

(Duck It!) 23. Cancer cells also show loss of cell cycle controls and may divide without being checked. The story of HeLa cells is worth noting. What is their source? How old are they?

(TedEd Video) (Note that, unlike normal cells, HeLa cells are immortal!) **(Crash Course)**

HeLa cells are cervical cancer cells from a woman named Henrietta Lacks who died of cancer on October 4th, 1951 making these cells 70 years old

(The Tuskegee Study)

(p.229)24. What is *transformation*?

Transformation is the process that converts a normal cell to a cancer cell.

(p.229)25. What is *metastasis*?

Metastasis is the spread of cancer cells to locations distant from their original site.

(p.229)26. Distinguish between a *benign tumor* and a *malignant tumor*. **(hhmi - How Tumors Grow)**

Benign tumors remain at their original site and can often be removed by surgery. Malignant tumors often metastasize and become invasive enough to impair the function of one or more organs.

(Jim Valvano 1993 ESPY Speech)

(p.215) 27. List two specific cancer treatments, and briefly describe how each treatment works.

(1) Radiation - kills actively dividing cells

(2) Chemotherapy - toxic drugs that also kill actively dividing cells