1. Project title: **Genomic Report and Data Interoperability with Epic**
2. Submitter's name, title, and contact information

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3. Names of project leader(s) and team members

Willy Bansi, David Vaillancourt, Scott Nathanson, Marvin Asercion, Paul Robbins

4. A simple short statement (even just one sentence) summarizing what the project does

UC Davis Health built a context aware link in Epic giving providers access to discrete data generated from genomic reports provided by Foundation Health with live link access to clinical trial information embedded in the report.

5. A project narrative that:

- Describes the problem being solved and the project goals

Genomic reports are delivered to UC Davis Health by mail, fax or by hand and then are scanned into the EHR and placed in the media tab with other scanned documents. The project goal is to take those scanned documents and create a dynamic frame of discrete data and links in context in the patient's chart with access to information provided by the genomic reporting agency and allow real time access and retrieval of those reports.

- Emphasize the solution and innovation, rather than technical detail

This is an embedded link in Epic, which will render the Genomics data placed in an external data storage. The connection leverages a FHIR API along with Single Sign On (SSO) technology. SSO is used to authentication users between the two systems, and FHIR Resources are used to pass the Patient and Provider information between Epic and Healthshare. The Embedded viewer GUI (Graphical Unit Interface) mimics Epic's and gives the user an experience that they never left Epic.

- Tell how the solution has impacted customers/users

Providers and Genetic Counselors were spending time looking for scanned reports in Epic's media tab and finding reports were difficult due to the number of scanned documents found there. The integration saves them time as they can easily locate patient reports. The embedded integration adds interactivity and search capability. Providers can search for key words and it gives them the ability to quickly narrow down available clinical trials based on study locations, Genes Types or Bio Markers. The report includes links that take providers to the ClinicalTrials.gov site to get more detail on the specifics of the research study.

- Explains how project success was measured
    - Budget & Project Schedule: We were on Budget and Project went live on schedule
    - Customer Satisfaction: Gathered requirements from our customers to make sure all the deliverables were met
    - Reporting: All transactions and activities are being logged and reports are in place showing the user activities.
    - Team Satisfaction: As we were developing a new capability and provided team members an opportunity to innovate, all team members were enthusiastic and engaged and their productivity showed the results
    - Quality of work: We had stakeholders who were able to perform quality audits to make sure their requirements were met.

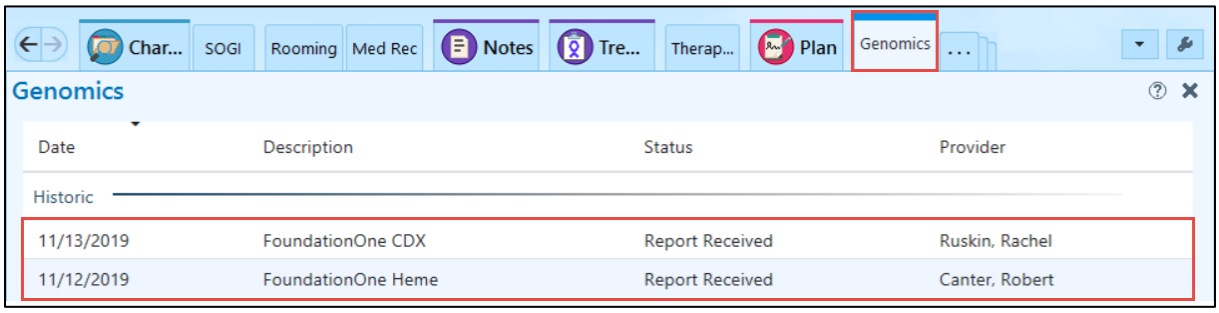
- Highlighted collaboration with other locations, departments, or teams
    - Multiple Teams were involved in the collaboration – Systems Integration, Epic Applications, Cancer Center Providers, Infrastructure Team, Foundation Medicine and our vendors (J2 and InterSystems).

- Timeframe of deployment
    - This project took roughly 4 months from start to finish.

- Describe the technology utilized
    - This integration uses Web Services, FHIR with oAuth, Single Sign On as well as the Epic Interconnect and InterSystems Healthshare platform.

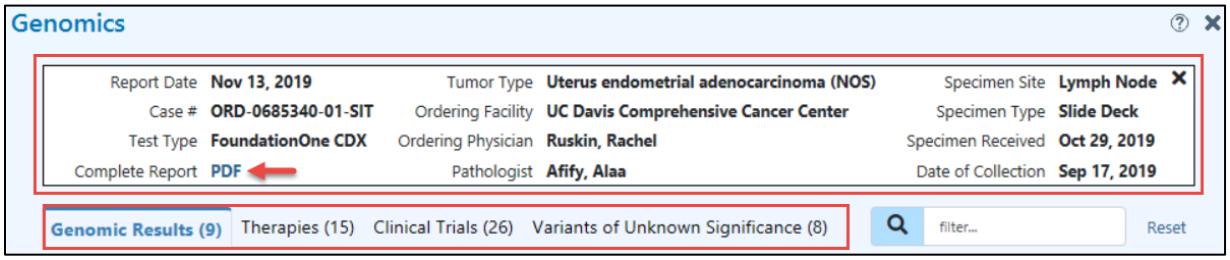
- Optional: Relevant screenshots

The **Genomics Results** activity opens the **Genomics** tab. Available result reports are listed. Double-click the report link to open the desired report.

