

# Supplementary material

Women in Contemporary Cancer Research

Dr. Julio González-Alvarez<sup>1</sup> & Dr. Rosa Sos-Peña

## TABLE OF CONTENTS.

Validation Study

Journals selected (Table S1)

Results (Tables S2, S3, S4, & S5)

### Validation Study

To test the accuracy of the data on gender classification, we selected a random sample of authorships to manually (one by one) check their gender identity. We randomly selected 384 authorships from the total of 144,300 authorships and manually (one by one) identified the gender of each author by locating some biographical information or a photo on the Internet (see also). According to the formula:

$$\text{Sample size} = \frac{\frac{z^2 \times p(1-p)}{e^2}}{1 + \left(\frac{z^2 \times p(1-p)}{e^2 N}\right)}$$

where N = population size, e = margin of error, and z = z-score, 384 is the sample size corresponding to N= 144,300, e = 0.05, and a 95% confidence interval (online calculator at <https://www.surveymonkey.com/mp/sample-size-calculator/>).

After several attempts, the gender of 28 authorships could not be identified and they were replaced by other 28 items randomly selected. The 384 authorships corresponded to 236 men, 61.5%, 95% CI [56.5%, 66.2%] and 148 women, 38.5%, 95% CI [33.8%, 43.5%], yielding a proportion close to the overall rate of 62.2% males and 37.8% females. The agreement between the manual vs. automated (excluding missing values) classification was 99.14% of observations, Cohen's kappa coefficient K = 0.982, SE of K = 0.011, 95% CI [0.961, 1.00].

## JOURNALS SELECTED

**Table S1.** List of 40 journals selected from the ONCOLOGY category of the Web of Science database, sorted by their impact factor (IF), with indication of the quartile (Q) and rank occupied by each journal within the category (JCR-2017). The number of Papers (Articles + Reviews) published in the 2015-17 period are presented. The journals occupy the top ten of each quartile.

| JOURNALS  | Abbreviations   | IF      | Q  | Rank (223) | Papers | Articles | Reviews |
|---|---|---------|----|------------|--------|----------|---------|
| CA-A CANCER JOURNAL FOR CLINICIANS  | CA Cancer J Clin  | 244.586 | Q1 | 1          | 82     | 45       | 37      |
| NATURE REVIEWS CANCER   | Nat Rev Cancer  | 42.784  | Q1 | 2          | 160    | 7        | 153     |
| LANCET ONCOLOGY   | Lancet Oncol  | 36.421  | Q1 | 3          | 508    | 411      | 97      |
| JOURNAL OF CLINICAL ONCOLOGY  | J Clin Oncol  | 26.360  | Q1 | 4          | 1368   | 1239     | 129     |
| NATURE REVIEWS CLINICAL ONCOLOGY  | Nat Rev Clin Oncol  | 24.653  | Q1 | 5          | 144    | 35       | 109     |
| CANCER DISCOVERY  | Cancer Discov   | 24.373  | Q1 | 6          | 249    | 219      | 30      |
| CANCER CELL   | Cancer Cell   | 22.844  | Q1 | 7          | 337    | 326      | 11      |
| JAMA ONCOLOGY   | JAMA Oncol  | 20.871  | Q1 | 8          | 376    | 323      | 53      |
| ANNALS OF ONCOLOGY  | Ann Oncol   | 13.930  | Q1 | 9          | 1016   | 836      | 180     |
| JNCI-JOURNAL OF THE NATIONAL CANCER INSTITUTE   | J Natl Cancer Inst  | 11.238  | Q1 | 10         | 440    | 394      | 46      |
| CANCER BIOLOGY & MEDICINE   | Cancer Biol Med   | 4.607   | Q2 | 56         | 132    | 53       | 79      |
| MOLECULAR CANCER RESEARCH   | Mol Cancer Res  | 4.597   | Q2 | 57         | 424    | 402      | 22      |
| JOURNAL OF ENVIRONMENTAL SCIENCE AND HEALTH PART C-<br>ENVIRONMENTAL CARCINOGENESIS & ECOTOXICOLOGY REVIEWS | J Environ Sci Health C Environ<br>Carcinog Ecotoxicol Rev | 4.586   | Q2 | 58         | 43     | 1        | 42      |
| CANCER EPIDEMIOLOGY BIOMARKERS & PREVENTION   | Cancer Epidemiol Biomarkers Prev                          | 4.554   | Q2 | 59         | 641    | 601      | 40      |
| GYNECOLOGIC ONCOLOGY  | Gynecol Oncol   | 4.540   | Q2 | 60         | 1101   | 974      | 127     |
| JOURNAL OF ONCOLOGY   | J Oncol   | 4.528   | Q2 | 61         | 64     | 39       | 25      |
| BONE MARROW TRANSPLANTATION   | Bone Marrow Transplant                                    | 4.497   | Q2 | 62         | 556    | 478      | 78      |
| CRITICAL REVIEWS IN ONCOLOGY HEMATOLOGY   | Crit Rev Oncol Hematol                                    | 4.495   | Q2 | 63         | 568    | 0        | 568     |
| LUNG CANCER   | Lung Cancer   | 4.486   | Q2 | 64         | 716    | 640      | 76      |
| FRONTIERS IN ONCOLOGY   | Front Oncol   | 4.416   | Q2 | 65         | 830    | 433      | 397     |

