



An AACR Special Conference on
**Rethinking DCIS: An
Opportunity for Prevention?**
September 8-11 | Philadelphia, PA



Conference Cochairs:

Lisa M. Coussens, OHSU Knight Cancer Institute, Portland, Oregon

Laura J. Esserman, UCSF Helen Diller Family Comprehensive Cancer Center, San Francisco, California

Kornelia Polyak, Dana-Farber Cancer Institute, Boston, Massachusetts

Jorge S. Reis-Filho, Memorial Sloan Kettering Cancer Center, New York, New York

[R] Remote Presentation

CME credit is available for in-person attendance for the designated sessions. On-demand presentations are not eligible for CME.

THURSDAY, SEPTEMBER 8

Welcome and Opening Lecture [CME Eligible]

Liberty Ballroom CD

6:45 p.m.-7:30 p.m.

6:45-7:00 p.m.

Welcome from Cochairs

Laura J. Esserman, UCSF Helen Diller Family Comprehensive Cancer Center, San Francisco, California

7:00-7:30 p.m.

Opening Presentation

Angela M. Belcher, Massachusetts Institute of Technology, Cambridge, Massachusetts

Opening Reception

Liberty Ballroom AB

7:30 p.m.-10:00 p.m.

FRIDAY, SEPTEMBER 9

7:00 a.m.–8:00 a.m.

Liberty Ballroom AB

Breakfast

8:00 a.m.–10:00 a.m.

Liberty Ballroom CD

Plenary Session 1: Pathology [CME Eligible]

Session Chair: Jorge S. Reis-Filho, Memorial Sloan Kettering Cancer Center, New York, New York

8:00 a.m.-8:30 a.m.

DCIS: Pathological heterogeneity and prognosis definition [R]

Anne Vincent-Salomon, Institut Curie, Paris, France

8:30 a.m.-9:00 a.m.	Preinvasive breast lesions: an integrated pathology and genomics perspective Jorge S. Reis-Filho, Memorial Sloan Kettering Cancer Center, New York, New York
9:00 a.m.-9:30 a.m.	How to solve the uncomfortable truth of DCIS? Jelle Wesseling, Netherlands Cancer Institute, Amsterdam, The Netherlands
9:30 a.m.-9:45 a.m.	Lightning talks from submitted abstracts Spatial proximity between CD8 + T cells and tumor cells correlates with invasive recurrence in DCIS* Michael Campbell, University of California, San Francisco, San Francisco, California Genomic predictor can discriminate between high- and low-risk DCIS* Elinor J. Sawyer, King's College London, London, United Kingdom Pioneering genetic rat models of Ductal Carcinoma in situ (DCIS)* Catrin Lutz, Netherlands Cancer Institute (NKI), Amsterdam, The Netherlands
9:45 a.m.-10:00 a.m.	Discussion
10:00 a.m.–10:30 a.m. Liberty Ballroom Foyer	Break
10:30 a.m.–12:20 p.m. Liberty Ballroom CD	Plenary Session 2: Artificial Intelligence [CME Eligible] <i>Session Chair: Jorge S. Reis-Filho, Memorial Sloan Kettering Cancer Center, New York, New York</i>
10:30 a.m.-11:00 a.m.	Artificial intelligence for breast pathology: Challenges and opportunities (and more challenges!) Michael G. Drage, PathAI, Inc., Boston, Massachusetts
11:00 a.m.-11:30 a.m.	Co-evolving artificial intelligence and pathology Yinyin Yuan, Institute of Cancer Research, London, United Kingdom

