Inside the Issue — Exploring the Current Role of Ovarian Suppression in the Management of Breast Cancer

Wednesday, February 8, 2023
5:00 PM – 6:00 PM ET

Faculty

Kathy D Miller, MD
Ann Partridge, MD, MPH

Moderator

Neil Love, MD

RTP
RESEARCH
TO PRACTICE

Faculty

Sara A Hurvitz, MD
Professor of Medicine
Director, Breast Cancer Clinical Trials Program,
Division of Hematology-Oncology
David Geffen School of Medicine at UCLA
Medical Director, Clinical Research Unit
Jonsson Comprehensive Cancer Center
Santa Monica, California

Kathy D Miller, MD
Ballvé-Lantero Professor
Division of Hematology/Oncology
Associate Director for Clinical Research
The Indiana University Melvin and Bren
Simon Cancer Center
Indianapolis, Indiana

Komal Jhaveri, MD
Associate Attending Physician
Breast Medicine Service and Early Drug
Development Service
Section Head, Endocrine Therapy Research Program
Clinical Director, Early Drug Development Service
Department of Medicine
Memorial Sloan Kettering Cancer Center
Assistant Professor of Medicine
Weill Cornell College of Medicine
New York, New York

Ann Partridge, MD, MPH
Vice Chair of Medical Oncology
Director, Program for Young Women
with Breast Cancer
Director, Adult Survivorship Program
Dana-Farber Cancer Institute
Professor of Medicine
Harvard Medical School
Boston, Massachusetts

RTP
RESEARCH
TO PRACTICE

Faculty

Melinda Telli, MD
Associate Professor of Medicine
Stanford University School of Medicine
Director, Breast Cancer Program
Stanford Cancer Institute
Stanford, California

Live Moderator
Neil Love, MD
Research To Practice

Sara M Tolaney, MD, MPH
Chief, Division of Breast Oncology
Associate Director, Susan F Smith Center for Women's Cancers
Senior Physician
Dana-Farber Cancer Institute
Associate Professor of Medicine
Harvard Medical School
Boston, Massachusetts

RTP
RESEARCH
TO PRACTICE

ONCOLOGY TODAY

WITH DR NEIL LOVE

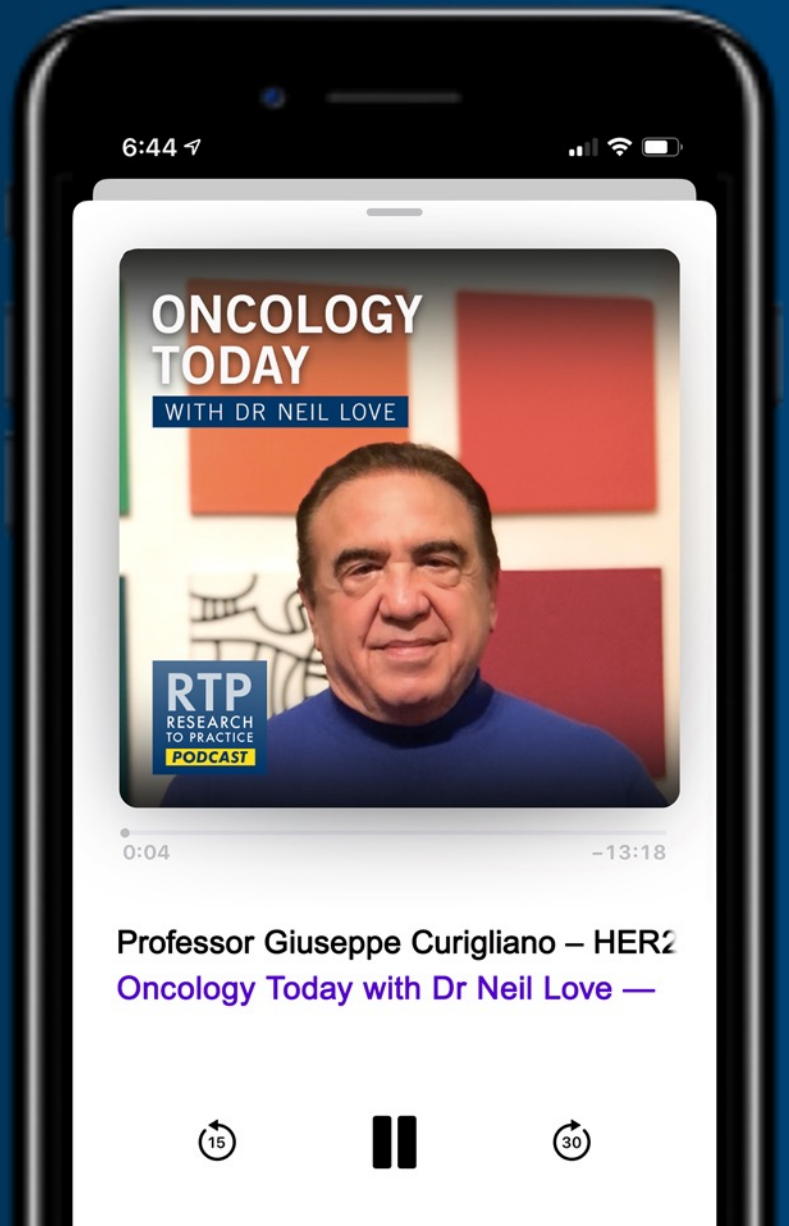
HER2-Positive Metastatic Breast Cancer

PROFESSOR GIUSEPPE CURIGLIANO
EUROPEAN INSTITUTE OF ONCOLOGY

Listen on Apple Podcasts

Spotify

Listen on Google Podcasts



Cases from the Community: Investigators Discuss Available Research Guiding the Care of Patients with Renal Cell Carcinoma

Part 1 of a 3-Part CME Symposium Series Held in Conjunction with the 2023 ASCO Genitourinary Cancers Symposium

Wednesday, February 15, 2023

7:15 PM – 8:45 PM PT (10:15 PM – 11:45 PM ET)

Faculty

Prof Laurence Albiges, MD, PhD

Thomas Powles, MBBS, MRCP, MD

Toni K Choueiri, MD

Moderator

Brian Rini, MD

RTP RESEARCH TO PRACTICE

Cases from the Community: Investigators Discuss Available Research Guiding the Care of Patients with Prostate Cancer

Part 2 of a 3-Part CME Symposium Series Held in Conjunction with the 2023 ASCO Genitourinary Cancers Symposium

Thursday, February 16, 2023

7:15 PM – 9:15 PM PT (10:15 PM – 12:15 AM ET)

Faculty

Emmanuel S Antonarakis, MD

Prof Karim Fizazi, MD, PhD

Maha Hussain, MD, FACP, FASCO

Matthew R Smith, MD, PhD

Moderator

Alan H Bryce, MD

RTP RESEARCH TO PRACTICE

Cases from the Community: Investigators Discuss Available Research Guiding the Care of Patients with Urothelial Bladder Cancer

Part 3 of a 3-Part CME Symposium Series Held in Conjunction with the 2023 ASCO Genitourinary Cancers Symposium

Friday, February 17, 2023

6:30 PM – 8:00 PM PT (9:30 PM – 11:00 PM ET)

Faculty

Matthew D Galsky, MD

Arlene Siefker-Radtke, MD

Jonathan E Rosenberg, MD

Moderator

Elisabeth I Heath, MD

RTP RESEARCH TO PRACTICE

Join Us In Person or Virtually

Recent Advances and Future Directions in Oncology: A Daylong Multitumor Educational Symposium in Partnership with the North Carolina Oncology Association and the South Carolina Oncology Society Joint Annual Conference

A CME/MOC- and NCPD-Accredited Event

Saturday, February 18, 2023

Breast Cancer

9:00 AM – 10:00 AM ET

Faculty

Harold J Burstein, MD, PhD

Virginia Kaklamani, MD, DSc

Gastrointestinal Cancers

10:00 AM – 11:00 AM ET

Faculty

Tanios Bekaii-Saab, MD

Rutika Mehta, MD, MPH

RTP RESEARCH TO PRACTICE

Join Us In Person or Virtually

Recent Advances and Future Directions in Oncology: A Daylong Multitumor Educational Symposium in Partnership with the North Carolina Oncology Association and the South Carolina Oncology Society Joint Annual Conference

A CME/MOC- and NCPD-Accredited Event

Saturday, February 18, 2023

Genitourinary Cancers

11:20 AM – 12:20 PM ET

Faculty

Daniel P Petrylak, MD

Sandy Srinivas, MD

Chronic Lymphocytic Leukemia and Lymphomas

1:05 PM – 2:05 PM ET

Faculty

Danielle M Brander, MD

Craig Moskowitz, MD

Join Us In Person or Virtually

Recent Advances and Future Directions in Oncology: A Daylong Multitumor Educational Symposium in Partnership with the North Carolina Oncology Association and the South Carolina Oncology Society Joint Annual Conference

A CME/MOC- and NCPD-Accredited Event

Saturday, February 18, 2023

Gynecologic Cancers

2:05 PM – 3:05 PM ET

Faculty

Michael J Birrer, MD, PhD

Ursula Matulonis, MD

Lung Cancer

3:20 PM – 4:20 PM ET

Faculty

Ibiayi Dagogo-Jack, MD

Stephen V Liu, MD

RTP RESEARCH TO PRACTICE

Meet The Professor
Optimizing the Management of Colorectal Cancer

Wednesday, February 22, 2023
5:00 PM – 6:00 PM ET

Faculty

Christopher Lieu, MD

Moderator

Neil Love, MD

RTP
RESEARCH
TO PRACTICE

Oncology Today with Dr Neil Love — Role of PARP Inhibition in Ovarian Cancer and Recent Data with Tumor Treating Fields: A Special Dual-Focused Webinar

A CME/MOC-Accredited Virtual Event

Thursday, February 23, 2023
5:00 PM – 6:00 PM ET

Faculty

Gottfried E Konecny, MD
Chirag B Patel, MD, PhD

Moderator

Neil Love, MD

RTP
RESEARCH
TO PRACTICE

Commercial Support

This activity is supported by an educational grant from TerSera Therapeutics LLC.

Dr Love — Disclosures

Dr Love is president and CEO of Research To Practice. Research To Practice receives funds in the form of educational grants to develop CME activities from the following companies: AbbVie Inc, Adaptive Biotechnologies Corporation, ADC Therapeutics, Agios Pharmaceuticals Inc, Alexion Pharmaceuticals, Amgen Inc, Array BioPharma Inc, a subsidiary of Pfizer Inc, Astellas, AstraZeneca Pharmaceuticals LP, Aveo Pharmaceuticals, Bayer HealthCare Pharmaceuticals, BeiGene Ltd, BeyondSpring Pharmaceuticals Inc, Blueprint Medicines, Boehringer Ingelheim Pharmaceuticals Inc, Bristol-Myers Squibb Company, Celgene Corporation, Clovis Oncology, Coherus BioSciences, CTI BioPharma Corp, Daiichi Sankyo Inc, Eisai Inc, Elevation Oncology Inc, EMD Serono Inc, Epizyme Inc, Exact Sciences Corporation, Exelixis Inc, Five Prime Therapeutics Inc, Foundation Medicine, G1 Therapeutics Inc, Genentech, a member of the Roche Group, Genmab, Gilead Sciences Inc, Grail Inc, GSK, Halozyme Inc, Helsinn Healthcare SA, ImmunoGen Inc, Incyte Corporation, Ipsen Biopharmaceuticals Inc, Janssen Biotech Inc, administered by Janssen Scientific Affairs LLC, Jazz Pharmaceuticals Inc, Karyopharm Therapeutics, Kite, A Gilead Company, Kronos Bio Inc, Lilly, Loxo Oncology Inc, a wholly owned subsidiary of Eli Lilly & Company, MEI Pharma Inc, Merck, Mersana Therapeutics Inc, Mirati Therapeutics Inc, Natera Inc, Novartis, Novartis Pharmaceuticals Corporation on behalf of Advanced Accelerator Applications, Novocure Inc, Oncopeptides, Pfizer Inc, Pharmacyclics LLC, an AbbVie Company, Puma Biotechnology Inc, Regeneron Pharmaceuticals Inc, Sanofi, Seagen Inc, Servier Pharmaceuticals LLC, SpringWorks Therapeutics Inc, Sumitomo Dainippon Pharma Oncology Inc, Taiho Oncology Inc, Takeda Pharmaceuticals USA Inc, TerSera Therapeutics LLC, Tesaro, A GSK Company, TG Therapeutics Inc, Turning Point Therapeutics Inc, Verastem Inc, and Zymeworks Inc.

RTP
RESEARCH
TO PRACTICE

Research To Practice CME Planning Committee Members, Staff and Reviewers

Planners, scientific staff and independent reviewers for Research To Practice have no relevant conflicts of interest to disclose.

Dr Miller — Disclosures

Contracted Research	Astex Pharmaceuticals, Pfizer Inc, Radiopharm Theranostics (not yet active)
Data and Safety Monitoring Board/Committee	AstraZeneca Pharmaceuticals LP, Celcuity, Genentech, a member of the Roche Group, Merck

RTP
RESEARCH
TO PRACTICE

Dr Partridge — Disclosures

No relevant conflicts of interest to disclose.

