



# Increasing trend of non-interventional treatment management in patients candidate to active surveillance with localized prostate cancer



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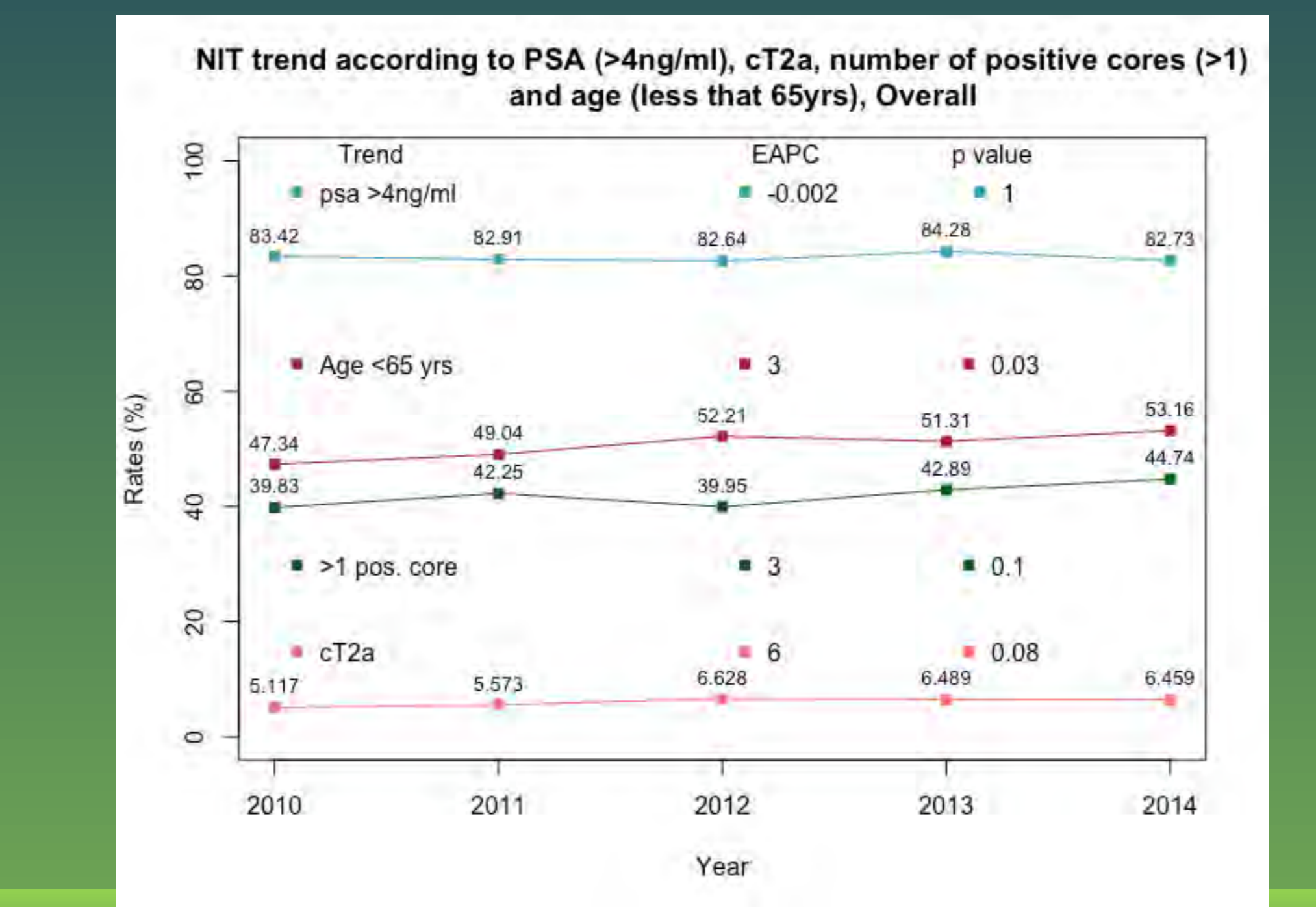
