**Supplemental Table S2. Hazard ratio of extraction and Data conversion**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Study (OS) | Year | HR | lnHR[(ln95%CI (lower-bound), ln95%CI(upper-bound)] | log(Odd ratio)=lnHR | SE=[ln95%CI(upper-bound) minus ln95%CI(lower-bound)]/(2\*1.96) |
| Rittmeyer, A | 2017 | 0.73 (0.62; 0.87) | -0.31 (-0.48; -0.14) | -0.31 | 0.087 |
| Brahmer, J | 2015 | 0.59 (0.44; 0.79) | -0.53 (-0.82; -0.24) | -0.53 | 0.148 |
| Borghaei, H | 2015 | 0.73 (0.59; 0.89) | -0.31 (-0.53; -0.12) | -0.31 | 0.105 |
| Barlesi, F | 2018 | 0.90 (0.72; 1.12) | -0.11 (-0.33; 0.11) | -0.11 | 0.112 |
| Herbst, RS (2 mg) | 2016 | 0.71 (0.58; 0.88) | -0.34 (-0.54; -0.13) | -0.34 | 0.104 |
| Herbst, RS (10 mg) | 2016 | 0.61 (0.49; 0.75) | -0.49 (-0.71; -0.29) | -0.49 | 0.107 |
| Hida, T | 2018 | 0.80 (0.41; 1.57) | -0.22 (-0.89; 0.45) | -0.22 | 0.342 |
| Wu, Y | 2019 | 0.68 (0.52; 0.90) | -0.39 (-0.65; -0.11) | -0.39 | 0.138 |
| Fehrenbacher, L | 2016 | 0.73 (0.53; 0.99) | -0.31 (-0.63; -0.01) | -0.31 | 0.158 |
| Study (PFS) | Year | HR | lnHR[(ln95%CI (lower-bound), ln95%CI(upper-bound)] | log(Odd ratio)=lnHR | SE=[ln95%CI(upper-bound) minus ln95%CI(lower-bound)]/(2\*1.96) |
| Rittmeyer, A | 2017 | 0.95 (0.82; 1.10) | -0.05 (-0.19; 0.10) | -0.05 | 0.074 |
| Brahmer, J | 2015 | 0.62 (0.47; 0.81) | -0.48 (-0.76; -0.21) | -0.48 | 0.140  |
| Borghaei, H | 2015 | 0.92 (0.77; 1.11) | -0.08 (-0.26; 0.10) | -0.08 | 0.092 |
| Barlesi, F | 2018 | 1.01 (0.80; 1.28) | 0.01 (-0.22; 0.25) | 0.01 | 0.120  |
| Herbst, RS (2 mg) | 2016 | 0.88 (0.74; 1.05) | -0.13 (-0.76; 0.05) | -0.13 | 0.207 |
| Herbst, RS (10 mg) | 2016 | 0.79 (0.66; 0.94) | -0.24 (-0.42; -0.06) | -0.24 | 0.092 |
| Hida, T | 2018 | 1.37 (0.81; 2.31) | 0.31 (-0.21; 0.84) | 0.31 | 0.268 |
| Wu, Y | 2019 | 0.77 (0.62; 0.95) | -0.26 (-0.48; -0.05) | -0.26 | 0.110  |
| Fehrenbacher, L | 2016 | 0.94 (0.72; 1.23) | -0.06 (-0.33; 0.21) | -0.06 | 0.138 |
| Study (PD-L1 positive) | Year | HR | lnHR[(ln95%CI (lower-bound), ln95%CI(upper-bound)] | log(Odd ratio)=lnHR | SE=[ln95%CI(upper-bound) minus ln95%CI(lower-bound)]/(2\*1.96) |
| Barlesi, F | 2018 | 0.90 (0.72; 1.12) | -0.11 (-0.33; 0.11) | -0.11 | 0.112 |
| Brahmer, J | 2015 | 0.69 (0.45; 1.05) | -0.37 (-0.80; 0.05) | -0.37 | 0.217 |
