

## Supplemental Online Content

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## **SUPPLEMENTARY MATERIALS**

### **INCIDENCE OF METASTATIC PROSTATE CANCER IN UNITED STATES CONTINUES TO INCREASE**

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**Supplementary tables**

**eTable 1. Yearly Variations in Prostate Cancer Presentation at Diagnosis - SEER Database 2004-2018- Non-Hispanic White. \* Rates are per 100,000 and age-adjusted to the 2000 US Std Population standard**

Delay-Adjusted Prostate Cancer Incidence (per 100 000 Men) in men < 75 old															
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
No. of patients	28,836	27,548	31,442	33,924	32,454	32,899	32,159	32,928	27,673	26,932	25,085	26,508	27,992	29,511	28,979
PSA, ng/mL, median (IQR)	6.0	6.0	5.9	5.8	5.7	5.7	5.8	5.8	6.0	6.2	6.4	6.6	6.7	6.7	6.8
	4.6-9	4.5-9	4.5-8.8	4.4-8.5	4.4-8.4	4.4-8.4	4.5-8.5	4.4-8.5	4.6-9	4.7-9.5	4.7-9.9	4.9-10.2	4.9-10.3	5-10.5	5-10.5
Incidence rate Invasive PCa	372.68	350.3	391.34	409.76	379.29	372.2	355.06	355.81	290.56	276.1	252.54	261.8	273.05	287.2	287.84
Incidence rate Localized PCa	303.9	285.6	323.54	338.42	309.15	301.87	286.13	287.67	230.65	216.95	193.9	197.47	198.95	207.91	213.22
Incidence rate Localized + regional	356.18	333.72	374.38	392.93	360.52	353.46	335.69	336.49	272.71	257.1	232.93	240.81	244.25	255.31	259.75
Localized/metastatic PCa	32.16	29.29	32.81	36.86	32.44	32.11	28.39	26.42	21.82	19.49	15.96	15.60	14.31	13.56	13.67
Metastasis *															
Summary Stage (distant)	9.66	9.85	10.02	9.35	9.76	9.54	10.18	10.94	10.7	11.28	12.22	12.85	14.38	15.59	15.88
AJCC M1	9.45	9.75	9.86	9.18	9.53	9.4	10.08	10.89	10.57	11.13	12.15	12.66	13.9	15.33	15.6
AJCC N1	6.54	6.67	6.49	7.18	7.48	7.29	7.83	8.25	8.13	8.59	10.3	12	12.77	14.63	14.91
T Stage *															
T1-T2	326.91	306.39	344.83	360.29	328.29	319.65	302.31	304.41	245.12	230.3	206.32	209.82	205.31	211.98	221.81
T3-T4	36.32	34.55	37.05	39.77	39.39	40.77	40.82	40.33	35.96	35.01	35.56	40.46	45.13	47.73	47.72
Gleason grade *															
≤6	189.87	176.24	190.26	194.00	166.20	126.76	170.01	167.11	128.21	113.39	96.26	94.45	93.51	93.62	89.24
7	120.81	117.62	138.04	151.24	146.96	119.66	121.02	123.88	103.54	100.79	94.82	101.98	111.77	117.81	119.60
8-10	40.25	40.30	44.67	45.15	42.10	34.57	44.74	44.73	41.38	43.34	43.34	46.79	50.10	55.22	53.42
Delay-Adjusted Prostate Cancer Incidence (per 100 000 Men) and in men ≥75 old															
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
No. of patients	10,904	10,374	11,048	11,009	9,510	8,855	8,650	8,388	6,939	6,820	6,631	7,128	7,396	7,836	8,123
PSA, ng/mL, median (IQR)	9.5	9.3	9.1	8.8	8.6	8.5	9.0	8.7	9.7	10.1	10.8	11.2	11.0	11.0	10.9
	6.1-19.3	5.9-18.3	5.9-17.7	5.6-16.7	5.5-16.95	5.5-17	5.7-18.45	5.7-17.6	44371.0	6.2-26.4	6.4-29.4	6.7-30.1	6.6-30	6.6-27.4	6.6-29.3
Incidence rate Invasive PCa	804.22	757.11	799.6	792.19	682.41	634.48	618.36	598.02	490.46	476.48	456.96	485.62	498.67	522.33	535.25
Incidence rate Localized PCa	638.21	596.08	635.26	623.37	520.56	474.92	454.6	453.19	343.37	324.35	299.98	313.59	312.77	326.23	343.24
Incidence rate Localized + regional	670.48	624.4	666.32	654.55	551.24	505.45	489.52	484.86	372.99	351.29	331.28	350.07	354.83	370.64	389.49
Localized/metastatic PCa	10.69	10.00	10.08	10.35	9.37	8.66	7.92	8.20	5.26	4.74	4.21	3.79	3.85	3.69	3.73
Metastasis *															
Summary Stage (distant)	60.27	60.42	63.9	61.16	56.64	55.6	57.88	55.66	65.58	68.93	71.8	83.31	82.67	91.52	92.66
AJCC M1	59.71	59.58	63.01	60.22	55.57	54.85	57.39	55.3	65.24	68.45	71.2	82.78	81.25	88.41	92
AJCC N1	8.94	8.9	10.18	11.97	13.24	12.45	15.14	15.87	17.71	19.68	23.44	27.12	31.43	33.16	37.01
T Stage *															
T1-T2	667.89	625.37	667.64	657.76	550.49	501.88	483.93	483.78	375.82	358.93	332.86	352.17	335.09	352.48	384.37
T3-T4	40.89	35.85	37.56	35.25	34.92	34.92	39.5	35.28	35.22	33.16	40.01	46.35	51.73	54.74	54.96
Gleason grade *															
≤6	285.52	262.05	266.52	254.49	203.06	137.50	153.01	156.88	104.74	102.75	84.33	80.28	82.56	81.92	78.47
7	223.98	218.88	237.06	249.91	214.14	145.68	193.17	192.93	140.74	132.88	121.07	137.62	140.79	151.92	155.01
8-10	166.09	155.60	176.27	168.22	145.52	108.19	159.21	152.30	137.30	130.44	141.23	152.28	166.25	174.89	178.51

