

Reproduced with permission from Medical Research Law & Policy Report, 16 MRLR 08, 04/19/2017. Copyright © 2017 by The Bureau of National Affairs, Inc. (800-372-1033) <http://www.bna.com>

**Biological Materials**

**Using Biospecimens Collected Abroad in Future Research: Key Considerations**



HALEY BAVASI, LESLIE THORNTON, DAVID PELOQUIN  
AND MARK BARNES

**C**linical research is an increasingly cross-national endeavor as research sponsors seek regulatory approval in multiple national markets, some of which require, as a precondition for marketing approval, that at least some trials be conducted locally. In addition, ex-United States (“U.S.”) and ex-European Union (“E.U.”) settings offer the possibility of enrolling large numbers of treatment-naïve and research naïve-patients, often leading to rapid trial initiation and completion. With this shift in research activities, U.S.-based life sciences companies must understand local regulatory requirements with respect to navigating pri-

*Haley Bavasi, Leslie Thornton, David Peloquin and Mark Barnes are attorneys with Ropes & Gray LLP.*

vacy and data security laws, obtaining the informed consent of research subjects, and securing research ethics committee review prior to beginning a clinical trial.

These legal issues have more subtle implications when companies contemplate *future* research uses of biospecimens collected in a given clinical trial, which uses may be limited depending on the laws of the jurisdiction in which the biospecimens are collected. The exportation of biospecimens out of the country of collection for storage or performance of the future research activities also can raise legal complications.

In this brief overview, we discuss key legal issues that must be considered when a U.S.-based company designs an international trial involving collecting and retaining biospecimens for future research, or when such a company considers how it may use biospecimens that already have been collected. We also provide selected highlights of these considerations for the use of biospecimens collected in the course of research conducted in China, Russia and the United Kingdom (“U.K.”).

**1. Key Considerations** When designing a clinical trial, or determining whether biospecimens collected in a previous trial may be used in future research, three types of laws generally need to be considered: (1) laws governing informed consent for future research use of biospecimens collected in the course of research involving human subjects; (2) laws regulating the conduct of genetic tests and/or the acquisition of genetic information; and (3) laws regulating the confidentiality of medical information and data protection laws.

#### *Informed Consent*

Under the recently revised Common Rule, *i.e.*, the set of federal regulations governing clinical research involving human subjects conducted or supported by the U.S. government (*see* 45 C.F.R. part 46), researchers may obtain broad consent with respect to the storage, maintenance and secondary research use of identifiable private information and identifiable biospecimens. However, when biospecimens are collected from research sites outside of the U.S., the legal/ethical framework of the jurisdiction in which the sample is collected must be considered with respect to informed consent—in particular, how biospecimens gathered in the course of the research may be used in future research that may not be defined in the informed consent document signed by the subject. While the U.S. permits the obtaining of broad consent for future use, other countries require *specific* informed consent for such future use. Therefore, in cases in which future use is not contemplated in an informed consent document, researchers must determine whether an individual has consented to research that is separate—whether temporally, topically or both—from the original research to which the subject expressly consented. In addition to requiring specific consent to future research, jurisdiction-specific laws and regulations may require that the subject consent to the necessary storage/retention of the sample itself for a period of time following completion of the original study, and that the sample be destroyed if such consent has not been obtained.

#### *Genetic Testing*

As genetic testing becomes more advanced and ubiquitous in science and medicine, so do the laws regulating conduct of genetic testing and acquisition of genetic information therefrom. Although genetic testing done in “bench research” may not yield clinical information that typically would be disclosed to subjects, the genetic testing laws in ex-U.S. countries that regulate genetic testing in the clinical context could apply nonetheless—particularly with respect to consent and privacy. Because future research often involves genetic testing, such country-specific laws may cause additional hurdles to utilizing biospecimens collected in the course of research.

#### *Confidentiality and Data Protection Laws*

The interplay between confidentiality and data protection laws, consent and future research also is of importance. Country-specific data privacy laws—particularly those in the E.U., where it soon will be required to follow the General Data Protection Regulation—often apply to “health information” or “personal information,” both of which generally would encompass the results of a genetic test that is run using a biospecimen collected in the course of future research. These laws often require the entity processing the information to have obtained the express consent of

the individual whose data are being processed. While a biospecimen itself is not “information,” the resulting data generally would be subject to these types of regulations, which may give individuals a right to request access to the information, place restrictions on the data processor’s ability to share the information with third parties and impose requirements for retention and/or destruction of the data.

Certain privacy laws restrict the *export* of data outside the jurisdiction in which the data are collected, especially when the information is flowing to a country that is considered to have “inadequate” privacy protections relative to the exporting jurisdiction. When exporting biospecimens, companies and research institutions should consider whether the receiving country is a permissible recipient under the regulations of the originating country. In addition to restrictions regarding the flow of data, countries also may impose restrictions on the export of biological material, such as customs import/export controls.

