

Figure S1. Scatter plots visualizing Spearman's rank correlation between gene expression values calculated using the $2^{-\Delta\Delta C_q}$ method between all studied genes (*MPK1/3*, *SMAD1/3/6/7*, *TGF β 1/3*) or selected clinical characteristics (BMI; age; number of pack-years). The plots show data from the healthy patient group, pre-challenge (0 h) gene expression levels. BMI, body mass index.

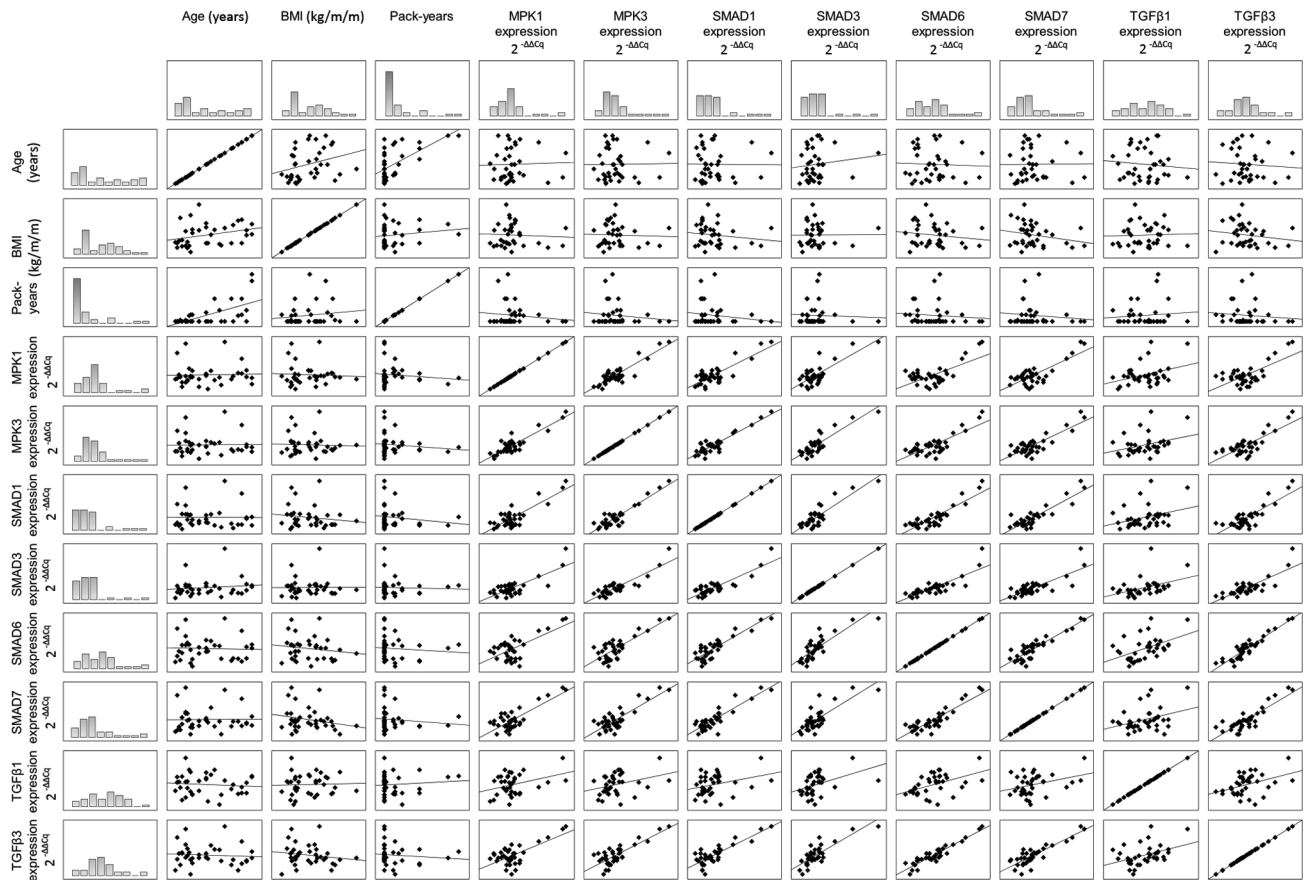


Figure S2. Scatter plots visualizing Spearman's rank correlation between gene expression values calculated using the $2^{-\Delta\Delta C_q}$ method between all studied genes (*MPK1/3*, *SMAD1/3/6/7*, *TGF β 1/3*) or selected clinical characteristics (BMI; age; number of pack-years). The plots show data from the asthmatic patient group, pre-challenge (0 h) gene expression levels. BMI, body mass index.

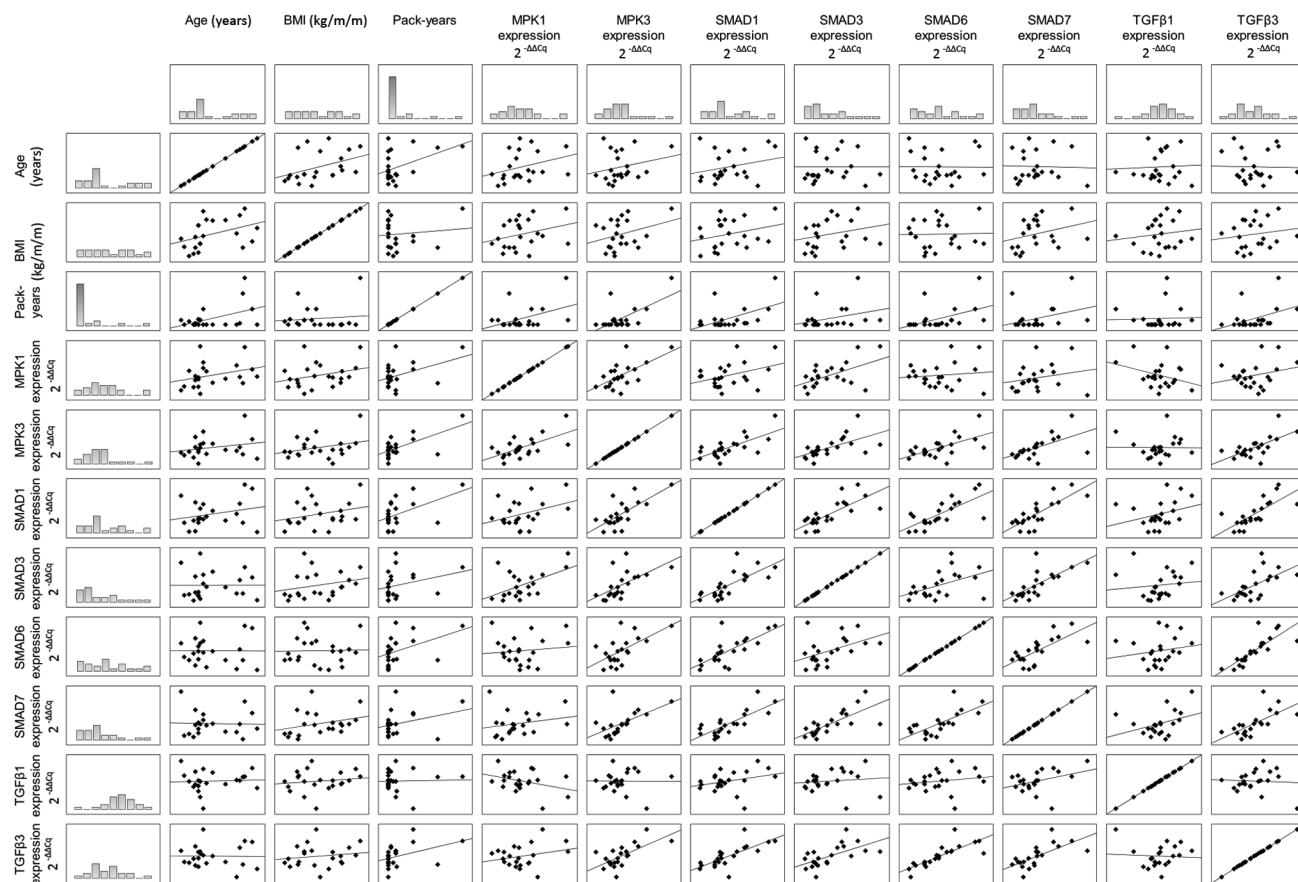


Figure S3. Scatter plots visualizing Spearman's rank correlation between gene expression values calculated using the $2^{-\Delta\Delta C_q}$ method between all studied genes (*MPK1/3*, *SMAD1/3/6/7*, *TGF β 1/3*) or selected clinical characteristics (BMI; age; number of pack-years). The plots show data from the asthmatic patient group, post-challenge (1 h) gene expression levels. BMI, body mass index.