\* Rates are per 100,000 and age-adjusted to the 2000 US Std Population standard

**eTable 2. Yearly Variations in Prostate Cancer Presentation at Diagnosis - SEER Database 2004-2018- Non-Hispanic Black. \* Rates are per 100,000 and age-adjusted to the 2000 US Std Population standard**

Delay-Adjusted Prostate Cancer Incidence (per 100 000 Men) in men < 75 old															
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
No. of patients	6,052	6,018	6,594	7,178	7,156	7,590	7,463	7,673	6,967	6,835	6,449	6,969	7,421	7,820	7,752
PSA, ng/mL, median (IQR)	7.1	7.0	6.9	6.8	6.6	6.7	6.8	6.6	6.9	7.0	7.4	7.6	7.6	7.7	7.8
	5-12.5	5-12.8	4.9-12.4	4.8-11.7	4.8-11.6	4.8-11.6	4.9-12	4.8-11.2	4.9-12.2	44329.0	5.2-14	5.3-14	5.3-14.1	5.3-14.3	5.4-15.1
Incidence rate Invasive PCa	619.2	599.47	632	658.39	625.98	636.1	603.02	598.26	528.05	501.38	455.75	476.63	497.21	514.75	512.58
Incidence rate Localized PCa	505.08	489.5	528.26	545.95	522.73	522.92	490.37	488.92	422.81	401.49	354.32	370.84	368.99	386.3	389.05
Incidence rate Localized + regional	577.32	551.01	587.28	611.91	581.69	587.86	555.82	548.69	479.4	453.79	405.99	428.03	429.9	448	447.36
Localized/metastatic PCa	19.09	17.23	17.91	20.00	19.02	19.70	17.22	16.50	14.37	12.76	11.16	12.03	10.45	10.94	9.90
Metastasis *															
Summary Stage (distant)	27.02	29.22	29.84	27.84	27.68	26.91	28.62	29.77	29.43	31.68	31.89	31.08	36.63	36.22	39.68
AJCC M1	26.46	28.41	29.5	27.3	27.48	26.54	28.47	29.64	29.43	31.47	31.75	30.83	35.32	35.32	39.29
AJCC N1	9.78	12.42	13.39	13.56	11.83	15.51	17.41	14.03	16.01	16.99	20.41	22.53	26.46	28.37	28.16
T Stage *															
T1-T2	544.82	522.74	561.55	581.57	555.46	557.25	520.87	519.76	451.35	430.63	381.97	397.3	388.49	383.98	409.38
T3-T4	53.14	50.82	46.26	51.1	47.27	51.3	56.42	51.1	49.59	46.19	47.38	52.4	61.31	64.66	61.45
Gleason grade *															
≤6	284.36	262.43	269.11	269.84	247.35	196.52	239.74	240.25	193.95	174.92	147.15	150.15	148.72	147.27	140.27
7	209.19	213.98	232.07	256.12	242.97	212.65	234.55	228.29	210.57	203.22	184.56	198.16	211.95	219.69	221.24
8-10	83.35	85.53	92.82	90.57	85.23	75.43	94.19	92.51	88.55	86.20	87.76	94.15	102.98	107.31	103.14
Delay-Adjusted Prostate Cancer Incidence (per 100 000 Men) and in men >=75 old															
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
No. of patients	1,454	1,293	1,224	1,309	1,229	1,205	1,164	1,143	1,018	981	907	936	1,029	1,105	1,083
PSA, ng/mL, median (IQR)	13.0	12.9	11.9	11.0	11.5	10.7	11.7	11.0	12.3	11.8	14.5	14.3	14.0	13.6	14.0
	7.4-34.7	7.2-37.4	6.75-28.4	6.5-32.8	6.6-33.7	6.5-31.4	6.6-35.2	6.2-30.4	6.8-36	7-38.8	7.7-57.5	7.7-61	7.8-52	7.2-46.8	7.7-49.5
Incidence rate Invasive PCa	1,315.02	1,149.24	1,067.52	1,122.70	1,034.01	986.41	925.58	878.81	757.83	710.86	637.91	634.53	673.99	705.14	676.78
Incidence rate Localized PCa	958.08	840.2	801.52	842.16	746.99	678.47	635.45	636.34	517.62	467.23	384.73	388.44	390.92	411.24	437.49
Incidence rate Localized + regional	991.82	872.09	832.78	873.1	782.26	708.18	671.43	661.29	539.23	493.6	409.46	415.16	425.71	445.73	472.67
Localized/metastatic PCa	6.74	6.27	7.37	8.03	7.17	5.78	5.76	6.29	5.34	4.53	3.57	3.26	3.12	2.83	3.53
Metastasis *															
Summary Stage (distant)	143.94	133.92	108.72	106.81	105.96	117.29	110.41	101.9	96.92	103.87	109.17	119.76	123.82	150	125.51
AJCC M1	142.24	133.92	108.72	104.94	104.15	117.29	110.41	101.18	96.92	103.19	107.63	118.99	125.24	145.26	124.11
AJCC N1	15.74	19.62	18.8	20.64	22.72	25.75	19.53	23.91	21.05	20.05	33.8	32.01	33.33	50.06	37.93
T Stage *															
T1-T2	1,028.01	912.84	847.05	893.79	799.35	735.95	691.25	693.82	574.18	512.53	428.78	430.58	432.56	436.65	491.33
T3-T4	55.32	54.86	50.94	49.5	55.47	41.66	51.53	33.11	27.17	45.64	40.88	41.22	49.38	55.46	45.69
Gleason grade *															
≤6	364.32	338.23	296.04	306.61	269.69	194.44	227.79	197.17	167.96	141.13	94.89	101.24	102.58	105.42	110.56
7	402.02	312.30	314.01	360.81	317.64	242.12	284.41	294.32	216.74	193.61	178.05	171.40	198.55	203.04	198.33
8-10	254.07	251.25	237.50	234.42	224.40	166.20	218.30	212.00	184.44	188.14	161.85	177.79	209.19	198.90	208.40

