

Presence of breast cancer information recorded in United Kingdom primary care databases: comparison of CPRD Aurum and CPRD GOLD

Supplementary Table 1. Malignant breast cancer, mastectomy, and breast cancer drug prescription codes in CPRD Aurum and CPRD GOLD for study population selection

Malignant Breast Cancer Diagnoses			
CPRD Aurum - Medcodes		CPRD GOLD – Read codes	
M1210642019	Malignant neoplasm of female breast	B34..00	Malignant neoplasm of female breast
M880261000006119	Carcinoma breast	B34..99	Carcinoma breast
M53185100000619	Ca female breast	B34..11	Ca female breast
M289137018	Malignant neoplasm of nipple and areola of female breast	B340.00	Malignant neoplasm of nipple and areola of female breast
M155417012	Malignant neoplasm of nipple of female breast	B340000	Malignant neoplasm of nipple of female breast
M155089014	Malignant neoplasm of areola of female breast	B340100	Malignant neoplasm of areola of female breast
M289140018	Malignant neoplasm of nipple or areola of female breast NOS	B340z00	Malignant neoplasm of nipple or areola of female breast NOS
M289141019	Malignant neoplasm of central part of female breast	B341.00	Malignant neoplasm of central part of female breast
M289142014	Malignant neoplasm of upper-inner quadrant of female breast	B342.00	Malignant neoplasm of upper-inner quadrant of female breast
M289143016	Malignant neoplasm of lower-inner quadrant of female breast	B343.00	Malignant neoplasm of lower-inner quadrant of female breast
M289144010	Malignant neoplasm of upper-outer quadrant of female breast	B344.00	Malignant neoplasm of upper-outer quadrant of female breast
M289145011	Malignant neoplasm of lower-outer quadrant of female breast	B345.00	Malignant neoplasm of lower-outer quadrant of female breast
M289146012	Malignant neoplasm of axillary tail of female breast	B346.00	Malignant neoplasm of axillary tail of female breast
M289147015	Malignant neoplasm; overlapping lesion of breast	B347.00	Malignant neoplasm, overlapping lesion of breast
M289148013	Malignant neoplasm of other site of female breast	B34y000	Malignant neoplasm of ectopic site of female breast
M289150017	Malignant neoplasm of other site of female breast NOS	B34y.00	Malignant neoplasm of other site of female breast
M289151018	Malignant neoplasm of female breast NOS	B34yz00	Malignant neoplasm of other site of female breast NOS
M880331000006115	Ca breast - NOS	B34z.00	Malignant neoplasm of female breast NOS
M292137017	Malignant tumour of breast	B34z.99	CA breast - NOS
M289149017	Malignant neoplasm of ectopic site of female breast	Byu6.00	[X]Malignant neoplasm of breast
M459378019	Local recurrence of malignant tumour of breast	B36..00	Local recurrence of malignant tumour of breast
M291299010	Neoplasm of breast	B933.11	Cystosarcoma phyllodes
M118291012	Cystosarcoma phyllodes	B342.99	CA Breast – upper – inner quadrant
M292137017	Malignant tumour of breast	B343.99	CA Breast – lower – inner quadrant

