

HOCOMA REVOLUTIONIZING REHABILITATION

Conventional therapy today is limited—by time, by number of repetitions, by the lack of reproducible movement quality and by the fact that it is strenuous for both therapists and patients. In other words: there is a **disbalance** between the therapy we know we should provide according to motor learning principles and all the factors that prevent us from reaching this goal.



Recovery potential is rarely ever fully exploited. Patients spend up to 72% of their time in rehabilitation hospitals in bed without effective training.1



Out of the roughly 15 million people worldwide who experience a stroke each year, 5 million live with permanent disability.²



At the same time, there are demographical changes: as people get older, the number of patients grows. Healthcare costs increase and therefore length of stay in hospitals is reduced.



Of all stroke survivors, up to 25% remain dependent in their mobility. This dependency, as well as other under-treated impairments, lead to tremendous costs throughout the person's lifetime.

FUNCTIONAL MOVEMENT THERAPY—INTENSITY MATTERS

INTENSITY = REPETITION × EFFORT

This is what we work for at Hocoma: to help people with technologies and ideas that look at **functional movement therapy** from a completely different angle. Because these technologies enable people to exercise **intensively**. Because they maximize **motivation**. Because they embolden patients to make possible what they've been told was impossible.

THE TOTAL SOLUTION

We offer efficient **solutions** and **services** with advanced technologies for human movement therapy across the **entire continuum of rehabilitation**. All our solutions are developed, manufactured and continuously improved in close cooperation with researchers, clinical partners and patients. We help you to become more successful with our broad portfolio of dedicated services, ensuring the best integration of our solutions into your clinical routines.



CLINICAL SERVICES

To help you make the best use of our solutions, we offer clinical integration consulting and companionship as well as education and training.

RESEARCH SERVICES

Research drives us forward. Our research support helps you kick start your research projects.

BUSINESS DESIGN SERVICES

Getting started can be difficult. We support you in building your rehabilitation project on solid ground—from small clinics to large hospitals.

TECHNICAL SERVICES

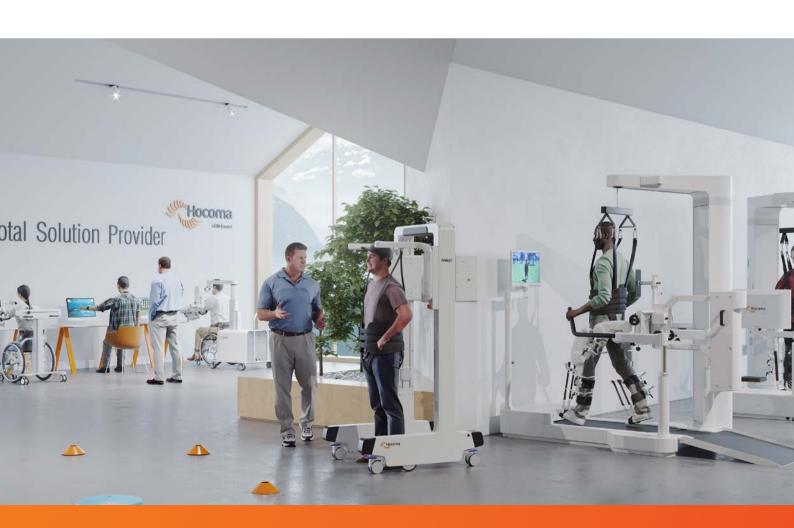
We offer peace of mind. With our technical support and regular maintenance, you can stick to your clinical routines without disruption.

FINANCING SERVICES

Your financial status should not prevent you from being able to deliver the best possible therapy. With our different financing solutions—be it leasing, renting or pay-per-use—you can keep your financial margin and your balance clear.

MARKETING SERVICES

By applying our solutions you immediately stand out from other rehabilitation facilities. With our PR and communications support, we make sure you're seen and heard.



HOCONET®

We offer a new software platform to plan, control and monitor the best therapy for your patients across the entire continuum.

The platform has an intuitive interface that allows for easy access to patient and device management, treatment overview, and many other functions. A seamless connection between our devices and existing information structures allows you to optimize your time and improve the quality of care. Complying with data security and safety standards, you can be sure your data is safeguarded at all times.

