

SEER Residual Tissue Repository (RTR) Program

<http://seer.cancer.gov/biospecimen/>

Overview

The SEER Residual Tissue Repository (RTR) maintains tissue from three cancer registries: Iowa, Hawaii, and Los Angeles. Investigators may apply to use this population-based sample of all reported tumors.

The Residual Tissue Repository (RTR)

Table of Biospecimens by Site

The estimated number of RTR tumors is shown by cancer site and decade of diagnosis. These tumors may be supplemented by pathology laboratories in the registry catchment areas (Virtual Tissue Repository).

Cancer Site	1980-1989	1990-1999	2000-2007	Total 1980-2007
All Sites Combined	15,034	107,861	18,346	141,241
Brain and Other Nervous System	257	1,396	182	1,835
Breast	2,107	16,823	3,494	22,424
Cervix Uteri	364	2,269	221	2,854
Colon and Rectum	1,896	13,560	2,587	18,043
Corpus and Uterus, NOS	399	3,433	764	4,596
Esophagus	144	1,103	188	1,435
Kidney and Renal Pelvis	314	2,145	437	2,896
Leukemia	408	2,563	326	3,297
Liver and Intrahepatic Bile Duct	140	1,261	246	1,647
Lung and Bronchus	2,059	14,059	1,942	18,060
Melanoma of the Skin	293	2,371	546	3,210
Myeloma	168	1,166	154	1,488
Non-Hodgkin Lymphoma	539	4,417	748	5,704
Oral Cavity and Pharynx	428	2,619	469	3,516
Ovary	278	1,860	311	2,449
Pancreas	313	2,209	281	2,803
Prostate	1,662	14,570	2,194	18,426
Stomach	470	3,094	580	4,144
Thyroid	225	1,591	420	2,236
Urinary Bladder	748	4,325	756	5,829
All Other	1,822	11,027	1,500	14,349

SEER RTR Data Items

The SEER RTR population-based cancer registries collect data on all cancer cases in Hawaii, Iowa, and Los Angeles. Data include age, sex, race, and ethnicity; primary site, morphology, stage, laterality, and tumor sequence; first-course surgery and radiation therapy; survival time, vital status, and cause of death.

Ongoing Activities

Published and Current Studies by Cancer Site

Published and current studies using SEER RTR biospecimens by cancer site include studies of breast, colorectal, liver, lung, ovarian, pancreatic, prostate, thyroid, and HPV-related tumors (cervix, head and neck, anal, vulvar, penis), and lymphomas. Dr. William Anderson (NCI) received the NIH Director's Intramural Innovator Award for a project with Hawaii to examine molecular sub-types of breast malignancies.

Participating Institutions

SEER RTR biospecimens are currently being studied at the following institutions: Case Western Reserve University; Catalan Institute of Oncology, Barcelona, Spain; Centers for Disease Control and Prevention; Garvan Institute, Sydney, Australia; Mayo Clinic Cancer Center; Institute for Biomedical Research, Barcelona, Spain; Johns Hopkins University Medical School; NCI, Division of Cancer Epidemiology and Genetics; Robert Wood Johnson Medical School; University of Arkansas for Medical Sciences; The University of Chicago; University of Iowa; University of Hawaii; and University of Southern California.

Potential Uses of SEER RTR Biospecimens

Most SEER RTR biospecimens are formalin-fixed paraffin-embedded tissue blocks; however, other resources are also maintained, including tissue microarrays of pancreatic, breast, thyroid, testicular, ovarian, and colorectal tumors, as well as HIV-associated lymphomas and melanomas. The SEER RTR enables studies on rare cancers by drawing tumors from multiple registries and allows evaluation of sample bias relative to all cases and the general population of registry areas. The SEER RTR links tumors to high-quality SEER case data. Survival can be updated for de-identified SEER RTR cases under exemption from HIPAA informed consent rules.

Access to SEER RTR Biospecimens

Investigators interested in using RTR biospecimens are asked to submit a SEER RTR biospecimens application form (<http://seer.cancer.gov/biospecimen/application.html>) and brief summary of the proposed study to seer-rtr@imsweb.com.

More Information

Of more than 50 publications based on the SEER RTR tumors, the following reflect recent studies.

Selected References

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Contact Information

Sean Altekruze, D.V.M., Ph.D.

Epidemiologist

Division of Cancer Control and Population Sciences

Surveillance Research Program

Email: sean.alktekruse@nih.gov | Telephone: 301-402-5331