St. Gallen/Vienna 2023: Optimization of Treatment for Patients with Primary Breast Cancer ; a Brief Summary of the Consensus Discussion

Pre-operative biopsy

- The Panel did not reach perfect consensus as to whether a patient with a small (<1cm) highly suspicious breast lesion could move to primary surgery without a diagnostic biopsy in situations for which non-neoadjuvant systemic treatment options exist:
- A majority (72%) insisted on a pre-operative biopsy,
- a minority (25%) stated that primary surgery would be appropriate in such a situation

For a 35-year-old patient with triple-negative breast cancer cT2cN0 and a pathogenic BRCA mutation, the majority recommended bilateral mastectomy with or without reconstruction

Some panelists voted to separate the risk-reducing aspect from the cancer surgery, thus also keeping breast conservation plus radiotherapy an option.

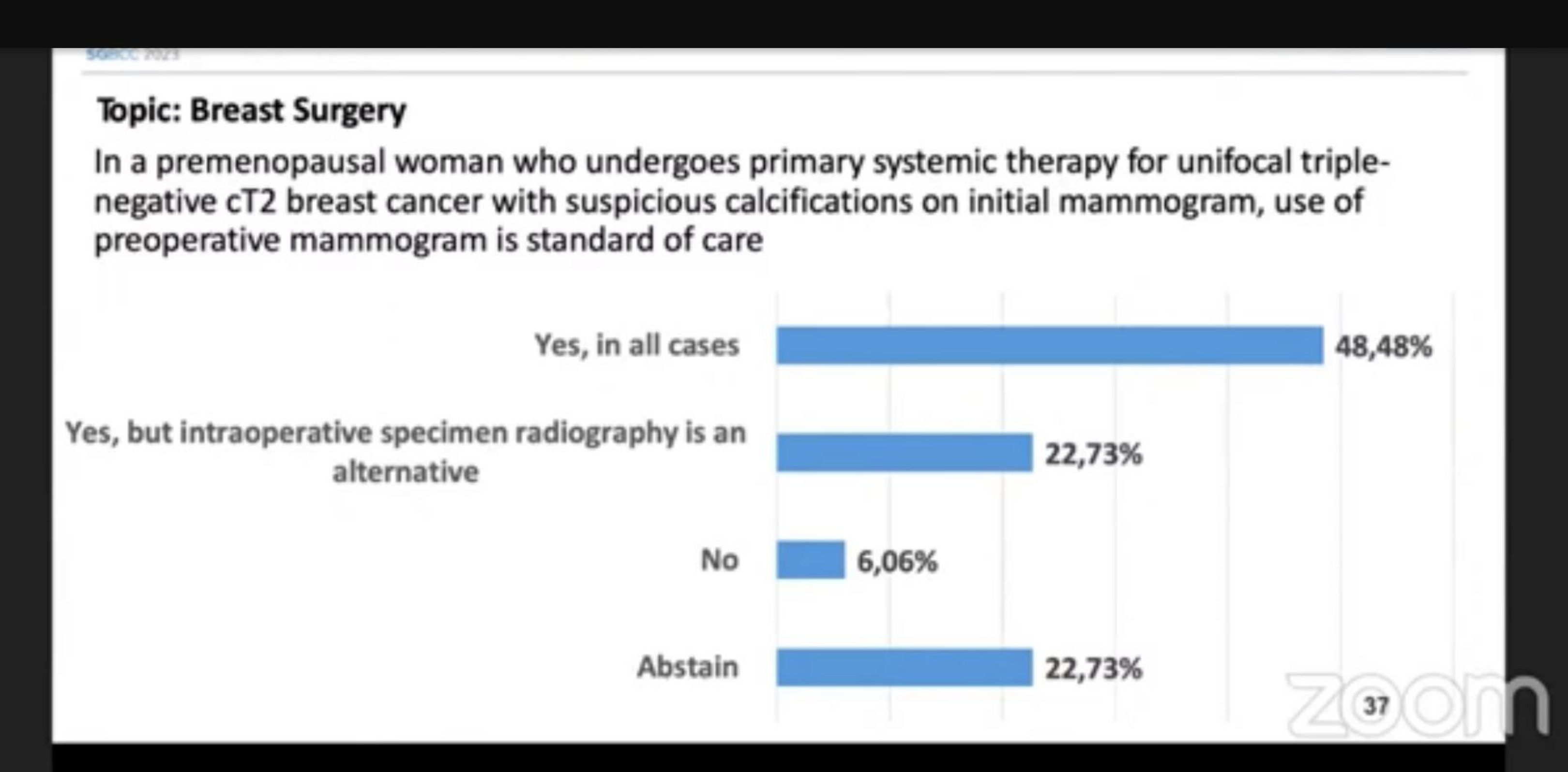
	Surgery	Intensive screening
Gene: BRCA1 Menopausal Status: Pre	66,67%	13,63%
Gene: BRCA1 Menopausal Status: Post	60,61%	16,67%
Gene: BRCA2 Menopausal Status: Pre	63,64%	13,64%
Gene: BRCA2 Menopausal Status: Post	42,42%	31,82%
Gene: PALB2 Menopausal Status: Pre	42,42%	31,82%
Gene: PALB2 Menopausal Status: Post	19,70%	53,03%
Gene: ATM Menopausal Status: Pre	9,09%	72,73%
Gene: ATM Menopausal Status: Post	1,52%	78,78%
Gene: CHEK2 Menopausal Status: Pre	7,58%	71,21%
Gene: CHEK2 Menopausal Status: Post	1,52%	78,78%

