Additional file 2. Survival data indicator of original articles

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| First author，year | Survival outcome | Univariate analysis | Multivariate analysis | Univariate analysis | Multivariate analysis | HR/RRestimation |
| HR | 95%CI | HR | 95%CI | RR | 95%CI | RR | 95%CI |
| Nielsen et al. 1996 | RFS |  |  |  |  | 1.40 | 0.88-2.23 | 1.33 | 0.53-3.34 | RR/Surv. Curves |
| BCSS |  |  |  |  | 3.24 | 1.59-6.60 | 2.06 | 0.72-5.89 |
| Porter et al. 1997 | OS |  |  |  |  | 2.10 | 1.30-3.39 | 2.40 | 1.10-5.24 | RR |
| Bukholm et al. 2001 | BCSS |  |  |  |  | 0.66 | 0.28-1.56 |  |  | Event number |
| RFS |  |  |  |  | 1.12 | 0.51-2.46 |  |  | Event number |
| Donnellan et al. 2001 | OS |  |  |  |  | 4.86 | 2.11-11.19 |  |  | Event number |
| Kim et al. 2001 | OS |  |  |  |  | 1.53 | 0.66-3.55 |  |  | RR |
| RFS |  |  |  |  | 2.81 | 1.35-5.85 | 2.05 | 0.95-4.42 | RR |
| Keyomarsi et al. 2002 | BCSS |  |  |  |  |  |  | 13.3 | 5.80-30.50 | RR |
| OS |  |  |  |  |  |  | 4.30 | 2.20-8.40 | RR |
| Han et al. 2003 | OS |  |  |  |  | 1.91 | 1.02-3.58 | 2.74 | 1.44-5.21 | RR |
| Kühling, H 2003 | BCSS |  |  |  |  |  |  | 2.64 | 1.33-2.52 | RR |
| MFS |  |  |  |  |  |  | 2.38 | 1.23-4.61 | RR |
| Rudolph et al. 2003 | BCSS |  |  |  |  |  |  | 2.38 | 1.08-5.24 | RR |
| Span et al. 2003 | OS | 1.21 | 0.67-2.18 |  |  |  |  |  |  | HR |
| RFS | 1.33 | 0.82-2.16 | 0.64 | 0.32-1.28 |  |  |  |  | HR |
| Foulkes et al. 2004 | BCSS |  |  |  |  | 2.63 | 1.58-4.38 | 1.99 | 1.16-3.41 | RR |
| Lindahl et al. 2004 | OS | 3.44 | 1.79-6.61 | 2.10 | 1.10-4.01 |  |  |  |  | HR |
| Peters et al. 2004 | RFS | 4.63 | 1.36-15.76 |  |  |  |  |  |  | Surv. Curves |
| Arnes et al. 2005 | BCSS |  |  |  |  | 2.68 | 1.64-4.38 | 2.00 | 1.16-3.45 | RR |
| Chappuis et al. 2005 | BCSS |  |  |  |  | 2.60 | 1.60-4.22 | 1.60 | 0.90-2.84 | RR |
| Brennan et al. 2006 | BCSS | 1.55 | 1.12-2.14 | 1.12 | 0.70-1.79 |  |  |  |  | HR |
| Callagy et al. 2006 | OS | 1.94 | 1.31-2.90 |  |  |  |  |  |  | HR |
| Desmedt et al. 2006 | RFS | 2.26 | 1.36-3.75 |  |  |  |  |  |  | HR |
| Porter et al. 2006 | OS | 1.12 | 0.91-1.38 |  |  |  |  |  |  | HR |
| RFS | 1.09 | 0.92-1.29 |  |  |  |  |  |  | HR |
| Sieuwertset al. 2006 | RFS | 3.83 | 2.67-5.49 |  |  |  |  |  |  | HR |
| OS | 2.55 | 1.87-3.49 | 2.45 | 1.74-3.44 |  |  |  |  | HR |
| Somlo et al. 2008 | OS | 1.52 | 0.83-2.78 |  |  |  |  |  |  | HR |
| RFS | 1.24 | 0.71-2.17 |  |  |  |  |  |  | HR |
| Potemski et al. 2009 | BCSS | 2.60 | 1.30-5.20 | 2.00 | 1.00-4.00 |  |  |  |  | HR |
| Sgambato et al. 2009 | OS | 1.44 | 0.48-4.32 |  |  |  |  |  |  | HR |
| Lemée et al. 2010 | OS | 3.60 | 1.76-7.36 | 2.27 | 1.05-4.91 |  |  |  |  | HR |
| Tokai et al. 2011 | OS | 1.13 | 0.28-4.56 |  |  |  |  |  |  | HR |
| RFS | 1.67 | 0.45-6.20 |  |  |  |  |  |  | HR |
| Voduc et al. 2008 | BCSS |  |  |  |  | 1.42 | 1.16-1.74 |  |  | Surv. Curves |
| Lundgren et al. 2015 | BCSS |  |  |  |  | 2.30 | 1.50-3.60 | 2.10 | 1.20-3.50 | RR |
| Johnston et al. 2020 | BCSS | 4.89 | 2.68-8.95 | 6.23 | 1.93-20.11 | 9.14 | 5.90-14.16 |  |  | HR/Surv. Curves |
| OS |  |  |  |  | 1.40 | 1.19-1.65 |  |  |
| Abbreviations: HR: hazard ratio; RR: risk ratio; RFS, recurrence-free survival; OS, overall survival; BCSS: breast cancer-specific survival; Surv. Curve: Survival curve. |