

**Table S1.** Quality assessment of studies reporting on the role of LND in patients with thymic cancers according to the National Heart, Lung, and Blood Institute criteria.

|                                                                                                                                                                                                               | Kondo [3] |    |       | Park [4] |    |       | Weissferdt [19] |    |       | Weksler [6] |    |       | Weksler [7] |    |       | Hwang [8] |    |       |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|----|-------|----------|----|-------|-----------------|----|-------|-------------|----|-------|-------------|----|-------|-----------|----|-------|
| Criteria                                                                                                                                                                                                      | Yes       | No | Other | Yes      | No | Other | Yes             | No | Other | Yes         | No | Other | Yes         | No | Other | Yes       | No | Other |
| 1. Was the research question or objective in this paper clearly stated and appropriate?                                                                                                                       | X         |    |       | X        |    |       |                 | X  |       | X           |    |       | X           |    |       | X         |    |       |
| 2. Was the study population clearly specified and defined?                                                                                                                                                    | X         |    |       | X        |    |       | X               |    |       | X           |    |       | X           |    |       | X         |    |       |
| 3. Did the authors include a sample size justification?                                                                                                                                                       |           | X  |       |          | X  |       |                 | X  |       |             | X  |       |             | X  |       |           | X  |       |
| 4. Were controls selected or recruited from the same or similar population that gave rise to the cases (including the same timeframe)?                                                                        | X         |    |       |          |    | X     |                 | X  |       | X           |    |       | X           |    |       | X         |    |       |
| 5. Were the definitions, inclusion and exclusion criteria, algorithms or processes used to identify or select cases and controls valid, reliable, and implemented consistently across all study participants? |           | X  |       | X        |    |       |                 |    | X     |             | X  |       |             | X  |       | X         |    |       |
| 6. Were the cases clearly defined and differentiated from controls?                                                                                                                                           |           | X  |       |          |    | X     |                 |    | X     |             |    | X     |             |    | X     | X         |    |       |
| 7. If less than 100 percent of eligible cases and/or controls were selected for the study, were the cases and/or controls randomly selected from those eligible?                                              |           | X  |       |          | X  |       |                 |    | X     |             |    | X     |             |    | X     |           |    | X     |
| 8. Was there use of concurrent controls?                                                                                                                                                                      |           | X  |       |          | X  |       |                 | X  |       | X           |    |       | X           |    |       | X         |    |       |
| 9. Were the investigators able to confirm that the exposure/risk occurred prior to the development of the condition or event that defined a participant as a case?                                            | X         |    |       |          |    | X     |                 | X  |       |             |    | X     |             |    | X     |           |    | X     |
| 10. Were the measures of exposure/risk clearly defined, valid, reliable, and implemented consistently (including the same time period) across all study participants?                                         |           |    | X     | X        |    |       |                 | X  | X     |             |    | X     |             |    | X     | X         |    |       |
| 11. Were the assessors of exposure/risk blinded to the case or control status of participants?                                                                                                                |           | X  |       |          | X  |       |                 | X  |       |             | X  |       |             | X  |       |           | X  |       |
| 12. Were key potential confounding variables measured and adjusted statistically in the analyses? If matching was used, did the investigators account for matching during study analysis?                     |           | X  |       | X        |    |       |                 | X  |       | X           |    |       | X           |    |       | X         |    |       |
| Quality rating                                                                                                                                                                                                | POOR      |    |       | FAIR     |    |       | POOR            |    |       | FAIR        |    |       | FAIR        |    |       | GOOD      |    |       |

