## Thickening fraction

**Baseline odds ratio of thickening fraction for extubation failure**

| | OR | 95% CI |
|---|---|---|
| (Intercept) | 0.53 | 0.13 - 2.18 |
| Thickening fraction | 0.96 | 0.90 - 1.02 |

**Odds ratio of thickening fraction for extubation failure in regression analysis with pressure support as continuous variable**

| | OR | 95% CI |
|---|---|---|
| (Intercept) | 0.58 | 0.13 - 2.62 |
| Thickening fraction | 0.96 | 0.90 - 1.02 |
| Pressure Support | 0.96 | 0.77 - 1.17 |

**Odds ratio of thickening fraction for extubation failure in regression analysis with pressure support as categorical variable (in this case as more than 0 cmH2O support)**

| | OR | 95 % CI |
|---|---|---|
| (Intercept) | 0.62 | 0.14 - 2.91 |
| Thickening fraction | 0.96 | 0.90 - 1.02 |
| > 0 support | 0.72 | 0.20 - 2.32 |

**Odds ratio of thickening fraction for extubation failure in regression analysis with PEEP as continuous variable**

| | OR | 95 % CI |
|---|---|---|
| (Intercept) | 0.18 | 0.01 - 1.88 |
| Thickening fraction | 0.96 | 0.90 - 1.02 |
| PEEP | 1.18 | 0.88 - 1.63 |

## B-lines

**Baseline odds ratio of more than 7.5 B-lines for extubation failure**

| | OR | 95 % CI |
|---|---|---|
| (Intercept) | 0.09 | 0.02 - 0.25 |
| Blines > 7.5 | 4.12 | 1.18 - 19.30 |

**Odds ratio of more than 7.5 B-lines for extubation failure in regression analysis with pressure support as continuous variable**

| | OR | 95 % CI |
|---|---|---|
| (Intercept) | 0.09 | 0.02 - 0.28 |
| Blines > 7.5 | 4.11 | 1.18 - 19.24 |

| | | |
|---|---|---|
| Pressure Support | 0.97 | 0.78 - 1.19 |

**Odds ratio of more than 7.5 B-lines for extubation failure in regression analysis with pressure support as categorical variable (in this case as more than 0 cmH2O support)**

| | OR | 95% CI |
|---|---|---|
| (Intercept) | 0.09 | 0.02 - 0.29 |
| Blines > 7.5 | 4.09 | 1.17 - 19.17 |
| > 0 support | 0.83 | 0.23 - 2.73 |

**Odds ratio of more than 7.5 B-lines for extubation failure in regression analysis with PEEP as continuous variable**

| | OR | 95 % CI |
|---|---|---|
| (Intercept) | 0.02 | 0.0 - 0.22 |
| Blines > 7.5 | 4.27 | 1.2 - 20.48 |
| PEEP | 1.23 | 0.9 - 1.77 |

**Code in R to calculate data above:**

```
lapply(c("Tdifr2" + "Tdifr2 + PS", "Tdifr2 + PScat", "Tdifr2 + PEEP"),
       function(var) {
         formula <- as.formula(paste("DetubF ~", var))
         logist <- glm(formula, data = df_mark, family = binomial)
         uni <- exp(cbind(OR = coef(logist), confint(logist, level = 0.95)))
         round(uni, digits = 2)
       }
)


lapply(c("Blines7.5", "Blines7.5 + PS", "Blines7.5 + PScat", "Blines7.5 + PEEP"),
       function(var) {
         formula <- as.formula(paste("DetubF ~", var))
         logist <- glm(formula, data = df_mark, family = binomial)
         uni <- exp(cbind(OR = coef(logist), confint(logist, level = 0.95)))
         round(uni, digits = 2)
       }
)
```

**Missing Data Lung Ultrasound**

4 quadrants per hemithorax for a total of 8 quadrants

**Missing fields per patient**

| | |
|---|---|
| 0 fields missing: | 38 patients |
| 1 field missing: | 17 patients |
| 2 fields missing: | 20 patients |
| 3 fields missing: | 3 patients |
| 4 fields missing: | 5 patients |
| 5 fields missing: | 0 patients |