*Lightning Talk selected from proffered abstracts

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11:30 a.m.-11:35 a.m.	Lightning talks from submitted abstracts Radiogenomics for predicting underestimation of invasiveness in ductal carcinoma in situ (DCIS) diagnosed with vacuum assisted breast biopsy: study rationale and design* Matteo Lazzeroni, European Institute of Oncology IRCCS, Milan, Italy
11:35 a.m.-12:05 p.m.	Breast pathology and AI: Are we there yet? [R] Matthew G. Hanna, Memorial Sloan Kettering Cancer Center, New York, New York
12:05 p.m.-12:20 p.m.	Discussion
12:20 p.m.–2:00 p.m. Liberty Ballroom AB	Poster Session A/ Lunch (provided)
2:15 p.m.–4:45 p.m. Liberty Ballroom CD <i>Session Chair: Jos Jonkers, Netherlands Cancer Institute, Amsterdam, The Netherlands</i>	Plenary Session 3: Model Systems [CME Eligible]
2:15 p.m.-2:45 p.m.	Mouse-INtraDuctal (MIND): An in vivo model for the discovery of epithelial/stromal cross talks that drive DCIS invasive and metastatic progression Fariba Behbod, University of Kansas Medical Center, Kansas City, Kansas
2:45 p.m.-3:15 p.m.	Title to be announced Senthil K. Muthuswamy, Beth Israel Deaconess Medical Center, Boston, Massachusetts
3:15 p.m.-3:30 p.m.	Lightning talks from submitted abstracts Intraductal administration of a recombinant transferrin receptor-directed immunotoxin clears ductal carcinoma in situ in preclinical mammary in-duct (MIND) models of breast cancer* Saraswati Sukumar, Johns Hopkins University School of Medicine, Baltimore, Maryland

*Lightning Talk selected from proffered abstracts

A living biobank of patient-derived ductal carcinoma in situ (DCIS) Mouse-INtraDuctal (MIND) xenografts identifies multiple risk factors of invasive progression*

Stefan Hutten, Netherlands Cancer Institute, Amsterdam, The Netherlands

Candidate antigens for a ductal carcinoma in situ vaccine, essential for breast cancer cell survival across multiple subtypes, are immunogenic in DCIS and IBC*

Sasha Stanton, Earle A. Chiles Research Institute, Portland, Oregon

3:30 p.m.-4:00 p.m. Patient-derived and genetically engineered models of Ductal Carcinoma in Situ

Jos Jonkers, Netherlands Cancer Institute, Amsterdam, The Netherlands

4:00 p.m.-4:30 p.m. Patient-derived organoids as models for breast cancer prevention and interception

Jennifer Rosenbluth, University of California, San Francisco, San Francisco, California

4:30 p.m.-4:45 p.m. Discussion

4:45 p.m.-5:15 p.m. Break

Liberty Ballroom Foyer

5:15 p.m.-7:35 p.m. Open Satellite Session: Updates from the Human Tumor Atlas Network and PRECISION Consortia [Not CME Eligible]

Liberty Ballroom CD

Chairs: Robert West, Stanford University, Stanford, California and Jelle Wesseling, Netherlands Cancer Institute, Amsterdam, The Netherlands

5:15 p.m.-5:45 p.m. Session 1: Spatial Genomics

Moderators: Robert West, Stanford University, Stanford, California and Esther H. Lips Netherlands Cancer Institute, Amsterdam, The Netherlands

5:15 p.m.-5:20 p.m. Introduction

Robert West, Stanford University, Stanford, California and Esther H. Lips Netherlands Cancer Institute, Amsterdam, The Netherlands

