



EUROPEAN COMMISSION
JOINT RESEARCH CENTRE

Directorate F - Health, Consumers & Reference Materials (Ispra)
Health in Society

European Commission Initiative on Breast Cancer (ECIBC): European guidelines on breast cancer screening and diagnosis Evidence profile

Healthcare question	Should tailored screening with hand-held ultrasound (HHUS) based on high mammographic breast density, in addition to mammography, compared to mammography alone be used for early detection of breast cancer in asymptomatic women?
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Abbreviations	CI: Confidence interval RR: Risk ratio OR: Odds ratio

Certainty assessment							N° of patients		Effect		Certainty	Importance
N° of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	tailored screening with hand-held ultrasound (HHUS) based on high mammographic breast density, in addition to mammography	mammography alone	Relative (95% CI)	Absolute (95% CI)		
Breast cancer detection rate												
1 ¹	randomised trials	not serious	not serious	serious ^a	not serious	none	184/36859 (0.5%)	117/36139 (0.3%)	RR 1.54 (1.22 to 1.95)	175 more per 100,000 (from 71 more to 308 more)	⊕⊕⊕○ MODERATE	CRITICAL
Breast cancer detection rate												
5 ^{2,3,4,5,6}	observational studies	not serious	not serious	not serious	not serious	none	319/35471 (0.9%)	222/35471 (0.6%) ^b	OR 1.50 (1.23 to 1.82) ^{c,d}	310 more per 100,000 (from 143 more to 507 more)	⊕⊕○○ LOW	CRITICAL
Breast cancer mortality - not reported												
-	-	-	-	-	-	-	-	-	-	-	-	CRITICAL
Stage of breast cancer - not reported												
-	-	-	-	-	-	-	-	-	-	-	-	CRITICAL
Interval cancer rate - not reported												
-	-	-	-	-	-	-	-	-	-	-	-	CRITICAL
Recall rate - not reported												
-	-	-	-	-	-	-	-	-	-	-	-	CRITICAL

Rate of mastectomies - not reported												
-	-	-	-	-	-	-	-	-	-	-	-	CRITICAL
Provision of chemotherapy - not reported												
-	-	-	-	-	-	-	-	-	-	-	-	CRITICAL
Adverse effects - not reported												
-	-	-	-	-	-	-	-	-	-	-	-	CRITICAL

Explanations

- Asymptomatic women aged 40-49 years from Japan (57,7% were classified as BI-RADS 3-4). Results for women with dense breast will be reported in the near future (PMID 26547101).
- Median or mean of the control group of the included studies as appropriate unless otherwise specified.
- Relative effect was adjusted for paired design.
- Incremental cancer detection was 380 cancers per 100,000 (from 166 more to 690 more).

References

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