

Monthly Steering
Committee Meetings

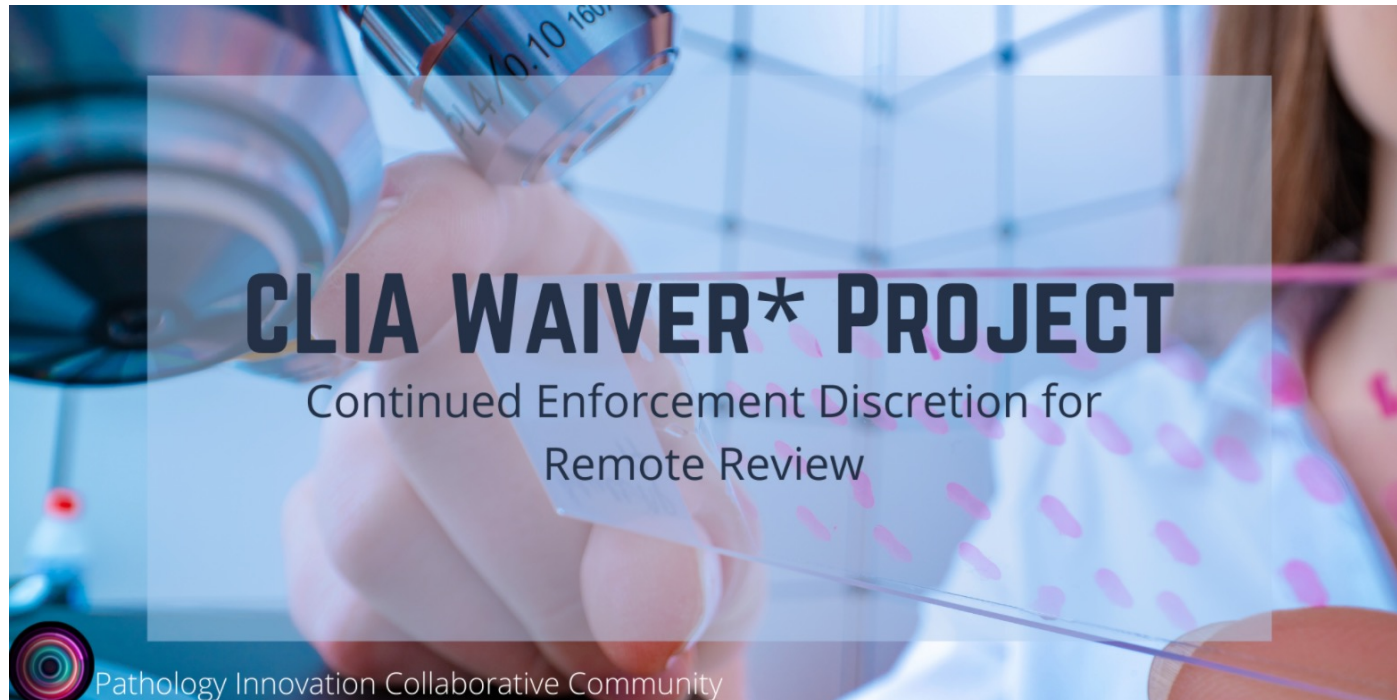
January 26
2022 3-4PM ET

Pathology Innovation Collaborative Community



CLIA Waiver

- ▶ Create and review draft to be shared with CLIA state surveyors



Target audience... and why

DEPARTMENT OF HEALTH & HUMAN SERVICES
Centers for Medicare & Medicaid Services
7500 Security Boulevard, Mail Stop C2-21-16
Baltimore, Maryland 21244-1850



Center for Clinical Standards and Quality/Survey & Certification Group

Ref: QSO-20-21-CLIA

DATE: March 26, 2020

TO: State Survey Agency Directors

FROM: Director
Quality, Safety & Oversight Group

SUBJECT: Clinical Laboratory Improvement Amendments (CLIA) Laboratory Guidance
During COVID-19 Public Health Emergency

We want to clarify that laboratories performing LDTs as set forth in the FDA guidance are required to be CLIA-certified and meet the requirements to perform high complexity testing.

Contact: Questions about this document should be addressed to LabExcellence@cms.hhs.gov.

Effective Date: Immediately. This policy should be communicated with all survey and certification staff, their managers and the State/Regional Office training coordinators within 30 days of this memorandum.

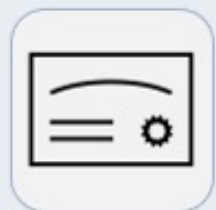
/s/
David R. Wright

cc: CLIA Branch Managers
CLIA Location Staff

Memorandum Summary

- CMS is issuing this memorandum to laboratory surveyors to provide important guidance to surveyors and laboratories during the COVID-19 public health emergency, such as:
 - CMS' Exercise of enforcement discretion to ensure pathologists may review pathology slides remotely if certain defined conditions are met ,
 - Ensuring that laboratories located in the United States wishing to perform COVID-19 testing that apply for CLIA certification are able to begin testing as quickly as possible during the public health emergency,
 - Highlighting that laboratories within a hospital/University Hospital Campus may hold a

