

**Table S4**  
**Discriminate validity of data obtained with objective physical activity monitors**

Participants		Instrument	Parameter (units)	Results	Statistic	Author
Group 1 N, age category	Group 2 N, age category					
<b>Discriminate Validity (CF vs. non-CF)</b>						
16 children with CF	99 healthy children	RT3	Percentage time spent in light, moderate, and hard/vigorous activity (%)	p=NS	Unpaired t-test	Kilbride 2012 [A:14]
20 adults with CF	20 healthy adults	SenseWear	Step count (steps/day)	p=0.37	MWUT	Troosters 2009 [A:7]
			Time spent in mild intensity activity (min/day)	p=NS		
			Time spent in moderate intensity activity (min/day)	p=0.03		
			Time spent in vigorous intensity activity (min/day)	p=0.09		
<b>Discriminate Validity (between groups of patients with CF who have different phenotype)</b>						
16 children with CF		RT3	Percentage time spent in light, moderate, and hard/vigorous activity (%)	p=NS	Unpaired t-test	Kilbride 2012 [A:14]
9 males	7 females					
19 adults with CF		SenseWear	Physical activity step count (steps/day)	p=NS	Unpaired t-test / MWUT	Burtin 2013 [A:1]
13 males	6 females		Time spent >4.8MET (min/day)	p=NS		
19 exacerbations	10 stable		Physical activity step count (steps/day)	p<0.05		
50 adults with CF		SenseWear	Step count (steps/day)	p=NS	MWUT	Garcia 2011 [A:5]
Normal BMD	Low BMD					
41 children, adolescents and adults with CF		ActiGraph	Time spent active in MPA (min/day)	p=NS	Unpaired t-test	Ruf 2012 [A:9]
18 males	23 females		Time spent active in VPA (min/day)	p<0.05		
			Time spent active in MVPA (min/day)	p<0.05		
30 children, adolescents and adults		DigiWalker	Step count (steps/day)	p=NS	Linear	Quon 2012

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with CF					regression	[A:18]
13 males	17 females					
70 pre-pubescent with CF		ActiGraph	Activity counts (units)		ANCOVA	Selvadurai 2004 [A:13]
Mild (female)	Moderate to severe (female)			p<0.05		
Mild (male)	Moderate to severe (male)			p<0.05		
78 pubescent with CF						
Mild (female)	Moderate to severe (female)			p<0.05		
Mild (male)	Moderate to severe (male)			p<0.05		
21 pre-pubescent males with CF						
14 PI	7 PS			p=NS		
18 pre-pubescent females with CF						
12 PI	6 PS			p=NS		
18 pubescent males with CF						
12 PI	6 PS			p=NS		
24 pubescent females with CF						
16 PI	8 PS			p<0.05		
26 pre-pubescent with CF and PI						
14 males	12 females			p=NS		
13 pre-pubescent with CF and PS						
7 males	6 females			p=NS		
28 pubescent with CF and PI						
12 males	16 females			p=NS		
14 pubescent with CF and PS						
6 males	8 females	p=NS				

Abbreviations: ANCOVA=analysis of covariance; BMD=bone mineral density; MPA=moderate physical activity; MVPA=moderate to vigorous physical activity; MWUT=Mann-Whitney U Test; NS=not significant; N=number; PI=pancreatic insufficiency; PS=pancreatic sufficiency; VPA=vigorous physical activity

**Note: All references are listed in the online supplementary material reference list**