Joyce O’Shaughnessy, MD
Celebrating Women Chair in Breast Cancer Research
Baylor University Medical Center
Director, Breast Cancer Research Program
Texas Oncology
US Oncology
Dallas, Texas
Commercial Support

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Dr Love — Disclosures

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 O’Shaughnessy — Disclosures

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Speakers Bureau</td>
<td>AstraZeneca Pharmaceuticals LP, Lilly, Novartis, Seagen Inc</td>
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</tbody>
</table>
We Encourage Clinicians in Practice to Submit Questions

Feel free to submit questions now before the program begins and throughout the program.
Familiarizing Yourself with the Zoom Interface

How to answer poll questions

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ONCOLOGY TODAY
WITH DR NEIL LOVE

The Role of PARP Inhibition in the Management of Breast Cancer

HOPE S RUGO, MD
HELEN DILLER FAMILY COMPREHENSIVE CANCER CENTER
Meet The Professor
Management of Lung Cancer

Tuesday, February 23, 2021
12:00 PM – 1:00 PM ET

Faculty
Martin Reck, MD, PhD

Moderator
Neil Love, MD
Recent Advances in Hematologic Oncology: A 4-Part Live Webinar Series Reviewing Key Data and Presentations from the 62nd ASH Annual Meeting

Part 4 — Chronic Lymphocytic Leukemia

Wednesday, February 24, 2021
5:00 PM – 6:00 PM ET

Faculty
Paul M Barr, MD
Matthew S Davids, MD, MMSc
Kerry Rogers, MD

Moderator
Neil Love, MD
Cases from the Community: Investigators Discuss Emerging Research and Actual Patients with Prostate Cancer (Part 1 of a 3-Part Series)

Thursday, February 25, 2021
5:00 PM – 6:30 PM ET

Faculty
Tanya B Dorff, MD
Fred Saad, MD
A Oliver Sartor, MD
Matthew R Smith, MD, PhD

Moderator
Neil Love, MD
Cases from the Community: Investigators Discuss Emerging Research and Actual Patients with Renal Cell Carcinoma (Part 2 of a 3-Part Series)

Monday, March 1, 2021
5:00 PM – 6:00 PM ET

Faculty
Thomas E Hutson, DO, PharmD
Thomas Powles, MBBS, MRCP, MD

Moderator
Neil Love, MD
Meet The Professor
Management of Ovarian Cancer

Tuesday, March 2, 2021
5:00 PM – 6:00 PM ET

Faculty
Thomas J Herzog, MD

Moderator
Neil Love, MD
Meet The Professor
Management of Multiple Myeloma

Wednesday, March 3, 2021
5:00 PM – 6:00 PM ET

Faculty
Morie A Gertz, MD, MACP

Moderator
Neil Love, MD
Cases from the Community: Investigators Discuss Emerging Research and Actual Patients with Urothelial Bladder Carcinoma (Part 3 of a 3-Part Series)

Thursday, March 4, 2021
5:00 PM – 6:15 PM ET

Faculty
Arjun Balar, MD
Elisabeth I Heath, MD
Jonathan E Rosenberg, MD

Moderator
Neil Love, MD
Cancer Conference Update: What Happened at the 2020 San Antonio Breast Cancer Symposium®

Session 1: Triple-Negative Breast Cancer
Monday, January 11, 2021
5:00 – 6:00 PM ET
Faculty
P Kelly Marcom, MD

Session 2: Triple-Negative Breast Cancer
Monday, February 22, 2021
5:00 – 6:00 PM ET
Faculty
Joyce O’Shaughnessy, MD

Session 1: HER2-Positive Breast Cancer
Monday, January 25, 2021
5:00 – 6:00 PM ET
Faculty
Erika Hamilton, MD

Session 2: HER2-Positive Breast Cancer
Monday, March 8, 2021
5:00 – 6:00 PM ET
Faculty
Mark D Pegram, MD
Thank you for joining us!

CME credit information will be emailed to each participant within 3 business days.
A 65-year-old woman with an ER-negative, HER2-positive IDC experiences disease recurrence in the liver 6 months after completing neoadjuvant TCHP followed by adjuvant T-DM1. Regulatory and reimbursement issues aside, what systemic treatment would you recommend?

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Recommended (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trastuzumab deruxtecan</td>
<td>57%</td>
</tr>
<tr>
<td>Tucatinib + trastuzumab/capcitabine</td>
<td>24%</td>
</tr>
<tr>
<td>Neratinib + capicitabine</td>
<td>8%</td>
</tr>
<tr>
<td>T-DM1</td>
<td>5%</td>
</tr>
<tr>
<td>Trastuzumab/pertuzumab/docetaxel</td>
<td>3%</td>
</tr>
<tr>
<td>Trastuzumab + capicitabine</td>
<td>2%</td>
</tr>
<tr>
<td>Neratinib + paclitaxel</td>
<td>1%</td>
</tr>
</tbody>
</table>

Survey of live webinar audience

N = 118
Cancer Conference Update: What Happened at the 2020 San Antonio Breast Cancer Symposium®

Management of Triple-Negative Breast Cancer

Monday, February 22, 2021
5:00 PM – 6:00 PM ET

Faculty
Joyce O’Shaughnessy, MD

Moderator
Neil Love, MD
Beyond the Guidelines: Clinical Investigator Perspectives on the Management of Triple-Negative Breast Cancer

Friday, December 11, 2020
8:30 PM – 10:00 PM ET

Faculty
P Kelly Marcom, MD
Joyce O’Shaughnessy, MD
Hope S Rugo, MD
Professor Peter Schmid, MD, PhD

Moderator
Neil Love, MD
Faculty

P Kelly Marcom, MD
Director, Breast Oncology Program
Professor of Medicine
Duke Cancer Institute
Durham, North Carolina

Hope S Rugo, MD
Professor of Medicine
Director, Breast Oncology and Clinical Trials Education
University of California, San Francisco
Helen Diller Family Comprehensive Cancer Center
San Francisco, California

Joyce O'Shaughnessy, MD
Celebrating Women Chair in Breast Cancer Research
Baylor University Medical Center
Director, Breast Cancer Research Program
Texas Oncology
US Oncology
Dallas, Texas

Professor Peter Schmid, MD, PhD
Centre Lead
Centre for Experimental Cancer Medicine
Barts Cancer Institute
London, United Kingdom
Optimal Integration of Immune Checkpoint Inhibitors into the Management of Metastatic Triple-Negative Breast Cancer (mTNBC)
Professor Peter Schmid, MD, PhD

Novel Applications of Immune Checkpoint Inhibitors for Patients with Early TNBC
Hope S Rugo, MD

Current and Future Role of PARP Inhibitors for Patients with TNBC and a BRCA Mutation
P Kelly Marcom, MD

Current and Future Management of PD-L1-Negative mTNBC
Joyce O’Shaughnessy, MD
We Encourage Clinicians in Practice to Submit Questions

