Supplementary Online Content

Stang A, Schmidt B. Reporting of statistical inference in abstracts of major cancer journals, 1990 to 2020. *JAMA Netw Open*. 2022;5(6):e2218337. doi:10.1001/jamanetworkopen.2022.18337

eTable. Prevalence of Reporting of Statistical Inference in Abstracts of High-Ranking Cancer Journals of the Publication Years 2016-2020

eFigure 1. Flexibly Estimated Time Trends 1990-2020 in the Prevalence of Any Statistical Inference in the Abstracts of High-Ranking Cancer Journals

eFigure 2. Time Trends of the Prevalence of Publications of Randomized Clinical Trials

eFigure 3. Flexibly Estimated Time Trends 1990-2020 of the Statistical Reporting Style in Abstracts of High-Ranking Cancer Journals That Contain Statistical Inference

This supplementary material has been provided by the authors to give readers additional information about their work.
### eTable. Prevalence of Reporting of Statistical Inference in Abstracts of High-Ranking Cancer Journals of the Publication Years 2016-2020

| Journal                                | Total (n) | Any statistical inference n (%) | Percentages among abstracts containing statistical inference (%) | Confidence intervals | p-values without confidence intervals | Significance terminology only |
|----------------------------------------|-----------|---------------------------------|---------------------------------------------------------------|----------------------|---------------------------------------|-------------------------------|
| Randomized controlled trials (all journals) | 1,126     | 1,061 (94.2)                    | 80.0                                                          | 13.4                 | 6.6                                   |                               |
| Annals of Oncology                      | 241       | 212 (88.0)                      | 74.1                                                          | 9.4                  | 16.5                                  |                               |
| Cancer Cell                            | 1         |                                 |                                                                |                      |                                       |                               |
| Cancer Discovery                       | 2         |                                 |                                                                |                      |                                       |                               |
| JAMA Oncology                          | 136       | 126 (92.6)                      | 88.1                                                          | 1.6                  | 10.3                                  |                               |
| Journal of Clinical Oncology           | 361       | 348 (96.4)                      | 69.8                                                          | 27.6                 | 2.6                                   |                               |
| Journal of the National Cancer Institute | 40        | 39 (97.5)                       | 92.3                                                          | 7.7                  | 0.0                                   |                               |
| Journal of Thoracic Oncology           | 53        | 45 (84.9)                       | 80.0                                                          | 2.2                  | 17.8                                  |                               |
| Lancet Oncology                        | 292       | 289 (99.0)                      | 92.0                                                          | 6.6                  | 1.4                                   |                               |
| Molecular Cancer                      | 0         |                                 |                                                                |                      |                                       |                               |
| Trends in Cancer                      | 0         |                                 |                                                                |                      |                                       |                               |

© 2022 Stang A et al. JAMA Network Open.
| Journal                                      | Total | Randomized | Nonrandomized | Nonrandomized | Randomized |
|----------------------------------------------|-------|------------|---------------|---------------|------------|
| Nonrandomized studies (all journals)         | 9,101 | 3,834 (42.1)| 57.9          | 12.7          | 29.3       |
| Annals of Oncology                           | 1,026 | 540 (52.6) | 53.7          | 10.2          | 36.1       |
| Cancer Cell                                  | 850   | 65 (7.6)   | 1.5           | 3.1           | 95.4       |
| Cancer Discovery                             | 1,608 | 145 (9.0)  | 4.8           | 5.5           | 89.7       |
| JAMA Oncology                                | 761   | 490 (64.4) | 82.4          | 1.4           | 16.3       |
| Journal of Clinical Oncology                 | 1,452 | 990 (68.2) | 64.8          | 21.9          | 13.3       |
| Journal of the National Cancer Institute     | 757   | 541 (71.5) | 80.8          | 13.9          | 5.4        |
| Journal of Thoracic Oncology                 | 836   | 460 (55.0) | 39.1          | 23.3          | 37.6       |
| Lancet Oncology                              | 532   | 285 (53.6) | 89.8          | 5.3           | 4.9        |
| Molecular Cancer                             | 789   | 284 (36.0) | 2.1           | 0.7           | 97.2       |
| Trends in Cancer                             | 490   | 34 (6.9)   | 0.0           | 0.0           | 100.0      |

© 2022 Stang A et al. JAMA Network Open.
eFigure 1. Flexibly Estimated Time Trends 1990-2020 in the Prevalence of Any Statistical Inference in the Abstracts of High-Ranking Cancer Journals

Legend: trend lines and 95% confidence interval bands are LOESS smoothed; no confidence interval bands for JAMA Oncology and Trends in Cancer because of few data points.

© 2022 Stang A et al. JAMA Network Open.
eFigure 2. Time Trends of the Prevalence of Publications of Randomized Clinical Trials

Legend: trend lines were based on splines (5 knots, smoothing 0.1)
eFigure 3. Flexibly Estimated Time Trends 1990-2020 of the Statistical Reporting Style in Abstracts of High-Ranking Cancer Journals That Contain Statistical Inference

Legend eFigure 3: green graphs indicate reporting of confidence intervals; blue graphs indicate reporting of exact p-values and/or p thresholds without confidence intervals; red graphs indicate reporting of statistical significance without confidence intervals and p-values; all trend lines are LOESS smoothed