1. **Latin American Study of Hereditary Breast and Ovarian Cancer LACAM: A Genomic Epidemiology Approach**
(Estudio latinoamericano de cáncer de mama y ovario hereditario LACAM: un enfoque de epidemiología genómica)

INVESTIGADORES: Oliver J, Quezada Urban R, Franco Cortés CA, Díaz Velásquez CE, Montealegre Paez AL, Pacheco-Orozco RA, Castro Rojas C, García-Robles R, López Rivera JJ, Gaitán Chaparro S, Gómez AM, Suarez Obando F, Giraldo G, Maya MI, Hurtado-Villa P, Sanchez AI, Serrano N, Orduz Galvis AI, Aruachan S, Nuñez Castillo J, Frecha C, Riggi C, Jauk F, Gómez García EM, Carranza CL, Zamora V, Torres Mejía G, Romieu I, Castañeda CA, Castillo M, Gitler R, Antoniano A, Rojas Jiménez E, Romero Cruz LE, Vallejo Lecuona F, Delgado Enciso I, Martínez Rizo AB, Flores Carranza A, Benites Godinez V, Méndez Catalá CF, Herrera LA, Chirino YI, Terrazas LI, Perdomo S, Vaca Paniagua F.
REVISTA: Front Oncol. 2019 Dec 20; 9:1429. doi: 10.3389/fonc.2019.01429. eCollection 2019.
ABSTRACTO: PURPOSE: Hereditary Breast and Ovarian Cancer (HBOC) syndrome is responsible for ~5-10% of all diagnosed breast and ovarian cancers. Breast cancer is the most common malignancy and the leading cause of cancer-related mortality among women in Latin America (LA). The main objective of this study was to develop a comprehensive understanding of the genomic epidemiology of HBOC throughout the establishment of The Latin American consortium for HBOC-LACAM, consisting of specialists from 5 countries in LA and the description of the genomic results from the first phase of the study. METHODS: We have recruited 403 individuals that fulfilled the criteria for HBOC from 11 health institutions of Argentina, Colombia, Guatemala, Mexico and Peru. A pilot cohort of 222 individuals was analyzed by NGS gene panels. One hundred forty-three genes were selected on the basis of their putative role in susceptibility to different hereditary cancers. Libraries were sequenced in MiSeq (Illumina, Inc.) and PGM (Ion Torrent-Thermo Fisher Scientific) platforms. RESULTS: The overall prevalence of pathogenic variants was 17% (38/222); the distribution spanned 14 genes and varied by country. The highest relative prevalence of pathogenic variants was found in patients from Argentina (25%, 14/57), followed by Mexico (18%, 12/68), Guatemala (16%, 3/19), and Colombia (13%, 10/78). Pathogenic variants were found in BRCA1 (20%) and BRCA2 (29%) genes. Pathogenic variants were found in other 12 genes, including high and moderate risk genes such as MSH2, MSH6, MUTYH, and PALB2. Additional pathogenic variants were found in HBOC unrelated genes such as DCLRE1C, WRN, PDE11A, and PDGFB. CONCLUSION: In this first phase of the project, we recruited 403 individuals and evaluated the germline genetic alterations in an initial cohort of 222 patients among 4 countries. Our data show for the first time in LA the distribution of pathogenic variants in a broad set of cancer susceptibility genes in HBOC. Even though we used extended gene panels, there was still a high proportion of patients without any detectable pathogenic variant, which emphasizes the larger, unexplored genetic nature of the disease in these populations.

2. **Correction: Quality of life under extended continuous versus intermittent adjuvant letrozole in lymph node-positive, early breast cancer patients: the SOLE randomised phase 3 trial.**
(Corrección: calidad de vida bajo letrozol adyuvante continuo versus intermitente prolongado en pacientes con cáncer de mama temprano positivo para ganglios linfáticos: el ensayo aleatorizado de fase 3 SOLE)

INVESTIGADORES: Ribi K, Luo W, Colleoni M, Karlsson P, Chirgwin J, Aebi S, Jerusalem G, Neven P, Di Lauro V, Gomez HL, Ruhstaller T, Abdi E, Biganzoli L, Müller B, Barbeaux A, Graas MP, Rabaglio M, Francis PA, Foukakis T, Pagani O, Graiff C, Vorobiof D, Maibach R, Di Leo A, Gelber RD, Goldhirsch A, Coates AS, Regan MM, Bernhard J; SOLE Investigators.