For the post-neoadjuvant surgery of a triple-negative breast cancer and complete radiological response

- lumpectomy with no ink on tumor was the treatment of choice for two thirds of panelists,
- A larger margin was preferred by 25% of panelists (split 1:1 between 1 and 2 mm between ink and tumor).

whether a preoperative mammography should be standard after the neoadjuvant treatment of a triple-negative breast cancer with initial baseline microcalcifications

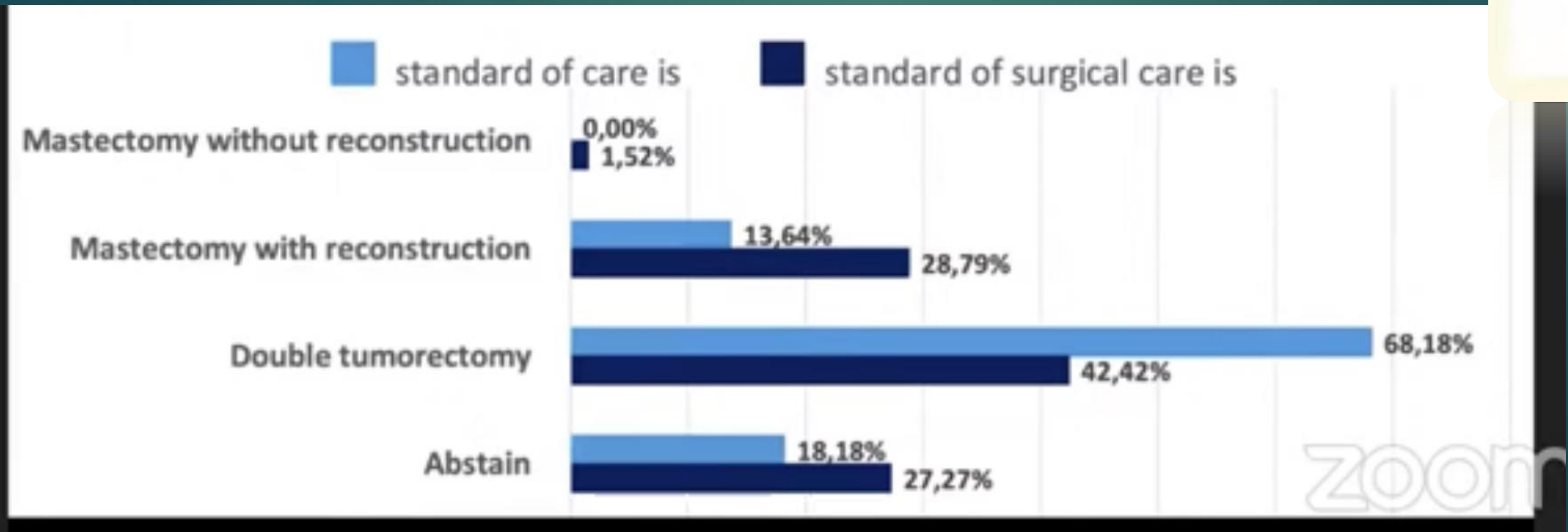
- The panel remained uncertain,
- but some endorsed the use of intraoperative specimen radiography instead.