Past



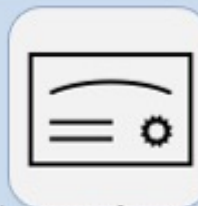
CLIA license

Present

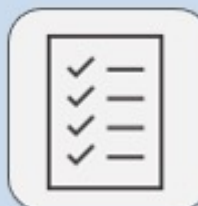


Memorandum
3/26/2020

Future



Revert to previous standard



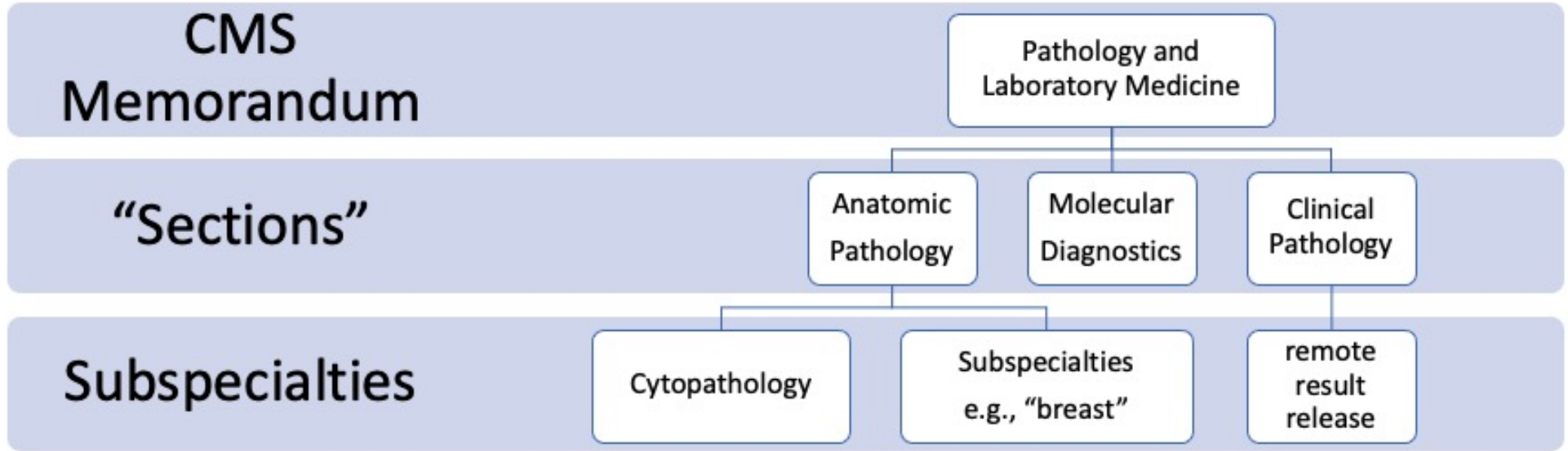
Establish current practice
as new standard



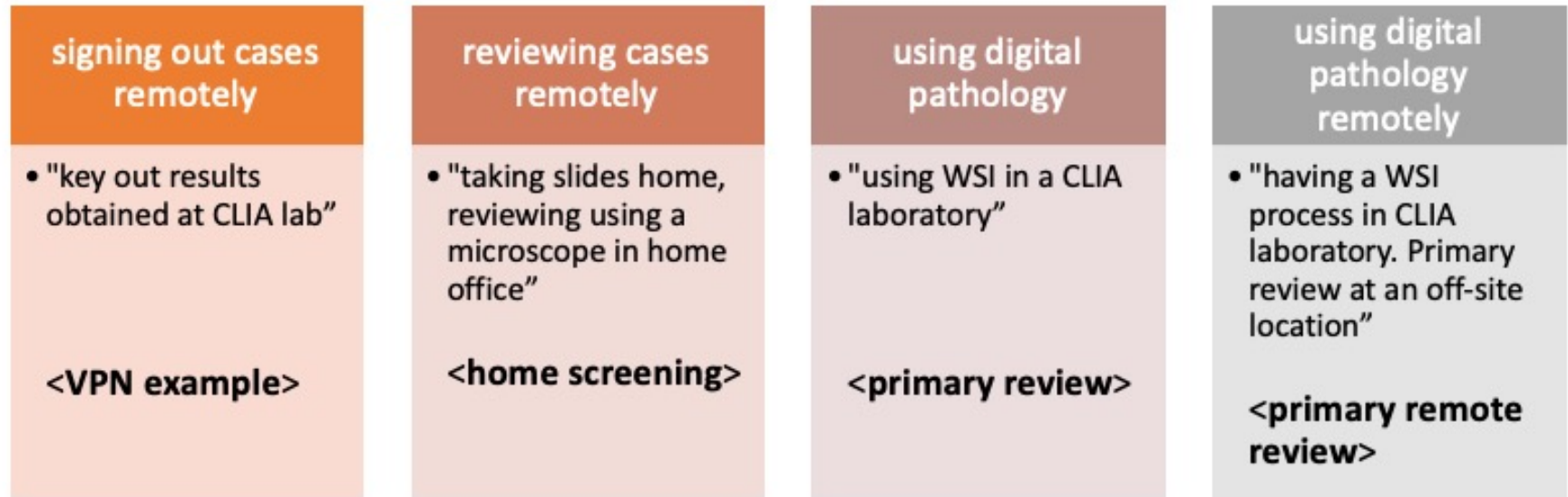
Propose novel practice
"set a new standard"



Scope



Function



Laboratories that choose to utilize temporary testing sites (e.g., for remote review and reporting of slides/images), may do so if the following criteria are met:

- **493.3(a) Basic rule.** Except as specified in paragraph (b) of this section, a laboratory will be cited as out of compliance with section 353 of the Public Health Service Act unless it—
 - (1) Has a current, unrevoked or unsuspended certificate of waiver, registration certificate, certificate of compliance, certificate for PPM procedures, or certificate of accreditation issued by HHS applicable to the category of examinations or procedures performed by the laboratory; or
- Per the regulations at **42 CFR §493.1105(a)(7) Slides.** Cytology slide preparations must be retained for at least 5 years from the date of examination; Histopathology slides must be retained for at least 10 years from the date of examination; Pathology specimen blocks must be retained for at least 2 years from the date of examination; and Remnants of tissue for pathology examination must be preserved until a diagnosis is made on the specimen.
- Equipment, supplies, and reagents, and other similar items needed at the temporary site are **not kept at a temporary testing site on a permanent basis.**
- The temporary site complies with other applicable Federal law, **including HIPAA.**
- As per **§493.1251** The primary site must have a written procedure manual for all tests, assays, and examinations performed by the laboratory must be available to, and followed by, laboratory personnel. Textbooks may supplement but not replace the laboratory's written procedures for testing or examining specimens. The Laboratory Director is not required to send but CMS may ask to inspect it in the future.

