***Meta-analysis of time-to-event data***

***December 6th 2022***

***Catrin Tudur Smith***

1. For the trial of Gemcitabine in combination with Oxaliplatin for pancreatic cancer (Louvet et al 2005), please complete the following as far as possible for the outcome ‘Overall Survival’ and ‘Progression Free Survival’.
2. *Overall survival*

|  |  |  |
| --- | --- | --- |
| **Data to extract** | **Research Arm** | **Control Arm** |
| Name of intervention |  |  |
| Randomisation ratio (e.g. 1:1) |  |  |
| Number randomised |  |  |
| Number analysed |  |  |
| Observed events |  |  |
| Logrank expected events |  |  |
| Logrank Variance (V) |  |
| Logrank observed minus expected events (O-E) |  |
| HR, CI (with level e.g. 95%) or standard error or variance (specify method e.g. Cox model) |  |
| Test statistic, 2-sided p-value and name of test (e.g. logrank) |  |
| Advantage to research or control? |  |
| Actuarial or Kaplan Meier curves presented |  |
| Numbers at risk reported? |  |
| Follow-up details (minimum and maximum) |  |

***Survival curve estimates if available***

|  |  |
| --- | --- |
| Time units (e.g. days, months etc): |  |
|   | **Timepoint** |
| **0** |  |  |  |  |  |  |  |  |
| Survival  | Research |  |  |  |  |  |  |  |  |  |
| probabilityπ | Control |  |  |  |  |  |  |  |  |  |
| Numbers  | Research  |  |  |  |  |  |  |  |  |  |
| at riskπ (if available) | Control |  |  |  |  |  |  |  |  |  |

π Extract data at each timepoint

1. *Progression-free survival*

|  |  |  |
| --- | --- | --- |
| **Data to extract** | **Research Arm** | **Control Arm** |
| Name of intervention |  |  |
| Randomisation ratio (e.g. 1:1) |  |  |
| Number randomised |  |  |
| Number analysed |  |  |
| Observed events |  |  |
| Logrank expected events |  |  |
| Logrank Variance (V) |  |
| Logrank observed minus expected events (O-E) |  |
| HR, CI (with level e.g. 95%) or standard error or variance (specify method e.g. Cox model) |  |
| Test statistic, 2-sided p-value and name of test (e.g. logrank) |  |
| Advantage to research or control? |  |
| Actuarial or Kaplan Meier curves presented |  |
| Numbers at risk reported? |  |
| Follow-up details (minimum and maximum) |  |

***Survival curve estimates if available***

|  |  |
| --- | --- |
| Time units (e.g. days, months etc): |  |
|   | **Timepoint** |
| **0** |  |  |  |  |  |  |  |  |
| Survival  | Research |  |  |  |  |  |  |  |  |  |
| probabilityπ | Control |  |  |  |  |  |  |  |  |  |
| Numbers  | Research  |  |  |  |  |  |  |  |  |  |
| at riskπ (if available) | Control |  |  |  |  |  |  |  |  |  |

π Extract data at each timepoint

1. Enter all data extracted in part 1 into the excel spreadsheet that has been provided (available as supplementary material within the paper:

Tierney JF, Stewart LA, Ghersi D, Burdett S, Sydes MR. Practical methods for incorporating summary time-to-event data into meta-analysis. Trials. 2007 Jun 7;8:16. doi: 10.1186/1745-6215-8-16. PMID: 17555582; PMCID: PMC1920534.

[https://static-content.springer.com/esm/art%3A10.1186%2F1745-6215-8-16/MediaObjects/13063\_2006\_188\_MOESM1\_ESM.xls](https://static-content.springer.com/esm/art%3A10.1186/1745-6215-8-16/MediaObjects/13063_2006_188_MOESM1_ESM.xls))

1. Record the calculated estimates of log(HR) and SE(logHR) obtained

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Method** | **Comments**  | **logHR** | **SE(logHR)** | **HR(CI)** |
| 1. **Overall survival**
 |
| Cox model HR with CI |  |  |  |  |
| Logrank p-value with observed events |  |  |  |  |
| Kaplan Meier Curve |  |  |  |  |
| 1. **Progression-free**

**survival**  |
| Cox model HR with CI |  |  |  |  |
| Logrank p-value with observed events |  |  |  |  |
| Kaplan Meier Curve |  |  |  |  |