EVERYTHING UNDER ONE ROOF

Discover our portfolio of solutions for:

- · Gait and Balance
- Arm and Hand
- Back Pain





OUR EXTENSIVE PORTFOLIO FOR REHABILITATION

	Gait and Balance Solutions			
ACUTE TREATMENT	Erigo®	Lokomat®		
INPATIENT TREATMENT	Erigo®	Lokomat®	Andago®	
OUTPATIENT TREATMENT		Lokomat®	Andago®	
HOME TRAINING				

HOCONET®







As the **Total Solution Provider** we are dedicated to offering the right solutions for your specific needs. Whether your institution is focused on acute care, inpatient rehabilitation or outpatient therapy, you will find the right device **to match your space**, **budget and needs**.

	Arm and Hand Solutions			Back Pain Solutions
Motek C-Mill	Armeo®Power	Armeo®Spring	Armeo®Senso*	Valedo® Motion
Motek C-Mill		Armeo®Spring	Armeo®Senso*	Valedo® Motion
			Armeo®Senso*	Valedo®
				**

CONNECTED CARE

One software platform connecting our product portfolio across the entire continuum of care.



UP YOUR EFFICIENCY

HocoNet* seamlessly connects to our product portfolio and to your existing Hospital Information System so that you can safely and efficiently manage and keep track of patient, treatment, and device data. This greatly reduces the time spent on administrative tasks, especially in parallel settings, and enables your therapists to concentrate on what they do best: treating patients.

INCREASE TRANSPARENCY AND MEASURABILITY

By pooling patient, treatment and device data on one intuitive dashboard, therapists quickly gain an indepth understanding of their patients' unique profiles and managers benefit from transparent data on the usage of the connected devices.

HocoNet will set new standards in rehabilitation therapy by supporting and streamlining the patient journey throughout the whole rehabilitation process, from intake to discharge.

GROW WITH US

In the near future, we will be releasing a wide range of modules for HocoNet. Some will help you provide high-quality, patient-centered care, automate repetitive tasks, or improve your patients' experience. Others will enable you to generate recurring revenue streams and grow your business.

Take charge of the patient journey across the entire continuum of care – from early rehabilitation to outpatient therapy and at-home training.

^{*} Availability depending on country and language.







Gait & Balance Solutions

EMPOWERING PATIENTS FROM THE VERY BEGINNING



ERIGO®

The Erigo is the only therapy solution that uniquely combines gradual verticalization, leg mobilization, and intensive sensorimotor stimulation through cyclic leg loading.

- Early and Safe Mobilization even in Acute Care
- · Cardiovascular Stabilization
- Improved Orthostatic Tolerance Using the Erigo FES (Functional Electrical Stimulation)
- Increased Patient Awareness
- Reduced Time in Acute Care
- Excellent Clinical Usability
- Increased Therapy Efficiency

RELEARNING TO WALK FROM THE BEGINNING



LOKOMAT®PRO LOKOMAT®NANOS

The Lokomat is the world's leading robotic medical device that provides highly repetitive and the most physiological gait training—especially to severely impaired patients.

- Effective Gait Training
- Most Physiological Gait
- Optimal Patient Challenge
- Augmented Performance Feedback
- Increased Efficiency
- State-of-the-Art Gait Rehabilitation

OPTIONAL MODULES*

- Pediatric Orthosis for children
- FreeD Module for lateral translation and transverse rotation of the pelvis

*Only available for LokomatPro



SAFE AND FREE OVERGROUND GAIT TRAINING



ANDAGO®

The Andago bridges the gap between treadmill-based gait training and free overground walking.

- Intensive and Versatile Overground Gait Therapy
- Active Patient-Following: Self-Directed Gait with Body Weight Support
- Safe and Efficient Therapy
- Upright and Hands-Free Gait
- No Infrastructure Modification, Flexible Use from Room to Room

Gait & Balance Solutions

EVALUATION AND TRAINING OF BALANCE AND GAIT

C-MILL VR C-MILL VR+

The C-Mill is an instrumented treadmill intended to evaluate human gait and balance and to train (impaired) gait and balance using treadmill movement, augmented reality and virtual reality.





Arm & Hand Solutions

GUIDING THE INITIAL PHASES OF ARM AND HAND FUNCTION RECOVERY



ARMEO®POWER

ArmeoPower is a highly advanced arm and hand rehabilitation device for early-stage patients even before they develop active movement.

