

## Geisinger

Implementation and Cost Benefit Analysis of the fully automated Idylla system in a large laboratory setting

Yi Ding M.D., Ph.D.

System and Core Lab Director, Molecular Diagnostic Diagnostic Medicine Institute
Geisinger

#### **Disclaimers**

**Speaker:** 

**Biocartis** 

Cepheid

#### **Geisinger Service Area Map**

Geisinger



30,609 Employees, 2,005 staffed beds in FY2017



# The Cost Effective Laboratory: Right-sizing Your Instrumentation and Test Menus

#### A cost/benefit analysis of:

- Comparison of in-house testing with reference laboratory charges and turn-around-time
- Cost: Instrument, reagent, storage requirement, QC,PT, facility, calibration and maintenance
- Instrument capacity and present or proposed test menu
- Tests run singularly or in batch mode
- Staffing requirements: number, training, qualifications

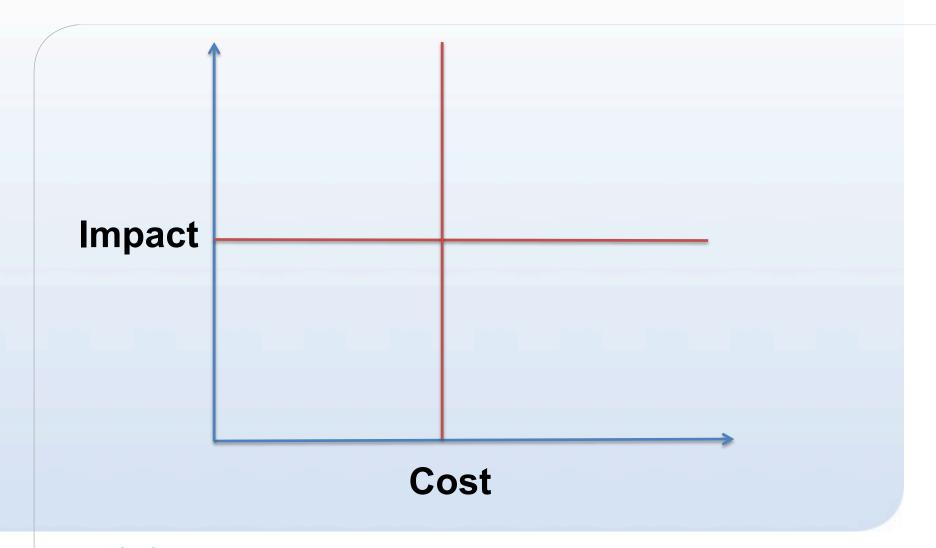
#### **New Test Request Process**

1. First Question

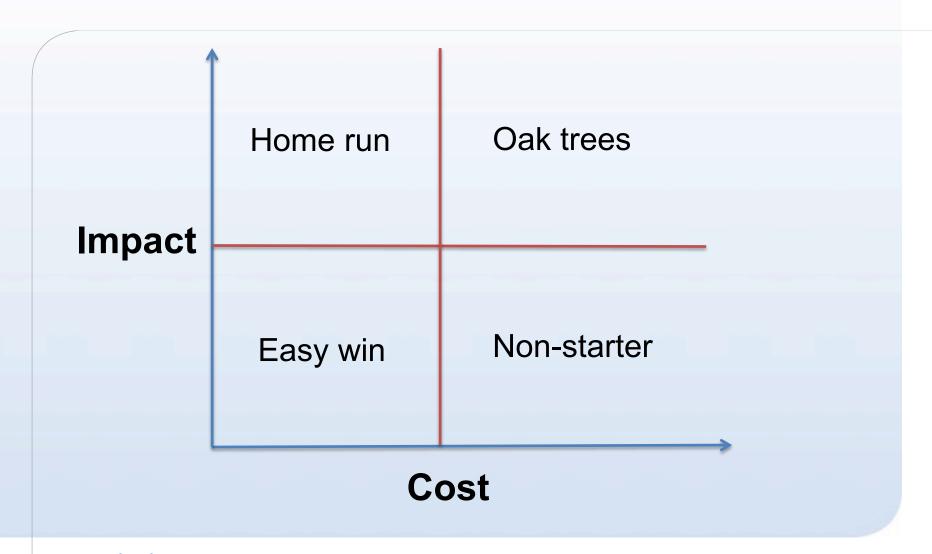


- 2. Requestor Information
- 3. Tech Assessment Questions
- 4. Costing Sheet
- 5. Evaluation