REVISTA: Br J Cancer. 2020 Jan 16. doi: 10.1038/s41416-019-0709-x.

ABSTRACTO: PURPOSE: Hereditary Breast and Ovarian Cancer (HBOC) syndrome is responsible for ~5-10% of all diagnosed breast and ovarian cancers. Breast cancer is the most common malignancy and the leading cause of cancer-related mortality among women in Latin America (LA). The main objective of this study was to develop a comprehensive understanding of the genomic epidemiology of HBOC throughout the establishment of The Latin American consortium for HBOC-LACAM, consisting of specialists from 5 countries in LA and the description of the genomic results from the first phase of the study. METHODS: We have recruited 403 individuals that fulfilled the criteria for HBOC from 11 health institutions of Argentina, Colombia, Guatemala, Mexico and Peru. A pilot cohort of 222 individuals was analyzed by NGS gene panels. One hundred forty-three genes were selected on the basis of their putative role in susceptibility to different hereditary cancers. Libraries were sequenced in MiSeq (Illumina, Inc.) and PGM (Ion Torrent-Thermo Fisher Scientific) platforms. RESULTS: The overall prevalence of pathogenic variants was 17% (38/222); the distribution spanned 14 genes and varied by country. The highest relative prevalence of pathogenic variants was found in patients from Argentina (25%, 14/57), followed by Mexico (18%, 12/68), Guatemala (16%, 3/19), and Colombia (13%, 10/78). Pathogenic variants were found in BRCA1 (20%) and BRCA2 (29%) genes. Pathogenic variants were found in other 12 genes, including high and moderate risk genes such as MSH2, MSH6, MUTYH, and PALB2. Additional pathogenic variants were found in HBOC unrelated genes such as DCLRE1C, WRN, PDE11A, and PDGFB. CONCLUSION: In this first phase of the project, we recruited 403 individuals and evaluated the germline genetic alterations in an initial cohort of 222 patients among 4 countries. Our data show for the first time in LA the distribution of pathogenic variants in a broad set of cancer susceptibility genes in HBOC. Even though we used extended gene panels, there was still a high proportion of patients without any detectable pathogenic variant, which emphasizes the larger, unexplored genetic nature of the disease in these populations

3. **Prepectoral Two-Stage Implant-Based Breast Reconstruction with and without Acellular Dermal Matrix: Do We See a Difference?**
(Reconstrucción mamaria prepectoral de dos etapas basada en implantes con y sin matriz dérmica acelular: ¿vemos alguna diferencia?)

INVESTIGADORES: Manrique OJ, Huang TC, Martinez-Jorge J, Ciudad P, Forte AJ, Bustos SS, Boughey JC, Jakub JW, Degnim AC, Galan R.

REVISTA: Plast Reconstr Surg. 2020 Feb;145(2):263e-272e. doi: 10.1097/PRS.0000000000006442.

ABSTRACTO: BACKGROUND: Prepectoral implant-based breast reconstruction has gained popularity because of advantages over the subpectoral technique. Acellular dermal matrix use with implant-based breast reconstruction has become common because of its perceived superior aesthetic outcome. Matrices are expensive, however, and recent evidence has pointed to several potential complications. This article reports a series of prepectoral implant-based breast reconstructions with and without acellular dermal matrix and compared their outcomes. METHODS: This is a single-surgeon retrospective review of patients who underwent staged prepectoral implant-based breast reconstruction following nipple-sparing mastectomy over two periods. Patients with well-perfused mastectomy skin flaps with a homogeneous thickness underwent reconstruction with acellular dermal matrix initially. On evolution of the practice, it was not used. Patient demographics, operative data, and complications were analyzed. Aesthetic outcome was measured by the BREAST-Q survey and the Aesthetic Item Scale. A cost analysis was also performed. RESULTS: Forty patients were included (acellular dermal matrix group, n = 19; non-acellular dermal matrix group, n = 21). The nonmatrix group had one case (5 percent) of seroma and one case (5 percent) with hematoma; there were none in the acellular dermal matrix group. Average BREAST-Q and Aesthetic Item Scale scores were 82.3 versus 81.6 (p = 0.954) and 20.98

versus 20.43 (p = 0.640) for the matrix and nonmatrix groups, respectively. The direct cost savings for the authors' institution over 1 year if matrix was not used in all cases of implant-based breast reconstruction would be estimated at $3,105,960 to $6,211,920 for unilateral and bilateral cases, respectively, for Medicare reimbursement. CONCLUSIONS: With adequate patient selection, acellular dermal matrix is not always required during two-stage prepectoral implant-based breast reconstruction for good aesthetic outcomes. The economic burden on patients and the health care system could be lessened with selective matrix use

