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**Correction of Anemia with Erythropoietin during the Two-Year Pre-ESRD Period:  
Cardiac Disease Associated with Pre-ESRD EPO Treatment**

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We have shown that patients who received more frequent pre-ESRD EPO had lower post-ESRD mortality. Because cardiac disease is the primary cause for death in ESRD patients, we hypothesized that more frequent pre-ESRD EPO treatment would be associated with lower risks of cardiac disease in the pre-ESRD period. **Methods:** We evaluated 1995-97 incident Medicare hemodialysis patients age 67+ years with 2 years of pre-ESRD claims, characterized into 5 groups: EPO none (0), <25 (I), 25-<50 (II), 50-<75 (III), and 75+% (IV) of the possible months from the first EPO treatment month to the first ESRD service date. We determined cardiac disease reported in the pre-ESRD Medicare claims using the ICD-9-CM codes. The likelihood of pre-ESRD cardiac disease was assessed with a logistic regression (odds ratio), adjusting for incident year, race, gender, age, diabetes, hypertension, and pre-ESRD EPO treatment group. **Results:** Patients who received EPO treatment less frequently prior to ESRD (Group I and II) had a higher likelihood for cardiac disease than those with more frequent EPO therapy. (P <.02). Patients with no EPO treatment had higher (P <.04) odds for cardiac disease than those who received more frequent EPO treatment (Groups III and IV) during the 2-year pre-ESRD period.

EPO status	0	I	II	III	IV
Odds ratios	1.080	1.515	1.150	0.970	1.0
95% CI	1.003-1.163	1.370-1.676	1.020-1.297	0.858-1.098	- - -
P-value	0.04	0.0001	0.02	0.63	- - -

Conclusions: Patients who receive more frequent EPO treatment for anemia in the pre-ESRD period appear to be less likely to have cardiac disease in pre-ESRD period, which may have a beneficial association with ESRD survival.