6 fields missing: 0 patients

7 fields missing: 0 patients

8 fields missing: 0 patients

**Patients with at least 2 measurement sites per hemithorax**:

83 out of 83

**Patients with at least no measurement sites per hemithorax**:

0 out of 83

**Missing images per field examined:**

Upper Anterior Right: 0 out of 83 missing

Lower Anterior Right: 1 out of 83 missing

Upper Lateral Right: 9 out of 83 missing

Lower Lateral Right: 33 out of 83 missing

Left side total: 43 out of 332 missing

Upper Anterior Left: 2 out of 83 missing

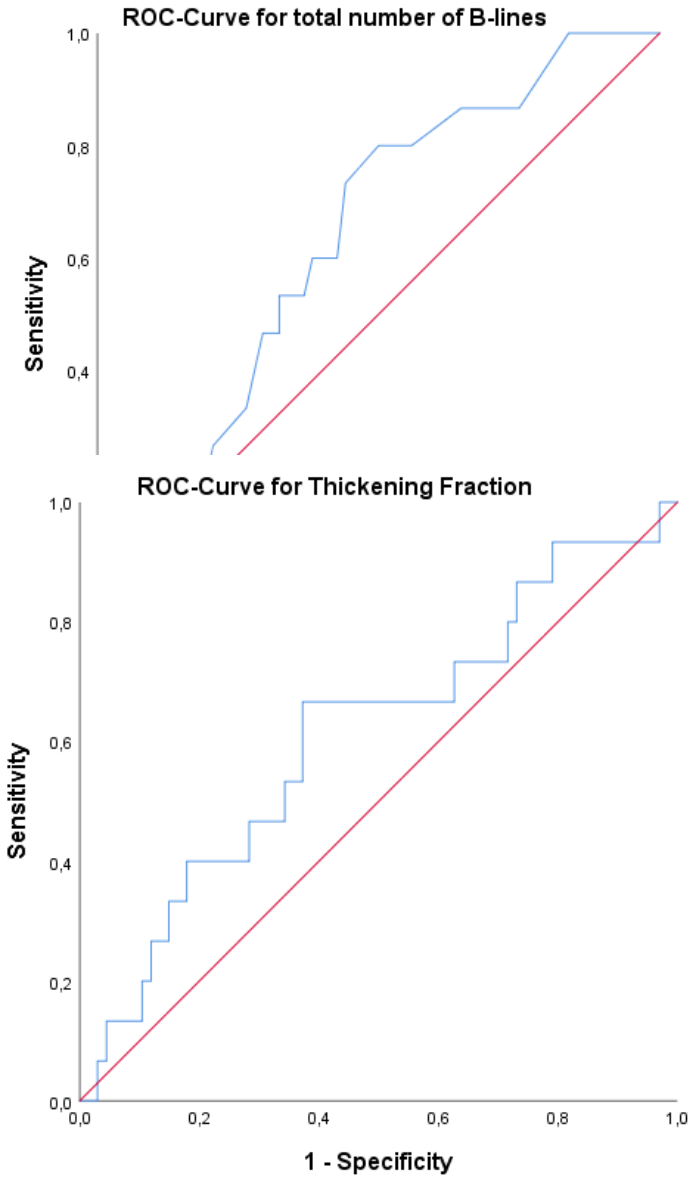
Lower Anterior Left: 1 out of 83 missing

| | |
|---|---|
| Upper Lateral Left: | 12 out of 83 missing |
| Lower Lateral Left: | 31 out of 83 missing |
| Left side total: | 46 out of 332 missing |

| | |
|---|---|
| Lower Regions missing: | 66 out of 332 |
| Upper Regions missing: | 23 out of 332 |
| Total: | 89 out of 664 |