RTP
RESEARCH
TO PRACTICE

Agenda

Case Presentation: Dr Partridge

- 25-year-old woman with T1cN0M0, ER/PR-positive, HER2-negative breast cancer, Recurrence Score® (RS) = 26

Case Presentation: Dr Miller

- 28-year-old woman with a 2.8-cm ER/PR-positive, HER2-positive Grade III IDC

Case Presentation: Dr Partridge

- 35-year-old woman with a 3.5-cm ER/PR-negative, HER2-negative breast cancer with a BRCA2 mutation

Case Presentation: Dr Miller

- 32-year-old woman with ER/PR-positive, HER2-negative inflammatory breast cancer

Appendix

Thank you for joining us!

CME and MOC credit information will be emailed to each participant within 5 business days.

RTP
RESEARCH
TO PRACTICE

Inside the Issue — Exploring the Current Role of Ovarian Suppression in the Management of Breast Cancer

Wednesday, February 8, 2023
5:00 PM – 6:00 PM ET

Faculty

Kathy D Miller, MD
Ann Partridge, MD, MPH

Moderator

Neil Love, MD

RTP
RESEARCH
TO PRACTICE

Faculty

Sara A Hurvitz, MD
Professor of Medicine
Director, Breast Cancer Clinical Trials Program,
Division of Hematology-Oncology
David Geffen School of Medicine at UCLA
Medical Director, Clinical Research Unit
Jonsson Comprehensive Cancer Center
Santa Monica, California

Kathy D Miller, MD
Ballvé-Lantero Professor
Division of Hematology/Oncology
Associate Director for Clinical Research
The Indiana University Melvin and Bren
Simon Cancer Center
Indianapolis, Indiana

Komal Jhaveri, MD
Associate Attending Physician
Breast Medicine Service and Early Drug
Development Service
Section Head, Endocrine Therapy Research Program
Clinical Director, Early Drug Development Service
Department of Medicine
Memorial Sloan Kettering Cancer Center
Assistant Professor of Medicine
Weill Cornell College of Medicine
New York, New York

Ann Partridge, MD, MPH
Vice Chair of Medical Oncology
Director, Program for Young Women
with Breast Cancer
Director, Adult Survivorship Program
Dana-Farber Cancer Institute
Professor of Medicine
Harvard Medical School
Boston, Massachusetts

RTP
RESEARCH
TO PRACTICE

Faculty

Melinda Telli, MD
Associate Professor of Medicine
Stanford University School of Medicine
Director, Breast Cancer Program
Stanford Cancer Institute
Stanford, California

Live Moderator
Neil Love, MD
Research To Practice

Sara M Tolaney, MD, MPH
Chief, Division of Breast Oncology
Associate Director, Susan F Smith Center for Women's Cancers
Senior Physician
Dana-Farber Cancer Institute
Associate Professor of Medicine
Harvard Medical School
Boston, Massachusetts

RTP
RESEARCH
TO PRACTICE

ONCOLOGY TODAY

WITH DR NEIL LOVE

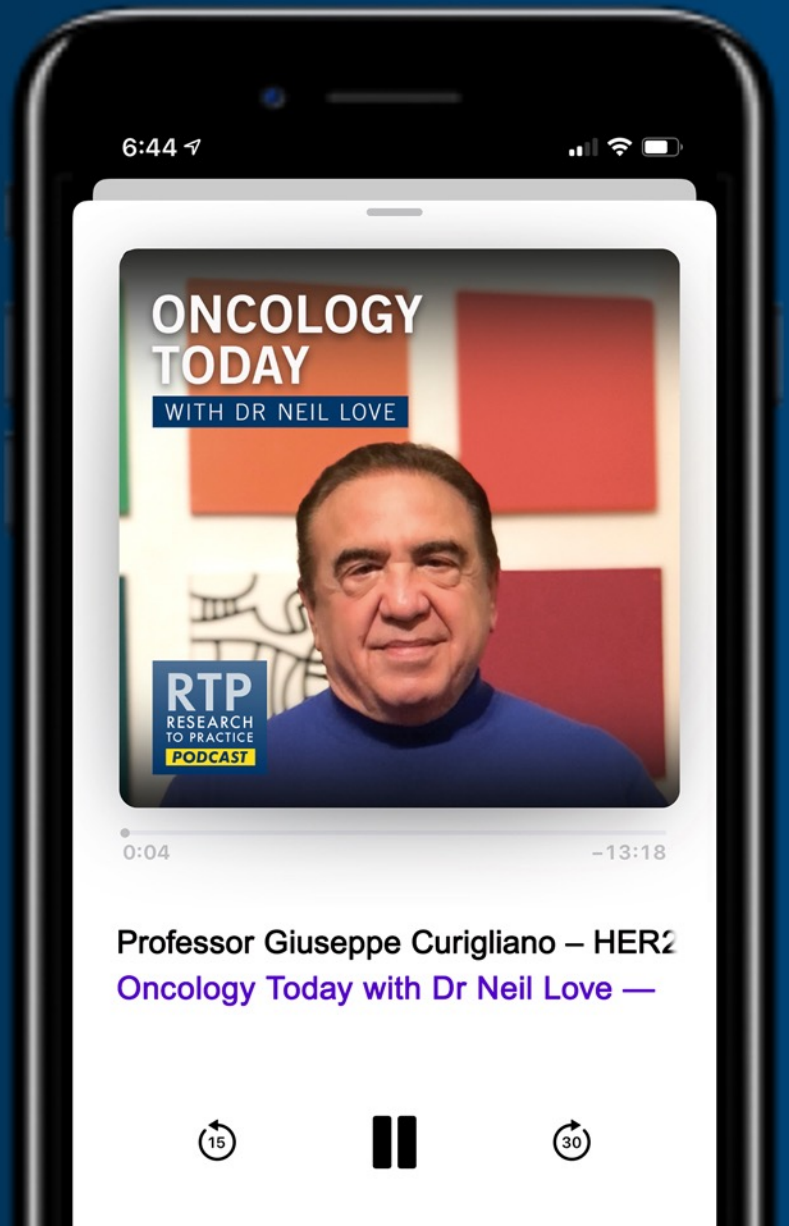
HER2-Positive Metastatic Breast Cancer

PROFESSOR GIUSEPPE CURIGLIANO
EUROPEAN INSTITUTE OF ONCOLOGY

Listen on Apple Podcasts

Spotify

Listen on Google Podcasts



Cases from the Community: Investigators Discuss Available Research Guiding the Care of Patients with Renal Cell Carcinoma

Part 1 of a 3-Part CME Symposium Series Held in Conjunction with the 2023 ASCO Genitourinary Cancers Symposium

Wednesday, February 15, 2023

7:15 PM – 8:45 PM PT (10:15 PM – 11:45 PM ET)

Faculty

Prof Laurence Albiges, MD, PhD

Thomas Powles, MBBS, MRCP, MD

Toni K Choueiri, MD

Moderator

Brian Rini, MD

RTP RESEARCH TO PRACTICE

Cases from the Community: Investigators Discuss Available Research Guiding the Care of Patients with Prostate Cancer

Part 2 of a 3-Part CME Symposium Series Held in Conjunction with the 2023 ASCO Genitourinary Cancers Symposium

Thursday, February 16, 2023

7:15 PM – 9:15 PM PT (10:15 PM – 12:15 AM ET)

Faculty

Emmanuel S Antonarakis, MD

Prof Karim Fizazi, MD, PhD

Maha Hussain, MD, FACP, FASCO

Matthew R Smith, MD, PhD

Moderator

Alan H Bryce, MD

RTP RESEARCH TO PRACTICE

Cases from the Community: Investigators Discuss Available Research Guiding the Care of Patients with Urothelial Bladder Cancer

Part 3 of a 3-Part CME Symposium Series Held in Conjunction with the 2023 ASCO Genitourinary Cancers Symposium

Friday, February 17, 2023

6:30 PM – 8:00 PM PT (9:30 PM – 11:00 PM ET)

Faculty

Matthew D Galsky, MD

Arlene Siefker-Radtke, MD

Jonathan E Rosenberg, MD

Moderator

Elisabeth I Heath, MD

RTP RESEARCH TO PRACTICE

Join Us In Person or Virtually

Recent Advances and Future Directions in Oncology: A Daylong Multitumor Educational Symposium in Partnership with the North Carolina Oncology Association and the South Carolina Oncology Society Joint Annual Conference

A CME/MOC- and NCPD-Accredited Event

Saturday, February 18, 2023

Breast Cancer

9:00 AM – 10:00 AM ET

Faculty

Harold J Burstein, MD, PhD

Virginia Kaklamani, MD, DSc

Gastrointestinal Cancers

10:00 AM – 11:00 AM ET

Faculty

Tanios Bekaii-Saab, MD

Rutika Mehta, MD, MPH

RTP RESEARCH TO PRACTICE

Join Us In Person or Virtually

Recent Advances and Future Directions in Oncology: A Daylong Multitumor Educational Symposium in Partnership with the North Carolina Oncology Association and the South Carolina Oncology Society Joint Annual Conference

A CME/MOC- and NCPD-Accredited Event

Saturday, February 18, 2023

Genitourinary Cancers

11:20 AM – 12:20 PM ET

Faculty

Daniel P Petrylak, MD

Sandy Srinivas, MD

Chronic Lymphocytic Leukemia and Lymphomas

1:05 PM – 2:05 PM ET

Faculty

Danielle M Brander, MD

Craig Moskowitz, MD

Join Us In Person or Virtually

Recent Advances and Future Directions in Oncology: A Daylong Multitumor Educational Symposium in Partnership with the North Carolina Oncology Association and the South Carolina Oncology Society Joint Annual Conference

A CME/MOC- and NCPD-Accredited Event

Saturday, February 18, 2023

Gynecologic Cancers

2:05 PM – 3:05 PM ET

Faculty

Michael J Birrer, MD, PhD

Ursula Matulonis, MD

Lung Cancer

3:20 PM – 4:20 PM ET

Faculty

Ibiayi Dagogo-Jack, MD

Stephen V Liu, MD

RTP RESEARCH TO PRACTICE

Meet The Professor
Optimizing the Management of Colorectal Cancer

Wednesday, February 22, 2023
5:00 PM – 6:00 PM ET

Faculty

Christopher Lieu, MD

Moderator

Neil Love, MD

RTP
RESEARCH
TO PRACTICE

Oncology Today with Dr Neil Love — Role of PARP Inhibition in Ovarian Cancer and Recent Data with Tumor Treating Fields: A Special Dual-Focused Webinar

A CME/MOC-Accredited Virtual Event

Thursday, February 23, 2023
5:00 PM – 6:00 PM ET

Faculty

Gottfried E Konecny, MD
Chirag B Patel, MD, PhD

Moderator

Neil Love, MD

RTP
RESEARCH
TO PRACTICE

Inside the Issue — Exploring the Current Role of Ovarian Suppression in the Management of Breast Cancer

Wednesday, February 8, 2023
5:00 PM – 6:00 PM ET

Faculty

Kathy D Miller, MD
Ann Partridge, MD, MPH

Moderator

Neil Love, MD

RTP
RESEARCH
TO PRACTICE

Commercial Support

This activity is supported by an educational grant from TerSera Therapeutics LLC.

Research To Practice CME Planning Committee Members, Staff and Reviewers

Planners, scientific staff and independent reviewers for Research To Practice have no relevant conflicts of interest to disclose.

Dr Love — Disclosures

Dr Love is president and CEO of Research To Practice. Research To Practice receives funds in the form of educational grants to develop CME activities from the following companies: AbbVie Inc, Adaptive Biotechnologies Corporation, ADC Therapeutics, Agios Pharmaceuticals Inc, Alexion Pharmaceuticals, Amgen Inc, Array BioPharma Inc, a subsidiary of Pfizer Inc, Astellas, AstraZeneca Pharmaceuticals LP, Aveo Pharmaceuticals, Bayer HealthCare Pharmaceuticals, BeiGene Ltd, BeyondSpring Pharmaceuticals Inc, Blueprint Medicines, Boehringer Ingelheim Pharmaceuticals Inc, Bristol-Myers Squibb Company, Celgene Corporation, Clovis Oncology, Coherus BioSciences, CTI BioPharma Corp, Daiichi Sankyo Inc, Eisai Inc, Elevation Oncology Inc, EMD Serono Inc, Epizyme Inc, Exact Sciences Corporation, Exelixis Inc, Five Prime Therapeutics Inc, Foundation Medicine, G1 Therapeutics Inc, Genentech, a member of the Roche Group, Genmab, Gilead Sciences Inc, Grail Inc, GSK, Halozyme Inc, Helsinn Healthcare SA, ImmunoGen Inc, Incyte Corporation, Ipsen Biopharmaceuticals Inc, Janssen Biotech Inc, administered by Janssen Scientific Affairs LLC, Jazz Pharmaceuticals Inc, Karyopharm Therapeutics, Kite, A Gilead Company, Kronos Bio Inc, Lilly, Loxo Oncology Inc, a wholly owned subsidiary of Eli Lilly & Company, MEI Pharma Inc, Merck, Mersana Therapeutics Inc, Mirati Therapeutics Inc, Natera Inc, Novartis, Novartis Pharmaceuticals Corporation on behalf of Advanced Accelerator Applications, Novocure Inc, Oncopeptides, Pfizer Inc, Pharmacyclics LLC, an AbbVie Company, Puma Biotechnology Inc, Regeneron Pharmaceuticals Inc, Sanofi, Seagen Inc, Servier Pharmaceuticals LLC, SpringWorks Therapeutics Inc, Sumitomo Dainippon Pharma Oncology Inc, Taiho Oncology Inc, Takeda Pharmaceuticals USA Inc, TerSera Therapeutics LLC, Tesaro, A GSK Company, TG Therapeutics Inc, Turning Point Therapeutics Inc, Verastem Inc, and Zymeworks Inc.