Proposal

- ▶ Additional regulatory input needed
- ▶ **Contact CLIA State Survey Agency Contacts**
 - ▶ Propose to review the "project"
 - ▶ Obtain their input
 - ▶ Consider a proposal

FDA Transition Plan

- ▶ Submit comments to draft guidance(s) by 3/23/22

Contains Nonbinding Recommendations

Draft – Not for Implementation

Transition Plan for Medical Devices Issued Emergency Use Authorizations (EUAs) During the Coronavirus Disease 2019 (COVID-19) Public Health Emergency

Draft Guidance for Industry and Food and Drug Administration Staff

DRAFT GUIDANCE

This draft guidance document is being distributed for comment purposes only.

Document issued December 2021.

You should submit comments and suggestions regarding this draft document within 90 days of publication in the *Federal Register* of the notice announcing the availability of the draft guidance. Submit electronic comments to <https://www.regulations.gov>. Submit written comments to the Dockets Management Staff, Food and Drug Administration, 5630 Fishers Lane, Room 1061, (HFA-305), Rockville, MD 20852. Identify all comments with the docket number listed in the notice of availability that publishes in the *Federal Register*.

For questions about this document, contact the Regulation, Policy, and Guidance Staff at RPG@fda.hhs.gov. For general questions about emergency use authorizations, contact the Office of the Commissioner/Office of the Chief Scientist/Office of Counterterrorism and Emerging Threats at AskMCMi@fda.hhs.gov.



U.S. Department of Health and Human Services
Food and Drug Administration
Center for Devices and Radiological Health

Contains Nonbinding Recommendations

Draft – Not for Implementation

Transition Plan for Medical Devices That Fall Within Enforcement Policies Issued During the Coronavirus Disease 2019 (COVID-19) Public Health Emergency

Draft Guidance for Industry and Food and Drug Administration Staff

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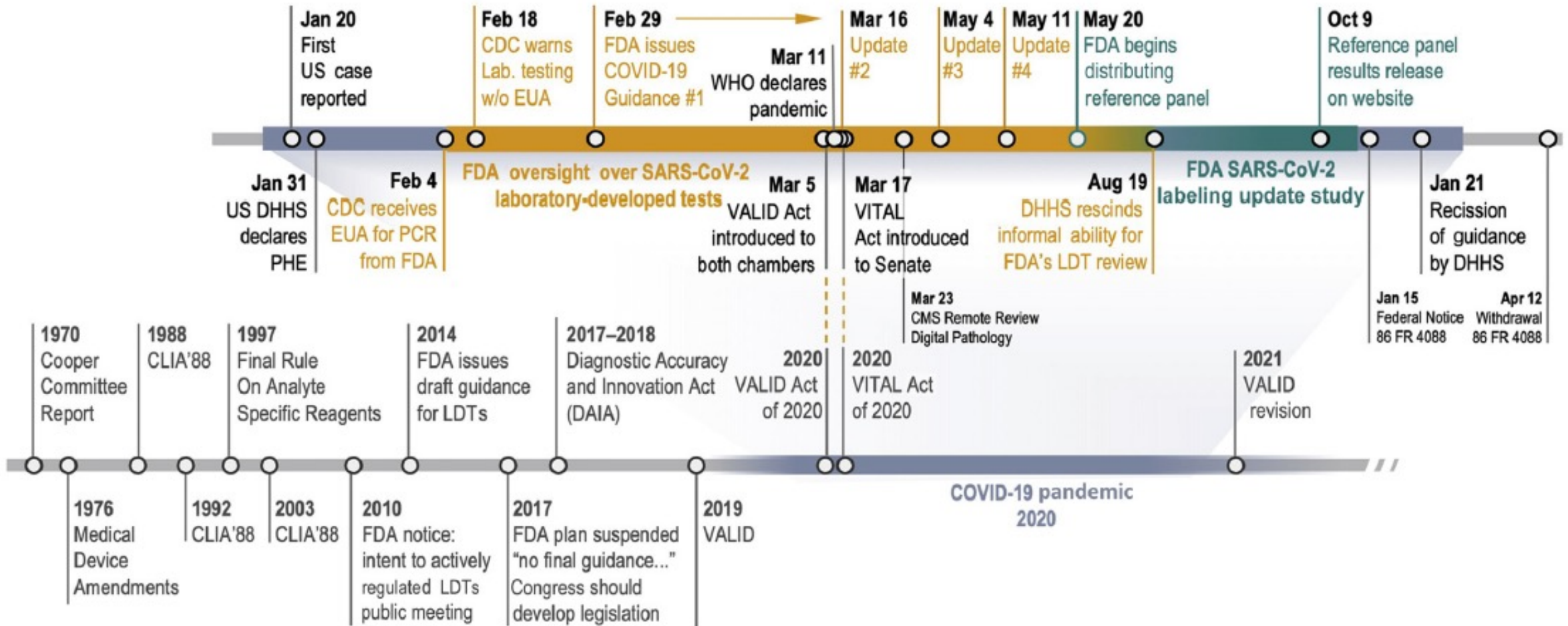
For questions about this document, contact the Regulation, Policy, and Guidance Staff at RPG@fda.hhs.gov.



U.S. Department of Health and Human Services
Food and Drug Administration
Center for Devices and Radiological Health



Context



GUIDANCE DOCUMENT

Transition Plan for Medical Devices Issued Emergency Use Authorizations (EUAs) During the Coronavirus Disease 2019 (COVID-19) Public Health Emergency

Draft Guidance for Industry and Food and Drug Administration Staff

DECEMBER 2021

[Download the Draft Guidance Document](#)

[Read the Federal Register Notice](#)

Draft

Not for implementation. Contains non-binding recommendations.

