

Appendix

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At 1 year, the Lin's coefficient was 0.61 (0.45; 0.74) in the coil treatment group and 0.45 (0.28; 0.59) in the usual care group. The Bland Altman plots presented in Figure 4 showed significant points dispersion in both groups. The agreement limits were between -0.46 (-0.55; -0.38) and 0.24 (0.15; 0.33) in the coil treatment group and between -0.52 (-0.62; -0.43) and 0.21 (0.12; 0.31) in the usual care group. In addition there was a negative bias with a 95% confidence interval excluding zero of -0.11 (-0.16; -0.06) in the coil treatment group and -0.15 (-0.21; -0.10) in the usual care group, indicating that the EQ-5D score was smaller than the SGRQ score. The significant point's dispersion and the Lin's coefficient showed fair concordance between the 2 questionnaires.

Appendix 5: Correlation diagram between the EQ-5D predicted value and the EQ-5D individual value at baseline and 1 year

Appendix

Appendix 1: Baseline characteristics of the REVOLENS patients

	Coil treatment (n=50)	Usual care (n=50)
Age, yr	62.1 (8.3)	61.9 (7.3)
Men, No. (%)	39 (78)	32 (64)
Pack-years smoked	44 (19)	46 (21)
Body mass index, kg/m ²	22.5 (4.1)	23 (4.3)
6MWT distance, m	300 (112) ^b	326 (121)
mMRC, No. (%) ^c		
1	0 (0)	1(2) ^d
2	11 (22)	13 (26)
3	28 (56)	25 (50)
4	11 (22)	11 (22)
Baseline Dyspnea Index ^e	4.4 (2.1)	4.1 (1.9)
FEV ₁ , % predicted	25.7 (7.5)	27.4 (6.2)
FVC, % predicted	67.4 (16.5)	72 (20.1)
FEV ₁ /FVC	0.31 (0.09)	0.32 (0.08)
RV, % predicted	271.2 (38.1)	269.3 (44.3)
TLC, % predicted	141.7 (16.6)	143.6 (18)
RV/TLC	0.70 (0.06)	0.69 (0.07)
Emphysema (0-4) ^f		
Right Upper lobe	2.9 (0.7)	3.2 (0.8)
Middle lobe	2.1 (1)	2.3 (0.8)
Right Lower lobe	2.2 (0.9)	2.2 (0.8)
Left Upper Lobe	2.9 (0.8)	3 (0.7)
Left Lower Lobe	2.3 (0.9)	2.2 (1)
Heterogeneous ^g , No. (%)	17 (34)	16 (32)
Treatments, No. (%)		
Oxygen therapy	32 (64)	29 (58)
Long-action beta-agonists	49 (98)	48 (96)
Long-acting muscarinic antagonists	45 (90)	42 (84)
Inhaled corticosteroids	46 (92)	43 (86)

^a Values are shown as mean (Standard Deviation), or number (No.) and percentage (%) when indicated.

^bThe 6-minute walk test was conducted with one patient receiving oxygen by mistake, and the patient was retained for further follow-up and included in analyses.

^cThe modified Medical Research Council (mMRC) scale grades 5 different levels of dyspnea based on the circumstances in which it arises: Grade 0 “I only get breathless with strenuous exercise”; Grade 1 “I get short of breath when hurrying on level ground or walking up a slight hill”; Grade 2 “On level ground, I

walk slower than people of the same age because of breathlessness, or I have to stop for breath when walking at my own pace on the level”; Grade 3 “I stop for breath after walking about 100 yards or after a few minutes on level ground”; Grade 4 “I am too breathless to leave the house or I am breathless when dressing”

^d1 patient was included in error with a mMRC at 1, but was included in the follow-up and analyses.

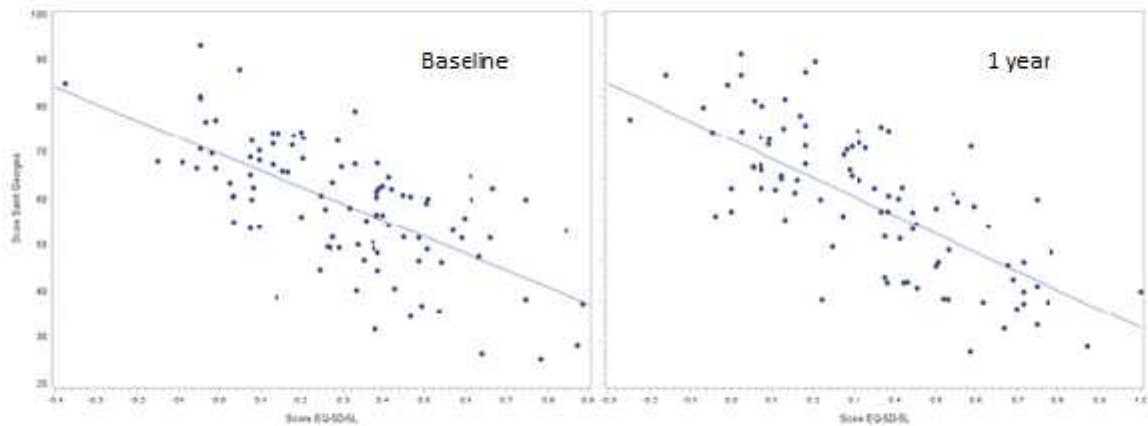
^eBaseline Dyspnea Index uses five grades (0 to 4) for 3 categories, functional impairment, magnitude of task and magnitude of effort with a total score from 0 to 12.

^fA visual score from 0 to 4 was assigned to each lobe, based on the extent of tissue destruction, where 0= no emphysema, 1= 1 to 25% emphysematous, 2= 26 to 50%, 3= 51 to 75%, and 4= >75%.