\* Rates are per 100,000 and age-adjusted to the 2000 US Std Population standard

**eTable 3. Yearly Variations in Prostate Cancer Presentation at Diagnosis - SEER Database 2004-2018- Hispanic. \* Rates are per 100,000 and age-adjusted to the 2000 US Std Population standard**

Delay-Adjusted Prostate Cancer Incidence (per 100 000 Men) in men < 75 old															
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
No. of patients	3,474	3,406	3,633	3,932	3,999	4,323	4,194	4,391	3,991	3,884	3,857	4,125	4,261	4,583	4,439
PSA, ng/mL, median (IQR)	7.1	6.7	7.0	6.7	6.6	6.5	6.6	6.5	6.7	7.0	7.2	7.3	7.3	7.4	7.5
	5.1-11.7	4.9-11	5-11.6	4.9-11	4.8-10.8	4.8-10.5	4.9-10.5	4.8-10.2	4.9-10.6	5.1-11.8	5.1-12.7	5.2-13	5.2-13	5.3-13	5.4-13.1
Incidence rate Invasive PCa	325.19	298.8	304.52	311.01	298.33	304.19	279.01	278.57	239.04	221.29	206.97	209.9	207.54	214.45	202.3
Incidence rate Localized PCa	256.33	234.39	244.26	240.54	229.26	231.88	211.4	213.22	182.16	162.27	148.63	148.04	141.33	141.87	134.52
Incidence rate Localized + regional	301.63	275.63	282.99	281.51	269.37	272.6	249.42	250.06	212.44	192.28	179.35	181.96	171.87	173.21	166.06
Localized/metastatic PCa	19.96	16.21	19.87	18.87	20.15	17.05	18.94	17.21	13.63	11.50	10.82	10.74	9.52	10.03	8.72
Metastasis *															
Summary Stage (distant)	13.64	14.62	12.29	12.92	11.52	13.68	11.27	12.59	13.41	14.11	13.97	14.02	15.3	14.5	15.71
AJCC M1	12.84	14.46	12.29	12.75	11.38	13.6	11.16	12.39	13.36	14.11	13.78	13.78	14.85	14.15	15.42
AJCC N1	6.8	6.74	6.75	7.17	8.1	7.17	7.3	8.05	8.46	8.7	11.08	10.94	12.34	11.83	12.38
T Stage *															
T1-T2	279.78	256.23	263.41	261.09	246.69	247.78	226.93	227.26	195.32	174.68	160.91	159.7	148.2	146.1	141.44
T3-T4	32.47	29.17	28.42	30.15	30.17	33.21	31.18	31.41	26.14	27.71	28.38	31.6	30.67	32.23	31.83
Gleason grade *															
≤6	163.11	142.46	135.23	139.26	124.44	102.04	131.90	130.31	107.31	91.65	81.30	74.41	69.09	70.87	62.01
7	97.17	95.63	104.69	106.54	108.62	85.82	86.57	89.51	77.83	73.78	70.52	74.62	78.33	76.25	72.01
8-10	42.12	37.47	41.48	42.62	41.90	33.74	41.50	39.38	36.07	37.71	37.89	41.77	41.97	43.32	40.50
Delay-Adjusted Prostate Cancer Incidence (per 100 000 Men) and in men >=75 old															
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
No. of patients	3,474	3,406	3,633	3,932	3,999	4,323	4,194	4,391	3,991	3,884	3,857	4,125	4,261	4,583	4,439
PSA, ng/mL, median (IQR)	11.0	10.5	10.0	9.6	9.6	9.9	10.4	10.6	12.0	11.8	11.8	14.1	13.0	15.2	13.6
	6.8-26	6.6-22.1	6.1-20.4	6.3-20	6.2-20.45	6.3-22.1	6.6-26.5	6.4-24.4	7-31.9	6.75-41.25	6.9-34	7.3-51.5	7.1-37.5	7.95-57.2	7.4-46.9
Incidence rate Invasive PCa	897.96	855.3	795.11	784.74	764.52	671.52	660.11	575.63	512.3	513.58	442.82	446.98	451.28	472.6	458.9
Incidence rate Localized PCa	675.86	622.73	601.73	567.1	542.83	447.62	435.93	394.92	338.16	319.82	264.66	255.8	253.37	248.66	249.54
Incidence rate Localized + regional	706.94	657.85	642.79	600.94	567.98	475.96	466.66	417.8	367.7	350.65	290.11	287.51	280.48	278.45	285.07
Localized/metastatic PCa	7.51	8.27	9.81	10.06	8.04	7.45	6.04	5.83	5.25	4.47	4.37	3.49	3.56	2.96	2.80
Metastasis *															
Summary Stage (distant)	91.53	76.03	61.98	56.97	68.16	60.1	73.43	67.75	65.51	71.56	60.52	73.33	72.68	86.99	90.49
AJCC M1	90.05	75.3	61.34	56.35	67.53	60.1	72.18	67.75	64.41	71.56	60.52	73.33	71.26	83.93	89.2
AJCC N1	^	14.17	12.68	11.79	10.65	16.22	15.4	15.18	22.16	21.62	18.58	25.69	26.62	33.67	39
T Stage *															
T1-T2	711.75	663.62	633.95	592.71	573.99	477.71	475.65	423.25	363.92	352.47	293.36	291.44	265.62	276.69	278.35
T3-T4	44.3	41.63	45.77	39.51	34.52	37.19	39.66	25.42	38.19	37.09	30.42	36.4	37.99	32.93	49.67
Gleason grade *															
≤6	302.55	281.25	265.90	273.18	228.09	141.28	196.59	168.30	120.59	113.92	83.44	63.61	78.62	70.91	68.40
7	263.67	227.07	231.05	215.57	238.22	133.05	194.83	172.03	141.15	128.42	115.54	128.00	127.50	115.68	102.66
8-10	161.11	174.95	158.98	167.79	160.73	112.86	155.25	133.59	134.45	155.55	130.19	134.72	132.26	157.16	146.53

\* Rates are per 100,000 and age-adjusted to the 2000 US Std Population standard

^ Statistic not displayed due to fewer than 16 cases.

