

SUMMARY

The tumors induced *in vitro* by Earle have been successfully transplanted to guinea pigs and to mice of foreign strains. The ability to survive and to grow in animals of alien species identifies the tumors with the chemically induced and naturally occurring sarcomas, and adds further significance to their mode of origin.

The success of transfer of the tumors to unrelated mice varied with the strain or species of the donor, and an examination of this relationship suggested that the stromal component of the tumor was concerned in the variation.

REFERENCES

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Radio Isotopes from the Manhattan Project

A detailed announcement on the availability and procurement of pile-produced radioisotopes from the Manhattan Project appeared in the June 14 issue of *Science*. (103:697-705. 1946)

Tables are included giving pertinent data on the characteristics and the quantities that may be made available of approximately 100 isotopes and isotopic mixtures. For practical reasons isotopes with a half-life less than 12 hours are not considered for distribution. Most of the isotopes are produced by fission or (n, γ) processes. Only four isotopes are produced by the (n,p) process with sufficient yield for distribution. Other processes are either not sufficiently productive or do not occur.

The article emphasizes that (1) present piles were not designed for tracer and therapeutic isotope production, (2) waste plutonium process solutions are not a feasible source for separated fission isotopes, (3) routine production methods and facilities are not yet developed for most isotopes, (4) isotopes which can now be made available are only experimental lots resulting from research and development proceedings,

(5) technical problems involved in the irradiation and processing of essential materials has been and will continue to be responsible for the delay in making certain isotopes available by routine production.

Allocation and distribution will be effected on the basis of the general policies, as well as on recommendations regarding specific applications, made by well qualified advisory groups nominated for Manhattan District appointment by the National Academy of Sciences. Charges will be made for materials and services on the basis of "out-of-pocket" operational expenses to the Government necessitated by the non-project production and service program. Costs for construction or rental of major plant facilities and expenses of research and development on isotope production will be assumed by the Project.

All correspondence concerning radioisotope procurement should be addressed to the Isotopes Branch, Research Division, Manhattan District, P. O. Box E, Oak Ridge, Tennessee. Reference to the original article for pertinent details is recommended, however, before instituting inquiries or requests.