



**Online Supplement 3 - Frequency table of rAiDA with a normal distribution curve**  
The AiDA values were approximately normally distributed. There was one female outlier value with  $r_{AiDA}$  of 516 mm. This person had moderate emphysema on CT with a visual emphysema score of 8 (of 18). She had COPD stage 2 according to spirometric GOLD-criteria ( $FEV_1/VC < 0.7$  and  $FEV_1$  of 55% of predicted). She also had a  $D_{LCO}$  of 49% of predicted. This person was an active smoker with a >52 pack year smoking history. She also reported experiencing dyspnoea, cough, wheezing and increased phlegm.