**Supplementary Table S1.** Characteristic comparisons between IF groups among interventional published studies *

| Characteristic                                      | Total (n=88) | IF < 10 (n=65) | IF ≥ 10 (n=23) | P-values |
|-----------------------------------------------------|--------------|----------------|----------------|----------|
| Duration of primary completion (mo.)                 | 34.2 (20.5, 55.0) | 33.9 (19.9, 56.0) | 34.5 (28.0, 43.0) | 0.618    |
| Time to publication (mo.)                           | 24.0 (11.2, 38.2) | 24.7 (11.4, 42.0) | 20.0 (11.1, 29.6) | 0.176    |
| Published within two years after primary completion  |              |                |                | 0.467    |
| Within 2 years                                      | 42 (47.7)    | 33 (50.8)      | 9 (39.1)       |          |
| After 2 years                                       | 46 (52.3)    | 32 (49.2)      | 14 (60.9)      |          |
| Year of primary completion                          |              |                |                | 0.610    |
| 00-10                                               | 27 (30.7)    | 19 (29.2)      | 8 (34.8)       |          |
| 11-16                                               | 61 (69.3)    | 46 (70.8)      | 15 (65.2)      |          |
| Outcome                                             |              |                |                | 0.772    |
| Nonpositive                                         | 18 (20.5)    | 14 (21.5)      | 4 (17.4)       |          |
| Positive                                            | 70 (79.5)    | 51 (78.5)      | 19 (82.6)      |          |
| Registered after study start                        |              |                |                | 0.439    |
| No                                                  | 28 (31.8)    | 19 (29.2)      | 9 (39.1)       |          |
| Yes                                                 | 60 (68.2)    | 46 (70.8)      | 14 (60.9)      |          |
| Sample size                                         |              |                |                | 0.776    |
| <=50                                                | 44 (50.0)    | 31 (47.7)      | 13 (56.5)      |          |
| 51-100                                              | 20 (22.7)    | 15 (23.1)      | 5 (21.7)       |          |
| >100                                                | 24 (27.3)    | 19 (29.2)      | 5 (21.7)       |          |
| Age                                                 |              |                |                | 0.675    |
| With child                                          | 8 (9.1)      | 7 (10.8)       | 1 (4.3)        |          |
| Only adults                                         | 80 (90.9)    | 58 (89.2)      | 22 (95.7)      |          |
| Only TC                                             |              |                |                | 0.228    |
| No                                                   | 18 (20.5)    | 11 (16.9)      | 7 (30.4)       |          |
| Yes                                                  | 70 (79.5)    | 54 (83.1)      | 16 (69.6)      |          |
| Purpose                                             |              |                |                | 0.018    |
| Others                                              | 13 (14.8)    | 13 (20.0)      | 0 (0.0)        |          |
| Treatment                                           | 75 (85.2)    | 52 (80.0)      | 23 (100.0)     |          |
| Phases                                              |              |                |                | 0.436    |
| Phase 1                                             | 12 (13.8)    | 7 (10.9)       | 5 (21.7)       |          |
| Phase 2                                             | 38 (43.7)    | 27 (42.2)      | 11 (47.8)      |          |
| Phase 3/4                                           | 18 (20.7)    | 14 (21.9)      | 4 (17.4)       |          |
| NA                                                  | 19 (21.8)    | 16 (25.0)      | 3 (13.0)       |          |
| Study design                                        |              |                |                | 0.330    |
| Single group                                        | 48 (54.5)    | 33 (50.8)      | 15 (65.2)      |          |
| Two or more groups                                  | 40 (45.5)    | 32 (49.2)      | 8 (34.8)       |          |
| Randomization                                       |              |                |                | 0.325    |
| No                                                   | 52 (59.1)    | 36 (55.4)      | 16 (69.6)      |          |
| Yes                                                  | 36 (40.9)    | 29 (44.6)      | 7 (30.4)       |          |
| Blind                                               |              |                |                | 1.000    |
| Open label                                          | 65 (73.9)    | 48 (73.8)      | 17 (73.9)      |          |
|                | Blind     | US/Canada | European | Asian     | Others   | Country  | 0.014 |
|----------------|-----------|-----------|----------|-----------|----------|----------|-------|
|                | 23 (26.1) | 35 (39.8) | 19 (21.6)| 21 (23.9) | 13 (14.8)|          |       |
|                | 17 (26.2) | 22 (33.8) | 17 (26.2)| 19 (29.2) | 7 (10.8) |          |       |
|                | 6 (26.1)  | 13 (56.5) | 2 (8.7)  | 2 (8.7)   | 6 (26.1) |          |       |
| Center         | 0.014     |          |          |          |          |          |       |
| Single-center  | 54 (61.4) | 45 (69.2) |          |          |          |          |       |
| Multi-center   | 34 (38.6) | 20 (30.8) |          |          |          |          |       |
| Funder         | 0.012     |          |          |          |          |          |       |
| NIH            | 17 (19.3) | 12 (18.5) |          |          |          |          |       |
| Industry       | 30 (34.1) | 17 (26.2) |          |          |          |          |       |
| Others         | 41 (46.6) | 36 (55.4) |          |          |          |          |       |
|                |           |           |          |          |          |          |       |
|                |           |           |          |          |          | NIH, the National Institutes of Health. |

Note: IF, impact factor; TC, thyroid cancer; NA, not available; NIH, the National Institutes of Health.
**Supplementary Table S2. Multivariate logistic regression for high IF**

|                | OR   | 95% CI       | P-values |
|----------------|------|--------------|----------|
| **Country**    |      |              |          |
| US/Canada      | 1.00 |              |          |
| European       | 0.09 | (0.01, 0.85) | 0.020    |
| Asian          | 0.11 | (0.01, 0.85) | 0.034    |
| Others         | 0.23 | (0.03, 1.57) | 0.123    |
| **Center**     |      |              |          |
| Single-center  | 1.00 |              |          |
| Multi-center   | 6.55 | (1.33, 32.30)| 0.021    |
| **Funder**     |      |              |          |
| Others         | 1.00 |              |          |
| NIH            | 0.58 | (0.08, 4.24) | 0.593    |
| Industry       | 2.33 | (0.58, 9.29) | 0.232    |

Note: IF, impact factor; NIH, the National Institutes of Health.