#### How to decide which tests to perform in-house?

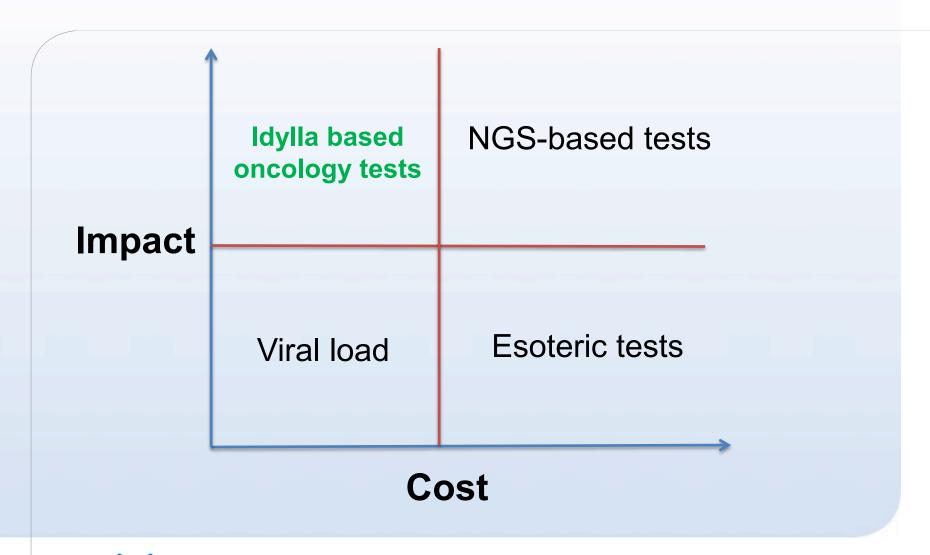


#### How to decide which tests to perform in-house?



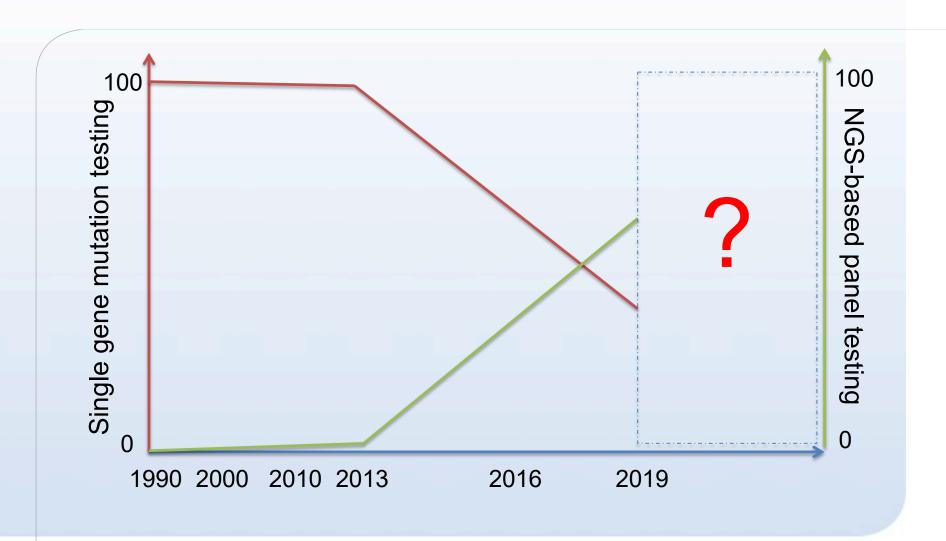


#### How to decide which tests to perform in-house?



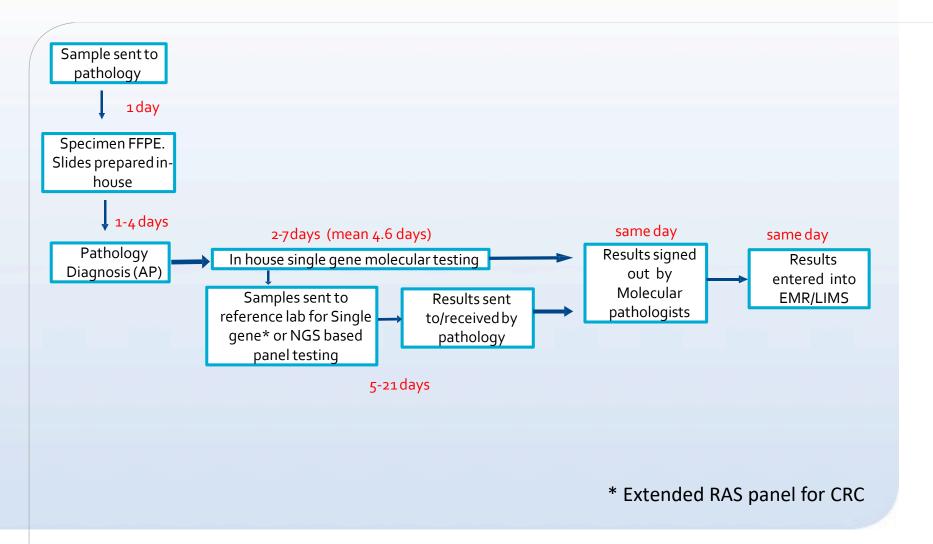


#### But it took us a long way to get here.....



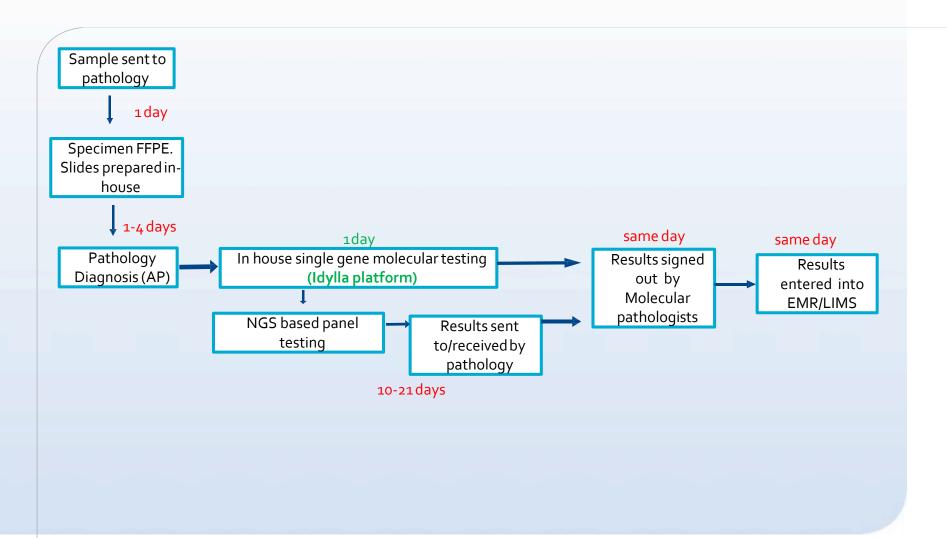


