

This is a Fresenius Medical Care summary of:

## Patient survival on haemodiafiltration and haemodialysis: a cohort study using the Australia and New Zealand Dialysis and Transplant Registry

See EJ et al. *Nephrol Dial Transplant* 2019;34:326-338

### Introduction

Mortality in patients on dialysis is still high and varies from 6.6% in Japan to 21.7% in USA. Studies comparing patient outcomes of haemodiafiltration (HDF) with haemodialysis (HD) are still controversial.

So far, large observational studies were done in Europe, thus not considering practice pattern variation outside of Europe.

### Objective

The study aim was to compare mortality in patients on HDF with patients on standard HD, in Australia and New Zealand over a 15-year period. Time to cardiovascular (CV) death was investigated as secondary outcome.

### Design

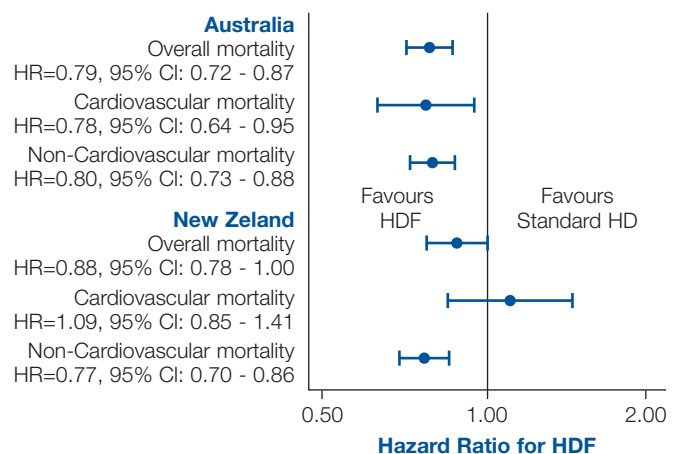
All adult patients starting HD or HDF between 2000 and 2014 in Australia and New Zealand were enrolled. Data were collected in the Australia and New Zealand Dialysis and Transplant Registry.

The HDF group includes all patients with at least one HDF treatment.

### Results

A total of 22,774 patients in Australia and 4,187 patients in New Zealand were included in the final analysis, of whom 4,110 received at least one HDF treatment (3302/808 in Australia/New Zealand). Median time of follow-up was 5.31 years, of which 3.75 years were spent on HD/HDF.

- Patients on HDF were more likely to be diabetic or obese, and less likely to be dialysed at home or elderly than patients on HD. There was no between-group difference in pre-existing CV diseases.
- There was no between-group difference in the use of permanent vascular access between groups.
- Mortality in HDF-patients is reported as significantly reduced by 21% ( $p > 0.001$ ) in Australia and by 12% ( $p = 0.05$ ) in New Zealand.
- In Australia, CV-mortality in HDF-patients was reduced by 22% ( $p = 0.01$ ), there was no reduction in CV-mortality in HDF-patients in New Zealand.



Graph from See et al. *NDT* 2019;34:326-338

### Conclusion

In this observational study, considered the largest outside Europe, HDF was associated with superior survival compared with HD.