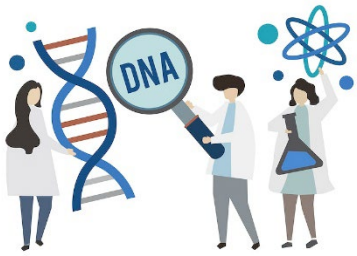
IRB Tip Sheet: Secondary Genomic Findings



What are secondary genomic findings?

A secondary genomic finding refers to a genomic variant, found through the analysis of a person's genome, that is of potential medical value yet is unrelated to the initial reason for examining the person's genome.

What type of genetic analysis can produce data that would include secondary genomic findings?

Genome sequencing and exome sequencing, also referred to as whole genome/exome sequencing. *Not included are SNP analysis, targeted gene sequencing, gene expression arrays, RNA sequencing, microbiome or virome sequencing.*

When doing genomic analyses, what secondary findings must investigators seek to discover and report to subjects?

Any genes included in the list from the American Council of Medical Genetics and Genomics (ACMG) at the time of analysis. Other clinically actionable genes may be included as long as they are accepted by the expert community as actionable. These additional genes should be described in the written protocol.

New OHSRP Guidance for the return of secondary genomic findings to subjects available on IRBO website:

- Applies to new NIH IRP clinical protocols that were *submitted* to an IRB as of October 1, 2022.
- For prior protocols, this guidance only applies if the investigator wishes to modify their already approved protocol to include new genomic sequencing or to allow for the return of secondary genomic findings .

Role of the IRB

- Investigators performing genomic analysis that can feasibly be interrogated for secondary findings must describe a plan for the management of such findings within the protocol and consent.
- The IRB needs to determine if that proposed plan regarding secondary genomic findings is both appropriate and adequate.

Points for IRB Consideration

- The IRB needs to consider the level of the relationship that the research team has with the subjects to determine if there is an ethical obligation for secondary genomic findings to be returned.

Secondary Genomic Findings may be required to be communicated to subjects	Secondary Genomic Findings may not need to be communicated to subjects
The research team has ongoing relationships with the research subjects	The research team does not engage with subjects
Secondary findings could have a major impact on a subject such as with a rare disease study	The research team only sees the subject one time and no clinical information is expected to be collected
Community-based participatory research where the research team is directly engaged in the community	The protocol is collecting samples for a future analysis that will not occur for many years

- If the investigator does not plan to return genomic findings, they must provide a strong justification as to why.
- The informed consent document should clearly state the expected time frame in which the genetic analysis is planned to be completed and when subject notification will occur afterwards.
- Investigators are not obligated to return negative results, however, that should be clearly explained in the consent document.
- The default stance at the NIH IRP is that actionable secondary findings will be returned to subjects. The subject may choose to opt out of receiving the results, but that conversation will happen at the time the finding is discovered and not as a part of the consent documentation.
- Any results returned to an individual subject need to be from an analysis conducted by a CLIA certified laboratory. Results obtained in a CLIA certified laboratory will become part of the medical record and will then fall under the Genetic Information Nondiscrimination Act (GINA).

There is suggested language for the investigators in both the IRBO provided protocol template and consent library.
Additional Presentation: NIH IRB Expectations for Returning Secondary Genomic Findings to Research Participants