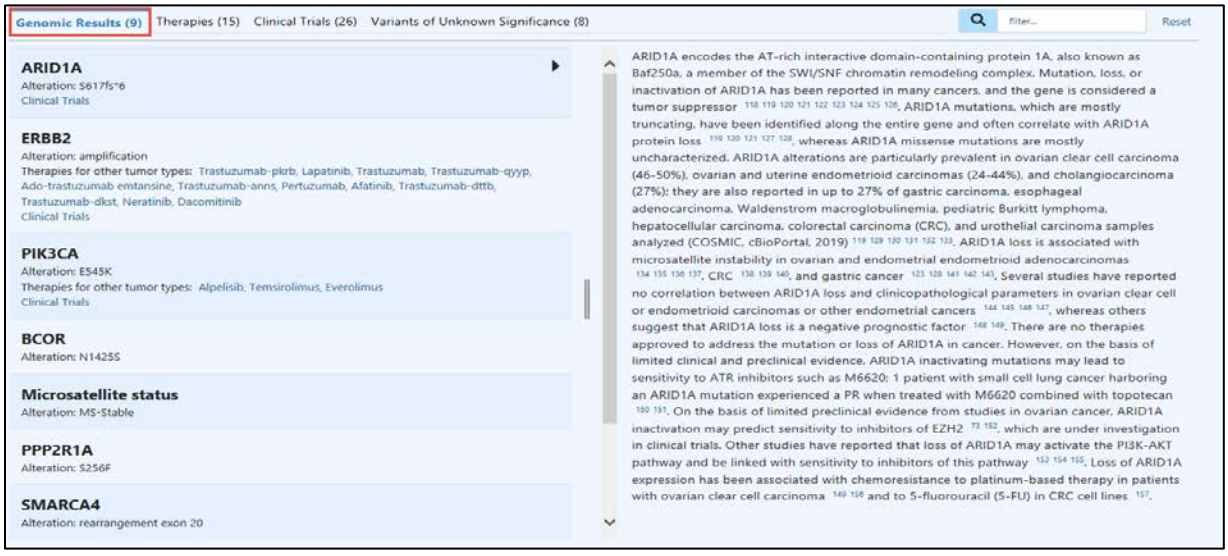


At the top of the report, the header provides information about the test.

- Click the PDF hyperlink to view the Complete Report. The PDF report was previously viewed when scanned to the Chart Review Media tab.
- Click through the tabs to access the sections of the report for **Genomic Results**, **Therapies**, **Clinical Trials**, and **Variants of Unknown Significance**.