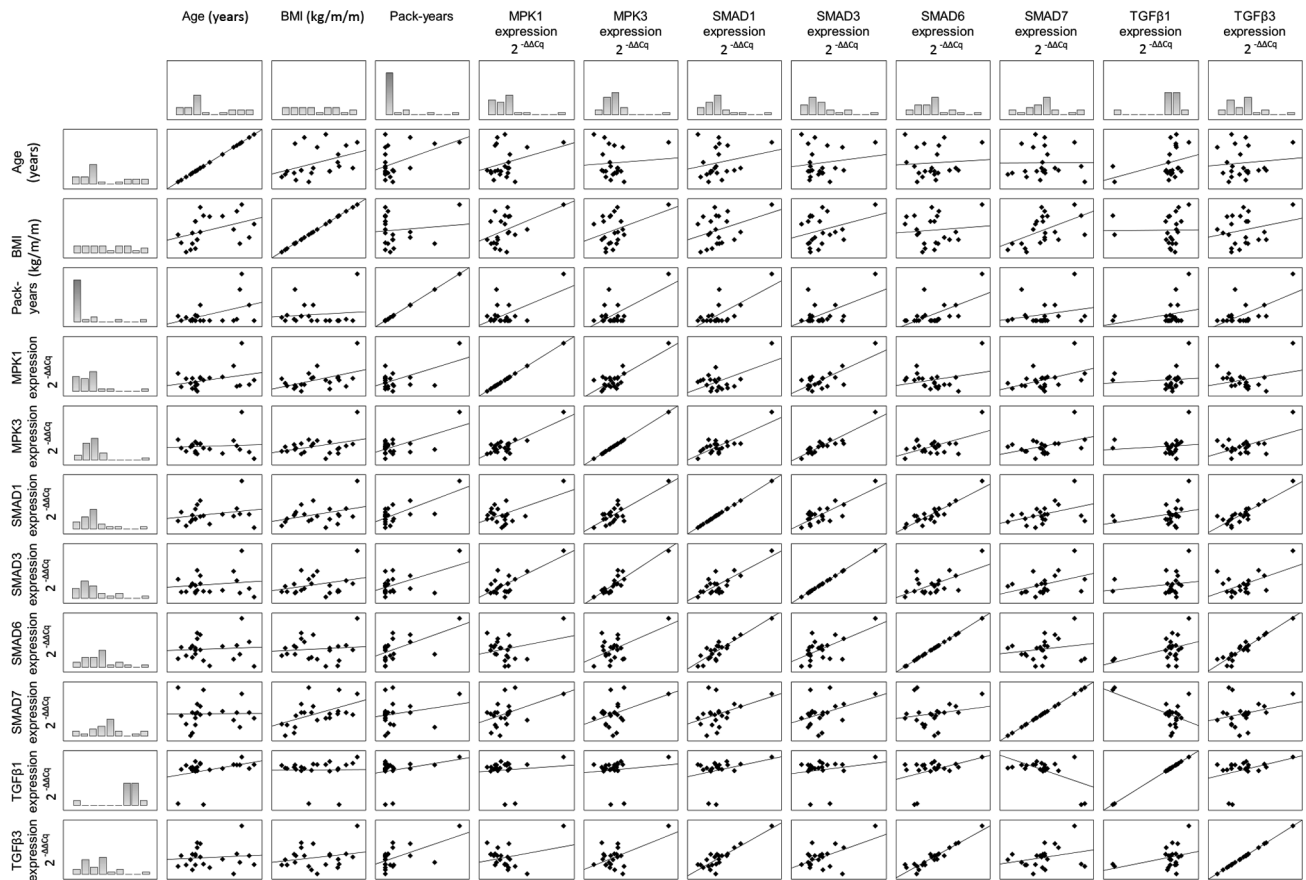


Figure S4. Scatter plots visualizing Spearman's rank correlation between gene expression values calculated using the $2^{-\Delta\Delta C_q}$ method between all studied genes (*MPK1/3*, *SMAD1/3/6/7*, *TGF β 1/3*) or selected clinical characteristics (BMI; age; number of pack-years). The plots show data from the healthy patient group, post-challenge (1 h) gene expression levels. BMI, body mass index.

