

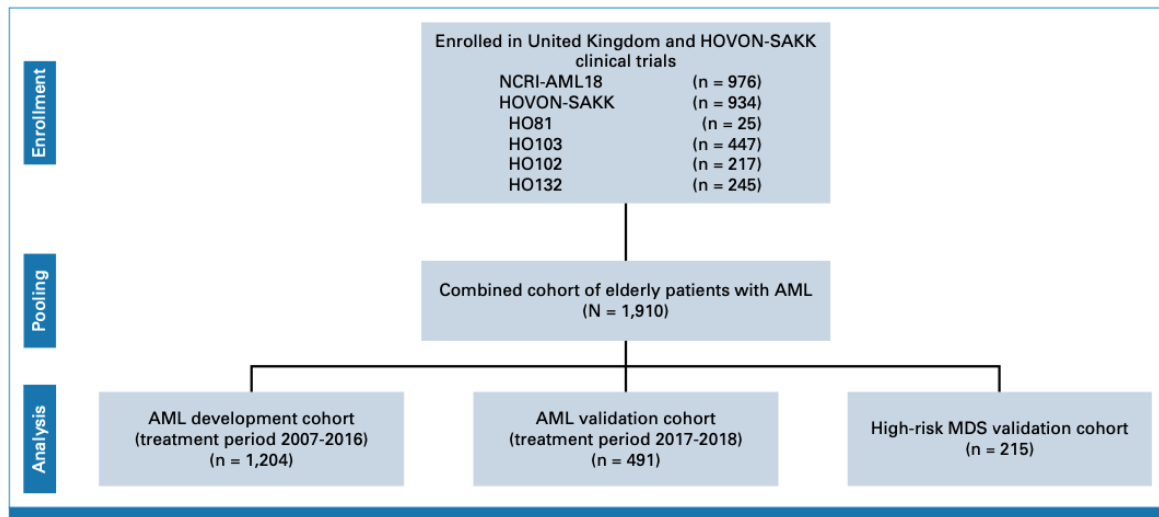
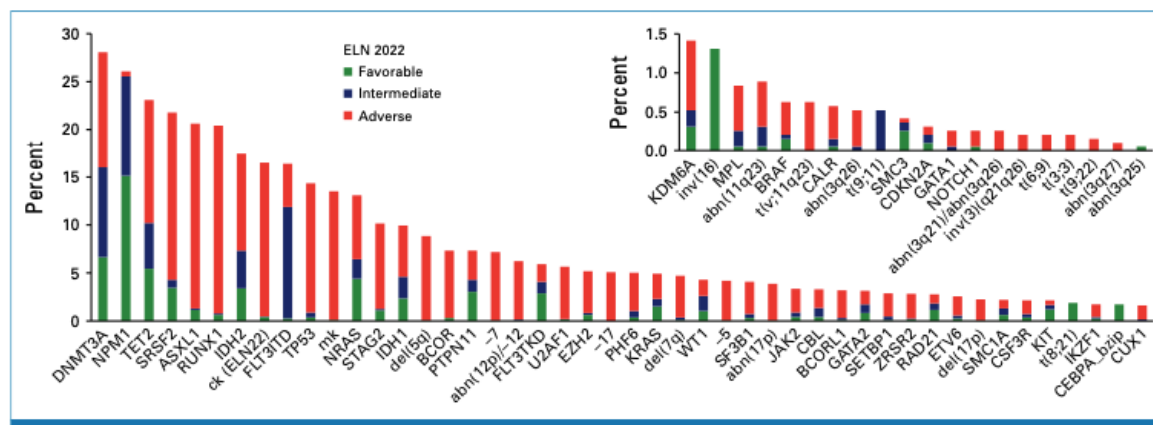