(cont.)

Table S1 (cont.)

| JOURNALS                                       | Abbreviations               | IF    | Q  | Rank (223) | Papers       | Articles     | Reviews     |
|--|-----------------------------|-------|----|------------|--------------|--------------|-------------|
| HEMATOLOGICAL ONCOLOGY                         | Hematol Oncol               | 3.193 | Q3 | 112        | 221          | 199          | 22          |
| SURGICAL ONCOLOGY CLINICS OF NORTH AMERICA     | Surg Oncol Clin N Am        | 3.178 | Q3 | 113        | 151          | 151          | 0           |
| ONCOLOGY RESEARCH                              | Oncol Res                   | 3.143 | Q3 | 114        | 290          | 283          | 7           |
| WORLD JOURNAL OF GASTROINTESTINAL ONCOLOGY     | World J Gastrointest Oncol  | 3.140 | Q3 | 115        | 201          | 109          | 92          |
| MELANOMA RESEARCH                              | Melanoma Res                | 3.135 | Q3 | 116        | 268          | 255          | 13          |
| CURRENT ONCOLOGY REPORTS                       | Curr Oncol Rep              | 3.122 | Q3 | 117        | 223          | 44           | 179         |
| HEMATOLOGY-ONCOLOGY CLINICS OF NORTH AMERICA   | Hematol Oncol Clin North Am | 3.098 | Q3 | 118        | 215          | 198          | 17          |
| TRANSLATIONAL ONCOLOGY                         | Transl Oncol                | 3.071 | Q3 | 119        | 256          | 246          | 10          |
| AMERICAN JOURNAL OF TRANSLATIONAL RESEARCH     | Am J Transl Res             | 3.061 | Q3 | 120        | 1273         | 1225         | 48          |
| CLINICAL ONCOLOGY                              | Clin Oncol                  | 3.060 | Q3 | 121        | 292          | 281          | 11          |
| JOURNAL OF ADOLESCENT AND YOUNG ADULT ONCOLOGY | J Adolesc Young Adult Oncol | 2.167 | Q4 | 168        | 139          | 121          | 18          |
| JOURNAL OF CONTEMPORARY BRACHYTHERAPY          | J Contemp Brachytherapy     | 2.146 | Q4 | 169        | 222          | 200          | 22          |
| INFECTIOUS AGENTS AND CANCER                   | Infect Agent Cancer         | 2.123 | Q4 | 170        | 165          | 141          | 24          |
| CANCER INVESTIGATION                           | Cancer Invest               | 2.053 | Q4 | 171        | 203          | 189          | 14          |
| BREAST CANCER                                  | Breast Cancer               | 2.028 | Q4 | 172        | 286          | 265          | 21          |
| FRONTIERS OF MEDICINE                          | Front Med                   | 2.027 | Q4 | 173        | 171          | 106          | 65          |
| HEREDITARY CANCER IN CLINICAL PRACTICE         | Hered Cancer Clin Pract     | 2.027 | Q4 | 173        | 61           | 48           | 13          |
| CANCER CONTROL                                 | Cancer Control              | 2.009 | Q4 | 175        | 163          | 146          | 17          |
| CHEMOTHERAPY                                   | Chemotherapy                | 2.000 | Q4 | 176        | 102          | 93           | 9           |
| CURRENT ONCOLOGY                               | Curr Oncol                  | 1.967 | Q4 | 177        | 362          | 324          | 38          |
| <b>TOTAL:</b>                                  |                             |       |    |            | <b>15019</b> | <b>12080</b> | <b>2939</b> |

## Results

**Table S2.** Percentages of men and women as authors of Articles (overall, first, and last author) and Reviews published during the 2015-17 period in 40 journals selected from the Web of Science (Category ONCOLOGY). Last position values were calculated for papers with at least three co-authors.