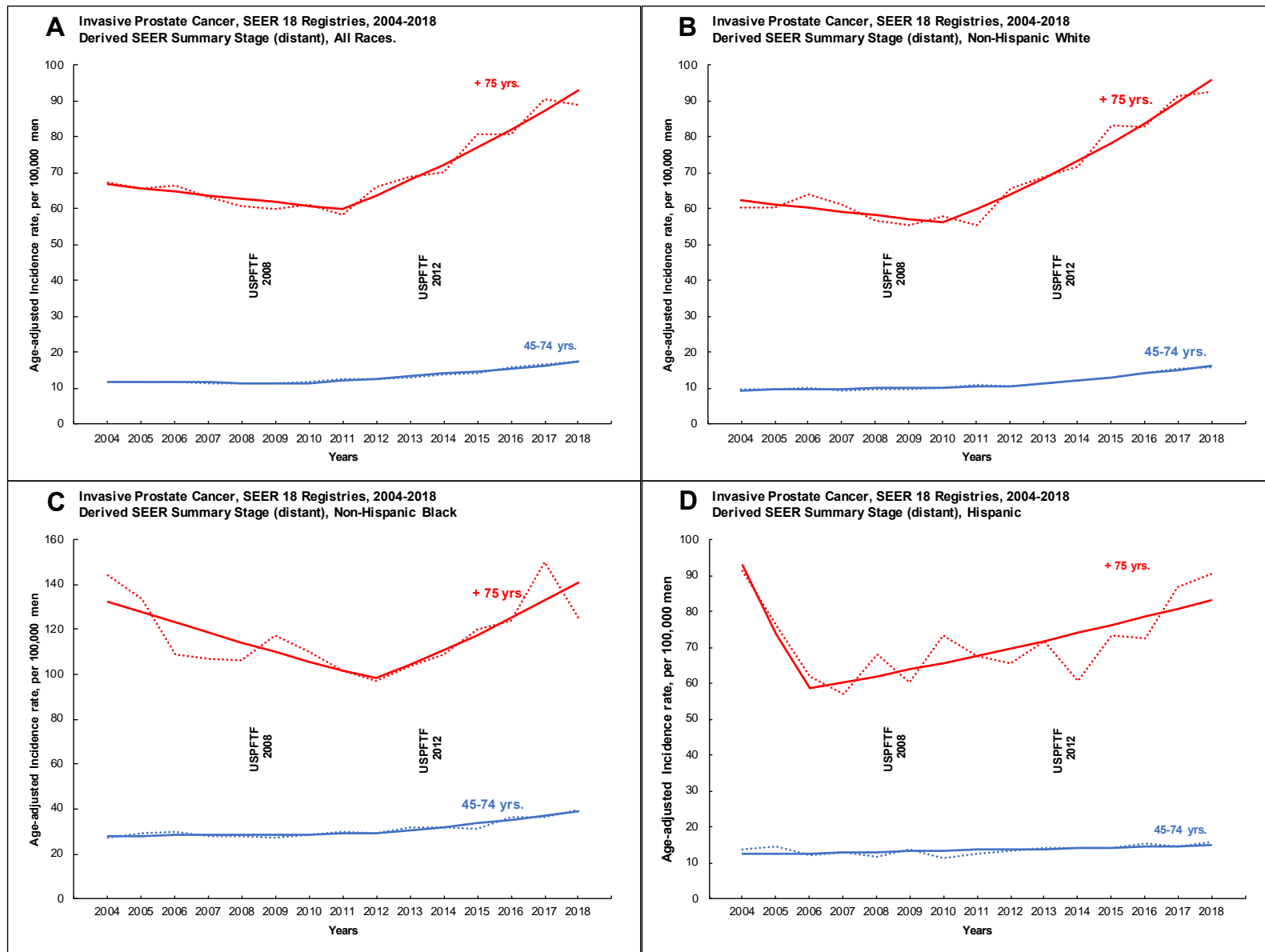
*eTable 4. Age-Adjusted metastatic Prostate Cancer rates and Joinpoint analysis (SEER 18, 2004-2018)*

