

# Universal germline genetic testing in patients with hematologic malignancies using DNA isolated from nail clippings

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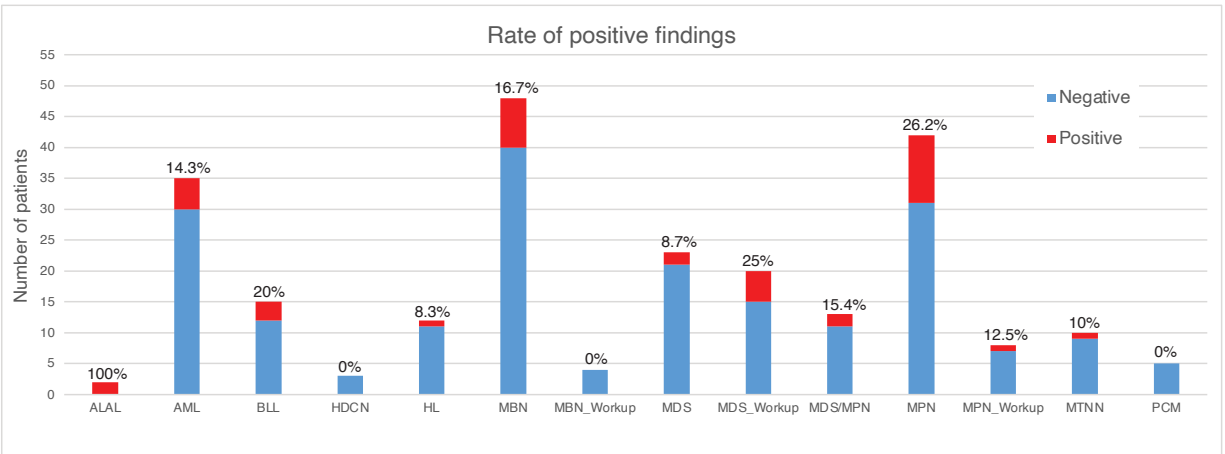
**Supplementary Table 1: Genes on Germline MSK-IMPACT-Heme panel**

|         |         |
|---------|---------|
| ALK     | MUTYH   |
| ANKRD26 | NBN     |
| APC     | NF1     |
| ATM     | NF2     |
| BAP1    | NRAS    |
| BARD1   | NSD1    |
| BLM     | PALB2   |
| BRCA1   | PAX5    |
| BRCA2   | PDGFRA  |
| BRIP1   | PMS2    |
| BTK     | POT1    |
| CALR    | PTCH1   |
| CBL     | PTEN    |
| CDC73   | PTPN11  |
| CDH1    | RAD51   |
| CDK4    | RAD51B  |
| CDKN2A  | RAD51C  |
| CEBPA   | RAD51D  |
| CHEK2   | RB1     |
| DDX41   | RET     |
| EGFR    | RTEL1   |
| ERBB2   | RUNX1   |
| ETV6    | SDHA    |
| FANCA   | SDHB    |
| FANCC   | SDHC    |
| FAS     | SDHD    |
| FLCN    | SH2B3   |
| GATA2   | SMAD4   |
| HRAS    | SMARCA4 |
| IKZF1   | SMARCB1 |
| KIT     | SRP72   |
| KRAS    | STK11   |
| LZTR1   | SUFU    |
| MEN1    | TERT    |
| MET     | TGFBR2  |
| MITF    | TP53    |
| MLH1    | TSC1    |
| MPL     | TSC2    |
| MSH2    | TYK2    |
| MSH3    | VHL     |
| MSH6    | WT1     |

## Supplementary Table 2: Patient demographics

|   | Number of patients<br>(n=240) (%) |
|---|-----------------------------------|
| <b><u>Sex</u></b>                         |                                   |
| Female                                    | 103 (42.9%)                       |
| Male                                      | 137 (57.1%)                       |
| <b><u>Age at HM diagnosis (years)</u></b> |                                   |
| <18                                       | 38 (15.8%)                        |
| 18-39                                     | 44 (18.3%)                        |
| 40-59                                     | 77 (32.1%)                        |
| 60-79                                     | 76 (31.7%)                        |
| 80-99                                     | 5 (2.1%)                          |
| <b><u>Genetic ethnicity</u></b>           |                                   |
| African/African American                  | 15 (6.3%)                         |
| Ashkenazi Jewish                          | 37 (15.4%)                        |
| East Asian                                | 10 (4.2%)                         |
| European                                  | 141 (58.7%)                       |
| Native American                           | 2 (0.8%)                          |
| South Asian                               | 2 (0.8%)                          |
| Admixed/Other                             | 28 (11.7%)                        |
| Unknown                                   | 5 (2.1%)                          |

Continental-level genetic ancestries were assigned if the inferred contribution of that population to their ancestry is  $\geq 80\%$ . Otherwise, they were assigned as Admixed/Other. Genetic ancestry could not be inferred in five individuals.



**Supplementary Figure 1. Rate of gPVs in hereditary cancer predisposition genes identified in patients with HMs.** Percentage of patients with gPVs (Positive; red) are presented above each bar. Clinical diagnoses of patients with HM included Mature B-Cell Neoplasms (MBN; n=48), Myeloproliferative Neoplasms (MPN; n=42), Acute Myeloid Leukemia (AML; n=35), Myelodysplastic Syndrome (MDS; n=23), B-Lymphoblastic Leukemia/Lymphoma (BLL; n=15), Myelodysplastic/Myeloproliferative Neoplasms (MDS/MPN; n=13), Hodgkin Lymphoma (HL; n=12), Mature T and NK Neoplasms (MTNN; n=10), Plasma Cell Myeloma (PCM; n=5), Histiocytic and Dendritic Cell Neoplasms (HDCN; n=3), and Acute Leukemias of Ambiguous Lineage (ALAL; n=2).