

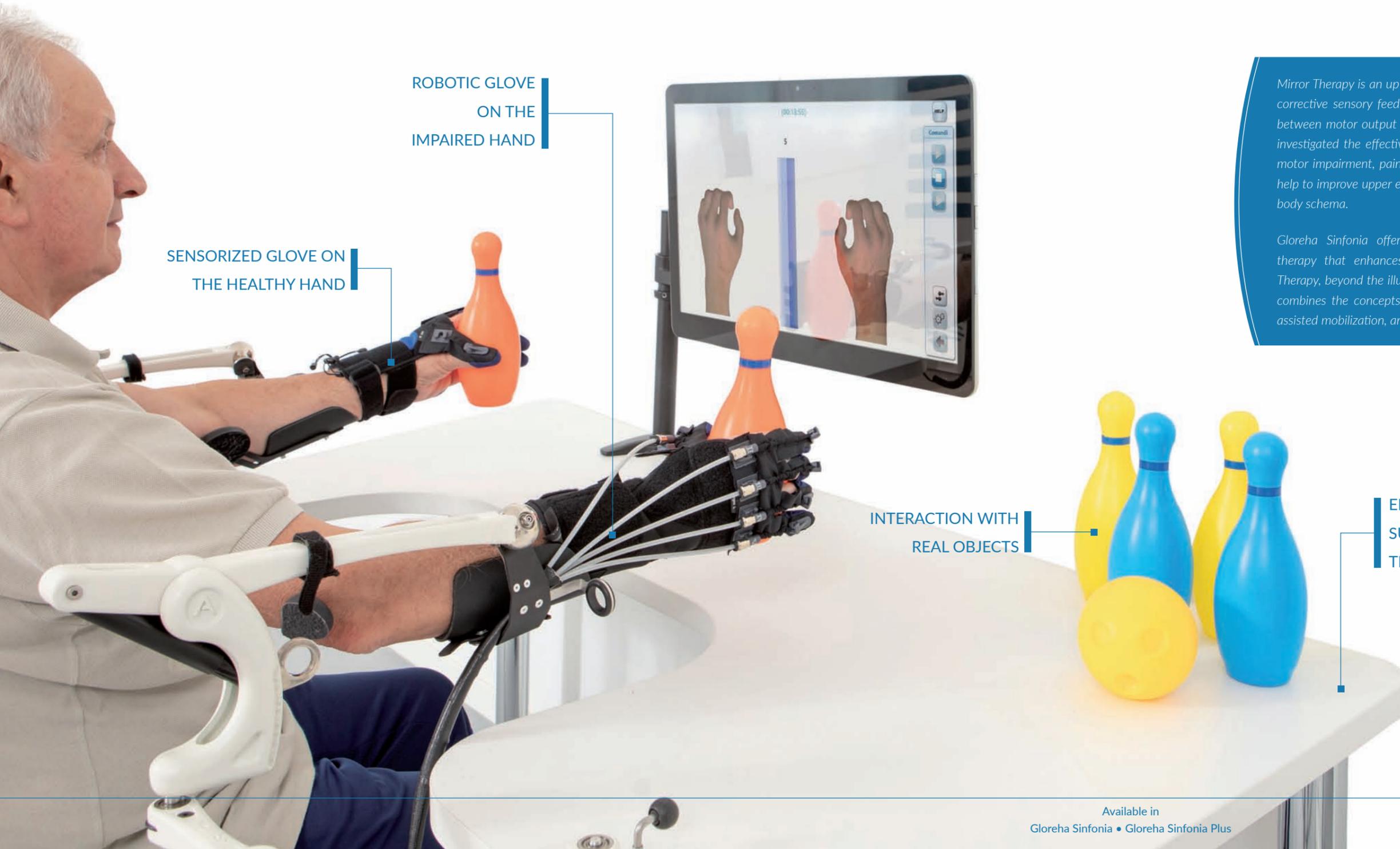
# BILATERAL TRAINING

While the hemiplegic/hemiparetic patient actively moves the healthy hand, at the same time the robotic glove generates a similar movement on the other hand. Flexion and extension of the fingers are activated dynamically by the patient

to increase the level of involvement and motivation.

The mirror motor mechanism, the observation of two moving 3D hands and the execution of bilateral functional tasks with real objects amplify the stimulation of the cortical areas of the brain.

- Like in the traditional Mirror Therapy, the patient is stimulated by the observation of the affected hand moving
- In addition, real motor training is generated by the system, amplifying the positive effects of rehabilitation
- Before motor exercise, the patient can watch a video preview
- The performance of functional grasping and reaching tasks can enrich the therapy
- The patient activates the functioning of the robotic glove within the speed and ROM parameters decided by the therapist
- The patient should think of a bilateral action, even if the hand to treat is lacking in motor skills



ROBOTIC GLOVE  
ON THE  
IMPAIRED HAND

SENSORIZED GLOVE ON  
THE HEALTHY HAND

INTERACTION WITH  
REAL OBJECTS

ERGONOMIC WORK AREA  
SUITABLE FOR BILATERAL  
TRAINING IN THE SPACE

Mirror Therapy is an up-and-coming approach aimed to provide corrective sensory feedback. The aim is to restore congruence between motor output and sensory input. Several clinical trials investigated the effectiveness of Mirror Therapy for decreasing motor impairment, pain, anxiety, and fear of movement. It can help to improve upper extremity motor function and recovery of body schema.

Gloreha Sinfonia offers a peculiar and innovative kind of therapy that enhances the benefits of conventional Mirror Therapy, beyond the illusion of the movement. Gloreha Sinfonia combines the concepts of Mirror Therapy with Virtual Reality, assisted mobilization, and bilateral tasks.