		Segment start	Segment End	APC	APC 95% LCL	APC 95% UCL	Test Statistic	P-Value
<b>Invasive Prostate Cancer, SEER 18 Registries, 2004-2018 Derived AJCC Summary stage (distant)</b>								
All Races	45-74	2004	2010	-0.4	-1.7	1.1	-0.6	0.585
		2010	2018	5.3	4.5	6	15.9	<0.001
	≥75 yrs.	2004	2011	-1.5	-3	0	-2.3	0.046
		2011	2018	6.5	5.1	7.8	11.1	<0.001
Non-Hispanic White	45-74	2004	2012	1.4	0	2.8	2.3	0.047
		2012	2018	7.5	5.7	9.3	9.6	<0.001
	≥75 yrs.	2004	2010	-1.7	-4.2	0.8	-1.5	0.164
		2010	2018	6.9	5.4	8.4	10.5	<0.001
Non-Hispanic Black	45-74	2004	2012	0.5	-1.3	2.3	0.6	0.562
		2012	2018	5	2.7	7.3	5	0.001
	≥75 yrs.	2004	2012	-3.7	-6.7	-0.5	-2.6	0.026
		2012	2018	6.2	1.6	11.1	3	0.013
Hispanic	45-74	2004	2018	1.3	0.3	2.3	2.9	0.012
	≥75 yrs.	2004	2006	-20.6	-44	12.4	-1.5	0.17
		2006	2018	3	1.2	4.8	3.7	0.004
<b>Invasive Prostate Cancer, SEER 18 Registries, 2004-2018 Derived AJCC M stage (M1)</b>								
All Races	45-74 yrs.	2004	2010	-0.1	-1.5	1.2	-0.2	0.817
		2010	2018	5.1	4.4	5.9	16	<0.001
	≥75 yrs.	2004	2010	-2.3	-4.2	-0.4	-2.7	0.022
		2010	2018	5.6	4.5	6.8	11.6	<0.001
Hispanic	45-74 yrs.	2004	2018	1.3	0.4	2.3	3	0.01
	≥75 yrs.	2004	2006	-20.1	-42.7	11.3	-1.5	0.162
		2006	2018	2.9	1.1	4.6	3.7	0.004
non-Hispanic Black	45-74 yrs.	2004	2015	1.5	0.5	2.5	3.5	0.006
		2015	2018	7.6	1.8	13.6	3	0.014
	≥75 yrs.	2004	2012	-3.6	-6.6	-0.6	-2.6	0.025
		2012	2018	6	1.4	10.7	3	0.014
non-Hispanic White	45-74 yrs.	2004	2009	-0.8	-3.7	2.1	-0.6	0.546
		2009	2018	5.9	4.9	6.9	13.2	<0.001
	≥75 yrs.	2004	2010	-1.6	-4.1	1	-1.4	0.191
		2010	2018	6.8	5.3	8.3	10.4	<0.001
<b>Invasive Prostate Cancer, SEER 18 Registries, 2004-2018 Derived AJCC N stage (N1)</b>								
All Races	45-74 yrs.	2004	2012	3.4	1.6	5.3	4.1	0.002
		2012	2018	10.4	8.2	12.6	11	<0.001
	≥75 yrs.	2004	2007	12.6	6.6	18.9	27.6	0.023
		2007	2010	4.9	-4.2	14.9	6.7	0.094
		2010	2013	10	1.6	19	15.3	0.041
		2013	2016	14.8	7.7	22.4	27.4	0.023
Hispanic	45-74 yrs.	2004	2018	5.4	4.3	6.5	10.9	<0.001
		2004	2018	10	8	12.2	10.8	<0.001
	≥75 yrs.	2004	2018	7.6	6.1	9	11.7	<0.001
non-Hispanic Black	45-74 yrs.	2004	2018	7.1	4.6	9.7	6.3	<0.001
	≥75 yrs.	2004	2018	7.1	4.6	9.7	6.3	<0.001
non-Hispanic White	45-74 yrs.	2004	2012	3.2	1.4	5.1	4	0.003
		2012	2018	11.2	9	13.5	11.7	<0.001
	≥75 yrs.	2004	2018	11.5	10.6	12.4	29.7	<0.001
<b>Invasive Prostate Cancer, SEER 18 Registries, 2004-2018 Derived AJCC T stage (T3-T4)</b>								
All Races	45-74 yrs.	2004	2010	2.3	-0.4	5.1	2	0.085
		2010	2013	-5.7	-18.8	9.4	-0.9	0.379
		2013	2018	6.5	3.3	9.8	4.9	0.002
	≥75 yrs.	2004	2012	-2.2	-4.1	-0.4	-2.6	0.025
		2012	2018	7.9	5.1	10.8	6.5	<0.001
Hispanic	45-74 yrs.	2004	2018	0.2	-0.7	1.1	0.5	0.601
	≥75 yrs.	2004	2018	-0.2	-2.3	1.9	-0.3	0.805
non-Hispanic Black	45-74 yrs.	2004	2014	-0.3	-2.1	1.5	-0.4	0.71
		2014	2018	7.4	1.1	14	2.6	0.025
	≥75 yrs.	2004	2018	-0.9	-3.1	1.3	-0.9	0.377
non-Hispanic White	45-74 yrs.	2004	2010	2.8	0.2	5.4	2.6	0.037
		2010	2013	-5.9	-18.3	8.3	-1	0.338
		2013	2018	7.5	4.4	10.7	5.9	0.001
	≥75 yrs.	2004	2013	-1.1	-2.9	0.6	-1.5	0.168
		2013	2016	15.1	-3.3	37.2	1.9	0.098
		2016	2018	2.5	-12	19.4	0.4	0.71

*eTable 5. Age-Adjusted metastatic Prostate Cancer rates and Joinpoint analysis (SEER 18, 2004-2018). Joinpoint analysis modeled for periods 2004-2010 and 2010-2018.*

