## Table 1 bis. Calculation of the sample size

Findings of the PneumO-LD-CT cohort (unpublished results). For each of the 200 participants, the probability of pneumonia was assessed by a clinician before and after LDCT. A committee of experts adjudicated the diagnosis of pneumonia.

| Clinician's estimates of the   | Clinician's estimates of the probability of pneumonia |                    |       |
|--|---|--------------------|-------|
| probability of pneumonia   | after LDCT  |                    |       |
| based on CXR (before   |   |                    |       |
| LDCT)  |   |                    |       |
|  |   |                    |       |
| Patients with pneumonia according to an adjudication committee (n=131)   |   |                    |       |
|  | Γ.  |                    | TOTAL |
|  | Low   | Intermediate/ high | TOTAL |
| Low  | 1   | 6                  | 7     |
|  |   |                    |       |
| Intermediate/ high   | 10  | 116                | 126   |
|  |   |                    |       |
| TOTAL  | 11  | 122                | 133   |
| Patients without pneumonia according to an adjudication committee (n=67) |   |                    |       |
|  |   |                    |       |
|  | Low   | Intermediate/ high | TOTAL |
| Low  | 9   | 1                  | 10    |
| 2011   |   |                    |       |
| Intermediate/ high   | 37  | 20                 | 57    |
|  |   |                    |       |
| TOTAL  | 46  | 21                 | 67    |
| Total patients (n=200)   |   |                    |       |

In this adjudication, the panel of experts had access to the results of LDCT to rate their probability of pneumonia, on the contrary of previous published results <sup>23</sup>.

The accuracy of clinician's diagnosis before LDCT was (126+10)/(133+67) = 0.68.

The accuracy of clinician's diagnosis after LDCT was (122+46)/(133+67) = 0.84.