4. **The path to a better biomarker: application of a risk management framework for the implementation of PD-L1 and TILs as immuno-oncology biomarkers into breast cancer clinical trials and daily practice.**
(El camino hacia un mejor biomarcador: aplicación de un marco de gestión de riesgos para la implementación de PD-L1 y TIL como biomarcadores inmuno-oncológicos en ensayos clínicos y práctica diaria del cáncer de mama)

INVESTIGADORES: Gonzalez-Ericsson PI, Stovgaard ES, Sua LF, Reisenbichler E, Kos Z, Carter JM, Michiels S, Le Quesne J, Nielsen TO, Laenkholm AV, Fox SB, Adam J, Bartlett JM, Rimm DL, Quinn C, Peeters D, Dieci MV, Vincent-Salomon A, Cree I, Hida AI, Balko JM, Haynes HR, Frahm I, Acosta-Haab G, Balancin M, Bellolio E, Yang W, Kirtani P, Sugie T, Ehinger A, Castaneda CA, Kok M, McArthur H, Siziopikou K, Badve S, Fineberg S, Gown A, Viale G, Schnitt SJ, Pruneri G, Penault-Llorca F, Hewitt S, Thompson EA, Allison KH, Symmans WF, Bellizzi AM, Brogi E, Moore DA, Larsimont D, Dillon DA, Lazar A, Lien H, Goetz MP, Broeckx G, El Bairi K, Harbeck N, Cimino-Mathews A, Sotiriou C, Adams S, Liu SW, Loibl S, Chen IC, Lakhani SR, Juco JW, Denkert C, Blackley EF, Demaria S, Leon-Ferre R, Gluz O, Zardavas D, Emancipator K, Ely S, Loi S, Salgado R, Sanders M; International Immuno-Oncology Biomarker Working Group.
REVISTA: J Pathol. 2020 Mar 4. doi: 10.1002/path.5406. [Epub ahead of print]
ABSTRACTO: Immune checkpoint inhibitor therapies targeting PD-1/PD-L1 are now standard of care in oncology across several hematologic and solid tumor types, including triple negative breast cancer (TNBC). Patients with metastatic or locally advanced TNBC with PD-L1 expression on immune cells occupying ≥1% of tumor area demonstrated survival benefit with the addition of atezolizumab to nab-paclitaxel. However, concerns regarding variability between immunohistochemical PD-L1 assay performance and inter-reader reproducibility have been raised. High tumor-infiltrating lymphocytes (TILs) have also been associated with response to PD-1/PD-L1 inhibitors in patients with breast cancer. TILs can be easily assessed on hematoxylin and eosin stained slides and have shown reliable inter-reader reproducibility. As an established prognostic factor in early stage TNBC, TILs are soon anticipated to be reported in daily practice in many pathology laboratories worldwide. Since TILs and PD-L1 are parts of an immunological spectrum in breast cancer, we propose the systematic implementation of combined PD-L1 and TIL analyses as a more comprehensive immune-oncological biomarker for patient selection for PD-1/PD-L1 inhibition-based therapy in patients with breast cancer. Although practical and regulatory considerations differ by jurisdiction, the pathology community has the responsibility to patients to implement assays that lead to optimal patient selection. We propose herewith a risk-management framework that may help mitigate the risks of suboptimal patient selection for immuno-therapeutic approaches in clinical trials and daily practice based on combined TILs/PD-L1 assessment in breast cancer.