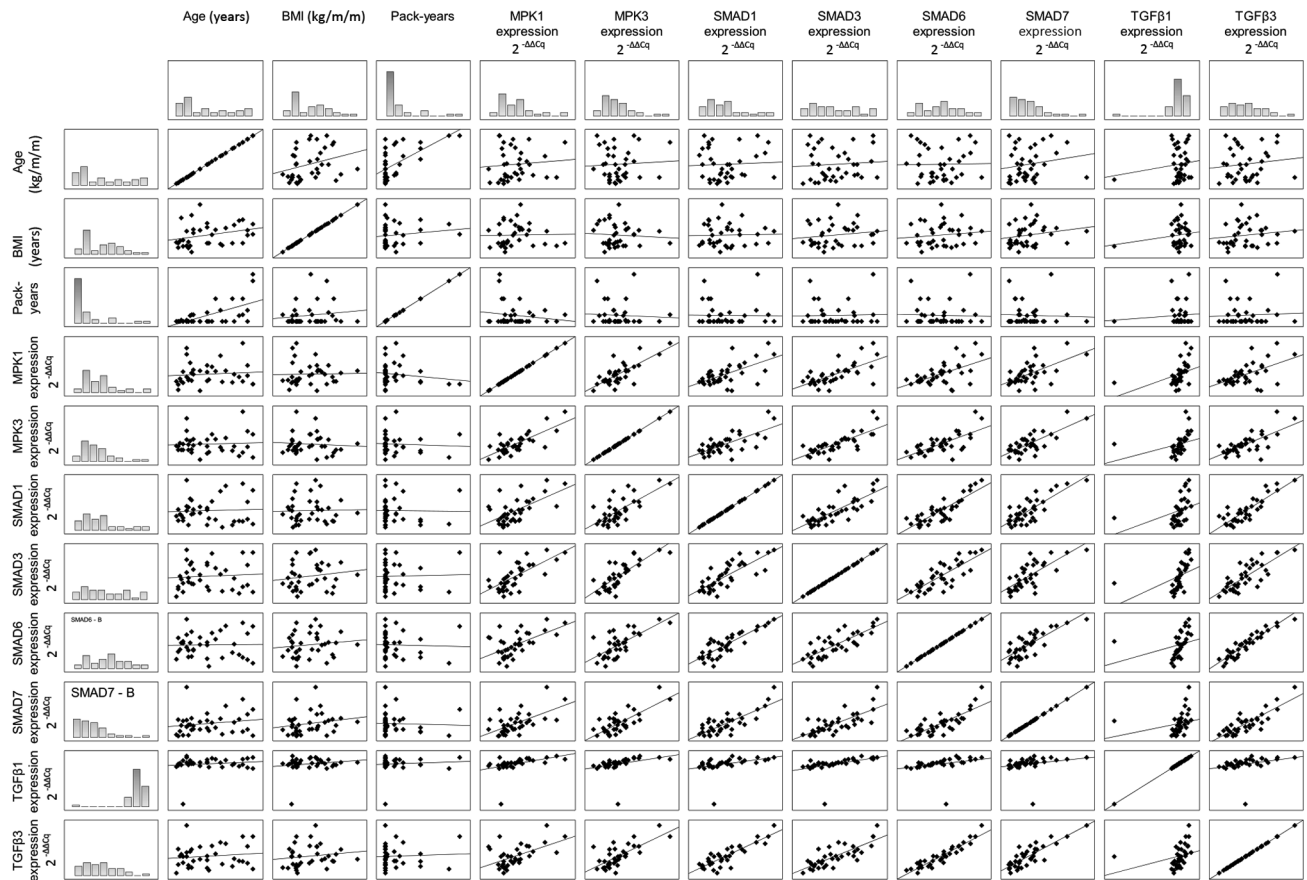


Figure S5. Scatter plots visualizing Spearman's rank correlation between gene expression values calculated using the $2^{-\Delta\Delta C_q}$ method between all studied genes (*MPK1/3*, *SMAD1/3/6/7*, *TGF β 1/3*) or selected clinical characteristics (BMI; age; number of pack-years). The plots show data from the asthmatic patient group, difference between pre-challenge and post-challenge (0-1 h) gene expression levels. BMI, body mass index.

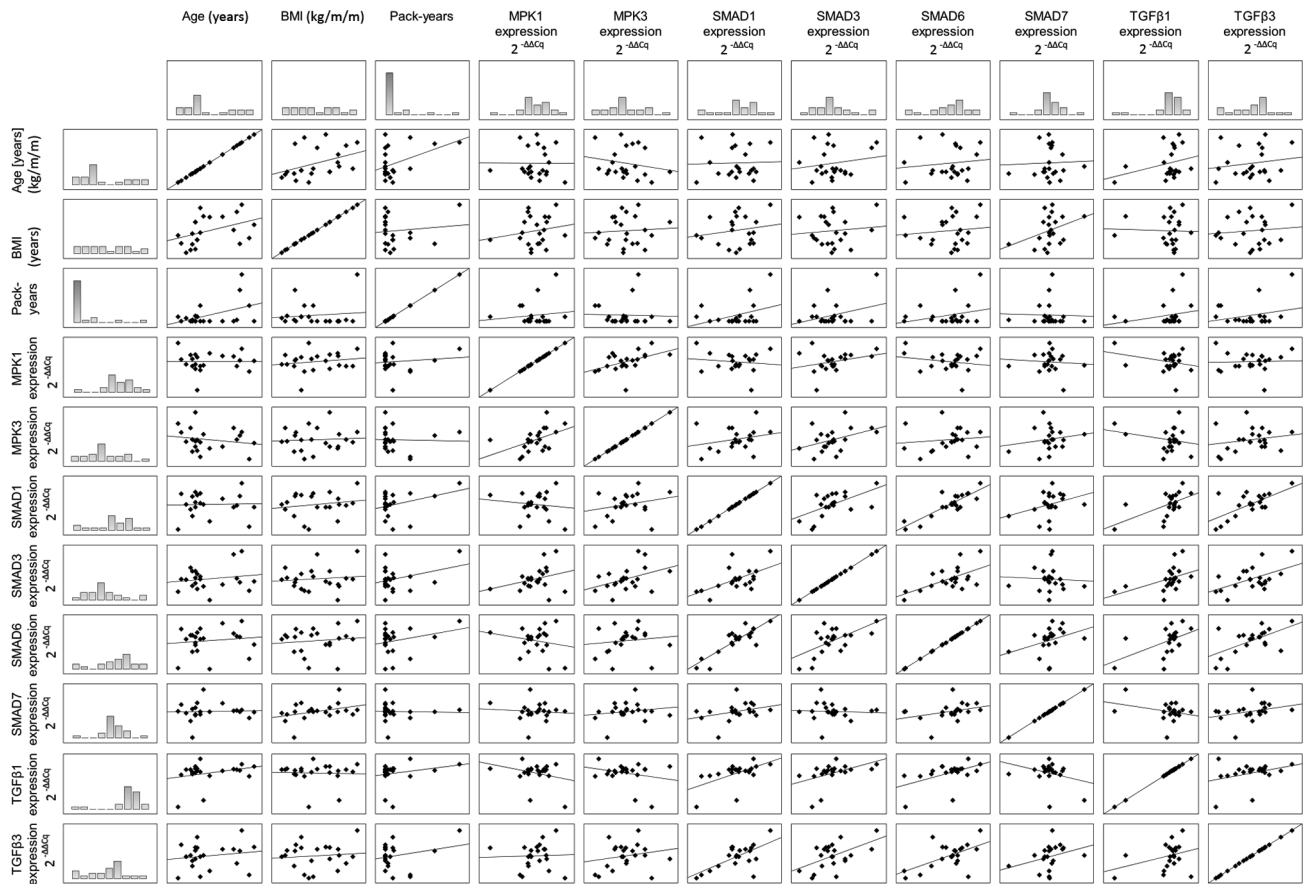


Figure S6. Scatter plots visualizing Spearman's rank correlation between gene expression values calculated using the $2^{-\Delta\Delta C_q}$ method between all studied genes (*MPK1/3*, *SMAD1/3/6/7*, *TGF β 1/3*) or selected clinical characteristics (BMI; age; number of pack-years). The plots show data from the healthy patient group, difference between pre-challenge and post-challenge (0-1 h) gene expression levels. BMI, body mass index.