RTP
RESEARCH
TO PRACTICE

Dr Miller — Disclosures

Contracted Research	Astex Pharmaceuticals, Pfizer Inc, Radiopharm Theranostics (not yet active)
Data and Safety Monitoring Board/Committee	AstraZeneca Pharmaceuticals LP, Celcuity, Genentech, a member of the Roche Group, Merck

RTP
RESEARCH
TO PRACTICE

Dr Partridge — Disclosures

No relevant conflicts of interest to disclose.

RTP
RESEARCH
TO PRACTICE

Optimizing the Use of Ovarian Function Suppression (OFS)/Ablation in the Care of Patients with Breast Cancer

Kathy D. Miller
Ballvé-Lantero Professor
Indiana University Melvin and Bren Simon Comprehensive Cancer Center

Agenda

Case Presentation: Dr Partridge

- 25-year-old woman with T1cN0M0, ER/PR-positive, HER2-negative breast cancer, Recurrence Score® (RS) = 26

Case Presentation: Dr Miller

- 28-year-old woman with a 2.8-cm ER/PR-positive, HER2-positive Grade III IDC

Case Presentation: Dr Partridge

- 35-year-old woman with a 3.5-cm ER/PR-negative, HER2-negative breast cancer with a BRCA2 mutation

Case Presentation: Dr Miller

- 32-year-old woman with ER/PR-positive, HER2-negative inflammatory breast cancer

Appendix

Common Questions from Community-Based Physicians

- Who should receive ovarian function suppression (OFS)/ablation versus tamoxifen alone?
- In what situations do you prefer oophorectomy to OFS?
- When using OFS, what is your usual duration and dosing interval?
- Does HER2 status affect your approach to endocrine therapy?
- How do you approach OFS during chemotherapy for fertility preservation versus ovarian function preservation?
- What is the optimal approach for interrupting endocrine therapy to allow for pregnancy?
- How do you approach the management of side effects associated with OFS (hot flashes, vaginal dryness, etc)?

Agenda

Case Presentation: Dr Partridge

- 25-year-old woman with T1cN0M0, ER/PR-positive, HER2-negative breast cancer, RS = 26

Case Presentation: Dr Miller

- 28-year-old woman with a 2.8-cm ER/PR-positive, HER2-positive Grade III IDC

Case Presentation: Dr Partridge

- 35-year-old woman with a 3.5-cm ER/PR-negative, HER2-negative breast cancer with a BRCA2 mutation

Case Presentation: Dr Miller

- 32-year-old woman with ER/PR-positive, HER2-negative inflammatory breast cancer

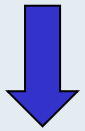
Appendix

Which adjuvant endocrine treatment would you recommend for a 25-year-old premenopausal patient with T1cN0M0 ER/PR-positive, HER2-negative breast cancer and RS = 26?

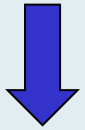
1. Ovarian function suppression (OFS)/ablation
2. OFS/ablation + tamoxifen
3. OFS/ablation + anastrozole
4. OFS/ablation + letrozole
5. OFS/ablation + exemestane
6. Tamoxifen
7. Other

Hierarchy of Endocrine Therapy for Premenopausal Women

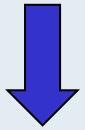
OFS/ablation + aromatase inhibitor



OFS/ablation + tamoxifen



OFS/ablation



Tamoxifen

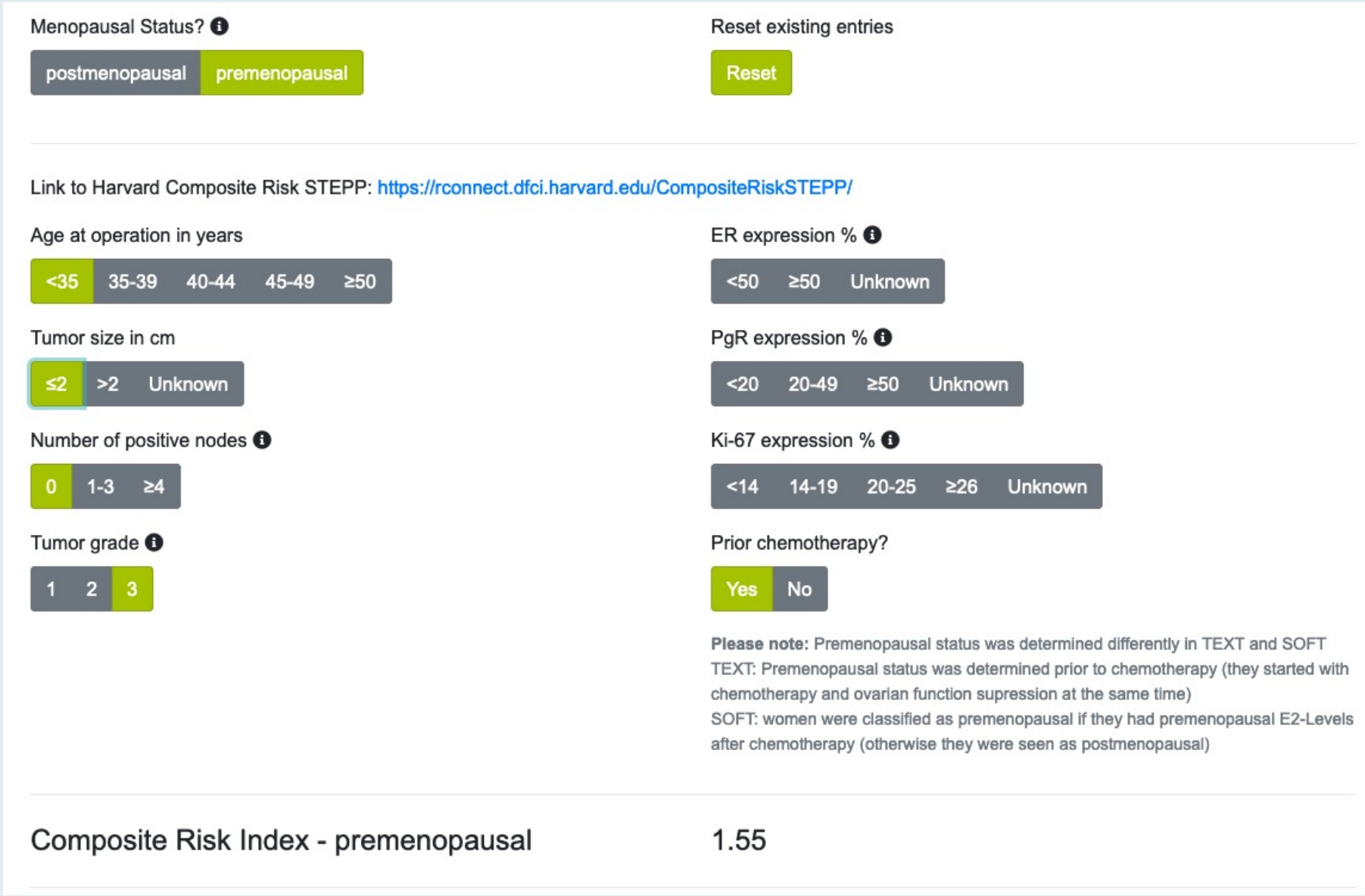
Case 1: Dr Partridge – 25-year-old woman

- 25 yo woman who presents with a mass in her R breast and is diagnosed with T1cN0M0, ER+, PR+, HER2- breast ca, grade 3, Oncotype Dx 26

- She receives 4 cycles of TC and sees you in follow-up for discussion of hormonal therapy

- She is depressed and concerned about trying any further therapy at this time.

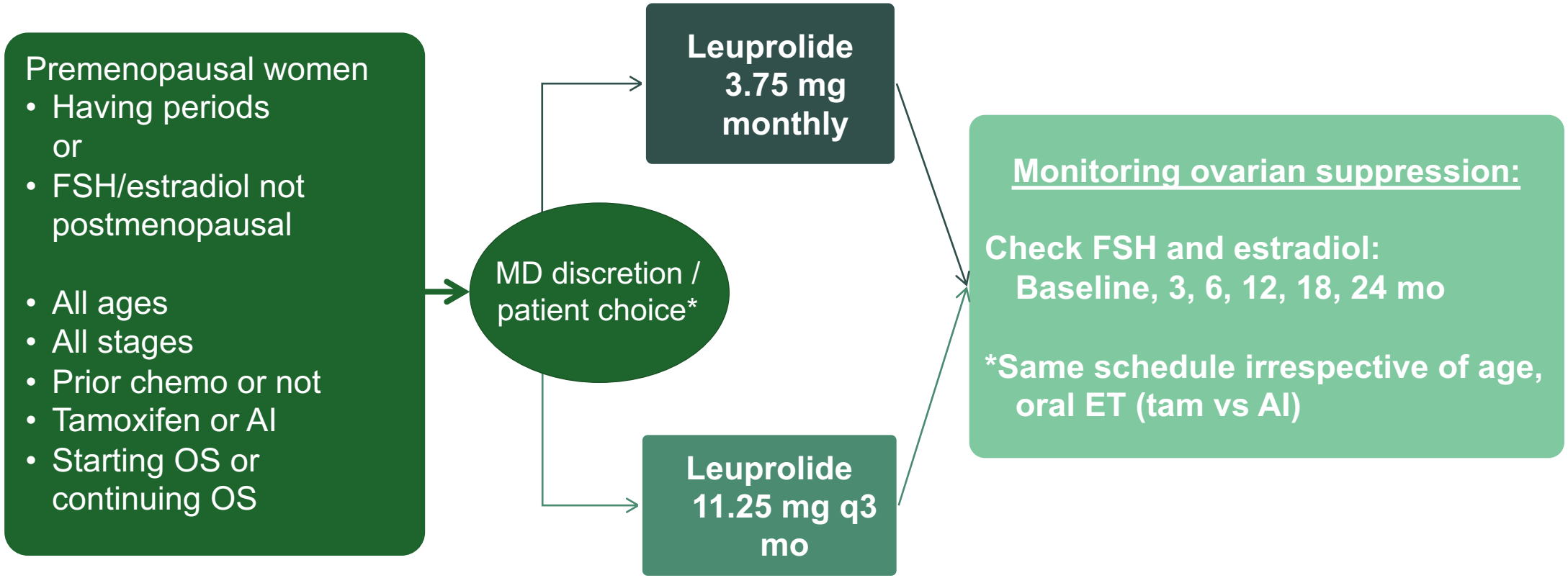
CRIB: Composite Risk Index Breast Cancer