- Highly Intensive Early Arm Rehabilitation
- Assist-As-Needed Movement Guidance
- Arm Weight Support in an Extensive 3D Workspace
- Motivating Exercises
- Increased Therapy Efficiency
- Objective Assessments
- Hand Function Training (optional)
- Part of a Modular Therapy Concept

Arm & Hand Solutions

SUPPORTING THE RECOVERY OF ARM AND HAND FUNCTION

ARMEO®SPRING PEDIATRIC

The ArmeoSpring is the preferred therapy choice for arm and hand rehabilitation of the widest range of patients.

- Self-Initiated Movement Therapy
- Simultaneous Arm and Hand Therapy in a 3D Workspace
- Ergonomic Exoskeleton
- Motivating Exercises
- Increased Therapy Efficiency
- Objective Assessments
- Part of a Modular Therapy Concept



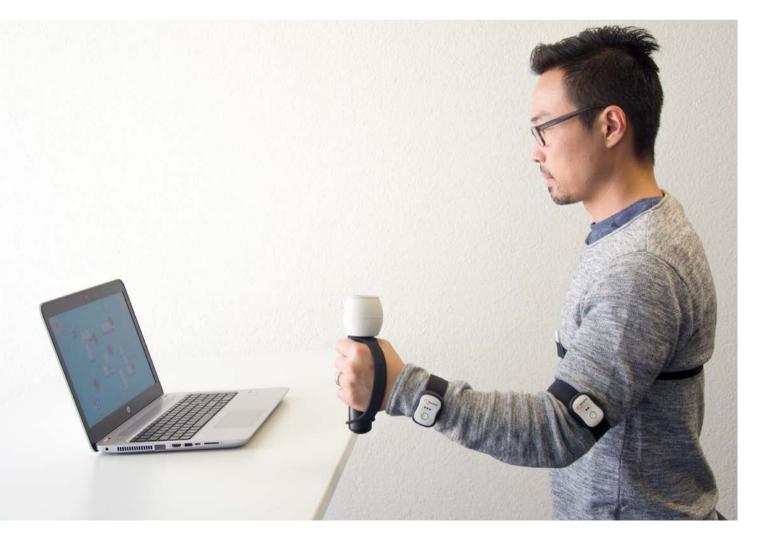
Arm & Hand Solutions

THE SENSOR-BASED SOLUTION FOR ARM FUNCTION RECOVERY

ARMEO®SENSO

ArmeoSenso is a versatile and easy-to-use solution to motivate and challenge patients with moderate to mild impairments of the upper extremity.⁵

- Highly Intensive Arm Therapy
- Versatile
- Compact and User-friendly
 Design
- Optimized Efficiency
- Motivating Exercises
- Hand Module
- Optional Arm Weight Support
- Part of a Modular Therapy Concept



Back Pain Solutions

MOTIVATING THERAPY AT THE CLINIC



VALEDO®MOTION

ValedoMotion offers objective assessments, didactic tools and motivating movement exercises for back pain therapy.

- Objective Assessments
- · Motivating and Fun
- Real-Time Feedback

FIGHT BACK PAIN BY PLAYING GAMES



VALEDO®

A medical device for digital back therapy at home.

- Easy and Fun
- More than 50 Therapeutic Exercises
- Constant Feedback and Motivation at Hand

MAXIMIZING OUTCOMES

FOR PATIENTS

- Numerous studies show that the combination of technology and conventional therapy leads to better outcomes.
- Robotic and sensor-based therapy provides greater intensity.
- Augmented Performance Feedback on our devices makes training more motivating and fun.

With the games on Lokomat and Armeo, rehabilitation actually becomes fun!

Mia Pajic Stroke patient



FOR THERAPISTS

- Robotic and sensor-based technology does all the hard work so you can support more patients and focus on optimally challenging them.
- You can treat patients with different movement disorders, start early and treat them through the whole continuum of rehabilitation.
- We help you integrate advanced technology into your daily routine at the clinic to make your work more effective and efficient.

With the Lokomat, we can increase numbers of repetitions in a task-specific activity. Changing the speed, decreasing body weight support: it helps motor learning, establishing reconnections with the brain.