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Management of Triple-Negative Breast Cancer

Monday, February 22, 2021
5:00 PM – 6:00 PM ET

Faculty
Joyce O’Shaughnessy, MD

Moderator
Neil Love, MD
Triple-Negative Breast Cancer Survey Participants

1. Sylvia Adams, MD
2. Carey K Anders, MD
3. Aditya Bardia, MD, MPH
4. Joanne L Blum, MD, PhD
5. Adam M Brufsky, MD, PhD
6. Howard A Burris III, MD
7. Harold J Burstein, MD, PhD
8. Lisa A Carey, MD
9. Matthew Goetz, MD
10. Erika Hamilton, MD
11. Sara Hurvitz, MD
12. Virginia Kaklamani, MD, DSc
13. Hannah M Linden, MD
14. P Kelly Marcom, MD
15. Jennifer M Matro, MD
16. Kathy D Miller, MD
17. Rita Nanda, MD
18. Ruth O’Regan, MD
19. Joyce O’Shaughnessy, MD
20. Mark D Pegram, MD
21. Lajos Pusztai, MD, DPhil
22. Hope S Rugo, MD
23. Professor Peter Schmid, MD, PhD
24. Joseph A Sparano, MD
25. Sara M Tolaney, MD, MPH
What Happened at the 2020 San Antonio Breast Cancer Symposium: Session 1 - January 11, 2021
Alan B Astrow, MD
Chief, Hematology/Medical Oncology
NewYork-Presbyterian Brooklyn Methodist Hospital
Professor of Clinical Medicine
Weill Cornell Medical College
Brooklyn, New York
Agenda

Module 1: Case Presentations
- An 88-year-old woman with triple-negative lobular carcinoma
- A 66-year-old woman with triple-negative, node-positive breast cancer
- A 31-year-old woman with triple-negative, node-negative IDC

Module 2: San Antonio Breast Cancer Symposium Review – Part 1

Module 3: Case Presentations
- A 40-year-old woman with metastatic triple-negative breast cancer (TNBC)
- A 61-year-old woman with a germline BRCA1 mutation and locally advanced advanced breast cancer

Module 4: San Antonio Breast Cancer Symposium Review – Part 2

Module 5: Case Presentations
- A 46-year-old woman with triple-negative small cell carcinoma of the breast
- A 37-year-old woman with triple-negative IDC
- A 68-year-old woman with triple-negative, node-negative IDC

Module 6: San Antonio Breast Cancer Symposium Review – Part 3
Agenda

**Module 1: Case Presentations**
- An 88-year-old woman with triple-negative lobular carcinoma
- A 66-year-old woman with triple-negative, node-positive breast cancer
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**Module 2: San Antonio Breast Cancer Symposium Review – Part 1**

**Module 3: Case Presentations**
- A 40-year-old woman with metastatic TNBC
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- A 46-year-old woman with triple-negative small cell carcinoma of the breast
- A 37-year-old woman with triple-negative IDC
- A 68-year-old woman with triple-negative, node-negative IDC

**Module 6: San Antonio Breast Cancer Symposium Review – Part 3**
Case Presentation – Dr Astrow: An 88-year-old woman with a multifocal invasive triple-negative lobular carcinoma with clinically negative nodes

- Excellent performance status
- 2.6-cm multifocal invasive lobular carcinoma
- Grade 3, triple-negative, Ki67 ~50%
- No sentinel lymph node performed but no palpable nodes in the axilla
- Predict UK: 2% benefit from adding chemotherapy at 10 years

Question
- Should I recommend adjuvant chemotherapy or not?
Case Presentation – Dr Astrow: An 88-year-old woman with a multifocal invasive triple-negative lobular carcinoma with clinically negative nodes

Predict Breast – Survival After Surgery*

<table>
<thead>
<tr>
<th></th>
<th>Surgery only</th>
<th>With adjuvant chemotherapy</th>
<th>Additional benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>5-year survival</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>60-year-old woman</td>
<td>78%</td>
<td>84%</td>
<td>6.4%</td>
</tr>
<tr>
<td>85-year-old woman</td>
<td>51%</td>
<td>57%</td>
<td>5.3%</td>
</tr>
<tr>
<td><strong>10-year survival</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>60-year-old woman</td>
<td>67%</td>
<td>75%</td>
<td>7.9%</td>
</tr>
<tr>
<td>85-year-old woman</td>
<td>22%</td>
<td>25%</td>
<td>3.3%</td>
</tr>
</tbody>
</table>

* Chemotherapy is a taxane-based regimen; 85 years is the upper age limit of the tool.

- For an 85-year-old woman, if death from breast cancer were excluded:
  - 67% would survive at least 5 years, and 33% would die of other causes
  - 32% would survive at least 10 years, and 68% would die of other causes

https://breast.predict.nhs.uk
Case Presentation – Dr Astrow: A 66-year-old woman with 4-cm TNBC (axilla positive) with residual disease after neoadjuvant chemotherapy

- Right, 4-cm, Grade 3, triple-negative IDC, with biopsy-proven positive axillary node
- Neoadjuvant dose-dense AC-paclitaxel
- Lumpectomy/ALND → 1.7-cm residual Grade 3 IDC, 1/10 positive axillary nodes
- Patient declines strongly recommended adjuvant capecitabine
- Nine months later, after discovery of a breast seroma, patient strongly wants to receive capecitabine
  - No distant metastases

Questions

- Should I give her the capecitabine, even though the data don’t support it?
- If I give her capecitabine, should it be for 6 months as in the CREATE-X trial, or one-year of metronomic capecitabine per the report from China in *JAMA Oncology*? Do you have a preference if not giving it neoadjuvantly?
Case Presentation – Dr Astrow: A 31-year-old woman with triple-negative, node-negative IDC – 3 separate sites

- Three separate right breast masses: 1.8-cm, 1.6-cm, 1.3-cm
- Core biopsy: Grade 2 IDC, triple-negative
- Neoadjuvant dose-dense AC-paclitaxel
- Mastectomy: 2 foci of residual Grade 2 IDC – 1.2-cm and 0.2-cm; SLNB: Negative
- Adjuvant capecitabine

Questions

- Would you have given carboplatin in addition to the neoadjuvant AC-paclitaxel?
- Should I give her additional treatment beyond the adjuvant capecitabine?
- What schedule of capecitabine should I give her?
- In a non-protocol setting, for a young woman with aggressive breast cancer, have you given adjuvant pembrolizumab?
Neurotoxicities associated with immune checkpoint inhibitor therapy

Sophie L. Duong\textsuperscript{1,2} · Frank J. Barbiero\textsuperscript{1} · Richard J. Nowak\textsuperscript{1} · Joachim M. Baehring\textsuperscript{3,4} (ID)

Duong SL et al. J Neuro-oncology;2021
Characteristics of Neurotoxicity

Duong SL et al. J Neuro-oncology;2021
Agenda

Module 1: Case Presentations
• An 88-year-old woman with triple-negative lobular carcinoma
• A 66-year-old woman with triple-negative, node-positive breast cancer
• A 31-year-old woman with triple-negative, node-negative IDC