https://crib-calculator.com/calculator.html

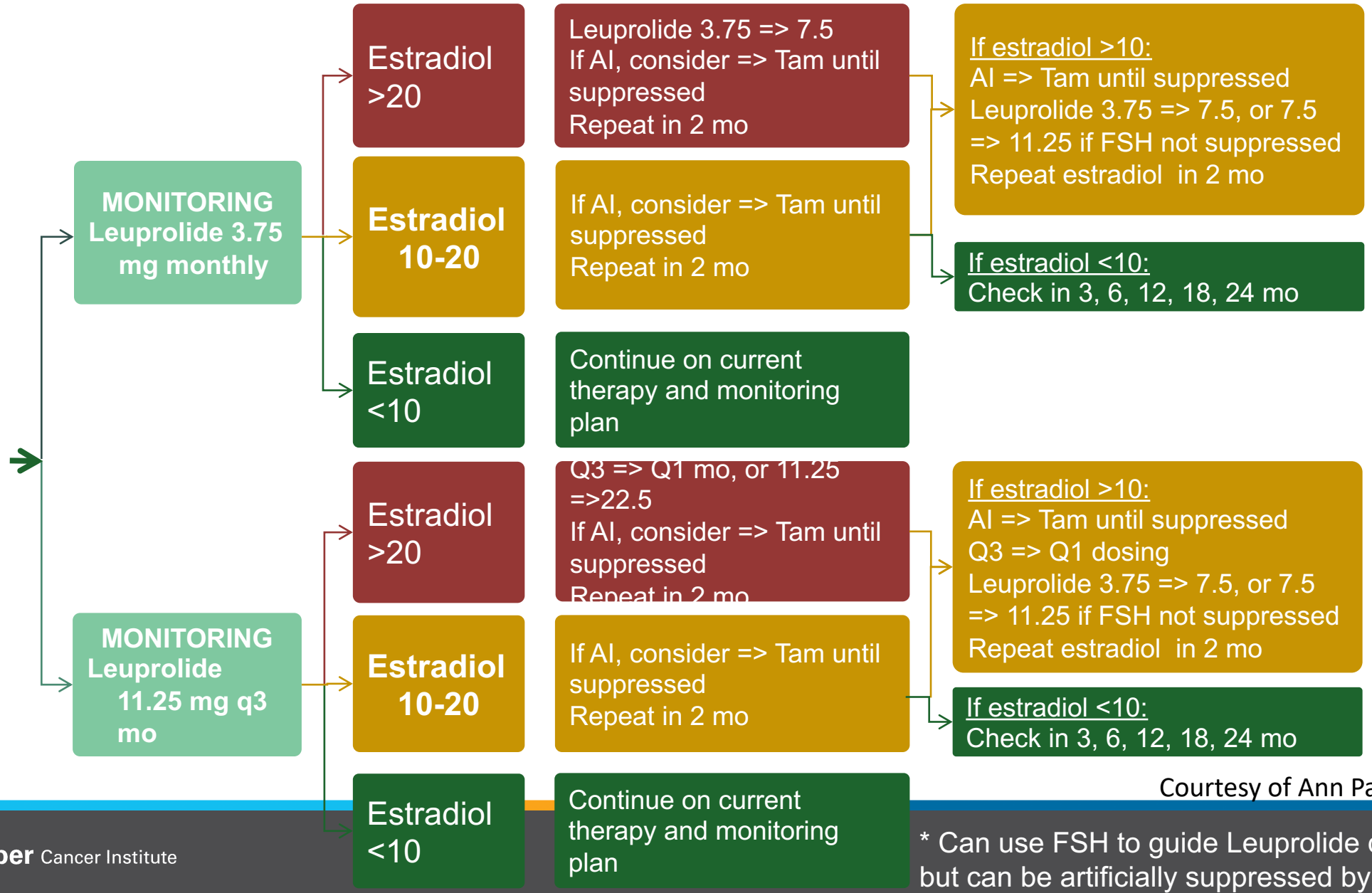
RTP RESEARCH TO PRACTICE

Ovarian suppression – monitoring schema



Courtesy of Ann Partridge, MD, MPH

Ovarian suppression – dosing schema



Courtesy of Ann Partridge, MD, MPH

* Can use FSH to guide Leuprolide dose adjustment, but can be artificially suppressed by tam

Which adjuvant treatment would you most likely recommend for a 30-year-old premenopausal woman with 0.5-cm ER-positive, HER2-negative, node-negative localized breast cancer and the Recurrence Score® (RS) below?

	RS = 8 ET	RS = 20 ET
 Dr Miller	Tamoxifen*	Tamoxifen*
 Dr Partridge	Tamoxifen	Tamoxifen
 Dr Hurvitz	Tamoxifen	OFS/ablation and tamoxifen
 Dr Jhaveri	Tamoxifen	Discuss tamoxifen vs OFS plus tamoxifen
 Dr Telli	Tamoxifen	Tamoxifen
 Dr Tolaney	Tamoxifen	Tamoxifen

ET = endocrine therapy; OFS = ovarian function suppression. * Low risk – T1 tumor, Grade <III, under age 40

Which adjuvant treatment would you most likely recommend for a 30-year-old premenopausal woman with 1-cm ER-positive, HER2-negative, node-negative localized breast cancer and the RS below?

	RS = 8 ET	RS = 20 ET
 Dr Miller	OFS/ablation	OFS/ablation
 Dr Partridge	Tamoxifen	OFS/ablation and letrozole
 Dr Hurvitz	Tamoxifen	OFS/ablation and tamoxifen
 Dr Jhaveri	Tamoxifen	Discuss OFS with tamoxifen/AI
 Dr Telli	Tamoxifen	OFS/ablation and exemestane
 Dr Tolaney	Tamoxifen	OFS/ablation and letrozole

AI = aromatase inhibitor

Which adjuvant treatment would you most likely recommend for a 30-year-old premenopausal woman with 1.5-cm ER-positive, HER2-negative, node-negative localized breast cancer and the RS below?

	RS = 8 ET	RS = 20 ET
 Dr Miller	OFS/ablation	OFS/ablation
 Dr Partridge	Tamoxifen	OFS/ablation and letrozole
 Dr Hurvitz	Tamoxifen	OFS/ablation and tamoxifen
 Dr Jhaveri	Tamoxifen	Discuss OFS with tamoxifen/AI
 Dr Telli	Tamoxifen	OFS/ablation and exemestane
 Dr Tolaney	Tamoxifen	OFS/ablation and exemestane

AI = aromatase inhibitor

Which adjuvant treatment would you most likely recommend for a 30-year-old premenopausal woman with 2-cm ER-positive, HER2-negative, node-negative localized breast cancer and the RS below?

	RS = 8 ET	RS = 20 ET
 Dr Miller	OFS/ablation	OFS/ablation
 Dr Partridge	OFS/ablation and letrozole	OFS/ablation and letrozole
 Dr Hurvitz	OFS/ablation and tamoxifen	OFS/ablation and tamoxifen
 Dr Jhaveri	Tamoxifen	Discuss OFS with tamoxifen/AI
 Dr Telli	Tamoxifen	OFS/ablation and exemestane
 Dr Tolaney	Tamoxifen	OFS/ablation and letrozole

Which adjuvant treatment would you most likely recommend for a 30-year-old premenopausal woman with 2.5-cm ER-positive, HER2-negative, node-negative localized breast cancer and the RS below?

	RS = 8 ET	RS = 20 ET
 Dr Miller	OFS/ablation	OFS/ablation
 Dr Partridge	OFS/ablation and letrozole	OFS/ablation and letrozole
 Dr Hurvitz	OFS/ablation and tamoxifen	OFS/ablation and tamoxifen
 Dr Jhaveri	Discuss OFS with tamoxifen/AI	OFS/ablation and AI
 Dr Telli	Tamoxifen	OFS/ablation and exemestane
 Dr Tolaney	Tamoxifen	OFS/ablation and letrozole

Which adjuvant ET would you most likely recommend for a 30-year-old premenopausal woman with ER-positive, HER2-negative localized breast cancer with 1 positive node and the RS below?

	RS = 8 ET	RS = 20 ET
 Dr Miller	OFS/ablation and anastrozole	OFS/ablation and anastrozole
 Dr Partridge	OFS/ablation + tamoxifen or + letrozole	OFS/ablation + letrozole
 Dr Hurvitz	OFS/ablation + tamoxifen	OFS/ablation + anastrozole
 Dr Jhaveri	OFS/ablation + tamoxifen or letrozole	OFS/ablation + tamoxifen or letrozole
 Dr Telli	OFS/ablation + exemestane	OFS/ablation + exemestane
 Dr Tolaney	OFS/ablation + letrozole	OFS/ablation + letrozole

For premenopausal patients with ER-positive localized breast cancer who wish to maintain fertility and to whom you are going to administer a GnRHa, when do you typically start it relative to chemotherapy?

 Dr Miller	Sequentially	 Dr Jhaveri	Concurrently
 Dr Partridge	Sequentially	 Dr Telli	Concurrently
 Dr Hurvitz	Concurrently	 Dr Tolaney	Concurrently

RTP RESEARCH TO PRACTICE

For premenopausal patients with ER-positive localized breast cancer who are not interested in maintaining fertility but wish to preserve ovarian function and to whom you are going to administer a GnRHa, when do you typically start it relative to chemotherapy?

 Dr Miller	Sequentially	 Dr Jhaveri	Concurrently
 Dr Partridge	Sequentially	 Dr Telli	Concurrently
 Dr Hurvitz	Concurrently	 Dr Tolaney	Concurrently

RTP RESEARCH TO PRACTICE

For premenopausal patients with ER-positive localized breast cancer who are not interested in maintaining fertility or preserving ovarian function and to whom you are going to administer a GnRHa, when do you typically start it relative to chemotherapy?

 Dr Miller	Concurrently	 Dr Jhaveri	Concurrently
 Dr Partridge	Sequentially	 Dr Telli	Sequentially
 Dr Hurvitz	Sequentially	 Dr Tolaney	Sequentially

RTP RESEARCH TO PRACTICE

Agenda

Case Presentation: Dr Partridge

- 25-year-old woman with T1cN0M0, ER/PR-positive, HER2-negative breast cancer, RS = 26

Case Presentation: Dr Miller

- 28-year-old woman with a 2.8-cm ER/PR-positive, HER2-positive Grade III IDC

Case Presentation: Dr Partridge

- 35-year-old woman with a 3.5-cm ER/PR-negative, HER2-negative breast cancer with a BRCA2 mutation

Case Presentation: Dr Miller

- 32-year-old woman with ER/PR-positive, HER2-negative inflammatory breast cancer

Appendix

Case 2: Dr Miller – 28-year-old woman

- Diagnosed at age 28 as part of an infertility evaluation
  - 1 cm breast mass on exam
  - 2.8 cm, normal LN on imaging -> Grade 3 IDC, ER 50%, PR 40%, HER2 3+
  - Expanded panel genetics -> no pathogenic mutation (VUS in NBN2)
- Very interested in preserving fertility
  - Oocyte retrieval pre-chemo yielded 6 good quality eggs
- Neoadjuvant THP with LHRH to preserve ovarian function
  - BCS with SNB – confirmed pCR
  - Completed RT and one-year HP
- Continued LHRH as part of hormone Rx
  - Unacceptable toxicity with AI, tolerated tamoxifen well

Case 2: Dr Miller – 28-year-old woman (cont)

3 years later

- Tired of menopausal effects
- Wants to attempt pregnancy

- She asks
  - When will menses resume if we stop the LHRH agonist?
  - What is the impact of stopping OFS sooner than 5 years?
  - Is it safe for me to get pregnant?

ASTRRA
OFS + Tamoxifen versus Tamoxifen

- N-1298
- OFS given for **2 years**

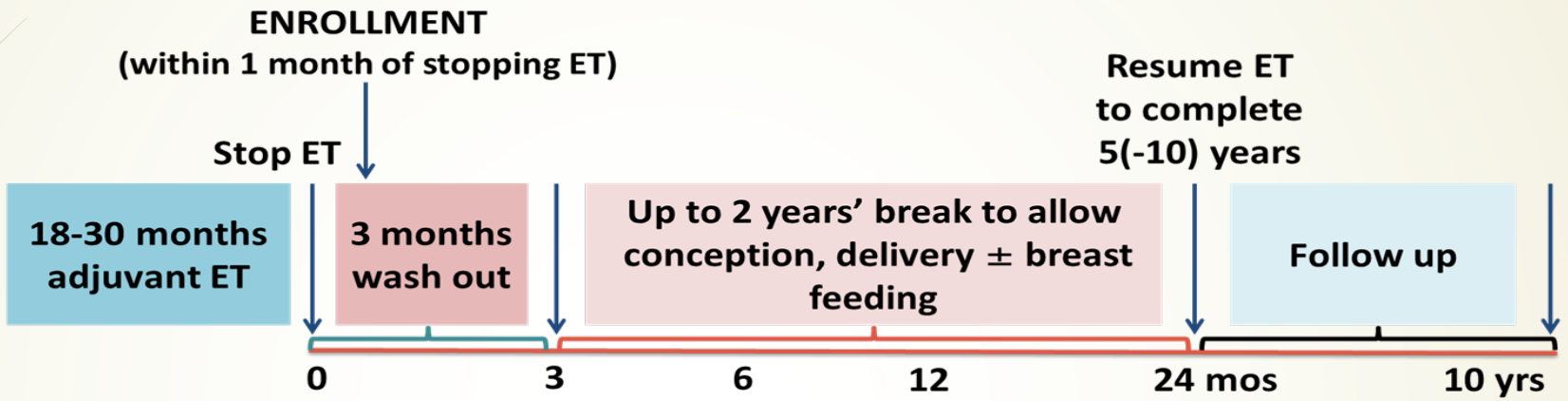
- 8-year DFS 85.4% vs. 80.2%
  - HR 0.67 (0.51-0.87)
- 8-year OS 96.5% vs 95.3% in the TAM-only group
  - HR 0.78 (0.49-1.25)

