Purpose
We examined whether the use of a biocompatible peritoneal dialysis solution (Gambrosol Trio®) delayed residual renal function decline in incident dialysis patients with GFR.

Methods
Patients with glomerular filtration rates of greater than 1 mL/minute were randomized (by minimization to equally distribute variables of centre, CHF and diabetes histories) to receive Gambrosol Trio® (a biocompatible solution with low levels of glucose degradation products) or standard peritoneal dialysis solutions (Baxter solutions) for 2 years. A repeated measures MANCOVA was used to evaluate differences in residual renal function between the two groups for all patients with 3 or more GFR determinations.

Conclusion
Compared with standard peritoneal dialysis solutions, the use of Gambrosol Trio® resulted in clinically, but not statistically, significant slower declines in residual renal function and 24-hour urine volumes.