





18-19 Maptiou 2016

Συνεδριακό Κέντρο Πανεπιστημίου Πατρών

εξελίξεις ακτινοθεραπείας & προβλεπτικοί παράγοντες

δήλωση συμφερόντων

δηλώνω ότι δεν έχω (προσωπικά ή ως μέλος εργασιακής/ερευνητικής ομάδας) ή μέλος της οικογένειάς μου οποιοδήποτε οικονομικό ή άλλου είδους όφελος από τις εταιρείες/επιχειρήσεις που διοργανώνουν/χρηματοδοτούν την άνω εκδήλωση κατά τη διάρκεια των τελευταίων 4 ετών

κύρια σημεία

- καρκίνος μαστού
 - νεότερα δεδομένα και εξελίξεις στην ακτινοθεραπεία μαστού
- γυναικολογικός καρκίνος
 - καρκίνος ενδομητρίου & τραχήλου μήτρας
 - εξελίξεις στην ακτινοθεραπεία του γυναικολογικού καρκίνου
- προβλεπτικοί παράγοντες

καρκίνος μαστού

επιδημιολογία

Estimated New Cancer Cases and Deaths by Sex, United States, 2015

	ESTIMATED NEW CASES			ESTIMATED DEATHS		
	BOTH SEXES	MALE	FEMALE	BOTH SEXES	MALE	FEMALE
All sites	1,658,370	848,200	810,170	589,430	312,150	277,280
Breast	234,190	2,350	231,840	40,730	440	40,290
Genital system	329,330	231,050	98,280	58,670	28,230	30,440
Uterine cervix	12,900		12,900	4,100		4,100
Uterine corpus	54,870		54,870	10,170		10,170
Ovary	21,290		21,290	14,180		14,180
Vulva	5,150		5,150	1,080		1,080
Vagina & other genital, female	4,070		4,070	910		910

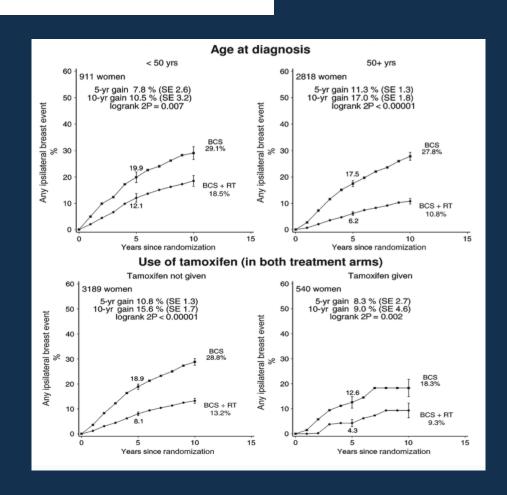
JNCI MONOGRAPHS

Overview of the Randomized Trials of Radiotherapy in Ductal Carcinoma In Situ of the Breast

Early Breast Cancer Trialists' Collaborative Group (EBCTCG)

J Natl Cancer Inst Monogr 2010;41:162-177

- four randomized trials
- 3729 pts
- 50% relative benefit across the randomized trials
- radiotherapy reduced the absolute 10-year risk of any ipsilateral breast event by 15.2%

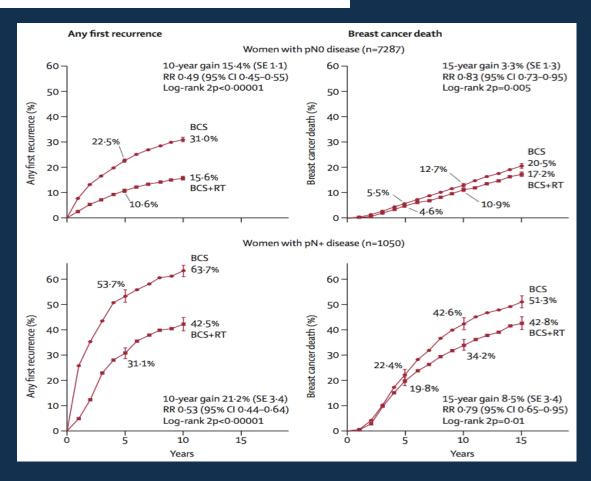


Effect of radiotherapy after breast-conserving surgery on 10-year recurrence and 15-year breast cancer death: meta-analysis of individual patient data for 10 801 women in 17 randomised trials