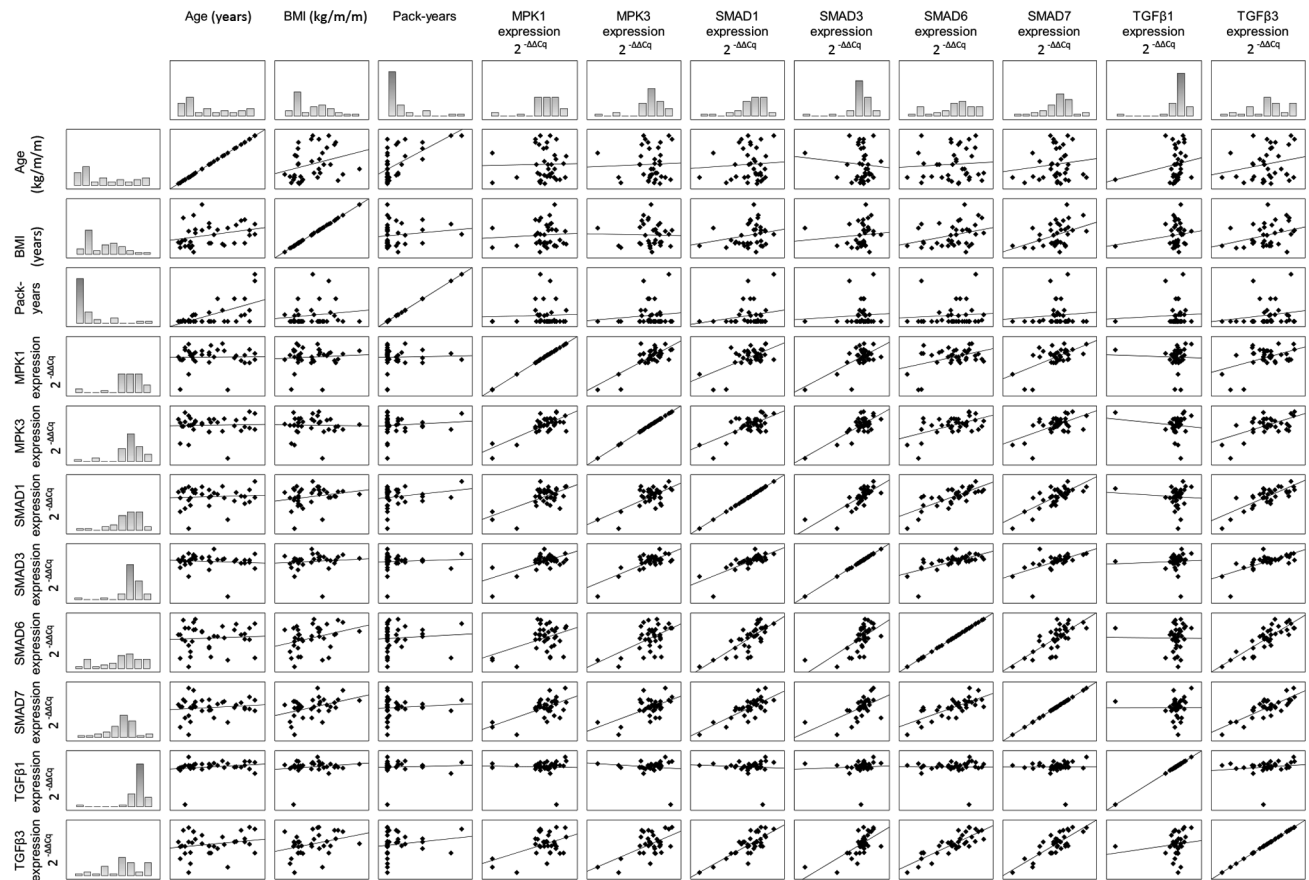


Figure S7. Scatter plots visualizing Spearman's rank correlation between gene expression values calculated using the $2^{-\Delta\Delta C_q}$ method between all studied genes (*MPK1/3*, *SMAD1/3/6/7*, *TGF β 1/3*) or selected clinical characteristics (BMI; age; number of pack-years). The plots show data from the allergen challenge group, pre-challenge (0 h) gene expression levels. BMI, body mass index.

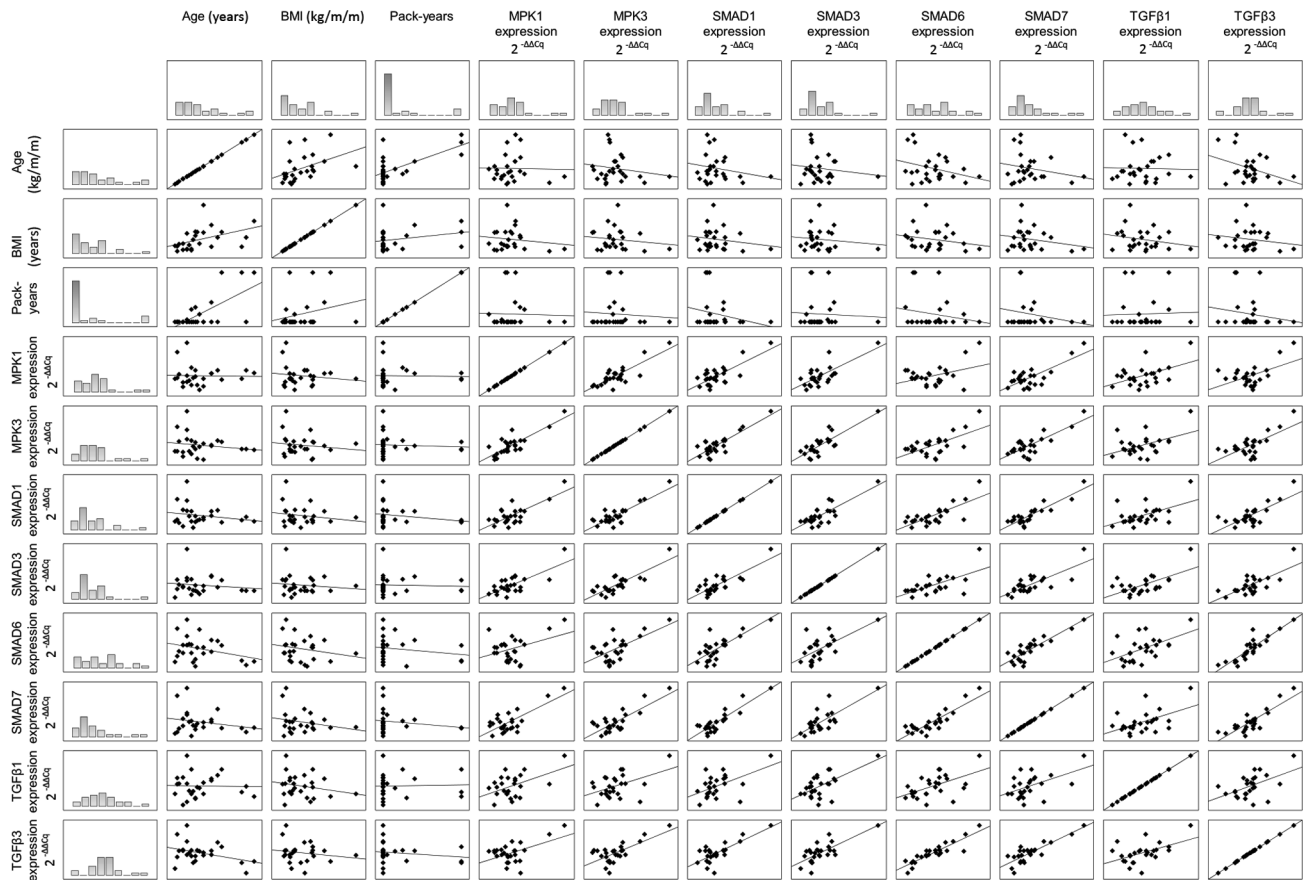


Figure S8. Scatter plots visualizing Spearman's rank correlation between gene expression values calculated using the $2^{-\Delta\Delta C_q}$ method between all studied genes (*MPK1/3*, *SMAD1/3/6/7*, *TGF β 1/3*) or selected clinical characteristics (BMI; age; number of pack-years). The plots show data from the allergen challenge group, post-challenge (1 h) gene expression levels. BMI, body mass index.

