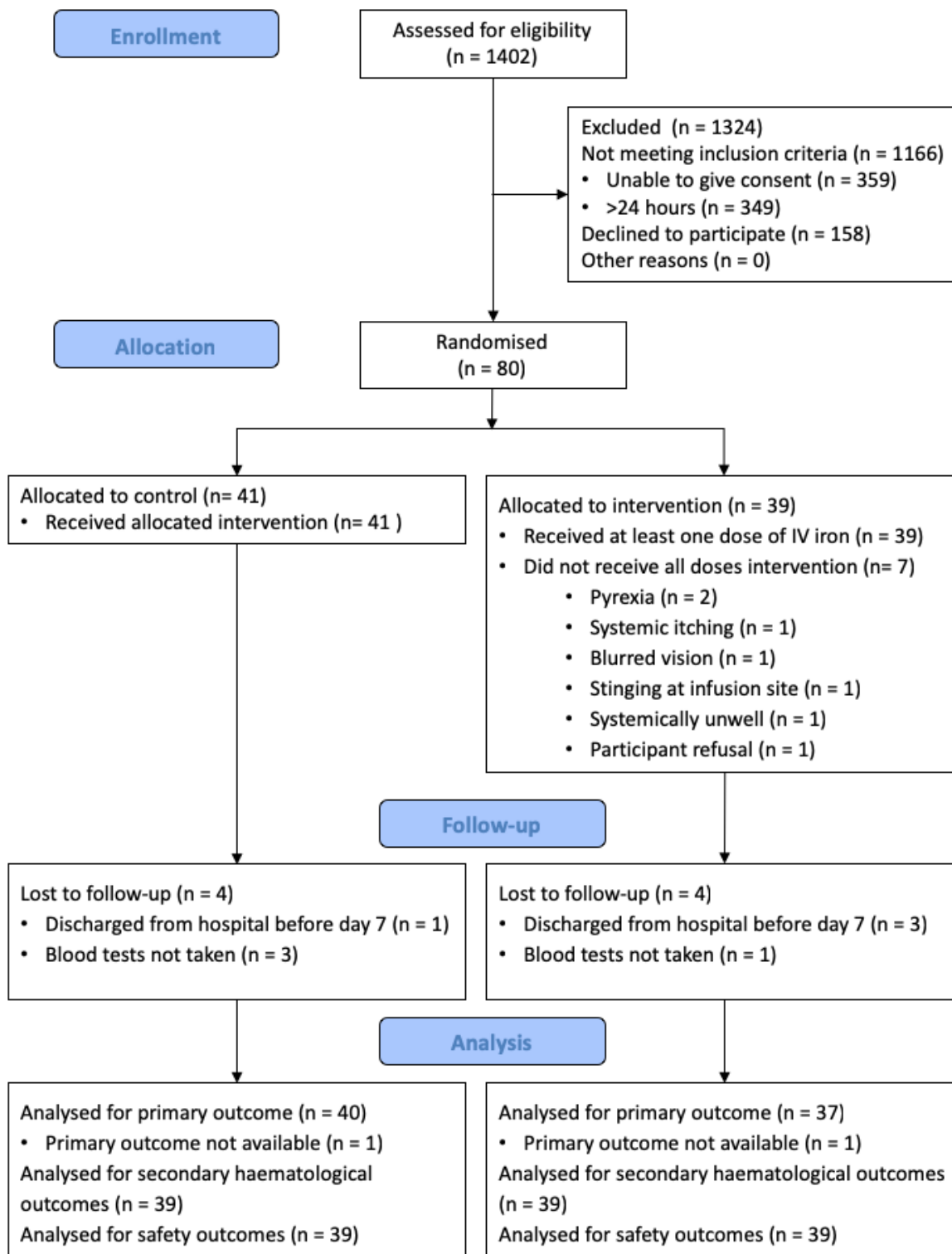


1. Participant Flow



2. Baseline Characteristics

Table 1: Baseline characteristics of patients included in the study

	Control (n = 41)	Iron (n = 39)
Age (years)	82.5 (5.8)	81.2 (7.0)
Sex (male)	12 (29)	15 (39)
Admission source		
Home – Independent	36 (89)	36 (92)
Nursing care	0	1 (3)
Residential care	1 (2)	0
Warden controlled	4 (10)	2 (5)
Operation		
AO Screws	2 (5)	1 (3)
DHS	14 (34)	9 (23)
Hemiarthroplasty	18 (45)	22 (56)
Nail	2 (5)	4 (10)
Total Hip Arthroplasty	5 (12)	3 (8)
Fracture type (%)		
Extracapsular	6 (15)	3 (8)
Intracapsular	24 (59)	26 (67)
Trochanteric	11 (27)	10 (26)
Time to theatre (hours)	29.8 (20)	29.7 (17)
Haemoglobin on admission log g L ⁻¹	4.83 (0.11) 125.4 (121.4 - 129.6)	4.81 (0.16) 122.4 (116.5 - 128.6)
Haemoglobin on admission < 120 g L ⁻¹	15 (36.6)	16 (42.1)
Reticulocyte count day 1 log 10 ⁹ cell L ⁻¹	3.70 (0.28) 40.4 (36.9 - 44.2)	3.74 (0.30) 42.2 (38.3 - 46.6)
Reticulocyte index day 1 log %	0.10 (0.32) 1.11 (1.00 - 1.23)	0.15 (0.36) 1.16 (1.03 - 1.3)
Haemoglobin day 1 log g L ⁻¹	4.72 (0.18) 112.7 (106.4 - 119.3)	4.71 (0.20) 111.1 (104.1 - 118.6)

