

## INTRODUCTION

Although maintenance I.V. iron dosing is commonly prescribed for hemodialysis (HD) patients, maintenance dosing levels differ by facility. Quantitative information on the relationship between these dosing levels and outcomes (specifically, anemia and iron indices) are lacking.

*We determined the association between various maintenance iron protocols and anemia management outcomes by constructing a facility-level analysis for maintenance iron use.*

## METHODOLOGY

- IV iron sucrose dosing patterns were assessed in facilities with ≥10 prevalent (≤90 days) patients in 01/10.
- Facilities were categorized to a dosing pattern if >40% of patients received the same dose: 25 mg 1x/wk (n=234), 50 mg 1x/wk (n=180), or 100 mg 1x/wk (n=285); Table 1.
- Medication and laboratory values were summarized across all patients in these clinics by dosing category.
- Reported lab values were lagged by one month to allow for the effect of iron dosing in the previous month.

## RESULTS

Table 1. Patient Demographics

	All Patients	25 mg Group	50 mg Group	100 mg Group	Mixed Dose Group
N	53,584	8,794	7,060	9,938	27,792
Facilities	1,392	234	180	285	693
Age (yr)	61.5 ± 14.8	61.0 ± 14.7	61.5 ± 14.7	61.4 ± 14.9	61.7 ± 14.8
% Male	56.0%	56.3%	56.2%	55.7%	55.9%
<i>Race and Ethnicity</i>					
% African American	38.8%	37.3%	42.1%	38.8%	38.4%
% Hispanic	16.8%	19.9%	13.4%	16.2%	16.8%
% Asian, Pacific Islander	4.0%	3.5%	4.3%	3.1%	4.3%
% Native American	1.4%	1.1%	1.4%	1.8%	1.3%
% Other	0.1%	0.1%	0.0%	0.1%	0.1%
% Diabetic	46.4%	47.7%	45.3%	46.1%	46.4%
Vintage (yr)	3.9 ± 3.6	3.9 ± 3.8	3.9 ± 3.5	3.8 ± 3.5	3.9 ± 3.6
BMI	28.2 ± 7.2	28.2 ± 7.2	28.2 ± 7.3	28.3 ± 7.3	28.1 ± 7.2

