XXXIV
Reunion de la Sociedad de Obstetricia y Ginecología de Castilla y León

25 y 26 de octubre de 2019
Zamora

MENOS ES MAS EN AXILA

DRA. GÓMEZ CALVO

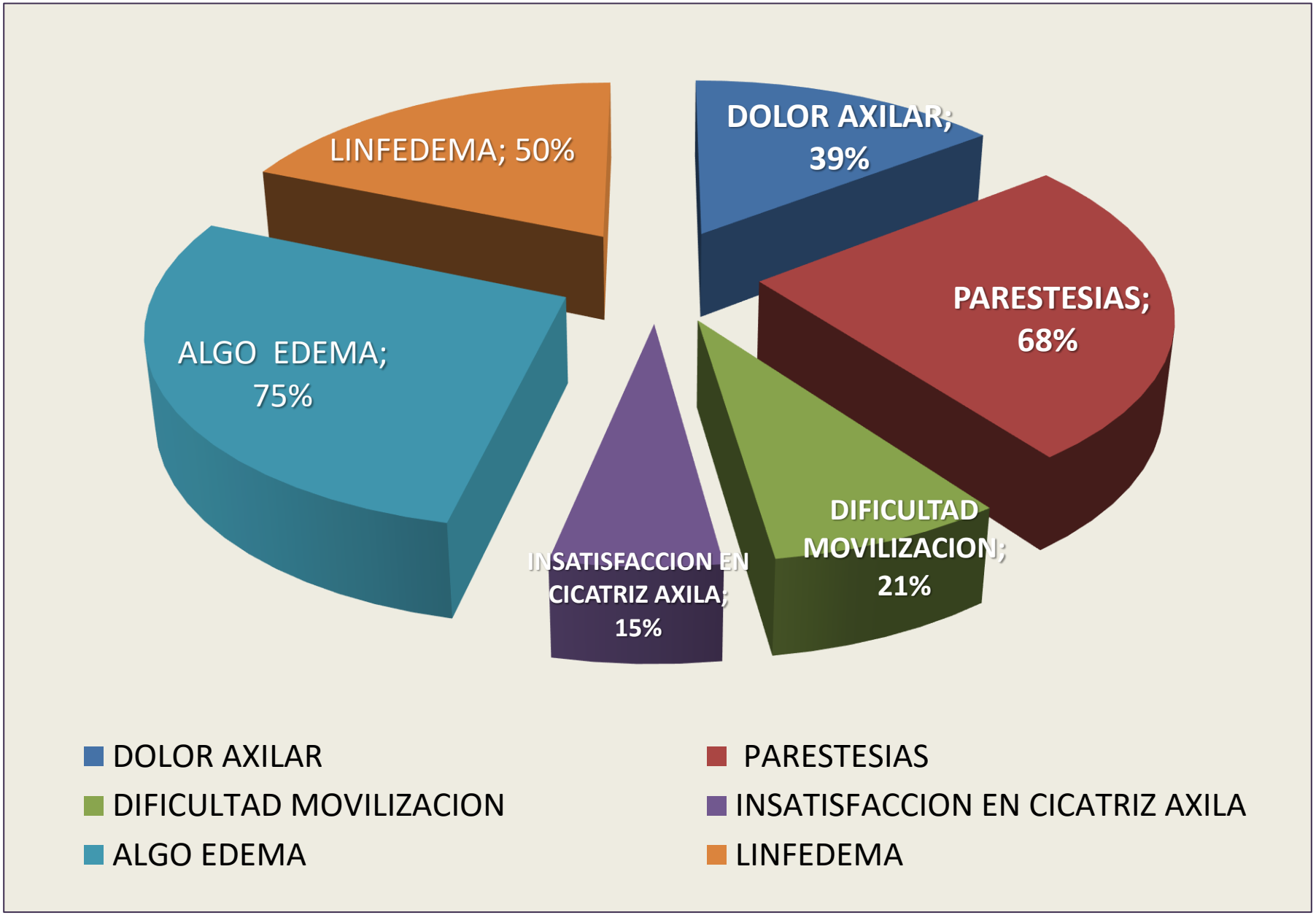
SERVICIO DE GINECOLOGIA

Hospital General de Segovia

LINFADENECTOMIA AXILAR

Current Problems in Surgery 55 (2018) 47–65

LINFADENECTOMÍA AXILAR: MORBILIDADES



LINFOANGIOSARCOMA

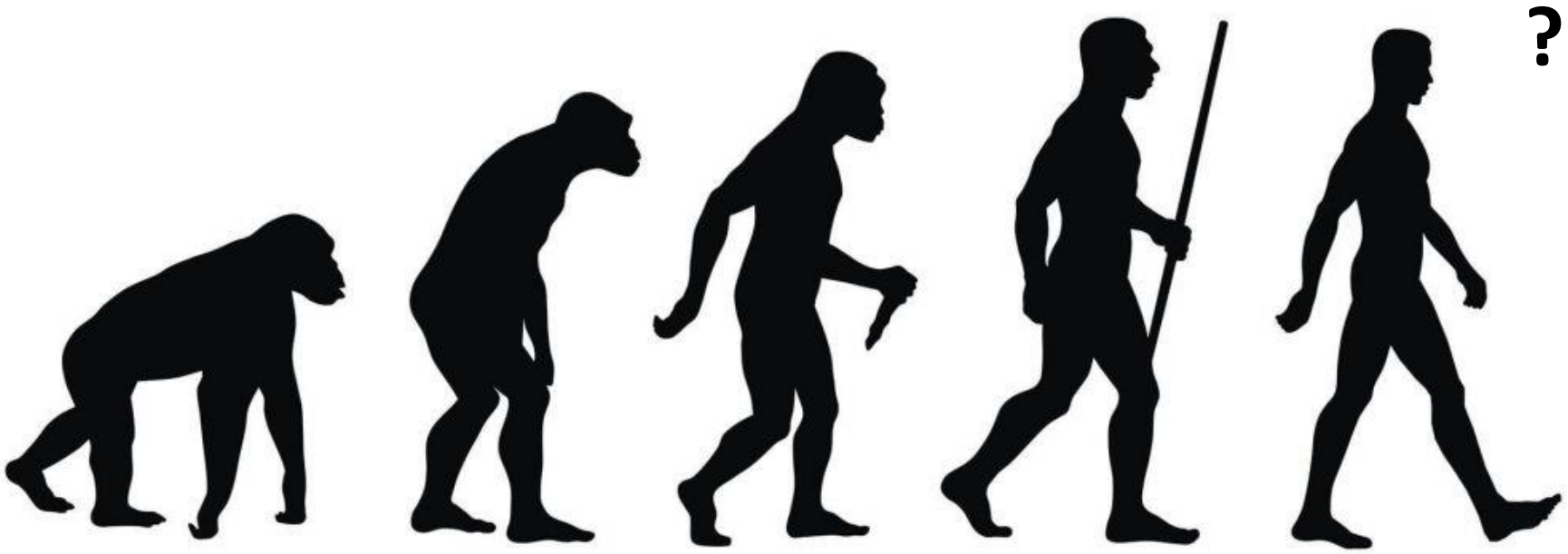
MENOS ES MÁS

EVOLUCION AXILA

ESTADIFICACION TUMOR Y AXILA-> DECISION DE TRATAMIENTO

ESTATUS AXILAR-> **FACTOR PRONOSTICO**

Halsted	Tumorectomía	ACOSOG Z0011	Biologia tumoral
Cirugía radical	BSGC(+)		
LINFADENECTOMIA	LINFADENECTOMIA	Amaros (2013)	Neoadyuvancia



MENOS ES MAS: LINFADENECTOMIA AXILAR

4

3

QUIMIOTERAPIA SISTEMICA EN NEOADYUVANCIA N1 (+) BSGC BIOMARCADORES

2

2000 BSGC

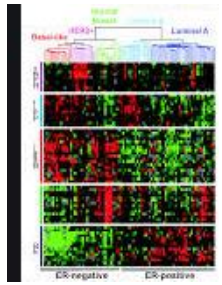
1

CDIS NO CIRUGIA AXILAR

1990 MAMOGRAFIA

NO BSGC

HER2 +/ TN



Current Problems in Surgery 55 (2018) 47–65

2

Annals of Surgical Oncology
February 2009, Volume 16, Issue 2, pp 266–275 | Cite as

Sentinel-Lymph-Node-Based Management or Routine Axillary Clearance? One-Year Outcomes of Sentinel Node Biopsy Versus Axillary Clearance (SNAC): A Randomized Controlled Surgical Trial

VOLUME 23 · NUMBER 19 · JULY 1 2005
JOURNAL OF CLINICAL ONCOLOGY ORIGINAL REPORT

Morbidity After Sentinel Lymph Node Biopsy in Primary Breast Cancer: Results From a Randomized Controlled Trial

Anand David Purushotham, Sara Upponi, Manfred Borislav Klevesath, Lynda Bobrow, Keith Millar, Jonathan Peter Myles, and Stephen William Duffy

Lancet Oncol. 2010;11(10):927–933.

Sentinel-lymph-node resection compared with conventional axillary-lymph-node dissection in clinically node-negative patients with breast cancer: overall survival findings from the NSABP B-32 randomised phase 3 trial

David M Krag, Stewart J Anderson, Thomas B Julian, Ann M Brown, Seth P Harlow, Joseph P Costantino, Takamaru Ashikaga, Donald L Weaver, Eleftherios P Mamounas, Lynne M Jalovec, Thomas G Frazier, R Dirk Noyes, André Robidoux, Hugh M C Scarth, Norman Wolmark

Randomized Multicenter Trial of Sentinel Node Biopsy Versus Standard Axillary Treatment in Operable Breast Cancer: The ALMANAC Trial

Journal of the National Cancer Institute, Vol. 98, No. 9, May 3, 2006

DISMINUCION LINFADENECTOMIA AXILAR 60%

ACOS0G Z011

Published in final edited form as:
Ann Surg. 2010 September ; 252(3): 426–433. doi:10.1097/SLA.0b013e3181f08f32.

Locoregional Recurrence after Sentinel Lymph Node Dissection with or without Axillary Dissection in Patients with Sentinel Lymph Node Metastases: The American College of Surgeons Oncology Group Z0011 Randomized Trial

Armando E Giuliano, MD[1], Linda McCall, MS[2], Peter Beitsch, MD[3], Pat W Whitworth, MD[4], Peter Blumencranz, MD[5], A. Marilyn Leitch, MD[6], Sukamal Saha, MD[7], Kelly K Hunt, MD[8], Monica Morrow, MD[9], and Karla Ballman, PhD[10]

ACOSOG Z0011 (59)

- Tumores T1-T2
- ≤ 2 ganglios centinela metastásicos
- No invasión de la grasa perigánglionar
- Cirugía conservadora de la mama
- Radioterapia (RDT) convencional adyuvante sobre mama (Irradiación de la mama con campos tangenciales optimizados a la axila)
- Tratamiento sistémico adyuvante

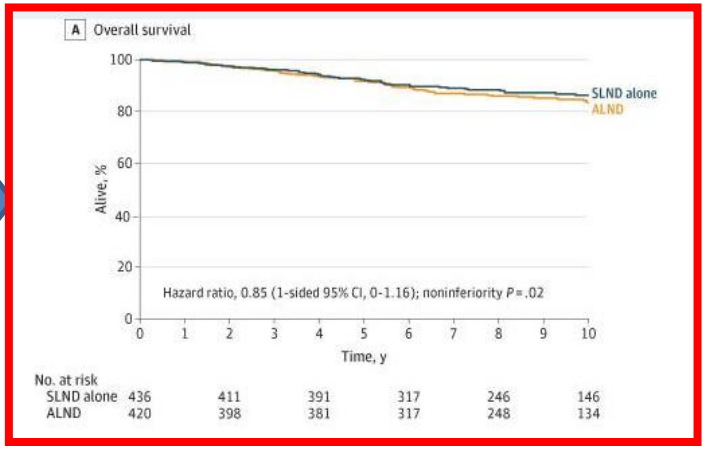
NO LINFADENECTOMIA AXILAR

Research

JAMA | Original Investigation

Effect of Axillary Dissection vs No Axillary Dissection on 10-Year Overall Survival Among Women With Invasive Breast Cancer and Sentinel Node Metastasis
The ACOSOG Z0011 (Alliance) Randomized Clinical Trial

Armando E. Giuliano, MD; Karla V. Ballman, PhD; Linda McCall, MS; Peter D. Beitsch, MD; Meghan B. Brennan, RN, ONP, PhD; Pond R. Kelemen, MD; David W. Ollila, MD; Nora M. Hansen, MD; Pat W. Whitworth, MD; Peter W. Blumencranz, MD; A. Marilyn Leitch, MD; Sukamal Saha, MD; Kelly K. Hunt, MD; Monica Morrow, MD



JAMA. 2017;318(10):918-926. doi:10.1001/jama.2017.11470

EVITAR LINFADENECTOMIAS AXILARES

Oncoguía SEGO
Cáncer infiltrante de Mama 2017

Tabla 11

EVITAR LINFADENECTOMÍA AXILAR EN GANGLIO CENTINELA METASTÁSICO
Valoración con OSNA:
Baja carga tumoral total*: < 15.000 copias ARN m CK19
Valoración histopatológica:
Células aisladas o micrometástasis
Macrometástasis, si cumplen todo los criterios ACOSOG Z0011 **(59)**
• Tumores T1-T2
• ≤ 2 ganglios centinela metastásicos
• No invasión de la grasa perighanglionar
• Cirugía conservadora de la mama
• Radioterapia (RDT) convencional adyuvante sobre mama (Irradiación de la mama con campos tangenciales optimizados a la axila)
• Tratamiento sistémico adyuvante

*Se define la carga tumoral total, como la suma de las cargas tun OSNA **(65-66)**