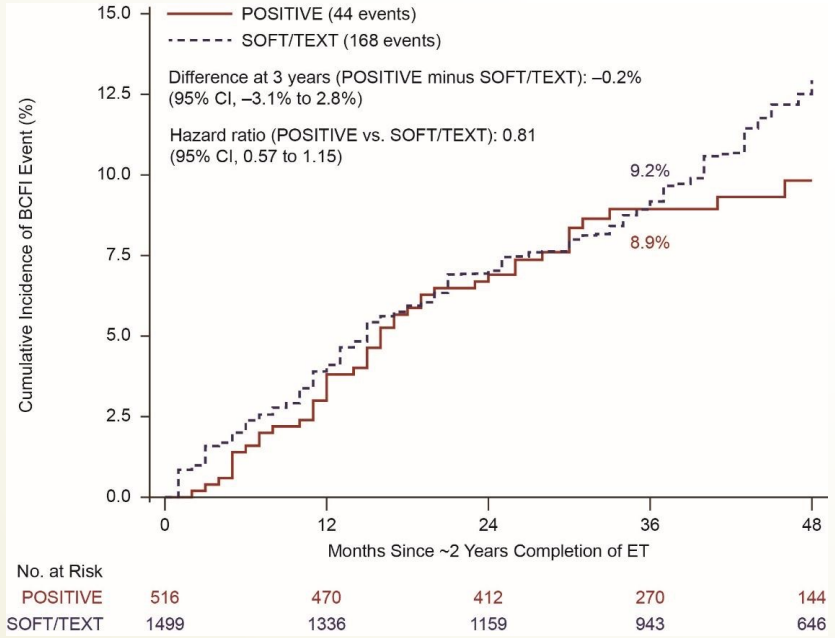
Baek et al, ASCO 2022

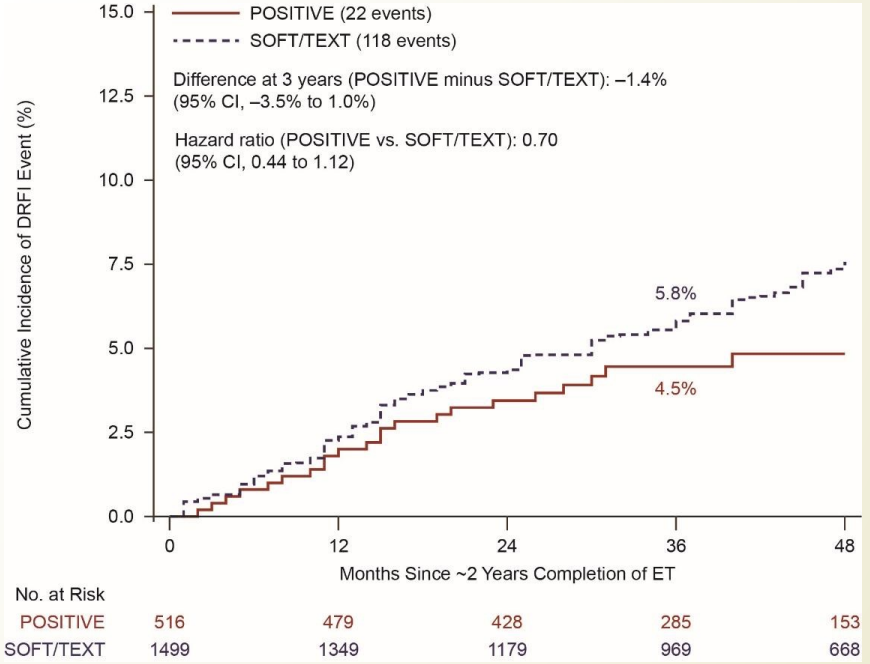
Courtesy of Kathy D Miller, MD

POSITIVE results for young patients

IBCSG 48-14 / BIG 8-13 / Alliance A221405







Courtesy of Kathy D Miller, MD

Partridge et al, SABCS 2022

POSITIVE
Pregnancy Outcomes

	N	% of 497	% of 368
Secondary endpoint population	497	100%	
At least one on trial pregnancy	368	**74%**	100%
At least one live birth (full-term or preterm)	317	**64%**	**86%**
At least one miscarriage	93	19%	25%
At least one elective abortion	16	3%	4%
At least one stillbirth/neonatal death	1/1	0.2% / 0.2%	0.3% / 0.3%

- **Delivery**
  - Vaginal 66%
  - Cesarean section 34%
- **Pregnancy complications**
  - 11% of pregnancies
  - Most common: Hypertension/preeclampsia 3%, Diabetes 2%
- **62% of 317 women reported breast feeding**

Courtesy of Kathy D Miller, MD

Partridge et al, SABCS 2022

A 28-year-old premenopausal woman with a 2.8-cm, ER/PR-positive, HER2-positive IDC who is interested in preserving fertility is going to receive neoadjuvant paclitaxel/trastuzumab/pertuzumab. When, if at all, would you initiate a GnRHa? Would your approach to the use of a GnRHa change if the patient experienced a pathologic complete response to neoadjuvant treatment?

 Dr Miller	Prior to neoadjuvant treatment; No	 Dr Jhaveri	Concurrently with neoadjuvant treatment; Yes
 Dr Partridge	Prior to neoadjuvant treatment; No	 Dr Telli	Prior to neoadjuvant treatment; No
 Dr Hurvitz	Concurrently with neoadjuvant treatment; No	 Dr Tolaney	Concurrently with neoadjuvant treatment; No

IDC = infiltrating ductal carcinoma

Have you offered or would you offer the opportunity to discontinue hormonal therapy to a premenopausal patient with low-risk (node-negative) localized breast cancer who is receiving a GnRHa in combination with adjuvant endocrine treatment and wishes to become pregnant?

 Dr Miller	I have	 Dr Jhaveri	I have
 Dr Partridge	I have	 Dr Telli	I have
 Dr Hurvitz	I have	 Dr Tolaney	I have

RTP RESEARCH TO PRACTICE

Have you offered or would you offer the opportunity to discontinue hormonal therapy to a premenopausal patient with high-risk (multiple positive nodes) localized breast cancer who is receiving a GnRHa in combination with adjuvant endocrine treatment and wishes to become pregnant?

 Dr Miller	I have	 Dr Jhaveri	I have
 Dr Partridge	I have not but would for the right patient	 Dr Telli	I have not but would for the right patient
 Dr Hurvitz	I have	 Dr Tolaney	I have not but would for the right patient

RTP RESEARCH TO PRACTICE

In general, for a premenopausal patient with low-risk (node-negative) localized breast cancer who is receiving a GnRHa in combination with adjuvant endocrine treatment and wishes to become pregnant, what is the minimum duration of hormonal therapy that you would recommend before you would be comfortable discontinuing treatment?

 Dr Miller	I have proceeded to pregnancy with delayed hormone therapy in 2 patients	 Dr Jhaveri	5 years
 Dr Partridge	2 years	 Dr Telli	2 years
 Dr Hurvitz	1 year	 Dr Tolaney	2 years

RTP RESEARCH TO PRACTICE

In general, for a premenopausal patient with high-risk (multiple positive nodes) localized breast cancer who is receiving a GnRHa in combination with adjuvant endocrine treatment and wishes to become pregnant, what is the minimum duration of hormonal therapy that you would recommend before you would be comfortable discontinuing treatment?

 Dr Miller	2 years	 Dr Jhaveri	5 years
 Dr Partridge	2 years	 Dr Telli	5 years
 Dr Hurvitz	2 years	 Dr Tolaney	3-4 years

RTP RESEARCH TO PRACTICE

In general, for a premenopausal patient with low-risk (node-negative) localized breast cancer who is receiving a GnRHa in combination with adjuvant endocrine treatment and wishes to become pregnant, how long would you feel comfortable allowing her to remain off hormonal therapy?

 Dr Miller	2 years	 Dr Jhaveri	2 years
 Dr Partridge	2 years	 Dr Telli	2 years
 Dr Hurvitz	3 years	 Dr Tolaney	2 years

RTP RESEARCH TO PRACTICE

In general, for a premenopausal patient with high-risk (multiple positive nodes) localized breast cancer who is receiving a GnRHa in combination with adjuvant endocrine treatment and wishes to become pregnant, how long would you feel comfortable allowing her to remain off hormonal therapy?

 Dr Miller	2 years	 Dr Jhaveri	2 years
 Dr Partridge	Maximum of 2 years	 Dr Telli	2 years
 Dr Hurvitz	2 years	 Dr Tolaney	1 year

RTP RESEARCH TO PRACTICE

Agenda

Case Presentation: Dr Partridge

- 25-year-old woman with T1cN0M0, ER/PR-positive, HER2-negative breast cancer, RS = 26

Case Presentation: Dr Miller

- 28-year-old woman with a 2.8-cm ER/PR-positive, HER2-positive Grade III IDC

Case Presentation: Dr Partridge

- 35-year-old woman with a 3.5-cm ER/PR-negative, HER2-negative breast cancer with a BRCA2 mutation

Case Presentation: Dr Miller

- 32-year-old woman with ER/PR-positive, HER2-negative inflammatory breast cancer

Appendix

RTP
RESEARCH
TO PRACTICE

Case 3: Dr Partridge – 35-year-old woman (cT2N0 TNBC)

- She has a 3cm mass palpable in her breast and ultrasound confirms 3.5 cm mass and reveals an enlarged axillary node; mammogram reveals dense breasts and MRI confirms L breast mass in upper outer breast without additional findings
- Core needle biopsy reveals high grade triple negative (ER-/PR-/HER2-) invasive breast cancer; biopsy of the node reveals invasive carcinoma c/w breast primary
- She undergoes rapid genetic testing and has a pathogenic BRCA2 variant (family hx of father with prostate in 50's only)
- She is a lawyer, married and had just started to try to get pregnant

Case 3: Dr Partridge – 35-year-old woman (cT2N0 TNBC) (cont)

- What would you offer her next?
  - Surgery considerations
  - Preoperative treatment options
  - Fertility preservation and future pregnancy considerations
  - Future surveillance and risk reduction recommendations

Case 3: Dr Partridge – 35-year-old woman (cT2N0 TNBC) (cont)

- The patient is recommended to receive preoperative KEYNOTE-522 chemotherapy.

- She chooses to undergo 1 cycle of IVF prior to starting treatment which she does over a 3-week period
  - She banks 10 embryos and 8 oocytes with a plan to consider pre-implantation genetic diagnosis (PGD) in future

- During treatment, she opts to receive leuprolide through chemotherapy to prevent premature menopause and potentially preserve fertility

Case 3: Dr Partridge – 35-year-old woman (cT2N0 TNBC) (cont)

- She tolerates chemotherapy well with excellent clinical response

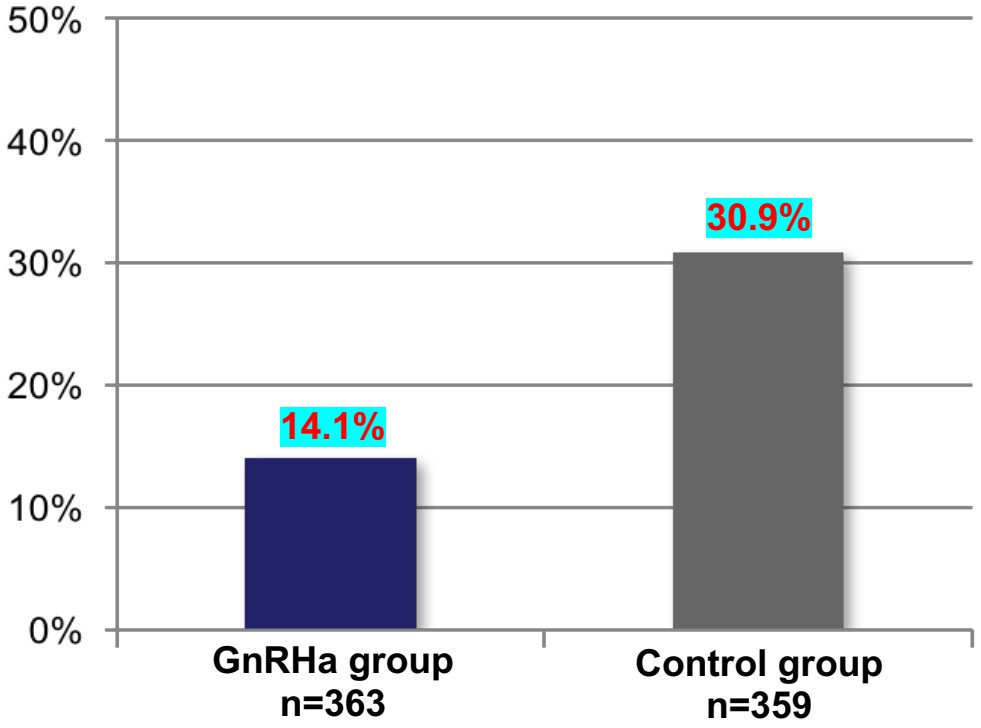
- At surgery (bilateral mastectomy with implant reconstruction), she is found to have negative sentinel node (0 of 3 nodes with disease, and evidence of treatment effect in the node with the clip) and 3 mm of residual grade 2 invasive ductal carcinoma in the breast.

Case 3: Dr Partridge – 35-year-old woman (cT2N0 TNBC) (cont)

- She sees you in follow-up after completing treatment and has a number of questions:
  - When can she get pregnant?
  - When does she have to get her ovaries out?
  - How will you know the treatment has worked?
  - How will you follow her?

Ovarian Suppression Through Chemotherapy

Premature-Ovarian Insufficiency Rate



OR* 0.38 (95% CI 0.26-0.57)
p<0.001

Post-Treatment Pregnancy Rate

	GnRHa group (n = 37) No. (%)	Control group (n = 20) No. (%)
Age distribution, years		
≤ 40	37 (100)	20 (100)
≥ 41	0 (0.0)	0 (0.0)
Estrogen receptor status		
Positive	6 (16.2)	2 (10.0)
Negative	31 (83.8)	18 (90.0)

IRR** 1.83 (95% CI 1.06-3.15)
p=0.030

DFS and OS the same!