|           | Articles |              |             | Reviews |
|-----------|----------|--------------|-------------|---------|
|           | Overall  | First author | Last author |         |
| Men (%)   | 62.2     | 56.1         | 70.4        | 62.1    |
| Women (%) | 37.8     | 43.9         | 29.6        | 37.9    |

**Table S3.** Gender distribution of **Authorships of Articles** published during the 2015-17 period in 40 journals selected from the Web of Science (Category ONCOLOGY). The journals are sorted by their impact factor and grouped by quartiles (Q) of the ONCOLOGY category (JCR-2017). Gender percentages refer to gender-identified values. M: Men; W:Women.

| Q  | Journals                         | Author<br>ships | Gender<br>Identified | Gender of the Authorships (Articles) |             |              |             |              |             |             |             |             |             |             |             |   |
|----|----------------------------------|-----------------|----------------------|--------------------------------------|-------------|--------------|-------------|--------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|---|
|    |                                  |                 |                      | Overall                              |             |              |             | First Author |             |             |             | Last Author |             |             |             |   |
|    |                                  |                 |                      | M                                    | %           | W            | %           | M            | %           | W           | %           | M           | %           | W           | %           |   |
| Q1 | CA Cancer J Clin                 | 286             | 275(96.2%)           | 157                                  | 57.1        | 118          | 42.9        | 18           | 43.9        | 23          | 56.1        | 33          | 82.5        | 7           | 17.5        |   |
|    | Nat Rev Cancer                   | 58              | 53(91.4%)            | 39                                   | 73.6        | 14           | 26.4        | 6            | 85.7        | 1           | 14.3        | 5           | 83.3        | 1           | 16.7        |   |
|    | Lancet Oncol                     | 8132            | 7177(88.3%)          | 4965                                 | 69.2        | 2212         | 30.8        | 288          | 73.5        | 104         | 26.5        | 310         | 79.5        | 80          | 20.5        |   |
|    | J Clin Oncol                     | 17620           | 16495(93.6%)         | 10291                                | 62.4        | 6204         | 37.6        | 701          | 60.3        | 462         | 39.7        | 819         | 70.8        | 337         | 29.2        |   |
|    | Nat Rev Clin Oncol               | 164             | 155(94.5%)           | 99                                   | 63.9        | 56           | 36.1        | 19           | 59.4        | 13          | 40.6        | 21          | 75.0        | 7           | 25.0        |   |
|    | Cancer Discov                    | 4603            | 4076(88.6%)          | 2525                                 | 61.9        | 1551         | 38.1        | 109          | 58.9        | 76          | 41.1        | 161         | 78.5        | 44          | 21.5        |   |
|    | Cancer Cell                      | 6599            | 5449(82.6%)          | 3543                                 | 65.0        | 1906         | 35.0        | 129          | 54.0        | 110         | 46.0        | 231         | 81.6        | 52          | 18.4        |   |
|    | JAMA Oncol                       | 4740            | 4363(92.0%)          | 2625                                 | 60.2        | 1738         | 39.8        | 149          | 50.7        | 145         | 49.3        | 208         | 69.3        | 92          | 30.7        |   |
