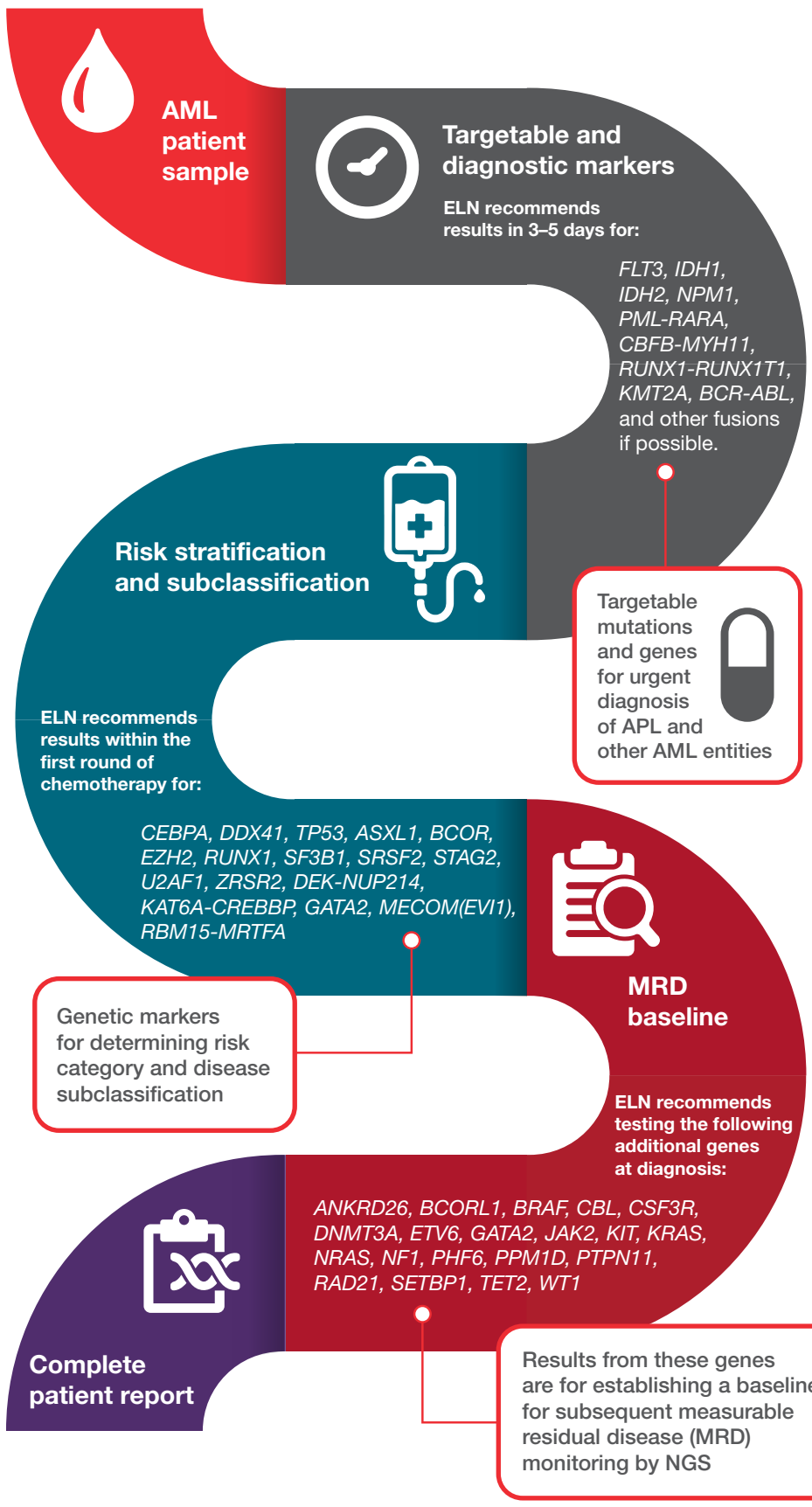
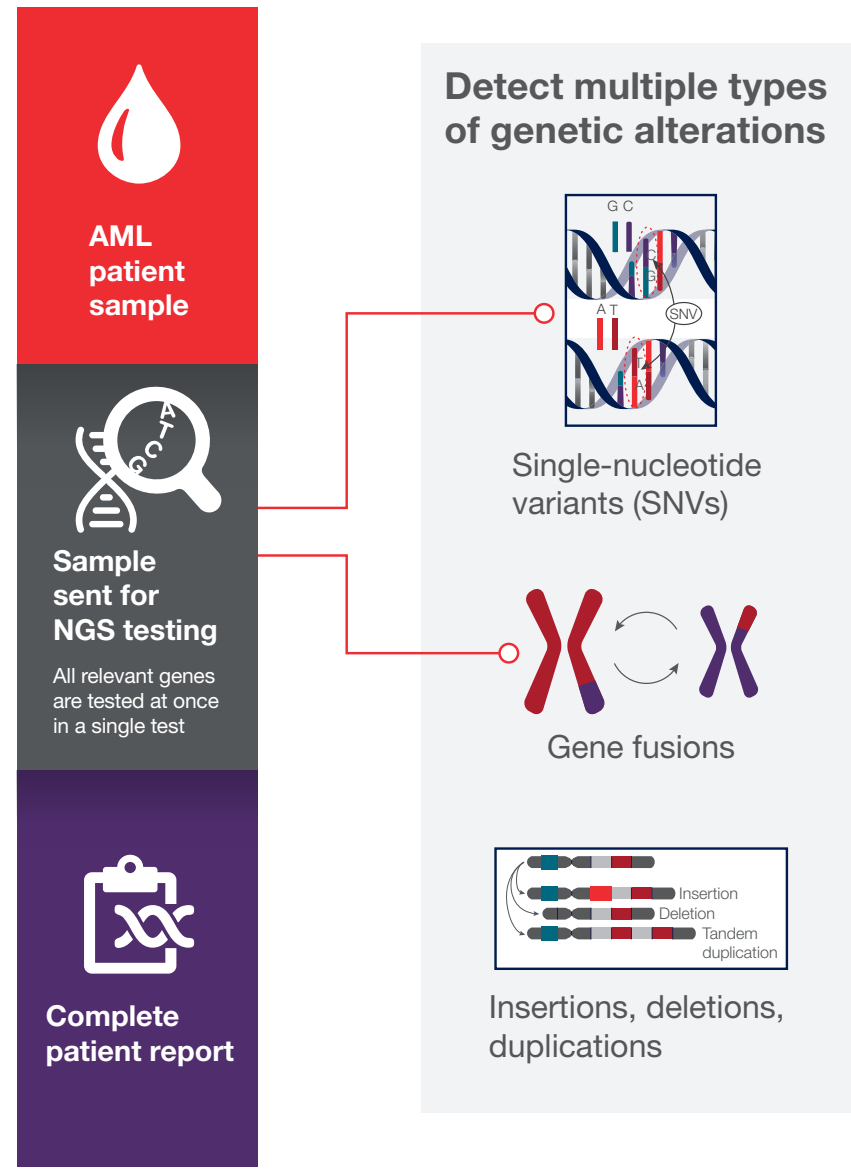
Rapid NGS testing for acute myeloid leukemia (AML)