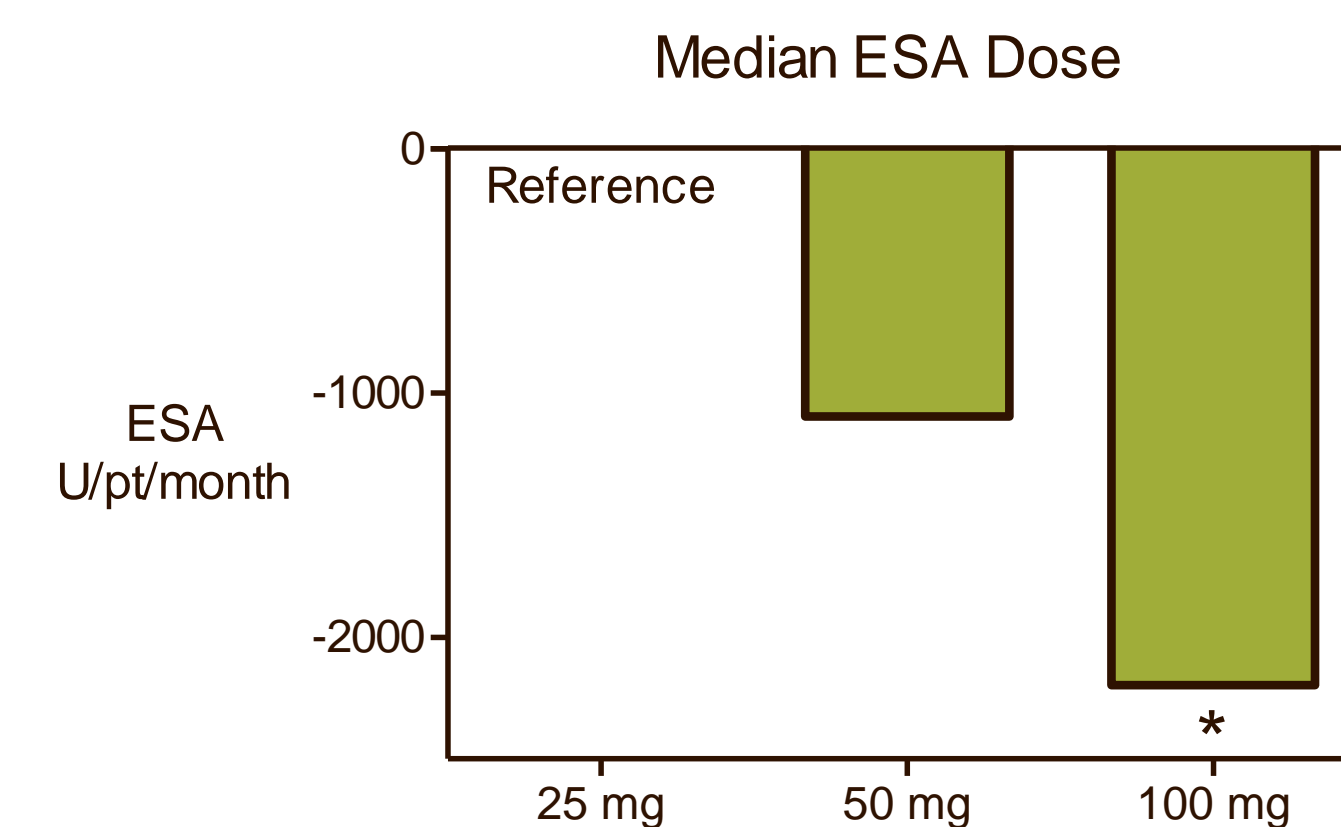


Figure 1. Median ESA Dose; 25 mg dose pattern as reference dose. P<0.01 25 mg compared to 100 mg.