Module 2: San Antonio Breast Cancer Symposium Review – Part 1

Module 3: Case Presentations
• A 40-year-old woman with metastatic TNBC
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• A 37-year-old woman with triple-negative IDC
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Module 6: San Antonio Breast Cancer Symposium Review – Part 3
Additional Efficacy Endpoints from the Phase 3 KEYNOTE-355 Study of Pembrolizumab + Chemotherapy versus Placebo + Chemotherapy as First-Line Therapy for Locally Recurrent Inoperable or Metastatic Triple-Negative Breast Cancer (mTNBC)

Hope S. Rugo¹, Peter Schmid², David W. Cescon³, Zbigniew Nowecki⁴, Seock-Ah Im⁵, Mastura Md Yusof⁶, Carlos Gallardo⁷, Oleg Lipatov⁸, Carlos Henrique Barrios⁹, Jose Perez-Garcia¹⁰, Hiroji Iwata¹¹, Norikazu Masuda¹², Marco Torregroza Otero¹³, Erhan Gokmen¹⁴, Sherene Loi¹⁵, Zifang Guo¹⁶, Jing Zhao¹⁶, Vassiliki Karantza¹⁶, Gursel Aktan¹⁶, Javier Cortes¹⁷

1. University of California San Francisco Comprehensive Cancer Center, San Francisco, CA, USA; 2. Barts Cancer Institute, Centre for Experimental Cancer Medicine, Queen Mary University of London, London, UK; 3. Princess Margaret Cancer Centre, Toronto, Ontario, Canada; 4. Maria Sklodowska-Curie Memorial Cancer Centre and Institute of Oncology, Warsaw, Poland; 5. Seoul National University Hospital, Seoul, Korea; 6. Pantai Hospital, Kuala Lumpur, Malaysia; 7. Arturo Lopez Perez Foundation, Santiago, Chile; 8. Republican Clinical Oncology Dispensary, Republic of Bashkortostan, Russian Federation; 9. Centro de Hematologia e Oncologia, Porto Alegre, Brazil; 10. Institute of Breast Cancer, Quiron Group, Barcelona; 11. Aichi Cancer Center Hospital, Nagoya, Japan; 12. National Hospital Organization Osaka National Hospital, Osaka, Japan; 13. Oncomedica S.A., Monteria, Colombia; 14. Ege University Medical Faculty, Izmir, Turkey; 15. Peter McCallum Cancer Institute, Melbourne, Australia; 16. Merck & Co., Inc., Kenilworth, NJ, USA; 17. International Breast Cancer Center (IBCC), Quiron Group, Madrid & Barcelona, Spain

This presentation is the intellectual property of Hope Rugo. Contact her at Hope_Rugo@ucsf.edu for permission to reprint and/or distribute.
Co-primary endpoints were PFS and OS in the CPS ≥10, CPS ≥1, and ITT populations

Study Population:
- CPS≥10, 75%; CPS≥1, 38%; CPS <1, 25%
- Taxane, 45%; Gem/carboplatin, 55%
- Prior treatment with same class chemo, 22%
- De novo MBC, 30%; DFI 6-12, 21%; DFI >12, 49%

Statistical design: Overall alpha controlled at one-sided 0.025, split among PFS (0.005), OS (0.018), and ORR (0.002); hierarchical testing PFS (CSP10>CP1>ITT)

Courtesy of Professor Peter Schmid, MD, PhD
KEYNOTE-355: Progression-Free Survival in Subgroups by On-Study Chemotherapy

PD-L1 CPS ≥10

<table>
<thead>
<tr>
<th>Subgroup</th>
<th>N</th>
<th>Median PFS (mo)</th>
<th>Hazard Ratio for Progression or Death (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>323</td>
<td>9.7</td>
<td>5.6</td>
</tr>
<tr>
<td>On-study chemotherapy</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Nab-Paclitaxel</td>
<td>99</td>
<td>9.9</td>
<td>5.5</td>
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<tr>
<td>Paclitaxel</td>
<td>44</td>
<td>9.6</td>
<td>3.6</td>
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<tr>
<td>Gemcitabine-Carboplatin</td>
<td>180</td>
<td>8.0</td>
<td>7.2</td>
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Rugo H et al. SABCS 2020;Abstract GS3-01.
# KEYNOTE-355: Progression-Free Survival in Subgroups by On-Study Chemotherapy

## PD-L1 CPS ≥1

<table>
<thead>
<tr>
<th>Subgroup</th>
<th>N</th>
<th>Median PFS (mo)</th>
<th>Hazard Ratio for Progression or Death (95% CI)</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>Pembro + Chemo</td>
<td>Placebo + Chemo</td>
</tr>
<tr>
<td><strong>Overall</strong></td>
<td>636</td>
<td>7.6</td>
<td>5.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.74</td>
<td>(0.61 to 0.90)</td>
</tr>
<tr>
<td><strong>On-study chemotherapy</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nab-Paclitaxel</td>
<td>204</td>
<td>6.3</td>
<td>5.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.66</td>
<td>(0.47 to 0.92)</td>
</tr>
<tr>
<td>Paclitaxel</td>
<td>84</td>
<td>9.4</td>
<td>3.8</td>
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<tr>
<td></td>
<td></td>
<td>0.46</td>
<td>(0.26 to 0.82)</td>
</tr>
<tr>
<td>Gemcitabine-Carboplatin</td>
<td>348</td>
<td>7.5</td>
<td>7.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.86</td>
<td>(0.66 to 1.11)</td>
</tr>
</tbody>
</table>

*KEYNOTE-355: Progression-Free Survival in Subgroups by On-Study Chemotherapy*

Rugo H et al. SABCS 2020;Abstract GS3-01.

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KEYNOTE-355: Response Rate in Subgroups by On-Study Chemotherapy

Data cutoff December 11, 2019.