Neera Prabhakar

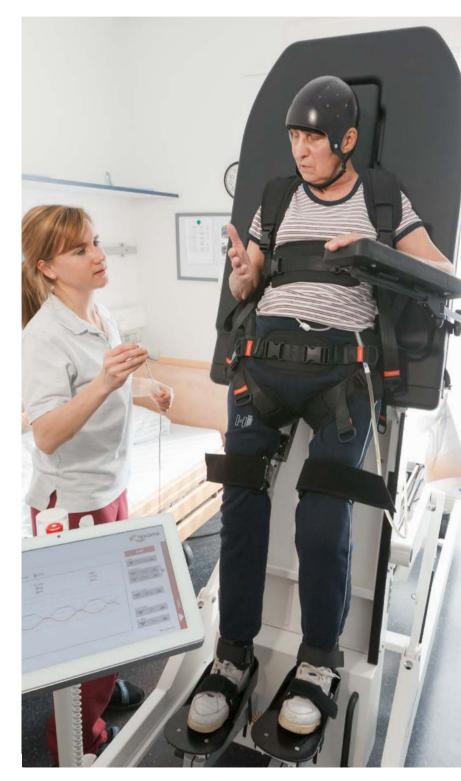
PT, DPT, NCS at MossRehab, Philadelphia, USA

FOR HOSPITALS AND CLINICS

- Your institution can deliver increased therapy hours with the same human resources.
- Providing highly intensive therapy with modern devices makes you a pioneer in the field of rehabilitation.
- Working with the latest technologies and devices is the best employer branding: it will attract the most-talented professionals.

With Hocoma's solutions we can offer a much more intensive therapy to our patients and this has a very positive impact on the process of their rehabilitation. Integrated into a tailor-made therapy program we offer our patients the most effective treatment with extraordinary results.

Dr. Daniel ZutterMedical Director,
Rehaklinik Zihlschlacht



SEEING RESULTS



I can't wait to get on it again.

Donald ShockleyStroke Patient

MOSSREHAB HOSPITAL

MossRehab Hospital treats nearly 2,800 inpatients and 150,000 outpatients per year. The hospital treats impairments ranging from very severe to mild, offering therapy for spinal cord injuries, strokes, amputation, traumatic brain injury and related conditions.

MossRehab Hospital works with Hocoma's Total Solution package, which includes the ArmeoPower, ArmeoSpring, LokomatPro, LokomatNanos and the Andago. These devices permit the hospital to have patients spend more direct, active time in their particular therapeutic activity.

The system feedback improves patient engagement: patients experience a sense of satisfaction because they can compete against themselves or others. People in the training programs receive their results right away so they can follow their progress or compare it to others.

This has an unmistakable positive effect on the therapy outcomes.





Over the last eight years, we have gradually brought robotic technology into the therapeutic environment. It was really with the intent of increasing both our ability to deliver higher intensity and more repeatable types of therapy.

Alberto Esquenazi

Chief Medical Officer at MossRehab, Member of the Scientific Advisory Board



We want to offer the best possible therapy to every patient.

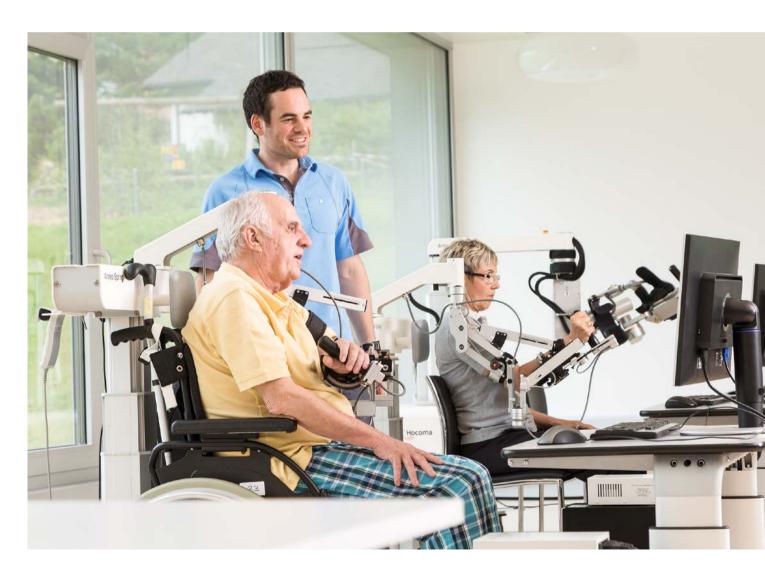
Dr. Peter OeschHead of Therapy

KLINIKEN VALENS

Kliniken Valens is a modern rehabilitation center that offers patients any possible way of rehabilitation. The clinic's aim is to give every person the therapy that his or her situation asks for. That's why Kliniken Valens uses the Total Solution: their Erigo, Lokomat and Andago complement each other to facilitate the best gait therapy. The combination of the ArmeoPower, ArmeoSpring and ArmeoBoom form the basis of their arm and hand therapy.