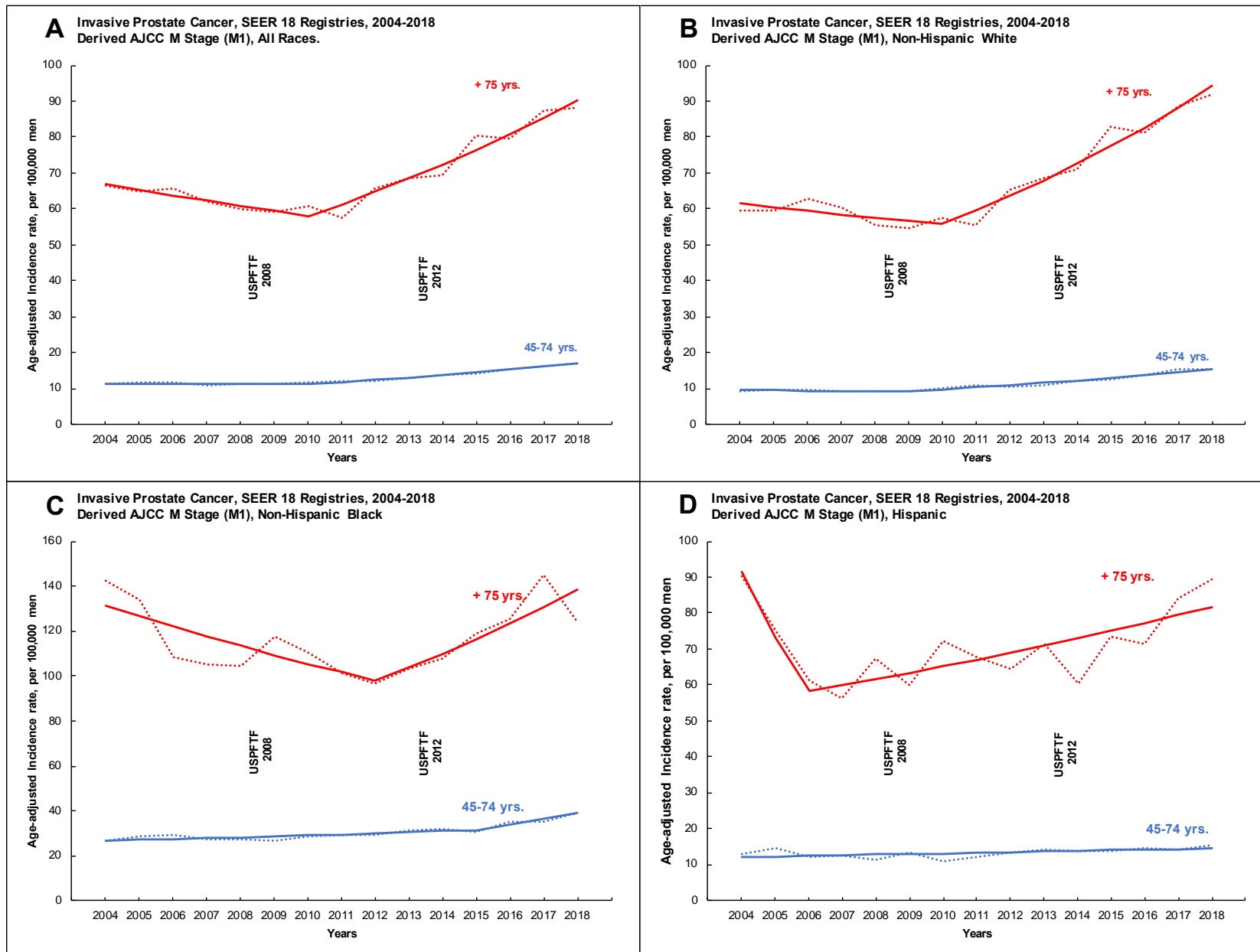
Segment Start-End	Race/ethnicity	Age	APC	APC 95% LCL	APC 95% UCL	Test Statistic	P-Value	P-Value	Parallelism	
<b>Invasive Prostate Cancer, SEER 18 Registries, 2004-2018 Derived AJCC Summary stage (distant)</b>										
2004-2010	All Races	45-74	-0.1	-1.2	1.0	-0.3	0.811			
		75+	-2.0	-2.9	-0.9	-5.0	0.004	0.016	Rejected	
	Hispanic	45-74	-2.6	-6.6	1.5	-1.7	0.159			
		75+	-3.4	-10.2	3.8	-1.2	0.267	0.964	Failed to reject	
	Non-Hispanic Black	45-74	-0.3	-2.3	1.8	-0.4	0.726			
		75+	-3.9	-8.1	0.5	-2.3	0.069	0.236	Failed to reject	
	Non-Hispanic White	45-74	0.3	-1.2	1.8	0.5	0.642			
		75+	-1.5	-3.4	0.5	-1.9	0.114	0.023	Rejected	
	2010-2018	All Races	45-74	5.2	4.4	6.0	15.5	<0.001		
			75+	5.8	4.4	7.2	10.4	<0.001	0.436	Failed to reject
Hispanic		45-74	3.2	1.9	4.6	5.7	0.001			
		75+	3.5	0.5	6.7	2.7	0.029	0.867	Failed to reject	
Non-Hispanic Black		45-74	4.1	2.7	5.5	7.0	<0.001			
		75+	4.1	1.2	7.1	3.4	0.012	0.978	Failed to reject	
Non-Hispanic White		45-74	6.2	5.1	7.5	12.7	<0.001			
		75+	6.9	5.5	8.2	12.2	<0.001	0.633	Failed to reject	
<b>Invasive Prostate Cancer, SEER 18 Registries, 2004-2018 Derived AJCC M stage (M1)</b>										
2004-2010		All Races	45-74	0.0	-1.2	1.2	0.0	0.976		
	75+		-1.9	-3.0	-0.9	-4.6	0.006	0.007	Rejected	
	Hispanic	45-74	-2.2	-6.3	2.2	-1.3	0.255			
		75+	-3.4	-10.0	3.6	-1.3	0.261	0.819	Failed to reject	
	Non-Hispanic Black	45-74	0.0	-2.1	2.1	0.0	0.992			
		75+	-3.8	-8.2	0.7	-2.2	0.082	0.212	Failed to reject	
	Non-Hispanic White	45-74	0.4	-1.3	2.0	0.6	0.599			
		75+	-1.5	-3.4	0.5	-1.9	0.118	0.031	Rejected	
	2010-2018	All Races	45-74	5.0	4.3	5.8	16.8	<0.001		
			75+	5.6	4.3	6.9	10.8	<0.001	0.453	Failed to reject
Hispanic		45-74	3.0	1.5	4.4	4.9	0.002			
		75+	3.3	0.4	6.3	2.7	0.03	0.843	Failed to reject	
Non-Hispanic Black		45-74	3.8	2.5	5.2	6.9	<0.001			
		75+	3.9	1.2	6.7	3.4	0.011	0.938	Failed to reject	
