Table 1. Comparison of outcomes in screening with digital mammography combined with tomosynthesis (DBT) compared to digital mammography alone (DM).

Reference	Study Type, Age of Patients and additional Comments	Number of Screening Examinations	Recall Rate	Change in Cancer detection rate/1000 women screened from DM to DBT screening (absolute change as well as percent change)
Skaane (Radiology 2013)	Prospective single site, multiple arms with multiple independent reads of same patients. Age: 50-69 years old Comments: Patients underwent both DM and DBT.Each arm interpreted by different radiologist with arbitration for positive studies, some patients included were symptomatic (i.e., lumps, discharge)	12,631 women	DM: 6.1% DBT: 5.3% (15% decrease)	DM: 6.1 DBT: 8.0 (increase of 1.9 cancers per 1000 screened; 31% increase)
Ciatto (Lancet 2013)	Prospective study at 2 sites. Age: 48 years and over	7292 women	DM: 5.0% DBT: 4.3%	DM: 5.3 DBT: 8.1

	Comments: Patients underwent both DM and DBT. Consecutive reads of DM then DM plus DBT also double reading and so difficult to assess for false negative DM rate		(17.2% decrease in conditional recall)	(increase of 2.8 cancers per 1000 screened; 53% increase)
Haas (Radiology 2013)	Observational study at network sites. Age: all patients presenting for screening Comments: Potential for bias since concurrent DM screening. No follow-up data for false negatives	DM: 7058 DBT: 6100	DM: 12.0% DBT: 8.4% (30% decrease)	DM: 5.2 DBT: 5.7 (increase of 0.5 cancers per 1000 screened; 9.6% increase)
Rose* (AJR 2013)	Observational study at single site. Age: all patients presenting for screening Comments: Potential for bias since concurrent DM screening. No follow-up data for false negatives	DM: 13,856 DBT: 9,499	DM: 8.7% DBT: 5.5% (37% decrease)	DM: 4.0 DBT: 5.4 (increase of 1.4 cancers per 1000 screened; 35% increase)
Greenberg* (AJR 2014)	Observational study at network sites. Age: all patients presenting for screening Comments: Potential for bias since concurrent DM screening. No follow-up	DM: 38,674 DBT: 20,943	DM: DBT: (16.1%	DM: 4.9 DBT: 6.3 (increase of 1.4 cancers per 1000 screened; 28.6%

	data for false negatives		decrease)	increase)
Friedewald* (JAMA 2014)	Observational, 13 U.S. sites combine MQSA outcome data. Age: all patients presenting for screening Comments: Potential for bias since concurrent DM screening. Also used historic DM for comparison. No patient level data or follow-up data for false negatives	DM: 281,187 DBT: 173,663	DM: 10.7% DBT: 9.1% (15% decrease)	DM: 4.2 DBT: 5.4 (increase of 1.2 cancers per 1000 screening; 29% increase)
McCarthy* (JNCI 2014)	Observational study at single site. Age: all patients presenting for screening Comments: Complete conversion to DBT with historic DM comparison. No follow-up data for false negatives.	DM: 10,729 DBT: 15,571	DM: 10.4% DBT: 8.8% (15% decrease)	DM: 4.6 DBT: 5.8 (increase of 1.2 cancers per 1000 screened; 26% increase)
Lorenco (Radiology	Observational study at single site. Age: all patients presenting for screening	DM: 12,577 DBT: 12,921	DM: 9.3% DBT: 6.4%	DM: 5.4 DBT: 4.6

2015)	Comments: Complete conversion to DBT with historic DM comparison. No follow-up data for false negatives		(31% decrease)	(*cancer detection decreased by 0.8 cancers per 1000 screened; 17% decrease)
Durand* (Radiology 2015)	Observational study at network sites. Age: all patients presenting for screening Comments: Potential for bias since concurrent DM screening. No follow-up data for false negatives	DM: 9,364 DBT: 8,591	DM: 12.3% DBT: 7.8% (36.6% decrease)	DM: 5.7 DBT: 5.9 (increase of 0.2 cancers per 1000 screened; 3.5% increase)
Conant* (BCR&T 2016)	Observational, multi-site. Patient level data with follow-up for false negative assessment. Age: all patients presenting for screening Comments: Potential for bias since concurrent DM screening.	DM: 142,882 DBT: 55,998	DM: 10.4% DBT: 8.7% (16% decrease; however, when adjusted for patient level factors, recall reduction was	DM: 4.4 DBT: 5.9 (increase of 1.5 cancers per 1000 screened; 34% increase). Also trend in decreased false negatives; 0.06 to 0.46/1000 for DM vs. DBT,

			21%)	n.s.)
Range			**Range of 9-37% decrease in recall**	**Range from a reduction of 0.2 to an increase of 2.8 cancers per 1000 screened** **Or, a 17% decrease to 53% increase in overall cancer detection rate**

*Trials which contain a degree of overlap of patient populations also reported in Friedewald et al[7]