## Appendix 1: Supplementary material [posted as supplied by author]

Breast cancer diagnoses and procedure codes

Description of condition	ICD-9 diagnosis or procedure code	CPT code
Breast cancer (overall)	174.x	G9131 (Invasive)
Breast cancer by stage:		
• 0	233.0	
• I	174.0-174.9	G9071,G9072
• II	Stages 0 - I AND 196.3	G9071,G9072
• III	Stages 0 - II AND 196.0, 198.2	
• IV	Stages 0 - III AND 196.1, 196.2,	
	1965, 196.6, 196.8, 196.9, 197.0-	
	197.8,198.0,198.1,198.3-	
	198.7,198.81,198.82	
Breast cancer by site (location):	174.0	
Nipple and areola		
Central portion of female breast	174.1	
Upper-inner quadrant of female breast	174.2	
Lower-inner quadrant of female breast	174.3	
Upper-outer quadrant of female breast	174.4	
Lower-outer quadrant of female breast	174.5	
Axillary tail of female breast	174.6	
Other specified sites of female breast	174.8	
• Malignant neoplasm of breast (female)	174.9	
unspecified		
Secondary Sites     Secondary and unspecified malignant	196.0	
<ul> <li>Secondary and unspecified malignant neoplasm of lymph nodes of head face</li> </ul>	190.0	
and neck		
Secondary and unspecified malignant	196.1	
neoplasm of intrathoracic lymph nodes	17011	
Secondary and unspecified malignant	196.2	
neoplasm of intra-abdominal lymph		
nodes		
Secondary and unspecified malignant	196.5	
neoplasm of lymph nodes of inguinal		
region and lower limb		
<ul> <li>Secondary and unspecified malignant</li> </ul>	196.6	
neoplasm of intrapelvic lymph nodes	1010	
• Secondary and unspecified malignant	196.8	
neoplasm of lymph nodes of multiple		
sites	196.9	
<ul> <li>Secondary and unspecified malignant neoplasm of lymph nodes site</li> </ul>	170.9	
unspecified		
Secondary malignant neoplasm of lung	197.0	
Secondary maignant neoplasm of tang     Secondary maignant neoplasm of	197.1	
mediastinum		
Secondary malignant neoplasm of pleura	197.2	
Secondary malignant neoplasm of other	197.3	
respiratory organs		
		1

Description of condition	ICD-9 diagnosis or procedure	CPT code
	code	
Secondary malignant neoplasm of small intestine including duodenum	197.4	
Secondary malignant neoplasm of large     intestine and rectum	197.5	
Secondary malignant neoplasm of retroperitoneum and peritoneum	197.6	
Malignant neoplasm of liver secondary	197.7	
Secondary malignant neoplasm of other digestive organs and spleen	197.8	
Secondary malignant neoplasm of kidney	198.0	
Secondary malignant neoplasm of other urinary organs	198.1	
Secondary malignant Neoplasm of Skin	198.2	
• Secondary malignant neoplasm of brain and spinal cord	198.3	
<ul> <li>Secondary malignant neoplasm of other parts of nervous system</li> </ul>	198.4	
• Secondary malignant neoplasm of bone and bone marrow	198.5	
Secondary malignant neoplasm of ovary	198.6	
<ul> <li>Secondary malignant neoplasm of adrenal gland</li> </ul>	198.7	
Secondary malignant neoplasm of breast	198.81	
<ul> <li>Secondary malignant neoplasm of genital organs</li> </ul>	198.82	
Breast cancer treatment		
• Surgery		<u>Mastectomy</u> New: 19301-19307 Old: 19140, 19160, 19162, 19180, 19182, 19200, 19220, 19240
Radiation		77280,77285,77290, 19296-19298
• Chemotherapy		90780- 90781,96401,96405,96 413, 96420,96449,96445,96 450,96542
Breast cancer screening and other		
Mammography	V76.11, V76.12	77057, G0204, G0202

Drug class	Drug name
Drugs that induce the CYP2D6	• Dexamethasone
enzyme	Rifampin
	Amiodarone
	Bupropion
	• Cimetidine
	• Clozapine
	• Desipramine
	• Duloxetine
	• Fluoxetine
Drugs that inhibit the CYP2D6	• Haloperidol
enzyme	• Lidocaine
	• Methadone
	• Paroxetine
	• Pimozide
	• Quinidine
	• Ritonavir
	• Sertraline
	• Ticlopidine

Appendix B: CYP2D6 enzyme inhibitors and inducers