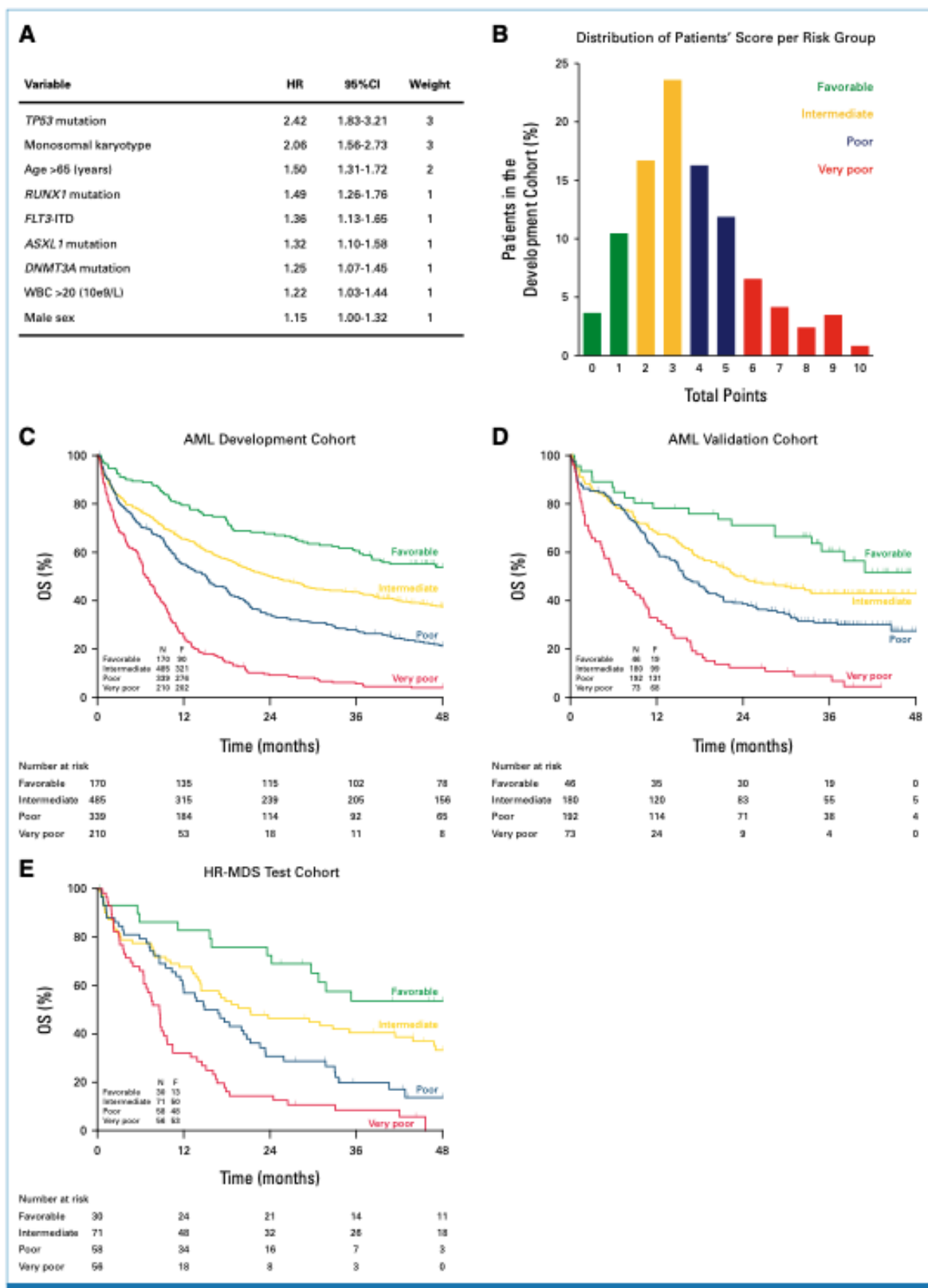
FIG 1. CONSORT diagram. MDS, myelodysplastic syndrome.