This guidance is being distributed for comment purposes only.



Featured papers

- ▶ **Bauer et al.** Making a science out of preanalytics: an analytical method to determine optimal tissue fixation in real-time
- ▶ **Morjaria et al.** Strategic thinking in test selection for mass SARS-CoV-2 testing
- ▶ **Lee et al.** Disruptive and sustaining innovation in telemedicine: a strategic roadmap
- ▶ **Bulten et al.** Artificial intelligence for diagnosis and Gleason grading of prostate cancer; the PANDA challenge



Bauer et al. Making a science out of preanalytics: an analytical method to determine optimal tissue fixation in real-time

PLOS ONE

RESEARCH ARTICLE

Making a science out of preanalytics: An analytical method to determine optimal tissue fixation in real-time

Daniel R. Bauer^{1*}, Torsten Leibold², David R. Chafin¹

1 Roche Tissue Diagnostics (Ventana Medical Systems, Inc.), Tucson, Arizona, **2** Raytheon Missiles & Defense, Tucson, Arizona, United States of America

* daniel.bauer.db2@roche.com

Abstract

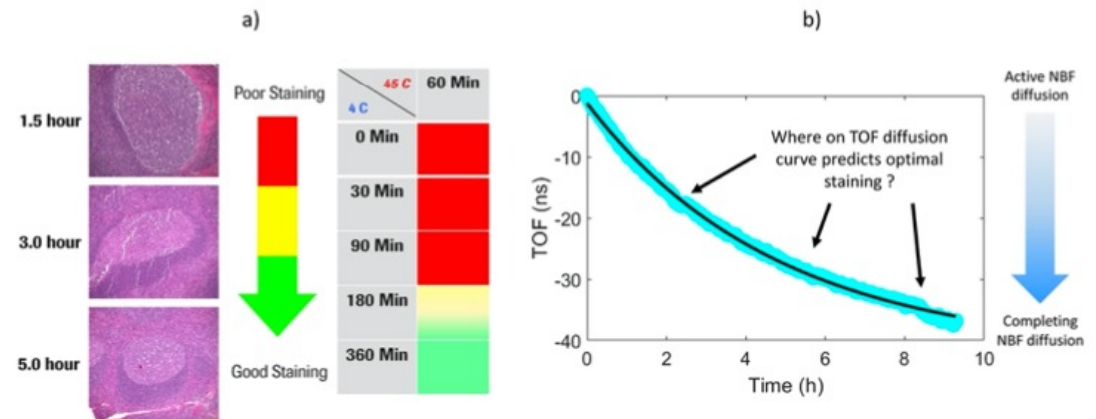
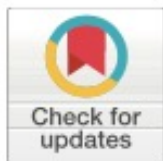


Fig 1. Correlating NBF diffusion times with stain quality. a) H&E images acquired with different cold soak times in NBF. Based on H&E based morphology, cold soak times of 1.5 hours, 3 hours, and 5 hours produced severely compromised, borderline, and exemplary staining, respectively. b) Example depiction of TOF diffusion curve with active NBF diffusion immediately after submerging tissue in NBF, manifesting with a rapidly changing TOF signal. Conversely, after several hours the tissue's rate of diffusion had significantly slowed as the tissue and NBF approached osmotic equilibrium.

<https://doi.org/10.1371/journal.pone.0258495.g001>



Morjaria et al. Strategic thinking in test selection for mass SARS-CoV-2 testing

OPINION

Strategic Thinking in Test Selection for Mass SARS-CoV-2 Testing

Sejal Morjaria,^a Rosa Nouvini,^b and S. Joseph Sirintrapun^{c,*}

INTRODUCTION

help curb outbreaks. This is especially important for vulnerable communities that contain individu-

Downloaded from https://a

	Desired Features of Testing Strategy			Testing Regimen	Risk Assessment	Logistics and Policy
"Cold spot" Community						
Scenario 1: Asymptomatic individual screening and daily sporadic interactions between non-vulnerable individuals	Easy Accessibility	Fast TAT	NPV is a priority	POC testing (i.e. PATs)	Though not perfect, NPV is better and possibly acceptable, given the lower community prevalence. Likewise, the penalty of FN is lower, given the scenario is screening and non-vulnerable individuals. Consider that PPV is lower.	Restrictions and isolation for "spreader" individuals testing positive, particularly those interacting with vulnerable subpopulations. Follow-up of positive tests with confirmatory PCR.
Scenario 2: Individuals with continual interactions with vulnerable subpopulations	Easy Accessibility	Fast TAT	PPV and NPV is a priority	PCR	The high penalty for FP and FN results are best addressed by performing PCR testing regimens.	Increase PCR testing supplies and improve logistics for deployment to enhance accessibility and TAT.
"Cold spot" Community with limited testing capacity.						
Scenario 3: Individuals developing a new onset of predictive COVID-19 associated symptoms	Easy Accessibility	Fast TAT	PPV and NPV is a priority	Start with POC testing (i.e. PATs). Develop serial POC testing regimens to strengthen trust in the POC results. Consider judicious use of follow-up PCR testing (when available).	NPV more trustworthy, particularly when a developed serial POC testing regimen is negative. PPV is lower, though developing a serial POC testing regimen may enhance the sensitivity.	Weighing the penalty of a FN, consider confirmatory PCR (if available) where the penalty is high. Or without PCR, blanket restrictions for all with symptoms where penalty is high.
"Hot spot" high RO, high COVID-19 prevalence community with limited testing capacity.						
Scenario 4: Individuals developing a new onset cough	Easy Accessibility	Fast TAT	PPV and NPV is a priority	Start with POC testing (i.e. PATs). Develop serial POC testing regimens to strengthen trust in the POC results. Consider judicious use of follow-up PCR testing (when available).	PPV more trustworthy, negatives are more suspect.	Weighing the penalty of a FN, consider confirmatory PCR (if available) where the penalty is high. Or without PCR, blanket restrictions for all with symptoms where penalty is high. The latter may not be practical given that such communities in reality regularly interact with vulnerable subpopulations. Therefore, efforts should be made to increase access to more accurate confirmatory tests like PCR.