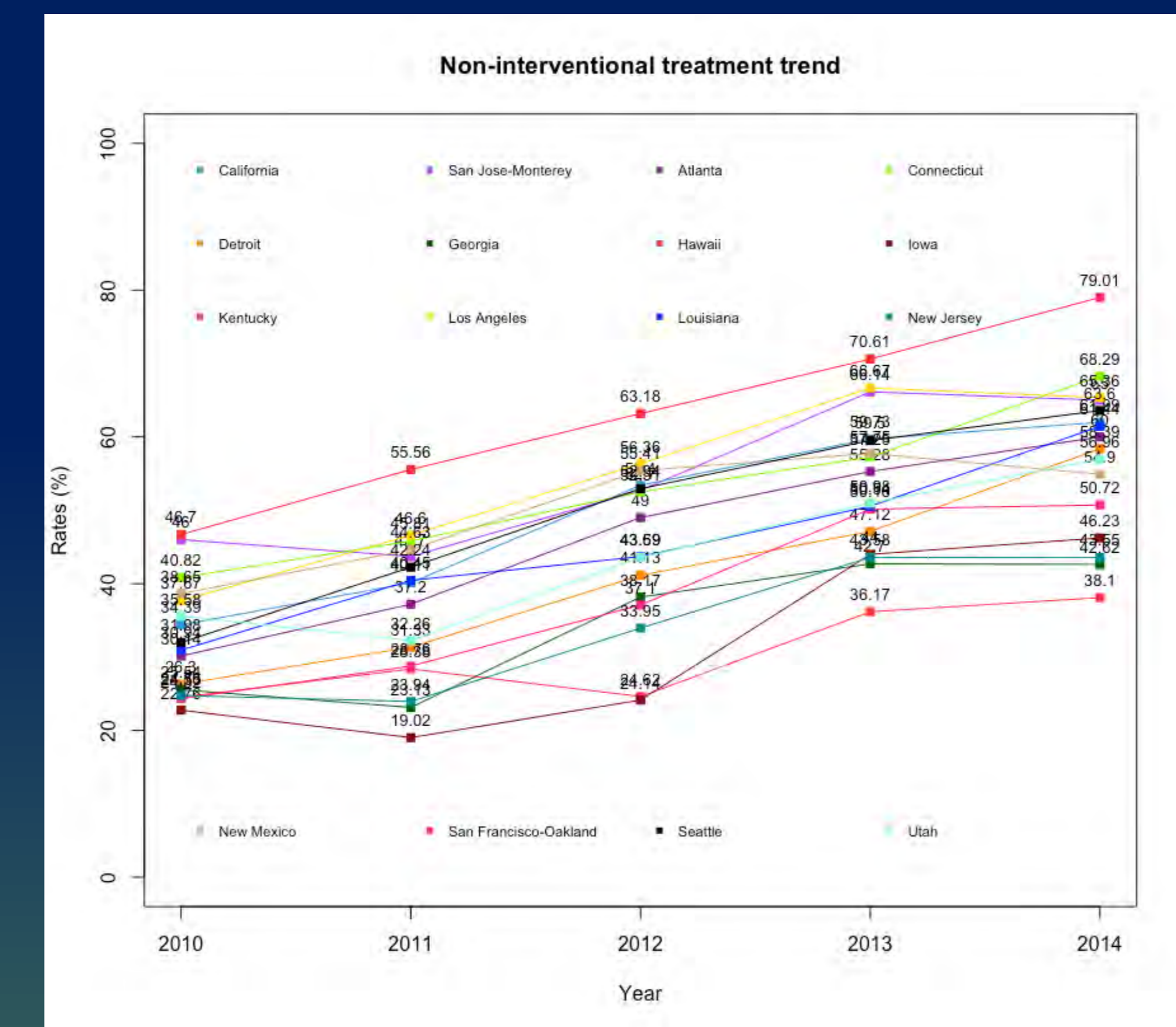
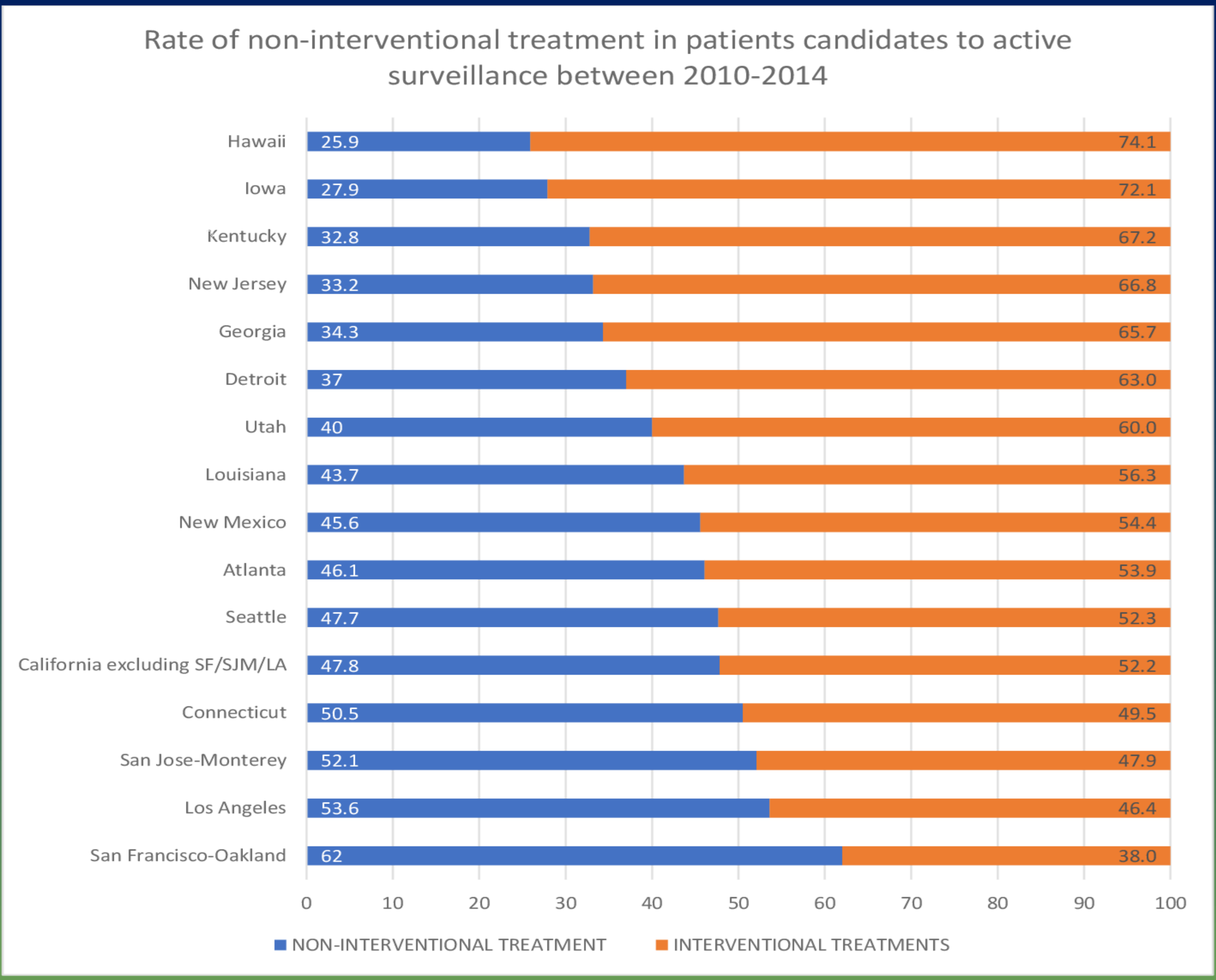
## INTRODUCTION