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- 5:20 p.m.-5:35 p.m. **Mammary epithelial architecture modulates field cancerization**
Hendrik Messal, Netherlands Cancer Institute, Amsterdam, The Netherlands
- 5:35 p.m.-5:50 p.m. **A single-cell and spatial investigation of tumor and TME for DCIS**
Runmin Wei, UT MD Anderson Cancer Center, Houston, Texas
- 5:50 p.m.-6:05 p.m. Panel Discussion
- 6:05 p.m.-7:20 p.m. Session 2: How Can We Optimize Risk Stratification Over Time for DCIS?**
Moderator: Jelle Wesseling, Netherlands Cancer Institute, Amsterdam, The Netherlands
- 6:05 p.m.-6:20 p.m. **Artificial intelligence for TIL scoring (AI-TIL)**
Yinyin Yuan, Institute of Cancer Research, London, United Kingdom
- 6:20 p.m.-6:35 p.m. **The DCIS: A biological challenge and clinical dilemma**
Sudhir Srivastava, National Cancer Institute, Bethesda, Maryland
- 6:35 p.m.-6:50 p.m. **Artificial intelligence approaches to DCIS grading and recurrence prediction**
Jonas Teuwen, Netherlands Cancer Institute, Amsterdam, The Netherlands
- 6:50 p.m.-7:05 p.m. **Managing large-scale consortia**
Jelle Wesseling
- 7:05 p.m.-7:20 p.m. Panel Discussion

SATURDAY, SEPTEMBER 10

7:00 a.m.-8:00 a.m. Breakfast
Liberty Ballroom AB

8:00 a.m.-10:00 a.m. Plenary Session 4: What is the role of our current surgical treatments? [CME Eligible]
Liberty Ballroom CD
Session Chair: Alistair Thompson, Dan L. Duncan Comprehensive Cancer Center, Houston, Texas

8:00 a.m.-8:30 a.m. **Surgery for DCIS: If, what and when**

*Lightning Talk selected from proffered abstracts

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Alistair Thompson, Dan L. Duncan Comprehensive Cancer Center, Houston, Texas

8:30 a.m.-9:00 a.m.

After DCIS surgery, what next? The prevention of future breast events

Seema A. Khan, Robert H. Lurie Comprehensive Cancer Center of Northwestern University, Chicago, Illinois

9:00 a.m.-9:10 a.m.

Lightning talks from submitted abstracts

Duration of endocrine treatment for DCIS impacts second events: Insights from a large registry of cases at two academic medical centers*

Gillian Hirst, University of California San Francisco, San Francisco, California

Breast Cancer (BC) risk reduction in young women with Ductal Carcinoma in Situ (DCIS)*

Megan Tesch, Dana-Farber Cancer Institute, Boston, Massachusetts

9:10 a.m.-9:40 a.m.

Challenges in conducting active surveillance for DCIS

Thomas Lynch, Duke Cancer Institute, Durham, North Carolina

9:40 a.m.-10:00 a.m.

Discussion

10:00 a.m.–10:30 a.m.

Liberty Ballroom Foyer

Break

10:30 a.m.–12:40 p.m.

Liberty Ballroom CD

Plenary Session 5: Imaging [CME Eligible]

Session Chair: Heather Greenwood, University of California San Francisco, San Francisco, California

10:30 a.m.-11:00 a.m.

Imaging tools for DCIS: Past, present and future

Constance Lehman, Harvard University/Massachusetts General Hospital, Boston, Massachusetts

11:00 a.m.-11:30 a.m.

MR Imaging of active surveillance of DCIS - What we have learned so far

Heather Greenwood, University of California San Francisco, San Francisco, California

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11:30 a.m.-11:40 a.m. **Lightning talks from submitted abstracts**

Characterizing N-glycan profiles of DCIS progression using tissue imaging MALDI mass spectrometry*

Elizabeth Wallace, Medical University of South Carolina, Charleston, South Carolina

DCIS-associated myoepithelial cells drive tumor progressive inflammation through up-regulation of integrin $\alpha\text{v}\beta\text{6}$ *

Michael Allen, Queen Mary University of London, Barts Cancer Institute, London, United Kingdom

11:40 a.m.-12:10 p.m. **Ductal carcinoma in situ (DCIS) and MRI: Challenges translating MRI depiction of DCIS to improved clinical performance and future opportunities to optimize treatment**

