Supplementary data

(Table A). Details of studies excluded with reasons

|  |  |  |
| --- | --- | --- |
| **SN** | **Study author (Year)** | **Reason for exclusion** |
| 1 | Antunes-Ferreira, 202323 | AI-based modelling |
| 2 | Best, 2017 22 | AI-based modelling |
| 3 | Goswami, 2020 24 | AI-based modelling |
| 4 | In 't Veld, 2022 25 | AI-based modelling |
| 5 | Li, 2018 26 | AI-based modelling |
| 6 | Pastuszak, 202127 | AI-based modelling |
| 7 | Rolfes, 2018 28 | No TEP but PDL1 was done |
| 8 | Sheng, 2018 19 | AI-based modelling |
| 9 | Xue, 2018 29 | Non-English Article |
| 10 | Xue, 201830 | AI-based modelling |

Supple data

(Table B) QUADAS - 2 tool details to show the quality of risk of bias and applicability concerns

|  |  |  |
| --- | --- | --- |
| **Study (year)** | **Risk of bias** | **Applicability concerns**  |
|  | **Patients’ selection** | **Index test** | **Reference Standard** | **Flow & Timings** | **Patient selection** | **Index Test** | **Reference Std**  |
| D'Ambrosi, 202110 | Low | Low  | Low | Unclear  | Low | Low | Low |
| Dong, 202011 | Low | Low | Low | Unclear  | Low | Unclear  | Unclear |
| Dong, 202112 | Low | Low | Unclear  | Unclear  | Low | Low  | Low  |
| Li, 2021 2 | Low  | Low | Unclear  | Low | Low  | Low  | Low  |
| Liu, 2019 13 | Low | Low | high | Low  | Low | Unclear  | Low  |
| Luo, 2018 14 | Low | Low | Low  | Low | Low | Low | Low |
| Xing, 201915 | Low | Low  | Unclear  | High  | Low  | Low  | Low  |

 Figure A): Risk of bias assessment:

**Figure B: Concerns regarding applicability**

Figure C: TEP mRNA AUC for Lung Cancer Diagnosis

**Figure D: TEP mRNA Sensitivity / Specificity for Lung Cancer Diagnosis**

Supple Figure E: Role of TEP in Early Lung Cancer Diagnosis