|    | Ann Oncol                        | 11960           | 6807(56.9%)          | 4882                                 | 71.7        | 1925         | 28.3        | 396          | 74.2        | 138         | 25.8        | 487         | 76.9        | 146         | 23.1        |   |
|    | J Natl Cancer Inst               | 6418            | 5833(90.9%)          | 3319                                 | 56.9        | 2514         | 43.1        | 188          | 54.5        | 157         | 45.5        | 257         | 68.4        | 119         | 31.6        |   |
|    | <b>TOTAL (Q1):</b>               | <b>60580</b>    | <b>50683(83.7%)</b>  | <b>32445</b>                         | <b>64.0</b> | <b>18238</b> | <b>36.0</b> | <b>2003</b>  | <b>62.0</b> | <b>1229</b> | <b>38.0</b> | <b>2532</b> | <b>74.1</b> | <b>885</b>  | <b>25.9</b> |   |
| Q2 | Cancer Biol Med                  | 404             | 218(54.0%)           | 135                                  | 61.9        | 83           | 38.1        | 15           | 46.9        | 17          | 53.1        | 23          | 79.3        | 6           | 20.7        |   |
|    | Mol Cancer Res                   | 3731            | 3074(82.4%)          | 1915                                 | 62.3        | 1159         | 37.7        | 158          | 48.8        | 166         | 51.2        | 265         | 76.1        | 83          | 23.9        |   |
|    | J Environ Sci Health C Environ.. | 11              | 5(45.5%)             | 3                                    | 60.0        | 2            | 40.0        | -            | -           | -           | -           | -           | -           | -           | -           |   |
|    | Cancer Epidemiol Biom. Prev      | 7165            | 6627(92.5%)          | 3113                                 | 47.0        | 3514         | 53.0        | 169          | 31.2        | 373         | 68.8        | 274         | 48.5        | 291         | 51.5        |   |
|    | Gynecol Oncol                    | 8732            | 7621(87.3%)          | 4020                                 | 52.7        | 3601         | 47.3        | 373          | 44.9        | 457         | 55.1        | 513         | 57.8        | 375         | 42.2        |   |
|    | J Oncol                          | 276             | 228(82.6%)           | 161                                  | 70.6        | 67           | 29.4        | 24           | 75.0        | 8           | 25.0        | 21          | 70.0        | 9           | 30.0        |   |
|    | Bone Marrow Transplant           | 6260            | 2969(47.4%)          | 2127                                 | 71.6        | 842          | 28.4        | 125          | 65.1        | 67          | 34.9        | 222         | 76.3        | 69          | 23.7        |   |
|    | Crit Rev Oncol Hematol           | 0               | 0                    | -                                    | -           | -            | -           | -            | -           | -           | -           | -           | -           | -           | -           | - |
|    | Lung Cancer                      | 6062            | 4924(81.2%)          | 3493                                 | 70.9        | 1431         | 29.1        | 307          | 62.7        | 183         | 37.3        | 454         | 83.8        | 88          | 16.2        |   |
|    | Front Oncol                      | 2950            | 2649(89.8%)          | 1624                                 | 61.3        | 1025         | 38.7        | 212          | 53.4        | 185         | 46.6        | 236         | 66.9        | 117         | 33.1        |   |
|    | <b>TOTAL (Q2):</b>               | <b>35591</b>    | <b>28315(79.6%)</b>  | <b>16591</b>                         | <b>58.6</b> | <b>11724</b> | <b>41.4</b> | <b>1383</b>  | <b>48.7</b> | <b>1456</b> | <b>51.3</b> | <b>2008</b> | <b>65.9</b> | <b>1038</b> | <b>34.1</b> |   |

