Supplemental Digital Content 4: Specificity and negative predictive value (NPV) of SEER to identify hormone therapy and percent of individuals with unknown treatment status from SEER with hormone claims identified in Medicare by patient and tumor characteristics among men with prostate cancer[a].

	Specificity (95% CI)[b]		NPV (95% CI)[b]		Unknown in SEER		% with Medicare claims found
					N	%	
Overall							
12 month window	90.9	(90.7, 91.1)	78.4	(78.1, 78.7)	4258	3.8	46.5
8 month window	90.4	(90.1, 90.6)	79.4	(79.1, 79.7)	4258	3.8	45.2
4 month window	88.6	(88.3, 88.8)	81.0	(80.7, 81.3)	4258	3.8	42.7
Stage at Diagnosis[c]							
In situ	--		--				
Localized/Regional	92.2	(92.0, 92.4)	79.4	(79.1, 79.7)	3410	3.4	46.2
Distant	54.1	(51.9, 56.3)	60.5	(58.3, 62.8)	153	2.8	66.7
Unstaged	90.9	(89.7, 92.1)	66.2	(64.6, 67.9)	694	16.7	43.4
Age at Diagnosis							
65-69 years	93.3	(92.9, 93.6)	87.1	(86.6, 87.5)	1056	3.2	34.8
70-74 years	91.4	(91.0, 91.8)	81.5	(81.0, 82.1)	1115	3.5	45.3
75-79 years	89.3	(88.7, 89.8)	72.6	(71.9, 73.4)	966	3.8	51.8
80-84 years	86.6	(85.7, 87.4)	64.7	(63.7, 65.8)	679	4.8	54.9
85+ years	85.9	(84.7, 87.0)	62.3	(60.9, 63.7)	442	5.7	52.9
Race/Ethnicity							
NH White	91.9	(91.6, 92.1)	79.4	(79.1, 79.8)	3478	4.1	46.7
NH Black	85.1	(84.2, 85.9)	78.1	(77.1, 79.1)	409	3.7	45.7
Hispanic	87.9	(86.8, 89.0)	73.2	(71.9, 74.5)	151	2.2	44.4
NH AI/AN	79.4	(73.2, 85.6)	80.9	(74.8, 86.9)	4	1.5	0.0
NH API	89.4	(88.1, 90.7)	75.4	(73.7, 77.1)	90	2.1	56.7
NH Other/Unknown	94.6	(93.4, 95.7)	66.8	(64.8, 68.7)	126	4.0	40.5
Registry[d]							
A	87.0	(85.9, 88.1)	78.5	(77.2, 79.8)			45.4
B	89.9	(89.0, 90.8)	75.5	(74.3, 76.7)			54.5
C	92.3	(91.5, 93.2)	78.0	(76.8, 79.3)			56.8
D	91.3	(90.1, 92.4)	77.9	(76.3, 79.5)			18.2
E	88.2	(87.1, 89.2)	73.5	(72.2, 74.8)			47.9
F	94.0	(93.3, 94.6)	78.5	(77.5, 79.4)			68.1
G	90.9	(90.5, 91.3)	81.1	(80.5, 81.6)			48.0
H	87.0	(86.2, 87.8)	68.4	(67.5, 69.3)			45.4
I	95.0	(94.1, 95.8)	82.1	(80.7, 83.4)			37.5
J	95.0	(94.1, 95.8)	85.8	(84.6, 87.0)			40.0
K	94.2	(93.5, 94.9)	86.8	(85.8, 87.7)			31.3
L	86.4	(83.9, 88.8)	75.0	(72.1, 77.8)			53.6

	Specificity (95% CI)[b]		NPV (95% CI)[b]		Unknown in SEER		% with Medicare claims found
					N	%	
Year of Diagnosis							
2000	88.5	(87.8, 89.2)	75.7	(74.8, 76.6)	845	5.7	42.5
2001	89.4	(88.7, 90.0)	77.5	(76.7, 78.3)	505	3.1	51.9
2002	90.6	(90.0, 91.2)	76.7	(75.9, 77.5)	539	3.1	47.9
2003	91.4	(90.9, 92.0)	77.0	(76.2, 77.8)	725	4.5	49.4
2004	91.6	(91.0, 92.2)	79.2	(78.4, 79.9)	544	3.3	48.7
2005	91.7	(91.1, 92.3)	80.6	(79.8, 81.3)	543	3.6	42.7
2006	92.5	(92.0, 93.1)	81.6	(80.9, 82.3)	557	3.5	44.2

NH=Non-Hispanic, API=Asian/Pacific Islander, AI/AN=American Indian/Alaskan Native

-- Cell counts were suppressed if less than 16 individuals and statistics were not calculated due to at least one cell size less than 5

[a]A 12-month post-diagnosis window was used to identify treatment using Medicare claims (gold standard) unless otherwise specified

[b]95% confidence intervals computed using normal approximation

[c]SEER Historic Stage A

[d]Sample sizes omitted to preserve anonymity of the registries. Data from registries in California were combined (Greater California, Los Angeles, San Jose-Monterey) and data from registries in Georgia were combined (Atlanta and Rural Georgia)