With these devices, Kliniken Valens is able to treat very severe to mild deficits and to increase therapy intensity as their patients need in order to achieve the best result.

M KLINIKEN VALENS



THERAPIEZENTRUM HERFORD

The clear objective at Therapiezentrum Herford is to offer top-quality therapy to every patient, regardless of their health insurance plan. By providing gait therapy with the LokomatNanos as well as arm and hand therapy with the ArmeoSpring, this occupational therapy clinic became a main attraction for patients. Not only in its own region: some travel up to 300 km per trip in order to benefit from the clinic's offer. Therapiezentrum Herford is an example of a smaller clinic that integrates the Gait & Arm setting into their routines with positive outcomes for patients and for the clinic.





I don't accept a two-tier healthcare system for my patients.

Paco Oberwalleney

Owner and Occupational Therapist



POLYCLINIC GLAVIĆ

Polyclinic Glavić is a private outpatient clinic in Dubrovnik, Croatia, that provides a wide range of medical services. Following the founder's vision, the main aim was to offer state-of-the-art neurorehabilitation treatment. Polyclinic Glavić entered a rather unpredictable market but focused on meeting patient needs, working to truly change their lives. The clinic started with one ArmeoSpring and later with a LokomatPro; ten months later they opened a second clinic in the capital of Croatia, Zagreb.

Providing a highly efficient setup in a robotic open space room, they are using the Total Solution with two LokomatPro, Andago, ArmeoSpring, ArmeoSpring Pediatric and ValedoMotion with up to 100 therapy sessions per device per week. By using advanced technologies, they are able to increase their productivity threefold. The biggest benefit is that now they are offering patients more training repetitions, at higher quality with a professional team—known keys to successful intensive training. Because of this, Polyclinic Glavić is a great example showing that robotic neurorehabilitation is not the technology of the future, it's the technology of today.



Integrating Hocoma devices in our therapy portfolio increased dramatically the amount of treatments we are able to offer. It is the key of our success.

Dr. Josip Glavić

Spec. Neurologist, Owner of the Poliklinika Glavić

TAN TOCK SENG HOSPITAL

Tan Tock Seng Hospital (TTSH) is one of Singapore's largest multi-disciplinary hospitals, with 45 clinical, allied health, and pharmacy departments, as well as 16 specialist centres. TTSH integrates a Lokomat since 2008 and an ArmeoSpring since 2011 in their rehabilitation programs. Their rehabilitation programs combine regular rehabilitation therapy with innovative robotics and virtual reality technologies. Aimed at achieving goal orientated and optimal outcomes for patients, TTSH's programs are innovatively structured to increase patients' engagement in movement retraining in a fun and interactive way.



The Lokomat saves manpower by allowing one therapist to conduct gait rehabilitation as opposed to 3-4 therapists that would be required if there were no Lokomat available.

Dr Karen Chua

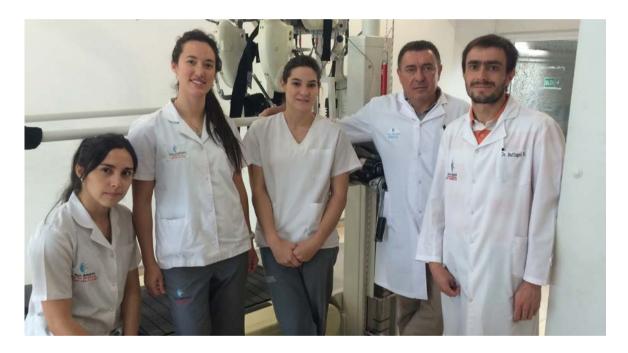
Senior Consultant, Tan Tock Seng Hospital



THE SAN ANDRÉS CLINIC

The San Andrés Clinic in Argentina is a rehabilitation clinic with a team of specialists in different disciplines such as neurology, psychology, internal medicine and intensive care. In the robotics department the San Andrés Clinic has been using a Lokomat since 2009, an ArmeoSpring since 2012 and an Erigo since 2013.