*Odds ratio (OR) adjusted for age, estrogen receptor status, type and duration of chemotherapy administered
**Incidence risk ratio (IRR)

Courtesy of Ann Partridge, MD, MPH

Lambertini et al, JCO, 2018

PROMISE GIM-6: Long-term Outcomes of GnRHa to Preserve Ovarian Function

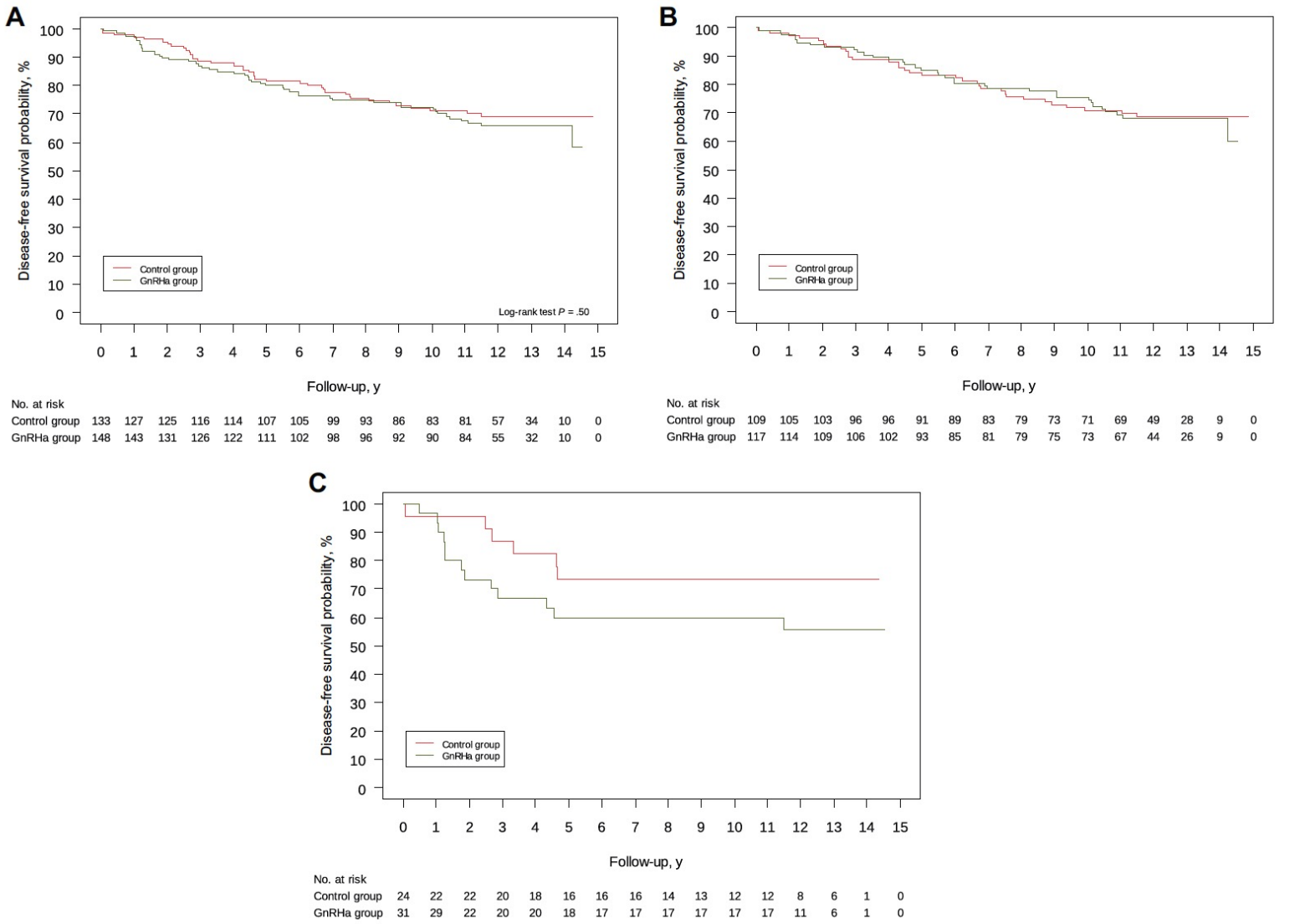


Figure 2. Kaplan-Meier curves for disease-free survival according to treatment arm among (A) all randomly assigned patients, (B) patients with hormone receptor–positive breast cancer, and (C) patients with hormone receptor–negative breast cancer. All statistical tests were 2-sided. GnRHa = gonadotropin-releasing hormone agonist.

For a 35-year-old premenopausal woman with ER-positive, HER2-negative localized breast cancer and multiple positive nodes who is not interested in future childbearing and to whom you plan to administer an aromatase inhibitor, would you recommend oophorectomy or a gonadotropin-releasing hormone agonist (GnRHa) in addition to adjuvant endocrine therapy?

Dr Miller

Patient preference — either option is acceptable

Dr Jhaveri

Patient preference — either option is acceptable

Dr Partridge

GnRHa, if not BRCA carrier

Dr Telli

Patient preference — either option is acceptable

Dr Hurvitz

Patient preference — either option is acceptable

Dr Tolaney

Patient preference — either option is acceptable

RTP RESEARCH TO PRACTICE

When administering a GnRHa in combination with adjuvant endocrine therapy for a 35-year-old woman with ER-positive localized breast cancer, what is your typical planned duration of OFS?

 Dr Miller	5 years	 Dr Jhaveri	5 years
 Dr Partridge	5 years	 Dr Telli	5 years
 Dr Hurvitz	5 years	 Dr Tolaney	5 years

RTP RESEARCH TO PRACTICE

For premenopausal patients (age 20-40 years) with ER-positive, HER2-negative localized breast cancer who are about to receive adjuvant chemotherapy, do you generally offer the option of using OFS during chemotherapy in the following clinical scenarios?

	For fertility preservation	For ovarian function preservation
 Dr Miller	Yes	No
 Dr Partridge	Yes	Yes
 Dr Hurvitz	Yes	Yes
 Dr Jhaveri	No*	Yes
 Dr Telli	Yes	Yes
 Dr Tolaney	Yes	Yes

*Fertility specialist discusses with patient

RTP RESEARCH TO PRACTICE

For premenopausal patients (age 20-40 years) with ER-positive, HER2-positive localized breast cancer who are about to receive adjuvant chemotherapy, do you generally offer the option of using OFS during chemotherapy in the following clinical scenarios?

	For fertility preservation	For ovarian function preservation
 Dr Miller	No	No
 Dr Partridge	Yes	Yes
 Dr Hurvitz	Yes	Yes
 Dr Jhaveri	No*	Yes
 Dr Telli	Yes	Yes
 Dr Tolaney	Yes	Yes

*Fertility specialist discusses with patient

RTP RESEARCH TO PRACTICE

For premenopausal patients (age 20-40 years) with ER-negative, HER2-negative localized breast cancer who are about to receive adjuvant chemotherapy, do you generally offer the option of using OFS during chemotherapy in the following clinical scenarios?

	For fertility preservation	For ovarian function preservation
 Dr Miller	Yes	Yes
 Dr Partridge	Yes	Yes
 Dr Hurvitz	Yes	Yes
 Dr Jhaveri	No*	Yes
 Dr Telli	Yes	Yes
 Dr Tolaney	Yes	Yes

*Fertility specialist discusses with patient

RTP RESEARCH TO PRACTICE

Agenda

Case Presentation: Dr Partridge

- 25-year-old woman with T1cN0M0, ER/PR-positive, HER2-negative breast cancer, RS = 26

Case Presentation: Dr Miller

- 28-year-old woman with a 2.8-cm ER/PR-positive, HER2-positive Grade III IDC

Case Presentation: Dr Partridge

- 35-year-old woman with a 3.5-cm ER/PR-negative, HER2-negative breast cancer with a BRCA2 mutation

Case Presentation: Dr Miller

- 32-year-old woman with ER/PR-positive, HER2-negative inflammatory breast cancer

Appendix

RTP RESEARCH TO PRACTICE

Case 4: Dr Miller – 32-year-old woman

- 32-year-old presented with inflammatory breast cancer
  - ER 90%, PR 70%, HER2 0
- Morbidly obese (BMI 36)
- Irregular menses, suspected PCOS
  - Gaps of 3-6 months between cycles common
- Adopted, family history unknown
  - Expanded panel genetics -> no pathogenic mutation
- Systemic staging -> no mets

- Identifies as lesbian, not interested in fertility preservation

Case 4: Dr Miller – 32-year-old woman (cont)

- Neoadjuvant ddAC -> paclitaxel
  - Clinical complete response
- Elected bilateral mastectomy for symmetry
  - Pathologic CR
- PMRT/Olaparib on SWOG IBC trial

- Light menses between C2 and 3, none since

Case 4: Dr Miller – 32-year-old woman (cont)

Is she menopausal?

Menopause = No spontaneous menses for 12 months in the absence of interventions that may impact ovarian function

Predictors of chemotherapy related amenorrhea

- Age
- Lower pre-treatment AMH (?)

Could check hormone levels **BUT**

- Ovarian function may vary over time
- Tamoxifen therapy makes interpretation challenging

Decreased peripheral conversation -> decreased estradiol -> increased FSH/LH -> stimulate ovarian estradiol production -> resume menses

- Up to ¼ of amenorrheic patients have pre-menopausal estradiol levels

Ruddy et al, BCRT 2014
Burstein et al, Clinical Breast Cancer 2006

Case 4: Dr Miller – 32-year-old woman (cont)

Choice of hormone therapy

- Uncomfortable with AI alone
  - Would require **ongoing monitoring** of ovarian function
- Tamoxifen concerns
  - Less effective
  - Higher risk of thromboembolic events
- Out of pocket cost for LHRH and more frequent clinic visits challenging

- Elected BSO
  - Followed by AI

Do you or your practice employ any alternative approaches to manage symptoms associated with OFS (eg, exercise, complementary strategies)?

 Dr Miller	Yes — exercise, breathing exercises, SSRIs	 Dr Jhaveri	Yes – exercise, acupuncture, gabapentin
 Dr Partridge	Yes – exercise, CBT for menopausal symptoms	 Dr Telli	Yes
 Dr Hurvitz	Yes – exercise, acupuncture	 Dr Tolaney	Yes – exercise, acupuncture

SSRIs = selective serotonin reuptake inhibitors; CBT = cognitive behavioral therapy

RTP RESEARCH TO PRACTICE

What is your typical strategy to ameliorate vaginal dryness/dyspareunia associated with OFS?

 Dr Miller	Vaginal lubricants and moisturizers, vaginal estrogen, topical pain relievers, pelvic floor therapy	 Dr Jhaveri	Vaginal lubricants and moisturizers, vaginal estrogens
 Dr Partridge	Vaginal lubricants and moisturizers	 Dr Telli	Vaginal lubricants and moisturizers, vaginal estrogen, pelvic floor therapy, CO2 laser treatment
 Dr Hurvitz	Vaginal lubricants and moisturizers, topical pain relievers, pelvic floor therapy, CO2 laser treatment	 Dr Tolaney	Vaginal lubricants and moisturizers

Are there situations in which you recommend hormone replacement therapy to ameliorate side effects associated with OFS?

