

Supplemental online content for:

## Real-World Impact of a Decision Support Tool on Colony-Stimulating Factor Use and Chemotherapy-Induced Febrile Neutropenia Among Patients With Breast Cancer

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**eTable 1:** Codes for Identifying Chemotherapy Regimens in Medical Claims

**eTable 2:** Diagnosis Codes for Infections

**eTable 3:** Distribution of Intermediate- to High-Risk Chemotherapy Agent Administration

eTable 1. Codes for Identifying Chemotherapy Regimens in Medical Claims	
Agent	CPT (HCPCS)
Cyclophosphamide	J9070, J9080, J9090, J9091, J9092, J9093, J9094, J9095, J9096, J9097, J8530
Ifosfamide	J9208
Mechlorethamine	J9230
Melphalan HCl	J9245
Streptozocin	J9320
Carmustine	J9050
Dacarbazine	J9130, J9140
Thiotepa	J9340
Busulfan	J0594
Carboplatin	J9045
Cisplatin	J9060, J9062
Oxaliplatin	J9263
Azacitidine	J9025
Decitabine	J0894
Methotrexate	J9250, J9260
Pemetrexed	J9305
Gemcitabine	J9201
Cytarabine	J9098, J9100, J9110
Fluorouracil	J9190
Floxuridine	J9200
Cladribine	J9065
Fludarabine	J9185
Pentostatin	J9268
Vinblastine	J9360
Vincristine	J9370, J9375, J9380
Vinorelbine	J9390
Abraxane	J9264
Paclitaxel	J9265
Docetaxel	J9170, J9171
Bleomycin sulfate	J9040
Dactinomycin	J9120
Mitomycin	J9290, J9291
Daunorubicin	J9150, J9151
Doxorubicin and pegylated liposomal doxorubicin (doxil)	J9000, J9001, Q2049, Q2050, J9002
Epirubicin	J9178
Idarubicin	J9211
Plicamycin (mithramycin)	J9270
Mitoxantrone HCl	J9293
Valrubicin	J9357
Pegaspargase	J9266
Asparaginase	J9020

(continued)

eTable 1. Codes for Identifying Chemotherapy Regimens in Medical Claims (cont.)	
Agent	CPT (HCPCS)
Irinotecan HCl	J9206
Topotecan HCl	J9350, J9351
Aldesleukin	J9015
Denileukin diftitox	J9160
Rituximab	J9310
Trastuzumab	J9355
Gemtuzumab	J9300
Alemtuzumab	J9010
Bortezomib	J9041
Chlorambucil	S0172
Lomustine	S0178
Melphalan	J8600
Busulfan	J8510
Capecitabine	J8520, J8521
Mercaptopurine	S0108
Methotrexate	J8610
Fludarabine	J8562, Q2025, C9262
Etoposide	J8560, J9181
Gefitinib	J8565
Imatinib	S0088
Topotecan	J8705
Temozolomide	J8700, J9328, C9253
Procarbazine	S0182
Hydroxyurea	S0176
Bevacizumab	J9035, Q2024, C9257
Bendamustine	J9033
Brentuximab	C9287
Cabazitaxel	J9043, C9276
Clofarabine	J9027
Eribulin	J9179, C9280
Ixabepilone	J9207
Nelarabine	J9261
Ofatumumab	J9302
Pralatrexate	J9307, C9259
Romidepsin	J9315, C9265
Tositumomab	G3001
Panitumumab	J9303
Cetuximab	J9055
Ziv-aflibercept	C9296
Pertuzumab	J9306
Prescription drug, oral, chemotherapeutic, not otherwise specified	J8999

Abbreviations: CPT, Common Procedural Terminology; HCPCS, Healthcare Common Procedure Coding System.

