Supplement

Supplemental Tables

Supplemental Table 1: Demographic and clinical characteristics of MCL0208 patients at enrolment with available data for Ki-67 or TP53 mutation or del17(p)
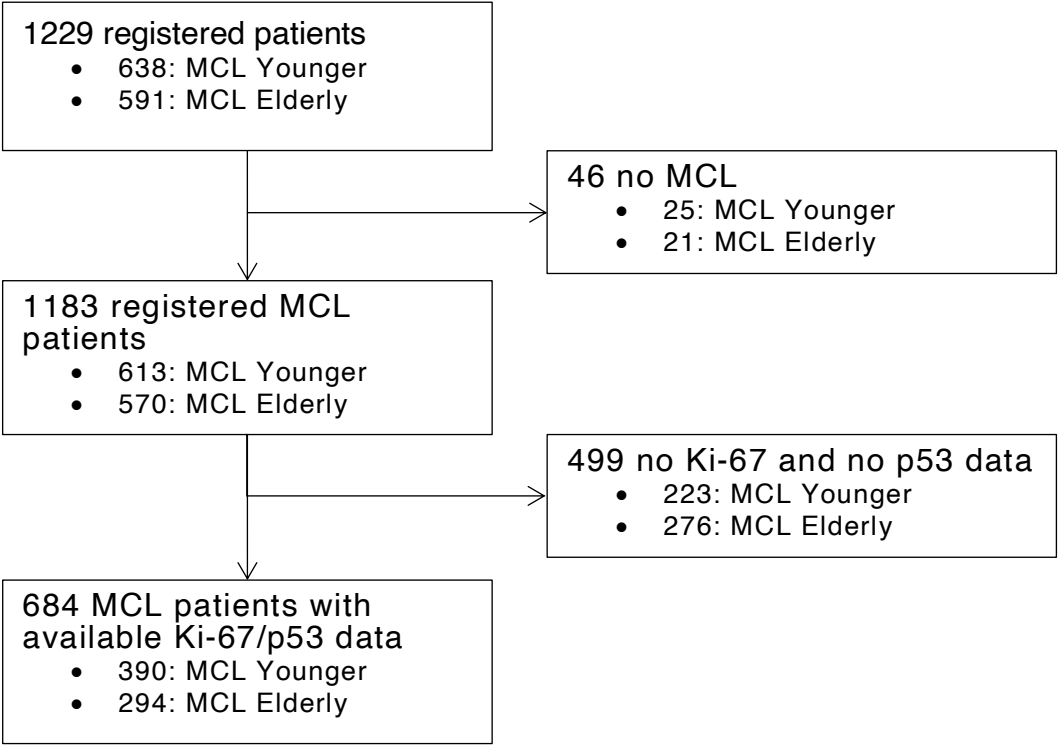
Factor	Level	All	Low-risk disease	High-risk disease
N		230	176	54
Age at enrolment, median (IQR)		57 (52, 62)	57 (50, 62)	59 (54, 61)
Sex	Female	52 (22.6%)	39 (22.2%)	13 (24.1%)
	Male	178 (77.4%)	137 (77.8%)	41 (75.9%)
Abnormal LDH		74 (32.2%)	44 (25.0%)	30 (55.6%)
ECOG	0	181 (78.7%)	145 (82.4%)	36 (66.7%)
	1	41 (17.8%)	26 (14.8%)	15 (27.8%)
	2	8 (3.5%)	5 (2.8%)	3 (5.6%)
Stage	II	2 (0.9%)	2 (1.1%)	0 (0.0%)
	III	12 (5.2%)	8 (4.5%)	4 (7.4%)
	IV	216 (93.9%)	166 (94.3%)	50 (92.6%)
Bulky disease (5 cm)	NO	147 (63.9%)	120 (68.2%)	27 (50.0%)
	YES	83 (36.1%)	56 (31.8%)	27 (50.0%)
Bone marrow involvement		185 (80.4%)	139 (79.0%)	46 (85.2%)
MIPI Risk Group	Low	140 (60.9%)	122 (69.3%)	18 (33.3%)
	Intermediate	58 (25.2%)	47 (26.7%)	11 (20.4%)
	High	32 (13.9%)	7 (4.0%)	25 (46.3%)
MIPI-c Risk Group	Low	111 (48.3%)	99 (56.3%)	12 (22.2%)
	Low-Intermediate	64 (27.8%)	54 (30.7%)	10 (18.5%)
	Intermediate-High	30 (13.0%)	23 (13.1%)	7 (13.0%)
	High	23 (10.0%)	0 (0.0%)	23 (42.6%)
	Missing	2 (0.9%)	0 (0.0%)	2 (3.7%)
Ki67 index >30%		75 (32.9%)	39 (22.2%)	36 (69.2%)
TP53mut or del(17p)		38 (17.0%)	0 (0.0%)	38 (80.9%)