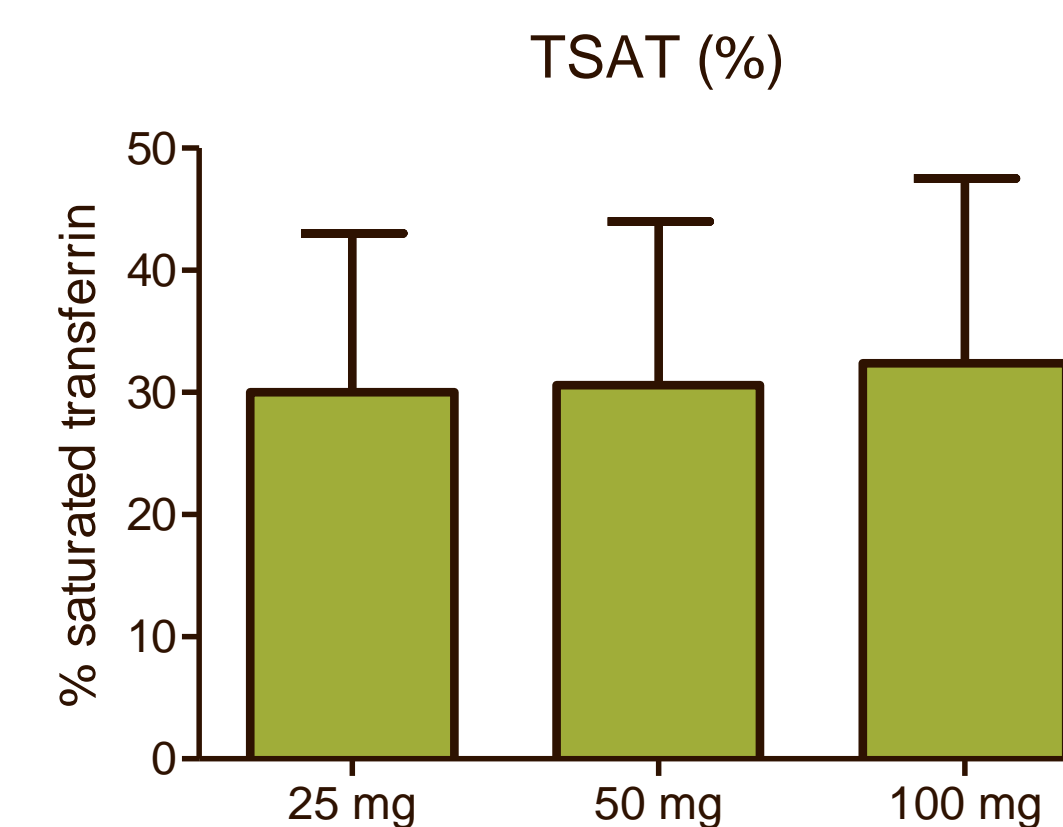


Figure 3. Transferrin Saturation

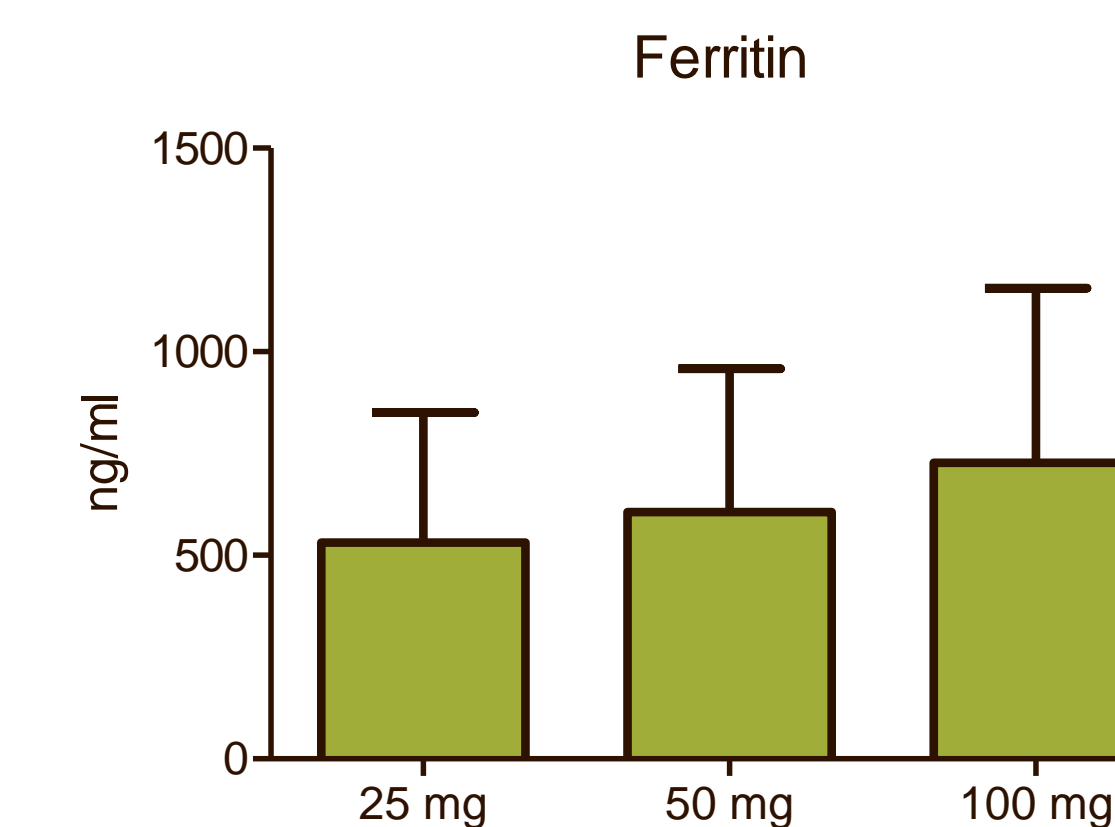


Figure 4. Ferritin Levels

## SUMMARY of RESULTS

- The median ESA dose was significantly lower in facilities with >40% of patients dosing at 100 mg/wk compared to that in facilities with >40% of patients dosing at 25 mg/wk (p = 0.002; Figure 1).
- TSAT and ferritin increased slightly as weekly dose increased, but changes lacked statistical and clinical significance. (Figures 2 and 3).
- Hb levels did not differ among centers with different dosing patterns (mean ± SD; 25 mg 11.7 ± 1.1, 50 mg 11.7 ± 1.1, 100 mg 11.7 ± 1.2; data not shown).

## KEY LEARNINGS

- ✓ This retrospective analysis suggests that the use of maintenance iron regimens are an effective adjuvant to anemia management.
- ✓ More detailed analyses and prospective studies are indicated to explore the possibility that monthly ESA requirements to maintain target hemoglobin may be lower with larger doses of maintenance iron.

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