

## **Hocoma's walking robot Andago® offers new prospects for injury prevention among care staff**

### **Dynamic, mobile, safe – Hocoma's walking robot Andago supports patients and medical staff during gait training**

*Volketswil, 3 November 2015* – According to a current study by the US Center for Disease Control and Prevention (CDC), medical staff are faced with a particularly high risk of injury at work[1]. In an investigation on how and when people experience first falls in a hospital setting, 19.1% fell during ambulation and a further 20.2% while standing up, sitting down or getting out of bed. By far most of these patients were unassisted at the time of the fall (79.2%). Hereby, patients with neurological diagnoses seem to be specifically at risk [2]. Patients with stroke, who fall in the hospital, are also more likely to fall at least twice at home after discharge [3]. These complications definitely hinder the rehabilitation progress and can lead to delays in the recovery.

With its walking robot, Andago, Hocoma is now offering new perspectives for patient mobilization, helping to avoid falls among patients and care staff during overground gait training.

“If you think, for example, about a therapist assisting a debilitated person twice his or her weight during gait training, it is obvious that this training is very difficult, requires a lot of skill and still bears risks for both the therapist as well as the patient.” states Alberto Esquenazi, chair of the Department of Physical Medicine and Rehabilitation at MossRehab, USA. With the mobile Andago, functional and safe gait training is now possible for both the therapist and the patient in a flexible manner, while requiring far less physical exertion from the therapist.

Hereby, Andago not only provides a safe, but also a permissive environment. Patients that are yet unable to initiate and conduct stepping movements while bearing their whole body weight, can now practice stepping thanks to the body weight support. Further, they can also practice balance and adapting their steps to environmental demands, such as to step over a puddle or up a curb [4].

The Andago® was developed within Hocoma's globally unique rehab network of medical specialists and patients. The innovative walking robot will be presented in Europe for the first time at the Medica 2015 in Dusseldorf, Germany. Visitors are invited to experience the walking robot for themselves during the live demo.

Further information on Andago® can be found under <http://www.hocoma.com/world/en/andago>

Video Andago-Demo „Coffee to Go“: [https://youtu.be/7OZGt\\_iC8kM](https://youtu.be/7OZGt_iC8kM)

US- Report: <http://www.apta.org/PTinMotion/News/2015/6/24/PatientHandlingInjuries/>

Study: <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6415a2.htm>

1. Goma, A.E., et al., *Occupational traumatic injuries among workers in health care facilities - United States, 2012-2014*. MMWR Morb Mortal Wkly Rep, 2015. **64**(15): p. 405-10.
2. Hitcho, E.B., et al., *Characteristics and circumstances of falls in a hospital setting: a prospective analysis*. J Gen Intern Med, 2004. **19**(7): p. 732-9.
3. Forster, A. and J. Young, *Incidence and consequences of falls due to stroke: a systematic inquiry*. Bmj, 1995. **311**(6997): p. 83-6.
4. Harkema, S.J., A.L. Behrman, and H. Barbeau, *Locomotor Training: Principles and Practice*. First ed. 2011, New York, NY: Oxford University Press.



Andago will allow hands-free, upright gait training.



Andago pilot user Prof. Albert Esquenazi,  
Chief Medical Officer, MossRehab, USA

## Press Release



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### Hocoma

A successful therapy begins in patients' heads. In the firm belief that – step by step – they can reach their goals and regain quality of life.

This is what we work for at the Swiss medtech company Hocoma. With technologies and ideas that look at functional movement therapy from a completely different angle. Because they enable independent exercises and create maximum motivation. Because they challenge people to take courage and support their hopes with personal achievements.

We are committed to creating the ideal therapy. Our awarded robotic and sensor-based devices offer solutions for intensive gait therapy (Lokomat®), functional therapy of the upper extremities (Armeo®), robotic mobilization and functional electrical stimulation in early rehabilitation (Erigo®) as well as functional movement therapy within low back pain treatment (Valedo® Therapy Concept) at home and at the clinic. They are the result of intensive research, consistent development and continuous exchange with patients, therapists and partners in research and science.

Those who see to break new grounds need to stay open to exceptional ideas. They have the potential of being exceptionally effective. This guiding principle by Hocoma founder and CEO Dr. Gery Colombo has accompanied us since our start in 2000 and is still lived and implemented by our dedicated employees around the world. At the headquarters in Volketswil near Zurich (Switzerland) and the subsidiaries in the USA, Singapore and Slovenia they achieved a turnover of more than 30 million CHF in 2014.

### Legal notes

All Hocoma products are medical devices and must be used in strict adherence to the user manual and only according to the recommendations contained therein; failure to do so may result in personal injury. Please contact Hocoma should you have any questions. For the latest available information about the medical indications, contraindications, side effects and risks associated with the Valedo it is strongly recommended that you regularly consult Hocoma's website: [www.hocoma.com/legalnotes](http://www.hocoma.com/legalnotes).

Hocoma is currently engaged in the development of the technology described herein. This technology has not been listed with FDA and is currently not available for sale in the USA. Continued development and testing of this device is anticipated to lead to FDA listing and to selling this device for clinical rehabilitation, at which time indications for use and benefits of use will be announced. The information provided herein is indicative of the current research findings from clinical experiments performed with this device and should not be considered to provide approved indications for use or benefits of use. CAUTION: Andago is an investigational device limited by Federal (or United States) law to investigational use.

Failure to consult qualified medical personnel before using the product or any failure to follow either their recommendations or the product instructions can result in personal injury. If at any time after beginning use of the product you experience discomfort or pain, loss of range of movement, or any other problem, stop using the product immediately and consult qualified medical personnel.

This information provides details about medical products, which may not be available in all countries and may not have received approval or market clearance by all governmental regulatory bodies throughout the world. Nothing herein should be construed as a solicitation or promotion of any product or of an indication of any specific use for any product which is not authorized by the laws and regulations of the country where the reader of this information resides.

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