San Antonio Breast Cancer Symposium®, December 8-11, 2020
Genomic Profiling and Clinical Outcomes with First-Line Atezolizumab and Nab-Paclitaxel in Triple-Negative Breast Cancer: An Exploratory Analysis from the Phase 3 IMpassion130 Trial

Emens L et al.
SABCS 2020;Abstract PD14-05.
Conclusions – Part 1

This exploratory retrospective subgroup analysis from the IMPassion130 study showed that:

• PD-L1 IC+ status was positively associated with TP53 loss of function alterations and negatively associated with VEGFA and CCND3 amplifications, however, es genes were not linked to clinical outcomes
• BRCA1 alterations were more prevalent in primary tumors, while PIK3R1 alterations were more prevalent in metastatic tumors
• TP53 BRCA1 and RB1 alterations were more prevalent in younger patients while older patients had more alterations in PI3KCA and KM12C
• PIK3CA mutations were more prevalent in Asian patients compared with other races
• TP53 and MYC alterations were more prevalent in basal tumors while PIK3CA and PTE were more characteristic in LAR molecular subtype
• Few gene alterations had a prognostic effect. Loss of RB1 possibly boosting tumor cell proliferation, was most associated with prognosis

Emens L et al. SABCS 2020;Abstract PD14-05.
Conclusions – Part 2

This exploratory retrospective subgroup analysis from the IMPassion130 study showed that:

• CN alterations in CDKN2A and CDKN2B were linked to an improved clinical outcome with A + nP, while MAP3K1 SVs were associated with a negative A + nP outcome
• MSI-H tumors were infrequent in Impassions 130, with the outcome associated with A + nP remaining unknown
• PIK3CA, AKT1, PTEN-altered status was not linked to PD-L1 IC status or A + nP clinical outcome

This analysis represents the largest data set evaluating the genomic profile of patients with locally advanced or mTNBC who were treated with immunotherapeutic agents

These data are hypothesis generating and require validation in an independent data set

Emens L et al. SABCS 2020;Abstract PD14-05.
Lenvatinib plus Pembrolizumab for Previously Treated, Advanced Triple-Negative Breast Cancer: Early Results from the Multicohort Phase 2 LEAP-005 Study

Chung HC et al.
SABCS 2020;Abstract PS12-07.
**LEAP-005 Study Design**

**Study population**
- Women aged ≥18 years
- Histologically/cytologically confirmed advanced TNBC
- 1 or 2 prior lines of therapy
- Measurable disease per RECIST version 1.1
- ECOG PS 0-1
- Tissue for PD-L1 assessment

N = 30

**Pembrolizumab 200 mg IV q3wk + lenvatinib 20 mg orally qd**

Evaluation

- PD
- SD, PR, CR

**30-day safety FU and survival status**

**Pembrolizumab 200 mg IV q3wk + lenvatinib 20 mg orally qd**

Up to 35 cycles or meeting DC

Chung HC et al. SABCS 2020;Abstract PS12-07.
LEAP-005: Best Percentage Change from Baseline in Target Lesion Size

Change from Baseline, %

-20  -40  -60  -80  -100

PD-L1 CPS ≥10
PD-L1 CPS <10

20% tumor growth
30% tumor growth

Includes patients with one or more evaluable post-baseline imaging assessment (n = 27).

Chung HC et al. SABCS 2020;Abstract PS12-07.
LEAP-005: Treatment Duration and Response Evaluation

Chung HC et al. SABCS 2020;Abstract PS12-07.
KEYNOTE-522 Study Design (NCT03036488)

Key Eligibility Criteria
- Age ≥18 years
- Newly diagnosed TNBC of either T1c N1-2 or T2-4 N0-2
- ECOG PS 0-1
- Tissue sample for PD-L1 assessment

Stratification Factors:
- Nodal status (+ vs -)
- Tumor size (T1/T2 vs T3/T4)
- Carboplatin schedule (QW vs Q3W)

Neoadjuvant Phase: starts from the first neoadjuvant treatment and ends after definitive surgery (post treatment included)
Adjuvant phase: starts from the first adjuvant treatment and includes radiation therapy as indicated (post treatment included)

PD-L1 + defined by CPS ≥1

Stratification Factors:
- Nodal status (+ vs -)
- Tumor size (T1/T2 vs T3/T4)
- Carboplatin schedule (QW vs Q3W)

Primary endpoints: pCR and EFS

Courtesy of Hope S Rugo, MD
Schmid et al, NEJM 2020
Event-Free Survival at IA2: 1st Interim Analysis

P value boundary for significance 0.000051 (HR<0.4)

**Immune related AEs:**
- 14.1 vs 2.1% grade 3-5

**Discontinuation of any drug:**
- 9.5 vs 2.6%

---

**Pembro + Chemo/Pembro**
- 7.4% (0.43-0.93)

**Placebo + Chemo/Placebo**
- 11.8%

9% events with median FU 15.5 months

---

*Prespecified P value boundary of 0.000051 not reached at this analysis (the first interim analysis of EFS). IA2: If pCR hypothesis successful at IA1, pCR will not be formally tested at IA2.*

HR (CI) analyzed based on a Cox regression model with treatment as a covariate stratified by randomization stratification factors. **Data cutoff April 24, 2019; 24 mo after last pt enrolled.**

Courtesy of Hope S Rugo, MD
Regulatory and reimbursement issues aside, have you attempted or would you attempt to access an anti-PD-1/PD-L1 antibody as part of neoadjuvant therapy for a 60-year-old patient with a 6-cm TNBC with 3 positive axillary nodes on biopsy (PD-L1 60%)?

1. I have
2. I haven’t but would for the right patient
3. I haven’t and would not
Have you or would you attempt to access an anti-PD-1/PD-L1 antibody as part of neoadjuvant therapy off protocol for a 60-year-old patient with TNBC with the following characteristics?

Tumor size: 6 cm, Nodal status: 3 positive nodes, PD-L1: 60%

Survey of 25 breast cancer clinical investigators

- I have
  - 9

- I haven’t but would for the right patient
  - 10

- I haven’t and would not
  - 6
Regulatory and reimbursement issues aside, have you or would you attempt to access an anti-PD-1/PD-L1 antibody as part of neoadjuvant therapy off protocol for a 60-year-old patient with TNBC with the following characteristics?

Tumor size: 6 cm, Nodal status: node-negative, PD-L1: 10%

I have 3

I haven’t but would for the right patient 3

I haven’t and would not 19

Survey of 25 breast cancer clinical investigators
A 32-year-old woman who completed neoadjuvant FEC/docetaxel and postoperative radiation therapy 21 months ago for localized TNBC now presents with small-volume liver and nodal metastases: BRCA wild type, PD-L1 positive. What therapy would you recommend?

1. Chemotherapy
2. Atezolizumab/nab paclitaxel
3. Atezolizumab/paclitaxel
4. Pembrolizumab/nab paclitaxel
5. Pembrolizumab/paclitaxel
6. Pembrolizumab/gemcitabine/carboplatin
7. Other
A 32-year-old woman who completed neoadjuvant FEC/T and radiation therapy 21 months ago for localized TNBC now presents with liver and nodal metastases. Biomarker assessment reveals BRCA WT, PD-L1-positive disease. What therapy would you recommend?