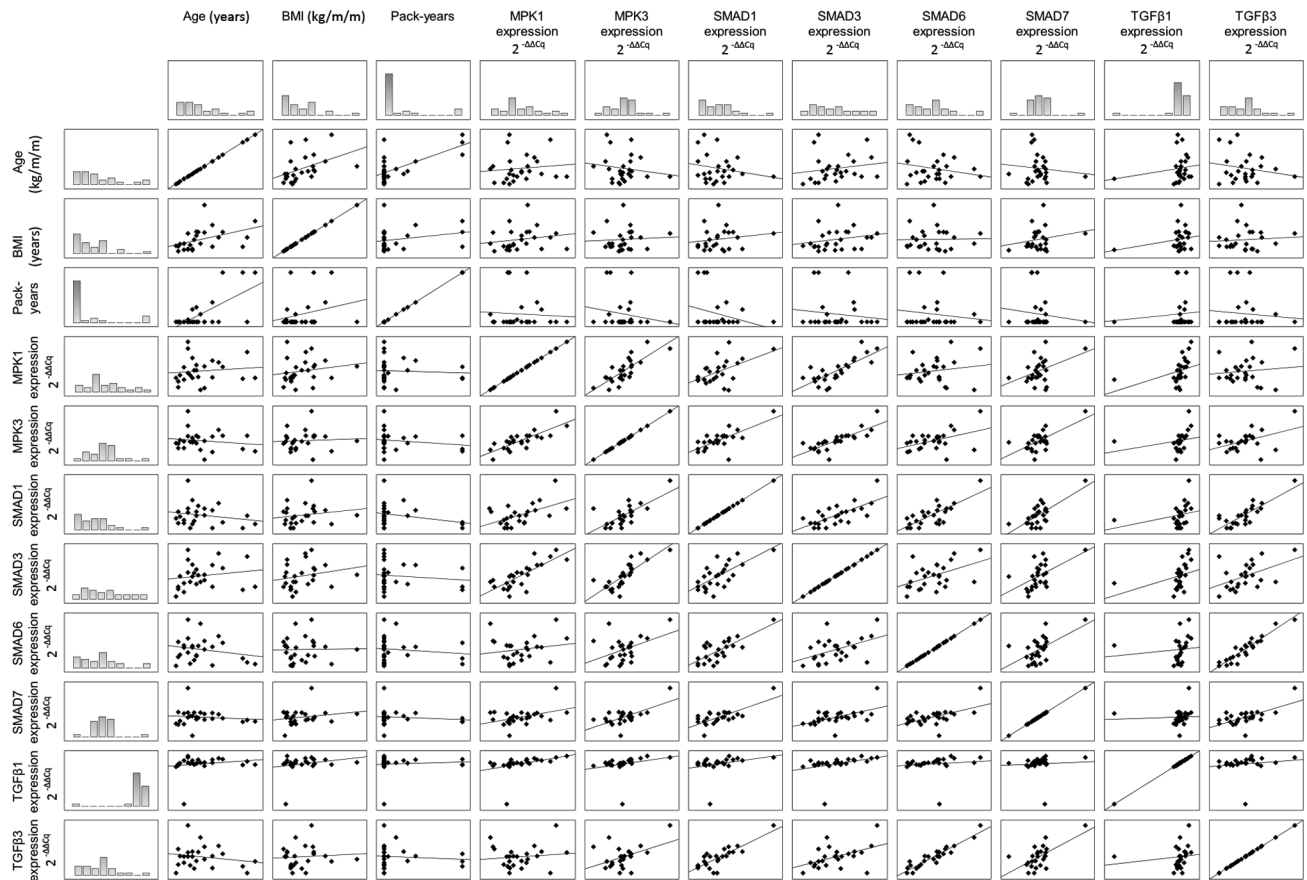


Figure S9. Scatter plots visualizing Spearman's rank correlation between gene expression values calculated using the $2^{-\Delta\Delta C_q}$ method between all studied genes (*MPK1/3*, *SMAD1/3/6/7*, *TGF β 1/3*) or selected clinical characteristics (BMI; age; number of pack-years). The plots show data from the allergen challenge group, difference between pre-challenge and post-challenge (0-1 h) gene expression levels. BMI, body mass index.

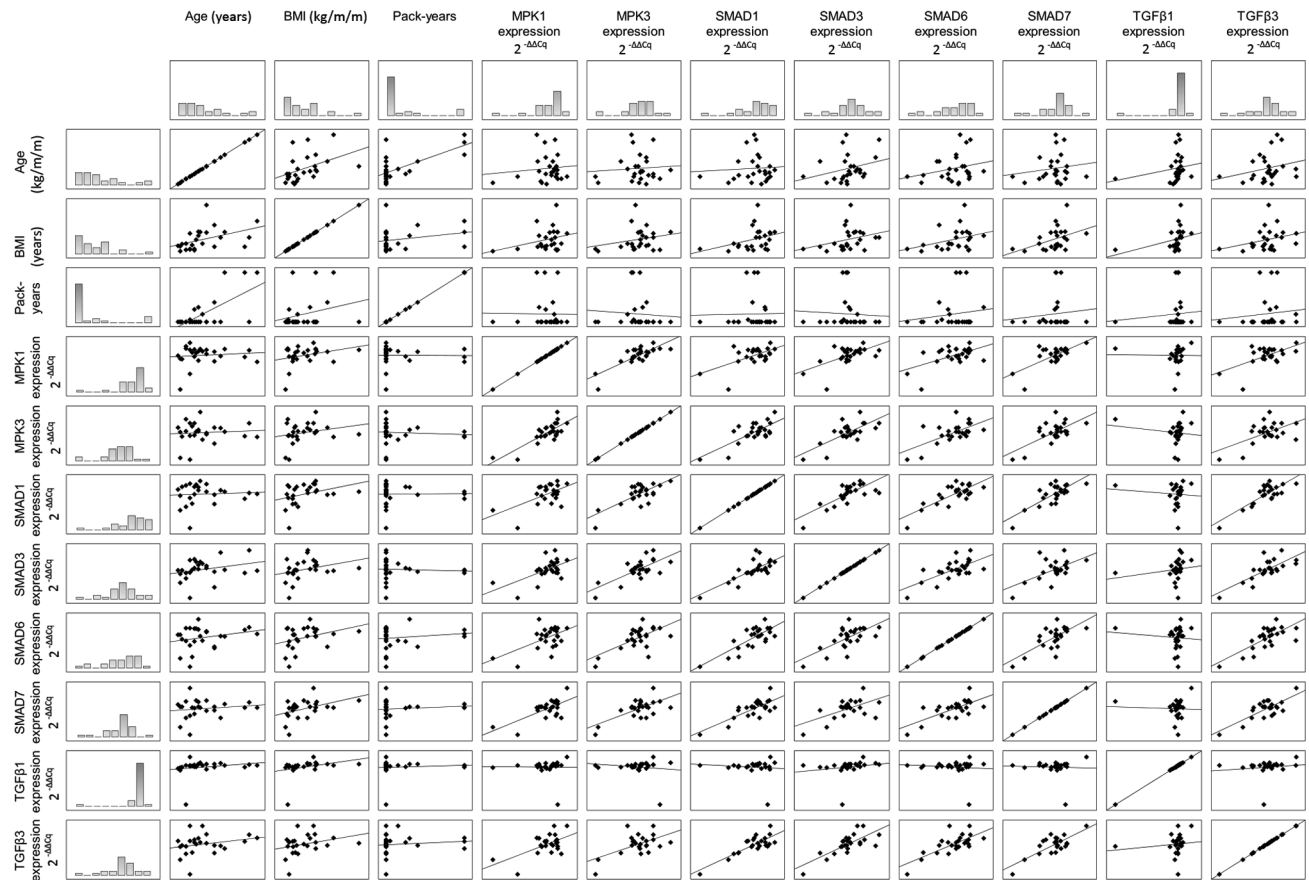


Figure S10. Scatter plots visualizing Spearman's rank correlation between gene expression values calculated using the $2^{-\Delta\Delta C_q}$ method between all studied genes (*MPK1/3*, *SMAD1/3/6/7*, *TGFBI/3*) or selected clinical characteristics (BMI; age; number of pack-years). The plots show data from the methacholine challenge group, pre-challenge (0 h) gene expression levels. BMI, body mass index.