5. **Long-term cardiac outcomes of patients with HER2-positive breast cancer treated in the adjuvant lapatinib and/or trastuzumab Treatment Optimization Trial.**
(Resultados cardíacos a largo plazo de pacientes con cáncer de mama HER2 positivo tratados en el ensayo adyuvante de optimización del tratamiento con lapatinib y / o trastuzumab)

INVESTIGADORES: Eiger D, Pondé NF, Agbor-Tarh D, Moreno-Aspitia A, Piccart M, Hilbers FS, Werner O, Chumsri S, Dueck A, Kroep JR, Gomez H, Láng I, Rodeheffer RJ, Ewer MS, Suter T, de Azambuja E.
REVISTAS: Br J Cancer. 2020 Mar 16. doi: 10.1038/s41416-020-0786-x. [Epub ahead of print]
TIPO DE INVESTIGACIÓN: Mamas y tejidos blandos
ABSTRACTO: BACKGROUND: Cardiotoxicity is the most significant adverse event associated with trastuzumab (T), the main component of HER2-positive breast cancer (BC) treatment. Less is known about the cardiotoxicity of dual HER2 blockade with T plus lapatinib (L), although this regimen is used in the metastatic setting. METHODS: This is a sub-analysis of the ALTTO trial comparing adjuvant treatment options for patients with early HER2-positive BC. Patients randomised to either T or concomitant T + L were eligible. Cardiac events (CEs) rates were compared according to treatment arm. RESULTS: With 6.9 years of median follow-up (FU) and 4190 patients, CE were observed in 363 (8.6%): 166 (7.9%) of patient in T + L arm vs. 197 (9.3%) in T arm (OR = 0.85 [95% CI, 0.68-1.05]). During anti-HER2 treatment 270 CE (6.4%) occurred while 93 (2.2%) were during FU (median time to onset = 6.6 months [IQR = 3.4-11.7]). While 265 CEs were asymptomatic (73%), 94 were symptomatic (26%) and four were cardiac deaths (1%). Recovery was observed in 301 cases (83.8%). Identified cardiac risk factors were: baseline LVEF < 55% (vs > 64%, OR 3.1 [95% CI 1.54-6.25]), diabetes mellitus (OR 1.85 [95% CI 1.25-2.75]), BMI > 30 kg/m2 (vs < 25 mg/kg2, OR 2.21 [95% CI 1.40-3.49]), cumulative dose of doxorubicin ≥240 mg/m2 (OR 1.36 [95% CI 1.01-1.82]) and of epirubicin≥ 480 mg/m2 (OR 2.33 [95% CI 1.55-3.51]). CONCLUSIONS: Dual HER2 blockade with T + L is a safe regimen from a cardiac perspective, but cardiac-focused history for proper patient selection is crucial

6. **Human Epidermal Growth Factor Receptor 2-Positive Breast Cancer Is Associated with Indigenous American Ancestry in Latin American Women.**
(El cáncer de mama 2-receptor del factor de crecimiento epidérmico humano positivo está asociado con la ascendencia indígena americana en mujeres latinoamericanas)

INVESTIGADORES: Marker KM, Zavala VA, Vidaurre T, Lott PC, Vásquez JN, Casavilca-Zambrano S, Calderón M, Abugattas JE, Gómez HL, Fuentes HA, Picoaga RL, Cotrina JM, Neciosup SP, Castañeda CA, Morante Z, Valencia F, Torres J, Echeverry M, Bohórquez ME, Polanco-Echeverry G, Estrada-Florez AP, Serrano-Gómez SJ, Carmona-Valencia JA, Alvarado-Cabrero I, Sanabria-Salas MC, Velez A, Donado J, Song S, Cherry D, Tamayo LI, Huntsman S, Hu D, Ruiz-Cordero R, Balassanian R, Ziv E, Zabaleta J, Carvajal-Carmona L, Fejerman L; COLUMBUS Consortium.
REVISTA: Cancer Res. 2020 Apr 3. doi: 10.1158/0008-5472.CAN-19-3659. [Epub ahead of print]
ABSTRACTO: Women of Latin American origin in the United States are more likely to be diagnosed with advanced breast cancer and have a higher risk of mortality than non-Hispanic White women. Studies in U.S. Latinas and Latin American women have reported a high incidence of HER2 positive (+) tumors; however, the factors contributing to this observation are unknown. Genome-wide genotype data for 1,312 patients from the Peruvian Genetics and Genomics of Breast Cancer Study (PEGEN-BC) were used to estimate genetic ancestry. We tested the association between HER2 status and genetic ancestry using logistic and multinomial logistic regression models. Findings were replicated in 616 samples from Mexico and Colombia. Average Indigenous American (IA) ancestry differed by subtype. In multivariate models, the odds of having an HER2+ tumor increased by a factor of 1.20 with every 10% increase in IA ancestry proportion (95% CI, 1.07-1.35; P = 0.001). The

association between HER2 status and IA ancestry was independently replicated in samples from Mexico and Colombia. Results suggest that the high prevalence of HER2+ tumors in Latinas could be due in part to the presence of population-specific genetic variant(s) affecting HER2 expression in breast cancer. SIGNIFICANCE: The positive association between Indigenous American genetic ancestry and HER2+ breast cancer suggests that the high incidence of HER2+ subtypes in Latinas might be due to population and subtype-specific genetic risk variants.