Supplemental Table 2: Demographic and clinical characteristics of MCL4 patients at enrolment with available data for Ki-67 or TP53 mutation
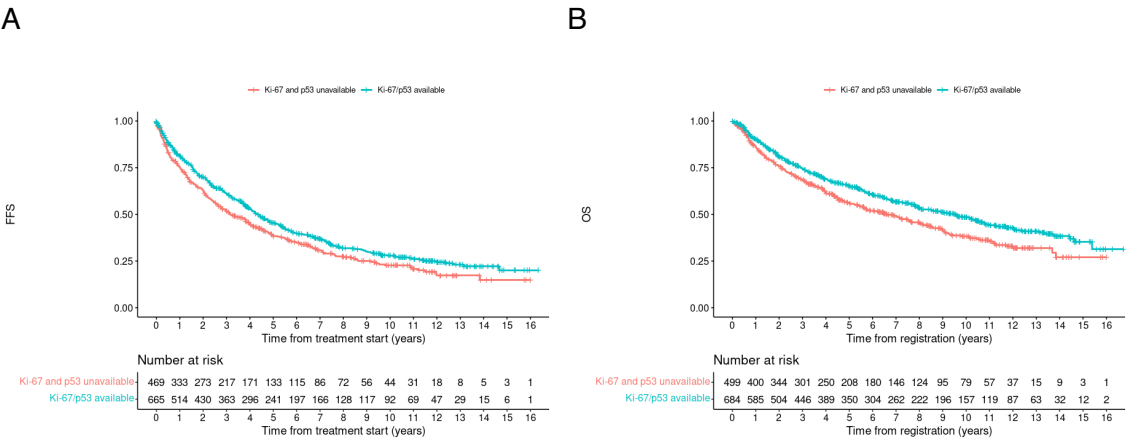
Factor	Level	All	Low-risk disease	High-risk disease
N		46	36	10
Age at enrolment, median (IQR)		72 (70, 77)	72 (70, 78)	72 (70, 76)
Sex	Female	12 (26.1%)	8 22.2%	4 (40%)
	Male	34 (73.9%)	28 (77.8%)	6 (60%)
Abnormal LDH		18 (39.1%)	12 (33.3%)	6 (60%)
ECOG	0	21 (45.7%)	17 (47.2%)	4 (40%)
	1	22 (47.8%)	18 (50%)	4 (40%)
	2	3 (6.5%)	1 (2.8%)	2 (20%)