**Missing images PLAPS point:**

| | |
|---|---|
| PLAPS right: | 2 out of 83 missing |
| PLAPS left: | 8 out of 83 missing |
| PLAPS right and left: | 1 out of 83 missing |
| All PLAPS views: | 10 out of 166 missing |




STROBE Statement—checklist of items that should be included in reports of observational studies

| | Item No | Recommendation | Page No |
|---|---|---|---|
| **1Title and abstract** | 1 | (*a*) Indicate the study's design with a commonly used term in the title or the abstract | 3 |
| | | (*b*) Provide in the abstract an informative and balanced summary of what was done and what was found | 3 |
| **Introduction** | | | |
| Background/rationale | 2 | Explain the scientific background and rationale for the investigation being reported | 4 |
| Objectives | 3 | State specific objectives, including any prespecified hypotheses | 4 |
| **Methods** | | | |
| Study design | 4 | Present key elements of study design early in the paper | 6 |
| Setting | 5 | Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection | 6,11 |
| Participants | 6 | (*a*) *Cohort study*—Give the eligibility criteria, and the sources and methods of selection of participants. Describe methods of follow-up<br><br>*Case-control study*—Give the eligibility criteria, and the sources and methods of case ascertainment and control selection. Give the rationale for the choice of cases and controls<br><br>*Cross-sectional study*—Give the eligibility criteria, and the sources and methods of selection of participants | 6 |
| | | (*b*) *Cohort study*—For matched studies, give matching criteria and number of exposed and unexposed<br><br>*Case-control study*—For matched studies, give matching criteria and the number of controls per case | |
| Variables | 7 | Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable | 6-9 |
| Data sources/ measurement | 8* | For each variable of interest, give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there is more than one group | *6,7* |

| | | | |
|---|---|---|---|
| Bias | 9 | Describe any efforts to address potential sources of bias | 7 |
| Study size | 10 | Explain how the study size was arrived at | 9 |
| Quantitative variables | 11 | Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why | 9,10 |
| Statistical methods | 12 | (*a*) Describe all statistical methods, including those used to control for confounding | 9,10 |
| | | (*b*) Describe any methods used to examine subgroups and interactions | 9,10 |
| | | (*c*) Explain how missing data were addressed | 9,10 |
| | | (*d*) *Cohort study*—If applicable, explain how loss to follow-up was addressed<br><br>*Case-control study*—If applicable, explain how matching of cases and controls was addressed<br><br>*Cross-sectional study*—If applicable, describe analytical methods taking account of sampling strategy | 9,10 |
| | | (*e*) Describe any sensitivity analyses | 12 |

Continued on next page

**Results**

| | | | |
|---|---|---|---|
| Participants | 13* | (a) Report numbers of individuals at each stage of study—eg numbers potentially eligible, examined for eligibility, confirmed eligible, included in the study, completing follow-up, and analysed | Fig 1 |
| | | (b) Give reasons for non-participation at each stage | Fig 1 |
| | | (c) Consider use of a flow diagram | Fig 1 |
| Descriptive data | 14* | (a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders | Table1 |
| | | (b) Indicate number of participants with missing data for each variable of interest | Table 1 |
| | | (c) *Cohort study*—Summarise follow-up time (eg, average and total amount) | 7 |
| Outcome data | 15* | *Cohort study*—Report numbers of outcome events or summary measures over time | *Table 1/2* |
| | | *Case-control study*—Report numbers in each exposure category, or summary measures of exposure | *n.a.* |
| | | *Cross-sectional study*—Report numbers of outcome events or summary measures | *n.a.* |
| Main results | 16 | (*a*) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and their precision (eg, 95% confidence interval). Make clear which confounders were adjusted for and why they were included | 11-13 |
| | | (*b*) Report category boundaries when continuous variables were categorized | 11-13 |
| | | (*c*) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period | |

| | | | |
|---|---|---|---|
| Other analyses | 17 | Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses | 12 |
| **Discussion** | | | |
| Key results | 18 | Summarise key results with reference to study objectives | 14 |
| Limitations | 19 | Discuss limitations of the study, taking into account sources of potential bias or imprecision. Discuss both direction and magnitude of any potential bias | 18 |
| Interpretation | 20 | Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence | 14-18 |
| Generalisability | 21 | Discuss the generalisability (external validity) of the study results | 18 |
| **Other information** | | | |
| Funding | 22 | Give the source of funding and the role of the funders for the present study and, if applicable, for the original study on which the present article is based | 1,20 |

*Give information separately for cases and controls in case-control studies and, if applicable, for exposed and unexposed groups in cohort and cross-sectional studies.

