Study logOR [95%CI] P-value -0.85 [-1.91; 0.21] 0.12 Snyder, Ureteral, n = 22-0.77 [-1.77; 0.23] 0.13 Jung, Lung, n = 26-0.48 [-1.28; 0.32] 0.23 Miao.1, Kidney, n = 28Braun, Kidney, n = 139-0.39 [-0.78; 0.00] 0.05 Liu, Melanoma, n = 112 -0.36 [-0.75; 0.03] 0.07 Fumet.1, Lung, n = 39-0.32 [-1.03; 0.39] 0.38 Riaz, Melanoma, n = 33-0.10 [-0.86; 0.66] 0.79 Hugo, Melanoma, n = 27-0.03[-0.79; 0.73]0.94 Mariathasan, Kidney, n = 460.01 [-0.70: 0.72] 0.97 Fumet.2, Lung, n = 410.13 [-0.52; 0.78] 0.70 Mariathasan, Bladder, $n = 133 \ 0.20 \ [-0.19; \ 0.59]$ 0.30 Van_Allen , Melanoma, n = 39 0.40 [-0.44; 1.24]0.36 Nathanson, Melanoma, $n = 24 \ 0.72 \ [-0.24; 1.68]$ 0.15

Total -0.14 [-0.34: 0.06] Heterogeneity: $\chi_{12}^2 = 15.44 \ (P = .22), \ I^2 = 22\% \ [0\%; 59\%]$ Test for overall effect: z = -1.34 (P = .18) 0 0.5 1

Estimated logOR