| Fehrenbacher, L | 2016 | 0.59 (0.40; 0.85) | -0.53 (-0.92; -0.16) | -0.53 | 0.194 |
| Herbst, RS (2 mg) | 2016 | 0.71 (0.58; 0.88) | -0.34 (-0.54; -0.13) | -0.34 | 0.105 |
| Herbst, RS (10 mg) | 2016 | 0.61 (0.49; 0.75) | -0.49 (-0.71; -0.29) | -0.49 | 0.107 |
| Hida, T | 2018 | 0.81 (0.22; 3.05) | -0.21 (-1.51; 1.12) | -0.21 | 0.671 |
| Rittmeyer, A | 2017 | 0.74 (0.58; 0.93) | -0.30 (-0.54; -0.07) | -0.30  | 0.120  |
| Wu, Y | 2019 | 0.62 (0.45; 0.87) | -0.48 (-0.80; -0.14) | -0.48 | 0.168 |
| Study (PD-L1 negative) | Year | HR | lnHR[(ln95%CI (lower-bound), ln95%CI(upper-bound)] | log(Odd ratio)=lnHR | SE=[ln95%CI(upper-bound) minus ln95%CI(lower-bound)]/(2\*1.96) |
| Brahmer, J | 2015 | 0.58 (0.37; 0.92) | -0.54 (-0.99; -0.08) | -0.54 | 0.232 |
| Fehrenbacher, L | 2016 | 1.04 (0.62; 1.75) | 0.04 (-0.48; 0.56) | 0.04 | 0.265 |
| Hida, T | 2018 | 0.79 (0.36; 1.73) | -0.24 (-1.02; 0.55) | -0.24 | 0.401 |
| Rittmeyer, A | 2017 | 0.75 (0.59; 0.96) | -0.29 (-0.53; -0.04) | -0.29 | 0.125 |
| Wu, Y | 2019 | 0.75 (0.52; 1.09) | -0.29 (-0.65; 0.09) | -0.29 | 0.189 |
| Study (Squamous cell) | Year | HR | lnHR[(ln95%CI (lower-bound), ln95%CI(upper-bound)] | log(Odd ratio)=lnHR | SE=[ln95%CI(upper-bound) minus ln95%CI(lower-bound)]/(2\*1.96) |
| Barlesi, F | 2018 | 0.70 (0.48; 1.01) | -0.36 (-0.73; 0.01) | -0.36 | 0.189 |
| Fehrenbacher, L | 2016 | 0.80 (0.49; 1.30) | -0.22 (-0.71; 0.26) | -0.22 | 0.247 |
| Herbst, RS | 2016 | 0.74 (0.50; 1.09) | -0.30 (-0.69; 0.09) | -0.30  | 0.199 |
| Rittmeyer, A | 2017 | 0.73 (0.54; 0.98) | -0.31 (-0.62; -0.02) | -0.31 | 0.153 |
| Wu, Y | 2019 | 0.61 (0.42; 0.89) | -0.49 (-0.87; -0.12) | -0.49 | 0.191 |
| Study (Non-squamous cell) | Year | HR | lnHR[(ln95%CI (lower-bound), ln95%CI(upper-bound)] | log(Odd ratio)=lnHR | SE=[ln95%CI(upper-bound) minus ln95%CI(lower-bound)]/(2\*1.96) |
| Barlesi, F | 2018 | 1.02 (0.79; 1.33) | 0.02 (-0.24; 0.29) | 0.02 | 0.135 |
| Fehrenbacher, L | 2016 | 0.69 (0.47; 1.01) | -0.37 (-0.76; 0.01) | -0.37 | 0.196 |
| Herbst, RS | 2016 | 0.63 (0.50; 0.79) | -0.46 (-0.69; -0.12) | -0.46 | 0.145 |
| Rittmeyer, A | 2017 | 0.73 (0.60; 0.89) | -0.31 (-0.51; -0.12) | -0.31 | 0.099 |
| Wu, Y | 2019 | 0.76 (0.56; 1.04) | -0.27 (-0.58; 0.04) | -0.27 | 0.158 |