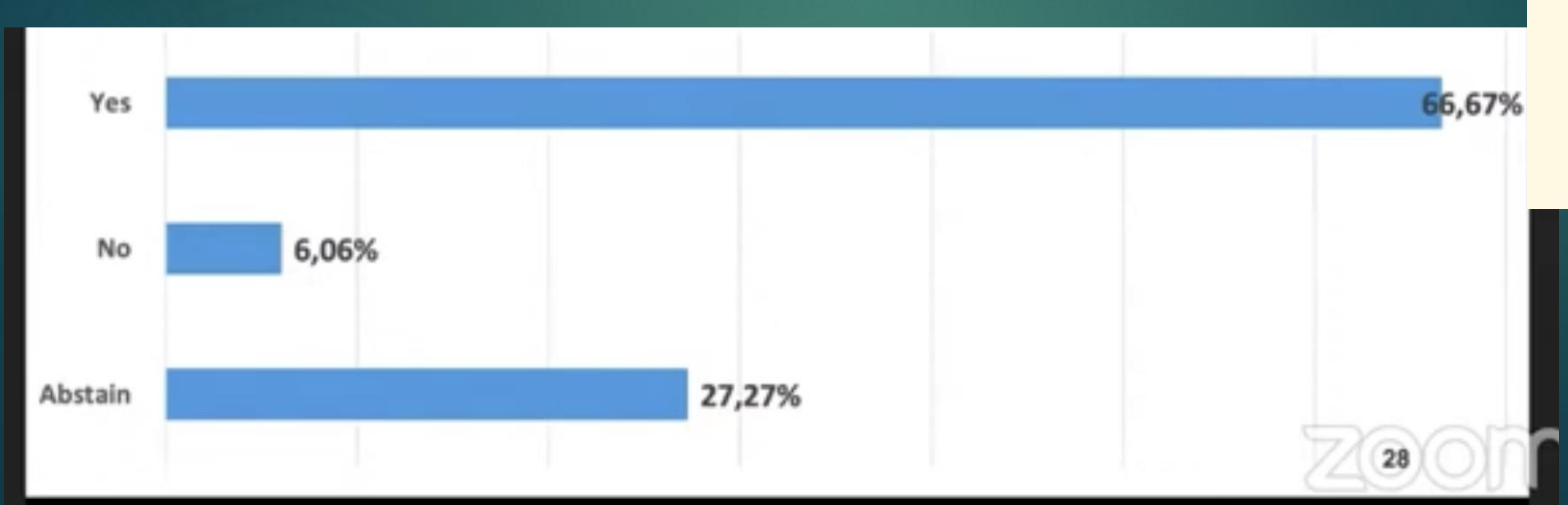
breast conservation for multicentric disease:

In a postmenopausal patient with ER+/HER2- clinically node-negative breast cancer with two ipsilateral tumors in two neighboring quadrants amenable to double tumorectomy with two separate incisions: 68% of Panelists preferred "Double tumorectomy"

Biology matters, thus in the same situation with two triple-negative breast cancers (TNBC), only 42% preferred a double tumorectomy, whereas 30% voted for mastectomy (27% abstention)



- In addition, a majority of the Panel endorsed oncoplastic high-volume resections or ”extreme oncoplasty” as an alternative for large primary tumors as long as margins are clear, and post-surgical radiation can be performed (67% Yes, 27% Abstain)