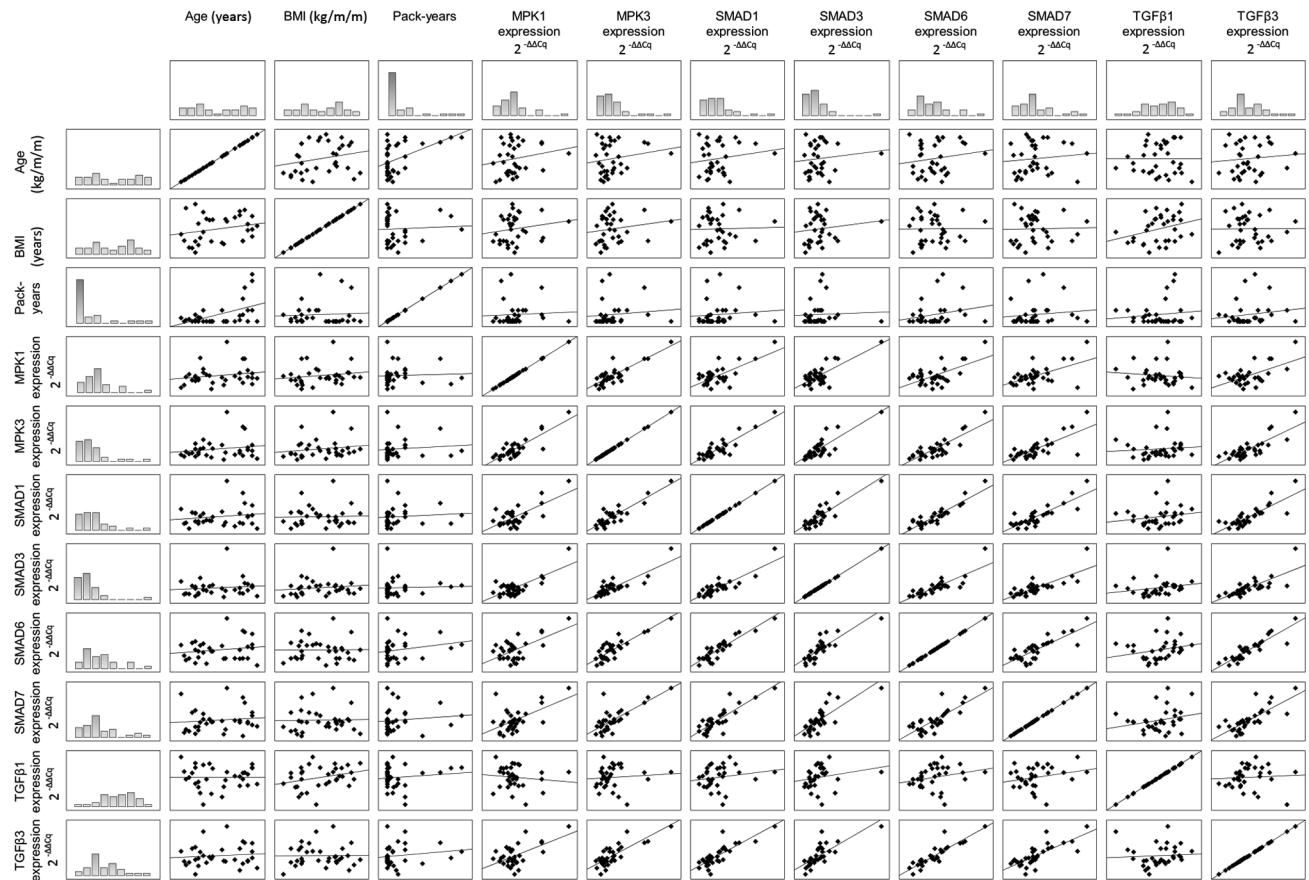


Figure S11. Scatter plots visualizing Spearman's rank correlation between gene expression values calculated using the $2^{-\Delta\Delta C_q}$ method between all studied genes (*MPK1/3*, *SMAD1/3/6/7*, *TGF β 1/3*) or selected clinical characteristics (BMI; age; number of pack-years). The plots show data from the methacholine challenge group, post-challenge (1 h) gene expression levels. BMI, body mass index.

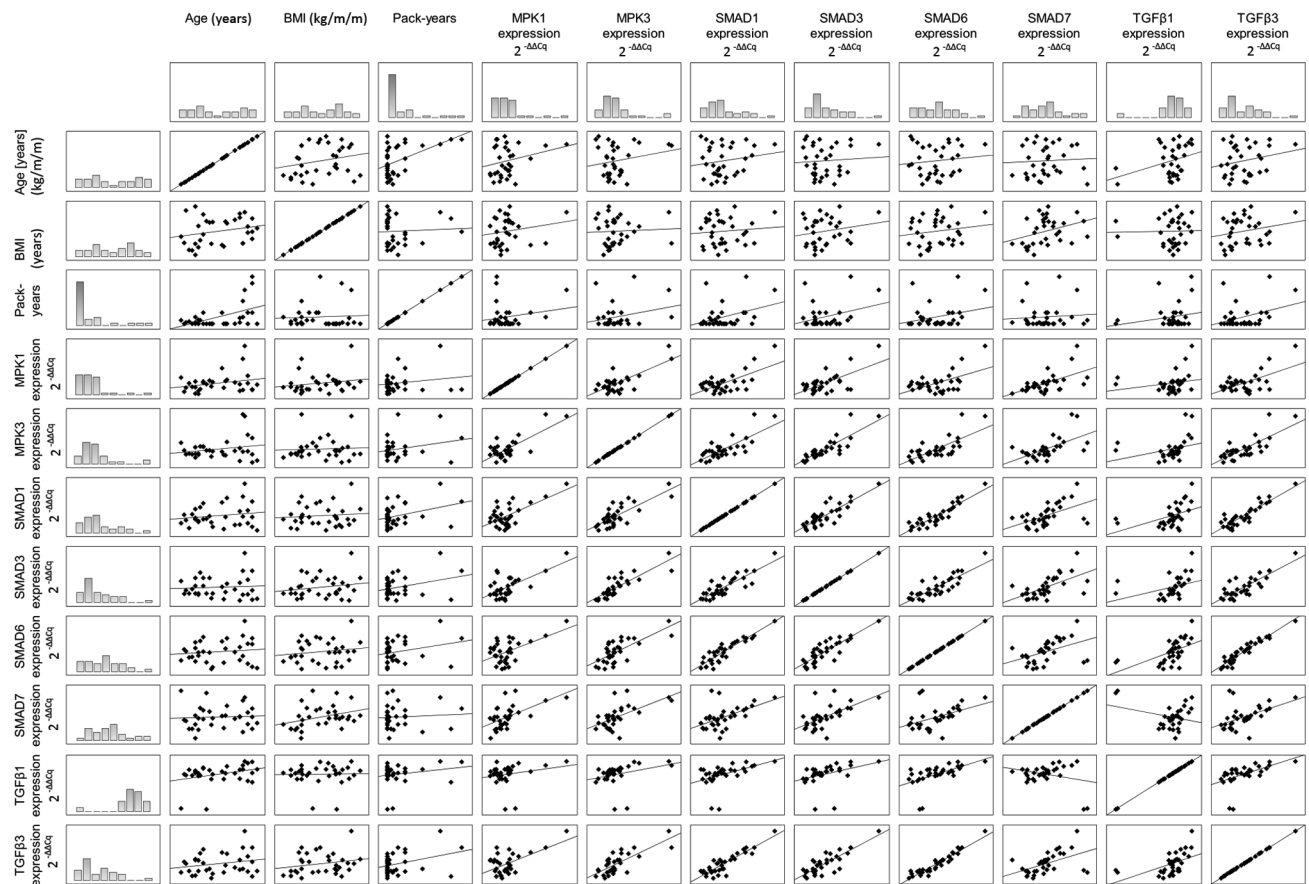


Figure S12. Scatter plots visualizing Spearman's rank correlation between gene expression values calculated using the $2^{-\Delta\Delta C_q}$ method between all studied genes (*MPK1/3*, *SMAD1/3/6/7*, *TGF β 1/3*) or selected clinical characteristics (BMI; age; number of pack-years). The plots show data from the methacholine challenge group, difference between pre-challenge and post-challenge (0-1 h) gene expression levels. BMI, body mass index.