Non-Hispanic White		45-74	6.1	4.9	7.2	12.4	<0.001			
		75+	6.7	5.3	8.0	12.0	<0.001	0.653	Failed to reject	
<b>Invasive Prostate Cancer, SEER 18 Registries, 2004-2018 Derived AJCC N stage (N1)</b>										
2004-2010		All Races	45-74	3.6	2.5	4.8	8.4	<0.001		
	75+		8.3	5.5	11.2	7.8	0.001	0.016	Rejected	
	Hispanic	45-74	1.8	-1.2	4.9	1.6	0.18			
		75+	6.3	-2.5	15.9	1.8	0.129	0.239	Failed to reject	
	Non-Hispanic Black	45-74	7.7	2.5	13.2	3.8	0.012			
		75+	5.0	-1.4	11.8	2.0	0.103	0.640	Failed to reject	
	Non-Hispanic White	45-74	3.1	1.6	4.7	5.2	0.004			
		75+	9.4	6.0	12.9	7.2	0.001	<0.001	Rejected	
	2010-2018	All Races	45-74	9.2	7.3	11.2	11.6	<0.001		
			75+	12.0	11.1	13.0	30.6	<0.001	0.098	Failed to reject
Hispanic		45-74	7.0	4.7	9.3	7.4	<0.001			
		75+	12.2	8.2	16.2	7.7	<0.001	0.108	Failed to reject	
Non-Hispanic Black		45-74	9.3	6.2	12.5	7.3	<0.001			
		75+	11.3	5.2	17.7	4.5	0.003	0.602	Failed to reject	
Non-Hispanic White		45-74	9.8	7.8	11.9	12.0	<0.001			
		75+	12.8	11.5	14.2	23.2	<0.001	0.114	Failed to reject	
<b>Invasive Prostate Cancer, SEER 18 Registries, 2004-2018 Derived AJCC T stage (T3-T4)</b>										
2004-2010		All Races	45-74	2.2	0.8	3.7	4.0	0.011		
	75+		-1.2	-3.5	1.1	-1.3	0.238	0.007	Rejected	
	Hispanic	45-74	0.8	-2.0	3.7	0.7	0.49			
		75+	-2.8	-6.5	1.0	-1.9	0.114	0.041	Rejected	
	Non-Hispanic Black	45-74	1.0	-2.3	4.5	0.8	0.479			
		75+	-2.1	-6.3	2.3	-1.3	0.264	0.306	Failed to reject	
	Non-Hispanic White	45-74	2.6	1.1	4.2	4.5	0.006			
		75+	-0.8	-4.0	2.5	-0.6	0.559	0.038	Rejected	
	2010-2018	All Races	45-74	2.5	-0.2	5.2	2.1	0.069		
			75+	5.7	2.7	8.7	4.6	0.002	0.116	Failed to reject
Hispanic		45-74	1.1	-1.0	3.2	1.3	0.25			
		75+	3.0	-2.3	8.6	1.3	0.222	0.476	Failed to reject	
Non-Hispanic Black		45-74	2.9	-0.2	6.1	2.2	0.063			
		75+	3.0	-2.9	9.2	1.2	0.278	0.972	Failed to reject	
Non-Hispanic White		45-74	3.1	0.2	6.0	2.5	0.041			
		75+	6.5	3.4	9.8	4.9	0.002	0.086	Failed to reject	