M880281000006112	Ca breast-upper;inner quadrant	B344.99	CA breast – upper – outer quadrant
M880291000006110	Ca breast-lower;inner quadrant	B345.99	CA breast – lower – outer quadrant
M880301000006111	Ca breast-upper;outer quadrant	B346.99	CA breast – axillary tail
M880311000006114	Ca breast-lower;outer quadrant	BB9J.00	[M]Paget's disease, mammary
M880321000006118	Ca breast - axillary tail	BB9J.11	[M]Paget's disease, breast
M314711000006117	Mammary Pagets disease	BB9K.00	[M]Paget's disease and infiltrating breast duct carcinoma
M314691000006115	Pagets disease of breast	BB9K000	[M]Paget's disease and intraductal carcinoma of breast
M1231363012	[M]Pagets disease and intraductal carcinoma of breast	BB9F.00	[M]Lobular carcinoma NOS
		BB9G.00	[M]Infiltrating ductular carcinoma
		BB9z.00	[M]Ductal, lobular or medullary neoplasm NOS
		BB9..00	[M]Ductal, lobular and medullary neoplasms
		BB90.00	[M]Intraductal carcinoma, noninfiltrating NOS
		BB91.00	[M]Infiltrating duct carcinoma
		BB91.11	[M]Duct carcinoma NOS
		BB91000	[M]Intraductal papillary adenocarcinoma with invasion
		BB91100	[M]Infiltrating duct and lobular carcinoma
		BB94.00	[M]Juvenile breast carcinoma
		BB94.11	[M]Secretory breast carcinoma
		BB96.00	[M]Noninfiltrating intraductal papillary adenocarcinoma
		BBM8.00	[M]Cystosarcoma phyllodes NOS
		BBM9.00	[M]Cystosarcoma phyllodes, malignant
Mastectomy			
CPRD Aurum - Medcodes		CPRD GOLD – Read codes	
M97901000006114	Total mastectomy	7130.00	Total mastectomy operations
M97251000006115	Total excision of breast operations	7130.11	Total excision of breast operations
M97851000006116	Total mastectomy & excision pectoral muscs & part chest wall	7130000	Total mastectomy & excision pectoral muscs & part chest wall
M266402016	Total mastectomy and excision of both pectoral muscles NEC	7130100	Total mastectomy and excision of both pectoral muscles NEC
M97871000006114	Total mastectomy and excision of pectoralis minor muscle	7130200	Total mastectomy and excision of pectoralis minor muscle
M266403014	Total mastectomy NEC	7130300	Total mastectomy NEC
M116564019	Subcutaneous mastectomy	7130400	Subcutaneous mastectomy
M410874017	Radical mastectomy including axillary lymph nodes	7130500	Radical mastectomy including axillary lymph nodes
M1479045012	Radical mastectomy	7130512	Radical mastectomy

M266409013	Simple mastectomy	7130600	Simple mastectomy
M46639019	Bilateral mastectomy	7130800	Bilateral mastectomy
M2158157014	Modified radical mastectomy	7130900	Modified radical mastectomy
M362611000000110	Skin sparing mastectomy	7130A00	Skin-sparing mastectomy
M266413018	Other specified total mastectomy	7130y00	Other specified total mastectomy
M266414012	Total mastectomy NOS	7130z00	Total mastectomy NOS
M1221495018	Mastectomy	7131.11	Other mastectomy operations
M393926011	Partial mastectomy	7131100	Partial mastectomy NEC
M815281000006116	Halsted radical mastectomy	7130511	Halsted radical mastectomy
M2692391012	Mastectomy of left breast	7130C00	Mastectomy of left breast
M2692806017	Mastectomy of right breast	7130B00	Mastectomy of right breast
M638611000006118	Elephantiasis-postmastectomy	G860.11	Elephantiasis-postmastectomy
M858671000006116	Subcut.mastect.+prosth.implant	7130499	SUBCUT.MASTECT.+PROSTH.IMPLANT
M474933010	Extended radical mastectomy		
M988531000006117	Mastectomy		
M858641000006112	Mastectomy		
M858691000006115	Mastectomy NOS		
M858661000006111	Extended simple mastectomy		
M932581000006111	Extended simple mastectomy		
M3524713018	Partial mastectomy of right breast		
M3524716014	Partial mastectomy of left breast		
M3524718010	Right subtotal mastectomy		
M3524719019	Left subtotal mastectomy		
M3524780010	Reconstruction of breast using myocutaneous flap with microvascular anastomosis following mastectomy		
M3542823010	Simple mastectomy of left breast		
M3542825015	Simple mastectomy of right breast		
M3542843016	Subcutaneous mastectomy of left breast with prosthetic implant		
M3542844010	Subcutaneous mastectomy of right breast with prosthetic implant		
M2629561000006110	Unilateral radical mastectomy		
M2732661000006110	Bilateral subcutaneous mastectomy		
M2732671000006115	Bilateral mastectomy with preservation of skin and nipple		
M2733091000006117	Bilateral mastectomy with excision of bilateral regional lymph nodes		

