

Supplementary Materials: The Dynamics of Nucleotide Variants in the Progression from Low–Intermediate Myeloma Precursor Conditions to Multiple Myeloma: Studying Serial Samples with a Targeted Sequencing Approach

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Table S1. Percentage of PCs in the precursor BM smears. For each patient, the start precursor phase, the total number of serial precursor samples and the percentage of PCs in the BM smears chronologically ordered were indicated.

Patient	Precursor Stage	Number of Serial Precursor Samples	% PCs in BM Smear, Chronologically over Time
			Precursor Phase
1	MGUS	1	6
2	SMM	1	12
3	MGUS	2	3–1
4	MGUS	1	5
5	MGUS	1	5
6	SMM	1	12
7	MGUS	1	3
8	MGUS	2	4–2
9	MGUS	1	4
10	MGUS	2	6–9
11	MGUS	1	3
12	MGUS*	5	6–9–17–8–12
13	MGUS	1	5
14	MGUS*	6	6–6–10–12–17–16
15	MGUS*	5	12–12–8–13–19
16	MGUS*	3	7–12–30
17	MGUS	4	5–8–7–12
18	MGUS*	2	9–19
19	MGUS	1	5
20	MGUS*	5	6–3–3–4–10
21	MGUS	1	1

US: Variant PC: plasma cells; BM: bone marrow.

Table S2. Detailed overview of the 29 identified variants. A total of 29 variants were detected in 20 different genes. Each identified somatic variant was annotated and classified as Pathogenic, Likely Pathogenic or Variant of Unknown Significance, according to the Belgian guidelines[1]. For each variant, the location (chromosome and coordinate) and HGVS coding and protein sequence name was showed.

Gene	Classification	HGVS _c	HGVS _p	Chr	Coordinate
<i>ARID2</i>	LIKELYPATHOGENIC	NM_152641.2:c.3410C > A	NP_689854.2:p.Ser1137Ter	12	46245316
<i>BCL7A</i>	US	NM_020993.3:c.36C > A	NP_066273.1:p.Ser12Arg	12	122460033
<i>BCL7A</i>	US	NM_020993.3:c.74T > C	NP_066273.1:p.Ile25Thr	12	122460071
<i>BRAF</i>	LIKELYPATHOGENIC	NM_004333.4:c.1780G > A	NP_004324.2:p.Asp594Asn	7	140453155
<i>DIS3</i>	US	NM_014953.3:c.1663_1668delGTGGA C	NP_055768.3:p.Val555_Asp556d el	13	73345220
<i>DNMT3A</i>	LIKELYPATHOGENIC	NM_175629.2:c.939G > A	NP_783328.1:p.Trp313Ter	2	25470535
<i>FAM46C</i>	US	NM_017709.3:c.275A > G	NP_060179.2:p.Asp92Gly	1	118165765
<i>FAM46C</i>	LIKELYPATHOGENIC	NM_017709.3:c.584_585delAT	NP_060179.2:p.Tyr195Ter	1	118166072
<i>HIST1H1D</i>	LIKELYPATHOGENIC	NM_005320.2:c.556G > A	NP_005311.1:p.Ala186Thr	6	26234606
<i>HIST1H1E</i>	US	NM_005321.2:c.139G > A	NP_005312.1:p.Ala47Thr	6	26156757
<i>IDH1</i>	US	NM_005896.2:c.940C > T	NP_005887.2:p.Arg314Cys	2	209104638
<i>IKBKB</i>	US	NM_001556.2:c.2033C > G	NP_001547.1:p.Ala678Gly	8	42183534
<i>IRF4</i>	US	NM_002460.3:c.316G > T	NP_002451.2:p.Asp106Tyr	6	394920
<i>KRAS</i>	PATHOGENIC	NM_033360.2:c.38G > A	NP_203524.1:p.Gly13Asp	12	25398281
<i>KRAS</i>	PATHOGENIC	NM_033360.2:c.35G > A	NP_203524.1:p.Gly12Asp	12	25398284
<i>KRAS</i>	PATHOGENIC	NM_033360.2:c.436G > A	NP_203524.1:p.Ala146Thr	12	25378562
<i>KRAS</i>	LIKELYPATHOGENIC	NM_033360.2:c.176C > A	NP_203524.1:p.Ala59Glu	12	25380282
<i>KRAS</i>	PATHOGENIC	NM_033360.2:c.38G > A	NP_203524.1:p.Gly13Asp	12	25398281
<i>KRAS</i>	PATHOGENIC	NM_033360.2:c.35G > A	NP_203524.1:p.Gly12Asp	12	25398284
<i>MAX</i>	US	NM_002382.4:c.312G > T	NP_002373.3:p.Lys104Asn	14	65543365
<i>NRAS</i>	PATHOGENIC	NM_002524.4:c.35G > C	NP_002515.1:p.Gly12Ala	1	115258747
<i>NRAS</i>	PATHOGENIC	NM_002524.4:c.181C > A	NP_002515.1:p.Gln61Lys	1	115256530
<i>PTPN11</i>	LIKELYPATHOGENIC	NM_002834.3:c.1520C > A	NP_002825.3:p.Thr507Lys	12	112926900
<i>PTPN11</i>	LIKELYPATHOGENIC	NM_002834.3:c.181G > A	NP_002825.3:p.Asp61Asn	12	112888165
<i>RASA2</i>	US	NM_006506.2:c.622_626delAAGAA	NP_006497.2:p.Lys208AspfsTer1 3	3	141274689
<i>SETD2</i>	LIKELYPATHOGENIC	NM_014159.6:c.4667_4670delTCAC	NP_054878.5:p.Leu1556GlnfsTer 8	3	47155410
<i>SP140</i>	US	NM_007237.4:c.265G > A	NP_009168.4:p.Val89Ile	2	231102955
<i>TP53</i>	LIKELYPATHOGENIC	NM_000546.5:c.574C > T	NP_000537.3:p.Gln192Ter	17	7578275
<i>XBP1</i>	US	NM_001079539.1:c.11T > C	NP_001073007.1:p.Val4Ala	22	29196502

US: Variant of Unknown Significance; HGVS_c: Human Genome Variation Society coding; HGVS_p: Human Genome Variation Society protein; Chr: Chromosome.

References

1. Froyen, G.; Le Mercier, M.; Lierman, E.; Vandepoele, K.; Nolle, F.; Boone, E.; Van der Meulen, J.; Jacobs, K.; Lambin, S.; Vander Borgh, S.; et al. Standardization of Somatic Variant Classifications in Solid and Haematological Tumours by a Two-Level Approach of Biological and Clinical Classes: An Initiative of the Belgian ComPerMed Expert Panel. *Cancers* **2019**, *11*, 2030, doi:10.3390/cancers11122030.