

S2. CT procedures

All CTs of CF subjects were made supine, with pressure control under general anesthesia (for Utrecht patients) or with free-breathing (for Rotterdam patients). To reduce atelectasis in sedated patients, alveolar recruitment maneuvers were performed consisting of 10 consecutive slow breath with inspirations pressure of 40 cm H₂O followed by a breath hold with end-inspiration pressure of 25 cm H₂O. Volumetric end-inspiratory acquisitions were obtained using a Philips Brilliance 16p scanner in Utrecht and Siemens Definition Flash scanner in Rotterdam.

See also Kuo et al. Ped Pulmonol 2017

CT setting	Rotterdam	Utrecht
CT Scanner	Siemens Definition Flash	Philips Brilliance 16p
Scan type	Inspiratory	Inspiratory
Acquisition	Volumetric	Helical
Rotation time (ms)	280	500
Pitch	3	0.9
Slice thickness (mm)	1.0	1.0
Increment (mm)	0.7	0.7
Collimation (mm)	0.63	16x0.75
Tube voltage (kVp)	100	90
Current-time product (mAs)	10	20
CTDIvol (mGy)	0.5	0.7
Dose-Length Product (mGy cm)	12.3	12.1

Table S2. CT settings. CTDIvol and Dose-Length Product based on a 32-cm phantom and reported as mean.