9 | 0.68 | 47 | 49 |
| 215 | 0.9 | 2.64 | 23 | 25 |
| 216 | 0.91 | 0.88 | 44 | 46 |
| 217 | 0.91 | 1.05 | 56 | 58 |
| 218 | 0.93 | 1.16 | 27 | 27 |
| 219 | 0.93 | 23.6 | 54 | 54 |
| 220 | 0.94 | 1.06 | 77 | 78 |
| 221 | 0.94 | 2.34 | 21 | 21 |
| 222 | 0.96 | 1.38 | 156 | 69 |
| 223 | 0.97 | 0.75 | 68 | 69 |
| 224 | 1.02 | 2.71 | 110 | 113 |
| 225 | 1.1 | 1.42 | 56 | 58 |
| 226 | 1.2 | 1.33 | 30 | 31 |
| 227 | 1.36 | 1.58 | 44 | 46 |
| 228 | 1.4 | 0.74 | 29 | 31 |
|   | AR  | Length in base pairs |
|---|-----|----------------------|
| 229 | 1.42 | 85                   |
| 230 | 0.88 | 86                   |
| 231 | 2    | 24                   |
| 232 | 1.51 | 24                   |
| 233 | 1.48 | 70                   |
| 234 | 1.9  | 72                   |
| 235 | 1.53 | 24                   |
| 236 | 2    | 24                   |
| 237 | 1.9  | 24                   |
| 238 | 1.44 | 24                   |
| 239 | 1.77 | 94                   |
| 240 | 1.9  | 72                   |
| 241 | 2.13 | 41                   |
| 242 | 2.62 | 78                   |
| 243 | 2.73 | 66                   |
| 244 | 3.14 | 81                   |
| 245 | 3.77 | 61                   |
| 246 | 4.33 | 58                   |
| 247 | 4.73 | 52                   |
| 248 | 13.72| 81                   |
| 249 | 21   | 21                   |
| 250 | 4.33 | 24                   |
| 251 | 14.03| 21                   |
| 252 | 11.15| 21                   |
| 253 | 212  | 123                  |
| 254 | 6.31 | 52                   |
| 255 | 34.2 | 84                   |
| 256 | 5.21 | 84                   |
| 257 | 73   | 75                   |
| 258 | 45.4 | 30                   |
| 259 | 30   | 30                   |

**Table S4.** FLT3-ITD-mutation data (AR and length in base pairs) from FLT3-ITD positive patients, based on DNA and cDNA measurements, sorted according to DNA-based FLT3-ITD-AR
References

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