(cont.)

Table S3 (cont.).

|               |                             | Gender of the Authorships (Articles) |                      |              |             |              |             |              |             |             |             |             |             |             |             |
|---------------|-----------------------------|--------------------------------------|----------------------|--------------|-------------|--------------|-------------|--------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Q             | Journals                    | Author<br>ships                      | Gender<br>Identified | Overall      |             |              |             | First Author |             |             |             | Last Author |             |             |             |
|               |                             |                                      |                      | M            | %           | W            | %           | M            | %           | W           | %           | M           | %           | W           | %           |
| Q3            | Hematol Oncol               | 1639                                 | 1380(84.2%)          | 809          | 58.6        | 571          | 41.4        | 89           | 56.7        | 68          | 43.3        | 105         | 72.4        | 40          | 27.6        |
|               | Surg Oncol Clin N Am        | 358                                  | 330(92.2%)           | 223          | 67.6        | 107          | 32.4        | 83           | 63.8        | 47          | 36.2        | 46          | 80.7        | 11          | 19.3        |
|               | Oncol Res                   | 1766                                 | 738(41.8%)           | 473          | 64.1        | 265          | 35.9        | 75           | 64.1        | 42          | 35.9        | 78          | 68.4        | 36          | 31.6        |
|               | World J Gastrointest Oncol  | 709                                  | 571(80.5%)           | 409          | 71.6        | 162          | 28.4        | 60           | 70.6        | 25          | 29.4        | 64          | 82.1        | 14          | 17.9        |
|               | Melanoma Res                | 1994                                 | 1828(91.7%)          | 1000         | 54.7        | 828          | 45.3        | 111          | 47.6        | 122         | 52.4        | 148         | 64.6        | 81          | 35.4        |
|               | Curr Oncol Rep              | 119                                  | 108(90.8%)           | 60           | 55.6        | 48           | 44.4        | 20           | 50.0        | 20          | 50.0        | 9           | 52.9        | 8           | 47.1        |
|               | Hematol Oncol Clin North Am | 481                                  | 458(95.2%)           | 301          | 65.7        | 157          | 34.3        | 103          | 55.7        | 82          | 44.3        | 64          | 82.1        | 14          | 17.9        |
|               | Transl Oncol                | 2043                                 | 1458(71.4%)          | 936          | 64.2        | 522          | 35.8        | 92           | 55.1        | 75          | 44.9        | 133         | 71.1        | 54          | 28.9        |
|               | Am J Transl Res             | 9131                                 | 3939(43.1%)          | 2673         | 67.9        | 1266         | 32.1        | 337          | 68.5        | 155         | 31.5        | 373         | 73.9        | 132         | 26.1        |
|               | Clin Oncol                  | 1694                                 | 780(46.0%)           | 533          | 68.3        | 247          | 31.7        | 62           | 59.6        | 42          | 40.4        | 113         | 76.9        | 34          | 23.1        |
|               | <b>TOTAL (Q3):</b>          | <b>19934</b>                         | <b>11590(58.1%)</b>  | <b>7417</b>  | <b>64.0</b> | <b>4173</b>  | <b>36.0</b> | <b>1032</b>  | <b>60.4</b> | <b>678</b>  | <b>39.6</b> | <b>1133</b> | <b>72.8</b> | <b>424</b>  | <b>27.2</b> |
| Q4            | J Adolesc Young Adult Oncol | 749                                  | 702(93.7%)           | 227          | 32.3        | 475          | 67.7        | 21           | 17.9        | 96          | 82.1        | 40          | 38.8        | 63          | 61.2        |
|               | J Contemp Brachytherapy     | 1370                                 | 1149(83.9%)          | 805          | 70.1        | 344          | 29.9        | 107          | 63.7        | 61          | 36.3        | 135         | 83.9        | 26          | 16.1        |
|               | Infect Agent Cancer         | 1203                                 | 906(75.3%)           | 514          | 56.7        | 392          | 43.3        | 43           | 44.3        | 54          | 55.7        | 73          | 68.2        | 34          | 31.8        |
|               | Cancer Invest               | 1386                                 | 1047(75.5%)          | 641          | 61.2        | 406          | 38.8        | 79           | 55.2        | 64          | 44.8        | 98          | 71.5        | 39          | 28.5        |
|               | Breast Cancer               | 2101                                 | 1758(83.7%)          | 1195         | 68.0        | 563          | 32.0        | 123          | 55.7        | 98          | 44.3        | 164         | 77.7        | 47          | 22.3        |
|               | Front Med                   | 792                                  | 359(45.3%)           | 210          | 58.5        | 149          | 41.5        | 28           | 59.6        | 19          | 40.4        | 32          | 65.3        | 17          | 34.7        |
|               | Hered Cancer Clin Pract     | 375                                  | 325(86.7%)           | 164          | 50.5        | 161          | 49.5        | 12           | 33.3        | 24          | 66.7        | 20          | 57.1        | 15          | 42.9        |
|               | Cancer Control              | 631                                  | 570(90.3%)           | 337          | 59.1        | 233          | 40.9        | 79           | 62.2        | 48          | 37.8        | 64          | 65.3        | 34          | 34.7        |
|               | Chemotherapy                | 737                                  | 549(74.5%)           | 365          | 66.5        | 184          | 33.5        | 33           | 55.9        | 26          | 44.1        | 55          | 85.9        | 9           | 14.1        |
|               | Curr Oncol                  | 2354                                 | 958(40.7%)           | 588          | 61.4        | 370          | 38.6        | 58           | 48.3        | 62          | 51.7        | 90          | 53.6        | 78          | 46.4        |
|               | <b>TOTAL (Q4):</b>          | <b>11698</b>                         | <b>8323(71.1%)</b>   | <b>5046</b>  | <b>60.6</b> | <b>3277</b>  | <b>39.4</b> | <b>583</b>   | <b>51.4</b> | <b>552</b>  | <b>48.6</b> | <b>771</b>  | <b>68.0</b> | <b>362</b>  | <b>32.0</b> |
| <b>TOTAL:</b> |                             | <b>127803</b>                        | <b>98911(77.4%)</b>  | <b>61499</b> | <b>62.2</b> | <b>37412</b> | <b>37.8</b> | <b>5001</b>  | <b>56.1</b> | <b>3915</b> | <b>43.9</b> | <b>6444</b> | <b>70.4</b> | <b>2709</b> | <b>29.6</b> |

**Table S4.** Gender distribution of **Authorships of Reviews** published during the 2015-17 period in 40 journals selected from the Web of Science (Category ONCOLOGY). The journals are sorted by their impact factor and grouped by quartiles (Q) of the ONCOLOGY category (JCR-2017). Gender percentages refer to gender-identified values. M: Men; W:Women.