The rate of non-interventional treatment (NIT) in prostate cancer (PCa) active surveillance (AS) candidates were shown to be on the rise. However, contemporary data have not been reported. To address this void, we examined NIT rate between 2010-2014, within 16 Surveillance Epidemiology and End Results (SEER) registries.

## MATERIALS AND METHODS

We identified 21,398 PCa patients that fulfilled the University of California, San Francisco AS criteria (prostate specific antigen [PSA] <10ng/ml, clinical T stage <T2a, Gleason score ≤6, and percent of positive cores <33%). Annual NIT rates, as well as the patient distribution according to PSA, age, number of positive cores and clinical T stage were studied. Multivariable logistic regression analysis (MLR) tested NIT predictors. LOESS plots graphically depicted the effect of patient and tumour characteristics on NIT rate

## RESULTS



Univariable and multivariable logistic regression (LR) analyses for prediction of non-interventional treatment in patient candidate to active surveillance between 2010-2014, within 16 SEER registries.

Variables	Univariable LR				Multivariable LR			
	OR	2.50%	97.50%	p values	OR	2.50%	97.50%	p values
Baseline PSA (ng/ml)	1.05	1.03	1.06	<0.0001	0.98	0.97	1.00	0.064
Age at diagnosis (yrs)	<b>1.04</b>	<b>1.03</b>	<b>1.04</b>	<b>&lt;0.0001</b>	<b>1.05</b>	<b>1.04</b>	<b>1.05</b>	<b>&lt;0.0001</b>
cT2a (ref. cT1)	0.82	0.73	0.91	0.0003	0.78	0.69	0.87	<0.0001
Number of positive cores	0.71	0.68	0.73	<0.0001	0.67	0.65	0.69	<0.0001
Pacific Islander (ref. Caucasian)	1.22	1.08	1.37	0.0011	0.92	0.80	1.05	0.2
African American (ref. Caucasian)	1.01	0.93	1.09	0.8	1.04	0.95	1.15	0.35
Race Hispanic (ref. Caucasian)	0.94	0.86	1.03	0.2	0.71	0.64	0.78	<0.0001
Race Other (ref. Caucasian)	1.05	0.76	1.45	0.7	0.86	0.61	1.22	0.41
Unmarried (ref. Married)	<b>1.42</b>	<b>1.32</b>	<b>1.52</b>	<b>&lt;0.0001</b>	<b>1.45</b>	<b>1.35</b>	<b>1.57</b>	<b>&lt;0.0001</b>
Unknown (ref. Married)	2.12	1.95	2.31	<0.0001	1.92	1.75	2.11	<0.0001
Medicaid coverage (ref. Insured)	1.04	0.89	1.23	0.6	0.97	0.81	1.16	0.74
Uninsured (ref. Insured)	<b>1.88</b>	<b>1.42</b>	<b>2.50</b>	<b>&lt;0.0001</b>	<b>2.41</b>	<b>1.78</b>	<b>3.28</b>	<b>&lt;0.0001</b>
Unknown (ref. Insured)	1.13	1.01	1.27	0.0355	1.18	1.03	1.35	0.0165
Atlanta (ref. California)	0.93	0.81	1.07	0.32	0.74	0.63	0.86	0.0001
Connecticut (ref. California)	1.12	0.98	1.27	0.096	1.09	0.95	1.25	0.22
Detroit (ref. California)	0.64	0.57	0.73	<0.0001	0.58	0.50	0.66	<0.0001
Hawaii (ref. California)	0.38	0.28	0.52	<0.0001	0.38	0.27	0.53	<0.0001
Iowa (ref. California)	0.42	0.34	0.52	<0.0001	0.39	0.32	0.49	<0.0001
Kentucky (ref. California)	0.53	0.47	0.61	<0.0001	0.48	0.42	0.55	<0.0001
Los Angeles (ref. California)	1.26	1.12	1.42	0.0001	1.32	1.17	1.50	<0.0001
Louisiana (ref. California)	0.85	0.75	0.96	0.012	0.71	0.62	0.81	<0.0001
New Jersey (ref. California)	0.54	0.49	0.59	<0.0001	0.42	0.38	0.46	<0.0001
New Mexico (ref. California)	0.91	0.73	1.14	0.4	1.05	0.83	1.33	0.70
San Francisco-Oakland (ref. California)	1.78	1.60	1.99	<0.0001	1.74	1.55	1.95	<0.0001
San Jose-Monterey (ref. California)	1.19	1.05	1.34	0.0054	1.20	1.05	1.37	0.006
Seattle (ref. California)	0.99	0.87	1.14	0.9	1.06	0.92	1.23	0.4
Utah (ref. California)	0.73	0.61	0.87	0.0007	0.77	0.63	0.94	0.0088
Year of diagnosis	1.36	1.33	1.39	<0.0001	1.41	1.38	1.45	<0.0001

## CONCLUSIONS

The rate of NIT has markedly increased across all examined SEER-registries. Nonetheless, very important differences distinguish high-end NIT users from low-end NIT users. PCa characteristics of NIT patients remained unchanged overtime. However, in addition to geographical differences in NIT rates, patient characteristic such as age, marital and insurance status represent potential NIT access barriers.