

Table S1: Characteristics of PH Group-III patients (in vitro study)

Age	Sexe	mPAP (mmHg)	FEV (ml)	FEV (%)	FVC (ml)	Underlying diagnosis
59	M	28	2340	70	2910	pulmonary fibrosis
49	M	42	702	19	2200	COPD, emphysema, bron. dilatation
45	M	31	910	24	2270	COPD, emphysema
48	F	24	450	17	920	COPD, emphysema
58	M	23	2100	57	2320	pulmonary fibrosis
60	M	20	1240	35	1420	pulmonary fibrosis
55	F	41	390	20	980	emphysema
61	M	27	1360	50	1770	pulmonary fibrosis
59	M	34	830	25	2550	COPD, emphysema
50	F	24	720	31	950	pulmonary fibrosis, bron. dilatation
59	M	41	1690	52	2594	pulmonary fibrosis, emphysema
50	F	20	840	32	1970	emphysema, bron. dilatation
65	M	32	530	17	1656	COPD, emphysema
63	F	31	740	37	1640	emphysema
32	M	41	740	19	1390	emphysema, bron. dilatation
19	F	24	410	15	970	bron. dilatation
64	M	27	3020	93	3740	pulmonary fibrosis
61	F	24	460	19	2100	emphysema
45	F	38	780	28	880	pulmonary fibrosis
66	M	30	630	23	1850	COPD, emphysema
54	M	22	570	67	1629	COPD, emphysema
66	M	26	630	20	1800	COPD, emphysema

mPAP: mean pulmonary arterial pressure, FEV: Forced expiratory volume, FVC: forced vital capacity, COPD: Chronic obstructive pulmonary disease, bron.: bronchial. PGI₂ analogues treatments were not used.

Table S2: Characteristics of control patients (in vitro study)

Age	Sexe	FEV (ml)	FEV (%)	Pathology
65	M	2800	100	lung cancer
79	M	2320	86	lung cancer, emphysema
53	M	7000	112	lung cancer
45	F	2620	87	lung cancer
70	F		57	lung cancer, COPD
71	F			lung cancer, fibrosis
55	M	3000	86	lung cancer
62	M		134	lung cancer
67	M	2360	87	lung cancer
74	M	1250	83	lung cancer
39	F		107	lung cancer
65	F	1790	90	lung cancer
68	M	2100	75	lung cancer
76	F	1400	79	lung cancer
81	M	1700	82	lung cancer, COPD, emphysema
72	M	2480	87	lung cancer, COPD
70	M	1640	90	emphysema
79	F	1820	92	lung cancer
65	F			lung cancer, fibrosis
57	F			lung cancer
51	M	1780	96	lung cancer
71	M	1920	85	lung cancer
68	M	2320	76	lung cancer
48	M	2140	78	lung cancer
59	M	2003	68	lung cancer, COPD
37	M			lung cancer
63	M	2010	61	lung cancer, COPD
66	F	2120	107	lung cancer
61	F	1770	63	lung cancer, COPD
67	M			Donor
63	M	1720	79	lung cancer, COPD
60	M	2140	77	lung cancer
75	M	1710	60	lung cancer, COPD
57	M	3160	80	lung cancer
77	F	1650	74	lung cancer, COPD
60	M	2300	65	lung cancer, COPD
62	M	1450	49	lung cancer, COPD
67	M	2870	80	lung cancer, COPD
64	F			lung cancer

FEV: Forced expiratory volume, COPD: Chronic obstructive pulmonary disease

Table S3: Primers used for Real-time PCR

Gene	Sequence
<i>IP</i> f	5' CACGAGGAGCAAAGCAAGTG 3'
<i>IP</i> r	5' AGGTCTGGGCTCTCCAGTCTT 3'
<i>EP4</i> f	5'-TGGTATGTGGGCTGGCTG-3'
<i>EP4</i> r	5'-GAGGACGGTGGCGAGAAT-3'
<i>EP2</i> f	5'-TGCTCCTTGCCTTTCACGA-3'
<i>EP2</i> r	5'-TCAGAACAGGAGGCCTAAGGA-3'
<i>GAPDH</i> f	5' GGGCACCCCTGGGCTAAACTGA 3'
<i>GAPDH</i> r	5' TGCTCTTGCTGGGGCTGGT 3'

f: forward, r: reverse

Table S4: Basal production of cAMP, PGI₂ and PGE₂

	Control patients		P	PH patients	
	levels	n		levels	n
cAMP (pmol/mg protein)	0.20±0.04	4	0.16	0.46±0.10	7
PGI₂ (ng/μg protein)	0.026±0.012	5	0.36	0.038±0.007	8
PGE₂ (ng/μg protein)	0.032±0.006	5	0.95	0.033±0.012	8

The cAMP, PGI₂ (measuring its stable metabolite 6-keto-PGF_{1α}) and PGE₂ endogenous levels in human bronchial homogenates were measured by ELISA. Values represent means±SEM from (n) different patients. The statistical differences between preparations derived from control or pulmonary hypertensive (PH) Group-III patients have been tested (Student's t or Mann-Whitney test; P values are shown).