7. **Pitfalls in assessing stromal tumor infiltrating lymphocytes (sTILs) in breast cancer.**
(Dificultades en la evaluación de los linfocitos infiltrantes de tumor del estroma (sTIL) en el cáncer de mama)

INVESTIGADORES: Kos Z, Roblin E, Kim RS, Michiels S, Gallas BD, Chen W, van de Vijver KK, Goel S, Adams S, Demaria S, Viale G, Nielsen TO, Badve SS, Symmans WF, Sotiriou C, Rimm DL, Hewitt S, Denkert C, Loibl S, Luen SJ, Bartlett JMS, Savas P, Pruneri G, Dillon DA, Cheang MCU, Tutt A, Hall JA, Kok M, Horlings HM, Madabhushi A, van der Laak J, Ciompi F, Laenkholm AV, Bellolio E, Gruosso T, Fox SB, Araya JC, Floris G, Hudeček J, Voorwerk L, Beck AH, Kerner J, Larsimont D, Declercq S, Van den Eynden G, Pusztai L, Ehinger A, Yang W, AbdulJabbar K, Yuan Y, Singh R, Hiley C, Bakir MA, Lazar AJ, Naber S, Wienert S, Castillo M, Curigliano G, Dieci MV, André F, Swanton C, Reis-Filho J, Sparano J, Balslev E, Chen IC, Stovgaard EIS, Pogue-Geile K, Blenman KRM, Penault-Llorca F, Schnitt S, Lakhani SR, Vincent-Salomon A, Rojo F, Braybrooke JP, Hanna MG, Soler-Monsó MT, Bethmann D, Castaneda CA, Willard-Gallo K, Sharma A, Lien HC, Fineberg S, Thagaard J, Comerma L, Gonzalez-Ericsson P, Brogi E, Loi S, Saltz J, Klaushen F, Cooper L, Amgad M, Moore DA, Salgado R; International Immuno-Oncology Biomarker Working Group.
REVISTA: NPJ Breast Cancer. 2020 May 12;6:17. doi: 10.1038/s41523-020-0156-0. eCollection 2020.
ABSTRACTO: Stromal tumor-infiltrating lymphocytes (sTILs) are important prognostic and predictive biomarkers in triple-negative (TNBC) and HER2-positive breast cancer. Incorporating sTILs into clinical practice necessitates reproducible assessment. Previously developed standardized scoring guidelines have been widely embraced by the clinical and research communities. We evaluated sources of variability in sTIL assessment by pathologists in three previous sTIL ring studies. We identify common challenges and evaluate impact of discrepancies on outcome estimates in early TNBC using a newly-developed prognostic tool. Discordant sTIL assessment is driven by heterogeneity in lymphocyte distribution. Additional factors include: technical slide-related issues; scoring outside the tumor boundary; tumors with minimal assessable stroma; including lymphocytes associated with other structures; and including other inflammatory cells. Small variations in sTIL assessment modestly alter risk estimation in early TNBC but have the potential to affect treatment selection if cutpoints are employed. Scoring and averaging multiple areas, as well as use of reference images, improve consistency of sTIL evaluation. Moreover, to assist in avoiding the pitfalls identified in this analysis, we developed an educational resource available at www.tilsinbreastcancer.org/pitfalls

8. **Cancer incidence and mortality trends in young adults in Metropolitan Lima young adults, 1990-2012.**
(Incidencia del cáncer y tendencias de mortalidad en adultos jóvenes en Lima Metropolitana adultos jóvenes, 1990-2012)