** De acuerdo con el estudio Amaros **(67)**, en algunos casos y o considerarse la realización de Radioterapia axilar.

DESCENSO EXPONENCIAL

Ann Surg Oncol (2018) 25:2596–2602
https://doi.org/10.1245/s10434-018-6637-9

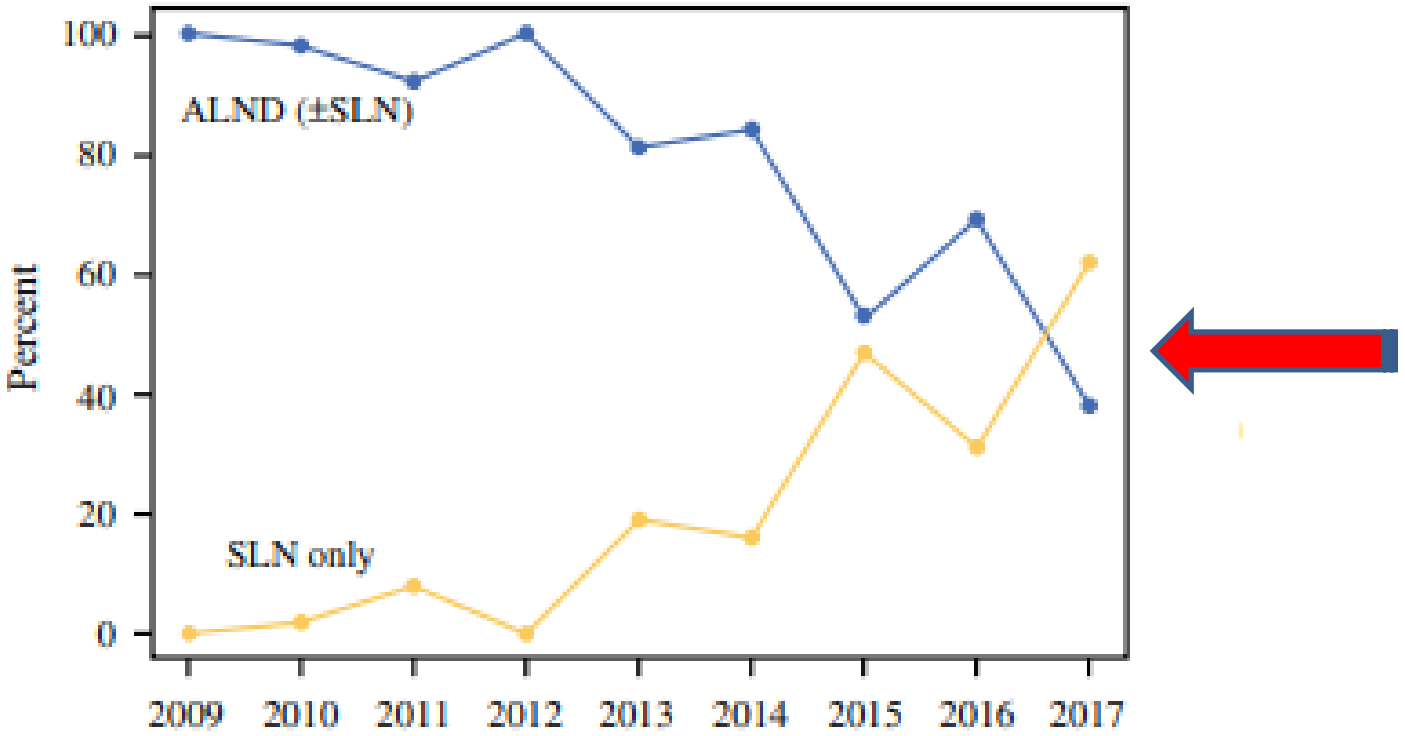
Annals of SURGICAL ONCOLOGY
OFFICIAL JOURNAL OF THE SOCIETY OF SURGICAL ONCOLOGY

CrossMark

ORIGINAL ARTICLE – BREAST ONCOLOGY

Decreasing Use of Axillary Dissection in Node-Positive Breast Cancer Patients Treated with Neoadjuvant Chemotherapy

S



Ann Surg Oncol (2018) 25:2596–2602

3

TERAPIA SISTEMICA PRIMARIA

BSGC PREQMT

BSGC POSTQMT

BSGC postQMT

A FAVOR BSGC postQMT?

- Permite ahorrar 1 cirugía
- Permite empezar antes QMT
- Informa eficacia QMT
- Reduce tasa LINFADENECTOMIA AXILARES

Oncoguía SEGO Cáncer infiltrante de Mama 2017

Sociedad Española de Senología y Patología Mamaria

Printed by Ana Gomez calvo on 4/8/2018 7:33:43 PM

NCCN National Comprehensive Cancer Network®

UpToDate®

BSGC (G-) POST NEOADYUVANCIA

National Cancer Institute

PREOPERATIVE THERAPY IN INVASIVE BREAST CANCER

Reviewing the State of the Science and Exploring New Research Directions

Sentinel Node Biopsy After Neoadjuvant Chemotherapy: The Pros

Terry Mamounas, M.D., M.P.H

J Clin Oncol. 2005 Jul 20;23(21

PLOS ONE | DOI:10.1371/journal.pone.0162605 September 8, 2016

RESEARCH ARTICLE

The Feasibility and Accuracy of Sentinel Lymph Node Biopsy in Initially Clinically Node-Negative Breast Cancer after Neoadjuvant Chemotherapy: A Systematic Review and Meta-Analysis

FN del 6%.

Chong Geng, Xiao Chen, Xiaohua Pan, Jiyu Li*

Department of Breast and Thyroid Surgery, Shandong Provincial Hospital Affiliated to Shandong University, Jinan, Shandong Province, China

Sentinel Lymph Node Biopsy Before or After Neoadjuvant Chemotherapy: Pros and Cons

Surg Oncol Clin N Am

Michael S. Sabel, MD

19 (2010) 519–538

CLINICAL BREAST CANCER SEPTIEMBRE, 2017

The Shift From Sentinel Lymph Node Biopsy Performed Either Before or After Neoadjuvant Systemic Therapy in the Clinical Negative Nodes of Breast Cancer Patients. Results, and the Advantages and Disadvantages of Both Procedures

Autor: Fernandez-Gonzalez, Sergi 1 ; Falo, Catalina 2 ; Pla, Maria Jesus 3 ; Pernas, Sonia 2 ; Bajen, Maite 4 ; Soler, Teresa 5 ; Ortega, Raul 6 ; Quetglas, Cecilia 3 ; Perez-Martin, Xavier 7 ; Fernandez Montoli, Maria Eulalia 3 ; Campos, Miriam 3 ; Varela-Rodriguez, Mar 5 ; Ponce, Jordi 3 ; Garcia-Tejedor, Amparo 3

BSGC postQMT

N1 (clínica y radiológicamente)

EN CONTRA BSGC postQMT?

- No se conoce estado axilar de inicio: Factor pronostico?
- Alta tasa de falsos negativoS
- Menos tasa de identificación

NO SE CONOCE ESTADO AXILAR DE INICIO

ESTADO AXILAR FACTOR PRONOSTICO???

JAMA Oncology | Review

Axillary Nodal Management Following Neoadjuvant Chemotherapy A Review

JAMA Oncol. doi:10.1001/jamaoncol.2016.4163
Published online December 1, 2016.

NSABP B-18
B-24

ENFERMEDAD RESIDUAL EN LA AXILA TRAS QUIMIOTERAPIA ES UN **FACTOR PREDICTOR DE RECIDIVA LOCORREGIONAL MAS** QUE EL ESTADIAJE PREVIO AL TTO

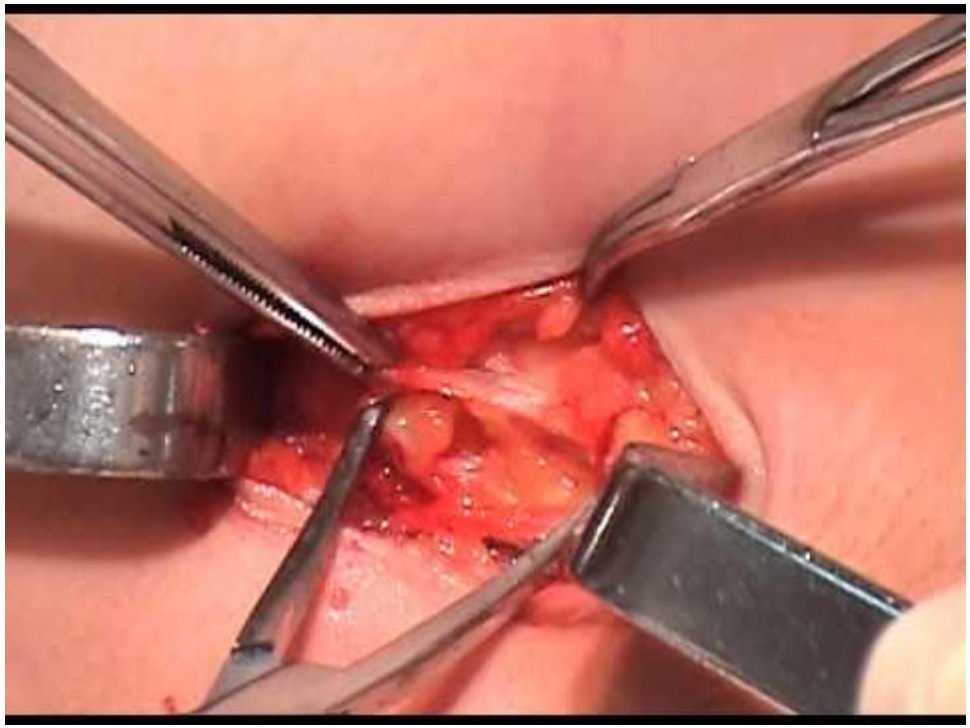
ESTADO GANGLIONAR	RECURRENCIA LOCOREGIONAL
c N1 -> ypN0	<2%
Cn1-> ypN1	9%

El riesgo de **recidiva locorregional te lo marcara la enfermedad residual** tras la qmt

LO IMPORTANTE NO ES SABER COMO ERA LA AXILA DE INICIO,

SINO AL FINALIZAR

¿QUE HACEMOS CON LA ENFERMEDAD RESIDUAL ?



PERSISTENCIA DE N+: ENF RESIDUAL

Ann Surg Oncol
https://doi.org/10.1245/s10434-018-6537-z

Annals of
SURGICAL ONCOLOGY
OFFICIAL JOURNAL OF THE SOCIETY OF SURGICAL ONCOLOGY

EDITORIAL – BREAST ONCOLOGY

Optimizing Surgical Management of the Axilla After Neoadjuvant Chemotherapy: An Evolving Story

9-year period (2008–2017), BSGC POST QMT

BSGC	G(+) NO CENTINELAS
CELS AISLADAS	17%
MICROMTS	64%
MACROMTS	62%

LINFADENECTOMIA AXILAR SIEMPRE QUE QUEDE TUMOR RESIDUAL

Ann Surg Oncol. 2018;25:1488–94. https://doi.org/10.1245/s104 34-018-6429-2.

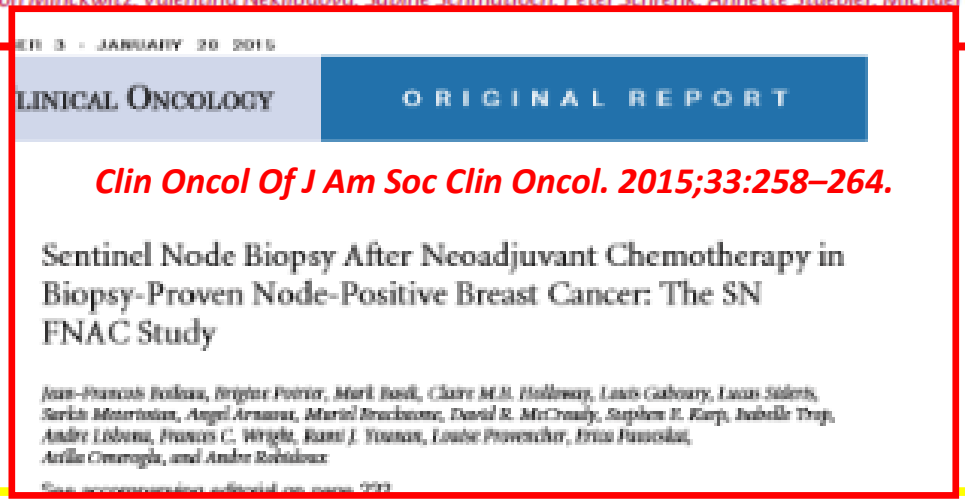
ALTA TASA DE FN

BAJA TASA DE DETECCION

Sentinel-lymph-node biopsy in patients with breast cancer before and after neoadjuvant chemotherapy (SENTINA): a prospective, multicentre cohort study

Thorsten Kuehn, Ingo Bauerfeind, Tanja Fehm, Barbara Fleige, Maik Hausschild, Gisela Helms, Annette Lebeau, Cornelia Liedtke, Gunter von Minckwitz, Valentina Nekljudova, Sabine Schmatloch, Peter Schrenk, Annette Staebler, Michael Untch

Lancet Oncol 2013; 14: 609–18



ER 3 · JANUARY 20 2015

LINICAL ONCOLOGY

ORIGINAL REPORT

Clin Oncol Of J Am Soc Clin Oncol. 2015;33:258–264.

Sentinel Node Biopsy After Neoadjuvant Chemotherapy in Biopsy-Proven Node-Positive Breast Cancer: The SN FNAC Study

Jean-François Boileau, Brigitte Poirier, Mark Basik, Claire M.S. Holloway, Louis Gaboury, Lucas Sideris, Sarkis Meterissian, Angel Arnaout, Muriel Brackstone, David R. McCready, Stephen R. Kaufp, Isabelle Trop, Andre Lisbona, Frances C. Wright, Rami J. Younan, Louise Provencher, Erica Patocskai, Attila Ormsby, and Andre Robidoux

Original Investigation

Sentinel Lymph Node Surgery After Neoadjuvant Chemotherapy in Patients With Node-Positive Breast Cancer

The ACOSOG Z1071 (Alliance) Clinical Trial

JAMA. 2013;310(14):1455-1461. doi:10.1001/jama.2013.278932

Published online October 7, 2013.

Current Management of the Axilla

Clinical Obstetrics and Gynecology
Trends in Breast Cancer Management

TABLE 2. Randomized Trials of Sentinel Lymph Node Biopsy After Neoadjuvant Systemic Therapy in Patients With Biopsy-Proven Axillary Lymph Node Metastases at Presentation

Study and Year	No. of Patients	SLNB Identified (%)	Average SLN Removed	Patients With ≥3 SLNs Removed (%)	Overall (%)	False-Negative Rate (%)			
						1 SLN	2 SLN	≥3 SLN	Dual Mapping
Z1071 (2013)	689	93	3.1	56	13	—	21	9	11
SENTINA Arm C (2013)	592	80	2.5	34	15	24	19	5	9
SN-FNAC (2014)	145	88	2.7	—	8	18	5*	—	5
Total [n/N (%)]	1426	1240/1426 (87)	2.8	589/1281 (46)	78/619 (13)	21/92 (23)	46/270 (17)	40/490 (8)	65/645 (10)

BSGC POST QMT en g(+) -> g(-) post Qmt , **FN < 5** si doble marcaje y 3 GC

MARCAJE DE ganglio axilar + pre QMT y cirugía posterior ↓ **FN 4%**

CLINICAL OBSTETRICS AND GYNECOLOGY Volume 59, Number 4, 743–755 .2016

N1 TRATADO CON QMT NEOADYUVANTE

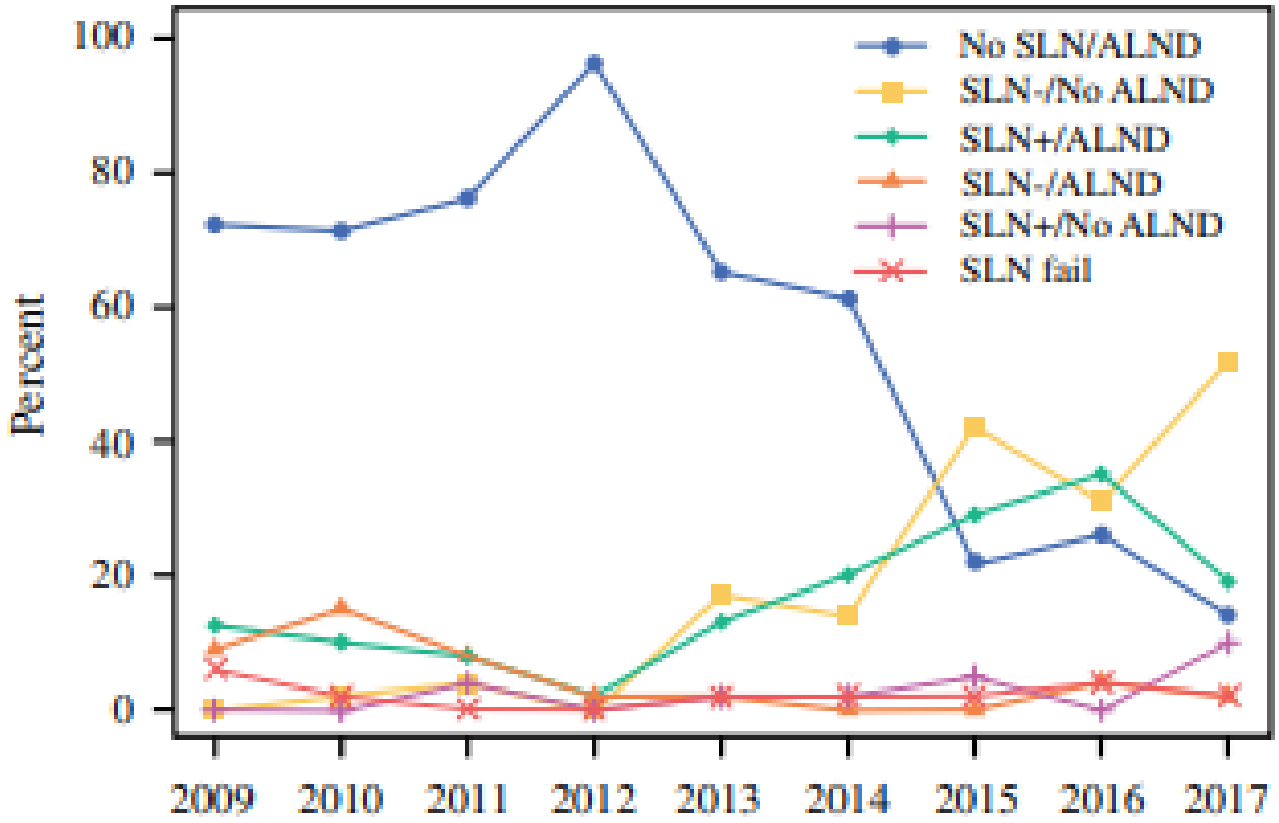
Ann Surg Oncol (2018) 25:2596–2602
https://doi.org/10.1245/s10434-018-6637-9