European LeukemiaNet (ELN) recommendations for AML molecular testing



Recent changes to medical guidelines and classification criteria for AML have added pressure on laboratories to increase molecular testing for more genetic biomarkers and deliver results in just days. Given these changes, the traditional approach involving multiple single-analyte tests is no longer sustainable. Only rapid next-generation sequencing (NGS) can provide a full molecular report for a wide range of genetic markers as fast as in a single day to inform frontline patient-care decisions.

Streamlined testing with NGS



Comparison of molecular testing strategies

Single-analyte testing

Complex: Requires multiple modalities (PCR, FISH, CE/Sanger sequencing) with various workflows and timelines.

Time consuming: It can take weeks for all genetic markers to be tested individually.

Costly: There are additive costs of running multiple individual tests (e.g., labor and reagents).

Inefficient: Valuable patient samples can be rapidly depleted with multiple tests.

NGS

Simple: A single workflow provides a complete molecular report.

Rapid: Get results in as fast as 1 day.

Cost effective: Limit costs by performing one comprehensive test.

Efficient: Multiple genes and types of genetic alterations are tested at once, preserving patient samples.

Reference
1. Döhner H, Wei AH, Appelbaum FR, et al. Diagnosis and management of AML in adults: 2022 recommendations from an international expert panel on behalf of the ELN. *Blood*. 2022;140(12):1345-1377. doi:10.1182/blood.2022016867