

# Targeted Gene Panels

## Overview

- Sequence specific set of genes related to condition
- Highly focused - typically 10-500 genes
- Very high coverage for selected regions (>500X)

## Common Panel Types

Cancer

**50-500 genes**

Oncology hotspots

Cardio

**50-200 genes**

Heart conditions

Neuro

**100-300 genes**

Epilepsy, ataxia

### Advantages

- Cost-effective (\$100-300)
- Very high depth
- Faster turnaround
- Detect low-frequency variants

### Use Cases

- Hereditary cancer screening
- Pharmacogenetic testing
- Carrier screening
- Targeted diagnostics

Best for known genes associated with specific phenotypes