Pembrolizumab/gemcitabine/carboplatin

Atezolizumab/nab paclitaxel
Agenda

Module 1: Case Presentations
• An 88-year-old woman with triple-negative lobular carcinoma
• A 66-year-old woman with triple-negative, node-positive breast cancer
• A 31-year-old woman with triple-negative, node-negative IDC

Module 2: San Antonio Breast Cancer Symposium Review – Part 1

Module 3: Case Presentations
• A 40-year-old woman with metastatic TNBC
• A 61-year-old woman with a germline BRCA1 mutation and locally advanced breast cancer

Module 4: San Antonio Breast Cancer Symposium Review – Part 2

Module 5: Case Presentations
• A 46-year-old woman with triple-negative small cell carcinoma of the breast
• A 37-year-old woman with triple-negative IDC
• A 68-year-old woman with triple-negative, node-negative IDC

Module 6: San Antonio Breast Cancer Symposium Review – Part 3
Case Presentation – Dr Astrow: A 40-year-old woman with metastatic TNBC – PD-L1 CPS 15%

- Left breast mass, Core biopsy: Grade 3 IDC, triple-negative
- Neoadjuvant dose-dense AC-paclitaxel → Residual 2.5-cm Grade 3 IDC, with 1/11 positive axillary nodes
- RT to left chest wall and regional nodes
- Patient did not tolerate adjuvant capecitabine well
- One year later: Multiple subcutaneous nodules in the mastectomy bed, biopsy-positive for TNBC
  - No other site of recurrence in CT chest/abdomen/pelvis and bone scan
  - PD-L1 CPS: 15%
- Gemcitabine/carboplatin/pembrolizumab

Questions
- What is the best treatment for metastatic triple-negative breast cancer, PD-L1-positive?
- Could I re-irradiate her? Is there any role for surgery? How long should I treat her for?
- If she is responding, should I stop the gem/carbo at some point and just continue her on pembrolizumab?
Case Presentation – Dr Astrow: A 61-year-old woman with Grade II breast cancer – BRCA1 mutation

- Presented 4 years ago with Grade 2 (T2N1M0) IDC, triple-negative
- Neoadjuvant dose-dense AC-paclitaxel → Complete clinical response
- Underwent mastectomy → Residual 3.0 mm IDC (ER/PR-positive, HER2-negative)
- Patient declined entering OlympIa (NSABP-B55) adjuvant PARP inhibitor trial
- Currently receiving adjuvant tamoxifen

Questions
- If the results of the OlympIa are positive, would you start this patient on delayed PARP inhibition?
- How would you approach treating a patient like this if she presented today?
A 61-year-old woman with a Grade II triple-negative IDC and a BRCA1 germline mutation has a complete clinical response to neoadjuvant dose-dense AC/paclitaxel but has 3.0-mm residual disease at surgery. What would you estimate to be her risk of recurrence?

1. Less than 5%
2. 5% - 10%
3. 11% - 20%
4. 21% - 30%
5. 31% - 40%
6. 41% - 50%
7. 51% - 60%
8. Greater than 60%
If the previous patient’s risk of recurrence is currently 35%, regulatory and reimbursement issues aside, how much of an improvement in the risk of recurrence would you need to administer 1 year of adjuvant olaparib?

1. 1%
2. 5%
3. 10%
4. 15%
5. 20%
6. 25%
7. Greater than 25%
OlympiA Trial: Olaparib Crosses Superiority Boundary for Invasive Disease-Free Survival versus Placebo at Planned Interim Analysis
Press Release: February 17, 2021

“The Phase 3 OlympiA trial for olaparib will move to early primary analysis and reporting following a recommendation from the Independent Data Monitoring Committee (IDMC). Based on the planned interim analysis, the IDMC concluded that the trial crossed the superiority boundary for its primary endpoint of invasive disease-free survival (iDFS) versus placebo in the adjuvant treatment of germline BRCA-mutated (gBRCAm), high-risk human epidermal growth factor receptor 2 (HER2)-negative early-stage breast cancer following definitive local treatment and neoadjuvant or adjuvant chemotherapy.

Andrew Tutt, global chair of the OlympiA Phase 3 trial and professor, Institute of Cancer Research and Kings College London, said, "We are delighted that our global academic and industry partnership has been able to help investigate a possible personalized treatment for women with hereditary breast cancer. The most common cause of hereditary breast cancer is an inherited mutation in the BRCA1 or BRCA2 genes, which also may cause the disease to develop at a significantly earlier age than is usual. The OlympiA trial has allowed us to go beyond using genetic testing to identify patients who are at risk of this disease and explore the potential of olaparib to prevent disease recurrence for these patients. We look forward to analyzing and presenting the full results of the trial at a forthcoming medical meeting."

OlympiA (NSABP B55/BIG 6-13): Phase III Trial Design

Estimated primary completion date: November 18, 2020

Courtesy of P Kelly Marcom, MD
SOLO-1: Updated PFS (60 Months Follow-Up)

Banerjee S et al. ESMO 2020;Abstract 811MO.

<table>
<thead>
<tr>
<th></th>
<th>Olaparib (N=260)</th>
<th>Placebo (N=131)</th>
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</thead>
<tbody>
<tr>
<td>Events, n (%)</td>
<td>118 (45)</td>
<td>100 (76)</td>
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<tr>
<td>Median PFS, months</td>
<td>56.0</td>
<td>13.8</td>
</tr>
<tr>
<td>Difference, months</td>
<td>42.2</td>
<td></td>
</tr>
<tr>
<td>HR</td>
<td>0.33 (95% CI 0.25–0.43)</td>
<td></td>
</tr>
</tbody>
</table>

Median treatment duration:
Olaparib, 24.6 months
Placebo†, 13.9 months

No. at risk

<table>
<thead>
<tr>
<th></th>
<th>Olaparib</th>
<th>Placebo</th>
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</thead>
<tbody>
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</tr>
<tr>
<td>78</td>
<td>115</td>
<td>0</td>
</tr>
</tbody>
</table>

Banerjee S et al. ESMO 2020;Abstract 811MO.
**PRIMA Primary Endpoint: Progression-Free Survival**

### Table: Median PFS (ITT) and Hazard Ratio

<table>
<thead>
<tr>
<th>Condition</th>
<th>Niraparib (n = 487)</th>
<th>Placebo (n = 246)</th>
<th>Hazard ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>13.8 mo</td>
<td>8.2 mo</td>
<td>HR: 0.62 (p &lt; 0.001)</td>
</tr>
<tr>
<td>BRCA mut, HRD+</td>
<td>22.1 mo</td>
<td>10.9 mo</td>
<td>HR: 0.40</td>
</tr>
<tr>
<td>BRCA WT, HRD+</td>
<td>19.6 mo</td>
<td>8.2 mo</td>
<td>HR: 0.50</td>
</tr>
<tr>
<td>HRD-</td>
<td>8.1 mo</td>
<td>5.4 mo</td>
<td>HR: 0.68</td>
</tr>
</tbody>
</table>

**Graph:**
- **Progression-free Survival (%)** vs **Months since Randomization**
- **Median PFS (ITT):**
  - Niraparib: 13.8 mo
  - Placebo: 8.2 mo
- **Hazard ratio:**
  - HR: 0.62 (p < 0.001)

---

Agenda

**Module 1: Case Presentations**
- An 88-year-old woman with triple-negative lobular carcinoma
- A 66-year-old woman with triple-negative, node-positive breast cancer
- A 31-year-old woman with triple-negative, node-negative IDC

