Figure S1 Data of patients in the CRT and RT groups before and after PSM. (A,B) Data of patients in the CRT group before and after PSM. (C,D) Data of patients in the RT group before and after PSM. CRT, chemoradiotherapy; RT, radiotherapy; PSM, propensity score matching.

Figure S2 Data of patients in the Neo + S and CRT groups before and after PSM. (A,B) Data of patients in the Neo + S group before and after PSM. (C,D) Data of patients in the CRT group before and after PSM. Neo + S, neoadjuvant therapy combined with surgery; CRT, chemoradiotherapy; PSM, propensity score matching.
Table S1 Baseline characteristics of esophageal cancer patients with supraclavicular lymph node metastasis

| Variables                               | Total | Percentage (%) |
|-----------------------------------------|-------|----------------|
| Age                                     |       |                |
| <65                                     | 119   | 51.5           |
| ≥65                                     | 112   | 48.5           |
| Sex                                     |       |                |
| Male                                    | 153   | 66.2           |
| Female                                  | 78    | 33.8           |
| BMI                                     |       |                |
| <22.34                                  | 109   | 47.2           |
| ≥22.34                                  | 122   | 52.8           |
| Supraclavicular lymph node metastasis   |       |                |
| Left                                    | 85    | 36.8           |
| Right                                   | 72    | 31.2           |
| Bilateral                               | 74    | 32.0           |
| Location                                |       |                |
| Upper                                   | 64    | 27.7           |
| Middle                                  | 138   | 59.7           |
| Lower                                   | 29    | 12.6           |
| TNM stage                               |       |                |
| IIB–IIIA                                | 56    | 24.2           |
| IIIB                                    | 145   | 62.8           |
| IVA                                     | 30    | 13.0           |
| Surgery                                 |       |                |
| Yes                                     | 57    | 24.7           |
| No                                      | 174   | 75.3           |
| Surgery item                            |       |                |
| Surgery only                            | 16    | 28.1           |
| Neoadjuvant chemotherapy                | 40    | 70.2           |
| Neoadjuvant RT                          | 1     | 1.7            |
| Lymphadenectomy†                        |       |                |
| Left                                    | 12    | 29.3           |
| Right                                   | 14    | 34.1           |
| Bilateral                               | 15    | 36.6           |
| Radiation                               |       |                |
| Yes                                     | 169   | 73.2           |
| No                                      | 62    | 26.8           |
| Chemotherapy                            |       |                |
| Yes                                     | 190   | 82.3           |
| No                                      | 41    | 17.7           |
| Cause of death                          |       |                |
| Cancer-specific death                   | 95    | 41.1           |
| Other-cause death                       | 13    | 5.6            |
| Alive                                   | 123   | 53.3           |

†, patients who did not receive neoadjuvant therapy were excluded. BMI, body mass index; TNM, tumor node metastasis classification; RT, radiotherapy.
| Site of metastasis          | Primary site of tumor | N  | N%   | N  | N%   | N  | N%   |
|----------------------------|-----------------------|----|------|----|------|----|------|
|                            | Upper                 |    |      |    |      |    |      |
|                            | Middle                |    |      |    |      |    |      |
|                            | Lower                 |    |      |    |      |    |      |
| Recurrence in situ         |                       | 0  | 0.00 | 0  | 0.00 | 5  | 50.00|
| Supraclavicular lymph nodes|                       | 12 | 41.38| 23 | 42.59| 2  | 20.00|
| Mediastinal lymph nodes    |                       | 9  | 31.03| 25 | 46.30| 4  | 40.00|
| Abdominal lymph nodes      |                       | 4  | 13.79| 19 | 35.19| 7  | 70.00|
| Axillary lymph nodes       |                       | 1  | 3.45 | 5  | 9.26 | 0  | 0.00 |
| Subcarinal lymph nodes     |                       | 1  | 3.45 | 2  | 3.70 | 0  | 0.00 |
| Liver metastasis           |                       | 2  | 6.90 | 6  | 11.11| 0  | 0.00 |
| Bone metastasis            |                       | 4  | 13.79| 5  | 9.26 | 0  | 0.00 |
| Lung metastasis            |                       | 11 | 37.93| 7  | 12.96| 0  | 0.00 |
| Splenic metastasis         |                       | 0  | 0.00 | 3  | 5.56 | 0  | 0.00 |
| Brain metastasis           |                       | 0  | 0.00 | 2  | 3.70 | 0  | 0.00 |
| Pleural metastasis         |                       | 0  | 0.00 | 2  | 3.70 | 0  | 0.00 |

N% refers to the percentage of the number of metastasis to a specific site out of the total number of metastatic cases. For example, 19 patients were found to have tumor metastasis or recurrence, of which 12 patients had supraclavicular lymph node metastasis, N% = 12/19 = 41.38% for supraclavicular lymph node metastasis.