

EULAR Highlights 2025 Inflammatory Myopathies

Britta Maurer, Department of Rheumatology & Immunology, University Hospital Bern, Switzerland



COI

Research: AbbVie, Protagen, Novartis Biomedical; patent mir-29 for the treatment of systemic sclerosis issued (US8247389, EP2331143)

Lecturing: Boehringer-Ingelheim, GSK, Novartis, Otsuka

Consulting: Novartis, Boehringer Ingelheim, Janssen-Cilag, GSK

Congress support: Medtalk, Pfizer, Roche, Actelion, Mepha, MSD

Advisory Boards: Boehringer-Ingelheim, Janssen-Cilag

Content

- (Co-)morbidity
- Treatment
 - IVIG
 - Novel monoclonal antibody
 - CAR T cells
 - Bispecific T Cell Engagers

Inflammatory Myopathies

Dermatomyositis

(Polymyositis)

Antisynthetase Syndrome

Immune-mediated necrotizing Myopathy

Cancer-associated Myositis

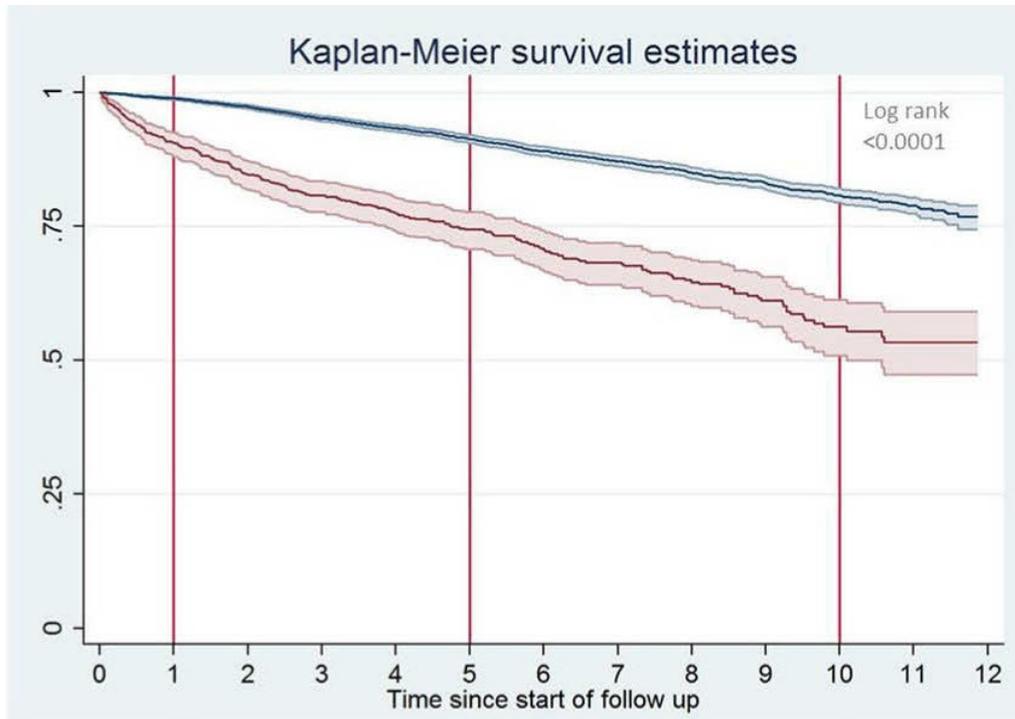
Overlap-Myositis (e.g. with systemic sclerosis, rheumatoid arthritis)

Secondary myositis (connective tissue disease, vasculitis, sarcoidosis)

Sporadic inclusion body myositis

(Co-)Morbidity

INSELGRUPPE Morbidity and Mortality of IIM



At risk, n
Dead at end of interval, n
Cumulative mortality, %

716/7100
66/77
9/1

648/7013
100/448
23/7

327/4037
53/318
31/12

- 80% long-term disability
- HR for death 5x increased
- Respiratory diseases, malignancies, cardiovascular diseases primary causes of death
- Survival not substantially changed during the last 20 years

MYOSITIS PATIENTS IN THE ICU – MORBIDITY BEYOND MUSCLE INVOLVEMENT

Background

- To date, there are only limited data on the outcomes and treatments of IIM patients in the ICU.