INVESTIGADORES: Luna-Abanto J, Ruiz LG, Laura-Martinez J, Tairo-Cerron T.
REVISTA: Ecancermedicalscience. 2020 Apr 20;14:1025. doi: 10.3332/ecancer.2020.1025. eCollection 2020.
ABSTRACTO: AIMS: The purpose of this research was to calculate and compare standardised incidence and mortality ratios in young adults, based on the data published by the population-based cancer registry of Metropolitan Lima. **METHOD:** A secondary analysis was carried out on the

data published by the population-based cancer registry of Metropolitan Lima in its last five volumes. Calculating the standardised incidence ratio, in accordance with the World Health Organization's standard population, was done using the direct method, and the annual percentage change was calculated using the Joinpoint Regression Program. **RESULTS**: From 1990 to 2012, 12,380 new cases of cancer in young adults between the ages of 20 and 49 were reported in Metropolitan Lima. The neoplasms with the highest standardised incidence ratio in the young adult male group were testicular cancer, brain and nervous system cancer, stomach cancer, non-Hodgkin's lymphoma and bowel cancer. The neoplasms with the highest standardised mortality ratio for this group were stomach cancer, brain and nervous system cancer, non-Hodgkin's lymphoma, tracheal cancer, bronchial and lung cancer and liver cancer. The neoplasms with the highest standardised incidence ratio in the young adult female group were breast cancer, cervical cancer, thyroid cancer, ovarian cancer and brain and nervous system cancer. The neoplasms with the highest standardised mortality ratio for this group were breast cancer, cervical cancer, stomach cancer, brain and nervous system cancer and non-Hodgkin's lymphoma. **CONCLUSIONS**: Young adults represent a highly unique group, characterised by little diagnostic suspicion, distribution and aggressiveness of the neoplasms that occur in them. Assessing and reporting incidence and mortality ratios in this age group can contribute to decision making.

9. **Breast cancer early detection: A phased approach to implementation.**
(Detección temprana del cáncer de mama: un enfoque gradual para la implementación)

INVESTIGADOR: Ginsburg O, Yip CH, Brooks A, Cabanes A, Caleffi M, Dunstan Yataco JA, Gyawali B, McCormack V, McLaughlin de Anderson M, Mehrotra R, Mohar A, Murillo R, Pace LE, Paskett ED, Romanoff A, Rositch AF, Scheel JR, Schneidman M, Unger-Saldaña K, Vanderpuye V, Wu TY, Yuma S, Dvaladze A, Duggan C, Anderson BO.
REVISTA: Cancer. 2020 May 15;126 Suppl 10:2379-2393. doi: 10.1002/cncr.32887
ABSTRACTO: When breast cancer is detected and treated early, the chances of survival are very high. However, women in many settings face complex barriers to early detection, including social, economic, geographic, and other interrelated factors, which can limit their access to timely, affordable, and effective breast health care services. Previously, the Breast Health Global Initiative (BHGI) developed resource-stratified guidelines for the early detection and diagnosis of breast cancer. In this consensus article from the sixth BHGI Global Summit held in October 2018, the authors describe phases of early detection program development, beginning with management strategies required for the diagnosis of clinically detectable disease based on awareness education and technical training, history and physical examination, and accurate tissue diagnosis. The core issues address include finance and governance, which pertain to successful planning, implementation, and the iterative process of program improvement and are needed for a breast cancer early detection program to succeed in any resource setting. Examples are presented of implementation, process, and clinical outcome metrics that assist in program implementation monitoring. Country case examples are presented to highlight the challenges and opportunities of implementing successful breast cancer early detection programs, and the complex interplay of barriers and facilitators to achieving early detection for breast cancer in real-world settings are considered.

10. **Prepectoral Two-Stage Implant-Based Breast Reconstruction With and Without Acellular Dermal Matrix: Do We See a Difference?**
(Reconstrucción mamaria prepectoral de dos etapas basada en implantes con y sin matriz dérmica acelular: ¿vemos alguna diferencia?)

INVESTIGADORES: Oscar J Manrique, Tony Chieh-Ting Huang, Jorys Martinez-Jorge, Pedro Ciudad, Antonio J Forte, Samyd S Bustos, Judy C Boughey, James W Jakub, Amy C Degnim, Ricardo Galan.
REVISTA: Plast Reconstr Surg 2020 Feb;145(2):263e-272e. doi: 10.1097/PRS.0000000000006442.

