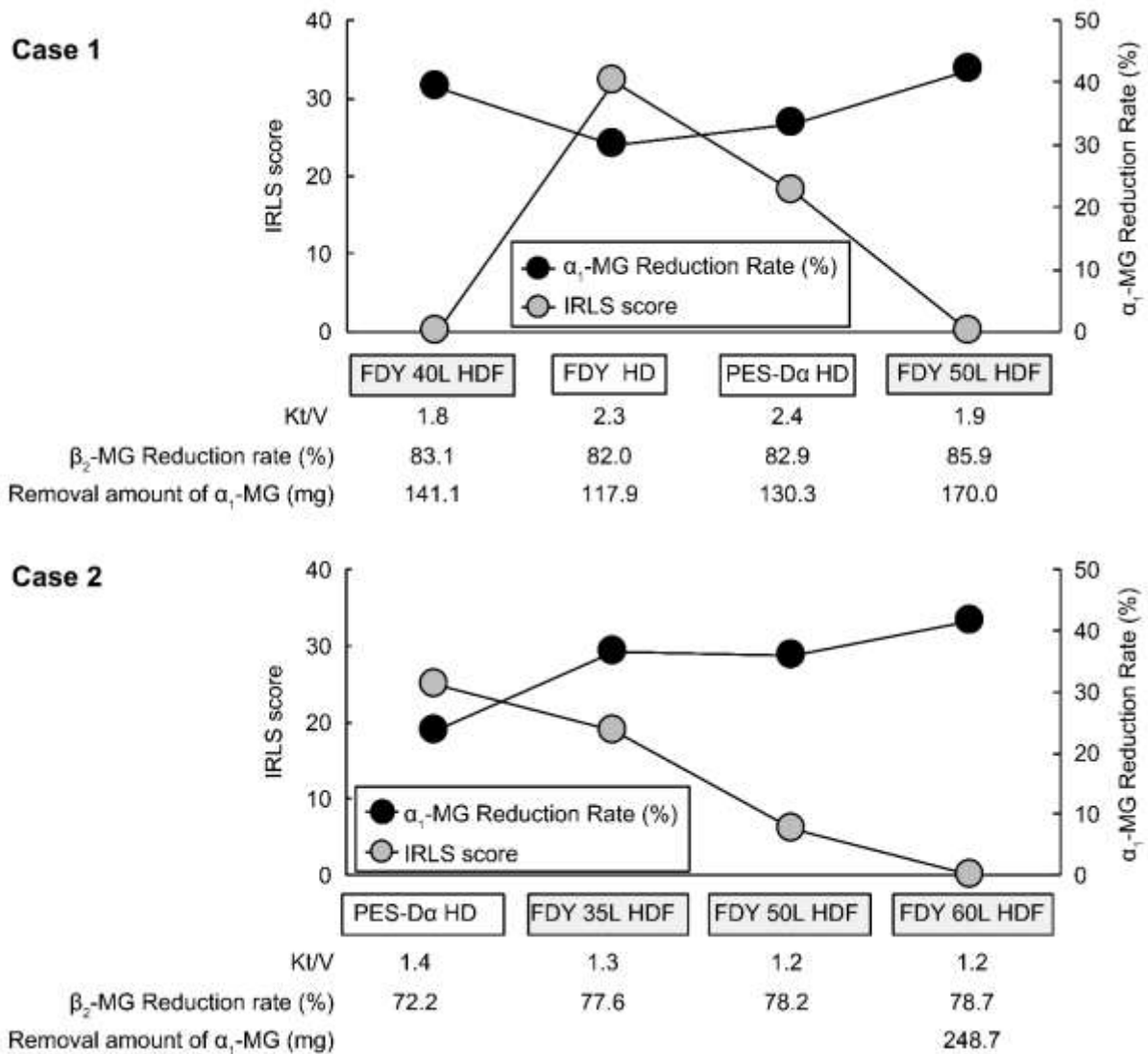


Supplementary Figures



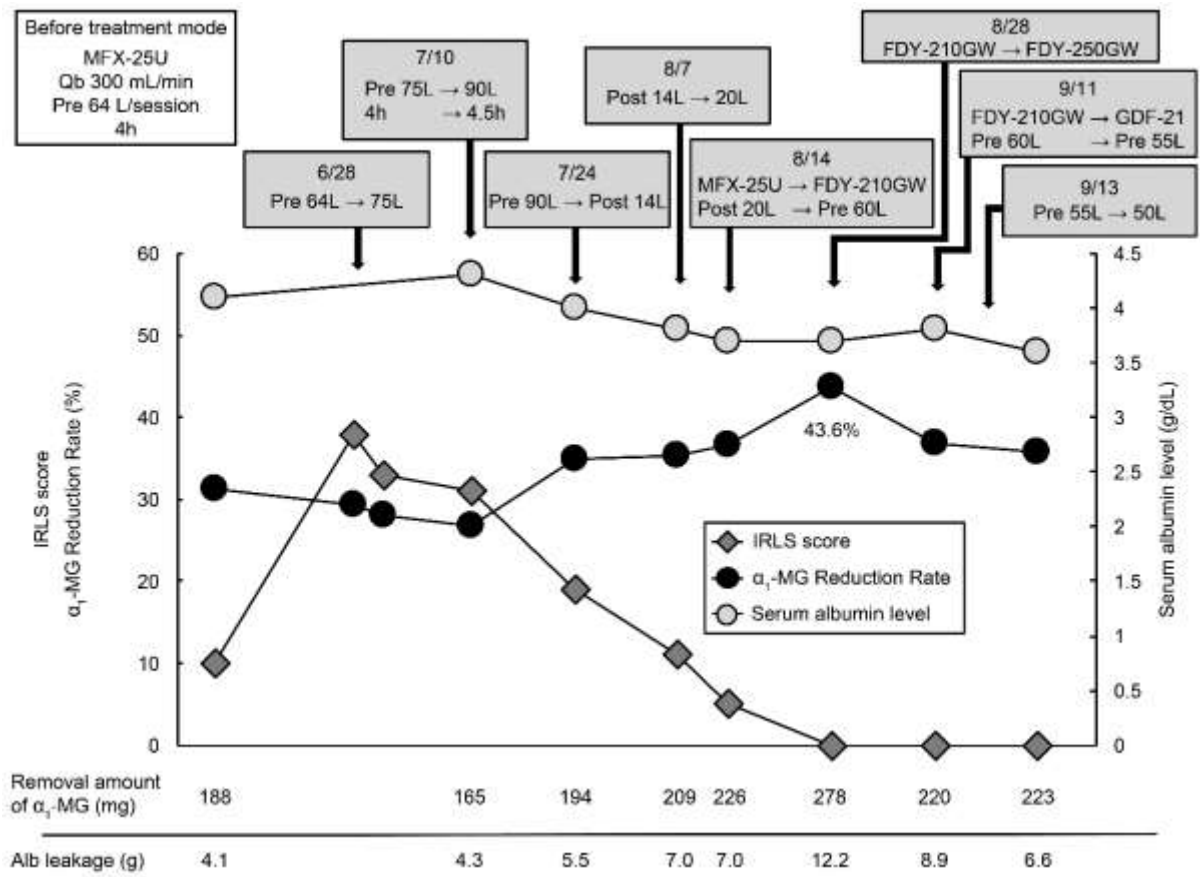
Supplementary Fig. S1 The figure shows the initial onset and the course of RLS in Cases 1 and 2.

The patient in Case 1 was slightly nervous, but the dialysis course was stable with HDF. However, RLS developed 1 month after switching from HDF to HD. The dialysis efficiency of HD was

increased, and though RLS was alleviated, it was not resolved. Thus, the method was switched to

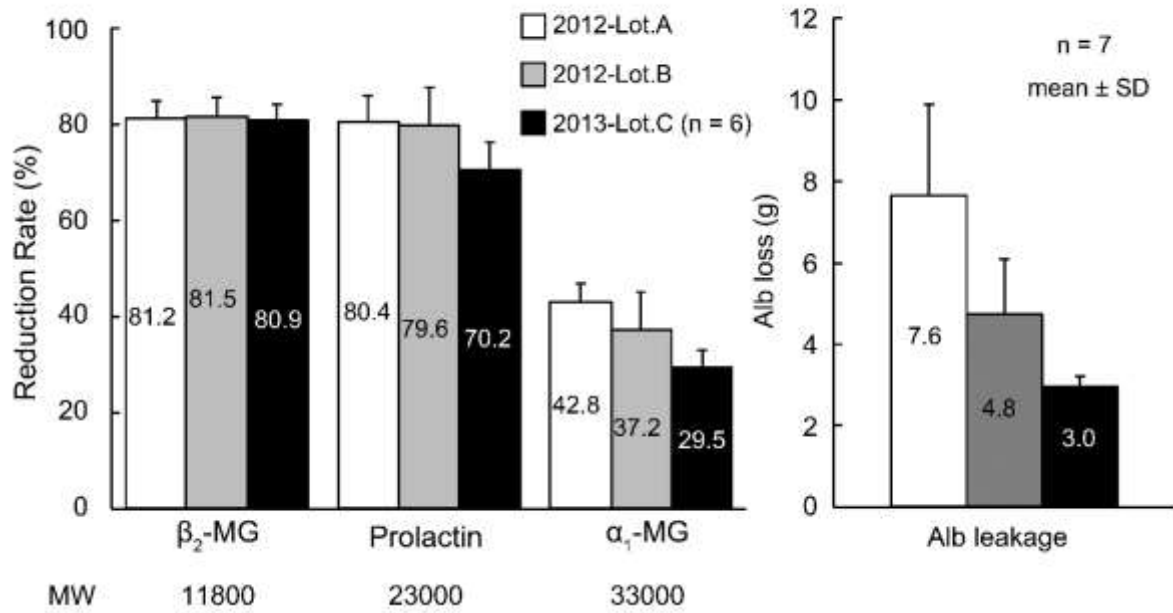
HDF. In Case 2, RLS developed in the 2nd year of dialysis and, thus, primary RLS was suspected.

However, high-efficiency HDF was performed and the patient recovered after 1 month of the entire course



Supplementary Fig. S2 Course at the time of recurrence in Case 2. It is strongly suspected that recurrent RLS was caused by deterioration of the hemodiafiltration MFX-U. Even when the total replacement solution was increased or when postdilution HDF was performed, the removal rate of alpha1-MG did not reach 40%, which caused a delay in RLS resolution. The patient was successfully treated by using FDY-GW with a large pore size. In this patient, the removal rate and amount of alpha1-MG at the time of RLS healing after the initial onset were 41.5% and 248 mg, respectively, and after recurrence were 43.6% and 278 mg, respectively

(50L on-line HDF 4.0h Q_b = 250mL/min Q_{dtotal} = 500mL/min)



Supplementary Fig. S3 The same product from the same brand may differ in efficiency depending on the production date. To detect this difference, α_1 -MG removal rate and Alb leakage should be measured. If the evaluation is only for β_2 -MG, all products would show the same efficiency