

ILZRO PROJECT SUMMARY

Issue Date:
August 1967

PROJECT NO. LH-113 TITLE Lead and Tumors of the Kidney in Rats

PREVIOUS IDENTIFICATION ULN-5 Lead and Tumors of the Kidney in Rats

CONTRACTOR none

CURRENT CONTRACT none

CUMULATIVE EXPENSES (to July 31, 1967) none

1968 PROPOSED OR CONTRACT PRICE \$10,000

1968 AUTHORIZATION

1967 & Prior Authorizations Uncommitted	\$5,000
1968 Proposed Authorization	none
Undesignated Research Authorization	none
1968 Proposed or Contract Price	\$10,000

ILZRO
\$5,000

TEL
\$5,000

TOTAL
\$10,000

MARKET APPLICATIONS Direct to gasoline additive, and indirectly to most other uses of lead.

OBJECTIVE To confirm or deny published reports of high incidence of kidney cancer in rats exposed to lead by ingestion.

RESEARCH REVIEW

1. Current Status This is a new program in the planning stage and a contractor has not yet been selected. We are attempting to obtain a single contractor for this project plus LH-112 and LH-114 to minimize costs.

2. Projected Research

a. Reproduce reported findings of the high incidence of kidney cancer in rats ingesting lead acetate.

b. Measure the lead concentration in the kidney.

c. In subsequent years, based upon the results of the above studies, try to resolve the following questions:

(1) Can the high incidence of renal tumors after feeding high concentrations of lead in the diet be reproduced in other animal species, as well as the rat?

(2) What effects result from high levels of porphyrins in the absence of high levels of lead?

3. Reports Issued

a. Progress Reports - not available

b. Technical - Relationship between lead and tumors of the kidney, received February 1966, circulated February 21, 1966.

c. Work Statement - none

DEVELOPMENT REVIEW

1. Pilot Production - not applicable

2. Consumer Evaluation - not applicable

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3. Licensing Activities - not applicable
4. Patents - not applicable
5. Publications
 - a. ILERO - none
 - b. Development associations - none

ECONOMIC INCENTIVE

1. Market Goals - Maintain world market.
2. Applications and Market Volume - Use as gasoline additive.
3. Size of Market Defending - 230,000 tons of lead in U.S. and 51,000 tons in Europe.
4. Competitive Threat - Change refining techniques to eliminate lead additives.