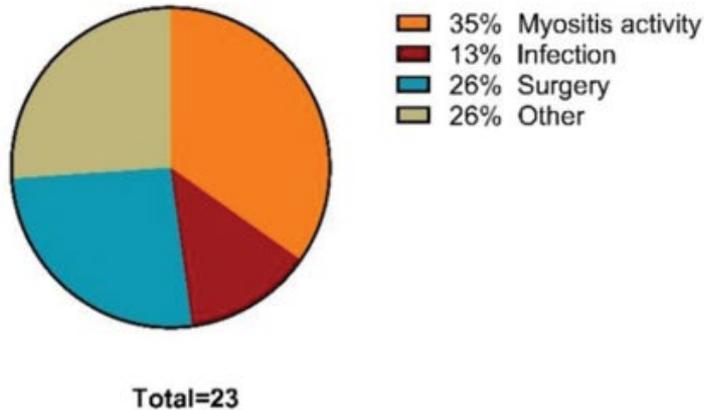
Aim

- To analyze the clinical characteristics and outcomes of patients with IIM in the ICU to provide better insight into the management of critically ill patients

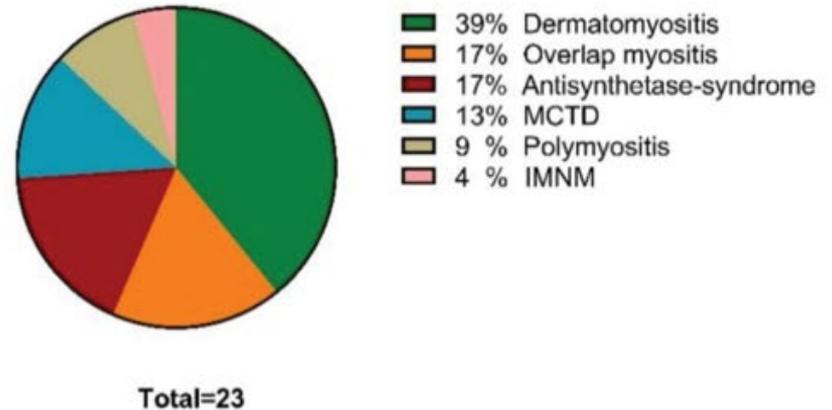
Results I

- Mean age at ICU admission 58 years (range 19-83 years), mean duration of ICU treatment 32 days (range 1-503 days), 5 patients died in the ICU, 14 patients were intubated, 21 were under immunosuppression