**TABLE 1. Baseline Characteristics**

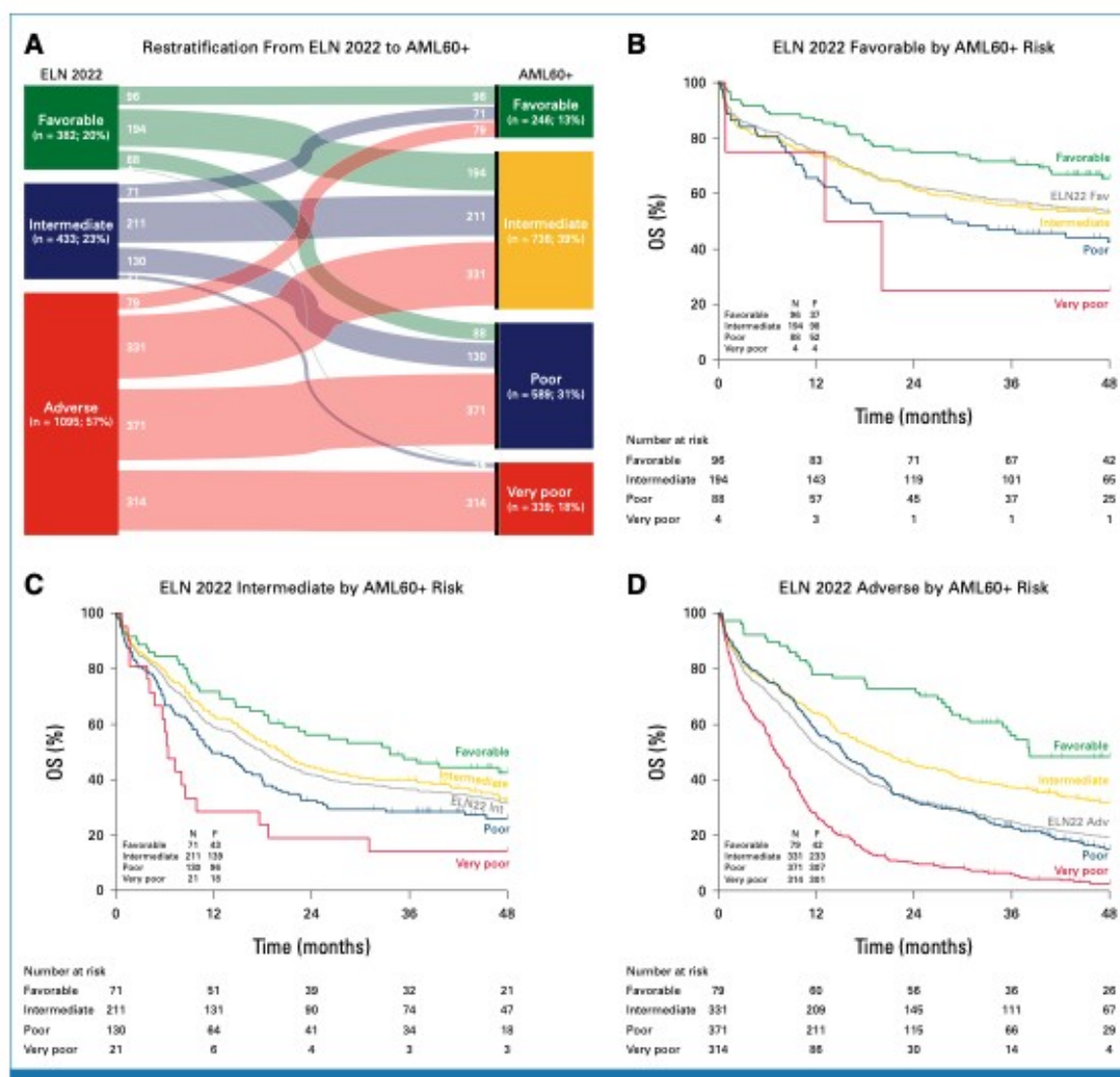
| Characteristic                         | Total (N = 1,910) |
|----------------------------------------|-------------------|
| Age, years                             |                   |
| Median (range)                         | 67 (60-84)        |
| >65 years, No. (%)                     | 1,143 (59.8)      |
| Sex, No. (%)                           |                   |
| Male                                   | 1,160 (60.7)      |
| Female                                 | 750 (39.3)        |
| WHO performance status, No. (%)        |                   |
| 0                                      | 918 (48.1)        |
| 1                                      | 844 (44.2)        |
| 2                                      | 132 (6.9)         |
| 3                                      | 1 (0.1)           |
| Missing                                | 15 (0.8)          |
| WBC, $\times 10^9/L$                   |                   |
| Median (range)                         | 5.0 (0.0-417)     |
| >20, No. (%)                           | 484 (25.3)        |
| Disease type, No. (%)                  |                   |
| De novo                                | 1,437 (75.2)      |
| sAML                                   | 172 (9.0)         |
| tAML                                   | 86 (4.5)          |
| High-risk MDS                          | 215 (11.3)        |
| ELN2017 classification, No. (%)        |                   |
| Favorable                              | 524 (27.4)        |
