Additional file 3. Median (first quartile, third quartile) concentration for each MMP/TIMP stratified by tertile of FVC % predicted, DLco % predicted, and CPI.

| Protein (pg/mL) | FVC % predicted | DLco % predicted | CPI |
|----------------|-----------------|------------------|-----|
|                | Tertile 1       | Tertile 2        | Tertile 3 | Tertile 1       | Tertile 2        | Tertile 3 | Tertile 1       | Tertile 2        | Tertile 3 |
| MMP1           | 39.07 (23.20-62.18) | 26.14 (12.75-51.78) | 30.79 (15.07-54.66) | 38.42 (23.11-67.49) | 29.48 (15.71-50.21) | 30.78 (12.76-49.74) | 30.16 (15.08-52.00) | 39.07 (23.20-67.49) |
| MMP2           | 30344.02        | 31586.16         | 29794.79 | 30923.93        | 31459.37         | 29374.21         | 29634.31         | 31568.39         | 30923.93 |
|                | (26053.51-37069.72) | (27418.90-36554.29) | (26624.82-36865.93) | (26941.17-38664.93) | (24883.76-36306.47) | (23732.83-36377.50) | (26733.15-37039.57) | (26834.08-37845.31) |
| MMP3           | 6531.08         | 6332.08          | 6080.23 | 6476.34         | 6349.97          | 6040.09          | 6198.11          | 6272.61          | 6476.34 |
|                | (4651.99-8300.57) | (3938.06-9056.61) | (3980.26-9806.68) | (4483.32-8837.38) | (4114.35-8290.76) | (4400.39-8531.70) | (4024.62-7762.02) | (4548.86-10282.81) |
| MMP7           | 247.85          | 224.20           | 223.20 (173.68-277.17) | 258.21          | 226.76           | 213.78           | 215.05           | 229.54           | 258.21 |
|                | (203.14-325.19) | (165.39-332.91) | (212.56-328.87) | (169.75-386.00) | (165.74-268.95) | (160.51-266.38) | (160.35-259.73) | (211.81-335.45) | (10282.81) |
| MMP8           | 60.61 (39.79-95.14) | 49.24 (31.66-79.04) | 55.07 (38.85-68.42) | 62.92 (44.39-113.75) | 51.20 (36.04-67.77) | 48.07 (34.53-68.69) | 49.87 (34.92-62.58) | 48.42 (35.62-72.89) | 63.81 (42.64-113.75) |
| MMP9           | 7076.01         | 5491.60          | 4887.53 | 6919.93         | 5723.32         | 4809.11          | 4812.21          | 5211.92          | 7523.44 |
|                | (3656.02-10058.80) | (3337.91-8702.68) | (3446.82-8150.05) | (3825.67-10324.59) | (3436.55-8855.98) | (3238.35-7539.73) | (3282.68-7666.10) | (3157.26-8190.94) | (12327.98) |
| MMP12          | 81.78 (49.16-124.95) | 51.95 (29.46-105.18) | 62.10 (40.96-102.61) | 76.44 (45.87-135.70) | 64.75 (40.85-100.88) | 60.38 (33.93-96.55) | 60.08 (35.76-96.46) | 64.22 (38.09-105.61) | 77.91 (47.12-131.95) |
|         | MMP13     | TIMP1      | TIMP2      | TIMP4      |
|---------|-----------|------------|------------|------------|
|         | 55.09 (37.77-84.82) | 453511.85 (387387.95-538566.35) | 139618.80 (125239.40-155392.85) | 4235.14 (3355.91-5372.85) |
|         | 39.99 (19.17-64.29)  | 446308.00 (357390.30-562568.85) | 139869.70 (125058.45-159254.80) | 3948.40 (2960.04-5132.03) |
|         | 46.54 (30.45-65.78)  | 452813.85 (367331.35-525346.05) | 143464.00 (123742.05-167573.20) | 4256.79 (3127.93-5058.68) |
|         | 54.85 (34.23-85.81)  | 435606.25 (366875.90-535856.35) | 141497.90 (125518.70-160997.40) | 4579.19 (3282.03-5563.62) |
|         | 44.27 (30.29-64.61)  | 446919.50 (357212.90-570017.90) | 138877.30 (125066.70-167393.50) | 3972.20 (3157.18-5227.46) |
|         | 39.72 (23.68-68.25)  | 471149.40 (386315.60-534450.30) | 140357.90 (124612.40-158020.90) | 3801.53 (3161.46-4825.90) |
|         | 40.93 (26.59-67.70)  | 466500.36 (389536.37-525346.10) | 139410.98 (124100.43-156414.57) | 3920.26 (3175.07-4982.71) |
|         | 42.58 (27.55-61.13)  | 443417.57 (353860.36-568303.27) | 139842.16 (124458.15-163596.04) | 3868.34 (2960.62-4907.14) |
|         | 55.38 (37.30-87.55)  | 444777.46 (374224.59-548099.39) | 141645.31 (126452.64-162541.19) | 4714.83 (3406.45-5824.77) |

CPI, composite physiologic index; DLCO, diffusing capacity of the lungs for carbon monoxide; FVC, forced vital capacity.