### Kurzzusammenfassung:
There exists a myriad of soft tissue tumors and tumor-like conditions ranging from benign to malignant that may involve skeletal muscles. MR imaging is the preferred imaging technique for defining the precise extent of a soft tissue tumor. Compared to other histological types of soft tissue tumors, malignant tumors with myogenic differentiation are more frequent than their benign counterparts. However, intramuscular tumors with myogenic differentiation cannot be reliably distinguished from other histological groups on MR imaging alone with the exception of some typical benign appearing lesions. So histological confirmation is mandatory in any case of suspected malignancy.

This lecture aims to show examples of MR imaging of 4 different groups of tumors located in skeletal muscles. (1) Malignant skeletal muscle tumors (i.e. rhabdomyosarcomas). (2) Benign skeletal muscle tumors (i.e. rhabdomyomas). (3) Other benign soft tissue tumors with intramuscular location that may be characterized with confidence on MR imaging (i.e. lipoma, myxoma, desmoid type fibromatosis, vascular anomaly). (4) Pseudotumoral lesions of muscles (i.e. myositis ossificans, focal myositis, calcifying myonecrosis, intramuscular abscess).

### Lernziele:
- To remember that intramuscular tumors with myogenic differentiation cannot be reliably distinguished from other histological groups of soft tissue tumors on MR imaging alone with the exception of some typical benign appearing soft tissue lesions and that histological confirmation is mandatory in any case of suspected malignancy.
- To recognize on MR imaging some typical benign appearing lesions with an intramuscular location.