■ What the testing regimen delivers for desirable features of the testing strategy.
■ What is not associated with the testing regimen and must be worked upon to meet the desirable features of the testing strategy.
 NPV = Negative predictive value
 PPV = Positive predictive value
 POC = Point of care
 FN = False negative
 FP = False positive
 PATs = Paper-based antigen tests
 TAT = Turn-around time
 RO = Level of contagiousness

Fig. 1. SARS-COV-2 testing strategy for 4 commonly encountered community scenarios.

Lee et al. Disruptive and sustaining innovation in telemedicine: a strategic roadmap



COMMENTARY

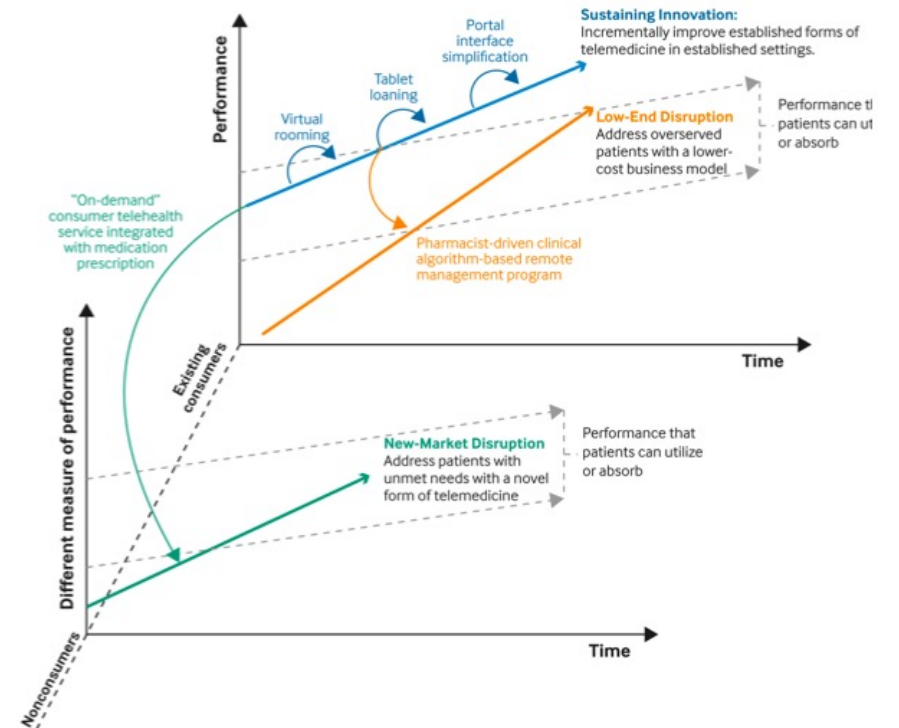
Disruptive and Sustaining Innovation in Telemedicine: A Strategic Roadmap

Simin Gharib Lee, MD, MBA, Alexander Blood, MD, William Gordon, MD, Benjamin Scirica, MD, MPH

DOI: 10.1056/CAT.21.0311

The Disruptive Innovation Model Applied to Telemedicine

In this framework, patients' performance demands (gray dotted lines) increase at a certain rate over time and contrast with telemedicine performance, which either improves along a sustaining innovation trajectory, incrementally enhancing offerings to serve patients with the most complex needs (blue line), or along disruptive innovation trajectories, serving patients with more basic (orange line) or altogether unmet needs (green line). Examples specific to telemedicine of sustaining improvements to mainstream models as well as disruptive departures from these models are detailed below.



Telemedicine as a Sustaining Innovation

Bulten et al. Artificial intelligence for diagnosis and Gleason grading of prostate cancer; the PANDA challenge

nature
medicine

ARTICLES

<https://doi.org/10.1038/s41591-021-01620-2>

Check for updates

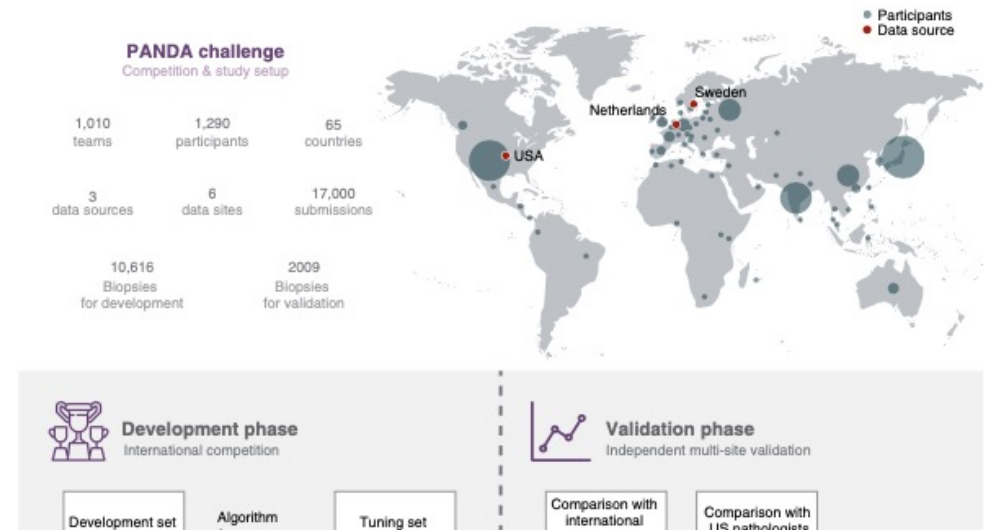
OPEN

Artificial intelligence for diagnosis and Gleason grading of prostate cancer: the PANDA challenge

