QIW Panel: Leveraging new technology to advance cancer screening

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Cancer screening remains underutilized

~70% of incident cancers have no standard of care screening tests
Framing the lung cancer challenge

#1

**Leading** cause of cancer related deaths

15M

**People** in the U.S. qualify for lung cancer screening

<6%

**Adherence** with standard of care low-dose CT screening
Early detection in lung cancer improves survival

**DISTANT METASTASIS**
STAGE IV

- 6%
- 5-Year Survival POST-DIAGNOSIS

**REGIONAL**
STAGE III

- 33%
- 5-Year Survival POST-DIAGNOSIS

**LOCAL**
STAGE I & II

- 60%
- 5-Year Survival POST-DIAGNOSIS
Multi-cancer screening can expand the number of cancers we screen for and improve adherence

MCED is a tumor agnostic and efficient approach to screening
**Characteristics of a multi-cancer early detection test**

**Multiple Cancers**
A blood test to detect many types of cancer can harness the common signals or biomarkers across multiple cancers.

**Trusted Results**
Fundamentally different multi-cancer “rule-in” approach that emphasizes high specificity to give physicians confidence in next steps and minimize false positives.
Example: building MCED test into routine care

Current CancerSEEK workflow

Annual check-up

~99% of patients

~1% of patients

Care coordination for cancer patients

Screening test by PCP/HCP

Blood is analyzed for cancer markers

PET-CT scan for tumor localization

Integration with EMRs for access and ordering
✓ Software based education and support tools for PCPs
✓ Medical and technical support
✓ Learning loop to continually improve test
DETECT-A study goals and design

GOALS

1. Detect cancers not found by standard of care in the real world

2. Pilot blood test and workflow in a large clinical population

3. Manage patient care by delivering test results

DESIGN

DETECT-A Blood Test (prototype of CancerSEEK)

Review by Multidisciplinary Committee

Imaging of Blood Test positive cases

Follow-up

ENROLLMENT

10,006 women enrolled (9,911 screened)

Aged between 65-75

September 2017 – May 2019

Only exclusion criteria: No prior history of cancer
Our blood test **doubled** the number of cancer cases first detected by screening.

24 → 50

Cancer cases detected by screening by adding our blood test.

96 total cancers in DETECT-A.
DETECT-A showed promising results in lung cancer

- Our blood test detected 9 women with lung cancer, tripling the number of cases detected by existing screening
- Seven of these women were not eligible for lung screening
- Two women who were eligible, were not adherent
## CancerSEEK development: next steps

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td><strong>Cohen et al. (Science 2018)</strong></td>
<td>Proof-of-concept</td>
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<tr>
<td>- Observational and training studies using prototype test</td>
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<tr>
<td>- Known cancer status at time of testing</td>
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<tr>
<td>- No intervention in clinical management</td>
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<tr>
<td><strong>DETECT-A Study (Science 2020)</strong></td>
<td>Establish feasibility and safety</td>
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<tr>
<td>- Prospective management using prototype test</td>
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<td>- Unknown cancer status at time of testing</td>
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<td>- Active intervention in clinical management</td>
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<tr>
<td><strong>FDA Registration Trial &amp; Launch LDT in 2022</strong></td>
<td>Demonstrate benefit/risk</td>
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<tr>
<td>- Prospective management using v1 CancerSEEK test</td>
<td></td>
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<tr>
<td>- Cancer status unknown at time of testing</td>
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<tr>
<td>- Active intervention in clinical management</td>
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Major goals for MCED screening

MCED holds the promise to shift the paradigm to more "screen-detected" cancers

- Expand the target population
- Increase screening participation rates
- Identify additional target organ cancers
- Shift to earlier stage cancer diagnoses
- Reduce cancer treatment costs
- Improve clinical outcomes
Collaborating to advance the field of MCED
One workflow: a safe and efficient path to resolution

Evaluating safety in DETECT-A

101 PET-CTs
1.0% False +

63 concluded negative
Fast rule out – no further testing

38 had any futile follow-up
Zero adverse events
In DETECT-A, cancers were detected in 10 organs, 7 of which have no screening options.

<table>
<thead>
<tr>
<th>10 ORGANS</th>
<th>OUR BLOOD TEST</th>
<th>STANDARD OF CARE SCREENING</th>
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<tbody>
<tr>
<td>Ovary</td>
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<td>Breast</td>
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<tr>
<td>Colorectal</td>
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<td>✓</td>
</tr>
<tr>
<td>Lung</td>
<td>✓</td>
<td>✓*</td>
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</tbody>
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* Cancer of Unknown Primary (CUP)