Stage	II	2 (4.3 %)	2 (5.6%)	0
	III	4 (8.7%)	4 (11.1%)	0
	IV	40 (87%)	30 (83.3%)	10 (100%)
Bulky disease (5 cm)	NO	N/A	N/A	N/A
	YES	N/A	N/A	N/A
Bone marrow involvement		40 (87%)	30 (83.3%)	10 (100%)
MIPI Risk Group	Low	5 (10.9%)	5 (13.9%)	0
	Intermediate	16 (34.8%)	15 (41.7%)	1 (10%)
	High	25 (54.3%)	16 (44.4%)	9 (90%)
MIPI-c Risk Group	Low	5 (10.9%)	5 (13.9%)	0
	Low-Intermediate	12 (26.1%)	12 (33.3%)	0
	Intermediate-High	23 (50%)	19 (52.8%)	4 (40%)
	High	6 (13%)	0 (0%)	6 (60%)
	Missing	-	-	-
Ki67 index >30%		10 (21.7%)	4 (11%)	6 (60%)
TP53mut		6 (11.8%)	0 (0%)	6 (60%)

Supplemental Figures

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│ 1229 registered patients            │
│   •   638: MCL Younger              │
│   •   591: MCL Elderly              │
└─────────────────────────────────────┘
              │          ┌──────────────────────────────────┐
              │─────────▶│ 46 no MCL                        │
              │          │   •   25: MCL Younger            │
              ▼          │   •   21: MCL Elderly            │
┌─────────────────────────────────────┐ └──────────────────────────────────┘
│ 1183 registered MCL                 │
│ patients                            │
│   •   613: MCL Younger              │
│   •   570: MCL Elderly              │
└─────────────────────────────────────┘
              │          ┌──────────────────────────────────┐
              │─────────▶│ 499 no Ki-67 and no p53 data     │
              │          │   •   223: MCL Younger           │
              ▼          │   •   276: MCL Elderly           │
┌─────────────────────────────────────┐ └──────────────────────────────────┘
│ 684 MCL patients with               │
│ available Ki-67/p53 data            │
│   •   390: MCL Younger              │
│   •   294: MCL Elderly              │
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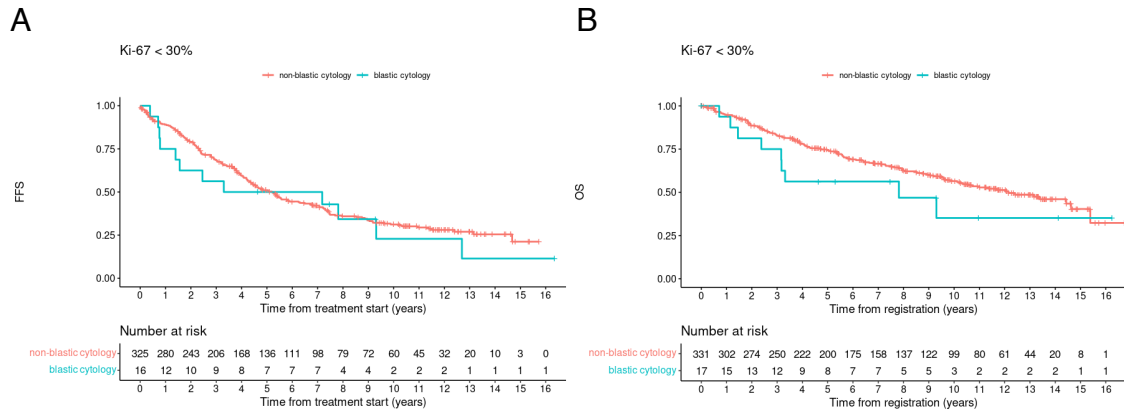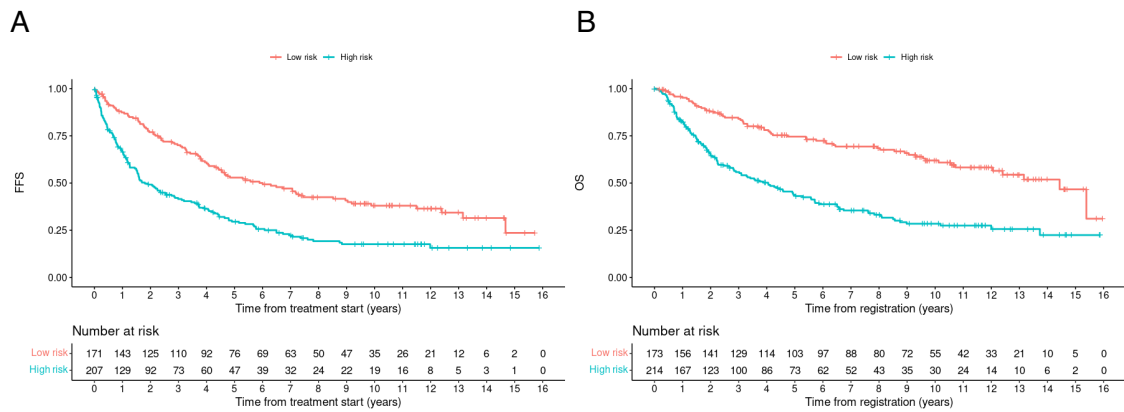
Supplemental Figure 1: Selection of patients for high-risk disease (HRD) assessment.