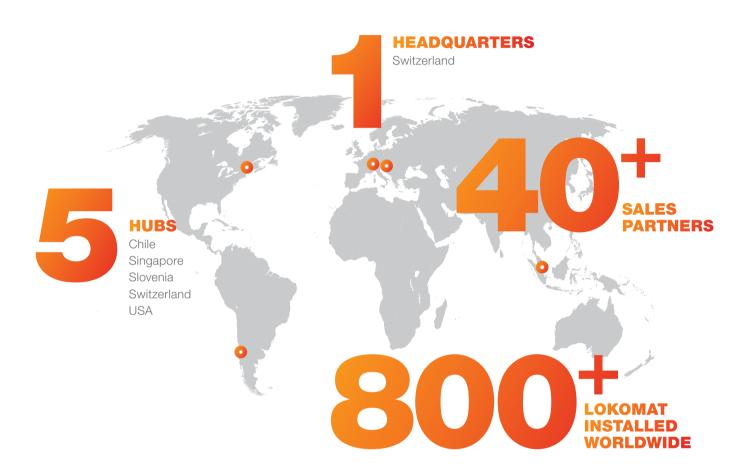
With the Lokomat we do not only observe improved walking ability in patients, but also heightened overall well-being.

Nicolás Buffagni Miralles

MD, San Andrés Clinic

THE WORLD'S LEADING BRAND FOR REHABILITATION SOLUTIONS FOR HUMAN MOVEMENT THERAPY ACROSS THE ENTIRE CONTINUUM OF REHABILITATION

- More than 5,000 installations worldwide
- 9 out of the 10 best U.S. rehabilitation hospitals use Hocoma solutions
- over 500 peer-reviewed studies prove the effectiveness of our solutions



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ABOUT HOCOMA

Hocoma is the global market leader in robotic and sensor-based rehabilitation solutions for functional movement therapy. Working closely together with leading clinics and research centers, we develop and improve innovative therapy solutions that lead to sustainable results. Hocoma was founded in 1996 as a limited liability company by the electrical and biomedical engineers Gery Colombo and Matthias Jörg and by the economist Peter Hostettler. Our headquarters are in Volketswil near Zurich, Switzerland. We have subsidiaries in the USA, Singapore, Slovenia and Chile.

Hocoma is a proud partner of DIH International and Motek.

DIH INTERNATIONAL

DIH International focuses on rehabilitation solutions and medication management by connecting the most innovative people with the most intelligent technologies.

MOTEK

Motek is the global leader in virtual reality-based rehabilitation research and therapy, offering scientists and clinics versatile high-tech devices to vastly improve human performance.

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- 3 Hendricks, H. T., J. van Limbeek, A. C. Geurts and M. J. Zwarts (2002). Motor recovery after stroke: a systematic review of the literature. Arch Phys Med Rehabil 83(11):1629-1637.
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- 5 Wittmann et al. Journal of NeuroEngineering and Rehabilitation (2016) 13:75.





HERE ARE JUST A FEW OF OUR CLINICAL PARTNERS





































PRODUCT DISCLAIMER

All Hocoma products are medical devices and must be used in strict adherence to the User Manual; failure to do so may result in serious personal injury. It is strongly recommended that you regularly consult Hocoma's website (www.hocoma.com/legalnotes) for the latest available information. Please contact Hocoma should you have any questions. Use only under the supervision of qualified medical personnel. However, certain Hocoma products are marketed for home use and must be strictly used according to the recommendations of your medical care provider who is knowledgeable about your specific needs. Consult the User Manual and Hocoma's website (www.hocoma.com/legalnotes) for appropriate product designation. Failure to obtain and follow the recommendations of your medical care provider may result in serious personal injury. 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 authorised by the laws and regulations of the country where the reader of this information resides.



Those who seek to break new ground need to stay open to exceptional ideas, as they have the potential to be exceptionally effective. This guiding principle has accompanied us since our start in 1996 and is still lived and implemented by our dedicated employees around the world.

The ground Hocoma breaks fundamentally improves rehabilitation therapy. We develop functional and efficient solutions to increase intensity of therapy, refine quality of movements and upgrade therapists' means to help their patients.

This is how Hocoma is setting a new standard for human movement therapy.