3. Outcome Measures

Table 2: Haematological outcomes

Outcome	Control (n = 41)	Iron (n = 39)	p
Reticulocytes final day log 10 ⁹ cells L ⁻¹	4.28 (0.38) 72.2 (63.9 - 86.4)	4.49 (0.38) 89.4 (78.9 - 101.3)	0.019
Reticulocytes day 7 log 10 ⁹ cells L ⁻¹	4.33 (0.36) 75.8 (66.5 - 86.4)	4.51 (0.37) 91.2 (79.8 - 104.2)	0.056
Reticulocyte index final day log %	0.77 (0.42) 2.19 (1.91 - 2.51)	0.99 (0.35) 2.69 (2.39 - 3.03)	0.022
Reticulocyte index day 7 log %	0.82 (0.42) 2.28 (1.97 - 2.64)	1.00 (0.33) 2.73 (2.42 - 3.08)	0.069
Haemoglobin final day log g L ⁻¹	4.60 (0.14) 99.9 (95.7 - 104.2)	4.62 (0.10) 102.0 (98.7 - 105.3)	0.454
Haemoglobin day 7 log g L ⁻¹	4.61 (0.14) 100.9 (96.4 - 105.6)	4.64 (0.09) 103.2 (99.7 - 106.8)	0.466
Minimum haemoglobin first 7 days log g L ⁻¹	4.51 (0.16) 90.6 (86.1 - 95.2)	4.52 (0.14) 92.1 (88.0 - 96.2)	0.638
Maximum fall in haemoglobin first 7 days log g L ⁻¹	3.39 (0.69) 29.5 (23.9 - 36.5)	3.23 (0.74) 25.3 (20.0 - 32.1)	0.344
Maximum reticulocytes first 7 days log 10 ⁹ cells L ⁻¹	4.29 (0.34) 72.7 (66.5 - 80.6)	4.49 (0.36) 88.8 (79.3 - 99.4)	0.022
Maximum reticulocyte index first 7 days log %	0.78 (0.40) 2.17 (1.92 - 2.46)	0.97 (0.36) 2.63 (2.35 - 2.94)	0.022
Serum Transferrin Receptor Concentration final day (mg L ⁻¹)	17.4 (14.5 - 19) [10.1 - 24.8]	16.1 (14.1 - 17.9) [9.3 - 24.8]	0.418
Total transfusions during admission	0 (0 - 1) [0 - 4]	0 (0 - 1) [0 - 4]	0.927
Participants transfused during admission	12 (29)	11 (28)	1.000
Total transfusions in first week	0 (0 - 1) [0 - 4]	0 (0 - 1) [0 - 4]	0.899
Participants transfused during first week	11 (27)	11 (28)	1.000

Table 3: Functional and safety outcomes

	Control (n = 41)	Iron (n = 39)	p
Infective complications	12 (29)	8 (21)	0.518
Cardiovascular complications	10 (24)	9 (23)	1.000
Cumulated ambulation score	43.5 (24 - 56) [8 - 82]	32 (19.2 - 48) [0 - 85]	0.137
Length of hospital stay log days	2.66 (0.45) 14.2 (12.4 - 16.4)	2.60 (0.54) 13.4 (11.4 - 15.9)	0.605
Length of postoperative hospital stay log days	2.56 (0.48) 12.9 (11.1 - 15)	2.48 (0.59) 12 (9.9 - 14.4)	0.527
Discharge destination			0.349
Died	0	3 (8)	
Nursing Home	1 (2)	2 (5)	
Own Home	27 (66)	25 (64)	
Rehab hospital	11 (27)	7 (18)	
Residential Home	1 (2)	2 (5)	
Warden controlled accommodation	1 (2)	0	
Mortality at 30-days	0	4 (10)	0.112

4. Adverse Events

Table 4: Adverse Events

Adverse event	Number of events	Deaths
Deaths		3
Hospital acquired pneumonia	2	
Infective exacerbation of COPD	3	2 x death
New onset cardiac arrhythmia	2	
Congestive heart failure	1	1 x death
Norovirus	1	
Fall	1	