A   B
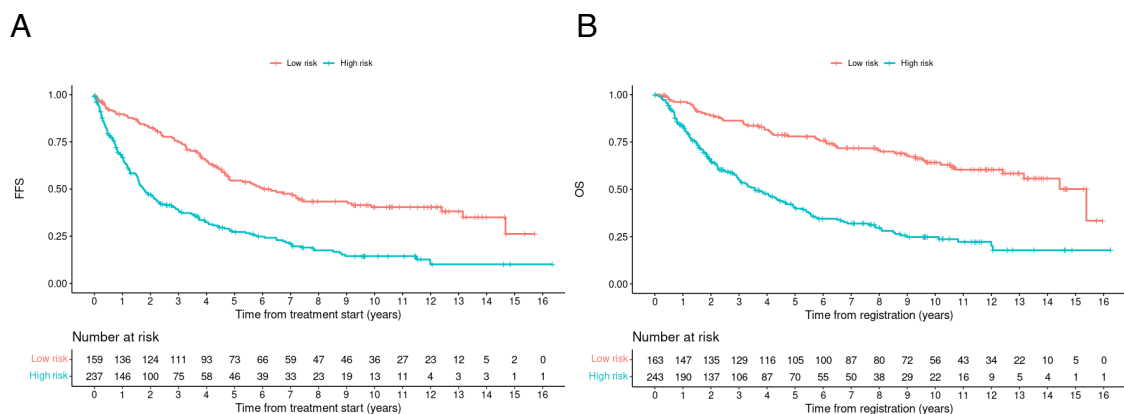

Supplemental Figure 2: **Outcome of patients with available data on Ki-67 or p53 expression compared to those without available data.** Kaplan-Meier estimates of FFS (A) and OS (B) stratified by patients with available data for Ki-67 or p53 compared to patients without available data for Ki-67 and p53.

A   B

Supplemental Figure 3: Prognostic impact of MCL cytology in association with low Ki-67.
Kaplan-Meier estimates of FFS (A) and OS (B) stratified by patients with blastoid or non-blastoid
cytology adjusted for Ki-67 <30%.

A   B

**Supplemental Figure 4: Prognostic impact of high Ki-67 or high p53 expression on clinical
outcome.** Kaplan-Meier estimates of FFS (A) and OS (B) of patients with Ki-67 ≥30% or p53
expression >50% (high-risk disease) compared to Ki-67 <30% and p53 expression ≤50% (low-
risk disease).

A   B

**Supplemental Figure 5: Prognostic impact of high, high intermediate MIPI-c or high p53
expression on clinical outcome.** Kaplan-Meier estimates of FFS (A) and OS (B) of patients

with high, high intermediate MIPI-c or p53 expression >50% (high-risk disease) compared to low or low intermediate MIPI-c and p53 expression ≤50% (low-risk disease).