Impact of BCS on local recurrence in patients with multiple ipsilateral breast cancer: results from the ACOSOG Z11102(Alliance) Trial

- ACOSOG Z11102 trial ⟶ single-arm *prospective* study evaluating outcomes of OBCS and breast RT (+ boost) for MIBC:
  - **204** patients (≥40 years) cT1-2, N0-1 breast cancer
  - 2 or 3 foci of disease in breast (at least 1 invasive)
  - median follow up **66.4** months (range 1.3 – 90.6)
  - tumor foci separated by at least **2cm** (each <5cm)
  - histologically negative margins of resection (no tumor on ink)

- Primary outcome = local recurrence at 5 years (defined acceptable <8%)
- Secondary outcomes = conversion to mastectomy (7.1%), cosmesis (PROs good/excellent in 70.6% 2 years), radiation constraints re boost doses (increased boost volume ⟶ acute dermatitis but *not* worse cosmesis)

Impact of BCS on local recurrence in patients with multiple ipsilateral breast cancer: results from the ACOSOG Z11102(Alliance) Trial

RESULTS

- Total of **6** patients — developed local recurrence = estimated cumulative incidence at 5 years **3.1%** (95% CI 1.3 – 6.4)

- Local recurrence cases — in breast (**4**), skin (**1**), chest wall (**1**)

Impact of BCS on local recurrence in patients with multiple ipsilateral breast cancer: results from the ACOSOG Z11102(Alliance) Trial

RESULTS

•Subset analysis → revealed *lower* rate local recurrence amongst patients with pre-operative MRI (p=0.002 but small numbers):

- MRI (n= 189) → local recurrence 1.7% [HR 1.0; 95% CI 0.6 – 5.2]
- no MRI (n= 15) → local recurrence 22.6% [HR 13.5; 95% CI 7.9 – 55.1]

•Suggestion of *lower* rate of recurrence for luminal type tumors (ER positive; HER2 negative) = 2.6% (95% CI 1.0 – 6.8) (few TNBC, HER2 +ve)

Contralateral Mastectomy

2001-2005

	Per 100/yr	
Age First Diagnosis	ER Positive	ER Negative
25-29	0.45	1.26
30-34	0.31	0.85
35-39	0.25	0.64
40-45	0.24	0.47
50-54	0.26	0.45
60-64	0.36	0.51
70-74	0.37	0.55
80-84	0.26	0.63

Nichols H, J Clin Oncol 2011;29:1564

BREAST CANCER
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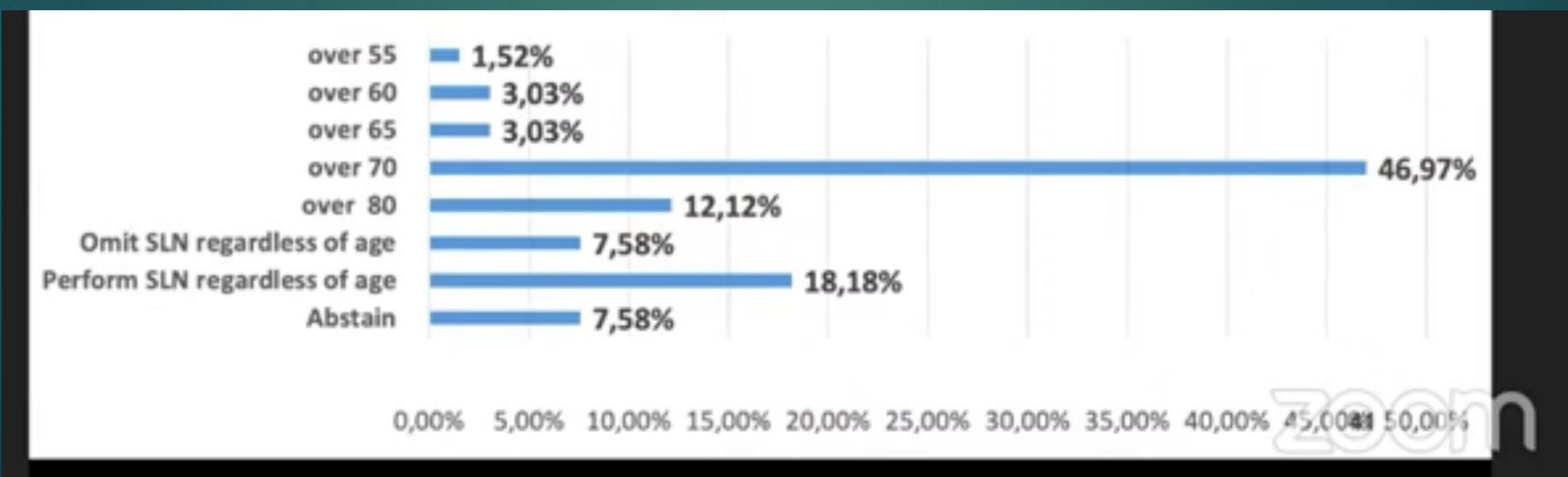
The Axilla