 Dr Miller	Yes — severe depression, suicidal, unresponsive to therapy	 Dr Jhaveri	No
 Dr Partridge	Yes – only in BRCA carrier previvors	 Dr Telli	No
 Dr Hurvitz	No	 Dr Tolaney	No

RTP RESEARCH TO PRACTICE

Agenda

Case Presentation: Dr Partridge

- 25-year-old woman with T1cN0M0, ER/PR-positive, HER2-negative breast cancer, RS = 26

Case Presentation: Dr Miller

- 28-year-old woman with a 2.8-cm ER/PR-positive HER2-positive Grade III IDC

Case Presentation: Dr Partridge

- 35-year-old woman with a 3.5-cm ER/PR-negative, HER2-negative breast cancer and a BRCA2 mutation

Case Presentation: Dr Miller

- 32-year-old woman with ER/PR-positive, HER2-negative inflammatory breast cancer

Appendix

APPENDIX

Case: Dr Partridge – 32-year-old woman

- A 32 yo woman sees you for a second opinion
- She was diagnosed 18 months ago with high grade HR+, Her-2+ disease, clinically T2 (approximately 2.5 cm), N0.
- She receives neoadjuvant THP chemotherapy (on clinical trial) and has a pCR and completes a year of HP and starts tamoxifen and OFS.
- She wants to know optimal duration of hormonal therapy and when she can become pregnant

The POSITIVE Trial: ELIGIBILITY

IBCSG

- Premenopausal women wishing to become pregnant
- Age ≤42 years at study entry
- At least 18 months and no more than 30 months of prior adjuvant ET for stage I-III HR+ BC
  - Prior neo/adjuvant chemotherapy ± fertility preservation allowed
- No clinical evidence of recurrence

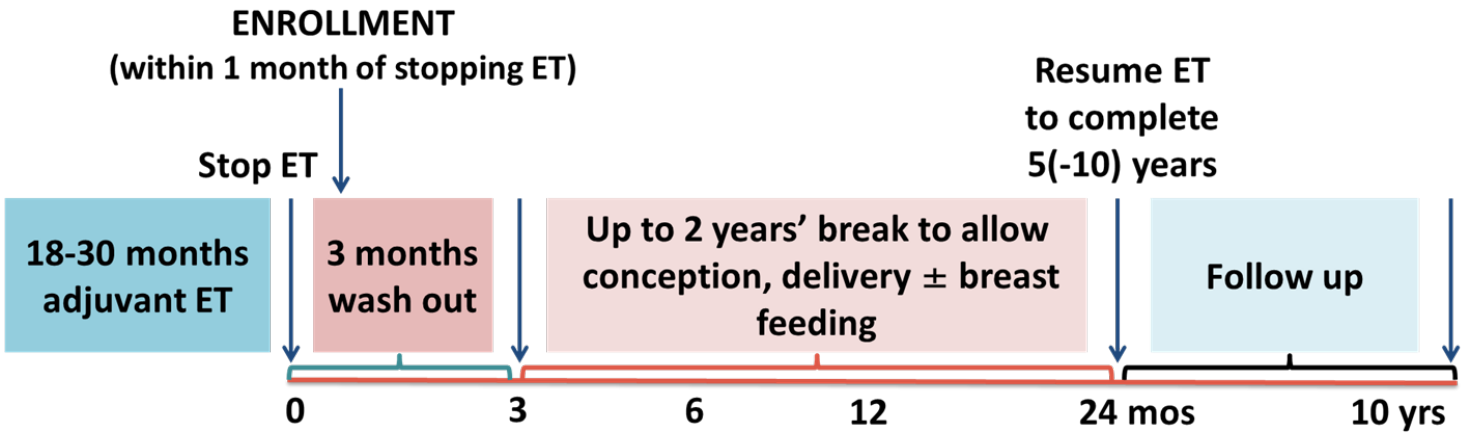
Courtesy of Ann Partridge, MD, MPH

Partridge et al, SABCS, 2022

POSITIVE TRIAL PROCEDURES

IBCSG

- Planned ET interruption (within 1 month of trial enrollment):
- Up to 2 years to attempt pregnancy, conceive, deliver, and breastfeed, including 3-months washout period
  - If no pregnancy by 1 year, fertility assessment strongly recommended
- ET resumption strongly recommended after pregnancy to complete planned 5-10 yrs
- Long-term follow-up



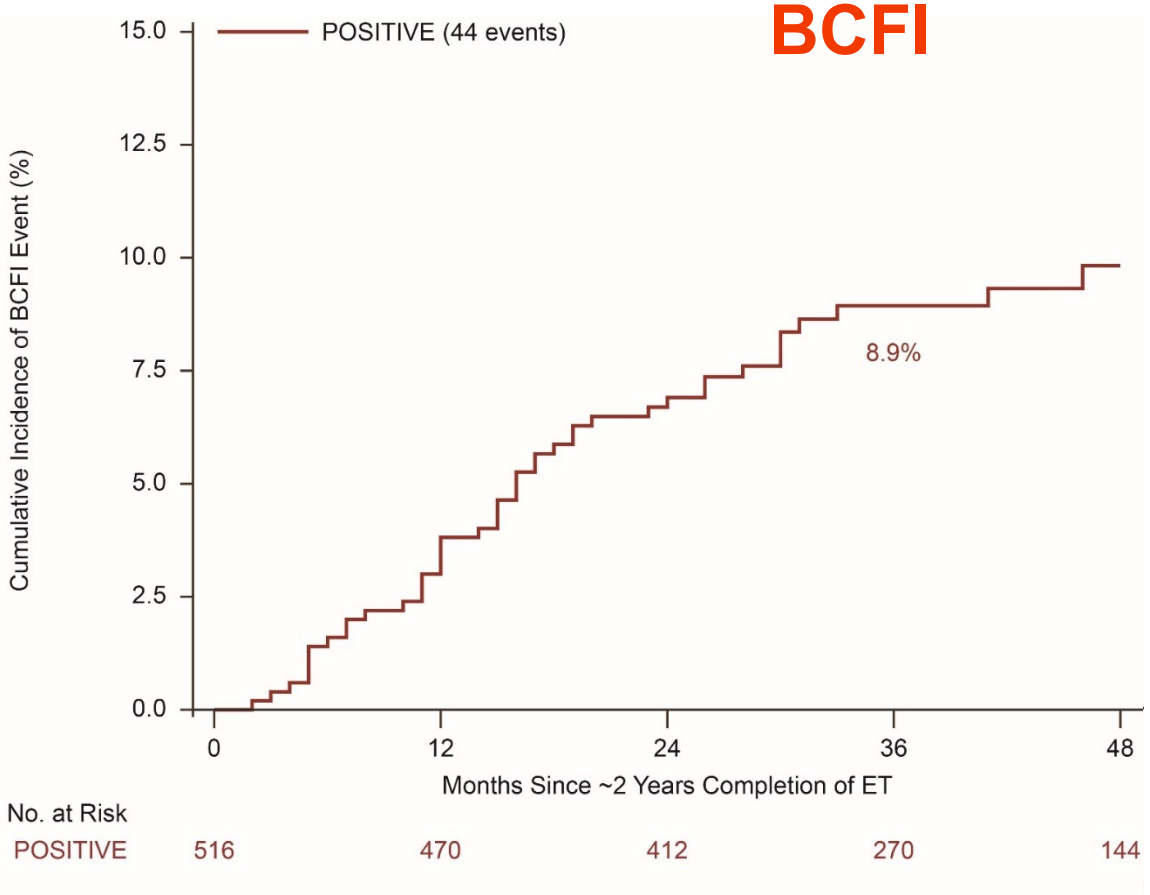
Courtesy of Ann Partridge, MD, MPH

Partridge et al, SABCS, 2022

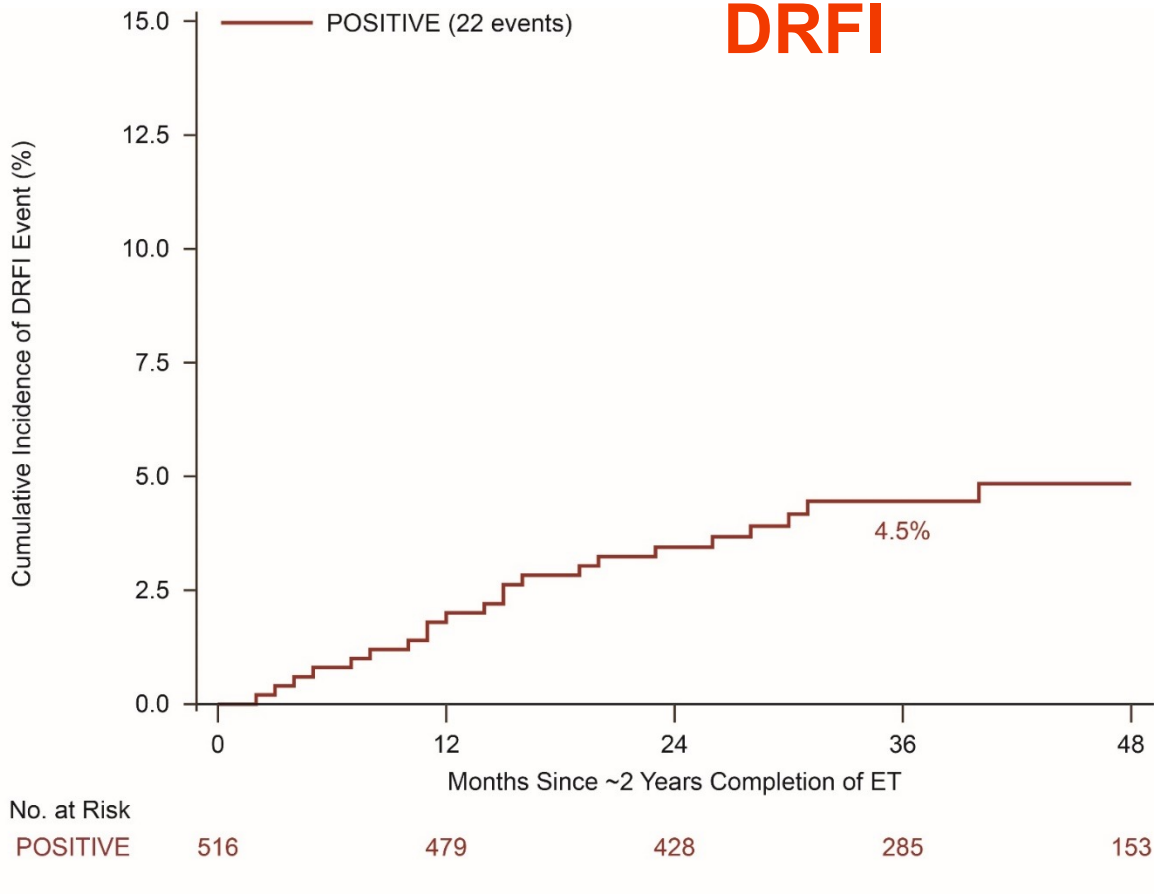
BREAST CANCER OUTCOMES – POSITIVE only

IBCSG

BCFI



DRFI



1638 patient-years of follow-up (41 months median follow-up)

