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**PROBLEM:** Searching human samples across biobanks is a hard task due to the geographically dispersed biobanks distribution, the diagnosis heterogeneity, language diversity, and the lack of online accessible robust samples catalogues.

**SOLUTION:** A new web-based approach to provide a virtual view across multiple sites is desirable. The BIOPOOL consortium (www.biopoolproject.eu; 7PM EC; (GA296162)) has developed an innovative web search to look for samples located at different biobanks.

**METHODOLOGY:**
- Digital images from colon, breast, and lung cancer were processed.
- 11 pathologists participate actively with IT developers.

**OBTAINED RESULTS:** Relevant visual descriptors were identified, coded, and extracted automatically from the images in order to be included in the searching tool and retrieved later in the case it matches the query.

**FINAL RESULT:** A first prototype based on histological image data and associated clinical data of colon, breast, and lung cancer has been developed.

**3 STEPS SOLUTION**

1. Get access to the platform
2. Perform query base on text or image
3. Select and request the sample

**CONCLUSION:**

BIOPOOL network, as a new concept for sample search and request, is now open to biobanks and pathology departments to bring together, in a European scale, a research infrastructure that could help significantly to conduct research through the synergy of medical knowledge and technology.