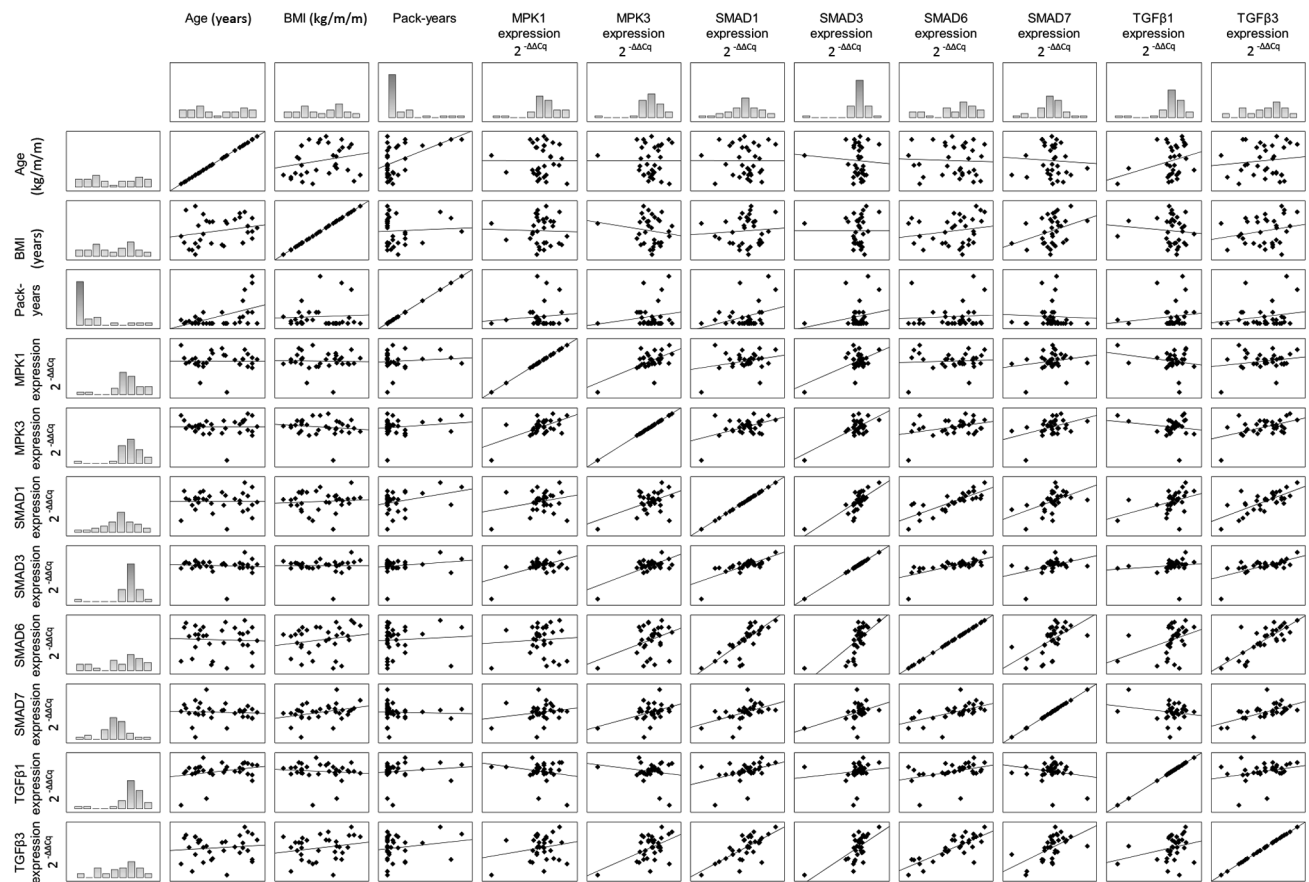


Figure S13. Scatter plots visualizing Spearman's rank correlation between gene expression values calculated using the $2^{-\Delta\Delta C_q}$ method between all studied genes (*MPK1/3*, *SMAD1/3/6/7*, *TGF β 1/3*) or selected clinical characteristics (BMI; age; number of pack-years). The plots show data from only those patients who exhibited positive allergen challenge results, pre-challenge (0 h) gene expression levels. BMI, body mass index.

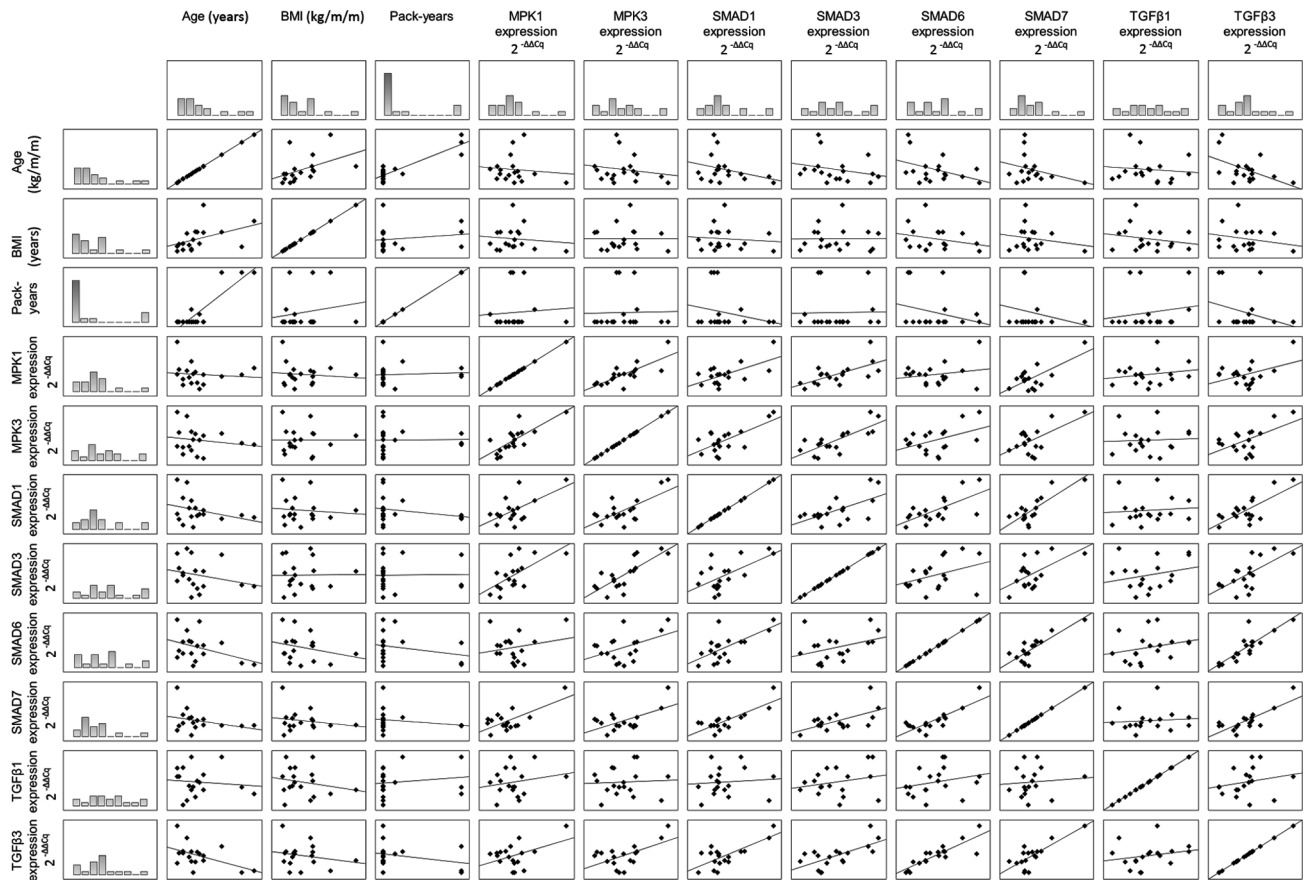


Figure S14. Scatter plots visualizing Spearman's rank correlation between gene expression values calculated using the $2^{-\Delta\Delta C_q}$ method between all studied genes (*MPK1/3*, *SMAD1/3/6/7*, *TGF β 1/3*) or selected clinical characteristics (BMI; age; number of pack-years). The plots show data from only those patients who exhibited positive allergen challenge results, post-challenge (1 h) gene expression levels. BMI, body mass index.

