Supplemental Material 7. Observed to Expected (O/E) ratio for cancer cases estimated by the AAPC-Joinpoint model to actual observed cancer cases in 2019

|  |  |  |  |
| --- | --- | --- | --- |
|  | 2019 observed | 2019 expected | O/E ratio (95% CI) |
|  | M | W | M | W | M | W |
| All cancer (C00-96) | 133,388 | 119,818 | 131,815 | 120,784 | 1.01 (1.01-1.02) | 1.01 (1.01-1.02) |
| Oral cavity, pharynx, Lip (C00-14) | 2,852 | 1,096 | 2,796 | 1,083 | 1.02 (0.98-1.06) | 1.01 (0.95-1.07) |
| MPL (C00-14, C32) | 4,005 | 1,164 | 3,920 | 1,149 | 1.02 (0.99-1.05) | 1.01 (0.96-1.07) |
| Aero-digestive (C00-C16, C18-20, C30-34) | 64,055 | 32,862 | 65,904 | 33,374 | 0.97 (0.96-0.98) | 0.99 (0.97-0.99) |
| Salivary (C07-08) | 328 | 277 | 312 | 301 | 1.05 (0.94-1.17) | 0.92 (0.81-1.03) |
| Pharynx (C10-14) | 926 | 147 | 943 | 163 | 0.98 (0.92-1.05) | 0.90 (0.76-1.06) |
| Nasopharynx (C11)  | 321 | 92 | 332 | 108 | 0.97 (0.86-1.08) | 0.85 (0.69-1.03) |
| Esophagus (C15)  | 2,573 | 297 | 2,318 | 254 | 1.11 (1.07-1.15) | 1.17 (1.04-1.31) |
| Stomach (C16) | 19,759 | 9,731 | 20,574 | 10,017 | 0.96 (0.95-0.97) | 0.97 (0.95-0.99) |
| Cardia (C16.0) | 1,049 | 320 | 1,101 | 356 | 0.95 (0.90-1.01) | 0.90 (0.80-1.00) |
| Non-cardia (C16.1-C16.6, C16.8) | 17,026 | 8,537 | 19,477 | 9,637 | 0.87 (0.86-0.89) | 0.89 (0.87-0.91) |
| Colorectal (C18-C20) | 17,109 | 11,910 | 18,768 | 12,620 | 0.91 (0.90-0.93) | 0.94 (0.93-0.96) |
| Liver (C22) | 11,527 | 4,054 | 11,569 | 3,964 | 1.00 (0.98-1.02)  | 1.02 (0.99-1.05) |
| HCC (C22.0) | 9,087 | 2,606 | 9,151 | 2,569 | 0.99 (0.97-1.01) | 1.01 (0.98-1.05) |
| CC (C22.1) | 1,767 | 1,166 | 1,894 | 1,180 | 0.93 (0.89-0.98) | 0.99 (0.93-1.05) |
| Anus (C21) | 137 | 184 | 123 | 201 | 1.11 (0.94-1.31) | 0.91 (0.79-1.05) |
| Gallbladder (C23) | 1,238 | 1,506 | 1,203 | 1,576 | 1.03 (0.97-1.09) | 0.96 (0.91-1.00) |
| Biliary tract (C23-C24) | 3,896 | 3,487 | 3,907 | 3,563 | 1.00 (0.97-1.03) | 0.98 (0.95-1.01) |
| Pancreas (C25) | 4,144 | 3,936 | 4,051 | 3,708 | 1.02 (0.99-1.05) | 1.06 (1.03-1.10) |
| Nasal cavity/ PNS (C30-C31) | 281 | 134 | 264 | 172 | 1.07 (0.94-1.19) | 0.78 (0.65-0.92) |
| Larynx (C32) | 1,153 | 68 | 1,152 | 73 | 1.00 (0.94-1.06) | 0.94 (0.72-1.17) |
| Lung, Bronchus, Trachea (C33-C34) | 20,328 | 9,626 | 20,031 | 9,155 | 1.01 (1.00-1.03) | 1.05 (1.03-1.07) |
| Bone (C40-C41) | 207 | 185 | 215 | 217 | 0.96 (0.84-1.10) | 0.85 (0.73-0.98) |