Early Breast Cancer Trialists' Collaborative Group (EBCTCG)*
Lancet 2011; 378: 1707-16

after breast conserving surgery, radiotherapy to the conserved breast halves the rate at which the disease recurs and reduces the breast cancer death rate by about a sixth



THE LANCET

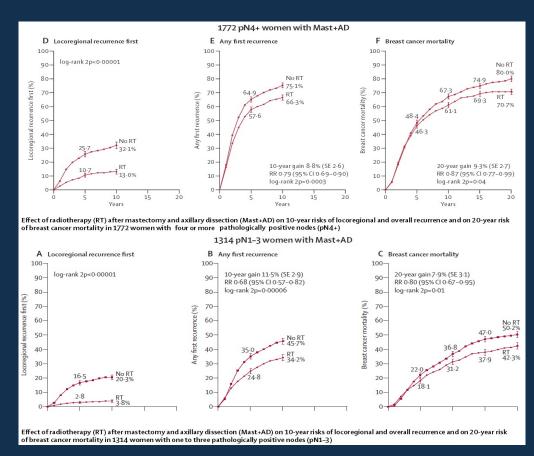
Articles

Effect of radiotherapy after mastectomy and axillary surgery $\gg W$. on 10-year recurrence and 20-year breast cancer mortality: meta-analysis of individual patient data for 8135 women in 22 randomised trials



EBCTCG (Early Breast Cancer Trialists' Collaborative Group)* Lancet 2014; 383: 2127-35

- the survival benefit of post mastectomy radiation therapy is not limited to patients with ≥4 positive lymph nodes
- interestingly, the mortality reduction benefit of PMRT was still evident in the 1,133 patients with 1-3 positive lymph nodes, even after receiving systemic therapy (HR = 0.78; 2p = 0.01)



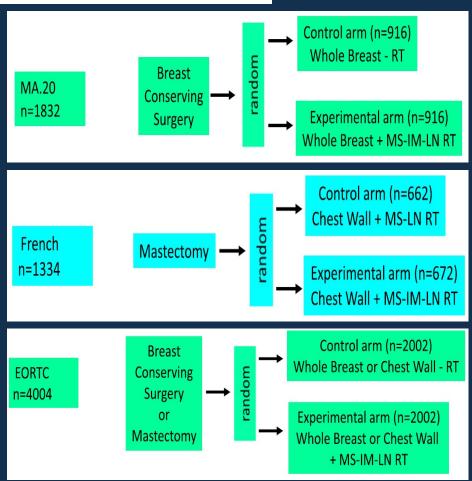
RESEARCH

Open Access

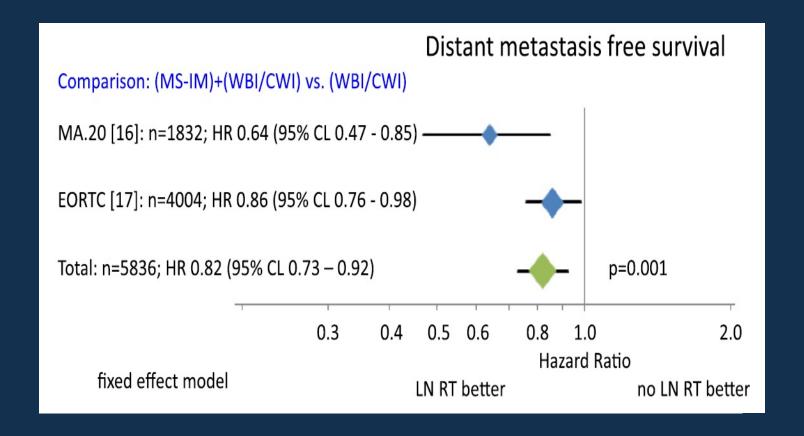
Adjuvant radiotherapy of regional lymph nodes in breast cancer - a meta-analysis of randomized trials

