

# Celemics Clinical Interpretation Service

Celemics provides robust clinical interpretation services through Strand pipeline that combines bioinformatics algorithms, public data from external sources/knowledge databases, visualization interfaces and reporting capabilities, enabling the user to analyze the NGS data and generate clinical report from Celemics panels, for individual samples.

Customers who use NGS but may have limited access of bioinformatics pipeline and server still need a quick and clear result interpretation.

Celemics provides Strand knowledgebase that enables fast and reliable reporting of actionable information.

## Emerging precision medicine and the importance of clinical interpretation

Cancer has been treated traditionally using general approaches such as chemotherapy, surgical excision, and radiation. Although these treatments often harm noncancerous tissues and organs and have different efficacies depending on the individuals, the precision medicine allows for treatments tailored to specific gene mutations and personal factors. To validate the efficiency of a cancer treatment drug or to identify the most effective drugs for a specific patient's disease, accurate and reliable clinical interpretation is necessitated with the given patient's genome information.

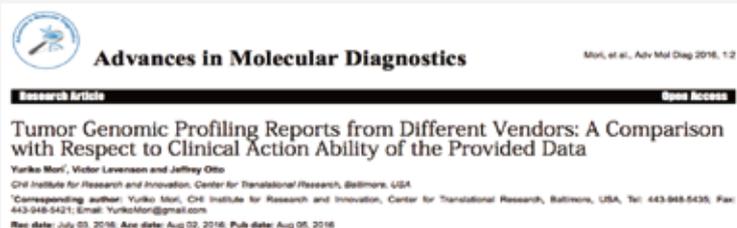
## Strand Knowledgebase

- Comprehensive coverage of genes, variants and drugs, extending well beyond guideline level variants thus useful for large panel testing and clinical trial recommendations
- Variants annotated with functional significance and AMP Tiers Clinical practice guidelines incorporated into therapy and evidence annotations
- Additional layer of sophisticated rule sets to take into account variant combinations, important in various cases, for example resistance scenarios

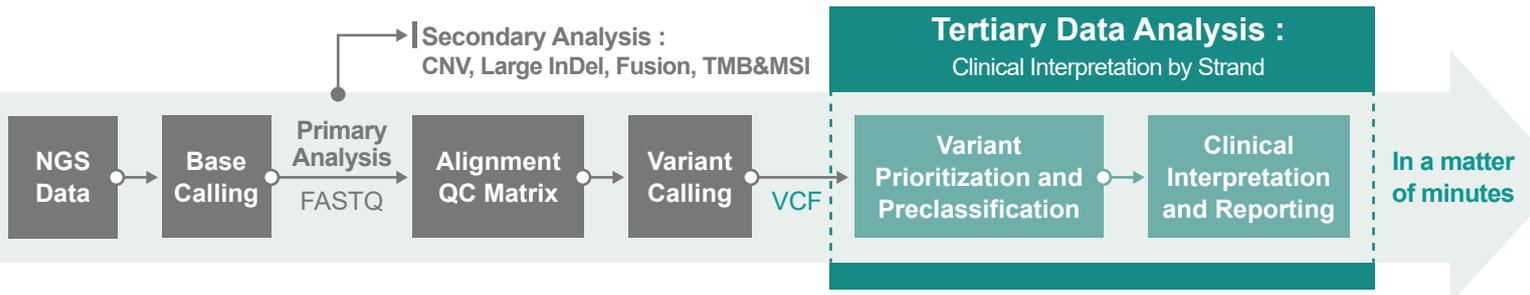
## High-Quality Variant Interpretation

**“Report formats of Foundation One and Strand Advantage were the most comprehensive with statement of drug FDA approval status, clinical trial description, and references to supporting literature”**

*CHI Institute of Research & Innovation, Center for Translational Research, Baltimore, USA*



## Celemics Analysis Service (CAS) Workflow



## Clinical Interpretation Report Example



### Drug Response

Therapy	Tested Marker(s)	Relevant Marker(s)	Likelihood of Response**
Alectinib	ALK	ALK <sup>trans</sup>	Enhanced
Brigatinib	ALK	ALK <sup>trans</sup>	Enhanced
Crizotinib	ALK, MET, ROS1	ALK <sup>trans</sup>	Enhanced
Ceritinib	ALK, ROS1	ALK <sup>trans</sup>	Enhanced
Lorlatinib	ALK, ROS1	ALK <sup>trans</sup>	Enhanced

Enhanced Response - Better than standard population response due to the presence or absence of specific markers.  
 Limited - Enhanced Response - Better than standard population response mitigated by the presence of conflicting markers.  
 Standard Response - Expected response similar to the typical population response for the specific therapy.  
 Reduced Response - Likely reduced response compared to the standard population response due to the presence of specific markers.  
 Poor Response - Likely poorer than the standard population response due to the presence of specific markers.

- Identification of clinically relevant mutations and quick reporting on their therapeutic implications
- Standard-of-Care and investigational therapy recommendations
- Tissue specific information
- Can handle custom gene lists with uncommon genes
- Two-step curation and manual review

## Strand Life Sciences

- Over 100 PhDs, physicians and pathologists from the best institutions worldwide
- ~800 employees, an interdisciplinary team of pathologists, scientists and engineers
- Cited in more than 24,000 peer-reviewed publications
- >10,000 clinical reports (in last 5 years)
- ~20 high quality laboratories across India
- India's first and only CAP & NABL (ISO15189) accredited, first company to launch a CLIA certified genomics lab in the US

### Contact us

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