| Q  | Journals                         | Author<br>ships | Gender<br>Identified | Gender of the Authorships (Reviews) |             |             |             |
|----|----------------------------------|-----------------|----------------------|-------------------------------------|-------------|-------------|-------------|
|    |                                  |                 |                      | M                                   | %           | W           | %           |
| Q1 | CA Cancer J Clin                 | 240             | 226(94.2%)           | 109                                 | 48.2        | 117         | 51.8        |
|    | Nat Rev Cancer                   | 570             | 540(94.7%)           | 374                                 | 69.3        | 166         | 30.7        |
|    | Lancet Oncol                     | 997             | 949(95.2%)           | 631                                 | 66.5        | 318         | 33.5        |
|    | J Clin Oncol                     | 766             | 736(96.1%)           | 457                                 | 62.1        | 279         | 37.9        |
|    | Nat Rev Clin Oncol               | 577             | 553(95.8%)           | 386                                 | 69.8        | 167         | 30.2        |
|    | Cancer Discov                    | 98              | 93(94.9%)            | 72                                  | 77.4        | 21          | 22.6        |
|    | Cancer Cell                      | 34              | 34(100%)             | 30                                  | 88.2        | 4           | 11.8        |
|    | JAMA Oncol                       | 434             | 397(91.5%)           | 278                                 | 70.0        | 119         | 30.0        |
|    | Ann Oncol                        | 1580            | 1024(64.8%)          | 722                                 | 70.5        | 302         | 29.5        |
|    | J Natl Cancer Inst               | 424             | 386(91.0%)           | 258                                 | 66.8        | 128         | 33.2        |
|    | <b>TOTAL (Q1):</b>               | <b>5720</b>     | <b>4938(86.3%)</b>   | <b>3317</b>                         | <b>67.2</b> | <b>1621</b> | <b>32.8</b> |
| Q2 | Cancer Biol Med                  | 305             | 197(64.6%)           | 121                                 | 61.4        | 76          | 38.6        |
|    | Mol Cancer Res                   | 86              | 76(88.4%)            | 48                                  | 63.2        | 28          | 36.8        |
|    | J Environ Sci Health C Environ.. | 193             | 127(65.8%)           | 72                                  | 56.7        | 55          | 43.3        |
|    | Cancer Epidemiol Biomarkers Prev | 350             | 313(89.4%)           | 153                                 | 48.9        | 160         | 51.1        |
|    | Gynecol Oncol                    | 945             | 859(90.9%)           | 411                                 | 47.8        | 448         | 52.2        |
|    | J Oncol                          | 89              | 80(89.9%)            | 45                                  | 56.3        | 35          | 43.8        |
|    | Bone Marrow Transplant           | 447             | 257(57.5%)           | 191                                 | 74.3        | 66          | 25.7        |
|    | Crit Rev Oncol Hematol           | 3458            | 2937(84.9%)          | 1811                                | 61.7        | 1126        | 38.3        |
|    | Lung Cancer                      | 500             | 421(84.2%)           | 281                                 | 66.7        | 140         | 33.3        |
|    | Front Oncol                      | 1633            | 1457(89.2%)          | 835                                 | 57.3        | 622         | 42.7        |
|    | <b>TOTAL (Q2):</b>               | <b>8006</b>     | <b>6724(84.0%)</b>   | <b>3968</b>                         | <b>59.0</b> | <b>2756</b> | <b>41.0</b> |

(cont.)



Table S4 (cont.).