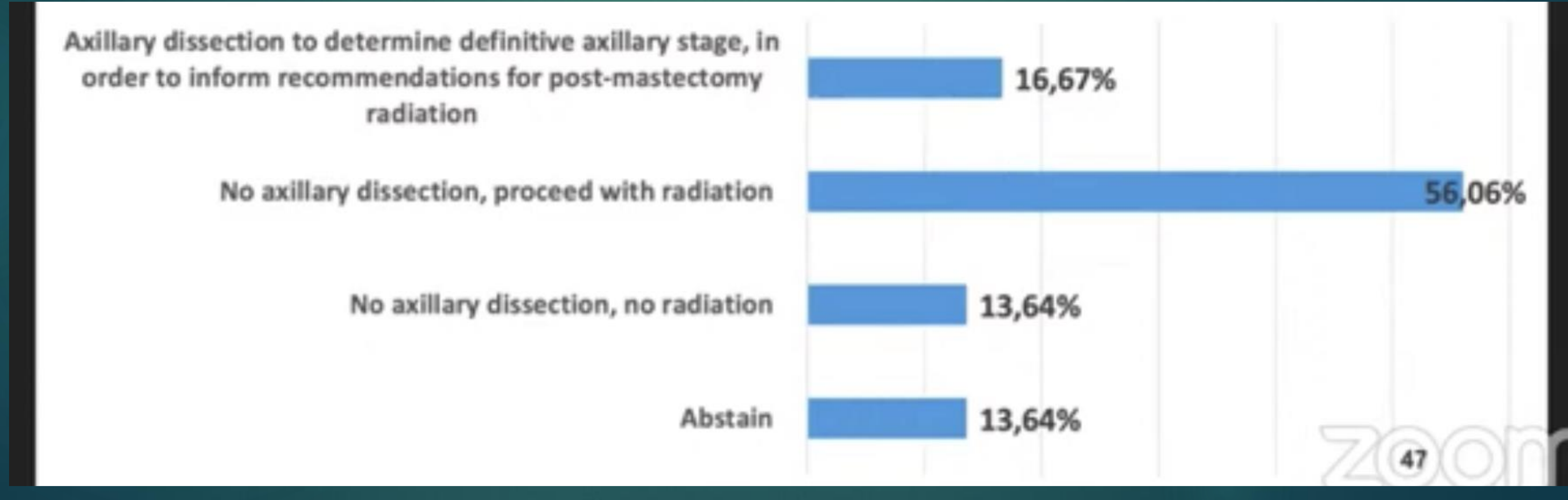
- There was no consensus on whether any axillary surgery can be omitted in patients with favorable prognostic factors (strong ER and PR, Grade 1, endocrine therapy compliant)

  A majority of panelists would consider such omission from the ages of 70 (47%) or 80 (12%) onwards.

  18% of Panelists insisted on SLN surgery regardless of age.