| Intermediate                           | 472 (24.7)        |
| Adverse                                | 914 (47.9)        |
| ELN2022 classification, No. (%)        |                   |
| Favorable                              | 382 (20.0)        |
| Intermediate                           | 433 (22.7)        |
| Adverse                                | 1,095 (57.3)      |
| Best response after induction, No. (%) |                   |
| CR                                     | 1,276 (66.8)      |
| CRi                                    | 168 (8.8)         |
| PR                                     | 73 (3.8)          |
| Refractory                             | 188 (9.8)         |
| Induction death                        | 126 (6.6)         |
| Missing/NA                             | 79 (4.1)          |
| Allogeneic HCT in first CR, No. (%)    |                   |
| Yes                                    | 460 (31.9)        |
| No                                     | 984 (68.1)        |



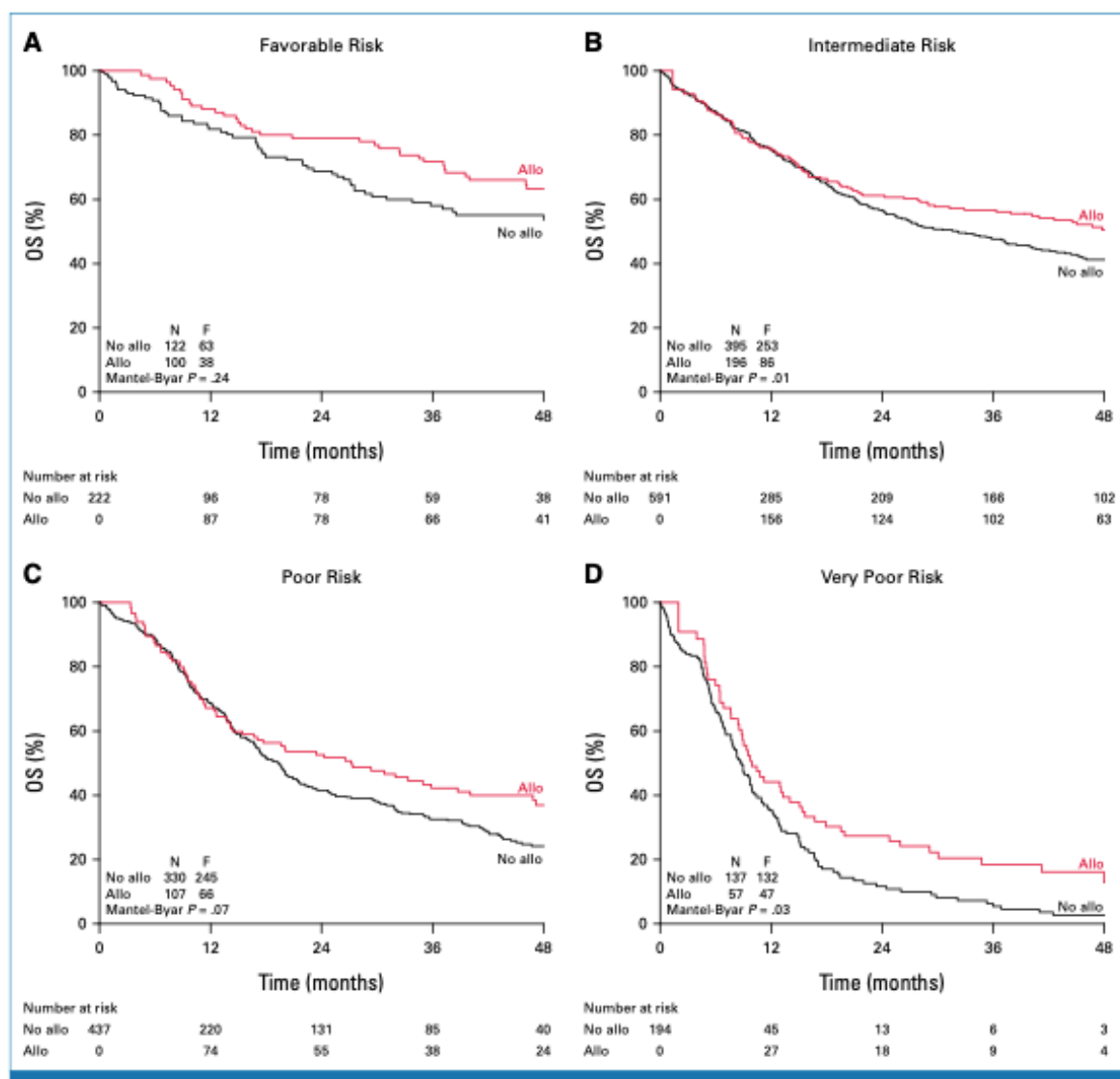
**FIG 2.** Mutational landscape of the patient cohort. Driver events found in 1,910 elderly patients with newly diagnosed AML. Each bar represents a driver lesion, including gene mutations and chromosomal abnormalities. The colors (green, blue, red) in each bar represent the ELN 2022 risk class (favorable, intermediate, adverse) among each driver lesion. abn, abnormality in; ck, complex karyotype (annotated according to the 2022 ELN risk classification); ELN, European LeukemiaNet; mk, monosomal karyotype.



**FIG 3.