ABSTRACTO: Background: Prepectoral implant-based breast reconstruction has gained popularity because of advantages over the subpectoral technique. Acellular dermal matrix use with implant-based breast reconstruction has become common because of its perceived superior aesthetic outcome. Matrices are expensive, however, and recent evidence has pointed to several potential complications. This article reports a series of prepectoral implant-based breast reconstructions with and without acellular dermal matrix and compared their outcomes. Methods: This is a single-surgeon retrospective review of patients who underwent staged prepectoral implant-based breast reconstruction following nipple-sparing mastectomy over two periods. Patients with well-perfused mastectomy skin flaps with a homogeneous thickness underwent reconstruction with acellular dermal matrix initially. On evolution of the practice, it was not used. Patient demographics, operative data, and complications were analyzed. Aesthetic outcome was measured by the BREAST-Q survey and the Aesthetic Item Scale. A cost analysis was also performed. Results: Forty patients were included (acellular dermal matrix group, n = 19; non-acellular dermal matrix group, n = 21). The nonmatrix group had one case (5 percent) of seroma and one case (5 percent) with hematoma; there were none in the acellular dermal matrix group. Average BREAST-Q and Aesthetic Item Scale scores were 82.3 versus 81.6 (p = 0.954) and 20.98 versus 20.43 (p = 0.640) for the matrix and nonmatrix groups, respectively. The direct cost savings for the authors' institution over 1 year if matrix was not used in all cases of implant-based breast reconstruction would be estimated at $3,105,960 to $6,211,920 for unilateral and bilateral cases, respectively, for Medicare reimbursement. Conclusions: With adequate patient selection, acellular dermal matrix is not always required during two-stage prepectoral implant-based breast reconstruction for good aesthetic outcomes. The economic burden on patients and the health care system could be lessened with selective matrix use.

11. **ABC4 Consensus: First Latin American Meeting-Assessment, Comments, and Application of Its Recommendations**

(Consenso ABC4: primera reunión latinoamericana-evaluación, comentarios y aplicación de sus recomendaciones)

INVESTIGADORES: Henry L Gomez, Carlos Castañeda, Fernando Valencia, Rene Muñoz-Bermeo, Maria Del Carmen Torrico, Silvia Neciosup.

REVISTA: JCO Glob Oncol 2020 Jun;6:819-827. doi: 10.1200/GO.20.00081.
TIPO DE CÁNCER: Mamas y Tejidos Blandos

ABSTRACTO: Breast cancer accounts for a high burden among all the neoplasms in Latin America, with more-advanced stages at presentation, which could result in high mortality rates. The 4th International Consensus Conference for Advanced Breast Cancer (ABC4) is focused on standardizing therapy for advanced breast cancer (ABC) and has held 5 meetings so far. ABC4 took place in Lisbon, Portugal, from November 2 to 4, 2017; however, the first Latin American ABC conference was held in Lima, Peru, from 18 to 19 May, 2018, chaired by Fatima Cardoso, MD, PhD. During these 2 days, the ABC4 consensus recommendations for advanced and locally advanced breast cancer were presented. Local treatment and systemic therapy were discussed with local experts, mainly focusing on anti-human epidermal growth factor receptor 2 therapy and newly approved drugs for hormone receptor-positive breast cancer, such as as CDK4/6, mammalian target of rapamycin, and poly (ADP-ribose) polymerase inhibitors for triple-negative breast cancer. The discussion focused additionally on access to drugs and ABC4 consensus recommendations as regards Latin American patients.

12. **A phased approach to implementing the Breast Imaging Reporting and Data System (BI-RADS) in low-income and middle-income countries.**
(Un enfoque por etapas para implementar el Sistema de informes e información de imágenes mamarias (BI-RADS) en países de bajos y medianos ingresos)

INVESTIGADORES: Lam DL, Entezari P, Duggan C, Muyinda Z, Vasquez A, Huayanay J, Anderson BO, Scheel JR**.**
REVISTA: Cancer. 2020 May 15;126 Suppl 10:2424-2430. doi: 10.1002/cncr.32864.
TIPO DE INVESTIGACIÓN:
ABSTRACTO: BACKGROUND: Successful breast cancer detection programs rely on standardized reporting and interpreting systems, such as the Breast Imaging Reporting and Data System (BI-RADS), to improve system performance. In low-income and middle-income countries, evolving diagnostic programs have insufficient resources to either fully implement BI-RADS or to periodically evaluate the program's performance, which is a necessary component of BI-RADS. This leads to inconsistent breast ultrasound interpretation and a failure to improve performance. **METHODS:** The authors applied the Breast Health Global Initiative's phased implementation strategy to implement diagnostic ultrasound and BI-RADS within the context of a limited-resource setting. **RESULTS:** The authors recommended starting with triage ultrasound to distinguish suspicious masses from normal breast tissue and benign masses such as cysts because the majority of health workers performing ultrasounds at this level have minimal breast imaging experience. Transitioning to full diagnostic ultrasound with condensed or full BI-RADS should occur after performance and quality metrics have been met. **CONCLUSIONS:** Transitioning through these phases across facilities likely will occur at different times, particularly in rural versus urban settings.

