Supplementary Figure 1: Trends of other treatments of new localized prostate cancer, SEER-Medicare, 2004-2015


| Supplementary Table 6: Estimated probabilities of treatments for localized prostate cancer with NCCN intermediate risk by age and race group |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Prostatectomy | IMRT | AS | No Treatment |
| Age Group 66-74 | 2004-2005 | 0.284[0.28,0.29] | 0.137[0.13,0.14] | 0.145[0.14,0.15] | 0.074[0.07,0.08] |
|  | 2006-2007 | 0.302[0.29,0.31] | 0.185[0.18,0.19] | 0.152[0.15,0.16] | 0.071[0.07,0.07] |
|  | 2008-2009 | 0.298[0.29,0.31] | 0.219[0.21,0.23] | 0.176[0.17,0.18] | 0.070[0.07,0.07] |
|  | 2010-2011 | 0.292[0.28,0.30] | 0.254[0.25,0.26] | 0.194[0.19,0.20] | 0.065[0.06,0.07] |
|  | 2012-2013 | 0.264[0.26,0.27] | 0.267[0.26,0.28] | 0.225[0.22,0.23] | 0.070[0.07,0.07] |
|  | 2014-2015 | 0.260[0.25,0.27] | 0.249[0.24,0.26] | 0.239[0.23,0.25] | 0.091[0.09,0.10] |
| Age Group 75+ | 2004-2005 | 0.051[0.05,0.05] | 0.154[0.15,0.16] | 0.230[0.22,0.24] | 0.093[0.09,0.10] |
|  | 2006-2007 | 0.056[0.05,0.06] | 0.213[0.21,0.22] | 0.248[0.24,0.25] | 0.092[0.09,0.10] |
|  | 2008-2009 | 0.055[0.05,0.06] | 0.252[0.24,0.26] | 0.286[0.28,0.29] | 0.090[0.09,0.09] |
|  | 2010-2011 | 0.053[0.05,0.06] | 0.290[0.28,0.30] | 0.314[0.30,0.32] | 0.084[0.08,0.09] |
|  | 2012-2013 | 0.046[0.04,0.05] | 0.295[0.29,0.30] | 0.349[0.34,0.36] | 0.087[0.08,0.09] |
|  | 2014-2015 | 0.045[0.04,0.05] | 0.271[0.26,0.28] | 0.367[0.36,0.38] | 0.111[0.10,0.12] |
| Number of Cases |  | 96,034 | 96,034 | 96,034 | 96,034 |
| Non-Hispanic Black | 2004-2005 | 0.134[0.13,0.14] | 0.158[0.15,0.17] | 0.171[0.16,0.18] | 0.120[0.11,0.13] |
|  | 2006-2007 | 0.147[0.14,0.16] | 0.215[0.21,0.23] | 0.180[0.17,0.19] | 0.117[0.11,0.12] |
|  | 2008-2009 | 0.153[0.14,0.16] | 0.254[0.24,0.26] | 0.205[0.19,0.21] | 0.114[0.11,0.12] |
|  | 2010-2011 | 0.153[0.14,0.16] | 0.292[0.28,0.30] | 0.224[0.21,0.23] | 0.106[0.10,0.11] |
|  | 2012-2013 | 0.141[0.13,0.15] | 0.302[0.29,0.31] | 0.252[0.24,0.26] | 0.109[0.10,0.12] |
|  | 2014-2015 | 0.140[0.13,0.15] | 0.278[0.27,0.29] | 0.264[0.25,0.28] | 0.137[0.13,0.15] |
| Non-Hispanic White | 2004-2005 | 0.183[0.18,0.19] | 0.142[0.14,0.15] | 0.187[0.18,0.19] | 0.076[0.07,0.08] |
|  | 2006-2007 | 0.200[0.19,0.21] | 0.195[0.19,0.20] | 0.197[0.19,0.20] | 0.074[0.07,0.08] |
|  | 2008-2009 | 0.208[0.20,0.21] | 0.229[0.22,0.23] | 0.223[0.22,0.23] | 0.072[0.07,0.08] |
|  | 2010-2011 | 0.208[0.20,0.21] | 0.263[0.26,0.27] | 0.244[0.24,0.25] | 0.066[0.06,0.07] |
|  | 2012-2013 | 0.193[0.19,0.20] | 0.272[0.26,0.28] | 0.274[0.27,0.28] | 0.070[0.07,0.07] |
|  | 2014-2015 | 0.193[0.19,0.20] | 0.252[0.24,0.26] | 0.289[0.28,0.30] | 0.090[0.09,0.09] |
| Number of Cases |  | 89,751 | 89,751 | 89,751 | 89,751 |


| Supplementary Table 7: Percent of patients with Gleason score 6 or below by year and stratified by age group |  |  |  |
| :---: | :---: | :---: | :---: |
| Year | Percent of patients with GS<=6 | Age Group | Percent of patients with $\mathrm{GS}<=6$ by age group |
| 2004-2005 | 47.77\% | 66-74 | 51.77\% |
|  |  | 75+ | 43.15\% |
| 2006-2007 | 44.10\% | 66-74 | 47.29\% |
|  |  | 75+ | 40.21\% |
| 2008-2009 | 41.24\% | 66-74 | 44.04\% |
|  |  | 75+ | 37.24\% |
| 2010-2011 | 39.79\% | 66-74 | 44.74\% |
|  |  | 75+ | 32.31\% |
| 2012-2013 | 36.49\% | 66-74 | 40.54\% |
|  |  | 75+ | 29.65\% |
| 2014-2015 | 32.11\% | 66-74 | 36.33\% |
|  |  | 75+ | 24.72\% |

