**Osteoporosis Management following vertebral compression fracture in CDM Database from 2004- 2019**

**Patient Population**

N= 448,328 First VCF

N= 215,391 (72.1%)

Excluded patients who were not enrolled at least 1 year before VCF

N= 175,857 (81.6%)

Excluded patients who were on anti-osteoporotic medication within a year before VCF

N= 298,883 (66.7%)

Excluded patients who had neoplasms, intraspinal abscesses, inflammatory spondylosis, osteomyelitis, or transportation/spinal cord injuries in year prior to VCF

N= 143,081 (81.4%)

Excluded patients who were < 50 years old

Supplemental Figure 1: Flowchart for the application of exclusion criteria showing how many patients were excluded by each exclusion criterion.

**Supplemental Figure 2: Trends in number of VCFs and anti-osteoporotic drugs prescribed from 2004-2019**

**b**

**a**

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**The number of patients with VCFs each year (2a) and the number of patients placed on anti-osteoporotic medications per year (2b)**

**Supplemental Table 1: Demographics and characteristics of patients who were started on medication within a year after VCF versus those who were not, propensity matched**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Clinical Characteristics** | **Patients started on medication within a year after VCF** | **Patients not started on medication within a year after VCF** | **Totals** | **P-Value** |
| **Number** | 16,780 | 16,780 | 33,560 |  |
| **Age (Years)** |  |  |  | 0.162 |
| Mean ± SD | 75.4 (9.3) | 75.6 (9.5) | 75.5 ± 9.4 |  |
| 50-59 | 1,256 (7.5) | 1,282 (7.7) | 2,538 (7.6) |  |
| 60-69 | 2,946 (17.7) | 2,874 (17.3) | 5,820 (17.3) |  |
| 70-79 | 5,885 (35.3) | 5,716 (34.5) | 11,601 (34.6) |  |
| 80-89 | 6,561 (39.4) | 6,709 (40.5) | 13,270 (39.5) |  |
| **Gender (%)** |  |  |  | 0.593 |
| Female | 13,612 (81.1) | 13,685 (81.6) | 27,297 (81.3) |  |
| Male | 3,167 (18.9) | 3,094 (18.4 | 6,261 (18.7) |  |
| **Race (%)** |  |  |  |  |
| White | 12,526 (74.6) | 12,903 (76.9) | 25,429 (75.8) | <0.001 |
| Asian | 621 (3.7) | 550 (3.3) | 1,171 (3.5) |  |
| Black | 977 (5.8) | 892 (5.3) | 1,869 (5.6) |  |
| Hispanic | 1,700 (10.1) | 1,616 (9.6) | 3,316 (9.9) |  |
| Other/Unknown | 956 (5.7) | 819 (4.9) | 1,775 (5.3) |  |
| **Region (%)** |  |  |  | 0.362 |
| Northeast | 1,326 (7.9) | 1,325 (7.9) | 2,651 (7.9) |  |
| Southeast | 4,165 (24.8) | 4,267 (25.4) | 8,432 (25.1) |  |
| Midwest | 3,207 (19.1) | 3,076 (18.3) | 6,283 (18.7) |  |
| Southwest | 2,898 (17.3) | 2,950 (17.6) | 5,848 (17.4) |  |
| West | 5,174 (30.8) | 5,156 (30.7) | 10,330 (30.8) |  |
| **Elixhauser Comorbidity Index Mean ± SD** | 4.29 (6.2) | 4.14 (6.0) | 4.1 ± 6.1 | 0.002621 |
| **Osteoporosis Diagnosis Code (%)** | 8,016 (47.8) | 7,888 (47.0) | 15,904 (47.4) | 0.165 |
| **Average Follow-up Time ± SD (Days)** | 1,366 ± 1,094 | 1388 ± 1,208 | 1,377 ± 1,153 | 0.07441 |