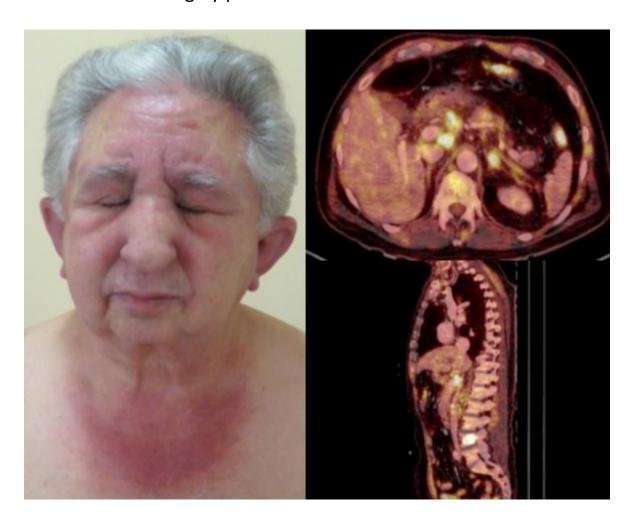
**Supplementary Figure 1.** A 67-year-old male was attended in our outpatient clinic because of muscle weakness, loss of weight (8 kg/last month) and asthenia. Heliotrope rash (left) and Gottron's papules were observed. A muscle biopsy showed perifascicular atrophy and a cancer screening by means of a whole body (18F) FDG PET/CT revealed hiliar lymphadenopathies and a lumbar vertebra (right) with high standardized uptake value (SUV max= 9.5). A core needle biopsy showed tumor cells compatible with an adenocarcinoma. Anti-TIF1 $\gamma$  antibodies were highly positive.



**Supplementary Figure 2.** A 60-year-old male under treatment with atorvastatin for hypercholesterolemia came to the clinic for proximal weakness. No skin or lung involvement was detected and a muscle biopsy showed some necrotic fibers (left) and patchy MHCI positivity (right). Anti-HMGCR autoantibodies were positive and the patient was diagnosed with an anti-HMGCR IMNM.