In Postmenopausal patients with clinically node- negative ER+ HER2-undergoing mastectomy and showing one positive SN:
a majority suggested radiation therapy (56%),
but some still favored axillary dissection or observation



palpable nodes at time of diagnosis of ER+HER2- disease

- Postmenopausal: 52% of panelists voted for primary surgery, a minority endorsed neoadjuvant chemotherapy (12%) or neoadjuvant antihormonal therapy (5%)

- For a similar situation in Premenopausal situation, voting results shifted towards more neoadjuvant chemotherapy (28%), but the majority still favoured primary surgery (42%).

After neoadjuvant systemic surgery and residual disease in the axilla

- axillary dissection or axillary radiotherapy should be undertaken:
- There was some variation of majorities with respect to the extent of residual disease and molecular tumor subtype:
- For TNBC and residual ITCs micrometastasis , 34% favored ALND, 40% ART.
- For macrometastasis 1-3 LN after PST for TNBC, 43% preferred ALND over ART (28%).
- For situations of a negative post-treamtent sentinel node, a relative majority of panelists (44%) voted for no further therapy, whereas 39% would still irradiate the axilla

De-escalate Surgery ->
Escalate Radiotherapy ??

2023

Omitting Axillary staging

18TH ST.GALLEN INTERNATIONAL BREAST CANCER CONFEREN

15 – 18 March 2023, Vienna/Austria

SGBCC 2023

Michael Gnant

st.gallenoncology

SOUND trial study design

Patients with breast cancer ≤2 cm
Any age, Breast conserving therapy
Negative U.S. of the axilla
negative FNAC of a single doubtful axillary node

