### Study ID

| IN   | Sildenafil                        | Vardenafil                        | Tadalafil                       |
|------|-----------------------------------|-----------------------------------|---------------------------------|
| Li (2014) | 2.24 (1.05, 4.78) | 1.03 (0.91, 1.17) | 1.02 (0.72, 1.45) |
| Loeb (2015) | 1.14 (0.99, 1.31) | 1.04 (0.92, 1.17) | 1.06 (0.88, 1.28) |
| Lian (2016) | 1.22 (0.97, 1.54) | 1.04 (0.95, 1.13) | 1.60 (1.11, 2.31) |
| Pottegard-DNHR (2016) | 1.08 (0.96, 1.22) | 1.03 (0.91, 1.17) | 1.07 (0.98, 1.16) |
| Pottegard-KPNC (2016) | 1.00 (0.90, 1.12) | 1.04 (0.92, 1.17) | 1.08 (0.96, 1.22) |
| Boor (2016) | 2.07 (1.48, 2.89) | 1.02 (0.94, 1.11) | 1.60 (1.11, 2.31) |
| Shkolyar (2018) | 1.02 (0.94, 1.11) | 1.04 (0.95, 1.13) | 1.07 (0.98, 1.16) |
| **Subtotal (I^2=74.3%, p=0.001)** | \(2.24 \times 1.03 \times 1.02 = 2.32\) | \(1.03 \times 1.04 \times 1.02 = 1.06\) | \(1.06 \times 1.07 \times 1.07 = 1.19\) |

| Weight (%) | Adjusted OR (95% CI) | Weight (%) | Adjusted OR (95% CI) | Weight (%) | Adjusted OR (95% CI) |
|------------|----------------------|------------|----------------------|------------|----------------------|
| 0.74       | 2.24 (1.05, 4.78)    | 5.49       | 1.22 (0.97, 1.54)    | 10.60      | 1.08 (0.96, 1.22)    |
| 9.42       | 1.14 (0.99, 1.31)    | 3.19       | 2.07 (1.48, 2.89)    | 12.88      | 1.02 (0.94, 1.11)    |
| 11.24      | 1.00 (0.90, 1.12)    |           | 1.02 (0.94, 1.11)    |           |                      |
| 3.91       | 2.07 (1.48, 2.89)    |           | 1.04 (0.95, 1.13)    |           |                      |
| 53.56      | 1.16 (1.03, 1.30)    |           | 1.04 (0.95, 1.13)    |           |                      |

**Note:** Weights are from random effects analysis.

**Supplement Fig. 2.** Meta-analysis of the association between phosphodiesterase type 5 inhibitors (PDE5Is) use and risk of developing malignant melanoma (subgroup by PDE5Is types). OR: odds ratio; CI: confidence interval; DNHR: Danish Nationwide Health Registries, KPNC: Kaiser Permanente Northern California.