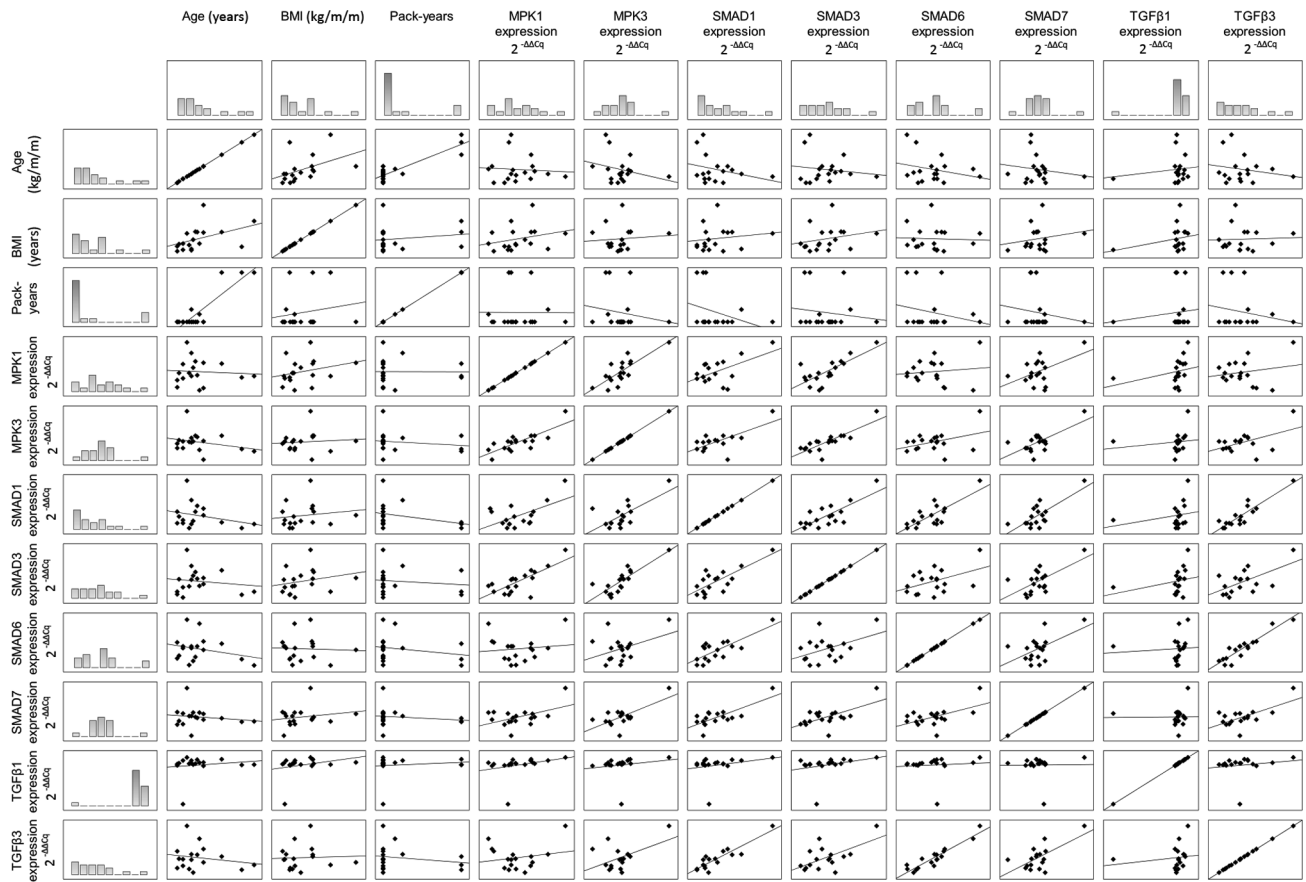


Figure S16. Scatter plots visualizing Spearman's rank correlation between gene expression values calculated using the $2^{-\Delta\Delta C_q}$ method between all studied genes (*MPK1/3*, *SMAD1/3/6/7*, *TGF β 1/3*) or selected clinical characteristics (BMI; age; number of pack-years). The plots show data from only those patients who exhibited positive methacholine challenge results, pre-challenge (0 h) gene expression levels. BMI, body mass index.

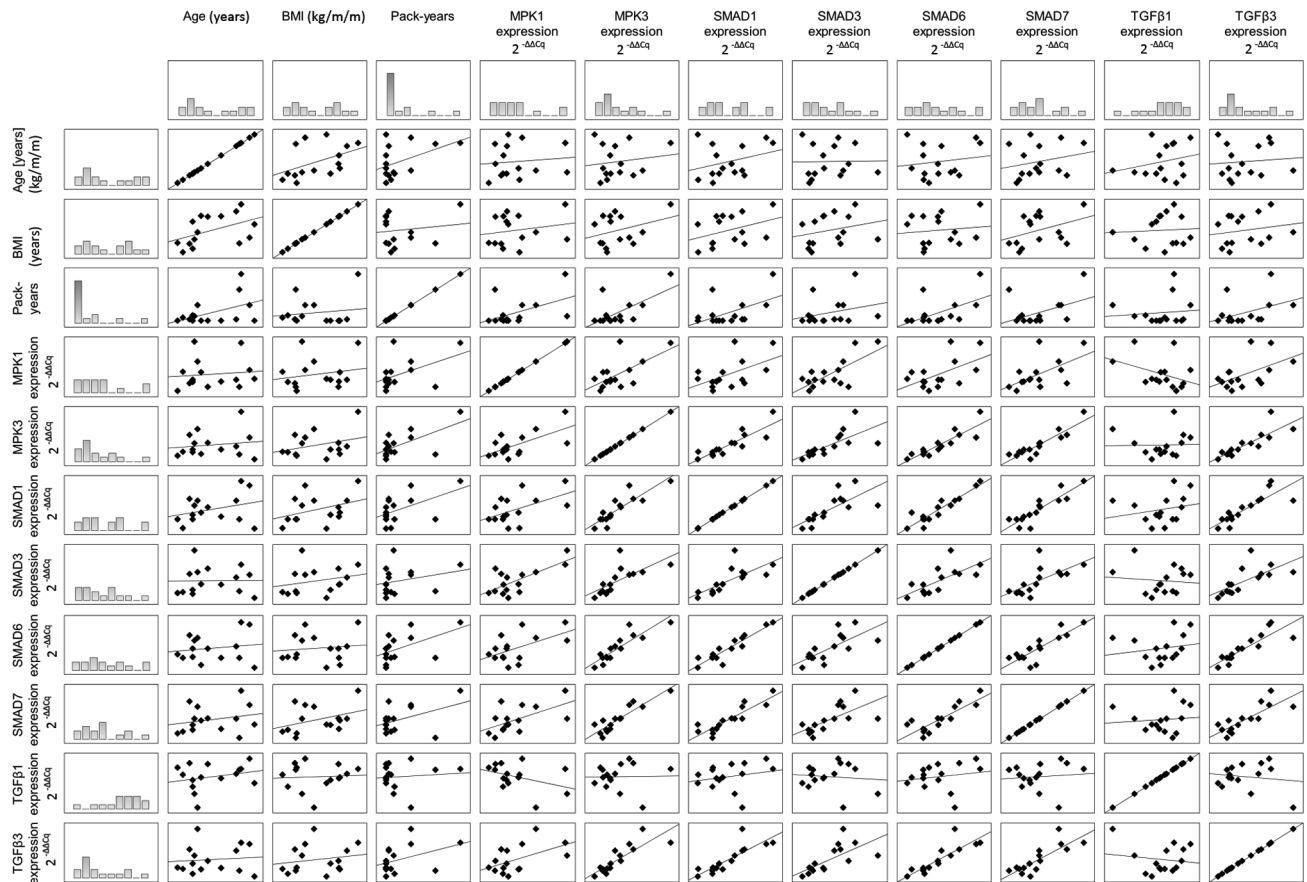


Figure S17. Scatter plots visualizing Spearman's rank correlation between gene expression values calculated using the $2^{-\Delta\Delta C_q}$ method between all studied genes (*MPK1/3*, *SMAD1/3/6/7*, *TGF β 1/3*) or selected clinical characteristics (BMI; age; number of pack-years). The plots show data from only those patients who exhibited positive methacholine challenge results, post-challenge (1 h) gene expression levels. BMI, body mass index.