13. **Earlier Breast Cancer Detection in Peru: Establishing a Comprehensive Program in an Underserved Region**
(Detección temprana de cáncer de mama en Perú: establecimiento de un programa integral en una región desatendida)

INVESTIGADORES: Monica M Matsumoto, Scott Widemon, Geerlitte Farfán, Tatiana Vidaurre, Jorge Dunstan, Debra E Krotish, Daron G Ferris, Jose M Garcia Santos, Daniel J Mollura, Erica Pollack, John R Scheel.
REVISTA: J Am Coll Radiol 2020 Jul 6;S1546-1440(20)30642-6. doi: 10.1016/j.jacr.2020.06.003. Online ahead of print.
ABSTRACTO: Rising breast cancer incidence and mortality rates in low- and middleincome countries are largely attributed to changing lifestyle, economic factors, and late-stage diagnosis. In Peruvian women, it is the second most common cancer diagnosis (16%) behind cervical cancer (24%) and is the second leading cause of cancer hospitalizations. The breast cancer burden is expected to rise and cause more premature deaths unless early detection programs are established. Peru is one of only a few LatinAmerican countries with a National Cancer Control Plan (Plan Nacional para la Atención Integral del Cáncer, originally called Plan Esperanza). For low-income patients, the plan provides universal coverage for cancer detection and treatment through the Comprehensive Health Insurance Scheme (Seguro Integral de Salud). The latest version of the cancer control plan prioritizes three cancer types, including breast cancer. The main Q 6 national cancer hospital (WWW) has undertaken initiatives, such as training primary care providers in fine needle aspiration and improving access to screening mammography.

14. **Lymph node ratio as best prognostic factor in triple-negative breast cancer patients with residual disease after neoadjuvant chemotherapy**

(Relación de ganglios linfáticos como mejor factor pronóstico en pacientes con cáncer de mama triple negativo con enfermedad residual después de quimioterapia neoadyuvante)

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ABSTRACTO: Although lymph node status (ypN) is one of the most important prognostic factors of survival, the lymph node ratio (LNR) has emerged as an equitable factor. We aimed to compare the prognostic value of both ypN and LNR in patients with residual triple-negative breast cancer (TNBC) after neo-adjuvant chemotherapy (NAC). This was a retrospective cohort study of patients treated in a tertiary care center during the period 2000-2014. We stratified the population based on LNR (≤0.20, 0.20-0.65, and >0.65) and ypN (N1, N2, and N3) status. The overall survival (OS) and progression-free survival (PFS) were estimated with Kaplan-Meier curves and the log-rank + test. We further compared patient mortality and disease recurrence using multivariate Cox regression analysis. We evaluated 169 patients with a median follow-up of 87 months. At 2 years of follow-up, patients with low-risk LNR compared to those with moderate and high risk had a higher PFS (54% vs 31% vs 18%, respectively; P < .001) and OS (74% vs 64% vs 45%, respectively; P < .001). Moreover, ypN1 patients compared to ypN2 and ypN3 showed similar results in PFS (53% vs 35% vs 19%, respectively; P = .001) and OS (73% vs 69% vs 43%, respectively; P < .001). Compared to the low-risk population, patients with moderate (hazard ratio [HR]: 3.50; 95% confidence interval [CI]: 1.41-8.71) and high risk (HR: 6.90; 95% CI: 2.29-20.77) had a worse PFS. Regarding OS, moderate-risk (HR: 2.85; 95% CI: 1.10-7.38) and high-risk patients (HR: 6.48; 95% CI: 2.13-19.76) showed considerably worse outcomes. On the other hand, ypN staging was not associated with PFS or OS in the multivariate analysis. The LNR is a better prognostic factor of survival than ypN. The LNR should be considered in the stratification of risk after NAC in patients with TNBC.