



THE NCI SEER PROGRAM'S RESIDUAL TISSUE REPOSITORY (RTR)



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Population-based Registries

- Hawaii
- Iowa
- Los Angeles

Background

- Biospecimens slated for destruction or held in trust
 - ▶ Obtained from Pathology laboratories
 - ▶ Formalin fixed paraffin imbedded blocks
- Population-based tumors from registry area
 - ▶ Not only research facilities
- Compare representativeness with registry
 - ▶ Assess bias

Accomplishments

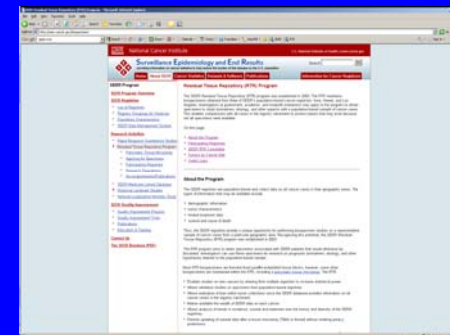
- Published cancer research:
 - ▶ Breast
 - ▶ Colorectal
 - ▶ Pancreatic
 - ▶ Lymphoma
 - ▶ Lung
- Current studies:
 - ▶ Breast
 - ▶ Prostate
 - ▶ Colorectal
 - ▶ Pancreatic
 - ▶ Lymphoma
 - ▶ HPV-related Tumors
 - ▶ Ovarian

Available Resources

- Tumor tissues by topography and morphology
 - ▶ Formalin fixed paraffin imbedded blocks
 - ▶ Tissue microarrays (TMA)
 - Pancreatic
 - Ovarian*
 - HIV-associated tumors*
 - * TMAs under construction
- Registry-specific TMAs available from
 - ▶ Hawaii
 - Breast
 - Colorectal
 - ▶ Los Angeles
 - Melanoma
 - Testicular
 - Thyroid

Visit the RTR Website

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



Case Attributes

- Racially/ ethnically diverse populations
 - ▶ White, Black, Asian, Pacific Islander
 - ▶ Hispanic
- Data for registry cases include
 - ▶ Age, Sex, Race, Ethnicity
 - ▶ Primary Site, Morphology
 - ▶ Stage, Laterality
 - ▶ Tumor Sequence Number
 - ▶ First-Course Therapy
 - ▶ Vital status
 - Outcome
 - Cause of Death

Goals

- Use of RTR biospecimens for
 - ▶ Population-based studies
 - ▶ Research on rare cancers

How to Request Specimens

- Tissues available via an application process
- Priority given to population-based studies
- Send request to seer-rttr@imsweb.com
- One to two page summary
 - ▶ Include ICD-O-3 site and morphology codes
 - ▶ Describe objectives, methods, funding
- RTR will assess if matching resources exist

Query the RTR

- Complete request form on the RTR website
- Submit to seer-rttr@imsweb.com

Selected Publications

1. Anderson WF et al. Human egf-2 and estrogen receptor expression: a demonstration project using the SEER residual tissue repository. *Breast Cancer Res Treat* 2008.
2. Glaser SL et al. Racial/ethnic variation in EBV-positive classical Hodgkin lymphoma in California populations. *Int J Cancer* 2008;123:1499-507.
3. Goodman MT et al. Tissues from population-based cancer registries: a novel approach to increasing research potential. *Hum Pathol* 2005;36:812-20.
4. Hernandez BY et al. CK20 and CK7 protein expression in colorectal cancer: Demonstration of the utility of a population-based tissue microarray. *Hum Pathol* 2005;36:275-81.
5. Lynch CF et al. Procurement of population-based cancer tissue in Iowa. *Mod Pathol* 1999;12:422-26.
6. Takikita M et al. Associations between Selected Biomarkers and Prognosis In A Population-Based Pancreatic Cancer Tissue Microarray. *Cancer Research*. 2009. 69:2950-5.
7. Thyagarajan B et al. New approaches for genotyping paraffin wax embedded breast tissue from patients with cancer: the Iowa women's health study. *J Clin Pathol* 2005;58:955-61.
8. Thyagarajan B et al. No association between XRCC1 and XRCC3 gene polymorphisms and breast cancer risk: Iowa Women's Health Study. *Cancer Detect Prev* 2006;30:313-21.
9. Tsou JA et al. Identification of sensitive and specific DNA methylation markers for lung adenocarcinoma. *Mol Cancer* 2007 Oct 29;6:70.
10. Wang SS et al. Chromosomal aberrations in peripheral blood lymphocytes and risk for non-Hodgkin lymphoma. *Natl Cancer Inst Monogr* 2008;39:78-82.
11. Chang CM et al. A case-control study of tobacco use and other non-occupational risk factors for lymphoma subtypes defined by t(14;18) translocations and bcl-2 expression. *Cancer Causes Control* 2010 Mar 16.
12. Chang CM et al. Non-Hodgkin Lymphoma (NHL) subtypes defined by common translocations: Utility of fluorescence in situ hybridization (FISH) in a case-control study. *Leukemia Research* 2010;34:190-195.

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