Annals of SURGICAL ONCOLOGY
OFFICIAL JOURNAL OF THE SOCIETY OF SURGICAL ONCOLOGY

CrossMark

ORIGINAL ARTICLE – BREAST ONCOLOGY

Decreasing Use of Axillary Dissection in Node-Positive Breast Cancer Patients Treated with Neoadjuvant Chemotherapy



Ann Surg Oncol (2018) 25:2596–2602

Current Management of the Axilla

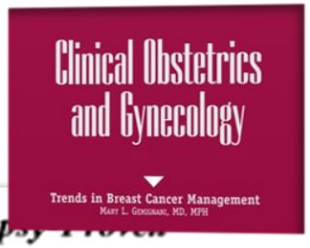


TABLE 1. Axillary Pathologic Complete Response Rates in Patients With Biopsy-Proven Axillary Lymph Node Metastases After Neoadjuvant Systemic Therapy

References	No. of Patients	SLNB Success Rate (%)	Axillary pCR (%)	Molecular Subtype (%) ER+ HER2−	ER+ HER2+	ER− HER2+	ER− HER2−
Mamtami et al[13]	195	98	49	21	70	97	47
Park et al[14]	178	95	41	24	52	52	59
Dominici et al[15]	109	—	—	—	67	79	—
Boughey et al[16]	689	93	40	—	—	—	—
Yagata et al[17]	95	85	33	—	—	—	—
Newman et al[18]	54	98	32	—	—	—	—
McVeigh et al[19]	78	—	37	—	—	—	—
Total [n/N (%)]	—	7/1144 (93)	497/1236 (40)	33/148 (22)	71/111 (64)	96/125 (77)	46/89 (52)

pCR indicates pathologic con esponse; ER; estr ceptor; HER2, human epidermal growt tor receptor 2; SLNB, sentinel lymph node biops

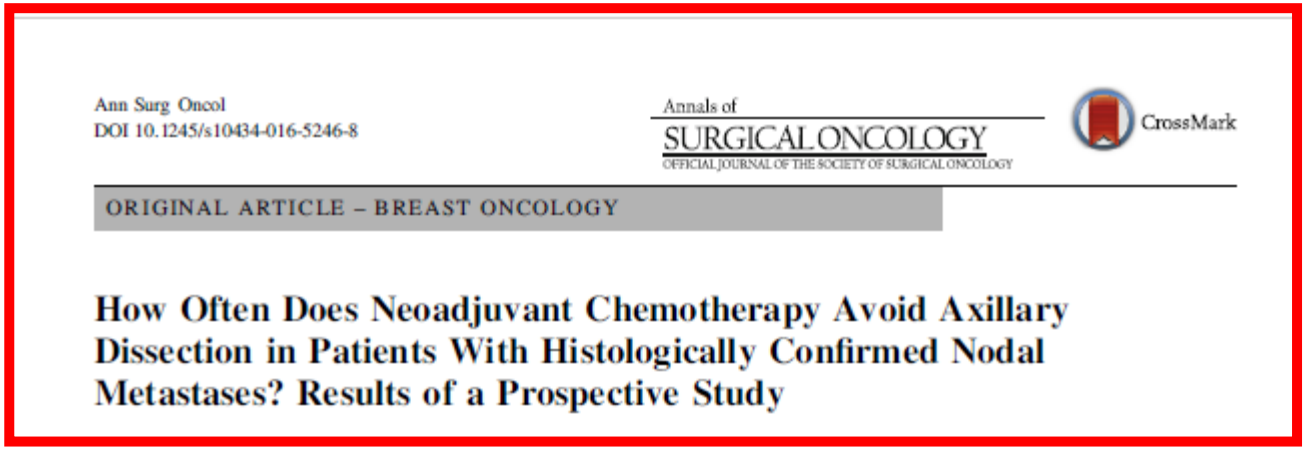
TASA DE DETECCION
98%

p CR AXILAR 49%

p CR 97% RE- HER2+

P CR 70% RE+ HER2+

CLINICAL OBSTETRICS AND GYNECOLOGY Volume 59, Number 4, 743–755
.2016



Ann Surg Oncol
DOI 10.1245/s10434-016-5246-8

Annals of
SURGICAL ONCOLOGY
OFFICIAL JOURNAL OF THE SOCIETY OF SURGICAL ONCOLOGY

CrossMark

ORIGINAL ARTICLE – BREAST ONCOLOGY

How Often Does Neoadjuvant Chemotherapy Avoid Axillary Dissection in Patients With Histologically Confirmed Nodal Metastases? Results of a Prospective Study

- BSGC tras neoadyuvancia en pacientes cN1 evita linfadenectomías en hasta 48% de los casos
- Particularmente en TN y HER2+

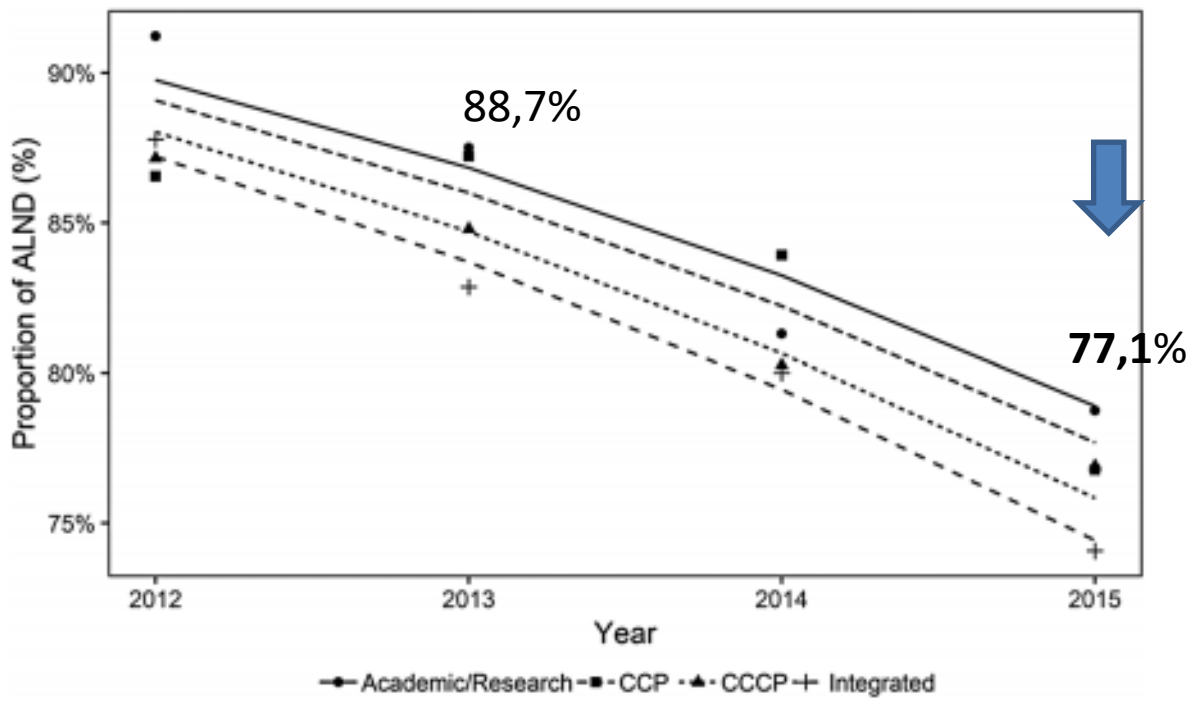
Mamtani Aet al. Ann Surg Oncol 2016

Ann Surg Oncol (2019) 26:3305–3311
https://doi.org/10.1245/s10434-019-07540-3

Annals of
SURGICAL ONCOLOGY
OFFICIAL JOURNAL OF THE SOCIETY OF SURGICAL ONCOLOGY

ORIGINAL ARTICLE – BREAST ONCOLOGY

Patterns in the Use of Axillary Operations for Patients with Node-Positive Breast Cancer After Neoadjuvant Chemotherapy: A National Cancer Database (NCDB) Analysis



EN CONTRA BSGC postQMT?

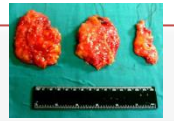
ENFERMEDAD RESIDUAL EN LA AXILA TR
QUIMIOTERAPIA ES UN **FACTOR**
PREDICTOR DE RECIDIVA
LOCORREGIONAL MAS QUE EL ESTADIA
PREVIO AL TTO

No se conoce estado axilar de inicio:
Factor pronostico?

X

Alta tasa de falsos negativoa

FN 4%

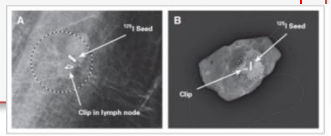


-Isótopo y/o Colorante
-Clipado del ganglio patológico
-I^{125}

TD: 100%

X

Menos tasa de identificación



X

GUIAS

National Comprehensive Cancer Network®

NCCN Guidelines Version 3.2019
Invasive Breast Cancer

Sociedad Española de Senología y Patología Mamaria

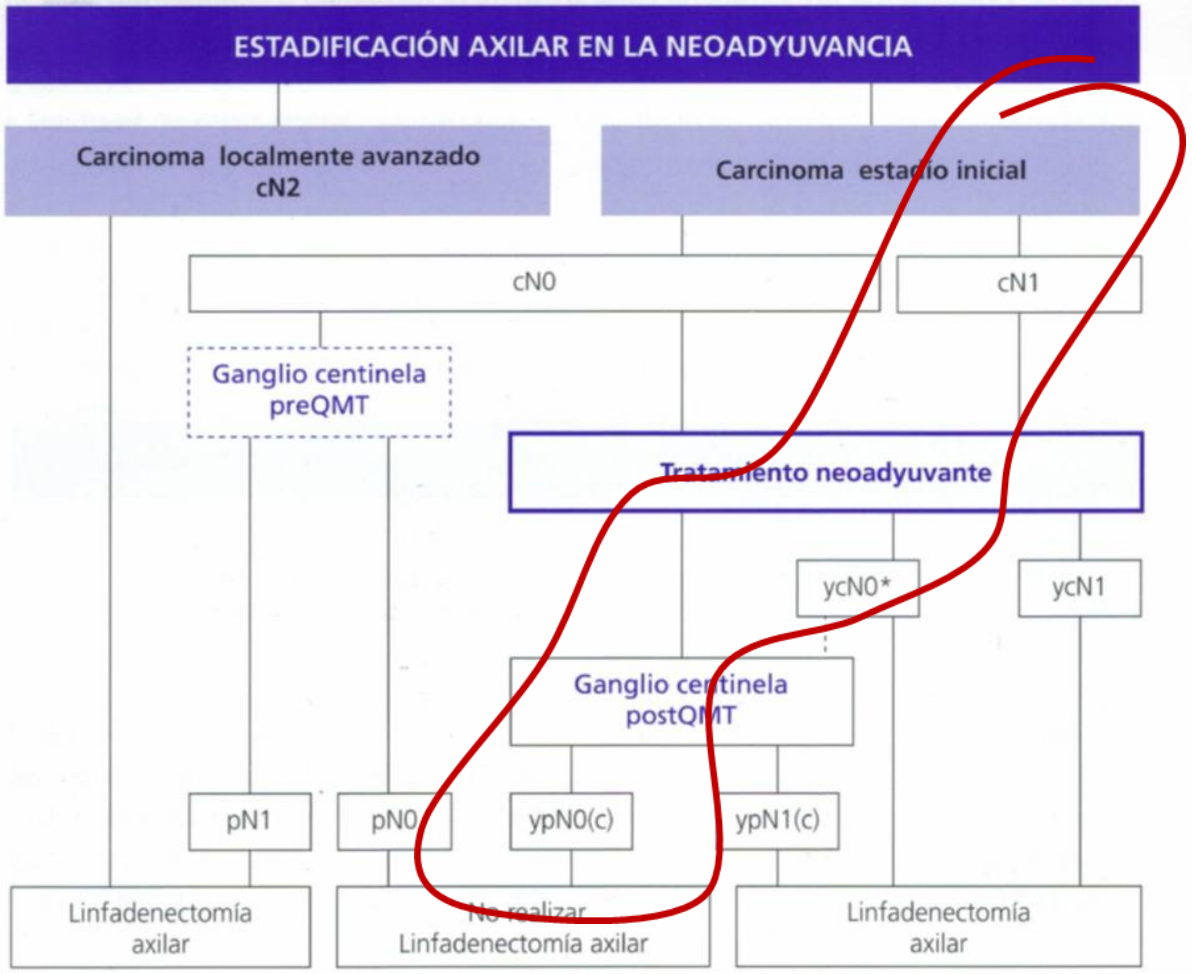
Oncoguía SEGO
Cáncer infiltrante de Mama 2017

UpToDate®

Oncoguía

Cáncer infiltrante de Mama 2017

Algoritmo 9



* Recomendación: Optimizar la técnica mediante localización prequirúrgica de los ganglios y disección axilar dirigida (Exéresis de ganglios centinela + ganglios marcados) o ganglio centinela con doble método (colorante y tecnecio) o intentar exéresis de al menos 2 ganglios. **(53,74,75)**

TRIPLE NEGATIVOS

HER2

ELSEVIER DOYMA

www.elsevier.es/patologia

REVISIÓN

Consenso sobre la biopsia selectiva del ganglio centinela en el cáncer de mama. Revisión 2013 de la Sociedad Española de Senología y Patología Mamaria☆