Randomization

SNB policy

n=780

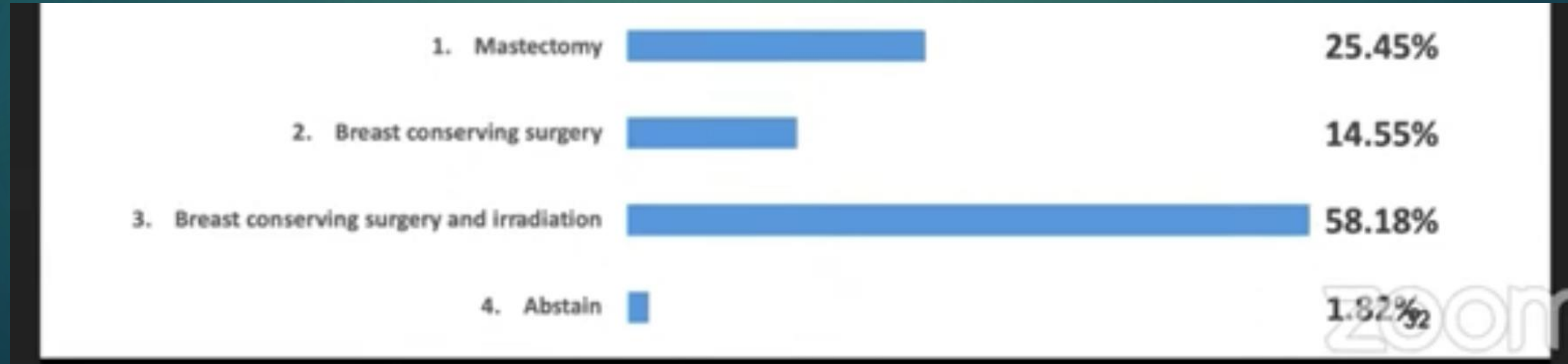
No axillary surgery

n=780

Sound Trial

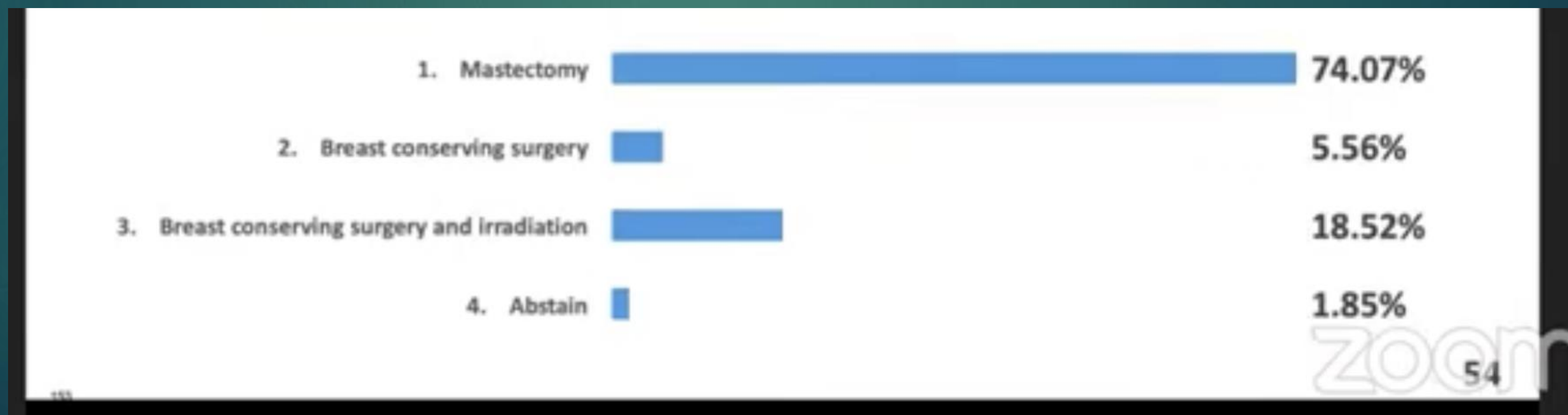
Loco- regional Recurrence

- A 63-year-old woman with breast-conserving therapy and adjuvant systemic therapy for node-negative stage 2 breast cancer 9 years ago and now presenting with an ER positive and HER2 negative ipsilateral tumor recurrence (<2cm, 3 cm distance to the nipple). No distant metastases and only very localized grade 2 side effects at the level of the skin and soft tissues.
- Clinically it would be amenable to breast-conserving surgery with acceptable aesthetic results.
- A majority of the panelists would recommend performing breast-conserving surgery again



Loco- regional Recurrence

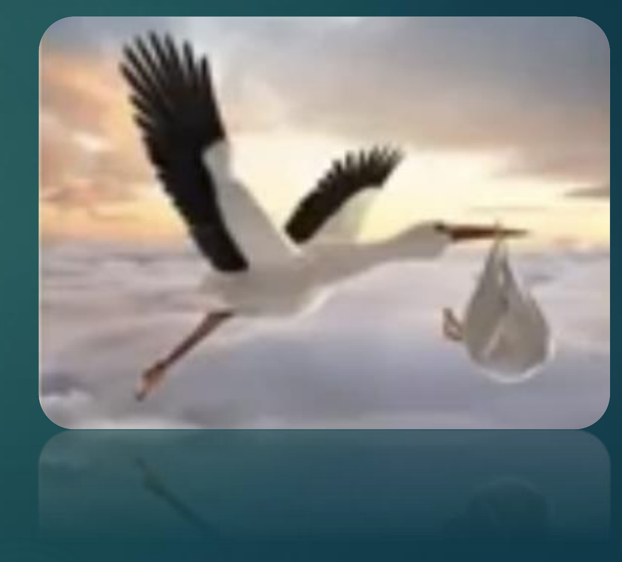
- The case was then modified by assuming a rather shorter disease-free interval of 3 years and endocrine therapy stopped after the first year. Lower than grade 2 side effects in skin or soft tissue, ER+, HER2-, non- Metastatic, T<2 cm, 3 cm from nipple, amenable to BCS.
- Now, the majority favored the mastectomy (74 %) and only a few still voted for a breast conserving procedure (18 % with re-irradiation and 6 % without).