## **2. Ex-U.S. Examples: China, Russia and the U.K.**

### **China**

Under China’s Human Genetic Resources (“HGR”) Guidelines, research sponsored by foreign firms in connection with Chinese-derived HGRs must take the form of international collaboration projects with a Chinese partner, which may be subject to the prior approval of the HGR Administrative Office (*see* Interim Measures for the Administration of Human Genetic Resources (the “HGR Measures”), Guidelines for Administrative Approvals for Sampling, Collecting, Trading and Exporting of Human Genetic Resources and *Regulations on the Administration of HGRs*, which were released in draft form for public comment in 2016). Under the HGR Measures, HGRs are defined as genetic materials such as human organs, tissues, cells, blood and preparations of any type or recombinant DNA constructs, which contain human genome, genes or gene products as well as the information related to such genetic materials. International collaboration projects also must meet the following requirements, as relevant to this analysis: (a) have clear research purposes and objectives; (b) obtain the approval of ethics committees of the local collaborator, and the informed consent of HGR donors; and (c) be re-executed or otherwise obtained again in order to re-use specimens for new research programs. Based on these requirements, it is unlikely that informed consent documentation that does not specify anything regarding future research would be able to satisfy the HGR Guidelines if a company or research institution desires to use biospecimens collected in past studies for future research.

China also has strict regulations with respect to data access: Sponsors of research generally are allowed to access only the anonymized study data transcribed by investigators in the form of case report forms. The source data and records are maintained and used by the treating physicians exclusively (*see* China’s Regulations for the Administration of Medical Records). Finally, current regulations are silent as to export and retention of biospecimens collected in the course of clinical research after the research is concluded; however, the draft Regulations on the Administration of HGRs provide that: (1) the Chinese collaborator may establish a biobank to store specimens for research purposes, and (2) any export of biospecimens collected from Chinese

subjects must be first approved by certain Chinese officials and approved and released by customs.

#### **Russia**

Russia's Circulation of Medicines Law and Good Clinical Practice ("GCP") Rules govern pharmaceutical development, including informed consent requirements for clinical trials. These require, among other things, that subjects be informed of the "purpose" of the clinical trial (see Federal Law of April 12, 2010 on Circulation of Medicines No. 61-FZ; Order No. 200n of April 1, 2016 of the Ministry of Health). Thus, if no consent to future use of biospecimens is specified (even in broad form), it would be difficult to find that this requirement has been met with respect to future research.

Russia's Data Protection Law requires subjects to provide consent to the processing of their data, including use of samples when those samples are held with associated data. Consent must include the purpose for the processing of the data, a list of personal data to which the subject is giving consent for future use, and a list of consented-to actions with respect to the personal data (see Federal Law of the Russian Federation No. 152-FZ on Personal Data (2006)). The Data Protection Law also limits the processing of personal data to the achievement of specific, pre-defined and legitimate objectives, and requires that the content and scope of the processing comply with stated objectives. Under this law, there is no exception for processing that is for the purpose of research, even if such data are anonymized. Given the highly specific nature of the consent requirements under the Data Protection Law, informed consent documentation that does not discuss future research likely would not meet these requirements.

There is some ambiguity as to whether genetic testing on samples collected within Russia may be processed outside of Russia, as Russia temporarily banned the export of human tissue in 2007 (see Russian clinical research is threatened by ban on export of samples, NIH.gov (June 16, 2007)). Today, as a member of the Eurasian Economic Commission (the "EEC"), Russia restricts, but does not entirely ban, the export of human materials (see Federal Customs Service, Customs.RU). The current restriction includes an exception for "human biological material samples," defined as cell samples, tissue, human body fluids, secretions, excreta, physiological and pathological secretions, swabs, scrapings and swabs used for *diagnostic and research purposes*, intended for external quality control studies or *received in the course of biomedical and (or) clinical trials*. A letter from the Russian Federal Customs Service confirms that the aforementioned restrictive regime does not apply to the import/export of tissues and other biological materials for diagnostic and research purposes or obtained in the course of biomedical re-

search (see Federal Customs Service Letter dated May 5, 2011, No. 01-19). However, given the past ambiguity, companies should monitor carefully any developments as to the export of biospecimens from Russia.

#### **U.K.**

U.K. law provides that samples may be used in future research despite the absence of express consent for such future research if the data are anonymized and the research has been approved by the National Health Services Research Ethics Council (see Human Tissue Act of 2004 (the "HTA")). Samples to be used in research are "anonymous" if the researcher is not in possession, or is not likely to come into possession, of information from which the person whose body the material has come can be identified. However, this does not mean samples must be permanently delinked; rather, guidance from the U.K. Medical Research Council suggests that "coding is a good way to meet these requirements" (see U.K. Medical Research Council Consent Summary).

Finally, the U.K.'s Data Protection Act provides certain rules for the international transfer of personal information outside of the E.U. Transfer of personal data to non-E.U. entities may only be carried out if the receiving state has an adequate level of protection for such data. Countries within the European Economic Area are deemed to have an adequate level of data protection, as well as a handful of other countries outside the E.U., although the U.S. is not among them. However, the U.K., like other E.U. member state jurisdictions, has a general exception to this requirement if the subject has given unambiguous consent to the transfer of personal data outside of the E.U. Therefore, any transfer of samples from the U.K. to the U.S. must be with the consent of the subject or have a separate basis of authority for transfer, such as E.U. Standard Contractual Clauses and Binding Corporate Rules, and eventually the July 12, 2016, E.U.-U.S. Data Privacy Shield.

**3. Conclusion** Keeping abreast of national regulatory requirements can enable U.S.-based life sciences companies to consider proactively these requirements when drafting informed consent documents and thus enable maximum uses of biospecimens in future research. On the other hand, when considering using, for additional research, biospecimens that already were collected in the course of a clinical trial, life sciences companies should consider what impediments these legal regimes—as well as the terms of the informed consent documents under which the specimens were collected—may pose for the future research use and exportation of the biospecimens into other national jurisdictions.