Habib Rahbar, University of Washington School of Medicine, Seattle, Washington

12:10 p.m.-12:40 p.m. **Image-based risk assessment**

Regina Barzilay, Massachusetts Institute of Technology, Cambridge, Massachusetts

12:40 p.m.–2:30 p.m. Lunch on own

2:30 p.m.–4:30 p.m. Plenary Session 6: Controversies in Clinical Care (debate format)
[CME Eligible]

Liberty Ballroom CD

Moderator: Laura J. Esserman, UCSF Helen Diller Family Comprehensive Cancer Center, San Francisco, California

DCIS should not be called cancer

2:30 p.m.-2:45 p.m. Jennifer L. Marti, Weill Cornell Medicine, New York, New York

2:45 p.m.-3:00 p.m. DCIS or cancer? Why all the confusion?

Steven Narod, Women's College Research Institute, Toronto, Canada

3:00 p.m.-3:30 p.m. Discussion

It is time to rethink local therapy for DCIS-enhanced image guided radiation therapy?

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3:30 p.m.-3:45 p.m.	For: Nicolas D. Prionas, University of California San Francisco, San Francisco, California
3:45 p.m.-4:00p.m.	Against: Bruce Mann, Royal Melbourne Hospital, Parkville, Australia
4:00 p.m.-4:30 p.m.	Discussion
4:45 p.m.-7:00 p.m. Liberty Ballroom AB	POSTER SESSION B / RECEPTION

SUNDAY, SEPTEMBER 11

7:00 a.m.-8:00 a.m. **Breakfast**
Liberty Ballroom AB

8:00 a.m.-9:45 a.m. **Plenary Session 7: Molecular Sequencing [CME Eligible]**
Liberty Ballroom CD
Session Chair: Kornelia Polyak, Dana-Farber Cancer Institute, Boston, Massachusetts

8:00 a.m.-8:30 a.m. **Molecular subtypes and spatial heterogeneity in DCIS**
Therese Sørbye, Oslo University Hospital, Oslo, Norway

8:30 a.m.-9:00 a.m. **Decoding DCIS progression & recurrence with single cell genomics**
Nicholas E. Navin, UT MD Anderson Cancer Center, Houston, Texas

9:00 a.m.-9:30 a.m. **Spatial ontologies for predicting invasive progression in ductal carcinoma in situ**
R. Michael Angelo, Stanford University, Stanford, California

9:30 a.m.-9:45 a.m. Discussion

9:45 a.m.-10:15 a.m. **Break**
Liberty Ballroom Foyer

10:15 a.m.-12:00 p.m. **Plenary Session 8: Microenvironment [CME Eligible]**
Liberty Ballroom CD
Session Chair: Kornelia Polyak, Dana-Farber Cancer Institute, Boston, Massachusetts

10:15 a.m.-10:45 a.m. **What is an invasion permissive/promoting microenvironment? Clues for prevention**

*Lightning Talk selected from proffered abstracts

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Alexander D. Borowsky, University of California-Davis, Davis, California

10:45 a.m.-11:15 a.m. **Compromised myoepithelial cell differentiation correlates with DCIS to IDC transition**

Pepper Schedin, Oregon Health & Science University, Portland, Oregon

11:15 a.m.-11:45 a.m. **DCIS to IDC progression - a key step of immune escape**

Kornelia Polyak, Dana-Farber Cancer Institute, Boston, Massachusetts

11:45 a.m.-12:00 p.m. Discussion

12:15 p.m.-1:00 p.m. Closing Keynote [CME Eligible]

Liberty Ballroom CD

Session Chair: Kornelia Polyak, Dana-Farber Cancer Institute, Boston, Massachusetts

The hitchhikers guide to the universe of DCIS

Laura J. Esserman, UCSF Helen Diller Family Comprehensive Cancer Center, San Francisco, California

1:00 p.m.

Closing Remarks

Laura J. Esserman, UCSF Helen Diller Family Comprehensive Cancer Center, San Francisco, California

Kornelia Polyak, Dana-Farber Cancer Institute, Boston, Massachusetts

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