**Module 2: San Antonio Breast Cancer Symposium Review – Part 1**

**Module 3: Case Presentations**
- A 40-year-old woman with metastatic TNBC
- A 61-year-old woman with a germline BRCA1 mutation and locally advanced breast cancer

**Module 4: San Antonio Breast Cancer Symposium Review – Part 2**

**Module 5: Case Presentations**
- A 46-year-old woman with triple-negative small cell carcinoma of the breast
- A 37-year-old woman with triple-negative IDC
- A 68-year-old woman with triple-negative, node-negative IDC

**Module 6: San Antonio Breast Cancer Symposium Review – Part 3**
PARP Inhibitors for Treatment of BRCA Positive Metastatic Breast Cancer: A Systematic Review and Meta-Analysis

Kunwor R et al.
SABCS 2020;Abstract PS10-41.
PARP Inhibitors with or without Chemotherapy versus Chemotherapy Alone: Progression-Free Survival

Kunwor R et al. SABCS 2020;Abstract PS10-41.
Biomarkers Predicting Response to Durvalumab Combined with Olaparib in the Neoadjuvant I-SPY 2 Trial for High-Risk Breast Cancer

Wolf DM et al.
SABCS 2020;Abstract PD14-02.
Biomarkers Predicting Response to Durvalumab/Olaparib Therapy

Wolf DM et al. SABCS 2020;Abstract PD14-02.
KEYLYNK-009: A Phase 2/3, Open-Label, Randomized Study of Pembrolizumab plus Olaparib vs Pembrolizumab plus Chemotherapy After Induction with First-Line Pembrolizumab plus Chemotherapy in Patients with Locally Recurrent Inoperable or Metastatic Triple-Negative Breast Cancer (TNBC)

Rugo H et al.
SABCS 2020;Abstract OT-30-01.
KEYLYNK-009 Study Design

Participants
• Locally recurrent inoperable or metastatic TNBC not previously treated in the metastatic setting
• Interval between treatment with curative intent and recurrence ≥6 months
• Confirmed PD-L1 status

Induction
Carboplatin (AUC 2 on days 1 and 8 of each 21-day cycle) and gemcitabine (1000 mg/m² on days 1 and 8 each 21-day cycle) + pembrolizumab (200 mg Q3W; 4 to 6 cycles)

Randomization is stratified by
• Response (CR or PR vs SD)
• PD-L1 positive (CP≥1) vs PD-L1 negative
• Genomic tumor status (BRCAm vs BRCAwt)

R 1:1

Postinduction
Olaparib (300 mg twice daily) + pembrolizumab (200 mg Q3W; for up to 35 cycles including induction)

Carboplatin (AUC 2 on days 1 and 8 of each 21-day cycle) and gemcitabine (1000 mg/m² on days 1 and 8 of each 21-day cycle) + pembrolizumab (200 mg Q3W; for up to 35 cycles including induction)

Survival follow-up

Rugo H et al. SABCS 2020;Abstract OT-30-01.
Efficacy of Combined CDK4/6 Inhibitor and PARP Inhibitor in the Treatment of BRCA1 Mutant Triple Negative Breast Cancer

Zhu X et al.
SABCS 2020;Abstract PS4-39.
Results and Conclusions

Results

• We demonstrated for the first time that the combination of PARPi and CDK4/6i has synergistic effects against some TNBCs both in vitro and in vivo and was verified by CI < 0.9.

• Further experiments confirmed that PARPi combined with CDK4/6i inhibited cell proliferation and migration, and increased apoptosis and DNA damage.

• In the PARPi sensitive BRCA-/TNBC cell (MDA-MB-436), the inhibitory effect of monotherapy PARPi was obvious. In the PARPi resistant BRCA-/TNBC cells (HCC1937 and SUM149), CDK4/6i was added to achieve significant growth inhibition.

• In the timing of medication, PARPi followed by CDK4/6i had better inhibitory effect.

Conclusions

• In some BRCA-/TNBCs, PARPi combined with CDK4/6i had a synergistic effect. Even in PARPi-resistant cells, combined treatment could enhance the efficacy and might reverse the drug resistance to some extent.

Zhu X et al. SABCS 2020;Abstract PS4-39.
What would be your preferred treatment approach for a 60-year-old patient with a BRCA germline mutation and de novo metastatic TNBC that is PD-L1-negative?

1. Olaparib
2. Talazoparib
3. Olaparib or talazoparib — coin flip
4. Nonplatinum chemotherapy
5. Platinum-containing chemotherapy
6. Chemotherapy followed by maintenance PARP inhibitor
7. Chemotherapy combined with a PARP inhibitor
8. Other
What would be your preferred treatment approach for a 60-year-old patient with a BRCA germline mutation and de novo metastatic TNBC that is PD-L1-negative?

Survey of 25 breast cancer clinical investigators

- Olaparib or talazoparib — coin flip
  - Olaparib: 4
  - Talazoparib: 3
- Chemotherapy followed by maintenance with a PARP inhibitor: 5
- Platinum-containing chemotherapy regimen: 1
- Nonplatinum chemotherapy regimen: 1
Regulatory and reimbursement issues aside, have you attempted or would you attempt to access a PARP inhibitor for a patient with metastatic TNBC and a germline PALB2 mutation?

I have 11

I haven’t but would for the right patient 14

Survey of 25 breast cancer clinical investigators
Regulatory and reimbursement issues aside, have you attempted or would you attempt to access a PARP inhibitor for a patient with metastatic TNBC and a somatic BRCA mutation?

Survey of 25 breast cancer clinical investigators

I have 14

I haven’t but would for the right patient 11
Agenda

Module 1: Case Presentations
• An 88-year-old woman with triple-negative lobular carcinoma
• A 66-year-old woman with triple-negative, node-positive breast cancer
• A 31-year-old woman with triple-negative, node-negative IDC

Module 2: San Antonio Breast Cancer Symposium Review – Part 1

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• A 61-year-old woman with a germline BRCA1 mutation and locally advanced breast cancer

Module 4: San Antonio Breast Cancer Symposium Review – Part 2

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• A 46-year-old woman with triple-negative small cell carcinoma of the breast
• A 37-year-old woman with triple-negative IDC
• A 68-year-old woman with triple-negative, node-negative IDC

Module 6: San Antonio Breast Cancer Symposium Review – Part 3
Case Presentation – Dr Astrow: A 46-year-old woman with a 3.8-cm triple-negative, node-positive small cell carcinoma of the left breast

• Large left breast mass and axillary nodes
• Core biopsy: Grade 3 IDC, triple-negative, Ki67: 70-80%
• Patient refused neoadjuvant chemotherapy
• Lumpectomy: 3.8-cm, Grade 3 small cell carcinoma, synaptophysin- and chromogranin-negative
• 3/18 positive axillary lymph nodes

