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SEER VIRTUAL TISSUE REPOSITORY INITIATIVE: CURRENT STATUS AND FUTURE GOALS**V Petkov**¹, A Van Dyke¹, S Hussey¹, A Wang¹, S Friedman¹, L Penberthy¹¹National Cancer Institute, Rockville, MD, United States

Background: Several SEER registries participate in research involving collection and use of biospecimens from community pathology laboratories. Building on this experience, SEER is in the process of establishing a Virtual Tissue Repository (VTR) Program, which will enable researchers to search de-identified SEER abstracts and pathology reports to select tumors for which SEER registries will provide the specimens and additional clinical data if needed.

Methods: To assess best practices, barriers, and overall feasibility, we initiated a VTR pilot study in 7 SEER registries. Information about sharing specimen for research was collected from pathology laboratories located in the registries' catchment areas. Two matched case-case studies were designed comparing patients with unusual and typical survival in early stage breast cancer (BC) and pancreatic ductal adenocarcinoma (PDAC). Specimens will be collected and shipped to a central molecular laboratory for tumor sequencing (Whole Genome/Exome and RNA). Detailed clinical information was abstracted for cases with available tissue. Diagnostic slides were digitized, and the images were transmitted to a central facility for digital pathology research.

Results: Pathology laboratories differed substantially on most of the examined parameters, not only between states but within a single state. The PDAC study included 261 survivors of > 5y and 522 patients that died < 2y. The BC study had 539 cases that died < 30 mos and 1,078 cases that survived > 5y. Due to higher than expected attrition rates, both studies required amendments to add more recent cases. Specimen attrition rates varied among registries (10% to 90%).

Conclusion: Our experience suggests that it is feasible to scale the VTR. The goal of the VTR pilot is to provide access to clinical and genomic data to the researchers. Plans on addressing the updated Common Rule and NIH Genomic Data Sharing policy need to be developed to allow sharing of data collected in the scaled VTR Program.

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REQUESTING DIAGNOSTIC TISSUE SPECIMENS AT THE REGISTRY LEVEL**C Lefante**^{1,2}, E Peters^{1,2}, X Wu^{1,2}¹Louisiana Tumor Registry, New Orleans, LA, United States; ²Louisiana State University Health Sciences Center; School of Public Health, New Orleans, LA, United States

Background: The Louisiana Tumor Registry (LTR) sought to enhance its ability to support biospecimen research by facilitating tissue procurement of diagnostic specimens from pathology laboratories (path labs). Current participation in NIH and CDC funded projects motivated the LTR to establish best practice guidelines for working with pathology labs throughout the State of Louisiana.

Purpose: To streamline and improve tissue specimen acquisition at the central cancer registry level.

Approach: LTR participates in the NCI-SEER's Virtual Tissue Repository and the CDC's HPV Typing 2 study, both requiring the collection of diagnostic specimens. E-path reporting was used to identify cases and locate the owner of paraffin-embedded tissue samples, which can be separate from the location of the diagnosing physician and facility. The characteristics of path labs influenced our approach. We looked at large vs. small labs as well as the independent vs. hospital based.

Results: The initial request was met with challenges, including specimen storage time limits by lab, the number of sections a lab was willing to take from a single block, and demand for compensation for their time spent completing our request. Providing the labs adequate time to retrieve samples, timely payment, and eliminating delays in returning specimens were key to maintaining a positive working relationship with labs. With the HPV Typing 2 study, 12 of 15 labs contacted over a 10-month period provided the requested specimens by December 2017 with a 13th lab promising samples in January 2018. Thus, 86% of contacted labs responded favorably in a relatively limited amount of time.

Implications: In spite of the challenges, this undertaking has tremendous value to the LTR including enhancing our ability to support population-based biospecimen research, education and outreach on the existence and importance of cancer registries, and expanding the working relationship with pathology laboratories, and biobanks.