Wouter Bulten^{1,60}, Kimmo Kartasalo^{2,3,60}, Po-Hsuan Cameron Chen^{4,60}, Peter Ström², Hans Pinckaers¹, Kunal Nagpal⁴, Yuannan Cai⁴, David F. Steiner⁴, Hester van Boven⁵, Robert Vink⁶, Christina Hulsbergen-van de Kaa⁶, Jeroen van der Laak^{1,7}, Mahul B. Amin⁸, Andrew J. Evans⁹, Theodorus van der Kwast¹⁰, Robert Allan¹¹, Peter A. Humphrey¹², Henrik Grönberg^{2,13}, Hemamali Samaratunga¹⁴, Brett Delahunt¹⁵, Toyonori Tsuzuki¹⁶, Tomi Häkkinen³, Lars Egevad¹⁷, Maggie Demkin¹⁸, Sohier Dane¹⁸, Fraser Tan⁴, Masi Valkonen¹⁹, Greg S. Corrado⁴, Lily Peng⁴, Craig H. Mermel⁴, Pekka Ruusuvaori^{3,19,61}, Geert Litjens^{1,61}, Martin Eklund^{2,61} and the PANDA challenge consortium*

ARTICLES

NATURE MEDICINE



“On United States and European external validation sets, the algorithms achieved agreements of 0.862 (quadratically weighted κ , 95% confidence interval (CI), 0.840–0.884) and 0.868 (95% CI, 0.835–0.900) with expert uro pathologists”.



Patient Advocacy Update

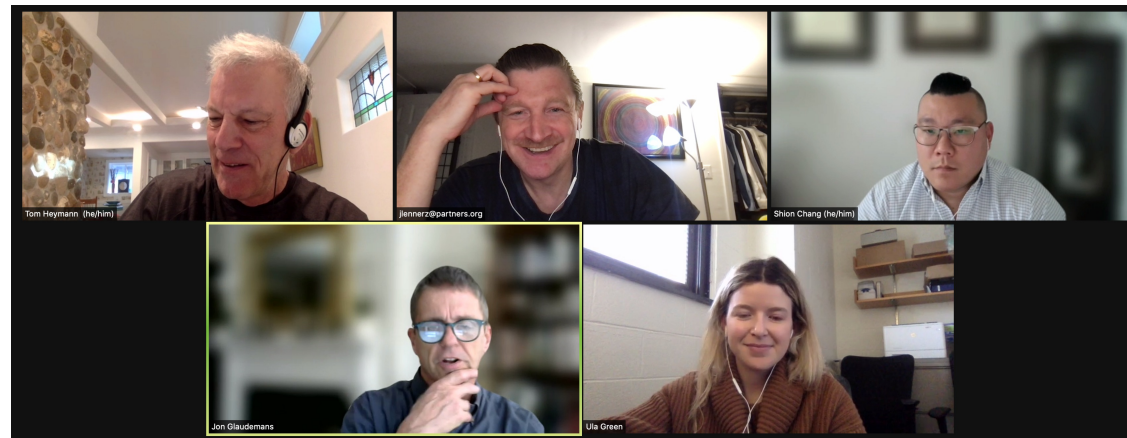
- ▶ One of our key deliverables in 2022 is to engage more patient advocacy groups

Sepsis Alliance

- ▶ Initial introduction meeting by M. Tarver FDA
- ▶ First meeting on 1/19
- ▶ Patient advocacy
- ▶ Aims to become a collaborative community



SEPSIS
ALLIANCE



APPIA



Phone: 919.314.6561



THE APPIA MISSION

Cooperative industry partners dedicated to advancing anatomic pathology to benefit patient care by advocating and fostering quality, education, and best practices.

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Anatomical Pathology Patient Interest Association

What is APPIA?



APPIA is the leading anatomic pathology

Membership



APPIA membership provides access to a

News & Initiatives



The Anatomical Pathology Patient Interest



APPIA



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THE APPIA MISSION

Cooperative industry partners dedicated to advancing anatomic pathology to benefit patient care by advocating and practicing.

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Anatomical Pathology Patient Interest Association

What is APPIA?



APPIA is the leading anatomic pathology organization formed by industry partners who actively engage with individuals and organizations and across all phases of specimen acquisition, preparation and examination. We are a resource to those who contribute to quality patient outcomes.

[* Learn More](#)

APPIA's Mission:

Membership



APPIA membership provides access to a dedicated community, which together works to influence anatomical pathology with the primary aim to provide high-quality patient care in pathology. The organization's membership is represented by leading organizations and individuals across the globe. Plan to join this dynamic community of pathologists, scientists, technologists and industry representatives dedicated to advancing the industry.

[* Learn More](#)

News



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[* Learn](#)

TOPS Program Introduction

Preanalytics

Getting the tissue from body to test



3 October 9, 2020 | © 2020 APPIA | Not for distribution




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APPIA




THE APPIA MI
Cooperative industry part
practices.

