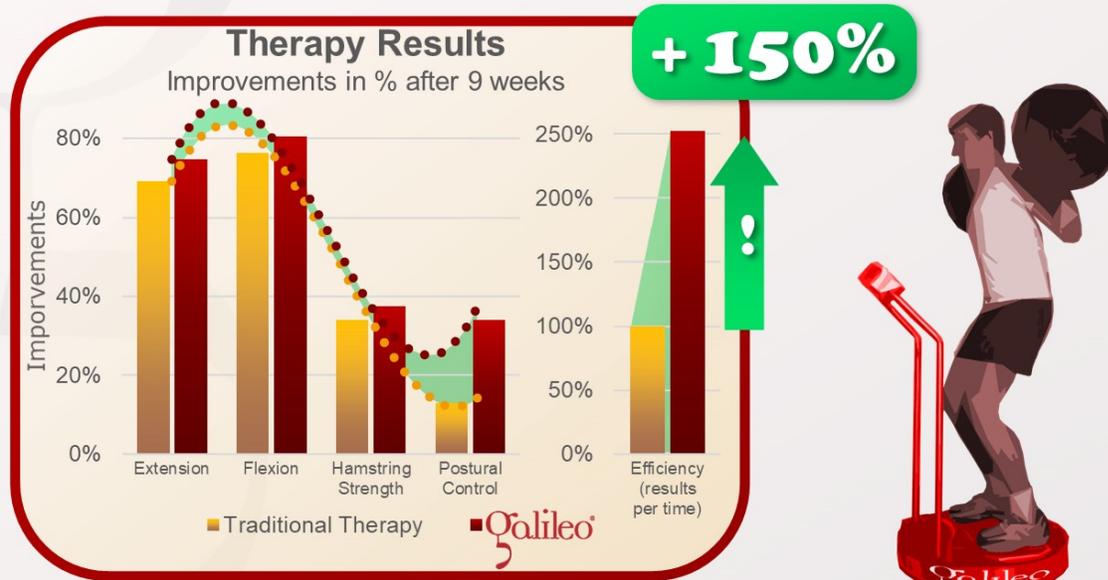


# Is Galileo Training after ACL reconstruction more efficient than traditional therapy ?

## The answer is: YES

This study shows the efficiency of Galileo Therapy after an ACL reconstruction compared to conventional physio-therapy (15-30Hz, 20min, 4week, 9 weeks, squat +10% 1RM load). The control group received conventional therapy with 85 min/session the Galileo Group received only 40 min/session. The Galileo group showed with less than half the time higher therapy results which equals to +150% efficiency.



Berschin G, Sommer HM et.al.: Whole Body Vibration Exercise Protocol versus a Standard Exercise Protocol after ACL Reconstruction: A Clinical Randomized Controlled Trial with Short Term Follow-Up.; J Sports Sci Med, 13(3):580-9, 2014; PMID: 25177185; CID: 3623

This study compares efficiency and effectiveness of Galileo Training after ACL reconstruction with conventional physio-therapy.

Both groups trained over a period of 9 weeks (starting 2 weeks after surgery) 4/week.

The control group received an extensive therapy of 85 min. per session (15 min. warm-up on cycling ergometer, 20 min. balance/postural control, 30 min. strength training, 5 min. cool-down) while the Galileo group received only 40 min. per session (15 min- warm-up on cycling ergometer, 20 min. Galileo with increasing intensity, 15-30Hz, starting with static squats, later dynamic deep squats with up to 10% 1RM load, 5 min. cool-down).

This results in 20 min. Galileo Therapy vs. 50 min. conventional therapy with similar results with slightly higher effects of Galileo Training – for balance and postural control the effects of Galileo Training were even 2.5 times higher than conventional therapy even though no specific balance exercise were used.

If more specific, individualized exercises would have been used the therapy effects would have been even higher.



[J Sports Sci Med](#). 2014 Sep 1;13(3):580-9. eCollection 2014 Sep.

## **Whole Body Vibration Exercise Protocol versus a Standard Exercise Protocol after ACL Reconstruction: A Clinical Randomized Controlled Trial with Short Term Follow-Up.**

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### **Abstract**

The suitability and effectiveness of whole body vibration (WBV) exercise in rehabilitation after injury of the anterior cruciate ligament (ACL) was studied using a specially designed WBV protocol. We wanted to test the hypothesis if WBV leads to superior short term results regarding neuromuscular performance (strength and coordination) and would be less time consuming than a current standard muscle strengthening protocol. In this prospective randomized controlled clinical trial, forty patients who tore their ACL and underwent subsequent ligament reconstruction were enrolled.

Patients were randomized to the whole body vibration (n=20) or standard rehabilitation exercise protocol (n=20). Both protocols started in the 2(nd) week after surgery. Isometric and isokinetic strength measurements, clinical assessment, Lysholm score, neuromuscular performance were conducted weeks 2, 5, 8 and 11 after surgery. Time spent for rehabilitation exercise was reduced to less than a half in the WBV group. There were no statistically significant differences in terms of clinical assessment, Lysholm score, isokinetic and isometric strength.

The WBV group displayed significant better results in the stability test. In conclusion, preliminary data indicate that our whole body vibration muscle exercise protocol seems to be a good alternative to a standard exercise program in ACL-rehabilitation. Despite of its significant reduced time requirement it is at least equally effective compared to a standard rehabilitation protocol. Key pointsIn this prospective randomized controlled clinical trial, we tested the hypothesis if WBV leads to superior short term results regarding neuromuscular performance (strength and coordination) and would be less time consuming than a current standard muscle strengthening protocol in forty patients who underwent ACL reconstruction. Time spent for rehabilitation exercise was reduced to less than a half in the WBV group as compared to the standard exercise group. Both protocols showed no differences regarding clinical assessment, Lysholm score, isokinetic and isometric strength.

Despite a more than 50% reduction in time spent for exercise sessions, the WBV group achieved significant better results in the stability test.

In conclusion, the presented WBV program can be considered as a practical alternative to a standard exercise program during ACL-rehabilitation.

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