Evidence-Based Public Health
International Workshop
Munich, Germany, 17th and 18th November 2010
Martin Daumer
Disability as an outcome in MS clinical trials


CONCLUSION
Clinical surrogates of unremitting disability used in trials of relapsing-remitting multiple sclerosis cannot be validated. Trials have been too short or degrees of disability change too small to measure the key outcomes. These analyses highlight the difficulty in determining effectiveness of therapy in chronic diseases.


MRI as an outcome in multiple sclerosis clinical trials


CONCLUSION
MRI measures widely used in trials of relapsing-remitting and progressive multiple sclerosis add little if anything independently to the clinically relevant relapse and disability outcomes.
What is actibelt®?

The actibelt is a three-dimensional accelerometer integrated in a belt buckle.

It can be used for the long term monitoring of a person’s activity, and also for gait quality and postural stability assessment in clinical trials.

Discrete, non-invasive, portable

Placed near the COM
Mobile accelerometry - actibelt®

- Pattern of the acceleration signal near the body's COM while performing different activities
- Towards the standardization of a gait and balance quality assessment tool using mobile accelerometry.
ACCELEROMICS MEETS GENOMICS —
Physical activity and genes for personalized medicine

Results from an international expert panel meeting – Schloss Höhenried, Oct. 2010

• “Mobile accelerometry has great potential for improving human health by contributing to the diagnosis of gait and balance disorders in daily life and clinical practice, improving outcome measures in chronic disabling diseases as well as a tool for prescribing and monitoring exercise therapy.”

Selection of Projects
BEGIN study with Bayer Schering: Betaseron treatment and Exercise data Gathering IN early MS
PerCoMed: Case study “MS Nurses” in the “Rhön-Klinik” in Bad Neustadt
Clinical study with the Masku Neurological Rehabilitation Centre in Finland: Physical activity of patients with early multiple sclerosis (MS) as monitored with a new measure – ActiBelt
Clinical trials with Lupus, Osteoporosis & MS
PhD together with the Technical University Munich: actibelt and Depression/Schizophrenia
SWIM - Advanced Body Motion Analysis ABMA – Sport Science
FP7: VPHOP: Application of the actibelt within osteoporosis – fall risk prediction
FP7 Marie Curie ITN: Netsim: CVD/
Parabola flights in Bordeaux in November 2006, in Houston in June 2007 and Cologne in September 2007
BMBF – German Competence Network MS: IPAT integrated platform for measuring physical activity as outcome and treatment option
Physical activity assessment in osteoarthritis using actibelt®, Mayo Clinic
CardoResource – healthy blood donors