|               |                             | Author<br>ships    | Gender<br>Identified | Gender of the Authorships (Reviews) |             |             |             |
|---------------|-----------------------------|--------------------|----------------------|-------------------------------------|-------------|-------------|-------------|
|               |                             |                    |                      | M                                   | %           | W           | %           |
| Q3            | Hematol Oncol               | 140                | 116(82.9%)           | 69                                  | 59.5        | 47          | 40.5        |
|               | Surg Oncol Clin N Am        | 0                  | 0                    | -                                   | -           | -           | -           |
|               | Oncol Res                   | 34                 | 17(50.0%)            | 12                                  | 70.6        | 5           | 29.4        |
|               | World J Gastrointest Oncol  | 397                | 336(84.6%)           | 225                                 | 67.0        | 111         | 33.0        |
|               | Melanoma Res                | 68                 | 57(83.8%)            | 37                                  | 64.9        | 20          | 35.1        |
|               | Curr Oncol Rep              | 601                | 565(94.0%)           | 337                                 | 59.6        | 228         | 40.4        |
|               | Hematol Oncol Clin North Am | 36                 | 31(86.1%)            | 18                                  | 58.1        | 13          | 41.9        |
|               | Transl Oncol                | 62                 | 47(75.8%)            | 32                                  | 68.1        | 15          | 31.9        |
|               | Am J Transl Res             | 227                | 117(51.5%)           | 85                                  | 72.6        | 32          | 27.4        |
|               | Clin Oncol                  | 54                 | 28(51.9%)            | 23                                  | 82.1        | 5           | 17.9        |
|               |                             | <b>TOTAL (Q3):</b> | <b>1619</b>          | <b>1314(81.2%)</b>                  | <b>838</b>  | <b>63.8</b> | <b>476</b>  |
| Q4            | J Adolesc Young Adult Oncol | 98                 | 95(96.9%)            | 23                                  | 24.2        | 72          | 75.8        |
|               | J Contemp Brachytherapy     | 133                | 120(90.2%)           | 88                                  | 73.3        | 32          | 26.7        |
|               | Infect Agent Cancer         | 135                | 123(91.1%)           | 56                                  | 45.5        | 67          | 54.5        |
|               | Cancer Invest               | 59                 | 45(76.3%)            | 31                                  | 68.9        | 14          | 31.1        |
|               | Breast Cancer               | 116                | 74(63.8%)            | 41                                  | 55.4        | 33          | 44.6        |
|               | Front Med                   | 242                | 126(52.1%)           | 78                                  | 61.9        | 48          | 38.1        |
|               | Hered Cancer Clin Pract     | 54                 | 37(68.5%)            | 15                                  | 40.5        | 22          | 59.5        |
|               | Cancer Control              | 57                 | 54(94.7%)            | 35                                  | 64.8        | 19          | 35.2        |
|               | Chemotherapy                | 52                 | 46(88.5%)            | 29                                  | 63.0        | 17          | 37.0        |
|               | Curr Oncol                  | 206                | 100(48.5%)           | 55                                  | 55.0        | 45          | 45.0        |
|               |                             | <b>TOTAL (Q4):</b> | <b>1152</b>          | <b>820(71.2%)</b>                   | <b>451</b>  | <b>55.0</b> | <b>369</b>  |
| <b>TOTAL:</b> |                             | <b>16497</b>       | <b>13796(83.6%)</b>  | <b>8574</b>                         | <b>62.1</b> | <b>5222</b> | <b>37.9</b> |

**Table S5.** Top 30% of Keywords extracted from the articles published during the 2015-17 period in 40 journals selected from the Web of Science (Category ONCOLOGY) and separated by authorship gender (first or last position in the by-line). Keywords in bold ascend one or more steps when going from male to female authorships. Underlined keywords descend one or more steps when going from male to female authorships. Occurrences between parentheses.