Supplementary figures

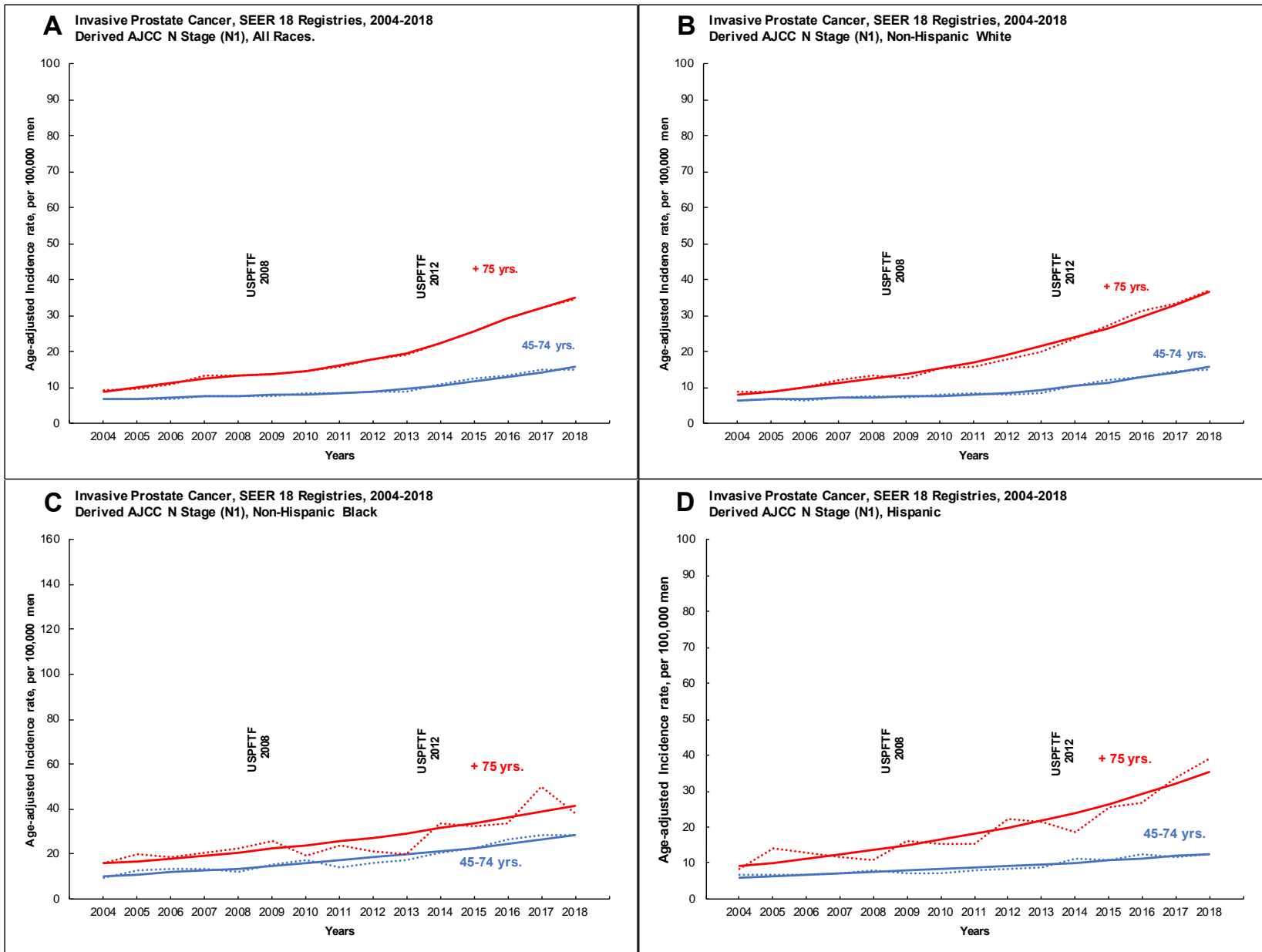


**eFigure 1.** Trends in malignant prostate cancer, SEER 18 Registries 2004-2018. Derived SEER summary stage (distant) by race a) All races, b) Non-Hispanic White c) Non-Hispanic Black d) Hispanic. *Continue line: modeled count; Dotted line: Delay age-adjusted rate*

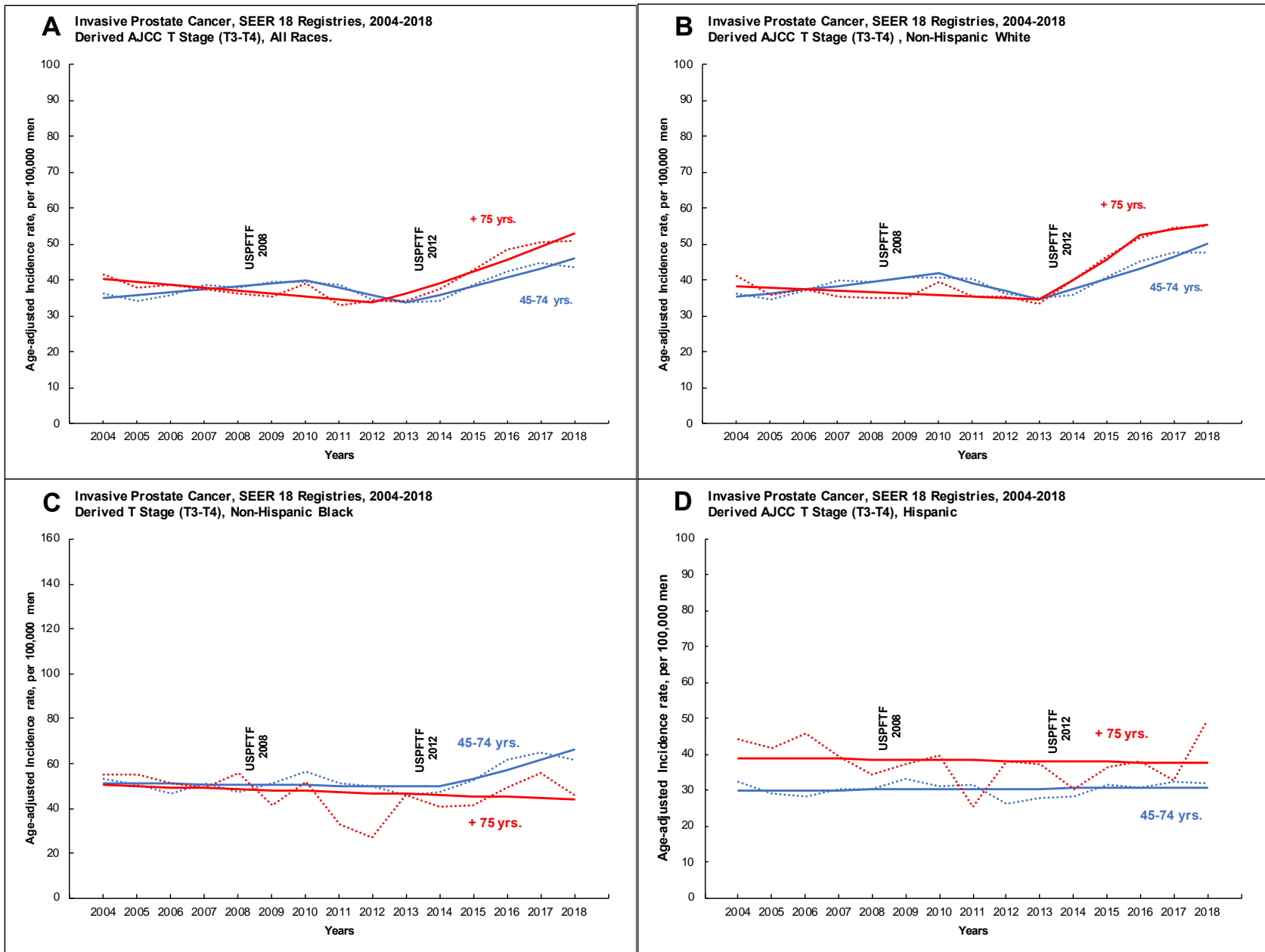




eFigure 2. Trends in malignant prostate cancer, SEER 18 Registries 2004-2018. Derived AJCC M stage (M1) by race a) All races, b) Non-Hispanic White c) Non-Hispanic Black d) Hispanic. *Continue line: modeled count; Dotted line: Delay age-adjusted rate*



**eFigure 3.** Trends in malignant prostate cancer, SEER 18 Registries 2004-2018. Derived AJCC N stage (N1) by race a) All races, b) Non-Hispanic White c) Non-Hispanic Black d) Hispanic. *Continue line: modeled count; Dotted line: Delay age-adjusted rate*



eFigure 4. Trends in malignant prostate cancer, SEER 18 Registries 2004-2018. Derived AJCC T stage (T3-T4) by race a) All races, b) Non-Hispanic White c) Non-Hispanic Black d) Hispanic. *Continue line: modeled count; Dotted line: Delay age-adjusted rate*