** AML60+ classification model development. (A) Cox regression analysis for OS using the top predictors identified by the random survival forest. Patients are assigned points on the basis of the presence of predictors; (B) shows the distribution of patients across the total sum of points and four risk groups in the development cohort. OS by risk categories (continued on following page)



**FIG 4.** Restratification and OS of patients from ELN 2022 to AML60+ classification. (A) Restratification of patients from ELN 2022 risk classification to the new AML60+ classification. OS by the new AML60+ classification in the ELN 2022 (B) favorable-, (C) intermediate-, and (D) adverse-risk groups. The corresponding outcome curve of each ELN 2022 group is shown in gray in (B), (C), and (D). Time is measured from the date of study entry. ELN, European LeukemiaNet; F, number of failures (ie, death); N, number of patients at risk; OS, overall survival.



**FIG 5.** OS of allo-HCT versus no allo-HCT in first CRi in AML60+ risk groups. OS by the (A) favorable, (B) intermediate, (C) poor, and very poor (D) groups of the AML60+ classification in which allo-HCT is considered as a time-dependent covariate according to a Simon-Makuch plot.<sup>15</sup> Time is measured from the date of CRi, and patients switch from the no allo-HCT to the allo-HCT at the time of allo-HCT if they received allo-HCT. allo-HCT, allogeneic hematopoietic cell transplantation; CRi, complete remission with incomplete count recovery; F, number of failures (ie, death); N, number of patients at risk; OS, overall survival.