range at the start of treatment (4 studies, $n = 221$, and 3 studies, $n = 127$, respectively), garlic induced reductions in blood pressure comparable to those of commonly prescribed drugs (8.38 mmHg, $P < 0.001$ and 7.27 mmHg, $P < 0.001$, respectively).

Reducing SBP by 4–5 mmHg and DBP by 2–3 mmHg is estimated to lower the risk of cardiovascular morbidity and mortality by 8–20%. Further, long-term studies on the use of garlic in the treatment of hypertension and in the management of prehypertensive individuals (i.e. those with SBP 120–139 mmHg or DBP 80–89 mmHg) are, therefore, very much warranted.

Original article Ried K *et al.* (2008) Effect of garlic on blood pressure: a systematic review and meta-analysis. *BMC Cardiovasc Disord* **8:** 13

Adverse effects of anemia correction in CKD: high epoetin doses to blame?

Assignment patients with chronic kidney disease (CKD) to increased hemoglobin targets does not seem to improve outcomes. Recent analyses indicate that high epoetin doses or low epoetin responsiveness could be the explanation.

Szczech and colleagues performed a secondary analysis of data from 1,260 participants in the CHOIR (Correction of Hemoglobin and Outcomes in Renal Insufficiency) trial, which randomly allocated individuals with CKD to a hemoglobin target of 113 g/l (11.3 g/dl) or 135 g/l (13.5 g/dl). After 4 months of follow-up, the likelihood of failure to reach the hemoglobin target and of need for high-dose epoetin (≥20,000 U/week) was greater in the high-target group than in the low-target group. Both these factors were associated with an increased risk of the primary end point (death or a major cardiovascular event). Taking into account use of high-dose epoetin and failure to achieve the hemoglobin target cancelled out the increased risk of an end point associated with the high hemoglobin target. When adjustments were made for all three of these factors, only high-dose epoetin was still associated with an increased risk of adverse outcomes (60% increase; $P = 0.02$).

In line with these findings, an analysis of data from 321 patients with CKD and cardiac disease who were on hemodialysis indicated that epoetin responsiveness was inversely associated with mortality ($P = 0.004$). Unlike Szczech *et al*., however, the authors observed no correlation between baseline epoetin dose and mortality.

Original articles Szczech LA *et al.* (2008) Secondary analysis of the CHOIR trial epoetin-α dose and achieved hemoglobin outcomes. *Kidney Int* [doi:10.1038/ki.2008.295]
Kilpatrick RD *et al.* (2008) Greater epoetin alfa responsiveness is associated with improved survival in hemodialysis patients. *Clin J Am Soc Nephrol* **3:** 1077–1083

Vitamin D therapy could explain survival advantage of black patients on hemodialysis

Black patients who start dialysis tend to have lower levels of vitamin D than non-Hispanic white patients, and are, therefore, presumably more likely to receive intravenous activated vitamin D. A recent study indicates that this difference in vitamin D treatment might contribute to the extended survival of black patients on dialysis compared with white patients.

Wolf *et al.* analyzed data from 9,303 patients (55% white, 35% black) in the US. At the initiation of dialysis, black patients had a higher mean parathyroid hormone level and a lower mean 1,25-dihydroxyvitamin D level than white patients ($P < 0.05$ for both). More black patients than white patients received activated vitamin D (88% vs 71%; $P < 0.05$), and baseline parathyroid hormone level was the strongest predictor of vitamin D treatment.

Black ethnicity was associated with a 32% (95% CI 23–39%) lower risk of death than white ethnicity, and use of activated vitamin D was associated with a 52% (95% CI 46–57%) decrease in the risk of death. Multivariate analysis revealed that black people who received vitamin D had a 16% lower risk of death than white people who received vitamin D ($P < 0.05$); however, the survival advantage of black ethnicity disappeared when the dose of vitamin D was taken into account. By contrast, among vitamin D untreated individuals, black patients had a 35% higher risk of death than white ones ($P < 0.05$).

Original article Wolf M *et al.* (2008) Impact of activated vitamin D and race on survival among hemodialysis patients. *J Am Soc Nephrol* **19:** 1379–1388