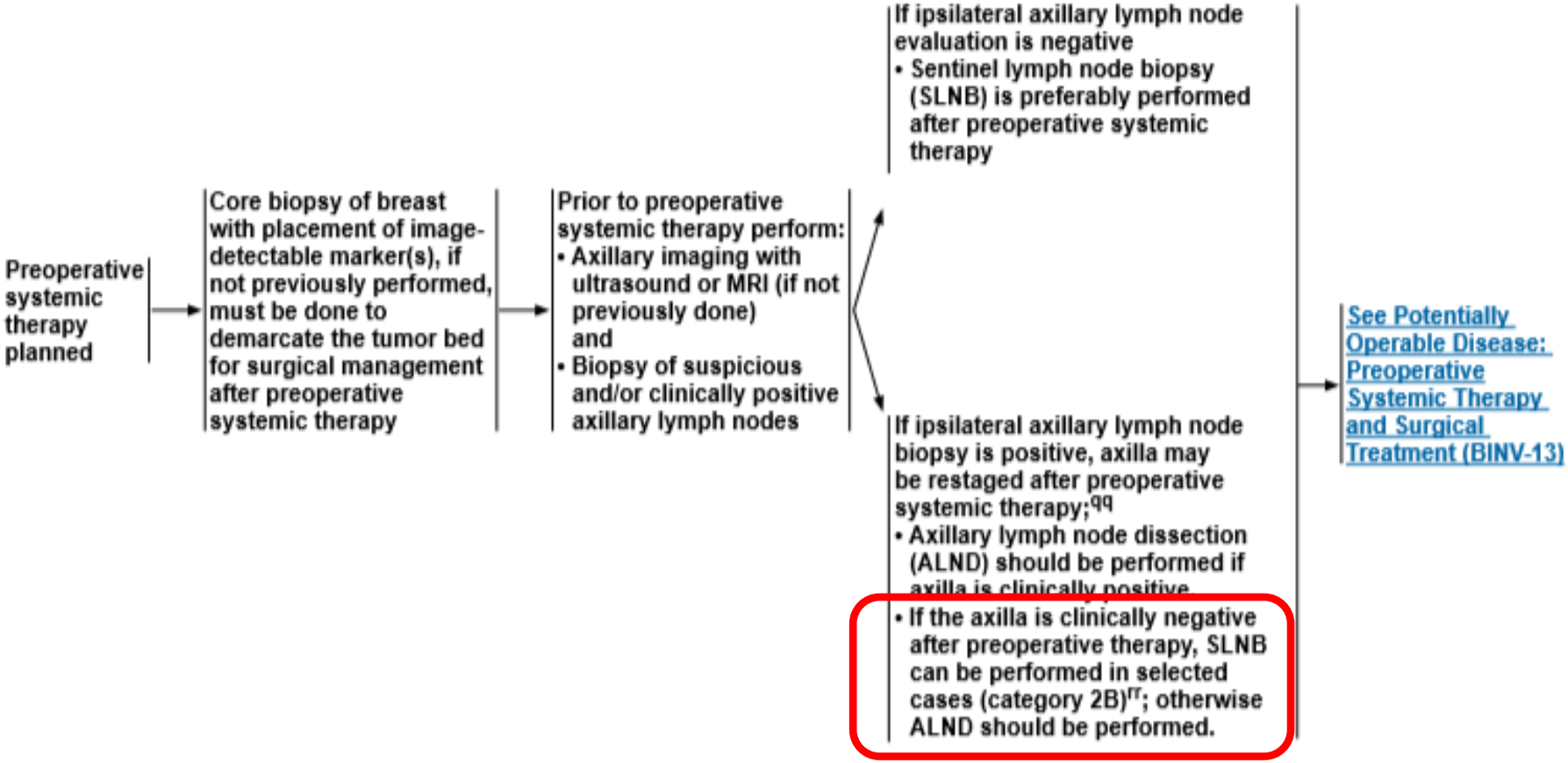
D. Consideraciones especiales

1. En pacientes con axila clínica / ecográficamente negativa de inicio (cN0), puede realizarse la BSGC tanto previo al tratamiento sistémico primario como posterior al mismo[25-32] (evidencia 1+).

2. En pacientes cN1/N2 de inicio con negativización clínica y ecográfica de la axila tras la neoadyuvancia (cyN0), puede realizarse la BSGC después del tratamiento sistémico primario y evitar la linfadenectomía axilar cuando el GC sea negativo (evidencia 1-). No obstante, series recientes aportan resultados controvertidos al respecto por la alta tasa de falsos negativos secundarios a la terapia sistémica primaria[26-35].

Sociedad Española de Senología y Patología Mamaria

POTENTIALLY OPERABLE DISEASE: BREAST AND AXILLARY EVALUATION PRIOR TO PREOPERATIVE SYSTEMIC THERAPY



[qq] Marking of sampled axillary nodes with a tattoo or clip should be considered to permit verification that the biopsy-positive lymph node has been removed at the time of definitive surgery.

[rr] Among patients shown to be node positive prior to preoperative systemic therapy, SLNB has a >10% false-negative rate when performed after preoperative systemic therapy. This rate can be improved by marking biopsied lymph nodes to document their removal, using dual tracer, and by removing more than 2 sentinel nodes.

Note: All recommendations are category 2A unless otherwise indicated.
Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

des

If ipsilateral axillary lymph node biopsy is positive, axilla may be restaged after preoperative systemic therapy;[qq]

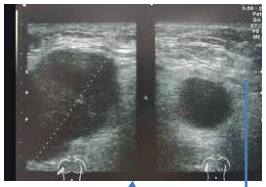
- Axillary lymph node dissection (ALND) should be performed if axilla is clinically positive.
- If the axilla is clinically negative after preoperative therapy, SLNB can be performed in selected cases (category 2B)[rr]; otherwise ALND should be performed.

and Surgical Treatment (BINV-13)

DOBLE MARCADO
>2 GC

[rr] Among patients shown to be node positive prior to preoperative systemic therapy, SLNB has a >10% false-negative rate when performed after preoperative systemic therapy. This rate can be improved by marking biopsied lymph nodes to document their removal, using dual tracer, and by removing more than 2 sentinel nodes.

GANGLIOS (+) QMT NEOAD BSGC



ECO NORMAL

N1-N2

DOBLE CLIPADO

3 o MAS BSGC

yN0 → NO LINFADENECTOMIA AXILAR SI RDT

ypN+ → 3 BSGC (+) GANGLIOS NO CENTINELAS (+) → LINFADENETOMIA AXILAR

1 o 2 BSGC (+) → NO LINFADENECTOMIA AXILAR SI RDT

Sentinel-lymph-node biopsy in patients with breast cancer before and after neoadjuvant chemotherapy (SENTINA): a prospective, multicentre cohort study

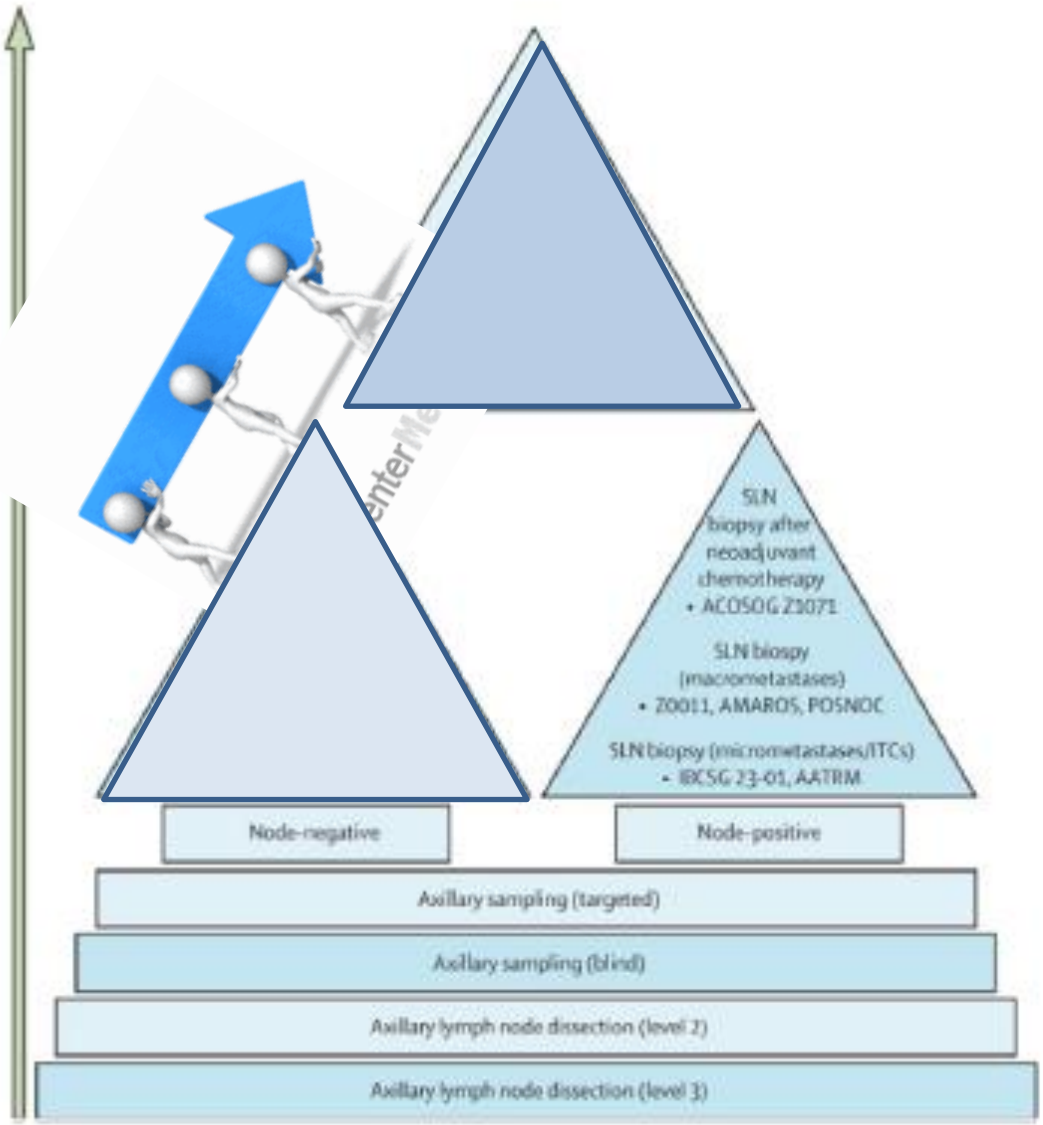
Original Investigation

Sentinel Lymph Node Surgery After Neoadjuvant Chemotherapy in Patients With Node-Positive Breast Cancer
The ACOSOG Z1071 (Alliance) Clinical Trial

Lancet Oncol. 2014 November ; 15(12): 1303–1310. doi:10.1016/S1470-2045(14)70460-7.

Radiotherapy or surgery of the axilla after a positive sentinel node in breast cancer (EORTC 10981-22023 AMAROS):a randomised, multicentre, open-label, phase 3 non-inferiority trial

NO BSGC


SLN biopsy after neoadjuvant chemotherapy
• ACOSOG Z1071
SLN biopsy (macrometastases)
• Z0011, AMAROS, POSNOC
SLN biopsy (micrometastases/ITCs)
• IBCSG 23-01, AATRM
Node-negative
Node-positive
Axillary sampling (targeted)
Axillary sampling (blind)
Axillary lymph node dissection (level 2)
Axillary lymph node dissection (level 3)

MANEJO AXILAR EN CANCER DE MAMA EN N1

Congreso Español de la 4MA 19
17 al 19 octubre 2019
IFEMA • Feria de Madrid
Centro de Convenciones y Congresos
XXXVIII Congreso SESPM
XVI Congreso SEDIM
XIV Reunión SETS

CANDIDATA A CIRUGIA PRIMARIA

CANDIDATA A QMT /HTP neoadyuvante

Inserción de marcador en el ganglio/s (2 o 3)

Ecografía post neoadyuvancia

Persisten ganglios
Sospechosos
No respuesta clínica

Ecografía Normal
RC o >50%

TAD
BSGC+exeresis de ganglios marcado
Doble método
Exeresis >_3 ganglioS

pN1 mi
pN1

pN0
pN0(+)

Linfadenectomia axilar

No Linfadenectomia axilar

RDT mama, pared torácica y cadenas ganglionares según protocolo+Tratamiento sistémico

¿QUIENES DE LA SALA NO REALIZAN LINFADENECTOMIA AXILAR

TRAS BSGC POSTQMT CON GANGLIOS NEGATIVOS?

The Breast 21 (2012) 678–681

Contents lists available at SciVerse ScienceDirect

The Breast

journal homepage: www.elsevier.com/brst

SOUND

4

Viewpoints and debate

Abandoning sentinel lymph node biopsy in early breast cancer? A new trial in progress at the European Institute of Oncology of Milan (SOUND: **S**entinel node vs **O**bservation after axillary **U**ltraSou**ND**)

Oreste Gentilini*, Umberto Veronesi

Trial SOUND

Sentinel node vs **O**bservation after axillary **U**ltra-sou**ND**

- Patients with breast cancer ≤2.0 cm
- Any age
- Candidates to Breast Conserving Surgery
- Negative preoperative axillary assessment (negative ultra-sound of the axilla or negative FNAC of a single doubtful axillary lymph node)

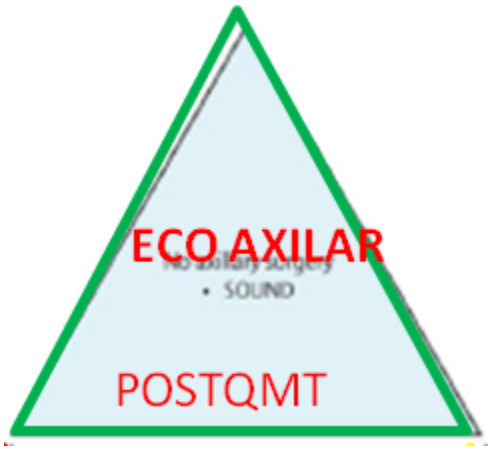
Randomization

SNB policy | No axillary surgery

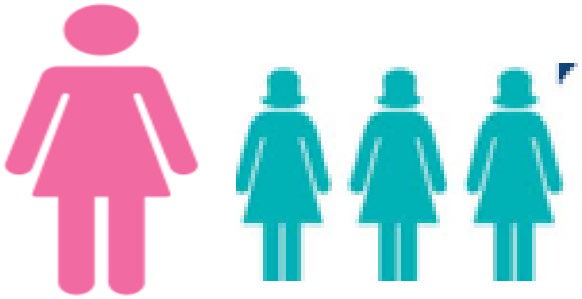
Fig. 1. SOUND trial: study design.

applicability also in conjunction with Fine Needle Aspiration and have voiced their intention to join this trial soon, and we are