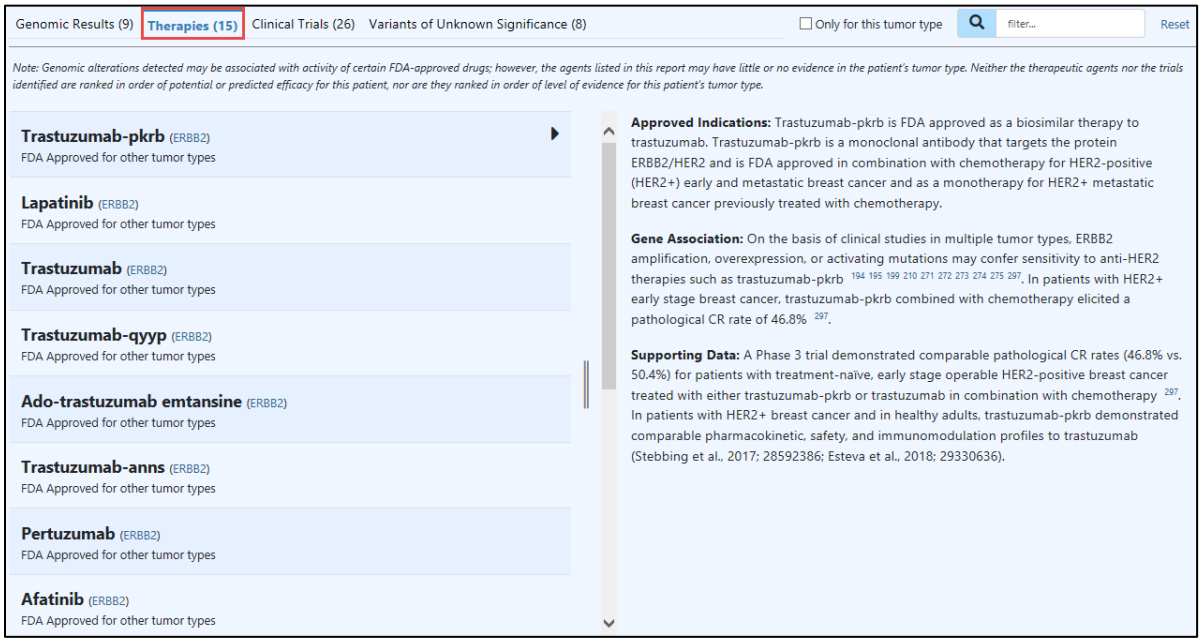


View Genomic Results:



Genomic Results Tab

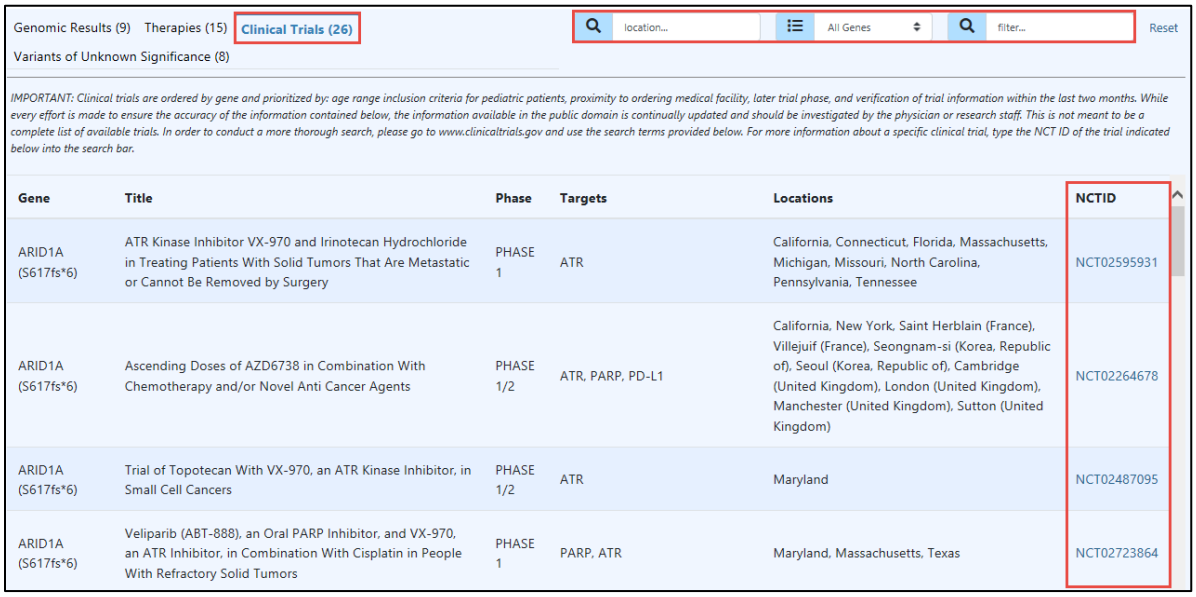
View Therapies:



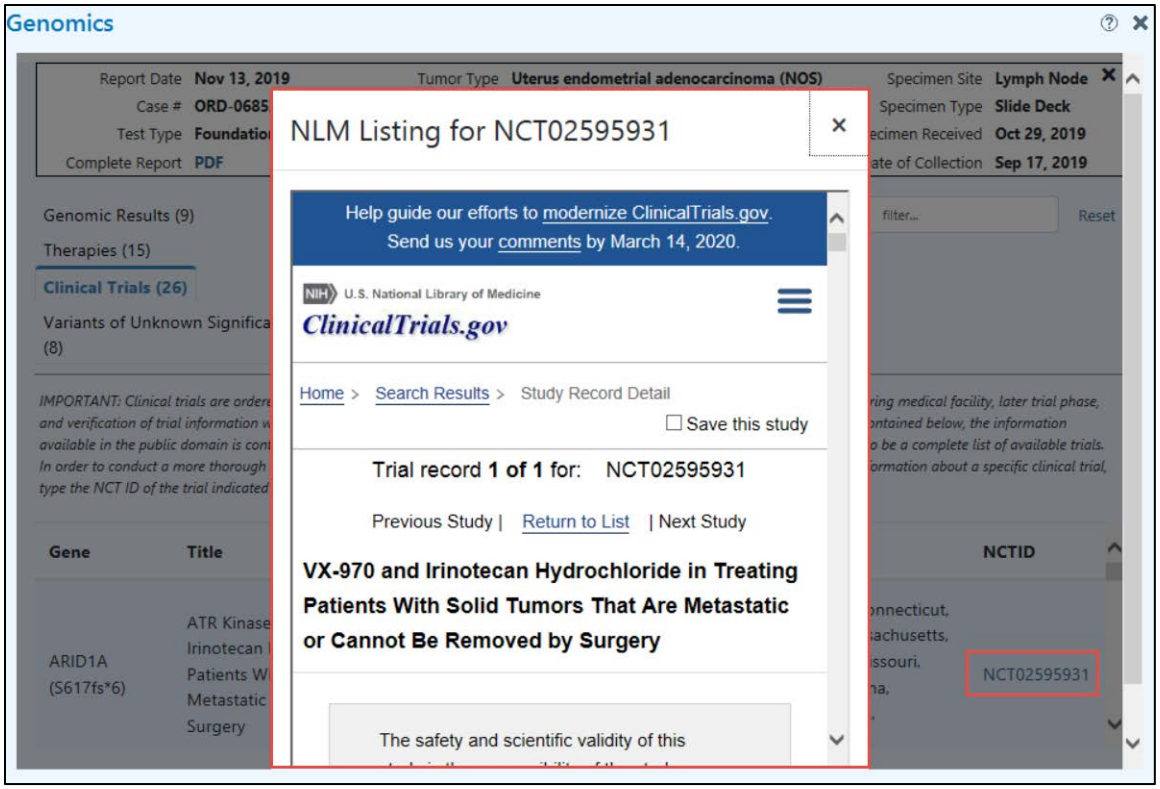
Therapies Tab

View Clinical Trials:

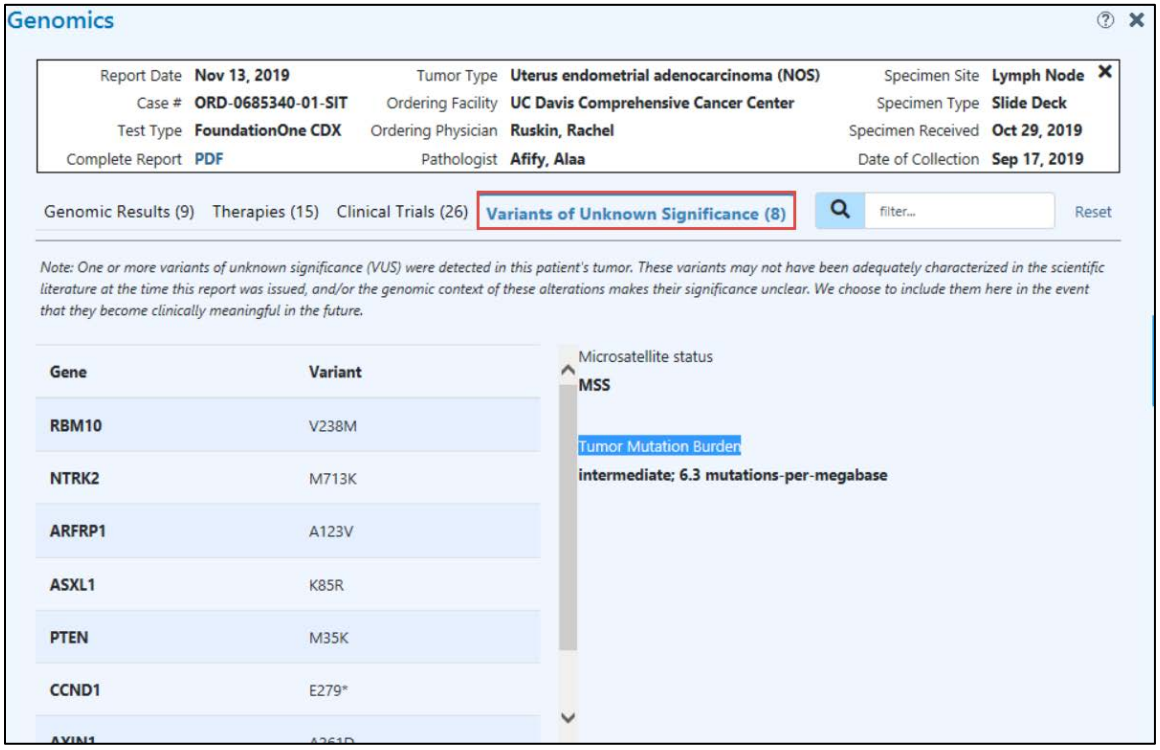
- Filter clinical trial results by location, Genes, or keyword(s)
- Click an NCTID hyperlink to go directly to the NLM listing on ClinicalTrials.gov



Clinical Trials Tab



View Variants of Unknown Significance:



Variants of Unknown Significance Tab