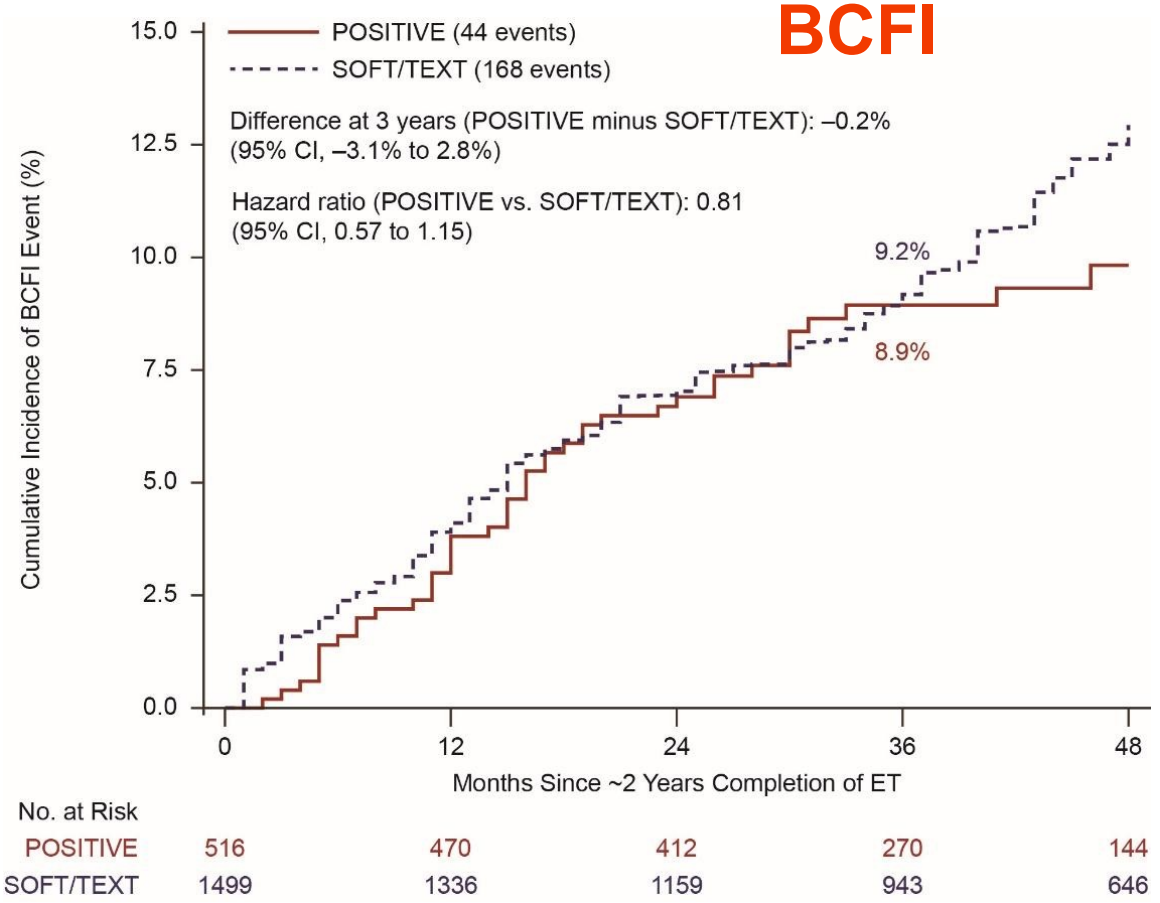
Courtesy of Ann Partridge, MD, MPH

Partridge et al, SABCS, 2022

BREAST CANCER OUTCOMES – POSITIVE & SOFT/TEXT

IBCSG

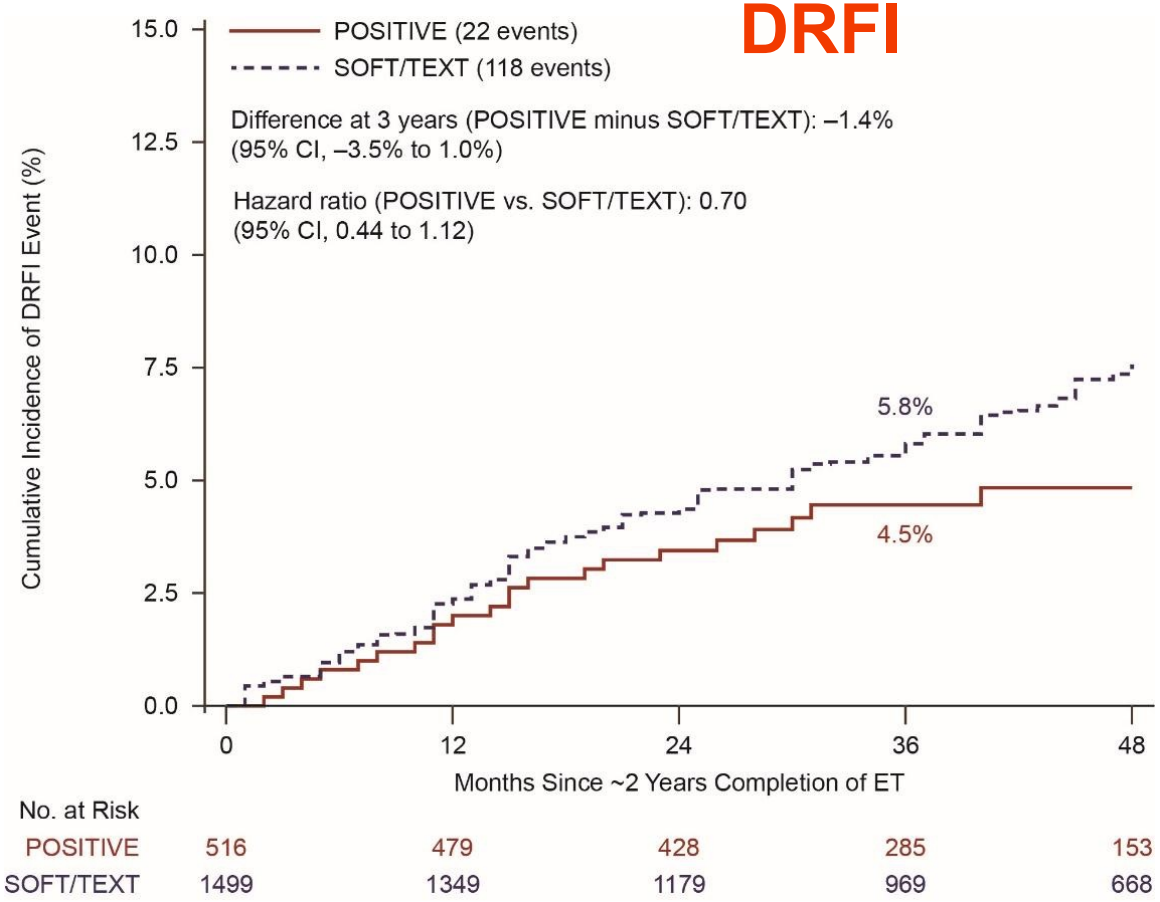
BCFI



No. at Risk

POSITIVE	516	470	412	270	144
SOFT/TEXT	1499	1336	1159	943	646

DRFI



No. at Risk

POSITIVE	516	479	428	285	153
SOFT/TEXT	1499	1349	1179	969	668

Courtesy of Ann Partridge, MD, MPH

Partridge et al, SABCS, 2022

Goserelin monthly vs leuprolide quarterly

Table 3 Comparisons of median of mean hormone levels with the two LHRH analogues

	Goserelin	Leuprolide	*p*
LH	0.31 (0.07–26.2)	0.52 (0.08–20.7)	0.025
FSH	2.1 (0.72–8.05)	2.3 (1.08–37.8)	0.143
Estradiol	17.8 (5–473.8)	15.9 (4–864.9)	0.683

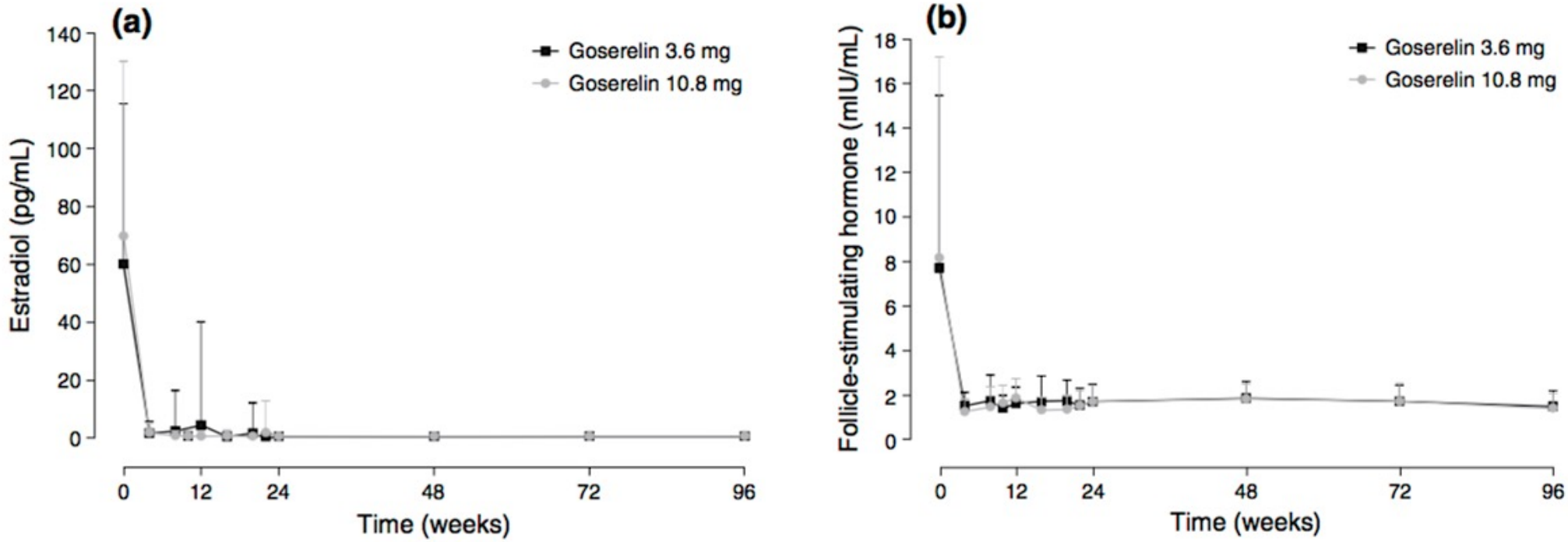
Leuprolide 11.25 mg q3 months
Goserelin 3.6 mg monthly

* Mean E2 >30 in 5/41 (12.2%) on leuprolide, 3/39 on goserelin (7.9%)

Courtesy of Ann Partridge, MD, MPH

1. Aydiner et al, Med Oncol, 2013

Goserelin: monthly vs quarterly



99% of pts in both arms had mean E2 <30
Breakthrough:
- Monthly: 4 pts (weeks 4, 8, 12, 20)
- Q3 mo: 1 pt (week 22)

Courtesy of Ann Partridge, MD, MPH

1. Masuda et al, Breast Cancer Res Treat, 2013

Case: Dr Miller – 32-year-old woman

- 32-year-old Black woman presented with breast mass 10 months after delivery of her third child.
  - Self-palpated 2 months earlier, assumed blocked duct from breast feeding
  - Came for evaluation when mass persisted (grew) despite weaning
- Exam 4 cm mass with 1.5 cm ipsilateral LAN
  - Breast imaging -> biopsy -> Grade 3 IDC, ER 70%, PR 30%, HER2 1+, FISH –
  - Breast MR -> additional area in same breast -> biopsy DCIS
- Systemic imaging -> no distant disease
- Genetic testing -> pathogenic BRCA2 mutation

Case: Dr Miller – 32-year-old woman (cont)

- No plans for future pregnancies
  - Not referred to reproductive endocrinology
  - No OFS during chemo
- Neoadjuvant ddAC -> weekly paclitaxel
  - Tolerated well, excellent clinical response
  - Elected bilateral mastectomy
    - Residual 0.8 cm IDC, SLB negative x 3
    - No PMRT or nodal RT (on randomized trial)
- Menses slightly irregular during chemo but persisted
  - Revisiting desire for future fertility

Case: Dr Miller – 32-year-old woman (cont)

Options for HRx

- Tamoxifen
- OFS/oophorectomy
- OFS/oophorectomy with tamoxifen
- OFS/oophorectomy with an AI

Case: Dr Miller – 32-year-old woman (cont)

Options for HRx

- OFS with monthly LHRH agonist
  - Caution in using depot formulations
- Added AI after OFS obtained

Ovarian suppression
Powerful yet underutilized

SOFT-TEXT (n=4690)

OS + exemestane vs OS + Tamoxifen

ITT population 12-year

- DFS (4.6% absolute improvement, HR=0.79; 95%CI 0.70-0.90; P<0.001)
- DRFI (1.8% absolute improvement, HR=0.83; 95%CI 0.70-0.98; P=0.03)
- Overall survival (90.1% versus 89.1%, HR=0.93; 95%CI, 0.78-1.11)

Significant OS improvement in

- women <35 years (4.0%)
- Tumor >2 cm (4.5%)
- Grade 3 tumor (5.5%).

Pagani et al, JCO 2022

SOFT (n=3047)

Tamoxifen vs OS + Tam vs OS + AI

ITT population 12-year DFS

- Tamoxifen 71.9%
- OS + Tam 76.1%
- OS + exemestane 79.0%
- tamoxifen plus OFS versus tamoxifen (HR=0.82; 95%CI 0.69-0.98)

Overall survival

- Tamoxifen 86.8%
- OS + Tam 89.0%
- OS + exemestane 89.4%

Francis et al, JCO 2022

Which adjuvant ET would you most likely recommend for a 30-year-old premenopausal woman with ER-positive, HER2-negative localized breast cancer with 3 positive nodes and the RS below?

	RS = 8 ET	RS = 20 ET
 Dr Miller	OFS/ablation and anastrozole	OFS/ablation + anastrozole
 Dr Partridge	OFS/ablation + letrozole	OFS/ablation + letrozole
 Dr Hurvitz	OFS/ablation + anastrozole	OFS/ablation + anastrozole
 Dr Jhaveri	OFS/ablation + tamoxifen or letrozole	OFS/ablation + tamoxifen or letrozole
 Dr Telli	OFS/ablation + exemestane	OFS/ablation + exemestane
 Dr Tolaney	OFS/ablation + letrozole	OFS/ablation + letrozole

RTP RESEARCH TO PRACTICE

Which adjuvant ET would you most likely recommend for a 45-year-old premenopausal woman with ER-positive, HER2-negative localized breast cancer with 1 positive node and the RS below?

	RS = 8 ET	RS = 20 ET
 Dr Miller	OFS/ablation + anastrozole	OFS/ablation + anastrozole
 Dr Partridge	OFS/ablation + letrozole	OFS/ablation + letrozole
 Dr Hurvitz	OFS/ablation + anastrozole	OFS/ablation + anastrozole
 Dr Jhaveri	OFS/ablation + tamoxifen or letrozole	OFS/ablation + tamoxifen or letrozole
 Dr Telli	OFS/ablation + exemestane	OFS/ablation + exemestane
 Dr Tolaney	OFS/ablation + letrozole	OFS/ablation + letrozole

RTP RESEARCH TO PRACTICE

Which adjuvant ET would you most likely recommend for a 45-year-old premenopausal woman with ER-positive, HER2-negative localized breast cancer with 3 positive nodes and the RS below?

	RS = 8 ET	RS = 20 ET
 Dr Miller	OFS/ablation + anastrozole	OFS/ablation + anastrozole
 Dr Partridge	OFS/ablation + letrozole	OFS/ablation + letrozole
 Dr Hurvitz	OFS/ablation + anastrozole	OFS/ablation + anastrozole
 Dr Jhaveri	OFS/ablation + tamoxifen or letrozole	OFS/ablation + tamoxifen or letrozole
 Dr Telli	OFS/ablation + exemestane	OFS/ablation + exemestane
 Dr Tolaney	OFS/ablation + letrozole	OFS/ablation + letrozole

RTP RESEARCH TO PRACTICE

Cases from the Community: Investigators Discuss Available Research Guiding the Care of Patients with Renal Cell Carcinoma

Part 1 of a 3-Part CME Symposium Series Held in Conjunction with the 2023 ASCO Genitourinary Cancers Symposium

Wednesday, February 15, 2023

7:15 PM – 8:45 PM PT (10:15 PM – 11:45 PM ET)

Faculty

Prof Laurence Albiges, MD, PhD

Thomas Powles, MBBS, MRCP, MD

Toni K Choueiri, MD

Moderator

Brian Rini, MD

RTP RESEARCH TO PRACTICE

Thank you for joining us!

CME and MOC credit information will be emailed to each participant within 5 business days.

RTP
RESEARCH
TO PRACTICE