TOPS Program Introduction

Anatomical I

What is APPI



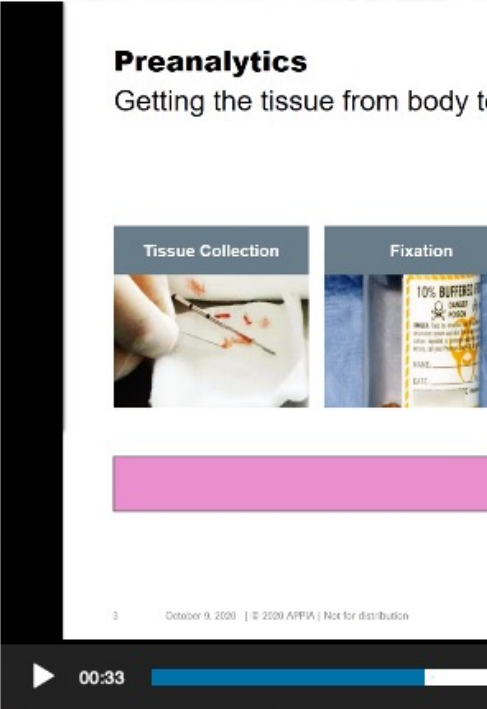
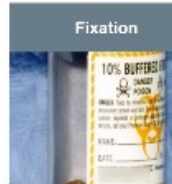
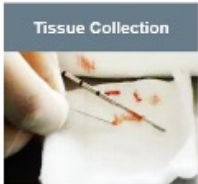
APPIA is the leading a
organization formed by
who actively engage w
organizations and acro
specimen acquisition, p
examination. We are a
who contribute to quali
outcomes.
* [Learn More](#)

APPIA's Mission:

TOPS Program Introduction

Preanalytics

Getting the tissue from body to



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APPIA Tops Program: Optimize Patient Outcomes by Improving PreAnalytics

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 **Recorded On: 06/23/2021**

[Overview](#) [Speaker\(s\)](#) [Contents \(4\)](#)

Targeted specifically for professional laboratory personnel including Histotechnologists and Medical Technologists, this video is an introduction to the Tissue Optimization and Pre-analytic Standardization (TOPS) program developed by the [Anatomical Pathology Patient Interest Association](#) (APPIA). Narrated by Robert Lott, HTL(ASCP), who is a frequent speaker and educator at both national and regional National Society for Histotechnology meetings and one of the collaborative authors of the complete APPIA TOPS Program, the video reviews what the histology and pathology laboratory can do to optimize tissue preservation and quality in clinical practice. It includes a review of “journey” of the tissue specimen from the patient to diagnosis including a review of the types of tests performed on a specimen. More importantly, the video provides an understanding of the impact of pre-analytic factors and variables and describes best practices and tools that laboratories can implement to optimize tissue preservation diagnostic quality.

CEUs: This histology course is worth 1 continuing education credit. Course is available for 365 days from date of purchase.

Start Engaging

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ISPOR

Title:

ADVANCING EXCHANGE OF DIGITAL HEALTH INFORMATION BY EMBRACING A NATIONAL TOKENIZATION MODEL FOR UNIQUE PATIENT IDENTIFICATION

Moderator:

Joe Lennerz MD PhD, Massachusetts General Hospital/Harvard Medical School, Boston, MA, USA)

Panelists (must have 2-3 panelists from different organizations; please include name, degree(s), institution, city, state, country)

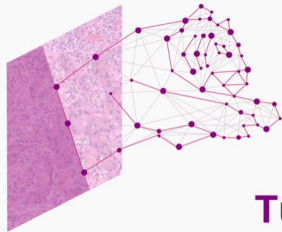
- S. Joseph Sirintrapun, M.D., Memorial Sloan Kettering Cancer Center, New York City, New York, USA
- Victor Brodsky, M.D., Washington University, St. Louis, Missouri, USA
- Bob Titus, CTO, Netcracker Technology Corp., Toronto, Ontario, Canada
- Jeff Allen, Ph.D., CEO, Friends of Cancer Research, Washington, D.C., USA

- ▶ Waiting on notification for submission of abstract
- ▶ We provide an overview of some of the questions around this topic



TIGER Grand Challenge

► TILS Grand Challenges



TIGER

Tumor Infiltrating lymphocytes in breast cancer

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- Rules
- Evaluation
- Timeline
- Prizes

Welcome to TIGER

TIGER is the first challenge on fully automated assessment of tumor-infiltrating lymphocytes (TILs) in H&E breast cancer slides. It is organized by the Diagnostic Image Analysis Group (DIAG) of the Radboud University Medical Center (Radboudumc) in Nijmegen (The Netherlands), in close collaboration with the International Immuno-Oncology Biomarker working Group (www.tilsinbreastcancer.org).

The goal of this challenge is to evaluate new computer algorithms for the automated assessment of tumor-infiltrating lymphocytes (TILs) in Her2 positive and Triple Negative breast cancer (BC) histopathology slides. In recent years, several studies have shown the predictive and prognostic value of visually scored TILs in BC as well as in other cancer types, making TILs a powerful biomarker that can potentially be used in the clinic. With TIGER, we aim at developing computer algorithms that can automatically generate a "TIL score" with a high prognostic value.



ONC (Office National Coordinator for Health Information Technology)



Project US@

TECHNICAL SPECIFICATION FOR PATIENT ADDRESSES DOMESTIC AND MILITARY

FINAL VERSION 1.0

Current Version Date: 1/7/2022
Project US@ Technical Workgroup

Revision History

Date	Version	Description
6/16/2021		DRAFT initial release
1/7/2022	1.0	FINAL release

HIT (ONC) Technical specifications

- ▶ Example of complexity of standardization

Incorrect Form	Correct Form
BIG BUSINESS INCORPORATED 12 EAST BUSINESS LANE, SUITE-209 KRYTON, TN 38188-0002	BIG BUSINESS INC 12 E BUSINESS LN STE 209 KRYTON, TN 38188-0022
PIZZA DELIVERY COMPANY 61-20 EAST RIVER DRIVE NEW YORK, NY 10021-0905	PIZZA DELIVERY COMPANY 61-20 E RIVER DR NEW YORK NY 10021-0905



FDA



FDA Clinical Investigator Training Course

Real-World Evidence

8 December 2021

John Concato, MD, MS, MPH
Associate Director for Real-World Evidence Analytics
Office of Medical Policy
Center for Drug Evaluation and Research
U.S. Food and Drug Administration

2022 Summer OSEL Regulatory Research Experience (SORRE) Announcement

The Office of Science and Engineering Laboratories ([OSEL](#)) at the FDA Center for Device and Radiological Health (CDRH) accelerates patient access to innovative, safe and effective medical devices through best-in-the-world regulatory science. We are composed of scientists and engineers who have a broad diversity of expertise from microbiology, chemistry, physics, data science to artificial intelligence and machine learning.

