

HeLa cells

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In news— Recently, the chief of the World Health Organization honored the late Henrietta Lacks, a woman whose cancer cells were taken without her knowledge during the 1950s and ended up providing the foundation for vast scientific breakthroughs.

About HeLa cells-

- HeLa is an **immortal cell line used in scientific research.**
- It is the oldest and most commonly used human cell line.
- The line is **named after and derived from cervical cancer cells taken on February 8, 1951, from Henrietta Lacks, a 31-year-old African-American mother** of five, who died of cervical cancer in 1951.
- The tissue taken from her at Johns Hopkins Hospital in Baltimore provided the **first human cells to be successfully cloned.**
- **Cell biologist George Otto Gey had found that these cells could be kept alive** and developed a cell line.
- Previously, cells cultured from other human cells would only survive for a few days but the Cells from Lacks's tumor behaved differently.
- Reproduced infinitely ever since, HeLa cells have become a **cornerstone of modern medicine.**
- In addition to the HPV vaccine, HeLa cells allowed for development of the polio vaccine; drugs for HIV/AIDS, haemophilia, leukaemia, and Parkinson's disease.
- It provided breakthroughs in reproductive health, including in vitro fertilization; research on chromosomal conditions, cancer, gene mapping, and precision medicine; and are used in studies responding to the COVID-19 pandemic.
- The HeLa cells were **"foundational" in the development of**

human papillomavirus (HPV) vaccines, which can eliminate the cancer that took her life.