

ARUP LABORATORIES

ARUP Laboratories Reduces Turnaround Time on Panel Analysis by 30% with GenomOncology

OVERVIEW

ARUP Laboratories (ARUP) is committed to improving patient care by providing advanced, guideline-appropriate testing in order to streamline patient diagnosis and treatment. As a CAP-, ISO 15189-, and CLIA-certified diagnostic lab with more than 35 years of experience, ARUP is at the foreground of diagnostic medicine.

THE PROBLEM

ARUP provides a substantial range of molecular oncology testing and pathology services to enhance patient care. However, regularly updating and unifying all of the diverse data sources needed for genomic interpretation is an extensive and time-consuming process. In order to strengthen their testing and analysis offerings, ARUP needed a solution that included the latest genomic annotation sources and created more efficiencies within their analysis processes and systems.



“GenomOncology’s Precision Oncology API Suite has allowed us to offload a significant fraction of work, saving our team a lot of time and energy. Clinical Variant Scientists no longer need to pull annotation information directly from multiple sources as all of this information is compiled into one place by GO and ARUP’s biocomputing team,”

- Steven Friedman, Clinical Variant Scientist, Supervisor NYQ.

THE SOLUTION

After reviewing various precision oncology software solutions, ARUP decided to implement GenomOncology's Precision Oncology API Suite. ARUP selected GenomOncology's Precision Oncology API Suite due to its flexibility, ability to be easily integrated within their current workflows and processes, and the depth of annotation sources within the solution.

To even further expand the annotation sources accessible within the solution, GenomOncology also updated the base annotations available within the Precision Oncology API Suite at ARUP's request. GenomOncology added the HGMD, MitoMap, OMIM, HPO generated gene lists, gnomAD, NHLBI GO Exome Sequencing Project, and Revel data sets, which enabled the ARUP team to accurately annotate long lists of genomic variants automatically.

RESULTS



Turnaround time on panel analysis and variant annotation databasing has reduced by nearly 30%, enabling the Clinical Variant Scientist team to analyze more cases and spend less time documenting variant classification information.



Reduced time creating diverse annotation data sources, enabling bioinformaticians to spend more time improving workflows and expanding their already implemented 100 germline and somatic panels.

ONGOING IMPROVEMENTS

In 2021, ARUP will extend the usage of the Precision Oncology API Suite by integrating the GO Clinical Trial and Therapy APIs into their current workflows in an effort to continuously strengthen their patient care offerings. The GO Clinical Trial and Therapy APIs will enable ARUP to match patients to relevant clinical trials and approved therapies based on the combination of variant interpretation and disease information. By utilizing these additional APIs available within the Precision Oncology API Suite, ARUP will continue to evolve the value they offer their customers by providing clinicians an expanded list of patient treatment options to streamline treatment matching.