eTable 2. Diagnosis Codes for Infections		
ICD-9-CM Diagnosis Code	Type	Code Description
035.xx	Bacterial	Erysipelas
036.xx	Bacterial	Meningococcal infection
038.xx	Bacterial	Streptococcus or staphylococcus bacterial infection
040.xx	Bacterial	Other bacterial diseases
041.xx	Bacterial	Bacterial infection in other diseases not specified
101.xx	Bacterial	Vincent's angina
320.xx	Bacterial	Bacterial meningitis
481.xx	Bacterial	Pneumococcal pneumonia
482.xx	Bacterial	Other bacterial pneumonia
681.xx	Bacterial	Cellulitis, finger/toe
682.xx	Bacterial	Other cellulitis or abscess
790.7x	Bacterial	Bacteremia
034.xx	Bacterial	Streptococcal throat/scarlet fever
039.xx	Fungal	Actinomycotic infections
112.xx	Fungal	Candidiasis
114.xx	Fungal	Coccidioidomycosis
115.xx	Fungal	Histoplasmosis
116.xx	Fungal	Blastomycotic infection
117.xx	Fungal	Other mycoses
118.xx	Fungal	Opportunistic mycoses
321.1x	Fungal	Meningitis in other fungal diseases
486.xx	None specific	Pneumonia, organism not otherwise specified
491.21	None specific	Acute exacerbation of obstructive chronic bronchitis
038.xx	None specific	Septicemia
461.xx	None specific	Acute sinusitis
462.xx	None specific	Acute pharyngitis
463.xx	None specific	Acute tonsillitis
485.xx	None specific	Bronchopneumonia with organism not otherwise specified
996.6x	None specific	Infection or inflammation of device/graft
999.3x	None specific	Infectious complication of medical care not otherwise classified
038.9x	None specific	Sepsis (unspecified)
995.92	None specific	Sepsis (unspecified)
995.91	None specific	Sepsis (unspecified)
415.12	None specific	Septic pulmonary embolism
449.xx	None specific	Septic arterial embolism
785.52	None specific	Septic shock, septic myocarditis
391.2x	None specific	Septic myocarditis
422.92	None specific	Septic myocarditis
098.5x	None specific	Septic myocarditis
038.4x	None specific	Gram negative sepsis
131.xx	None specific	Parasitic infection
130.xx	None specific	Parasitic infection
136.3x	None specific	Parasitic infection
996.62	None specific	Intravenous-line infection
999.31	None specific	Intravenous-line infection
999.32	None specific	Intravenous-line infection
999.33	None specific	Intravenous-line infection
996.62	None specific	Intravenous-line infection
042.xx	HIV infection	HIV infection

eTable 3. Distribution of Intermediate- to High-Risk Chemotherapy Agent Administration				
	Intervention States (Subject to the Tool)		Nonintervention States (Not Subject to the Tool)	
	Pre-Implementation n (%)	Post-Implementation n (%)	Pre-Implementation n (%)	Post-Implementation n (%)
All	1,991 (100)	2,010 (100)	1,569 (100)	1,654 (100)
Moderate- to high-risk agents				
No	186 (9.3)	246 (12.2)	146 (9.3)	198 (12.0)
Yes	1,805 (90.7)	1,764 (87.8)	1,423 (90.7)	1,456 (88.0)
Fluorouracil				
No	1,949 (97.9)	1,978 (98.4)	1,507 (96)	1,601 (96.8)
Yes	42 (2.1)	32 (1.6)	62 (4.0)	53 (3.2)
Trastuzumab <sup>a</sup>				
No	1,486 (74.6)	1,482 (73.7)	1,242 (79.2)	1,267 (76.6)
Yes	505 (25.4)	528 (26.3)	327 (20.8)	387 (23.4)
Epirubicin				
No	1,976 (99.2)	1,995 (99.3)	1,561 (99.5)	1,640 (99.2)
Yes	15 (0.8)	15 (0.8)	8 (0.5)	14 (0.8)
Pertuzumab <sup>a</sup>				
No	1,953 (98.1)	1,757 (87.4)	1,569 (100)	1,472 (89.0)
Yes	38 (1.9)	253 (12.6)	0	182 (11.0)
Carboplatin				
No	1,546 (77.6)	1,564 (77.8)	1,335 (85.1)	1,323 (80.0)
Yes	445 (22.4)	446 (22.2)	234 (14.9)	331 (20.0)
Paclitaxel				
No	1,855 (93.2)	1,903 (94.7)	1,425 (90.8)	1,515 (91.6)
Yes	136 (6.8)	107 (5.3)	144 (9.2)	139 (8.4)
Doxorubicin				
No	1,398 (70.2)	1,385 (68.9)	933 (59.5)	1,061 (64.1)
Yes	593 (29.8)	625 (31.1)	636 (40.5)	593 (35.9)
Cyclophosphamide				
No	856 (43.0)	919 (45.7)	592 (37.7)	726 (43.9)
Yes	1,135 (57.0)	1,091 (54.3)	977 (62.3)	928 (56.1)

<sup>a</sup>Pertuzumab and trastuzumab were considered agents with moderate to high myelosuppressive risk, although a previous publication listing high-risk regimens did not include pertuzumab and rated trastuzumab as low risk.<sup>28</sup>