Miscellaneous

Pregnancy: Interrupting endocrine therapy

- Pregnancy After Breast Cancer
- With regard to counselling premenopausal women about the safety of being pregnant after breast cancer and the recently presented data of the IBCSG / BIG / Alliance POSITIVE trial(35), a case was constructed. It showed a 28-year- old patient receiving ovarian function suppression and tamoxifen as treatment for breast cancer with 4 or more involved axillary lymph nodes, and the question was whether one would recommend interrupting endocrine therapy after 2 years therapy.
- Only 14 % voted in favor, but the overwhelming majority (79 %) would not encourage the patient to get pregnant in that situation



Pregnancy outcome and safety of interrupting therapy for women with endocrine responseive breast cancer: initial results from the POSITIVE trial

- ATLAS trial → confirmed benefit of **10** years versus **5** years endocrine therapy with tamoxifen (pre-menopausal)

- Pregnancy → contraindicated *during* endocrine therapy (now 10 years)
- Therefore temporary *interruption* of hormonal treatment after 18 – 30 months → permit attempt at conception and pregnancy to term
- POSITIVE trial → prospective non-randomized study of pre-menopausal women with desire for pregnancy after breast cancer:
  - **518** patients recruited from 116 centres in **20** countries
  - majority stage I and II disease; one-third node positive
  - median patient age = 37 years
  - **75%** nulliparous

Initial results from the POSITIVE trial

- Safety analyses → pre-defined trial *suspension* threshold ≥47 breast cancer recurrences within 3 years of median follow up period

- Primary endpoint = breast cancer-free interval (enrolment to 1st event)

RESULTS

susan G. komen.

- Total of **44** breast cancer recurrences → corresponding to rate of 8.9% at 3 years [95% CI 6.3 – 22.6]

- Similar to **9.2%** for comparative external cohort *control* (SOFT/TEXT trials)

Initial results from the POSITIVE trial

- *" Temporary interruption endocrine therapy for pregnancy → does not appear to negatively impact breast caner outcomes in relatively short term follow up for ER positive disease"*
- *"……..data suggest that patient-centred reproductive healthcare should be incorporated routinely in the care of young women with breast cancer "*

[ANN PARTRIDGE]

Topic: Well-being for Breast Cancer Survivors

Would you recommend interrupting endocrine therapy now if she was 28 years old with a high likelihood of maintaining fertility for several more years?

1. Yes	16.67%
2. No	77.78%
3. Abstain	5.56%

Oligometastatic disease

- A case was presented with a patient who has been diagnosed with ER negative HER2 positive breast cancer, and staging scans disclose a 4 cm tumor in the breast, positive axillary LN, and an isolated pulmonary nodule. With primary docetaxel-trastuzumab-pertuzumab combination therapy, a complete clinical response was achieved.
- The majority of the panelists would proceed with local therapy (in total 86 %), however, 10 % would perform surgery only, 8 % radiotherapy only, and 68 % would consequently do both surgery and radiotherapy

Breast Reconstruction

Topic: Breast Surgery

You are discussing mastectomy and reconstruction with an overweight patient. You would recommend reconstruction if the following BSA criteria are met:

Option	Response
BMI below 30	15,38%
BMI below 35	4,62%
Regardless of BMI if patient has reached stable weight	36,92%
Abstain	43,08%

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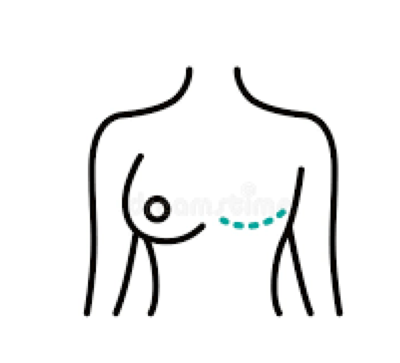

Fat Injection

Topic: Breast Surgery

Can the use of fat stem cells in breast reconstruction meanwhile be considered safe?

Answer	Share
Yes	30,30%
No	12,12%
Abstain	57,58%

Survivors

Telehealth

- the Panel discussed telehealth and virtual visits for the follow-up of breast cancer survivors: the majority use these tools only exceptionally (<10%: 60%), but a sizeable proportion has implemented them in their care routines (10-25%: 12%; >25%: 7%).
- In any case, the majority approved these methods "in addition to in-person follow-up" (69% Yes

- The Panel did not recommend LYMPHA surgery as routine, but considered lymphatic surgery in general promising (64% Yes) for the treatment of clinically relevant lymphedema

ANY
QUESTIONS