

Table 1. Absolute number of events for three different breast cancer screening intervals in average risk women between 40 to 49 years old.

Outcomes*	Triennial mammography	Biennial mammography	Annual mammography	Populations	GRADE Quality
Breast cancer death averted	5	37 to 131	53 to 180	Canada/Spain/Japan/U.S. (1-6)	⊕○○○ VERY LOW
QALYs	652	863 to 1,860	1,197 to 2330	Spain/U.S. (3,4)	⊕○○○ VERY LOW
Overdiagnosis	72	147 to 200	266 to 400	Spain/U.S. (3,4)	⊕○○○ VERY LOW
False positive results	9,532	12,509 to 59,200	19,448 to 117,500	Canada/Spain/Japan/U.S. (1-6)	⊕○○○ VERY LOW
Benign biopsies	229	428 to 9,700	919 to 11,400	Canada/Spain/U.S. (2-4)	⊕○○○ VERY LOW
Radiation induced breast cancer	---	41	62	U.S. (5)	⊕○○○ VERY LOW
Death by radiation induced breast cancer	---	8	11	U.S. (5)	⊕○○○ VERY LOW

Estimations from modelling studies. Number of events expressed as per 100,000 screened women

*Some estimations were calculated by subtracting the absolute number of events from overlapping age years of screening i.e. number of deaths averted by annual screening in 45 to 69 years' period minus estimates in 50 to 59 years' period

References:

1. Tsunematsu M. An Analysis of Mass Screening Strategies Using a Mathematical Model: Comparison of Breast Cancer Screening in Japan and the United States. *Epidemiol* 2015; 25(2): 162-171
2. Yaffe M. Clinical outcomes of modelling mammography screening strategies. *Health reports* 2015; 26 (12): 9-15
3. Vilapriyo E. Cost-effectiveness and harm-benefit analyses of risk-based screening strategies for breast cancer. *PLoS One*. 2014 Feb 3;9(2):e86858.
4. Mandelblatt J. Collaborative Modeling of the Benefits and Harms Associated With Different U.S. Breast Cancer Screening Strategies. *Ann Intern Med*. 2016; 164:215-225
5. Miglioretti D. Radiation-Induced Breast Cancer Incidence and Mortality From Digital Mammography Screening. *Ann Intern Med*. 2016; 164:205-214.
6. van Ravesteyn N. Tipping the Balance of Benefits and Harms to Favor Screening Mammography Starting at Age 40 Years. *Ann Intern Med*. 2012; 156:609-617.

Table 2. Absolute number of events for three different breast cancer screening intervals in average risk women between 50 to 69 years old.

Outcomes	Triennial mammography	Biennial mammography	Annual mammography	Populations	GRADE Quality
Breast cancer death averted	397 to 400	520 to 2036	740 to 2742	Japan/Spain/Canada/U.S. (1-3)	⊕○○○ VERY LOW
QALYs	4,386	4,714	6,901	Spain (3)	⊕○○○ VERY LOW
Overdiagnosis	500	609	904	Spain (3)	⊕○○○ VERY LOW
False positive results	24,547 to 69,900	29,039 to 89,500	42,606 to 152,800	Japan/Spain/Canada/U.S. (1-3)	⊕○○○ VERY LOW
Benign biopsies	2,166 to 14,100	2,487 to 14,400	3,455 to 16,300	Spain/Canada (2,3)	⊕○○○ VERY LOW
Radiation induced breast cancer*	---	27	49	U.S. (4)	⊕○○○ VERY LOW
Death by radiation induced breast cancer*	---	4	7	U.S. (4)	⊕○○○ VERY LOW

Estimations from modelling studies. Number of events expressed as per 100,000 screened women

*Results are estimated in a screening period from 50 to 74 years, as no study reporting in the 50 to 69 years was identified.

References:

1. *Tsunematsu M.* An Analysis of Mass Screening Strategies Using a Mathematical Model: Comparison of Breast Cancer Screening in Japan and the United States. *Epidemiol* 2015; 25(2): 162-171
2. Yaffe M. Clinical outcomes of modelling mammography screening strategies. *Health reports* 2015; 26 (12): 9-15
3. Vilapriyo E. Cost-effectiveness and harm-benefit analyses of risk-based screening strategies for breast cancer. *PLoS One.* 2014 Feb 3;9(2):e86858.
4. Miglioretti D. Radiation-Induced Breast Cancer Incidence and Mortality From Digital Mammography Screening. *Ann Intern Med.* 2016; 164:205-214.