Reason of ICU admission

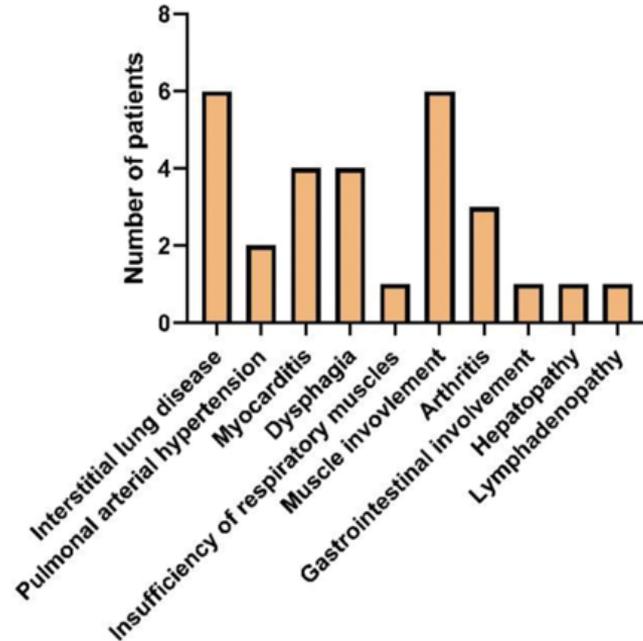


Myositis subtype

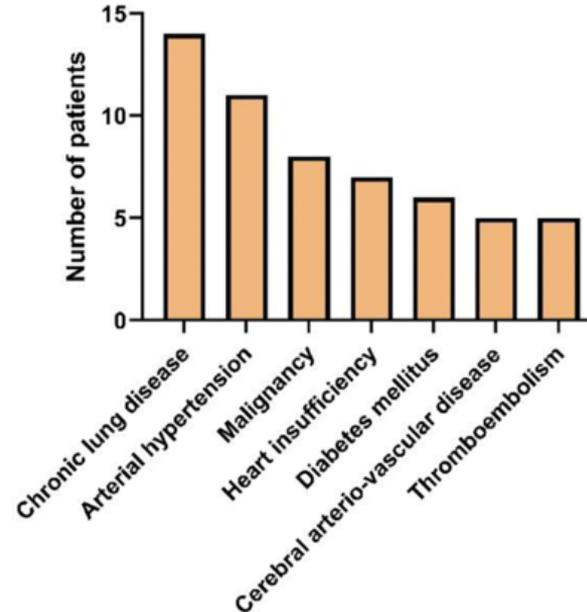


Results II

Active organ involvement



Most common co-morbidities



MYOSITIS PATIENTS IN THE ICU – MORBIDITY BEYOND MUSCLE INVOLVEMENT

Conclusions

- Active disease (e.g. ILD or cardiac involvement) and infectious complications can lead to severe morbidity with a potentially life-threatening course.
- There is a need for interdisciplinary treatment in the ICU setting.

BONE HEALTH DETERMINANTS IN INFLAMMATORY MYOPATHIES

Background

- Use of high doses of glucocorticoid (GC) for prolonged periods, muscle weakness and reduced mobility compromise bone health in IIM.

Aim

- To assess the prevalence and risk factors for fragility fractures (FFx) in a monocentric cohort of IIMs patients in a third level rheumatology center

BONE HEALTH DETERMINANTS IN INFLAMMATORY MYOPATHIES

Results

- 191 patients (125 female, 65.4%), mean age of 67.3 ± 13.5 years, mean disease duration of 10.4 ± 7.4 years
- Osteoporosis (OP) occurred in 70 patients (36.6%; 64 females, mean age 72.3 years)
- FFX occurred in 29/70 patients (15.2% of the total cohort; 25 females, mean age 72.5 years)
- Age, female sex and disease duration were risk factors for both OP and FFX ($p < 0.01$); no association found for GC dose
- OP associated with higher HAQ and lower SF-36 values in both physical and emotional domains ($p \leq 0.04$)

BONE HEALTH DETERMINANTS IN INFLAMMATORY MYOPATHIES

Conclusions

- OP occurred in 30% of the enrolled IIM patients and > 40% of them developed at least one FFX
- OP substantially adds to the overall disease burden – physically and emotionally
- IIM patients should be carefully screened for individualized management strategies

REDUCING CARDIOVASCULAR RISK IN MYOSITIS: FOCUS ON LIPID-LOWERING THERAPY

Background

- Statin therapy reduces CVD risk, but its use in IIM is limited due to potential muscular adverse events.
- International recommendations for CV risk reduction are lacking.

Aims

- To assess CVD risk in a myositis cohort using the SCORE-2 prediction system, carotid artery Doppler ultrasound measurement and biomarkers
- To recommend individual lipid-lowering treatment with 6 months follow-up regarding efficacy and adverse events

REDUCING CARDIOVASCULAR RISK IN MYOSITIS: FOCUS ON LIPID-LOWERING THERAPY

Results

- 80 patients, mean age of 56.2 ± 13.4 years, disease duration of 9 (5-15) years
- SCORE-2: 78.8% medium/high CVD risk; 73.13% asymptomatic carotid plaque; risk factors: hypertension (71.3%), diabetes (25%)
- After 6 months
 - Cholesterol levels significantly lower
 - No progression of carotid plaques
 - 37.5% of patients shifted into a lower SCORE-2 risk category
 - No negative side effects