M2771211000006119	Modified radical mastectomy - bilateral	
M2857171000006113	Bilateral simple mastectomy	
M2866101000006113	Unilateral simple mastectomy	
M2866111000006111	Simple mastectomy	
M3547031000006119	Subtotal mastectomy	
M3579731000006114	Mastectomy with excision of regional lymph nodes	
M3579741000006116	Unilateral simple mastectomy with regional lymphadenectomy	
M3641121000006116	Unilateral mastectomy with preservation of skin and nipple	
M3641141000006111	Nipple preserving subcutaneous mastectomy	
M3675541000006119	Unilateral modified radical mastectomy	
M3675551000006117	Modified radical mastectomy - unilateral	
M3692861000006116	Unilateral mastectomy	
M3743871000006115	Bilateral radical mastectomy	
M3942391000006113	Unilateral extended simple mastectomy	
M3942401000006110	Unilateral mastectomy extended simple	
M4647121000006113	SM - Simple mastectomy	
M5106281000006115	Total mastectomy and excision of part of pectoral muscles and chest wall	
M5726301000006119	Subcutaneous mastectomy and prosthetic implant	
M5726311000006116	Extended simple mastectomy	
M6062141000006114	Unilateral subcutaneous mastectomy with synchronous implant	
M6068501000006119	Mastectomy with preservation of skin and nipple with synchronous implant	
M6205641000006119	Radical mastectomy including pectoral muscles and axillary lymph nodes	
M6205701000006111	Urban operation - extended radical mastectomy	
M6205761000006112	Halsted mastectomy	
M6557611000006110	Patey total mastectomy	
M7319261000006112	Total mastectomy and axillary dissection	
M7319271000006117	Simple mastectomy with excision of axillary lymph nodes	
M7324241000006119	Total mastectomy and axillary clearance	
M7324251000006117	Simple mastectomy with complete axillary lymphadenectomy	
M7335291000006110	Simple mastectomy with axillary lymph node sampling	
M7335791000006117	Mastectomy and axillary clearance	
M7878881000006119	Subcutaneous mastectomy of right breast	

