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- 1957** Enzo Bonmassar, Carla Testorelli, Paola Franco, Abraham Goldin, and Gustavo Cudkowicz. Changes of the Immunogenic Properties of a Radiation-induced Mouse Lymphoma following Treatment with Antitumor Drugs.
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- \*1970** Naomi Rosenberg, Warren I. Schaeffer, and Leila Diamond. Isolation of Variant Cells from SV40-transformed Human Diploid Fibroblasts.
- 1975** Eric Y. H. Kuo, Henry J. Esber, D. Jane Taylor, and Arthur E. Bogden. Effects of Cancer Chemotherapeutic Agents on Endocrine Organs and Serum Levels of Estrogens, Progesterone, Prolactin, and Luteinizing Hormone.
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