Conclusions

- Not to neglect assessment and management of CVRF in IIM

Treatment

PHASE 2 RESULTS FROM THE ALKIVIA STUDY

Background

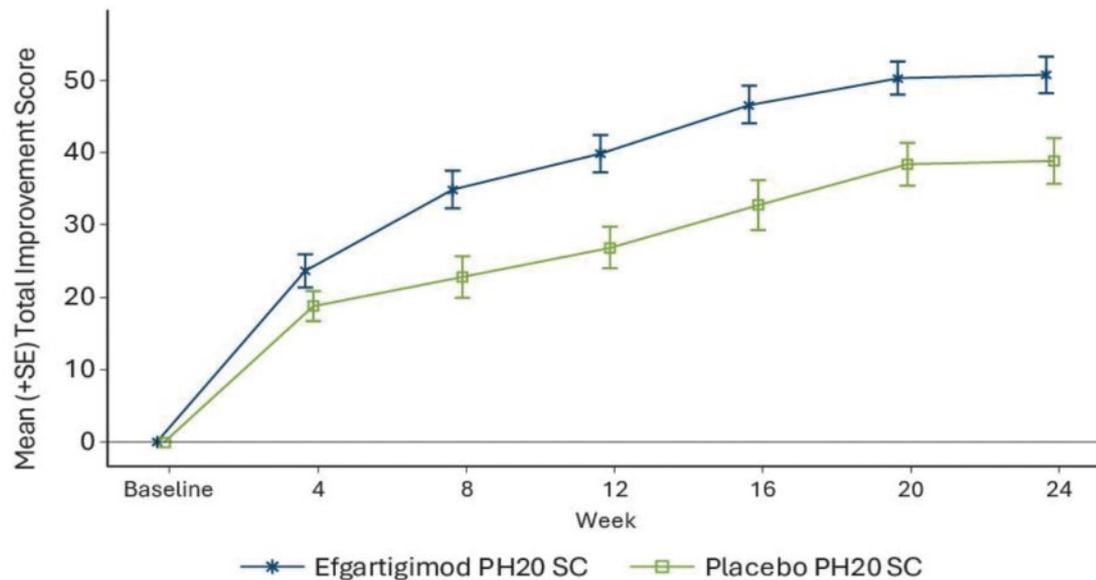
- Efgartigimod = IgG1 antibody Fc fragment blocking the neonatal Fc receptor (FcRn) without impacting antibody production, albumin levels, or other parts of the immune system

Aim

- To evaluate the safety and efficacy of subcutaneous (SC) efgartigimod (coformulated with recombinant human hyaluronidase PH20) compared with placebo in patients with IIM receiving standard of care (SOC) medications

Results

Figure 1A. Mean (\pm SE) TIS over time



n (mean):

Efgartigimod PH20 SC: 47 44 (23.64) 45 (35.00) 44 (39.83) 45 (46.72) 42 (50.24) 41 (50.67)

Placebo PH20 SC: 42 42 (18.81) 40 (22.81) 37 (26.89) 36 (32.71) 36 (38.33) 36 (38.96)

PHASE 2 RESULTS FROM THE ALKIVIA STUDY

Conclusions

- Efgartigimod PH20 SC led to significant improvement over placebo in TIS and key secondary endpoints with good safety and tolerability.
- The results demonstrate the mechanistic relevance of FcRn inhibition in IIM, indicating the potential pathogenicity of autoantibodies in IIM.
- These findings support further evaluation of efgartigimod PH20 SC in IIM in the ongoing phase 3 part of the study.