Questions

• What chemotherapy would you recommend for this highly aggressive breast cancer? Should I just give standard dose-dense AC/paclitaxel?
• Should I give carbo/paclitaxel, or carbo/etoposide, or cisplatin/etoposide? If I give the patient carbo/etoposide, should I follow that with an anthracycline?
Case Presentation – Dr Astrow: A 37-year-old woman with TNBC and persistent neuropathy after neoadjuvant AC → paclitaxel

- Left 3-cm Grade 3 IDC, triple-negative
- Neoadjuvant dose-dense AC x 4 → Paclitaxel (q2 wk) x 1 discontinued due to allergic reaction
  - BP elevated, trouble breathing, skin rash
- *Nab* paclitaxel x 6 of 9 completed but discontinued due to neuropathy
- Surgery, with CR
- One year later, neuropathy persists

Questions

- Is there anything that can be done for her persistent neuropathy?
- For future patients, do you recommend using gloves with ice in them? Other recommendations?
Case Presentation – Dr Astrow: A 68-year-old woman with an 8-mm triple-negative, node-negative IDC – Oncotype DX® RS: 57 (ER-negative)

- Diagnosed with an 8-mm, Grade 3 IDC
- SLNB: Negative
- IHC: ER: 20%, PR: Negative, HER2: Negative
- RT-PCR via Oncotype DX assay: Triple-negative
- Oncotype DX RS: 57

Questions
- Would you suggest TC chemotherapy, particularly in light of her high RS of 57? What about dose-dense AC-paclitaxel?
- Should I offer her an aromatase inhibitor or tamoxifen after completion of chemotherapy, since she is triple-negative by RT-PCR with the Oncotype DX assay but ER-positive by IHC?
Agenda

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- A 68-year-old woman with triple-negative, node-negative IDC

Module 6: San Antonio Breast Cancer Symposium Review – Part 3
Low Levels of Interleukin-6 at Baseline Were Significantly Associated with Improved Overall Survival of Patients Treated with Eribulin for Locally Advanced or Metastatic Breast Cancer

Bun A et al.
SABCS 2020;Abstract PS4-20.
Patients treated with eribulin demonstrated a significantly longer OS if their baseline IL-6 levels were within the normal range. This predictive efficacy for eribulin was more accurate than that of NLR or ALC. As there was no significant association between IL-6 levels and NLR or ALC, IL-6 appears to predict whether the tumor microenvironment is favorable or unfavorable for eribulin treatment, mediated through different mechanisms. Therefore, IL-6 levels may be useful for selecting patients who will benefit from the administration of eribulin in terms of improved OS.
Biomarker Evaluation in the Phase 3 ASCENT Study of Sacituzumab Govitecan Versus Chemotherapy in Patients With Metastatic Triple-Negative Breast Cancer

Sara A. Hurvitz,1 Sara M. Tolaney,2 Kevin Punie,3 Delphine Loirat,4 Mafalda Oliveira,5 Kevin Kalinsky,6 Amelia Zelnak,7 Philippe Aftimos,8 Florence Dalenc,9 Sagar Sardesai,10 Erika Hamilton,11 Priyanka Sharma,12 Sabela Recalde,13 Eva Ciruelos Gil,14 Tiffany Traina,15 Joyce O'Shaughnessy,16 Javier Cortes,17 Michaela Tsai,18 Linda Vahdat,19 Véronique Diéras,20 Lisa Carey,21 Hope S. Rugo,22 David M. Goldenberg,23 Quan Hong,23 Martin Olivo,23 Loretta M. Itri,23 and Aditya Bardia24

1Medical Oncology, University of California, Los Angeles, Jonsson Comprehensive Cancer Center, Los Angeles, CA, USA; 2Dana-Farber Cancer Institute, Boston, MA, USA; 3Department of General Medical Oncology, University Hospitals Leuven, Leuven, Belgium; 4Institut Curie, Paris, France; 5Hospital Universitari Vall d’Hebron, Barcelona, Spain; 6Winship Cancer Institute, Emory University, Atlanta, GA, USA; 7Northside Hospital, Atlanta, GA, USA; 8Institut Jules Bordet, Brussels, Belgium; 9Institut Claudius Regaud, Toulouse, France; 10The Ohio State University Wexner Medical Center, Columbus, OH, USA; 11Sarah Cannon Research Institute/Tennessee Oncology, Nashville, TN, USA; 12University of Kansas Cancer Center - The Richard and Annette Bloch Cancer Care Pavilion, Kansas City, KS, USA; 13Institut Català d’Oncologia Hospitalat, Barcelona, Spain; 14Hospital Universitari 12 de Octubre, Madrid, Spain; 15Memorial Sloan Kettering Cancer Center, New York, NY, USA; 16Texas Oncology - Baylor Charles A. Sammons Cancer Center, Dallas, TX, USA; 17IBB Institute of Oncology, Quirón Group, Madrid & Barcelona, Spain; 18PCI Oncology Research, Minneapolis, MN, USA; 19Memorial Sloan Kettering Cancer Center, New York, NY, USA; 20Centre Eugène-Meritus, Rennes, France; 21University of North Carolina Lineberger Comprehensive Cancer Center, Chapel Hill, NC, USA; 22University of California San Francisco Comprehensive Cancer Center, San Francisco, CA, USA; 23ImmunoMedics, Morris Plains, NJ, USA; and 24Massachusetts General Hospital, Harvard Medical School, Boston, MA, USA


ClinicalTrials.gov Number: NCT02574455

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Sacituzumab Govitecan (SG) Is a First-in-Class Trop-2–Directed ADC

- SG is distinct from other ADCs
  - Antibody highly specific for Trop-2
  - High drug-to-antibody ratio (7.6:1)
  - Internalization and enzymatic cleavage by tumor cell not required for SN-38 liberation from antibody
  - Hydrolysis of the linker also releases SN-38 extracellularly in the tumor microenvironment (bystander effect)
- Granted FDA accelerated approval for mTNBC
- Landmark ASCENT study demonstrated a significant survival improvement of SG over chemotherapy, with a tolerable safety profile in pretreated mTNBC
  - Median PFS of 5.6 vs 1.7 months (HR 0.41, P<0.0001)
  - Median OS of 12.1 vs 6.7 months (HR 0.48, P<0.0001)

Linker for SN-38
- Hydrolyzable linker for payload release
- High drug-to-antibody ratio (7.6:1)

Humanized anti-Trop-2 antibody
- Directed toward Trop-2, an epithelial antigen expressed on many solid cancers

SN-38 payload
- SN-38 more potent than parent compound, irinotecan

ADC, antibody-drug conjugate; FDA, US Food and Drug Administration; OS, overall survival; PFS, progression-free survival; TNBC, triple-negative breast cancer; Trop-2, trophoblast cell surface antigen 2.