#### Molecular Testing Workflow Analysis for CRC



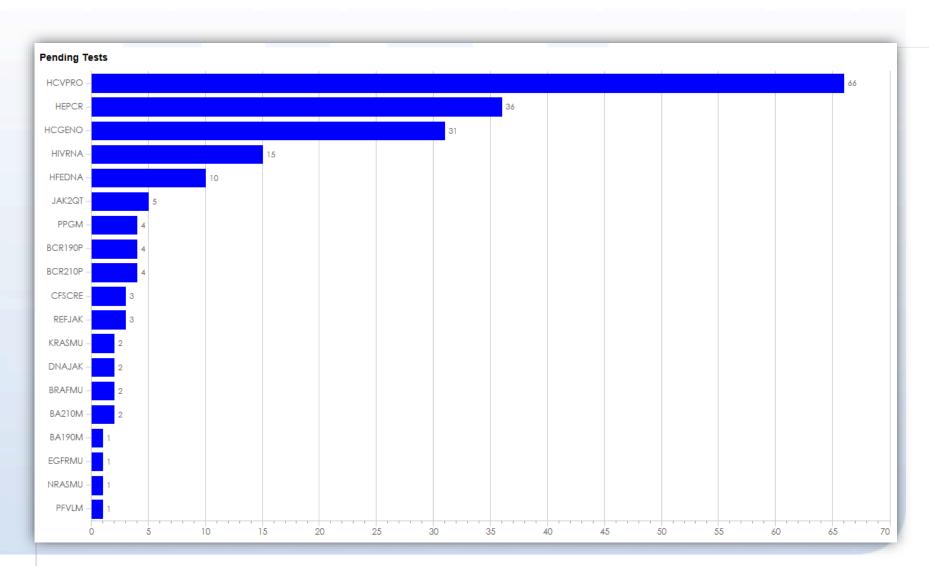


#### **New Molecular Testing Workflow Analysis for CRC**



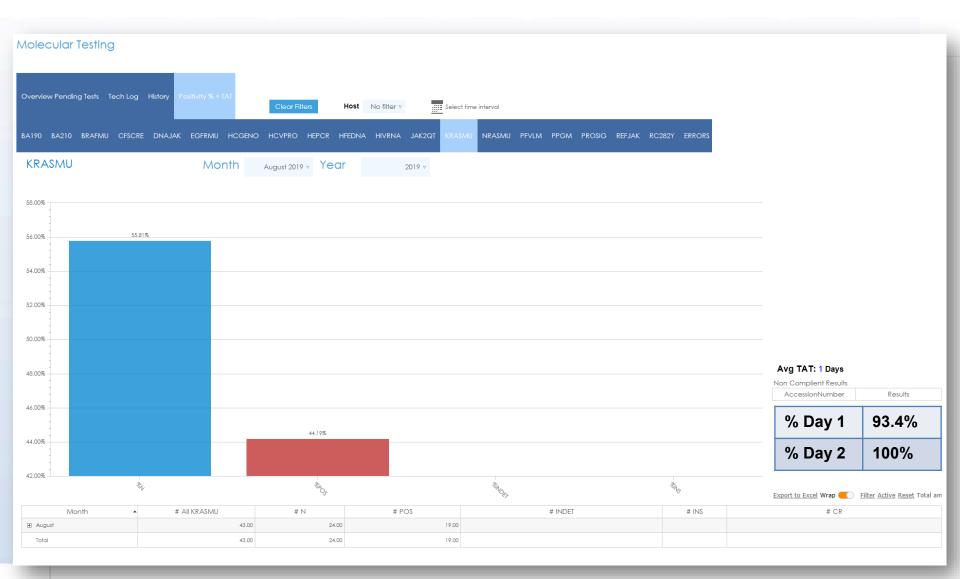


#### Informatic Solution for MoIDx Quality Management





#### Informatic Solution for MoIDx Quality Management





### The Idylla solution

| Features                              | Impact to Geisinger Laboratory Medicine   |
|---------------------------------------|---|
| Fully automated walk-<br>away system  | <ul><li>~ 2 mins hands-on time</li><li>1.0 FTE reduction</li></ul>                            |
| Fast assay Turn-around-<br>time (TAT) | TAT decreases from 4-7 days to 1-2 days   |
| Assay menu                            | <ul> <li>Expand our test menu</li> <li>Excellent bridge to NGS based panel testing</li> </ul> |



