

## MR4 sustained for 12 months is associated with stable deep molecular responses in chronic myeloid leukemia

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Received: December 16, 2018.

Accepted: March 21, 2019.

Pre-published: March 28, 2019.

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## Supplementary information

### Title:

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**Supplementary Table 1.**

**Study cohort characteristics (n=450): comparison between patients who achieved only sMR3 and those who achieved sMR4.**

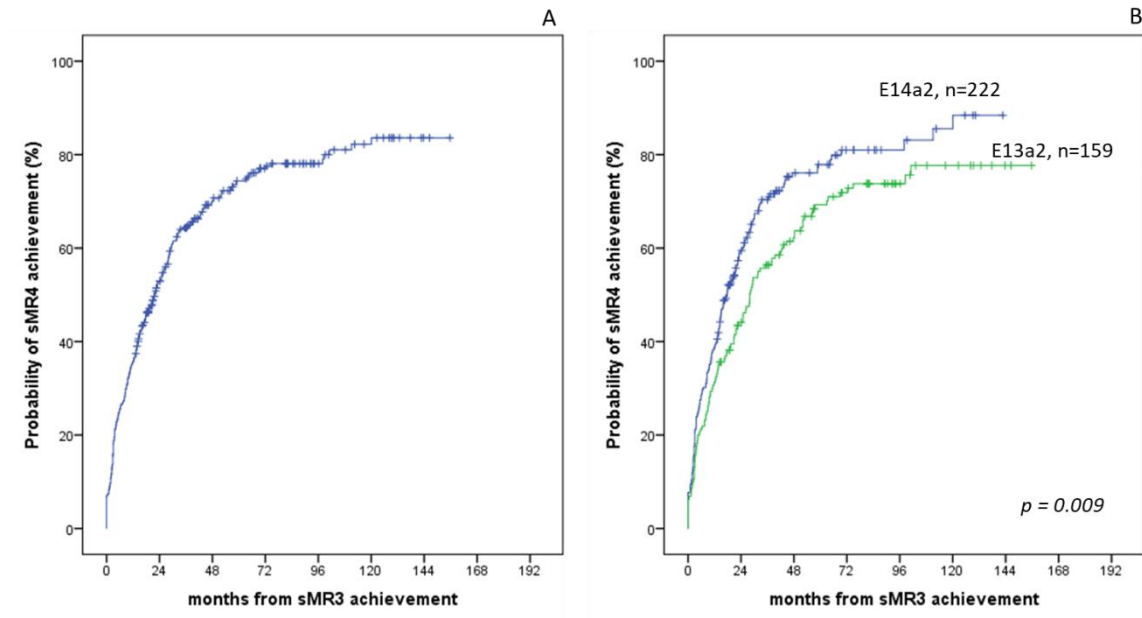
	<b>Total</b>	<b>sMR3only (N = 126)</b>	<b>sMR4 (N= 324)</b>	<b>P value</b>
Female sex (%)	226	61 (48%)	165 (50.9%)	0.6
Age at diagnosis (median, range)		42.6 (19-86.4)	45.4 (20-83)	0.27
<i>Sokal score</i>				
<i>Low</i>	135 (30%)	29 (23%)	106 (32.7%)	ns
<i>Intermediate</i>	106 (23.6%)	29 (23%)	77 (23.8%)	
<i>High</i>	109 (24.2%)	36 (28.6%)	73 (22.5%)	
<i>Unknown</i>	100 (22.2%)	32 (25.4%)	68 (21%)	na
<i>Transcript type</i>				
<i>e14a2</i>	222 (49.3%)	58 (46%)	164 (50.6%)	ns
<i>e13a2</i>	159 (35.4%)	48 (38.1%)	111 (34.2%)	
<i>e14a2/e13a2</i>	50 (11.1%)	19 (15.1%)	31 (9.6%)	
<i>other</i>	6 (1.3%)	0	6 (1.9%)	
<i>unknown</i>	13 (2.9%)	1 (0.8%)	12 (3.7%)	na
Time to achieve sMR3 (months)		24.2	12.2	<b>&lt;0.0001</b>
Imatinib SD 1st line at sMR3	226	45/68	181/226	<b>0.021</b>
Imatinib HD 1st line at MR3	68	23/68	45/226	
2GTKI 1st line at MR3	42	8	34	ns
Imatinib 2nd line at MR3	1	1	0	ns
2or3GTKI ≥ 2nd line at MR3 for previous intolerance	17	7	10	ns
2or3GTKI ≥ 2nd line at MR3 for previous resistance	96	42	54	<b>0.0002</b>
Resistance to at least 1 2GTKI	13	6	7	ns

**Legend:** ns= not significant; na= not applicable; TKI= tyrosine kinase inhibitor; 2or3GTKI= second or third generation TKI; SD= standard dose; HD= higher than standard dose.

**Supplementary Figure 1.**

**5-year probability of sMR4 after achieving sMR3.**

A: Achievement of sMR4 in the entire population n = 450, B: Achievement of sMR4 by transcript type.



**Supplementary Table 2.**

**Tyrosine kinase inhibitor at the time of achievement of sMR3 in patients without sMR3 on standard dose imatinib.**

TKI after Imatinib SD failure	N of patients	N of patients achieving MR4	N of patients losing MR4	N of patients losing MR3 after MR4 loss	Total N of pts losing MR3
Imatinib HD	54	33 (61.1%)	9/33 (27.3%)	4	11 (20.4%)
2GTKI or 3GTKI	94	54 (57.4%)	2/54 (3.7%)	2	6 (6.4%)

## Supplementary Figure 2.

### Events occurring after loss of response and therapy status at last follow-up.

**Legend:** pts= patients; sMR3 = sustained MR3; sMR4= sustained MR4; AP= accelerated phase; CCyR= complete cytogenetic response; BP= blast phase; TKI= tyrosine kinase inhibitor; CHR= complete haematological response; SD = standard TKI dose; LD= lower TKI dose (compared to the standard recommended doses for first or subsequent lines); HD= higher TKI dose (compared to the standard recommended doses for first or subsequent lines); I= imatinib; D= dasatinib; N= nilotinib; B= bosutinib; P= ponatinib; TFR= treatment free remission.