EFFICACY OF IVIG ON PULMONARY MANIFESTATIONS IN DERMATOMYOSITIS

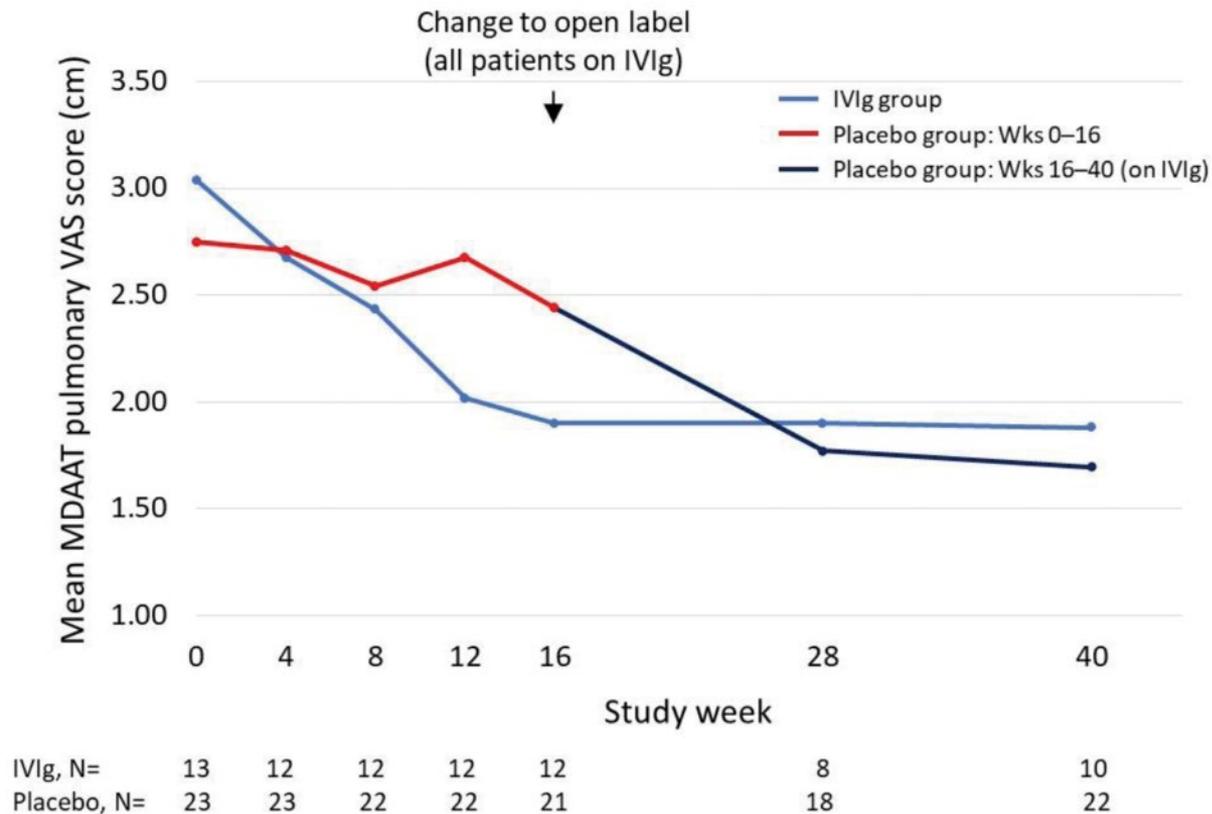
Background

- ProDERM study was a randomized Phase 3 study designed to evaluate the efficacy and safety of IVIG in adult DM patients

Aim

- Post-hoc analysis of the ProDERM study data to assess the effect of IVIg on pulmonary symptoms of DM

Results



EFFICACY OF IVIG ON PULMONARY MANIFESTATIONS IN DERMATOMYOSITIS

Conclusions

- IVIg may have favourable treatment effects on active pulmonary manifestations of DM.
- Future studies should consider including pulmonary outcomes to assess the effect of treatment on these symptoms.

Upcoming Therapies I

CAR T Cells

- RESECABTAGENE AUTOLEUCEL, A FULLY HUMAN, AUTOLOGOUS 4-1BB ANTI-CD19 CAR T CELL THERAPY; DOI: [annrheumdis-2025-eular.B1119](#)
- SAFETY AND PRELIMINARY EFFICACY OF CD19 CAR T-CELL TREATMENT IN RHEUMATIC DISEASE – DATA FROM THE PHASE I/II CASTLE BASKET STUDY; DOI: [annrheumdis-2025-eular.B1038](#)
- SUCCESSFUL BCMA-CAR T-CELL SALVAGE THERAPY IN A PATIENT WITH IDIOPATHIC INFLAMMATORY MYOSITIS RELAPSING AFTER CD19-CAR T-CELL THERAPY; DOI: [annrheumdis-2025-eular.E504](#)

Upcoming Therapies II

Bispecific Antibodies

- SAFETY AND EFFICACY OF T CELL ENGAGER THERAPY IN PATIENTS WITH REFRACTORY AUTOIMMUNE DISEASE; DOI: [annrheumdis-2025-eular.B1336](#)
- INDUCTION OF GC-FREE REMISSION BY THE BISPECIFIC CD19xCD3 T CELL ENGAGER BLINATUMOMAB IN PATIENTS WITH SEVERE, THERAPY-REFRACTORY ANTI-SYNTHEASE SYNDROME; DOI: [annrheumdis-2025-eular.E688](#)

Thank you for your attention!

Britta.maurer@insel.ch