The American Society of Clinical Oncology recognizes molecular profiling as the most significant cancer advancement of 2021. The technology identifies epigenetic profiles and molecular features of a disease, matching select targeted therapies to the patient.

The COVID-19 pandemic illustrated the cost-effective and mass production benefits of mRNA vaccines. The new vaccine technology will improve management and prevention of difficult-to-treat cancers.

CAR-T causes complete remission in the youngest patients with acute lymphoblastic leukemia.

The National Human Genome Research Institute and others begin to analyze cancer DNA to classify malignancies by tumor characteristics and molecular abnormalities.

A patient with prostate cancer undergoes the first robotically assisted radical prostatectomy.

This marks the first approval of an immunotherapy drug to fight cancer.

German physicist Wilhelm Rontgen creates first X-ray picture, and Marie Curie discovers radioactive element radium, making it the first radiation cancer therapy.