

Table 1: Results of quality assessment with the Newcastle-Ottawa scale for case-control studies

| Author   | Selection | Comparability | Exposure |
|--|-----------|---------------|----------|
| Chen <i>et al</i> <sup>[24]</sup> , 2008         | ★★        | ★             | ★★       |
| Shiono <i>et al</i> <sup>[25]</sup> , 2008       | ★★        | ★             | ★★★★     |
| Kozu <i>et al</i> <sup>[27]</sup> , 2014         | ★         | ★             | ★★       |
| Kobayashi <i>et al</i> <sup>[30]</sup> , 2014    | ★★        | ★             | ★        |
| Kanamori <i>et al</i> <sup>[31]</sup> , 2017     | ★         | ★             | ★        |
| Ghaly <i>et al</i> <sup>[35]</sup> , 2018        | ★★        | ★             | ★        |
| Onal <i>et al</i> <sup>[36]</sup> , 2017         | ★         | ★             | ★★       |
| Erhunmwunsee <i>et al</i> <sup>[37]</sup> , 2014 | ★★        | ★             | ★★       |

Table 2: Results of quality assessment with the New-Castle Ottawa scale for cohort studies

| Author                                      | Selection | Comparability | Exposure |
|---|-----------|---------------|----------|
| Ichida <i>et al</i> <sup>[32]</sup> , 2013  | ★★        | ★★            | ★★       |
| Hiyoshi <i>et al</i> <sup>[34]</sup> , 2015 | ★★        | ★★            | ★★       |

Table 3: Results of quality assessment of the case-series study

| Author                                       | Selection | Ascertainment | Causality | Reporting | Total score |
|--|-----------|---------------|-----------|-----------|-------------|
| Kozu <i>et al</i> <sup>[26]</sup> , 2011     | 0/1       | 2/2           | 2/4       | 1/1       | 5/8         |
| Takemura <i>et al</i> <sup>[29]</sup> , 2012 | 1/1       | 1/2           | 2/4       | 1/1       | 5/8         |
| Ichikawa <i>et al</i> <sup>[28]</sup> , 2011 | 0/1       | 2/2           | 2/4       | 1/1       | 5/8         |
| Huddy <i>et al</i> <sup>[33]</sup> , 2015    | 0/1       | 1/2           | 2/4       | 1/1       | 4/8         |

Table 4: Baseline characteristics of included studies regarding oligometastatic disease in oesophageal cancer.

| METACHRONOUS                    |                    |                    |                    |                              |   |
|---------------------------------|--------------------|--------------------|--------------------|------------------------------|---|
| Author                          | Number of patients | Median age (years) | Gender             | Histology primary tumour     | Treatment primary tumour  |
| Chen et al. [24], (2008)        | 5                  | 57                 | Male 2; Female 3   | SCC 5                        | Surgery 4; Surgery + CTH 1  |
| Shiono et al. [25] (2008)       | 49                 | 65                 | Male 46; Female 3  | SCC 48; AC 1                 | Surgery 26; Surgery +CRT 7; Surgery+ CTH 3; Surgery+RTH 6; RTH 2              |
| Ichikawa et al. [28] (2011)     | 23                 | 66                 | Male 19; Female 4  | SCC 21; AC 1; Sarcoma 1      | Surgery 7; Surgery+CTH 13; CRT 3  |
| Kozu et al. [26] (2011)         | 5                  | 68                 | Male 5; Female 0   | SCC 5                        | CRT   |
| Takemura et al. [29] (2012)     | 5                  | 63                 | Male 4; Female 1   | SCC 4; Basaloid cancer 1     | Surgery   |
| Ichida et al. [32] (2013)       | 92                 | 64                 | -                  | -                            | Surgery   |
| Kobayashi et al. [30] (2014)    | 23                 | 66                 | Male 21; Female 2  | SCC 22; Carcinosarcoma 1     | Surgery 9; Neoadjuvant CTH+surgery 4; Neoadjuvant CRT+surgery 4; CRT 5; ESD 1 |
| Hiyoshi et al. [34] (2015)      | 9                  | 64                 | Male 7; Female 2   | -                            | Surgery   |
| Huddy et al. [33] (2015)        | 4                  | 57.5               | Male 3; Female 1   | SCC 1; AC 3                  | Surgery + CTH   |
| Kozu et al. [27] (2015)         | 15                 | 64                 | Male 13; Female 2  | SCC 15                       | Surgery 10; Surgery+CRT 2; Neoadjuvant CTH+Surgery 3                          |
| Kanamori et al. [31] (2017)     | 33                 | 67                 | Male 30; Female 3  | SCC 32; Basaloid carcinoma 1 | Surgery 16; Neoadjuvant 6; Definitive CRT 14; ESD 3                           |
| Ghaly et al. [35] (2018)        | 56                 | 62.5               | Male 46; Female 10 | SCC 11; AC 45                | Surgery 11; Neoadjuvant CRT+ Surgery 38                                       |
| SYNCHRONOUS                     |                    |                    |                    |                              |   |
| Author                          | Number of patients | Median age (years) | Gender             | Histology primary tumour     | Treatment primary tumour  |
| Erhunmwunsee et al. [37] (2014) | 71                 | 60                 | Male 60; Female 11 | SCC 10; AC 61                | Surgery+CRT   |
| Onal et al. [36] (2017)         | 7                  | 58                 | Male 7; Female 0   | SCC 2; AC 5                  | CRT 6; RTH 1  |