NO BSGC



NUESTRA EXPERIENCIA: MANEJO AXILA



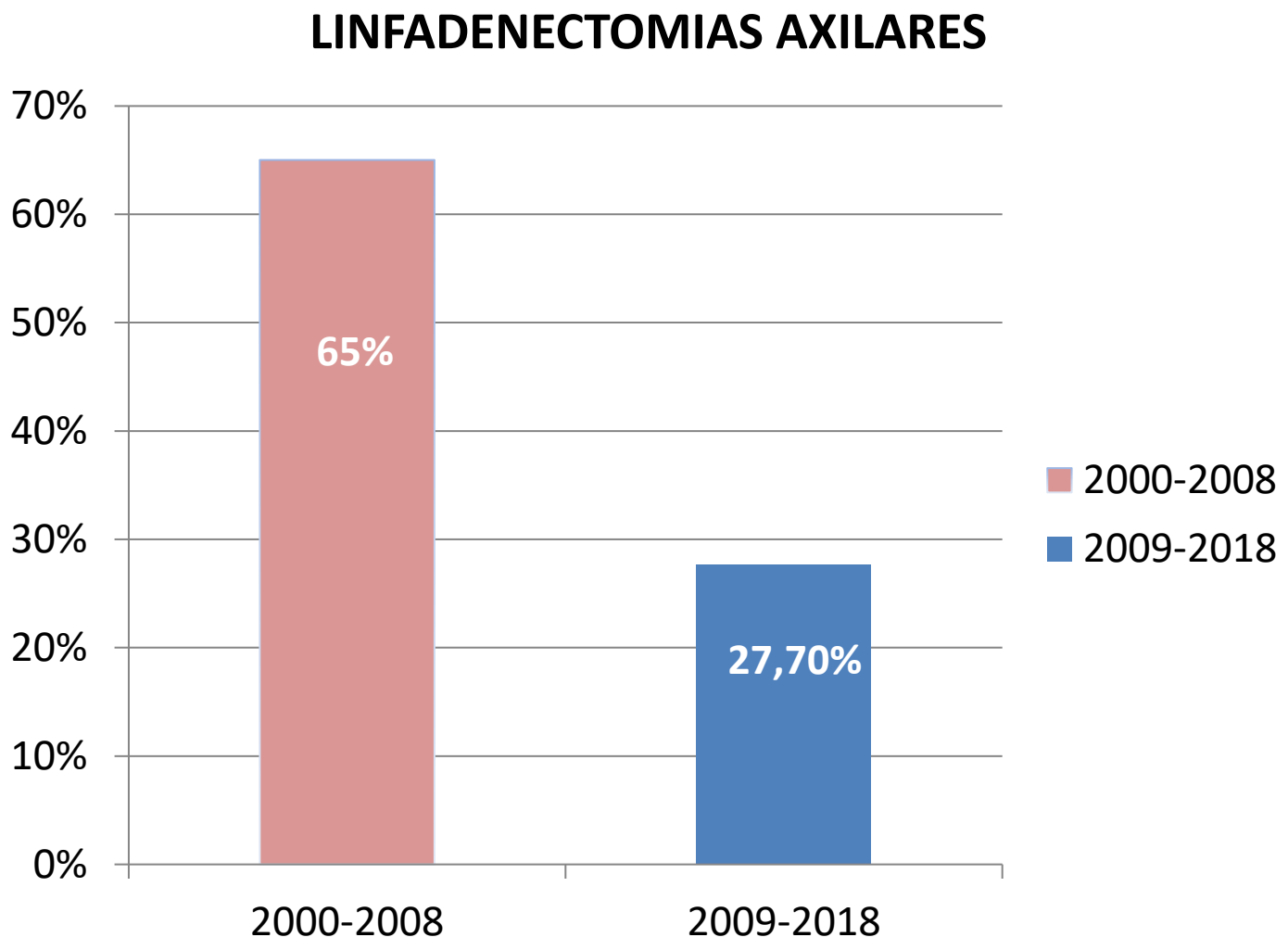
DIFICULTAD DE BSGC EN HOSPITAL NIVEL 2

- REMISION A OTRO CENTRO
- TRASLADO DE LA PACIENTE
- TIEMPO DESDE LA INYECCION DEL TECNECIO Y CIRUGIA
- MIGRACION DE BSGC

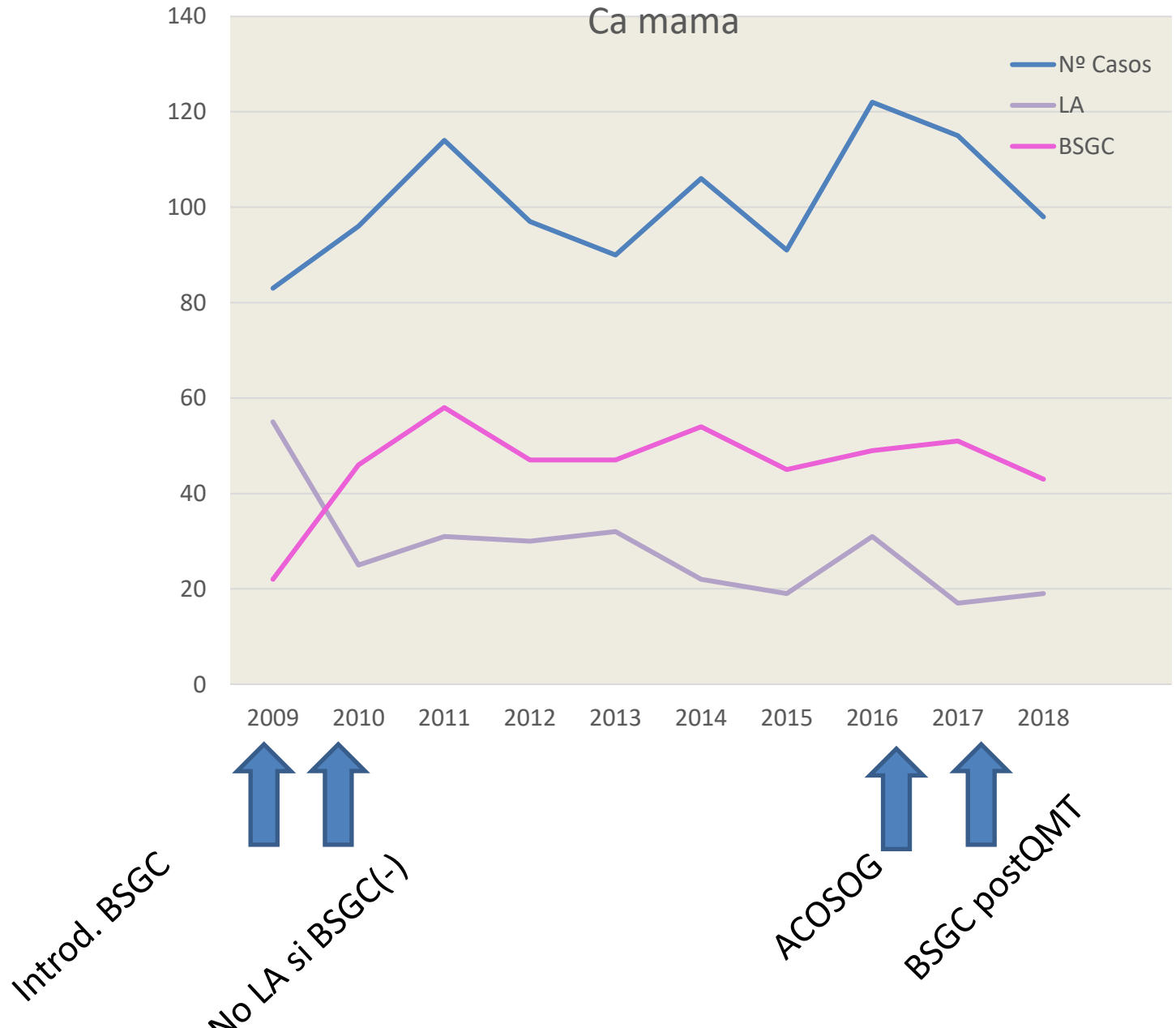
EVOLUCION DEL MANEJO DE AXILA

	2000-2008	2009-2018
Nª TOTAL	650	1012
LINFADENECTOMIAS AXILARES	423 (65%)	281 (27,7%)
BSGC	6	462

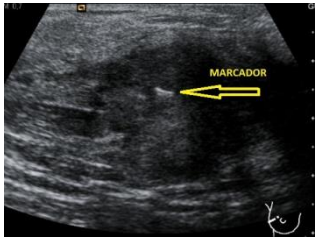
EVOLUCION DEL MANEJO DE AXILA

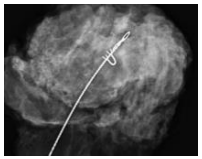


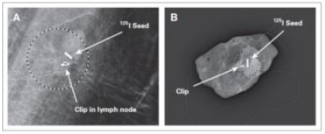
EVOLUCION AXILA



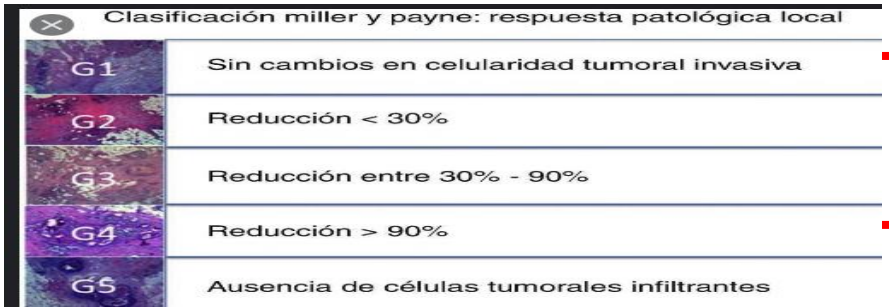
N1 PREQMT







PACIENTE	TIPO TUMOR	ESTADIAJE PREQMT	RESPUESTA Grado Myller	GANGLIOS	ESTADIAJE POSQMT pyTNM
1	TN	T2N2M0	3	**BSGC:MICROMTS** RESTO G(-)	T1cN1mic
2	LUMINAL B	T2N1MO	4	NEGATIVOS	T1a
3	HER2 PURO	T2N1M0	5	BSGC(´-) LA: **2 MICROMTS**	T0N1mic
4	HER2 PURO	T3N1M0	5	NEGATIVOS	T0NOMO
5	HER2 LUMINAL	T2N3M0	5	NEGATIVOS	TISNOMO

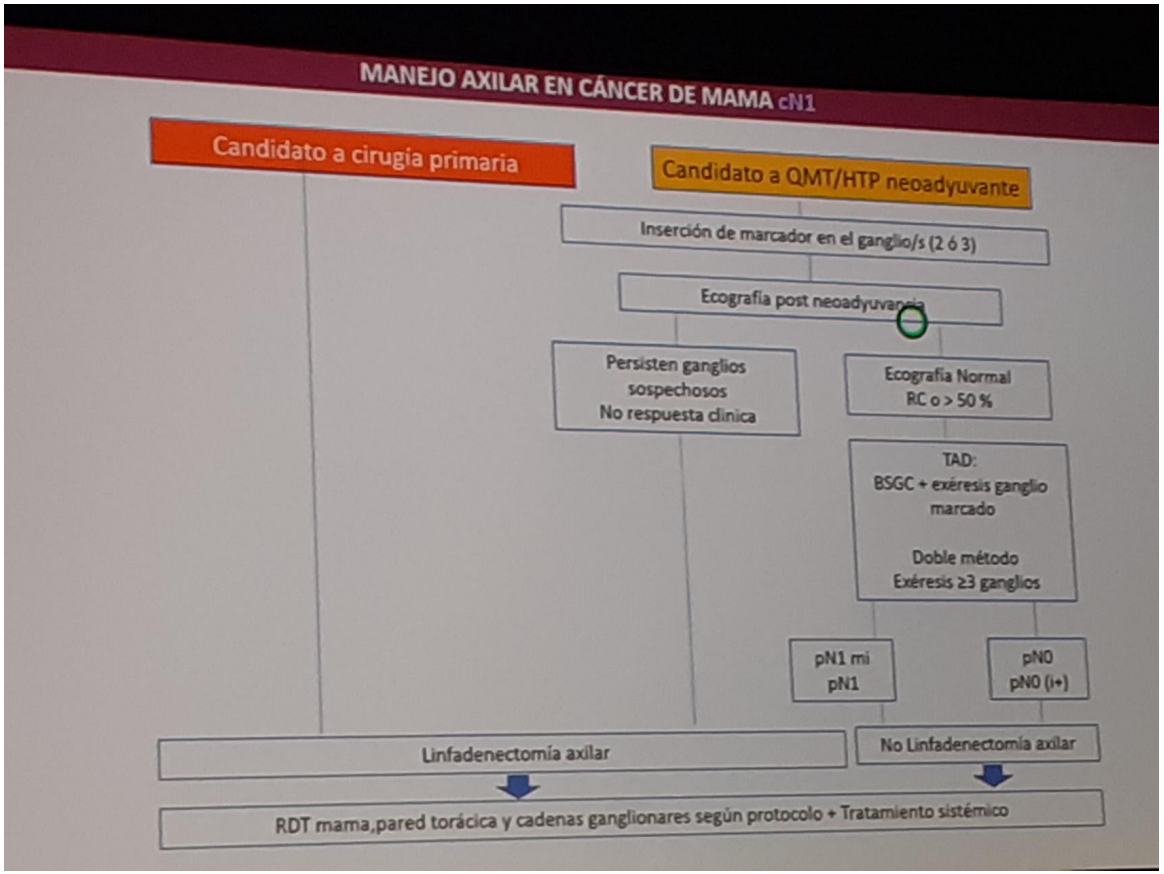


N1 +CLIPADO+ QMT+BSGC+ARPON +LINFADENECTOMIA AXILAR

agomezca@saludcastillayleon.es

Dra. Gómez Calvo
SERVICIO DE GINECOLOGIA

Hospital General de Segovia


MANEJO AXILAR EN CÁNCER DE MAMA cN1
Candidato a cirugía primaria
Candidato a QMT/HTP neoadyuvante
Inserción de marcador en el ganglio/s (2 ó 3)
Ecografía post neoadyuvancia
Persisten ganglios sospechosos
No respuesta clínica
Ecografía Normal
RC o > 50 %
TAD:
BSGC + exéresis ganglio marcado
Doble método
Exéresis ≥3 ganglios
pN1 mi
pN1
pN0
pN0 (i+)
Linfadenectomía axilar
No Linfadenectomía axilar
RDT mama,pared torácica y cadenas ganglionares según protocolo + Tratamiento sistémico

Alliance A011202

NIH NATIONAL CANCER INSTITUTE

1-800-4-CANCER Live Chat Publications Dictionary

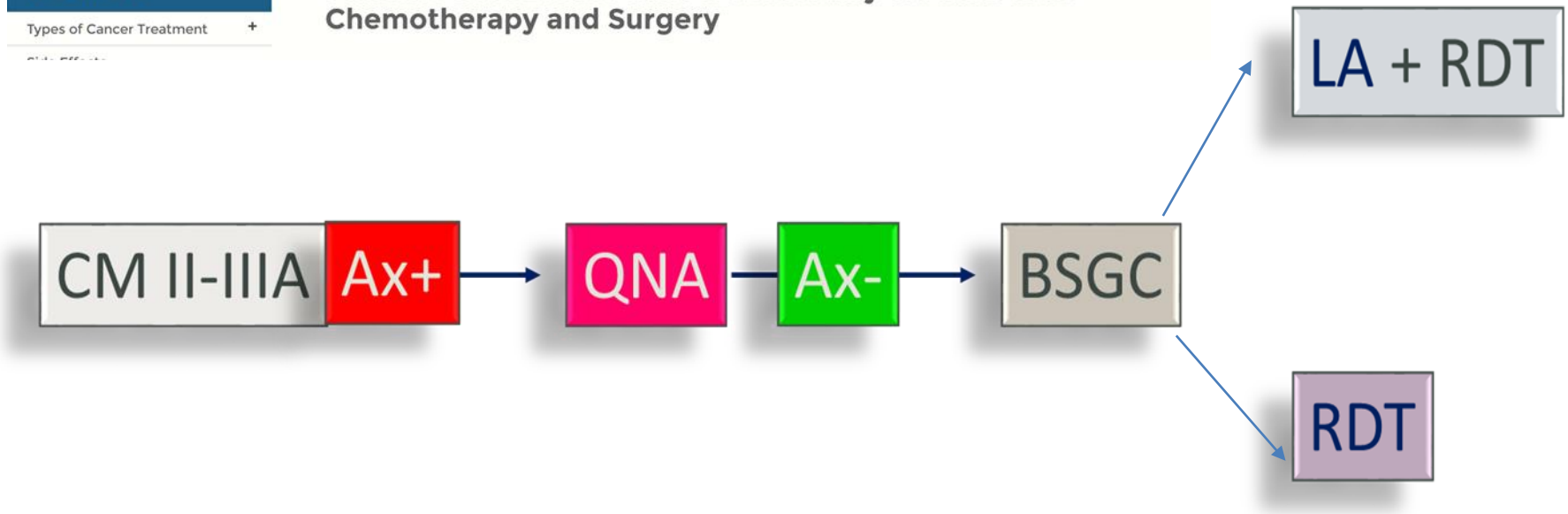
ABOUT CANCER | CANCER TYPES | RESEARCH | GRANTS & TRAINING | NEWS & EVENTS | ABOUT NCI | search

Home > About Cancer > Cancer Treatment > Clinical Trials Information > Find NCI-Supported Clinical Trials

CANCER TREATMENT

Types of Cancer Treatment +

Lymph Node Dissection and Radiation Therapy in Treating Patients with Breast Cancer Previously Treated with Chemotherapy and Surgery



Ann Surg Oncol. 2018;25:1488–94. https://doi.org/10.1245/s104 34-018-6429-2.

