Contents

THIS ISSUE CONSISTS OF TWO PARTS. THIS IS PART 1

523 Anna Goldfeder. Host-Tumor Relationship: A Primary Factor in a Primary Standard. Guest Editorial

525 M. Abercrombie and E. J. Ambrose. The Surface Properties of Cancer Cells: A Review

549 M. L. Crossley, E. Kuh, and J. B. Allison. Structure and Carcinostatic Activity of Certain Ethylenephosphorimidines. II. Alkyl and Aralkyl Diethylenephosphorimidines

556 Jean Ferguson and Ann Wansbrough. Isolation and Long-Term Culture of Diploid Mammalian Cells Lines

563 G. B. Pierce, Jr., A. R. Midgley, Jr., and E. L. Verney. Therapy of Heterotransplanted Choriocarcinoma

568 Agneta Hägmark. Studies on Resistance against 5-Fluorouracil. II. Thymidylate Synthetase from Drug-resistant Tumor Lines

573 David Yaffe. The Distribution and in Vitro Propagation of an Agent Causing High Plasma Lactic Dehydrogenase Activity

581 E. Ann Burgess and B. Sylvén. Glucose, Lactate, and Lactic Dehydrogenase Activity in Normal Interstitial Fluid and That of Solid Mouse Tumors

589 James Winkelman. The Distribution of Tetraphenylporphinesulfonate in the Tumor-bearing Rat

597 S. A. Hoffman, K. E. Paschkis, D. A. DeBias, A. Cantarow, and T. L. Williams. The Influence of Exercise on the Growth of Transplanted Rat Tumors

600 Morris Friedkin, Elizabeth Crawford, Stewart R. Humphreys, and Abraham Goldin. The Association of Increased Dihydrofolate Reductase with Amethopterin Resistance in Mouse Leukemia

607 Morris Friedkin and Abraham Goldin. The Use of Dihydrofolate Reductase in Studies of Mixed Populations of Sensitive and Resistant Leukemic Cells

617 I. S. Johnson, P. J. Simpson, and J. C. Cline. Comparative Studies with Chemotherapeutic Agents in Biologically Diverse in Vitro Cell Systems

627 Felix D. Bertalanffy and Chosen Lau. Rates of Cell Division of Transplantable Malignant Rat Tumors

632 Leonard A. Sauer, Arlene P. Martin, and E. Stotz. Oxidative Phosphorylation in Ascites Tumor Mitochondria

637 Harris Buseh, Lubomir S. HaUica, Su-Chen Chien, Joseph R. Davis, and Charles W. Taylor. Isolation and Purification of R2P2-L, a Nuclear Protein Fraction of the Walker 256 Carcinosarcoma