Wilfried Budach^{1*}, Kai Kammers², Edwin Boelke¹ and Christiane Matuschek¹ Budach *et al. Radiation Oncology* 2013, **8**:267

- meta-analysis
 three large randomized trials
 (n=7170)
 - MA.20 (n=1832)
 - EORTC 22922-10925 (n=4004)
 - French trial (n=1334)
- main eligibility criteria:
 - positive axillary LN (all trials)
 - LN negative disease with high risk for recurrence
- primary endpoint :
 - OS
- secondary endpoints:
 - DFS
 - DMFS



results

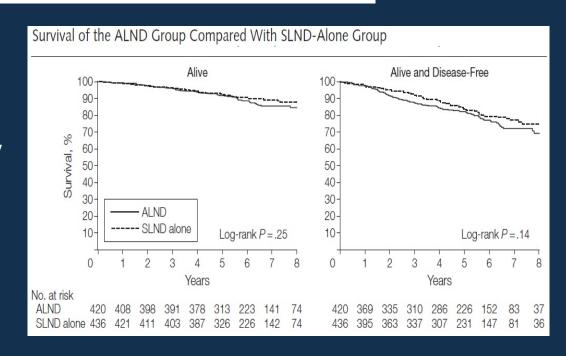


Axillary Dissection vs No Axillary Dissection in Women With Invasive Breast Cancer and Sentinel Node Metastasis

A Randomized Clinical Trial

Armando E. Giuliano, MD JAMA. 2011;305(6):569-575

- ACOSOG Z0011 trial
- "it is time to abandon ALND in early BCa Pts with a positive SN provided they receive systemic adjuvant treatment and whole breast RT"



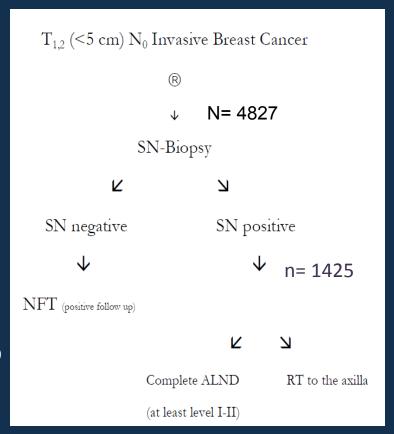
THE LANCET Oncology

Articles

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



- EORTC 10981/AMAROS
- 4827 patients
- primary end point recurrence rate after 5 y
- median follow up: 6.1 y
- 5-year axillary recurrence rate after a positive SNB: 0.54% (4/744) after ALND vs. 1.03% (7/681) after ART
- no significant differences between treatment arms regarding OS and DFS
- lymphedema significantly more often after ALND



εξελίξεις στην ακτινοθεραπεία μαστού

- hypofractionation
- Intensity Modulated Radiation Therapy (IMRT)
- Accelerated Partial Breast Irradiation (APBI)
 - external beam (3.85gy BID x 5 days)
 - interstitial brachytherapy: LDR, HDR
 - intracavitary:
 - ✓ intraoperative electrons: ELIOT
 - ✓ intraoperative Orthovoltage Photons: TARGIT-A
 - √ mammosite

hypofractionation

- shortened treatment course
 - improve experience for patients
 - improve access to breast conservation
- biology
 - increase dose per fraction without compromising BED
 - predict > local control
- cost effective
- concerns
 - toxicity

The UK Standardisation of Breast Radiotherapy (START) Trial B of radiotherapy hypofractionation for treatment of early breast cancer: a randomised trial

The START Trialists' Group* Lancet 2008; 371: 1098-107