**Note:** An Explanation and Elaboration article discusses each checklist item and gives methodological background and published examples of transparent reporting. The STROBE checklist is best used in conjunction with this article (freely available on the Web sites of PLoS Medicine at http://www.plosmedicine.org/, Annals of Internal Medicine at http://www.annals.org/, and Epidemiology at http://www.epidem.com/). Information on the STROBE Initiative is available at www.strobe-statement.org.

| | Mark1 | Mark2 | Mark3 | MarkAVG | Leila1 | Leila2 | Leila3 | LeilaAVG |
|---|---|---|---|---|---|---|---|---|
| AvgThiInsp | 188 | 198 | 160 | 182 | 178 | 188 | 179 | 181.666667 |
| AvgThiInsp | 133 | 138 | 141 | 137.333333 | 133 | 132 | 141 | 135.333333 |
| AvgThiInsp | 163 | 162 | 162 | 162.333333 | 164 | 170 | 170 | 168 |
| AvgThiInsp | 194 | 194 | 198 | 195.333333 | 156 | 167 | 181 | 168 |
| AvgThiInsp | 182 | 176 | 162 | 173.333333 | 188 | 199 | 193 | 193.333333 |
| AvgThiInsp | 123 | 135 | 135 | 131 | 136 | 137 | 141 | 138 |
| AvgThiInsp | 220 | 235 | 207 | 220.666667 | 215 | 204 | 227 | 215.333333 |
| AvgThiInsp | 181 | 176 | 176 | 177.666667 | 191 | 171 | 175 | 179 |
| AvgThiInsp | 176 | 171 | 183 | 176.666667 | 170 | 170 | 165 | 168.333333 |
| AvgThiInsp | 222 | 225 | 230 | 225.666667 | 232 | 235 | 227 | 231.333333 |
| AvgThiInsp | 170 | 163 | 163 | 165.333333 | 181 | 155 | 148 | 161.333333 |
| AvgThiInsp | 213 | 237 | 222 | 224 | 217 | 238 | 238 | 231 |
| AvgThiInsp | 113 | 128 | 120 | 120.333333 | 115 | 121 | 123 | 119.666667 |
| AvgThiInsp | 178 | 179 | 191 | 182.666667 | 169 | 155 | 157 | 160.333333 |
| AvgThiInsp | 246 | 241 | 243 | 243.333333 | 242 | 248 | 256 | 248.666667 |
| AvgThiInsp | 194 | 203 | 217 | 204.666667 | 192 | 201 | 188 | 193.666667 |
| AvgThiInsp | 253 | 254 | 249 | 252 | 257 | 245 | 242 | 248 |
| AvgThiInsp | 147 | 145 | 161 | 151 | 151 | 162 | 141 | 151.333333 |
| AvgThiInsp | 200 | 212 | 212 | 208 | 198 | 208 | 212 | 206 |
| AvgThiInsp | 159 | 168 | 165 | 164 | 173 | 168 | 151 | 164 |
| AvgThiInsp | 126 | 146 | 141 | 137.666667 | 139 | 137 | 137 | 137.666667 |
| AvgThiInsp | 118 | 112 | 149 | 126.333333 | 125 | 125 | 142 | 130.666667 |
| AvgThiInsp | 155 | 145 | 159 | 153 | 148 | 144 | 156 | 149.333333 |
| AvgThiInsp | 103 | 106 | 111 | 106.666667 | 108 | 118 | 116 | 114 |