M7878891000006116	Subcutaneous mastectomy of left breast	
M7878901000006117	Modified radical mastectomy of right breast	
M7878911000006119	Modified radical mastectomy of left breast	
M7881061000006116	Prophylactic bilateral mastectomy	
M12759271000006114	Other mastectomy operations	
Breast Cancer Drugs		
CPRD Aurum - ProdCodes		CPRD GOLD – Gemscript codes
<p><i>Tamoxifen</i> 514541000033113, 986741000033119, 988741000033118, 1408141000033119, 1408241000033114, 1408541000033111, 1408641000033112, 1408741000033115, 1408841000033113, 1409141000033113, 1409241000033118, 1900841000033113, 1900941000033117, 514641000033114, 988841000033111</p> <p><i>Anastrozole</i> 70141000033119, 80841000033116, 6112541000033112, 13146241000033111</p> <p><i>Letrozole</i> 572641000033111, 825841000033116</p> <p><i>Exemestane</i> 1991941000033113, 1992041000033119</p> <p><i>Fulvestrant</i> 3076841000033117, 3076941000033113</p> <p><i>Formestane</i> 600541000033112, 562841000033119</p> <p><i>Toremifene</i> 1451341000033118</p>		<p><i>Tamoxifen</i> 634009, 634010, 634011, 635009, 635010, 635011, 636009, 636010, 636011, 654001, 1300001, 1301001, 1353010, 1353011, 1354009, 1354010, 1354011, 1976009, 2281009, 2281010, 2281011, 2627001, 2628001, 2629001, 2906009, 2906010, 2906011, 3166009, 3166010, 3166011, 3642009, 3642010, 3865001, 4351007, 4407009, 4758009, 4759009, 4782001, 4782002, 4782003, 4783001, 4783002, 4809007, 4810007, 5505001, 5505002, 7070001, 7070002, 7070003, 7542020, 7543020, 7550020, 8780001, 8780002, 8780003, 11039001, 34518020, 34520020, 47537020, 50664020, 50665020, 50675020, 50747020, 53266020, 53270020, 53480020, 53481020, 53486020, 57131020, 57132020, 58407020, 58410020, 58413020, 59521020, 60635020, 62641020, 63522020, 65529020, 66868020, 66869020, 66870020, 66873020, 66874020, 69491020, 69492020, 74883020, 74884020, 74885020, 79824020, 79825020, 79826020, 84701020</p> <p><i>Anastrozole</i> 7640020, 7642020, 8867001, 8868001, 18435001, 39877020, 77385021, 77914020, 77945020, 80029020, 80031020, 99564020</p> <p><i>Letrozole</i> 7649020, 7650020, 10572001, 10573001, 39879020, 78127020, 78223020, 83693020, 83695020</p> <p><i>Exemestane</i> 7654020, 10167001, 10168001, 39880020, 78220020, 82779020, 82781020</p> <p><i>Fulvestrant</i> 87792020, G87794020</p> <p><i>Formestane</i> 74278020, 74281020,</p> <p><i>Toremifene</i> 82785020, 82796020</p>

Source Population:

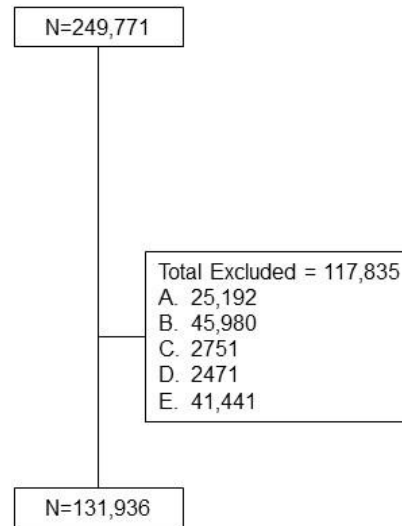
- Female had malignant breast cancer diagnosis, mastectomy, and/or breast cancer drug prescription) recorded during study period (1/1/2004 – 6/30/2019).
- Eligible date defined as first of the eligible events during the study period.
- Patients followed from the start of the electronic record or 1/1/2004 (whichever came later) to end of electronic record of 6/30/2019 (whichever came first)

Excluded patients where:

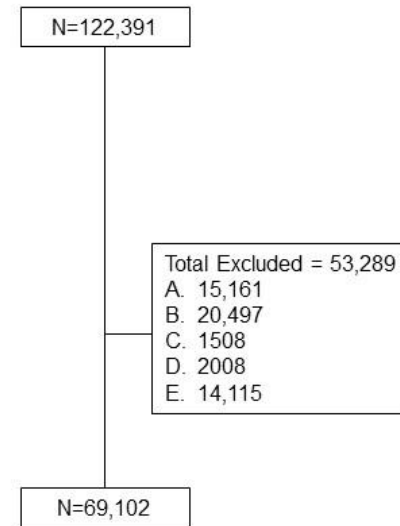
- A. Malignant cancer diagnosis (except non-melanoma skin or breast cancer) before eligible date
- B. Malignant breast cancer diagnosis before eligible date
- C. Mastectomy before eligible date
- D. Breast cancer drug prescription before eligible date
- E. Eligible date before or after the patient's follow up

Final Study Population

CPRD Aurum



CPRD GOLD



Supplementary Figure 1. Study Population Selection