NRG ONCOLOGY
Advancing Research. Improving Lives.™
NSABP

NSABP Clinical Trials Overview

Protocol B-51

A Randomized Phase III Clinical Trial Evaluating Post-Mastectomy Chestwall and Regional Nodal XRT and Post-Lumpectomy Regional Nodal XRT in Patients with Positive Axillary Nodes Before Neoadjuvant Chemotherapy Who Convert to Pathologically Negative Axillary Nodes After Neoadjuvant Chemotherapy

Primary Aim

To evaluate whether the addition of chestwall + regional nodal XRT after mastectomy or breast + regional nodal XRT after breast conserving surgery will significantly reduce the rate of events forinvasive breast cancer recurrence-free interval (IBC-RFI) in patients who present with histologically positive axillary nodes but convert to histologically negative axillary nodes following neoadjuvant chemotherapy.

NSABP B-51/RTOG 1304 Schema

Clinically T1–3, N1 Breast Cancer
Documented Positive Axillary Nodes by FNA
or by Core Needle Biopsy

↓

Minimum of 12 Weeks of Standard Neoadjuvant Chemotherapy
Plus Anti-HER2 Therapy for Patients with HER2-Positive Tumors

↓

Definitive Surgery with Histologic Documentation of Negative Axillary Nodes
(Either by Axillary Dissection or by Sentinel Node Biopsy ± Axillary Dissection)

↓

STRATIFICATION

- Type of surgery (mastectomy, lumpectomy)
- Hormone receptor status (ER-positive and/or PgR-positive; ER- and PgR-negative)
- HER2 status (negative, positive)
- Adjuvant chemotherapy (yes, no)
- pCR in breast (yes, no)

↓

RANDOMIZATION

Arm 1
(Groups 1A and 1B)*, **
No Regional Nodal XRT

- *Group 1A Lumpectomy:* No regional nodal XRT with WBI
- *Group 1B Mastectomy:* No regional nodal XRT and no chestwall XRT

Arm 2
(Groups 2A and 2B)*, **
Regional Nodal XRT

- *Group 2A Lumpectomy:* Regional nodal XRT with WBI
- *Group 2B Mastectomy:* Regional nodal XRT and chestwall XRT

* Patients will be randomized to one of the following:

- **Arm 1**

GICOR *OPTIMAL IIa Study*

PROTOCOLO DEL ESTUDIO

Promotor	Grupo de Investigación Clínica en Oncología Radioterápica (GICOR)
Protocolo	GIC – RAD – 2016 - 01
Producto	No aplicable
Título	Optimización de la radiación a través de la Evaluación Molecular de ganglios linfáticos después del tratamiento sistémico primario (OPTIMAL IIa)
Versión	1.1
Fecha	21/6/2016

FINALIZADO 2028

Rev Senol Patol Mamar. 2016;29(1):1–3

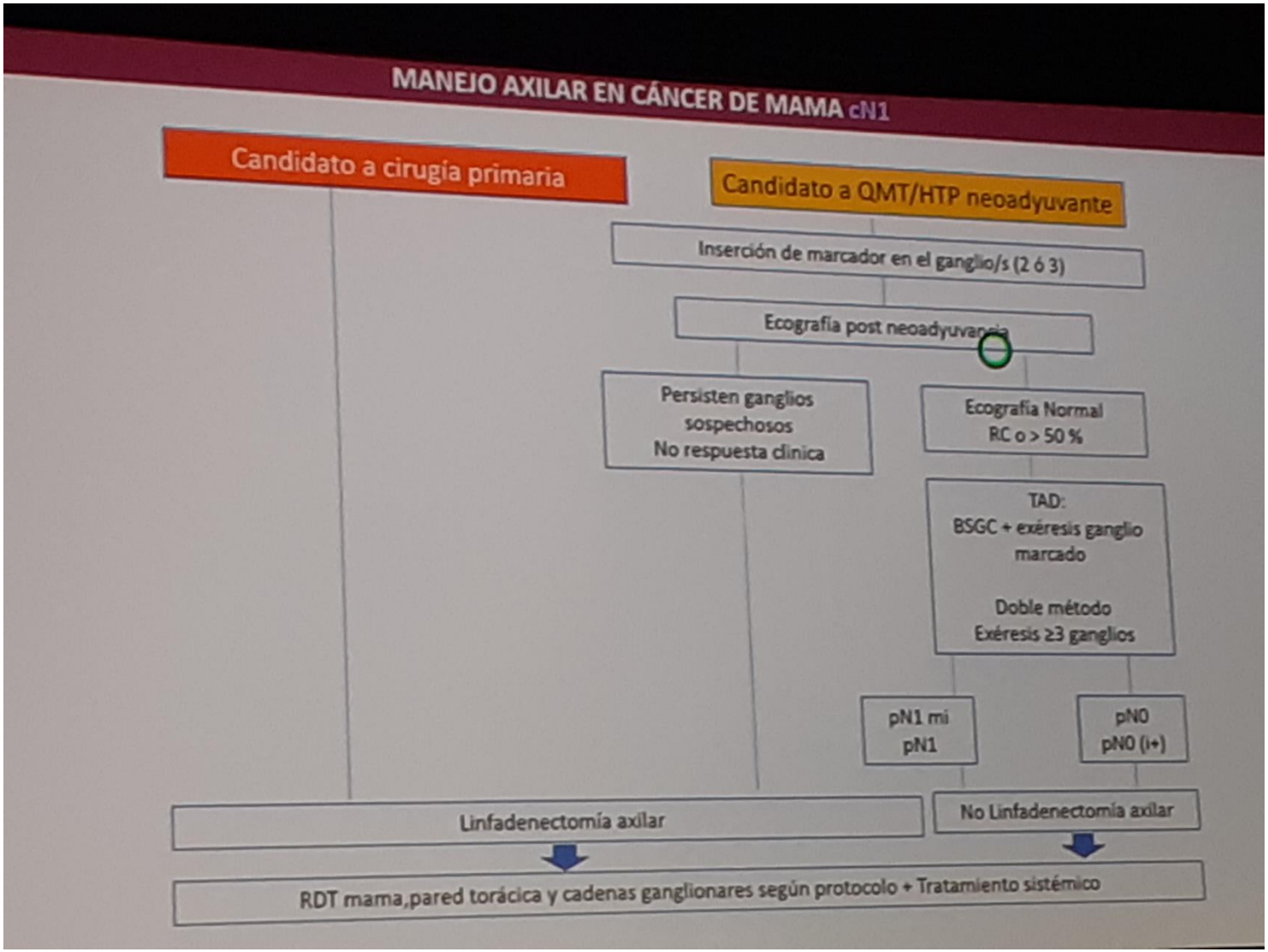
Revista de Senología y Patología Mamaria

www.elsevier.es/senologia

EDITORIAL

Manejo de la axila en el cáncer de mama: menos es más, más es menos o todo lo contrario

Management of the axilla in breast cancer: Less is more, more is less or the other way around


MANEJO AXILAR EN CÁNCER DE MAMA cN1
Candidato a cirugía primaria
Candidato a QMT/HTP neoadyuvante
Inserción de marcador en el ganglio/s (2 ó 3)
Ecografía post neoadyuvancia
Persisten ganglios sospechosos
No respuesta clínica
Ecografía Normal
RC o > 50 %
TAD:
BSGC + exéresis ganglio marcado
Doble método
Exéresis ≥3 ganglios
pN1 mi
pN1
pN0
pN0 (i+)
Linfadenectomía axilar
No Linfadenectomía axilar
RDT mama,pared torácica y cadenas ganglionares según protocolo + Tratamiento sistémico

GUIAS

National Comprehensive Cancer Network®

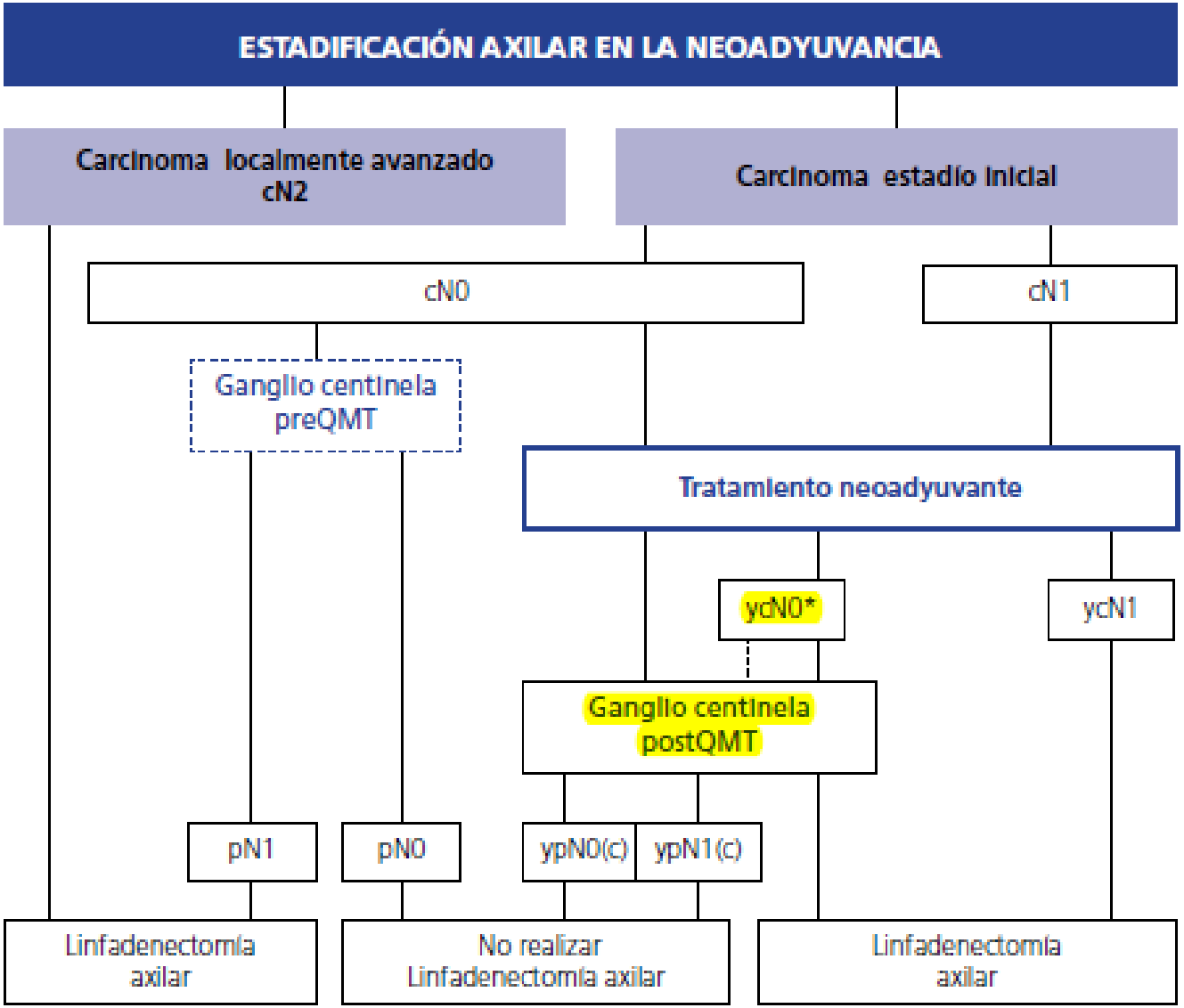
NCCN Guidelines Version 1.2018
Invasive Breast Cancer

Oncoguía SEGO
Cáncer infiltrante de Mama 2017

Sociedad Española de Senología y Patología Mamaria

UpToDate®

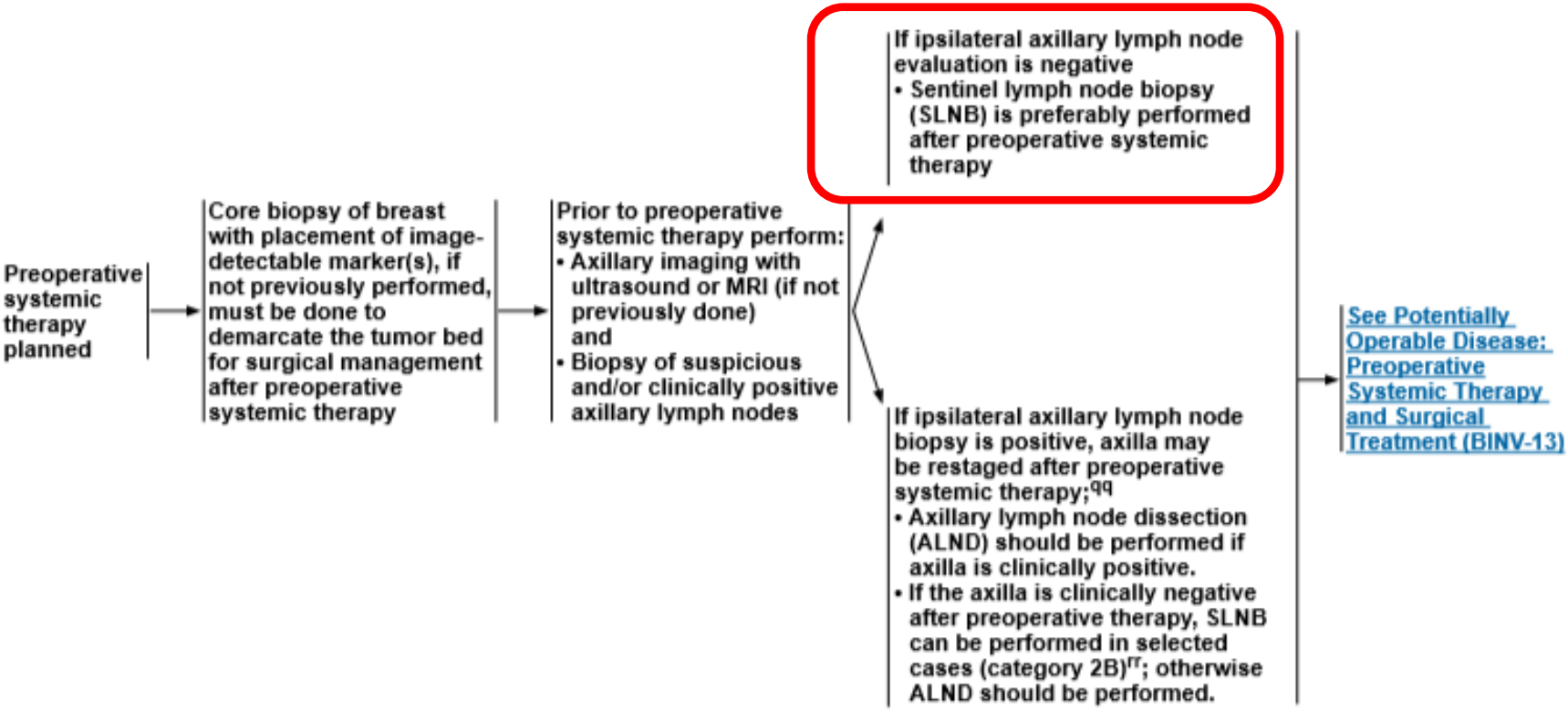
Algoritmo 9



* Recomendación: Optimizar la técnica mediante localización prequirúrgica de los ganglios y disección axilar dirigida (Exéresis de ganglios centinela + ganglios marcados) o ganglio centinela con doble método (colorante y tecnecio) o intentar exéresis de al menos 2 ganglios. (53,74,75)

NCCN Guidelines Version 3.2019
Invasive Breast Cancer

POTENTIALLY OPERABLE DISEASE: BREAST AND AXILLARY EVALUATION PRIOR TO PREOPERATIVE SYSTEMIC THERAPY



[qq] Marking of sampled axillary nodes with a tattoo or clip should be considered to permit verification that the biopsy-positive lymph node has been removed at the time of definitive surgery.