ASCENT: A Phase 3 Confirmatory Study of Sacituzumab Govitecan in Refractory/Relapsed mTNBC

Metastatic TNBC (per ASCO/CAP)
≥2 chemotherapies for advanced disease
[no upper limit; 1 of the required prior regimens could be progression occurred within a 12-month period after completion of (neo)adjuvant therapy]
N=529

Sacituzumab Govitecan (SG)
10 mg/kg IV
days 1 & 8, every 21-day cycle
(n=267)

Treatment of Physician’s Choice (TPC)*
(n=262)

Continue treatment until progression or unacceptable toxicity

Endpoints
Primary
• PFS
Secondary
• PFS for the full population†
• OS, ORR, DOR, TTR, safety
Exploratory
• Biomarkers

Data cutoff: March 11, 2020

Stratification factors
• Number of prior chemotherapies (2-3 vs >3)
• Geographic region (North America vs Europe)
• Presence/absence of known brain metastases (yes/no)

We report the exploratory biomarker analysis in the brain metastases-negative (Brain Mets-Negative) population

---

*TPC: etibulin, vinorelbine, gemcitabine, or capcitabine. TPFS measured by an independent, centralized, and blinded group of radiology experts who assessed tumor response using RECIST 1.1 criteria in patients without brain metastasis. The full population includes all randomized patients (with and without brain metastases). Baseline brain MRI only required for patients with known brain metastasis.
ASCO/CAP, American Society of Clinical Oncology/College of American Pathologists; DOR, duration of response; DSMC, Data Safety Monitoring Committee; IV, intravenous; mTNBC, metastatic triple-negative breast cancer; ORR, objective response rate; OS, overall survival; PFS, progression-free survival; R, randomization; RECIST, Response Evaluation Criteria in Solid Tumors; TTR, time to response.
ORR by Trop-2 Expression

<table>
<thead>
<tr>
<th>Trop-2 Expression</th>
<th>H-score</th>
<th>ORR—% (no.)</th>
<th>95% CI</th>
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<tr>
<td>High</td>
<td>200-300</td>
<td>SG (n=85) 44% (37)</td>
<td>33-55</td>
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<tr>
<td></td>
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<td>TPC (n=72) 1% (1)</td>
<td>0-8</td>
</tr>
<tr>
<td>Medium</td>
<td>100-200</td>
<td>SG (n=39) 38% (15)</td>
<td>23-55</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TPC (n=35) 11% (4)</td>
<td>3-27</td>
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<td>Low</td>
<td>&lt;100</td>
<td>SG (n=27) 22% (6)</td>
<td>9-42</td>
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<td>TPC (n=32) 6% (2)</td>
<td>1-21</td>
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</tbody>
</table>

Assessed in the brain metastases-negative population. ORR and PFS are assessed by BICR. Trop-2 expression determined in archival samples by validated immunohistochemistry assay and H-scoring. BICR, blind independent central review; H-score, histochemical-score; ORR, objective response rate; SG, sacituzumab govitecan; TPC, treatment of physician’s choice; Trop-2, trophoblast cell surface antigen-2.
Treatment-Related AESIs by Trop-2 Expression: Key AESIs*

- Key grade ≥3 treatment-related AESIs for Trop-2 High (SG [n=90] vs TPC [n=70]): neutropenia (47% vs 32%), diarrhea (12% vs 0%), and anemia (10% vs 5%)

*Assessed in the safety population of patients who received ≥1 dose of SG regardless of brain metastases status and have known Trop-2 expression. Trop-2 expression determined in archival samples by validated immunohistochemistry assay and H-scoring. Patients may report more than 1 event per preferred term. AESIs were classified according to the MedDRA systems of preferred terms and system organ class and according to severity by NC1 CTC-AE v4.03. Combined preferred terms of 'neutropenia' and 'decreased neutrophil count'. Combined preferred terms of 'anemia', 'hemoglobin decreased' and 'red blood cell count decreased'. AESI, adverse event of special interest; H-score, histochemical score; MedDRA, Medical Dictionary for Regulatory Activities; NC1 CTC-AE v4.03, National Cancer Institute Common Terminology Criteria for AESIs, version 4.03; SG, sacituzumab govitecan; TPC, treatment of physician's choice; Trop-2, trophoblast cell surface antigen-2.
Efficacy Summary by Germline BRCA1/2 Status

**ORR by BRCA1/2 Status**

- **Germline BRCA1/2 Positive**
  - SG (n=16): 19%
  - TPC (n=18): 6%

- **Germline BRCA1/2 Negative**
  - SG (n=133): 33%
  - TPC (n=125): 6%

**PFS and OS by BRCA1/2 Status**

- **Germline BRCA1/2 Positive**
  - Median PFS: 4.6 months
  - Median OS: 15.6 months

- **Germline BRCA1/2 Negative**
  - Median PFS: 4.9 months
  - Median OS: 10.9 months

Assessed in the brain metastases-negative population. ORR and PFS are assessed by BICR. BICR, blind independent central review; BRCA, breast cancer gene; ORR, objective response rate; OS, overall survival; PFS, progression-free survival; SG, sepatituzumab Govitecan; TPC, treatment of physician’s choice; Trop-2, trophoblast cell surface antigen-2.
Geicam/2014-03 (RegisTEM): A Prospective Registry of Unresectable Locally Advanced or Metastatic Breast Cancer: Characteristics of a Subset of Patients with Triple Negative Subtype

Jara C et al.
SABCS 2020;Abstract PS7-25.
Conclusion

In this subset of patients with TN ABC due to recurrent disease, lung, lymph nodes and bone are the most frequent metastatic locations. The main first-and second-line therapies were CT in monotherapy.

Progression to the first-line conventional therapy (CT +/- bevacizumab) was reported in 51.1% patients with a median TTP of 4.7 mo (range 0.8-19.0) in the whole group, being similar in pts with TN in PT and PT/M1 (4.4 mo), and higher in patients with TN in M1 (7.1 mo), no statistically significant difference.

36% of the initial subset of patients reported to be treated in the third-line setting. Patients with TN only in M1 seem to have a longer time to progression from EBC.
What treatment would you recommend next for a 60-year-old woman with metastatic TNBC (BRCA wild type, PD-L1-positive) who experiences disease progression after 7 months of first-line atezolizumab/nab paclitaxel?

1. Gemcitabine
2. Capecitabine
3. Vinorelbine
4. Eribulin
5. Sacituzumab govitecan
6. Platinum-based chemotherapy
7. Other chemotherapy
8. Other
What treatment would you recommend next for a 60-year-old woman with metastatic TNBC (BRCA WT, PD-L1-positive) who experiences disease progression after 7 months of first-line atezolizumab/nab paclitaxel?

- Sacituzumab govitecan: 9 votes
- Platinum-based chemotherapy: 8 votes
- Capecitabine: 4 votes
- Eribulin: 3 votes
- Gemcitabine: 1 vote

Survey of 25 breast cancer clinical investigators.
Meet The Professor
Management of Lung Cancer

Tuesday, February 23, 2021
12:00 PM – 1:00 PM ET

Faculty
Martin Reck, MD, PhD

Moderator
Neil Love, MD
Thank you for joining us!

CME credit information will be emailed to each participant within 3 business days.