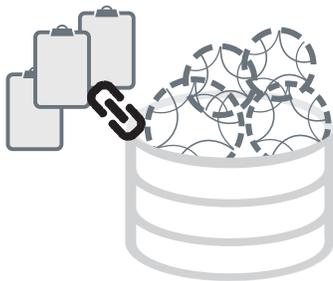


PROJECT GENIE

Genomics Evidence Neoplasia Information Exchange

AACR Project GENIE is an international, multiphase, multiyear project that provides the “critical mass” of genomic and clinical data necessary to improve clinical decision making and catalyze new clinical and translational research.



GENIE will aggregate existing and ongoing genotyping efforts from the **eight phase 1 project participants** into a single registry and link these data to select clinical outcomes. The data are publicly available at aacr.org/genie/data.

- Dana-Farber Cancer Institute
- Institut Gustave Roussy, France
- Memorial Sloan Kettering Cancer Center
- The Netherlands Cancer Institute on behalf of the Center for Personalized Cancer Treatment, The Netherlands
- Princess Margaret Cancer Centre, Canada
- Sidney Kimmel Comprehensive Cancer Center at Johns Hopkins, Baltimore, Maryland
- University of Texas MD Anderson Cancer Center
- Vanderbilt-Ingram Cancer Center

The GENIE registry is a tool that can be used in many ways:

To confirm or refute that mutation X or mutations X, Y, and Z predict patient response to drug A or that the patient’s disease is likely to do better or worse over time.



Drug B is approved for patients with mutation Y1. The GENIE registry indicates that patients with mutation Y2 can also be successfully treated with drug B.



Drug C is approved for lung cancer patients with mutation W. The GENIE registry indicates that many blood cancers, colorectal cancers, and stomach cancers also have mutation W.

- Novel disease-causing proteins could be identified and become new drug targets.
- Novel mutation signatures could be uncovered that predict drug sensitivity or patient outcomes.



New clinical trial(s) are opened to test drug C in blood, colorectal, and stomach cancers.



Enough blood, colorectal, or stomach cancer patients in the GENIE data set have already been treated with drug C, showing that it is an effective treatment for these patients.



The GENIE registry could provide the evidence necessary to support reimbursement for next-generation sequencing by payers, opening this technology to all patients.



Lessons learned from the assembly and operation of GENIE could benefit other global consortia and vice versa.

