Patients with epilepsies can be treated with a variety of different approaches. 60 – 65 % of patients can be treated with anticonvulsive drugs, 40 – 50 % of patients’ seizures are controlled by the first anticonvulsant. If this is not the case then the epilepsy is more difficult to treat requiring additionally one or two drugs for sufficient seizure frequency reduction. If two drugs unsuccessfully were applied in mono- or combination therapy after adequate follow-up then pharamcoresistance can be diagnosed.

In addition to the old or first generation of anticonvulsants nowadays newer antiepileptic drugs (second generation) can be used. Strength and limitations will be discussed.

Translational neuroscience leads to further innovative approaches e.g. m-TOR pathway influence.

In pharmacoresent epilepsies presurgical evaluation should take place after adequate time. Referral or non-referral of a pharmacoresent patient is a criteria of quality of care. Meanwhile different surgical approaches are available as well as radiosurgery, radiotherapy, vagus nerve stimulation or deep brain stimulation.

Long-term prognosis and psychosocial outcomes after anti-convulsant drug treatment and epilepsy surgery will be discussed as well as health related quality of life.

Epilepsy rehabilitative treatment strategies concern the integration of patients with epilepsy in general rehabilitation hospitals with a special epilepsy rehabilitative treatment including occupational problems, neuropsychologic diagnostics and psychotherapeutic interventions and educative offers.

Corresponding author:
Prof. Dr. Hermann Stefan
University Hospital Erlangen (FAU)
Neurological Clinic
Chairman Biomagnetism Unit
10, Schwabachanlage
91054 Erlangen/Germany
Email: hermann.stefan@uk-erlangen.de