[rr] Among patients shown to be node positive prior to preoperative systemic therapy, SLNB has a >10% false-negative rate when performed after preoperative systemic therapy. This rate can be improved by marking biopsied lymph nodes to document their removal, using dual tracer, and by removing more than 2 sentinel nodes.

Note: All recommendations are category 2A unless otherwise indicated.
Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

Available online at www.sciencedirect.com

ScienceDirect

EJSO 42 (2016) 361–368

EJSO
the Journal of Cancer Surgery

www.ejso.com

Sentinel node biopsy after neoadjuvant treatment in breast cancer: Five-year follow-up of patients with clinically node-negative or node-positive disease before treatment

- **SLE a 5 años >90%** (93.3% en cN0 de inicio y 86.3% en las que eran cN1/2)
- La negatividad del ganglio centinela es un factor predictivo de buen pronostico

Original Investigation

Sentinel Lymph Node Surgery After Neoadjuvant Chemotherapy in Patients With Node-Positive Breast Cancer

The ACOSOG Z1071 (Alliance) Clinical Trial

JAMA. 2013;310(14):1455-1461. doi:10.1001/jama.2013.278932

Published online October 7, 2013.

DUDAS DE PONER AQUÍ??

Published in final edited form as:

Ann Surg. 2016 April ; 263(4): 802–807. doi:10.1097/SLA.0000000000001375.

Identification and resection of the clipped node decreases the false negative rate of sentinel lymph node surgery in patients presenting with node positive breast cancer (T0-T4, N1-2) who receive neoadjuvant chemotherapy – results from ACOSOG Z1071 (Alliance)

false-negative rate decreased to 6.8%

QUITAR?

JOURNAL OF CLINICAL ONCOLOGY

ORIGINAL REPORT

Improved Axillary Evaluation Following Neoadjuvant Therapy for Patients With Node-Positive Breast Cancer Using Selective Evaluation of Clipped Nodes: Implementation of Targeted Axillary Dissection

Abigail S. Caudle, Wei T. Yang, Savitri Krishnamurthy, Elizabeth A. Mittendorf, Dalliah M. Black, Michael Z. Gilcrease, Isabelle Bedrosian, Brian P. Hobbs, Sarah M. DeSnyder, Rosa F. Hwang, Beatriz E. Adrada, Simona F. Shaitelman, Mariana Chavez-MacGregor, Benjamin D. Smith, Rosalind P. Candelaria, Gildy V. Babiera, Basak E. Dogan, Lumarie Santiago, Kelly K. Hunt, and Henry M. Kuerer

All authors: The University of Texas MD Anderson Cancer Center, Houston, TX.

Published online ahead of print at www.jco.org on January 25, 2016.

Supported by a Cancer Center Support Grant from the National Institutes of Health (CA16672), the PH and Fay Eta Robinson Distinguished Professorship in Research Endowment (H.M.K.), and a National Institutes of Health P30 grant (CA016672) (B.P.H.), as well as funding from the Mike Hogg Foundation (A.S.C.) and an MD Anderson Clinical Innovator Award (A.S.C.).

Terms in blue are defined in the glossary, found at the end of this article and online at www.jco.org.

Presented at the 68th Society of Surgical Oncology Annual Cancer Symposium, Houston, TX, March 25-28, 2015.

Authors' disclosures of potential conflicts of interest are found in the article online at www.jco.org. Author contributions are found at the end of this article.

Corresponding author: Henry M. Kuerer, MD, PhD, MD Anderson Cancer Network Department of Breast Surgical Oncology, The University of Texas MD Anderson Cancer Center, 1400 Pressler St, Unit 1434, Houston, TX 77030; e-mail: hkuerer@mdanderson.org.

A B S T R A C T

Purpose
Placing clips in nodes with biopsy-confirmed metastasis before initiating neoadjuvant therapy allows for evaluation of response in breast cancer. Our goal was to determine if pathologic changes in clipped nodes reflect the status of the nodal basin and if targeted axillary dissection (TAD), which includes sentinel lymph node dissection (SLND) and selective localization and removal of clipped nodes, improves the false-negative rate (FNR) compared with SLND alone.

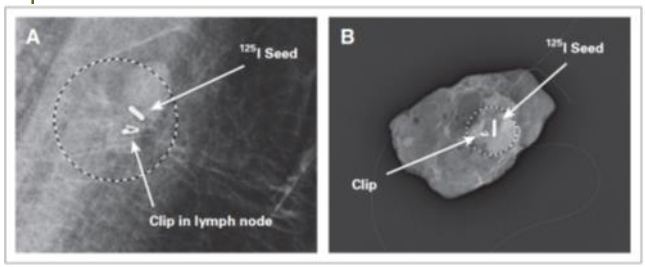
Methods
A prospective study of patients with biopsy-confirmed nodal metastases with a clip placed in the sampled node was performed. After neoadjuvant therapy, patients underwent axillary surgery and the pathology of the clipped node was compared with other nodes. Patients undergoing TAD had SLND and selective removal of the clipped node using iodine-125 seed localization. The FNR was determined in patients undergoing complete axillary lymphadenectomy (ALND).

Results
Of 208 patients enrolled in this study, 191 underwent ALND, with residual disease identified in 120 (63%). The clipped node revealed metastases in 115 patients, resulting in an FNR of 4.2% (95% CI, 1.4 to 9.5) for the clipped node. In patients undergoing SLND and ALND (n = 118), the FNR was 10.1% (95% CI, 4.2 to 19.8), which included seven false-negative events in 69 patients with residual disease. Adding evaluation of the clipped node reduced the FNR to 1.4% (95% CI, 0.03 to 7.3; P = .03). The clipped node was not retrieved as an SLN in 23% (31 of 134) of patients, including six with negative SLNs but metastasis in the clipped node. TAD followed by ALND was performed in 85 patients, with an FNR of 2.0% (1 of 50; 95% CI, 0.05 to 10.7).

Conclusion
Marking nodes with biopsy-confirmed metastatic disease allows for selective removal and improves pathologic evaluation for residual nodal disease after chemotherapy.

-Isótopo y/o Colorante
-Clipado del ganglio patológico
-^{125}I

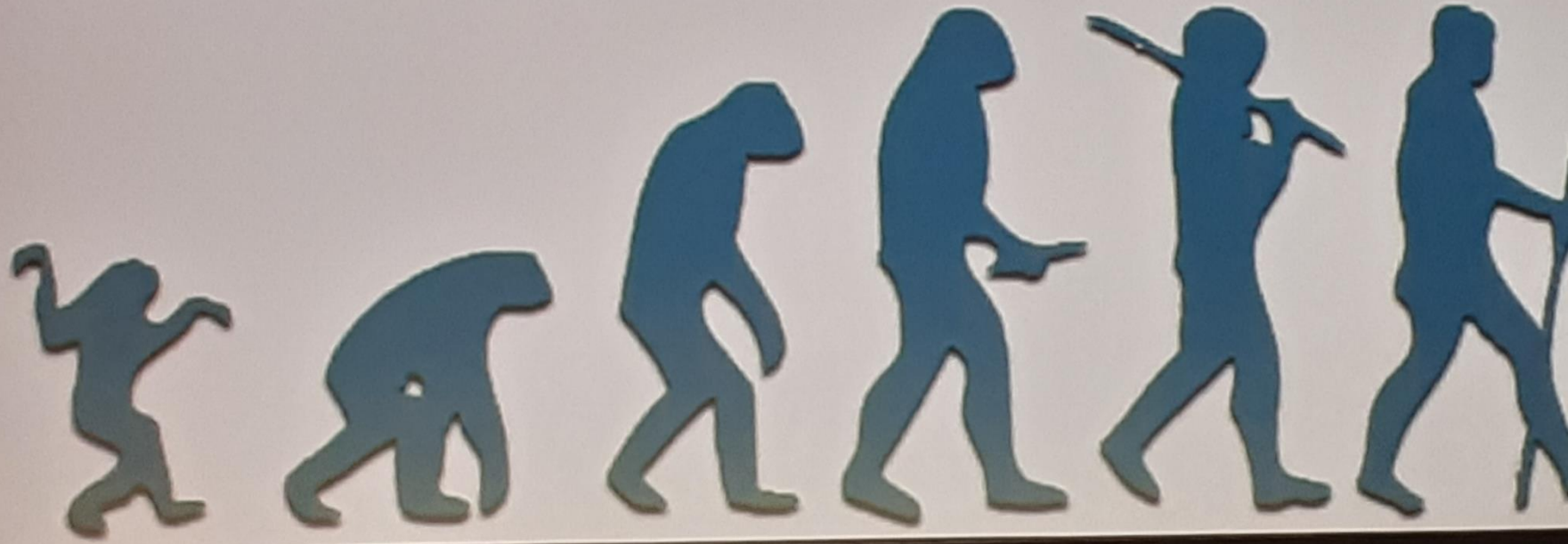
TD: 100%



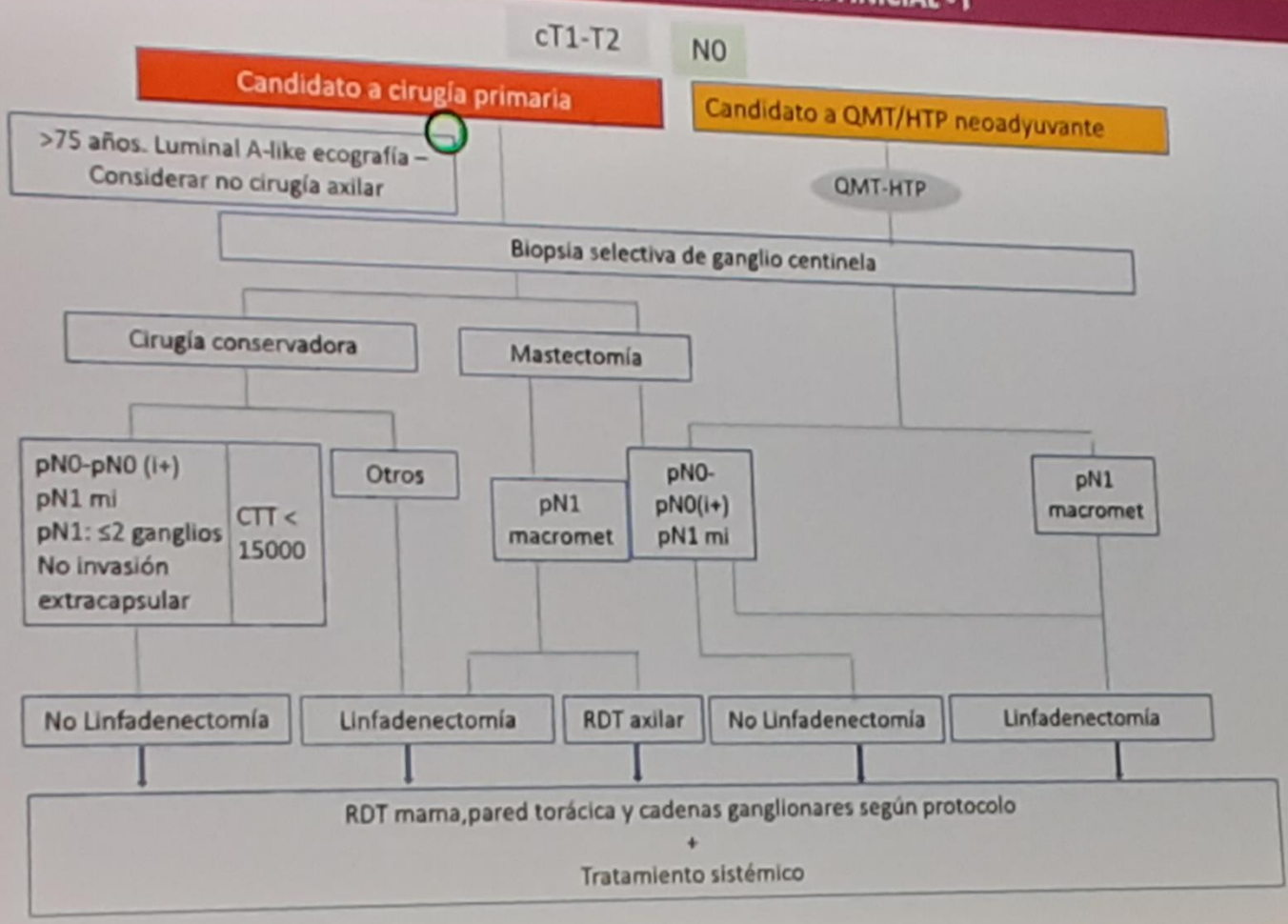
Introducción

ESTATUS AXILAR→ Factor pronóstico importante
ESTADIFICACIÓN TUMOR Y AXILA → Decisión tratamiento

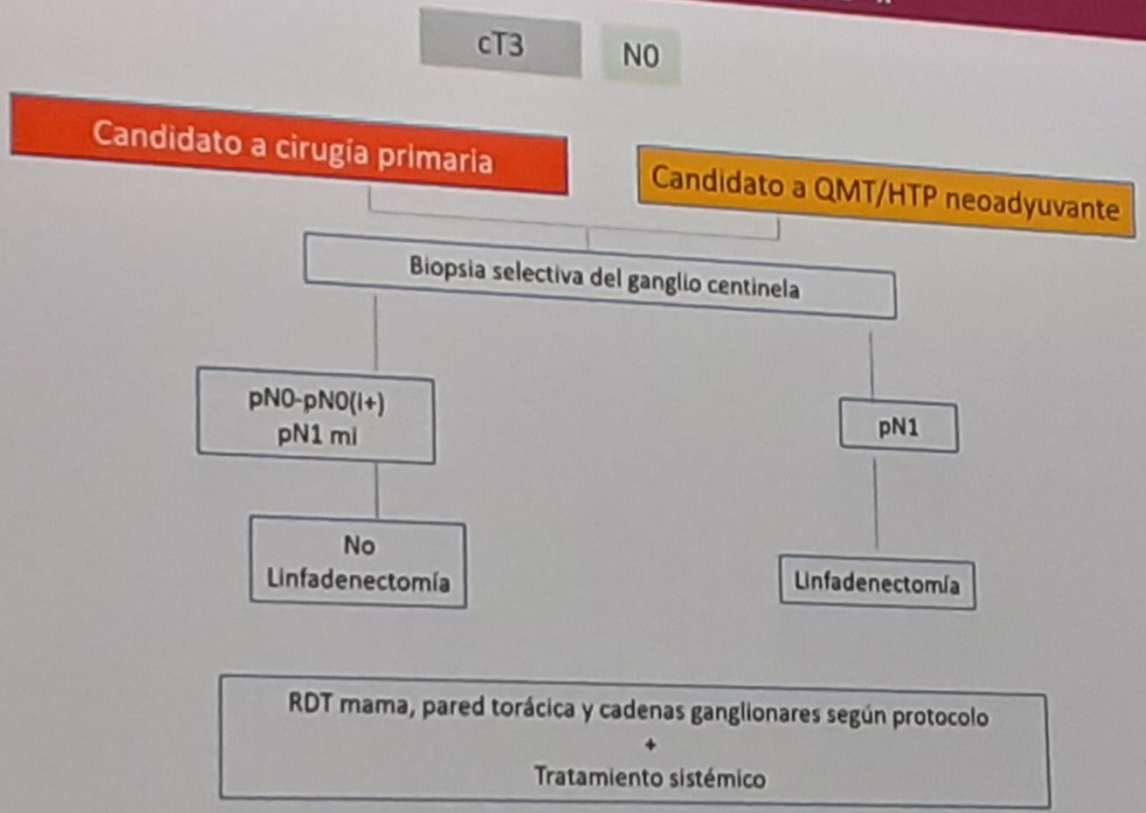
Halsted Cirugía radical LINFADENECTOMIA	D.Krag 1993 BSGC+ LINFADENECTOMIA	ACOSOG Z0011 AMAROS (2013)	Biología tumoral Neoadyuvancia	?	?