| Melanoma (C43) | 319 | 317 | 347 | 331 | 0.92 (0.82-1.02) | 0.96 (0.86-1.07) |
| Non-melanoma, Skin (C44) | 2,810 | 3,714 | 3,058 | 4,032 | 0.92 (0.89-0.95) | 0.92 (0.89-0.95) |
| Mesothelioma (C45) | 112 | 45 | 136 | 50 | 0.82 (0.68-0.98) | 0.90 (0.66-1.18) |
| Kaposi sarcoma (C46) | 53 | 17 | 53 | 20 | 1.00 (0.75-1.28) | 0.85 (0.49-1.30) |
| Breast (C50) 1 | 113 | 24,816 | 102 | 25,517 | 1.11 (0.91-1.32) | 0.97 (0.96-0.99) |
| Premenopausal  | 12 | 9,980 | 10 | 10,242 | 1.26 (0.65-2.07) | 0.97 (0.96-0.99) |
| Postmenopausal  | 101 | 14,836 | 92 | 15,275 | 1.09 (0.89-1.32) | 0.97 (0.96-0.99) |
| Vulva (C51) | - | 190 | - | 192 | - | 0.99 (0.85-1.13) |
| Vagina (C52) | - | 86 | - | 88 | - | 0.98 (0.78-1.19) |
| Cervix uteri (C53) | - | 3,270 | - | 3,322 | - | 0.98 (0.95-1.02) |
| Corpus uteri (C54) | - | 3,283 | - | 3,453 | - | 0.95 (0.92-0.98) |
| Endometrium (C54.1) | - | 3,089 | - | 3,311 | - | 0.93 (0.90-0.97) |
| Ovary (C56) | - | 2,839 | - | 2,839 | - | 1.00 (0.96-1.04) |
| Penis (C60) | 76 | - | 66 | - | 1.16 (0.91-1.43) | - |
| Prostate (C61) | 16,803 | - | 16,503 | - | 1.02 (1.00-1.03) | - |
| Testis (C62) | 307 | - | 279 | - | 1.10 (0.98-1.23) | - |
| Kidney (C64) | 4,139 | 1,859 | 4,159 | 1,926 | 1.00 (0.96-1.03) | 0.97 (0.92-1.01) |
| Kidney, renal pelvis, ureter (C64-C66) | 5,056 | 2,386 | 5,085 | 2,468 | 0.99 (0.97-1.02) | 0.97 (0.93-1.00) |
| Bladder (C67) | 3,984 | 911 | 3,816 | 907 | 1.04 (1.01-1.08) | 1.00 (0.94-1.07)  |
| Brain and CNS (C70-C72) | 968 | 833 | 1,008 | 852 | 0.96 (0.90-1.02) | 0.98 (0.91-1.05) |
| Meningioma (C70) | 28 | 40 | 28 | 34 | 1.00 (0.67-1.41) | 1.17 (0.83-1.56) |
| Thyroid (C73) | 7,477 | 23,009 | 7336 | 24,792 | 1.02 (1.00-1.04) | 0.93 (0.92-0.94)  |
| Hodgkin lymphoma (C81)  | 167 | 113 | 158 | 113 | 1.06 (0.91-1.23) | 1.00 (0.82-1.19) |
| NHL (C82-C85, C96.3) | 3,006 | 2,209 | 2,843 | 2,210 | 1.06 (1.02-1.10) | 1.00 (0.96-1.05) |
| Multiple Myeloma (C90) | 997 | 834 | 980 | 893 | 1.02 (0.96-1.08) | 0.93 (0.87-0.99) |
| Leukemia (C91-C95) | 1,877 | 1,485 | 1,831 | 1,393 | 1.03 (0.98-1.07) | 1.07 (1.01-1.12) |

Abbreviation: M, Men; W, Women; MPL, Mouth, pharynx & larynx cancers; HCC, Hepatocellular carcinoma; CC, Cholangiocarcinoma; PNS, Peripheral Nervous System, CNS, Central Nervous System; NHL, Non-Hodgkin lymphoma

1. Definition of menopausal status: premenopausal (age <50) and postmenopausal (age ≥ 50).