

**Table S6**  
**Responsiveness of data obtained by objective physical activity monitors**

Participants N and subject type	Intervention	Instrument Parameter (units)	Result	Did other endpoints detect difference?	Statistic	Author
<b>Exercise and Physical Activity Interventions</b>						
38 children, adolescents and adults	Partially supervised activity program (baseline to 3-6mo)	ActiGraph Time spent in vigorous PA (hr/week)	p=NS	Yes	ANOVA	Hebestreit 2010 [A:10]
	Partially supervised activity program (baseline to 12mo)	ActiGraph Time spent in vigorous PA (hr/week)	p=NS	Yes		
	Partially supervised activity program (baseline to 18-24mo)	ActiGraph Time spent in vigorous PA (hr/week)	p=0.047	Yes		
<b>Other interventions (e.g. IV antibiotics)</b>						
19 adults with CF	During IVAB to 40day follow-up	SenseWear (steps/d)	P<0.05	Yes	ANOVA	Burtin 2013 [A:1]
		SenseWear Time spent in physical activity >4.8 METS (mins)	P<0.05	Yes		
22 adults	During IVAB to 1mo follow-up	SenseWear Time spent in physical activity <3 METS (mins)	p<0.001	Yes	Paired t-test	Ward 2013 [A:3]
		SenseWear Time spent in physical activity ≥3 METS (mins)	p<0.001	Yes		
		SenseWear Time spent in physical activity 3-6 METS ACSM Moderate (mins)	p<0.001	Yes		
		SenseWear Time spent in physical activity 6-9 METS ACSM Vigorous (mins)	p<0.001	Yes		
		SenseWear Time spent in physical activity >9 METS ACSM Very vigorous (mins)	P=NS	Yes		
		SenseWear Time spent in physical activity 3-4.8 METS	p<0.001	Yes		

Physical Activity Assessment in CF (Mar 2015)

		Troosters Mild (mins)				
		SenseWear Time spent in physical activity 4.8-7.2 METS Troosters Moderate (mins)	p<0.001	Yes		
		SenseWear Time spent in physical activity >7.2 METS Troosters Vigorous (mins)	P=NS	Yes		
		SenseWear Total energy expenditure (kcal)	p<0.001	Yes		
		Time spent lying down (mins)	P=NS	Yes		
		Time spent sleeping (mins)	P=NS	Yes		
13 adults	Hospital admission for IVAB (admission to discharge)	SenseWear Step count (steps/d)	p=NS	Yes	ANOVA	Wieboldt 2012 [A:4]
		SenseWear Energy expenditure (kJ/d)	p=0.01	Yes		
	Hospital admission for IVAB (admission to 1mo follow-up)	SenseWear Step count (steps/d)	p=0.001	Yes		
		SenseWear Energy expenditure (kJ/d)	p=0.001	Yes		
	Hospital admission for IVAB (discharge to 1mo follow-up)	SenseWear Step count (steps/d)	p=0.008	Yes		
		SenseWear Energy expenditure (kJ/d)	p=NS	Yes		
21 children adolescents and adults	Well to Ill state	RT3 Physical activity (counts/min)	P=NS	No	MWUT	Beghin 2009 [A:15]
13 children and adolescents	Pre and Post IVABs	TriTrac-R3D Physical activity (counts/min)	p=0.02	No	Wilcoxon	Beghin 2005 [A:16]
30 adolescents and adults	Ill to well state	DigiWalker step rate (steps/hr)	p=0.015	NR	Linear Regression	Quon 2012 [A:18]
		DigiWalker step count (steps/d)	p<0.05			

Abbreviations: ACSM=American College of Sports Medicine; ANOVA=analysis of variance; d=day; h=hour; IVAB=intravenous antibiotics; kcal=kilocalories; kJ=kilojoules; METS=metabolic equivalents; min=minute; mins=minutes; mo=month; MWUT=Mann-Whitney U Test; N=number; NS=not significant

Physical Activity Assessment in CF (Mar 2015)

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