|        | First or last male authorship<br>(total keywords = 93,361)   | First or last female authorship<br>(total keywords = 59,356)   |
|--------|--|--|
| 1-5 %  | survival (1007); cancer (937); expression (905); chemotherapy (861); <u>therapy</u> (819)  | <b>breast-cancer</b> (581); survival (580); cancer (569); chemotherapy (508); expression (485)   |
| 6-10%  | <b>breast-cancer</b> (751); carcinoma (714); trial (590); risk (519); <u>open-label</u> (431); <u>cell lung-cancer</u> (424); <u>radiation-therapy</u> (397); quality-of-life (357); <u>radiotherapy</u> (356)   | <u>therapy</u> (468); carcinoma (452); risk (424); <b>women</b> (387); trial (316); quality-of-life (313); <b>united-states</b> (289); <b>metaanalysis</b> (258); <b>lung-cancer</b> (220)   |
| 11-15% | colorectal-cancer (355); disease (353); <b>women</b> (353); <b>lung-cancer</b> (346); management (346); mutations (341); outcomes (324); <b>metaanalysis</b> (320); cells (316); <b>united-states</b> (295); <u>randomized-trial</u> (293); <u>randomized controlled-trial</u> (287); <u>squamous-cell carcinoma</u> (282); <u>activation</u> (279); <u>phase-iii trial</u> (264)  | disease (219); <u>open-label</u> (217); <u>cell lung-cancer</u> (216); <u>randomized controlled-trial</u> (215); colorectal-cancer (214); cells (213); <u>radiotherapy</u> (213); outcomes (209); mutations (206); <u>radiation-therapy</u> (200); management (197); <b>mortality</b> (194); <b>follow-up</b> (190); <b>impact</b> (179)   |
| 16-20% | <b>follow-up</b> (263); adenocarcinoma (260); prostate-cancer (255); progression (250); growth (248); tumors (245); diagnosis (242); phase-ii (241); metastasis (239); <u>acute myeloid-leukemia</u> (238); <b>impact</b> (235); <u>double-blind</u> (234); <b>mortality</b> (230); gene-expression (222); <u>multicenter</u> (218); <u>stem-cell transplantation</u> (218); <u>surgery</u> (218); phase-ii trial (217); <u>1st-line treatment</u> (216); clinical-trials (215)  | diagnosis (177); prostate-cancer (176); <u>squamous-cell carcinoma</u> (171); <b>ovarian-cancer</b> (169); <u>randomized-trial</u> (169); <b>risk-factors</b> (163); <b>population</b> (158); metastasis (155); tumors (155); <u>activation</u> (154); growth (150); <u>phase-iii trial</u> (150); progression (147); adenocarcinoma (138); <b>care</b> (138); clinical-trials (134); phase-ii (134); <b>prognostic-factors</b> (133); gene-expression (132); phase-ii trial (128)   |
| 21-25% | cisplatin (209); <b>prognostic-factors</b> (208); resistance (201); solid tumors (198); <u>bone-marrow-transplantation</u> (194); in-vivo (194); <b>ovarian-cancer</b> (189); identification (187); pathway (187); combination (180); gene (180); <u>efficacy</u> (175); <u>apoptosis</u> (174); growth-factor receptor (172); in-vitro (172); <b>risk-factors</b> (171); <b>population</b> (170); adjuvant chemotherapy (161); <u>hepatocellular-carcinoma</u> (161); acute lymphoblastic-leukemia (160); <u>docetaxel</u> (158); metastatic melanoma (157); colon-cancer (156); <u>versus-host-disease</u> (155); association (153); <u>safety</u> (148); gynecologic-oncology-group (144) | <u>surgery</u> (127); <b>cohort</b> (125); in-vivo (125); <b>health</b> (121); <b>prevalence</b> (119); gynecologic-oncology-group (118); association (115); <u>multicenter</u> (115); <u>double-blind</u> (113); adjuvant chemotherapy (111); in-vitro (111); identification (110); acute lymphoblastic-leukemia (109); <u>acute myeloid-leukemia</u> (108); solid tumors (107); <u>stem-cell transplantation</u> (106); combination (105); <b>postmenopausal women</b> (105); <b>survivors</b> (105); cisplatin (103); growth-factor receptor (102); metastatic melanoma (102); pathway (102); <b>children</b> (100); gene (99); resistance (99); colon-cancer (97); <b>recommendations</b> (93) |

26-30% proliferation (143); inhibition (142); stem-cells (141); **care** (140); phase-iii (139); **recommendations** (139); acquired-resistance (137); guidelines (137); inflammation (136); experience (135); recurrence (134); classification (133); prognosis (131); t-cells (129); neoadjuvant chemotherapy (126); endothelial growth-factor (123); chronic lymphocytic-leukemia (122); oncology (122); positron-emission-tomography (120); **children** (119); gefitinib (118); epithelial-mesenchymal transition (116); non-hodgkins-lymphoma (116); **prevalence** (116); bevacizumab (114); **cohort** (114); elderly-patients (114); mice (112); differentiation (111); inhibitor (107); men (107); pancreatic-cancer (106); paclitaxel (104); protein (103); angiogenesis (102); toxicity (101); epidemiology (100); carboplatin (99); fluorouracil (97) apoptosis (93); bone-marrow-transplantation (93); guidelines (90); **body-mass index** (89); **physical-activity** (89); stem-cells (88); oncology (86); 1st-line treatment (85); neoadjuvant chemotherapy (84); proliferation (84); recurrence (84); hepatocellular-carcinoma (83); prognosis (82); docetaxel (80); pancreatic-cancer (80); **patterns** (80); **prevention** (79); **human-papillomavirus** (77); **validation** (77); differentiation (76); **genome-wide association** (76); endothelial growth-factor (74); inflammation (74); t-cells (73); **malignant-melanoma** (72); classification (71); phase-iii (71); epithelial-mesenchymal transition (70); experience (70); paclitaxel (70); **cervical-cancer** (69); inhibition (68); **long-term survivors** (68); positron-emission-tomography (67); protein (67); safety (67); epidemiology (66); men (66)

---