

Supplemental Table 1

<u>Study</u>	<u>Study Groups</u>	<u>Smoking status</u>	<u>Sample Size</u>	<u>Pack-years</u>	<u>Type of Tissue studied</u>	<u>Disease stage</u>	<u>Definition of disease</u>	<u>Assay method</u>	<u>Experimental validation</u>
Schembri et al¹⁷	never-smoker smokers	current smokers	10 10	0 18.8 ± 16	bronchial airway epithelial cells	no COPD	not applicable	microRNA microarray	RT-PCR (4 miRNAs)
Van Pottelberge et al¹⁰	never-smokers smokers smokers with COPD	current smokers current smokers	10 10 12	0 44.6 ± 28.6 62.2 ± 25.1	induced sputum	GOLD stages I and II	GOLD criteria (FEV ₁ /FVC < 0.70)	microRNA RT-qPCR	validation in an independent patient cohort (41 patients)
Molina-Pinelo et al¹⁸	Controls COPD Adenocarcinoma COPD and adenocarcinoma	15 current smokers 12 current smokers 18 current smokers 13 current smokers	16 23 27 21	40.0 (30.0-56.2)* 54.0 (40.0-75.0) * 60.0 (37.5-75) * 54.5 (40.0-67.5)*	BAL fluid	GOLD stages I to IV	GOLD criteria	microRNA microarray	RT-PCR (11 miRNAs). validation in an independent patient cohort (40 patients)
Sato et al³³	Control COPD	6 current smokers 6 current smokers	16 14	43.2 ± 7.6 ¹ 43.7 ± 4.3 ¹	fibroblasts	GOLD stages I to IV	GOLD criteria (FEV ₁)	microRNA microarray	RT-PCR and Northern blot (1 miRNA)
Ezzie et al²⁷	Healthy smokers GOLD I GOLD II GOLD IV	not specified	9 7 9 10	25.67 ± 16.70 41.86 ± 23.26 44.00 ± 20.15 56.40 ± 36.42	lung tissue	GOLD stage I, II and IV	GOLD criteria (FEV ₁)	microRNA microarray	RT-PCR (4 microRNAs)
Graff et al²³	never-smoker smokers	current smokers	12 16	0 > 10 years	alveolar macrophages	no COPD	not applicable	RT-PCR array	2 cohorts. RT-PCR (3 miRNAs)
Hassan et al⁴⁴	Control COPD	not specified	4 4	not specified	lung tissue	GOLD stage IV	GOLD criteria (FEV ₁ . FEV ₁ /FVC)	in situ hybridization	/
Hassan et al⁴⁹	asymptomatic MM asymptomatic ZZ symptomatic MM symptomatic ZZ	not specified	8 11 7 11	0 0 29 ± 13.1 ¹ 18.6 ± 11.2 ¹	peripheral blood monocytes	not specified	not specified	RT-PCR/ nCounter miRNA hybridization	/

Supplemental Table 1 (Continued)

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Mizuno et al⁵⁷	no COPD mild COPD moderate COPD severe COPD	0 current smokers 2 current smokers 0 current smokers 0 current smokers	10 13 17 15	0 30.4 ± 32.2 32.4 ± 35.2 43.2 ± 38.6	lung tissue	GOLD stages I to IV	GOLD criteria	RT-PCR	/
Savarimuthu et al⁶³	mild emphysema moderate emphysema	ex-smokers ex-smokers	9 20	62 ± 34 75 ± 49	lung tissue	mild versus moderate emphysema GOLD stages I and II	mild emphysema: > 75% predicted KCO, moderate emphysema: 40-75% predicted KCO GOLD criteria (FEV ₁ /FVC < 0.70)	microRNA microarray	RT-PCR (2 microRNAs)
Christenson et al⁵²	COPD IV Controls	former smokers former smoker never-smoker	6 1 1	35 ± 23.66 24 0	lung tissue	GOLD stage IV, degree of emphysema measured by Lm	GOLD criteria (FEV ₁ < 0.25 predicted)	microRNA microarray	RT-PCR (8 miRNAs)
Chatila et al⁵⁰	healthy non-smokers smokers without COPD smokers with COPD	current smokers current smokers	12 12 12	0 > 10 years	T regulatory and T effector cells	GOLD stages I to IV	GOLD criteria (FEV ₁ /FVC < 0.70)	microRNA microarray	RT-PCR (1 miRNA)
Bi et al⁸¹	non-smokers smokers without COPD smokers with COPD	current smokers current smokers	3 5 5	0 23.7 ± 1.4 29.8 ± 2.3	lung tissue	not specified	not specified	lncRNA + mRNA microarray	RT-PCR (14 lncRNAs)

The number of pack-years smoked is represented as mean ± SD, unless otherwise indicated.

*median (interquartile range)

¹ mean ± SEM