|                                                                                                                                                                                                               | Gu [2] |    |       | Zhao [20] |    |       | Fang [21] |    |       | Hwang [22] |    |       | Wen [23] |    |       | Cheufou [24] |    |       |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|----|-------|-----------|----|-------|-----------|----|-------|------------|----|-------|----------|----|-------|--------------|----|-------|
| Criteria                                                                                                                                                                                                      | Yes    | No | Other | Yes       | No | Other | Yes       | No | Other | Yes        | No | Other | Yes      | No | Other | Yes          | No | Other |
| 1. Was the research question or objective in this paper clearly stated and appropriate?                                                                                                                       | X      |    |       | X         |    |       | X         |    |       | X          |    |       | X        |    |       | X            |    |       |
| 2. Was the study population clearly specified and defined?                                                                                                                                                    | X      |    |       | X         |    |       | X         |    |       | X          |    |       | X        |    |       | X            |    |       |
| 3. Did the authors include a sample size justification?                                                                                                                                                       |        | X  |       |           | X  |       |           | X  |       |            | X  |       |          | X  |       |              | X  |       |
| 4. Were controls selected or recruited from the same or similar population that gave rise to the cases (including the same timeframe)?                                                                        | X      |    |       |           |    | X     |           |    | X     | X          |    |       | X        |    |       |              | X  |       |
| 5. Were the definitions, inclusion and exclusion criteria, algorithms or processes used to identify or select cases and controls valid, reliable, and implemented consistently across all study participants? | X      |    |       | X         |    |       | X         |    |       | X          |    |       | X        |    |       | X            |    |       |
| 6. Were the cases clearly defined and differentiated from controls?                                                                                                                                           |        |    | X     |           |    | X     |           |    | X     | X          |    |       | X        |    |       |              | X  |       |
| 7. If less than 100 percent of eligible cases and/or controls were selected for the study, were the cases and/or controls randomly selected from those eligible?                                              |        |    | X     |           |    | X     |           |    | X     |            |    | X     |          |    | X     |              | X  |       |
| 8. Was there use of concurrent controls?                                                                                                                                                                      |        | X  |       |           | X  |       |           | X  |       | X          |    |       | X        |    |       |              | X  |       |
| 9. Were the investigators able to confirm that the exposure/risk occurred prior to the development of the condition or event that defined a participant as a case?                                            |        |    | X     |           | X  |       |           | X  |       |            |    | X     |          |    | X     |              | X  |       |
| 10. Were the measures of exposure/risk clearly defined, valid, reliable, and implemented consistently (including the same time period) across all study participants?                                         | X      |    |       | X         |    |       | X         |    |       | X          |    |       | X        |    |       |              | X  |       |
| 11. Were the assessors of exposure/risk blinded to the case or control status of participants?                                                                                                                |        | X  |       |           | X  |       |           | X  |       |            | X  |       |          | X  |       |              | X  |       |
| 12. Were key potential confounding variables measured and adjusted statistically in the analyses? If matching was used, did the investigators account for matching during study analysis?                     | X      |    |       |           |    | X     |           |    | X     | X          |    |       | X        |    |       |              |    | X     |
| Quality rating                                                                                                                                                                                                | FAIR   |    |       | POOR      |    |       | POOR      |    |       | GOOD       |    |       | GOOD     |    |       | POOR         |    |       |

|                                                                                                                                                                                                               | Song [25] |    |       | Wang [26] |    |       | Clermidy [27] |    |       |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|----|-------|-----------|----|-------|---------------|----|-------|
| Criteria                                                                                                                                                                                                      | Yes       | No | Other | Yes       | No | Other | Yes           | No | Other |
| 1. Was the research question or objective in this paper clearly stated and appropriate?                                                                                                                       | X         |    |       | X         |    |       | X             |    |       |
| 2. Was the study population clearly specified and defined?                                                                                                                                                    | X         |    |       | X         |    |       | X             |    |       |
| 3. Did the authors include a sample size justification?                                                                                                                                                       |           | X  |       |           | X  |       |               | X  |       |
| 4. Were controls selected or recruited from the same or similar population that gave rise to the cases (including the same timeframe)?                                                                        |           | X  |       | X         |    |       | X             |    |       |
| 5. Were the definitions, inclusion and exclusion criteria, algorithms or processes used to identify or select cases and controls valid, reliable, and implemented consistently across all study participants? |           |    | X     |           |    | X     | X             |    |       |
| 6. Were the cases clearly defined and differentiated from controls?                                                                                                                                           |           |    | X     |           |    | X     | X             |    |       |
| 7. If less than 100 percent of eligible cases and/or controls were selected for the study, were the cases and/or controls randomly selected from those eligible?                                              |           |    | X     |           |    | X     | X             |    |       |
| 8. Was there use of concurrent controls?                                                                                                                                                                      |           | X  |       |           | X  |       | X             |    |       |
| 9. Were the investigators able to confirm that the exposure/risk occurred prior to the development of the condition or event that defined a participant as a case?                                            |           |    | X     |           |    | X     |               |    | X     |
| 10. Were the measures of exposure/risk clearly defined, valid, reliable, and implemented consistently (including the same time period) across all study participants?                                         |           |    | X     |           |    | X     | X             |    |       |
| 11. Were the assessors of exposure/risk blinded to the case or control status of participants?                                                                                                                |           | X  |       |           | X  |       |               | X  |       |
| 12. Were key potential confounding variables measured and adjusted statistically in the analyses? If matching was used, did the investigators account for matching during study analysis?                     | X         |    |       | X         |    |       | X             |    |       |
| Quality rating                                                                                                                                                                                                | POOR      |    |       | FAIR      |    |       | GOOD          |    |       |