The SORRE Program is hosted by the OSEL Diversity, Equity, Inclusion, & Belonging Council (DEI&B) to increase underrepresented students to perform regulatory science research at the U.S. Food and Drug Administration (FDA).

The program has several paid and unpaid opportunities for students to engage in [OSEL's Regulatory Science Research Programs](#), which consist of a variety of research projects primarily focused on laboratory research of medical devices.

The OSEL Regulatory Science Project Catalog below describes opportunities available for the 2022 Summer program. Please read each project description as you will need to select your top three.

Open Date: January 18th, 2022
Close Date: February 18th, 2022



Plcc Updates

- Progress by Truthing & Validation group
- Finalizing survey for TILS RS Project
- Updating website domain:
Digitalpathologalliance.org → pathologyinnovationcc.org



MDIC



+



Emerging HealthTech

The MDIC Series | Clinical Diagnostics

MDICx Series

MDICx: AI/ML Framework Public Comment Q&A

Tuesday, February 1, 2022 | 12:00PM – 1:00PM ET



Upcoming Events



Supporting Development of Diagnostic Tests for Unmet Needs

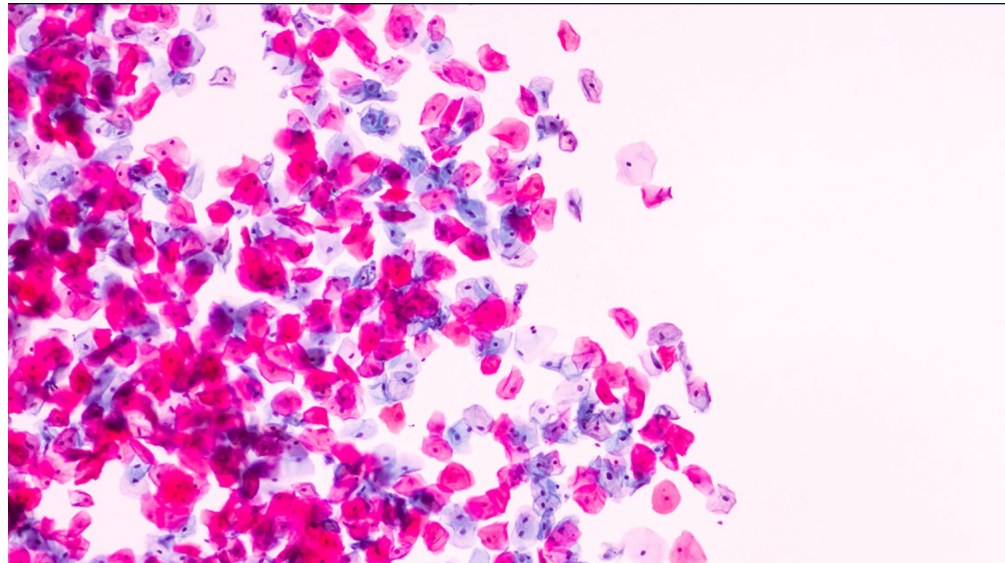
**Friends of Cancer Research Virtual
Meeting**
**Supporting Development of Diagnostic
Tests for Unmet Needs**
Tuesday, February 22, 2022
12:00PM EST - 1:00PM EST

Friends of Cancer Research (*Friends*) is proud to announce a new virtual meeting, **Supporting Development of Diagnostic Tests for Unmet Needs.**

During the past several months, experts from across health sectors have convened to design new approaches for drug/diagnostic co-development in the field of oncology and rare diseases. This forum will feature a new report describing recommended strategies and policy considerations to optimize diagnostic test development for rare populations into the future.



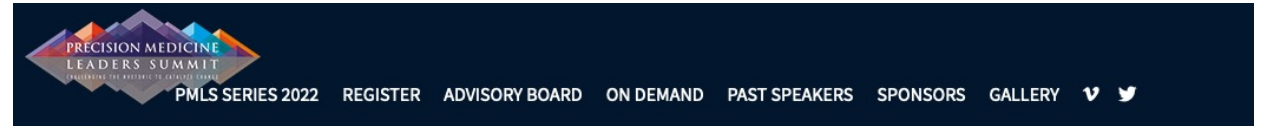
Upcoming Events



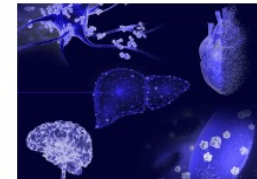
PMLS Virtual Series 2022 – Precision Pathology

To register [Click Here](#)

February 22, 2022



Precision Pathology
February 22, 2022 – Virtual



Precision Medicine Outside of Oncology
March 29, 2022 – Virtual



Precision Oncology
April 26, 2022 – Virtual



MultiOmics in Precision Medicine
June 22-23, 2022 – Boston, MA



Updates in Precision Medicine: Pharmacogenomics and Pharmacovigilance
September 28-29, 2022 –



Precision Oncology & Diagnostics
October 2022 – Chicago, IL



AI, Machine Learning and Data Science
October, 2022 – Los Angeles, CA



Next month's Steering Committee

- ▶ Wednesday
- ▶ February 23, 2022
- ▶ at 3:00-4:00PM ET