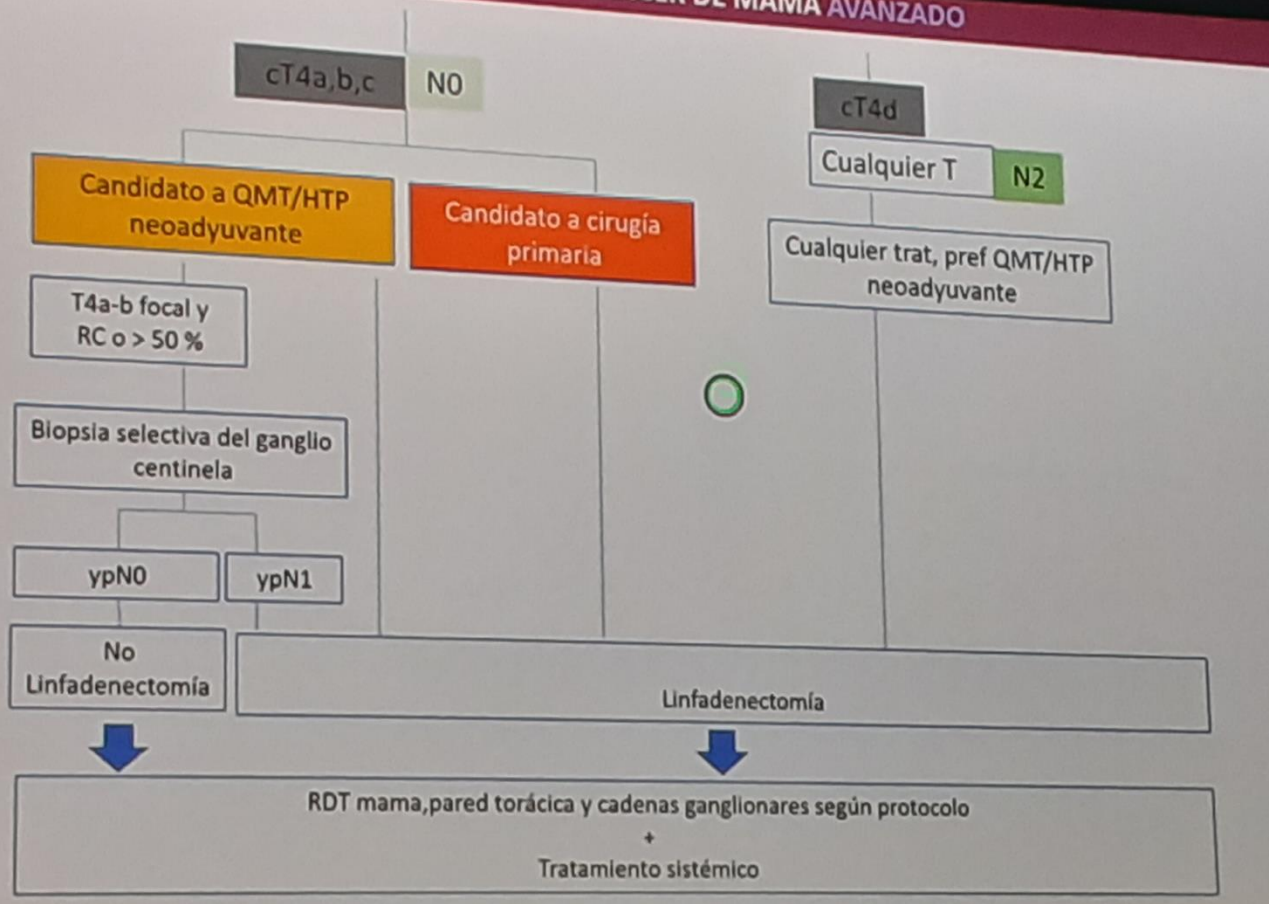
MANEJO AXILAR EN CÁNCER DE MAMA INICIAL - I



MANEJO AXILAR EN CÁNCER DE MAMA INICIAL - II



MANEJO AXILAR EN CÁNCER DE MAMA AVANZADO



PERSISTENCIA DE N+: FACTOR PCO

The Breast Journal

ORIGINAL ARTICLE

Are the ACOSOG Z0011 Trial Findings Being Applied to Breast Cancer Patients Undergoing Neoadjuvant Chemotherapy?

Olga Kantor, MD, MS,* Catherine Pesce, MD,†,‡ Erik Liederbach, BS,† Chi-Hsiung Wang, PhD,§ David J. Winchester, MD, FACS,†,‡ and Katharine Yao, MD, FACS†,‡

*Department of Surgery, University of Chicago Medicine, Chicago, Illinois; †Department of Surgery, NorthShore University HealthSystem, Evanston, Illinois; ‡Pritzker School of Medicine, University of Chicago, Chicago, Illinois; §Center for Biomedical Research Informatics, NorthShore University HealthSystem, Evanston, Illinois

■ **Abstract:** In 2010, the ACOSOG Z0011 trial showed equivalent survival and recurrence between sentinel lymph node biopsy (SLNB) alone versus axillary lymph node dissection (ALND) for those with a tumor positive sentinel node (SN). We examined national trends in axillary surgery following neoadjuvant chemotherapy (NAC) for clinically node positive disease in the years prior to and after the Z0011 trial publication. 12,063 women with cT1-4N1M0 invasive breast cancer who underwent NAC from 2006 to 2013 and had 1-3 positive nodes on pathology were selected from the National Cancer Data Base. We defined SLNB as 1–4 nodes and ALND as ≥10 nodes examined. 2,704 women (22.4%) underwent SLNB alone and 9,359 (77.6%) underwent ALND. The rate of SLNB increased from 25.6% in 2006 to 33.3% in 2012 in patients that underwent lumpectomy ($p < 0.01$) and increased from 20.6% to 22.8% in patients that underwent mastectomy ($p = 0.25$). Patients treated at Community centers (30.4% versus 19.2% at Academic centers) and those with less positive nodes (32.2% for 1 positive node versus 10.1% for 3 positive nodes, $p < 0.01$) were more likely to have SLNB alone compared to ALND. On multivariate analysis, treatment with lumpectomy (OR 1.46, CI 1.28–1.67), lower number of positive nodes (OR 3.98, CI 3.29–4.82) and lobular subtype (OR 1.82, CI 1.42–2.34) were independent predictors of receiving SLNB alone after NAC. Approximately 22% of patients with cN1 breast cancer underwent SLNB alone for pN1 disease after NAC. Ongoing clinical trials will determine if recurrence and survival rates are equivalent between SLNB and ALND groups. ■

Key Words: clinically node positive, neoadjuvant chemotherapy, sentinel node biopsy

Completar la linfadenectomía , ante cualquier grado de afectación GC

Tasa de recidiva locorregional

15%-20%

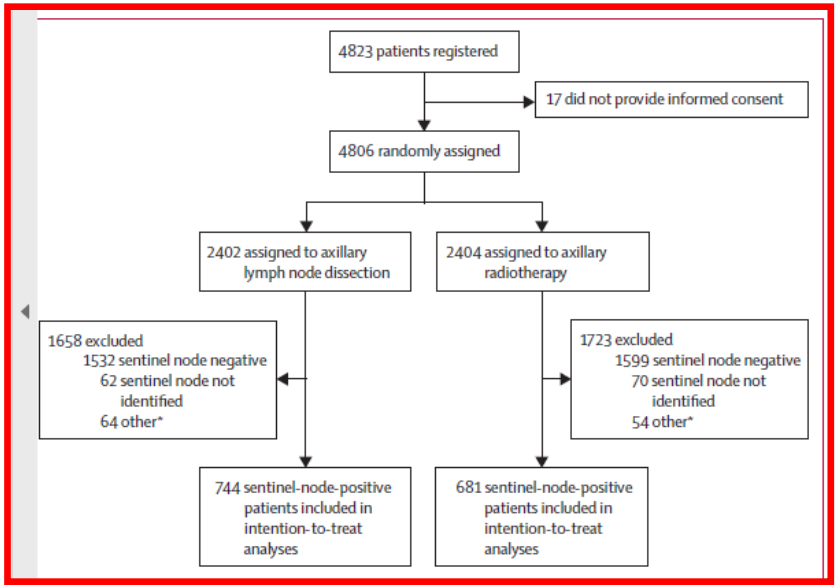
Beneficio de RDT

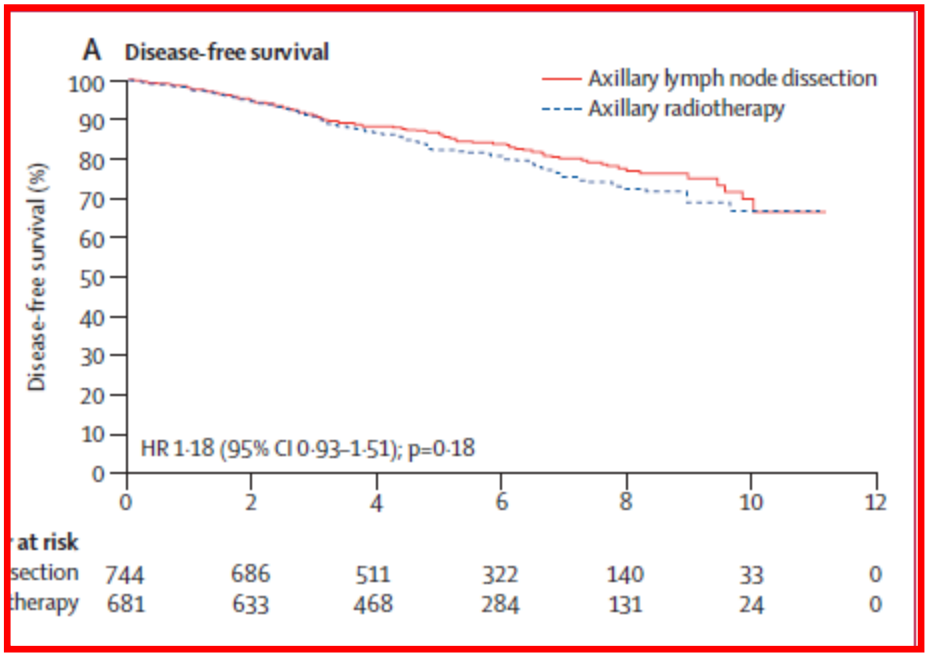
SELECCIÓN DE TERAPIA ADYUVANTE

ESTUDIO AMAROS

1 o 2 BSGC (+)

NO LINFADENECTOMIA AXILAR
SI RDT





UpToDate

Agosto 2019

MENOS ES MAS EN EL MANEJO AXILA

- If the SLNB post-treatment is negative (ypN0), no further axillary evaluation is required. We treat such patients with axillary radiation.
- If the SLNB post-treatment is positive (ypN+), we proceed with ALND for those who have involvement of three or more sentinel nodes or involvement of a nonsentinel node. For those who have one to two positive sentinel nodes, we favor axillary radiation. Our rationale is that axillary radiation is likely to be as effective as ALND but less morbid in cN0 patients with limited sentinel nodal involvement (N1mic/N1a), based on results of the After Mapping of the Axilla: Radiotherapy or Surgery (AMAROS) trial [65]. (See "Overview of sentinel lymph node biopsy in breast cancer", section on 'Role of radiotherapy'.)

NO LINFADENECTOMIA AXILAR SI 1 0 2 GANGLIOS POSTIVOS-> SOLO RDT

Published in final edited form as:
Lancet Oncol. 2014 November ; 15(12): 1303–1310. doi:10.1016/S1470-2045(14)70460-7.

Radiotherapy or surgery of the axilla after a positive sentinel node in breast cancer (EORTC 10981-22023 AMAROS):a randomised, multicentre, open-label, phase 3 non-inferiority trial

UpToDate

G(+)-> QMT

Positive axilla prior to treatment — For patients with evidence of involvement of the axilla from an FNA or CNB prior to treatment, or for those in whom clinical suspicion was high (cN2-N3) but biopsy was not obtained, management of the axilla includes ALND or axillary radiation. A choice between them depends on the extent of nodal involvement prior to NACT and, for those with limited involvement, the response to treatment:

- For those with clinical evidence of advanced nodal involvement (cN2 or cN3 (table 1)) prior to treatment, an ALND should be pursued following NACT, independent of the clinical response to treatment.
- For those with clinical N1 or N0 disease with a positive axillary FNA or CNB (table 1) prior to treatment, management depends on the response to NACT:
  - Patients who remain clinically node positive (ycN1) after NACT should undergo an ALND.
  - Patients who are clinically node negative after NACT (ycN0) should undergo axillary US after NACT.

VOLUME 33 · NUMBER 30 · OCTOBER 20 2015

JOURNAL OF CLINICAL ONCOLOGY

ORIGINAL REPORT

Axillary Ultrasound After Neoadjuvant Chemotherapy and Its Impact on Sentinel Lymph Node Surgery: Results From the American College of Surgeons Oncology Group Z1071 Trial (Alliance)

G(+)-> QMT

- For those with abnormal post-treatment axillary US, ALND should be performed, which may be done at the time of breast surgery.
- For those with negative or uncertain axillary US results, post-treatment SLNB as well as removal of any clipped or other marked nodes should be planned. This may be performed at the time of breast surgery, with intraoperative assessment of the sampled nodes, if possible.

If one or more of the sentinel lymph nodes is pathologically involved (ypN+), if a nonsentinel lymph node is involved, or if no sentinel lymph nodes are identified, ALND is the standard approach. In patients with a negative SLNB post-NACT (ypN0), an ALND can usually be avoided [68], particularly if at least two sentinel nodes are sampled, and the patient will be treated with axillary radiation therapy (RT). For those patients who have only one sentinel lymph node identified, the optimal management is unclear because of the higher likelihood of a false-negative SLNB in such settings [69,70]. As an example, in the SENTinel NeoAdjuvant (SENTINA) study, the FNRs with one, two, or three negative sentinel lymph nodes were 24, 18, and 5 percent, respectively. In such situations, the risks and benefits of an ALND versus axillary RT must be discussed with the patient.