**Supplemental Table 1:** Multivariable linear regression models of traditional reflux metrics (AET, BET, total reflux episodes) on MII-pH and change in PFT findings in 12 months, adjusting for age, sex, smoking, proton pump inhibitor use, baseline PFT value, IEM, and anti-fibrotic therapy. Separate models were constructed for each impedance metric to avoid co-linearity. (A) Models constructed using reflux metrics as continuous variables. (B) Models constructed using reflux as dichotomized variables using currently established cutoffs.

|  |  |
| --- | --- |
| **A** | *Reflux Metrics as Continuous Variables* |
|  | **FEV1 % Change in 12 months** | **FVC % Change in 12 months** |
| Covariates | β-coeff | *p*-value | β-coeff | *p*-value |
| **Models 1: AET** | -0.15 | 0.64 | -0.16 | 0.56 |
| **Models 2: BET** | -0.14 | 0.89 | -0.14 | 0.90 |
| **Models 3: Total Reflux Episodes** | -0.026 | 0.58 | -0.024 | 0.66 |
| **B** | *Reflux Metrics as Dichotomized Variables*  |
|  | **FEV1 % Change in 12 months** | **FVC % Change in 12 months** |
| Covariates | β-coeff | *p*-value | β-coeff | *p*-value |
| **Models 1: Abnormal AET (>6%)** | -5.42 | 0.29 | -6.95 | 0.23 |
| **Models 2: Abnormal BET (>1.4%)** | -2.77 | 0.47 | -4.48 | 0.31 |
| **Models 3: Abnormal Total Reflux Episodes (>80 episodes)** | -1.80 | 0.67 | -2.61 | 0.58 |

FEV1=Foced Expiratory Volume in One Second; FVC=Forced Vital Capacity; AET = acid exposure time; BET = bolus exposure time