AC = adenocarcinoma; CRT = chemoradiotherapy; CTH = chemotherapy; OC = oesophageal cancer; ESD = endoscopic submucosal dissection; RTH = radiotherapy; SCC = squamous cell carcinoma

Table 5: Outcome characteristics of included studies regarding oligometastatic disease in oesophageal cancer.

| METACHRONOUS                    |                     |   |                          |               |   |                     |                     |                     |                           |              |                                 |                                    |                    |
|---------------------------------|---------------------|---|--------------------------|---------------|---|---------------------|---------------------|---------------------|---------------------------|--------------|---------------------------------|------------------------------------|--------------------|
| Author                          | Median DFI (months) | Site of metastasis                                | Number of metastasis     | Laterality    | Treatment for metastasis                              | 1-year survival (%) | 3-year survival (%) | 5-year survival (%) | Overall survival (months) | DFS (months) | Imaging on recurrence diagnosis | Imaging post-recurrence management | Number of patients |
| Chen et al. [24] (2008)         | 21                  | Pulmonary   | Solitary 3; Multiple 2   | Unilateral 4  | Surgery   | -                   | -                   | -                   | 24                        | 13           | -                               | CT 5                               | 3                  |
| Shiono et al. [25] (2008)       | 14                  | Pulmonary   | Solitary 39; Multiple 10 | Unilateral 44 | Surgery   | -                   | -                   | 29.6                | 27                        | -            | -                               | -                                  | 16                 |
| Ichikawa et al. [28] (2011)     | 15.5                | Pulmonary   | Solitary 16; Multiple 7  | -             | Surgery   | 73.9                | 43.5                | 43.5                | 28.7                      | -            | -                               | -                                  | 14                 |
| Kozu et al. [26] (2011)         | 19                  | Pulmonary   | Solitary 3; Multiple 2   | -             | Surgery   | -                   | -                   | -                   | 29                        | -            | CXR; CT                         | -                                  | -                  |
| Takemura et al. [29] (2012)     | -                   | Pulmonary   | Solitary 5               | -             | Surgery 4; Surgery+CTH 1                              | -                   | -                   | -                   | 48                        | -            | CXR; CT; PET                    | -                                  | -                  |
| Ichida et al. [32] (2013)       | 8                   | Pulmonary 27; Liver 26; Bone 21; other organs 29  | Solitary 17; Multiple 36 | -             | -   | -                   | -                   | -                   | 51                        | -            | -                               | -                                  | -                  |
| Kobayashi et al. [30] (2014)    | 23.8                | Pulmonary   | Solitary 26; Multiple 4  | -             | Surgery   | 82.6                | 46                  | 34.1                | 29.4                      | -            | CT                              | -                                  | 5                  |
| Hiyoshi et al. [34] (2015)      | -                   | Pulmonary 5; Liver 1; Parotid 1; Bone 1; Brain 1  | -                        | -             | Surgery+CRT 1; Surgery+CTH 6; Surgery+RTH 1           | -                   | -                   | -                   | 18.4                      | -            | CT; FDG-PET CT; US; endoscopy   | -                                  | -                  |
| Huddy et al. [33] (2015)        | 33.5                | Liver   | Solitary 3; Multiple 1   | -             | Surgery+CTH   | -                   | -                   | -                   | 36.25                     | -            | CT; PET; US                     | CT                                 | 2                  |
| Kozu et al. [27] (2015)         | 15                  | Pulmonary   | Solitary 15; Multiple 1  | -             | Surgery   | -                   | 44                  | 0                   | 32.3                      | -            | -                               | -                                  | 7                  |
| Kanamori et al. [31] (2017)     | 15.5                | Pulmonary   | Solitary 27; Multiple 6  | -             | Surgery   | 79.4                | 47.8                | 43                  | 17.9                      | -            | CT                              | CXR; CT                            | 23                 |
| Ghaly et al. [35] (2018)        | 19                  | Pulmonary 5; Bone 10; Brain 3; Liver 2; Adrenal 1 | -                        | -             | Surgery 31; Surgery+CRT 25                            | 76.8                | -                   | 16                  | 25.9                      | -            | CT; PET; endoscopy              | -                                  | -                  |
| SYNCHRONOUS                     |                     |   |                          |               |   |                     |                     |                     |                           |              |                                 |                                    |                    |
| Author                          | Median DFI (months) | Site of metastasis                                | Number of metastasis     | Laterality    | Treatment for metastasis                              | 1-year survival (%) | 3-year survival (%) | 5-year survival (%) | Overall survival (months) | DFS (months) | Imaging on recurrence diagnosis | Imaging post-recurrence management | Number of patients |
| Erhunmwunsee et al. [37] (2014) | -                   | Suspicious lesion                                 | -                        | -             | -   | -                   | -                   | 24.8                | -                         | -            | CT; PET                         | -                                  | -                  |
| Onal et al. [36] (2017)         | -                   | Brain   | -                        | -             | WBRT 3; Surgery+WBRT 4 followed by systemic treatment | -                   | -                   | -                   | 18.9                      | -            | CT; PET; MRI                    | -                                  | 7                  |

CRT = chemoradiotherapy; CT = computerised tomography; CTH = chemotherapy; CXR = chest x-ray; DFI = disease-free interval; DFS = disease-free survival; LN = lymph nodes; RTH = radiotherapy; US = ultrasound; WBRT = whole brain radiotherapy; FDG-PET CT = [18F]-fluorodeoxyglucose-positron emission tomography