^gEmphysema was classified as heterogeneous in there was a difference >1 point between ipsilateral lobes.

NOTES: mMRC=modified Medical Research Council test; FEV₁=forced expiratory volume in one second; FVC=forced vital capacity; FEV₁/FVC= forced expiratory volume in one second/forced vital capacity; RV=residual volume; TLC=total lung capacity; RV/TLC=residual volume/total lung capacity; SGRQ=St. George’s Respiratory Questionnaire.

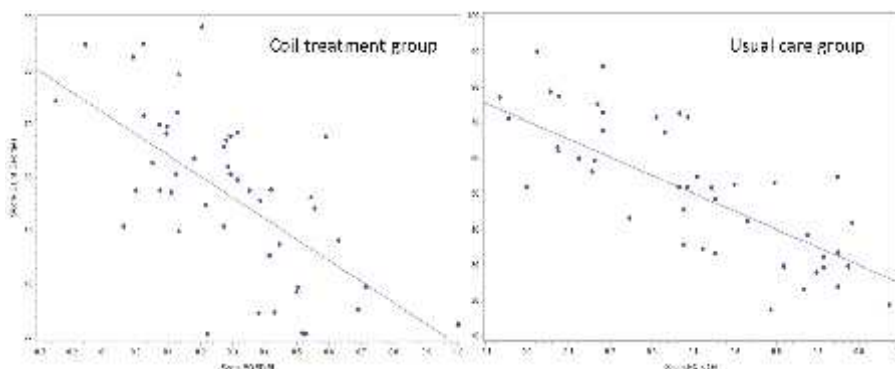
Appendix 2: Correlation diagram between the EQ-5D and the SGRQ total score at baseline and 1 year



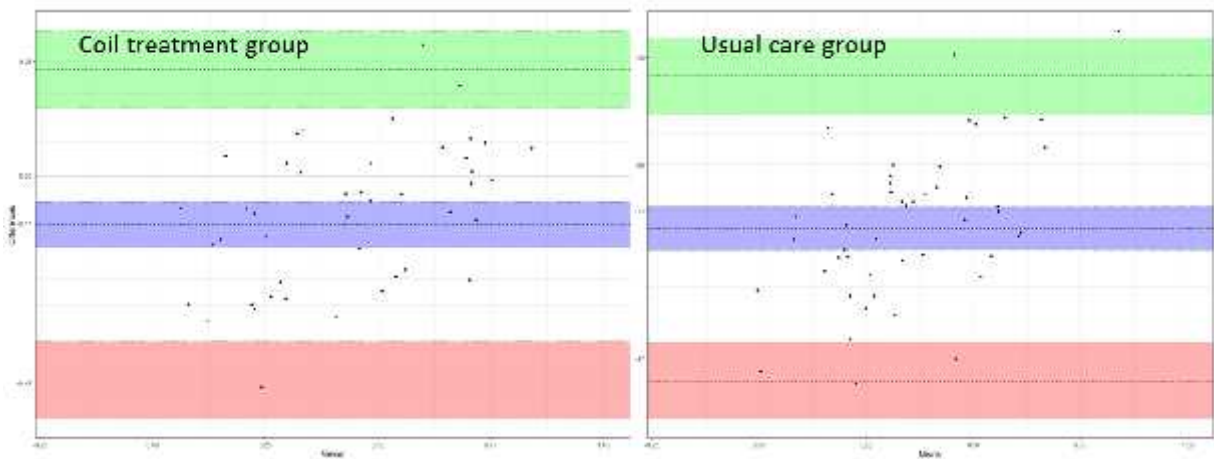
Appendix 3a: Correlation between the EQ-5D-5L and the SGRQ at 1 year in each group

		Mean (95%CI)	Correlative with the EQ-5D-5L	
			Correlation coefficient	P value
Coil treatment group	SGRQ (%)	52.0 (46.9 ; 57.2)	-0.740	<0.0001
	Symptoms domain	53.1 (47.4 ; 58.7)	-0.516	0.0001
	Activity domain	72.7 (67.6 ; 77.9)	-0.658	<0.0001
	Impact domain	39.0 (33.2 ; 44.7)	-0.739	<0.0001
	EQ-5D-5L	0.37 (0.29 ; 0.44)		
Usual care group	SGRQ (%)	57.6 (53.3 ; 61.9)	-0.647	<0.0001
	Symptoms domain	51.5 (46.1 ; 57.0)	-0.469	0.0006
	Activity domain	80.5 (76.6 ; 84.4)	-0.735	<0.0001
	Impact domain	45.8 (40.4 ; 51.2)	-0.525	<0.0001
	EQ-5D-5L	0.27 (0.20 ; 0.34)		

Appendix 3b: Correlation diagram between the EQ-5D-5L and the SGRQ at 1 year in each group



Appendix 4: Bland Altman Plot of the EQ-5D and the SGRQ score at 1 year in each group



At 1 year, the Lin's coefficient was 0.61 (0.45; 0.74) in the coil treatment group and 0.45 (0.28; 0.59) in the usual care group. The Bland Altman plots presented in Figure 4 showed significant points dispersion in both groups. The agreement limits were between -0.46 (-0.55; -0.38) and 0.24 (0.15; 0.33) in the coil treatment group and between -0.52 (-0.62; -0.43) and 0.21 (0.12; 0.31) in the usual care group. In addition there was a negative bias with a 95% confidence interval excluding zero of -0.11 (-0.16; -0.06) in the coil treatment group and -0.15 (-0.21; -0.10) in the usual care group, indicating that the EQ-5D score was smaller than the SGRQ score. The significant point's dispersion and the Lin's coefficient showed fair concordance between the 2 questionnaires.

Appendix 5: Correlation diagram between the EQ-5D predicted value and the EQ-5D individual value at baseline and 1 year

