

Appendix 1 Description of Included Studies [posted as supplied by author]

Name	Year	N	Category	Iron Type	Dose Schedule	Control	ESA	Outcomes Measures					Follow Up (weeks)	
								Hb	Trans	Infect	Mort	Other		
1 Adhikary, L	2011	90	Renal	Sucrose	200mg alternate days for 5 doses	Oral iron, ferrous fumarate 125mg three times daily	Yes, both groups	Y					Anaphylaxis	4
2 Agarwal, R	2006	75	Renal	Gluconate	250mg weekly, total dose 10mg/kg	Oral iron	No	Y					AE, SAE, Anaphylaxis, Mortality	10
3 Aggarwal, HK	2003	40	Renal	Dextran	100mg every 2 weeks	Oral iron	Yes, both groups	Y					SAE, Anaphylaxis	12
4 Al, RA	2005	90	Obstetrics	Sucrose	Ganzoni formula. Max 400mg/day over 5 days. Total dose 11mg/kg	Oral iron polymaltose	No	Y	Y				SAE, Anaphylaxis, Iron studies, Fetal birth weight	10
5 Al-Momen, AK	1996	111	Obstetrics	Sucrose	Calculated from body weight	Oral iron ferrous sulphate	No	Y					AE, Anaphylaxis	15
6 Allen, RP	2011	46	Restless leg syndrome	Carboxymaltose	500mg twice, 2 days apart	Placebo	No			Y			IRLS restless leg score	4
7 Anker, SD	2009	459	Heart failure	Carboxymaltose	Ganzoni Formula, 200mg weekly till replete	Placebo	No	Y		Y	Y		Self-reported patient global assessment, SAE, Anaphylaxis	26
8 Auerbach, M	2004	157	Oncology	Dextran	Total dose infusion or 100mg repeated	Oral iron group and no iron group	Yes, both	Y	Y		Y		AE, Anaphylaxis	6
9 Auerbach, M	2010	243	Oncology	Dextran	50mg per dose, three weekly for 12 weeks	Oral iron or no iron	Yes, both groups	Y	Y		Y		Functional assessment, AE, SAE, Anaphylaxis	15
10 Bastit, L*	2008	396	Oncology	Sucrose	200mg every 3	Standard care,	Yes,	Y	Y	Y	Y		QOL, SAE,	16

11 Bayoumeu, F	2002	50	Obstetrics	Sucrose	weeks Lorentz Formula	no iron Oral iron sulphate	Both No	Y	Y		Anaphylaxis SAE, Anaphylaxis	4
12 Beck-Da-Silva, L	2013	23	Cardiac failure	Sucrose	200mg weekly for 5 weeks	Oral ferrous sulphate 200mg three times per day	No	Y			VO2 max	13
13 Benacaiova, G	2009	260	Obstetrics	Sucrose	200mg twice or three times	Oral ferrous sulphate	No	Y	Y	Y	Iron studies, SAE	20-25
14 Bhandal, N	2006	44	Obstetrics	Sucrose	200mg two days apart	Oral ferrous sulphate	No	Y	Y		SAE, Anaphylaxis	5
15 Birgregard, G	2010	120	Healthy blood donors	Sucrose	200mg after each donation	Oral ferrous sulphate	No				Iron studies, AE, SAE, Anaphylaxis, RLS	8-52
16 Breymann, C	2008	349	Obstetrics	Carboxymaltose	15mg/kg to max of 1000mg weekly up to 3 doses, mean total dose 1347mg	Oral ferrous sulphate	No	Y	Y	Y	AE, SAE, Anaphylaxis	12
17 Charytan, C	2005	96	Renal	Sucrose	200mg weekly for 5 doses	Oral ferrous sulphate	No	Y		Y	SAE, Anaphylaxis, Iron studies	5
18 Coyne, DW	2007	134	Renal	Gluconate	125mg 3 times a week for 8 doses	No iron	Yes, Both	Y		Y	SAE, Iron studies	6
19 Danguwan, P	2010	44	Oncology	Sucrose	200mg	Oral ferrous sulphate	No	Y	Y		SAE, Anaphylaxis	2
20 Edwards, TJ	2009	62	Colorectal surgery	Sucrose	300mg twice (BMI)	Placebo	No	Y	Y		LOS hospital	2
21 Evstatiev, R	2013	256	Gastrointestinal	Ferric carboxymaltose	500mg per dose, median dose 1000mg	Placebo	No	Y		Y	SAE	34
22 Friel, JK	1995	26	Neonatal TPN	Dextran	200mcg/kg/ day	No iron	No		Y	Y		8
23 Froessler, B	2013	271	Obstetric	Sucrose	200mg twice, minimum 24 hours apart	Oral ferrous iron sulphate 500mg daily	No	Y	Y		AE	7
24 Garrido-	2012	210	Cardiothor	Sucrose	Three doses of	Oral iron	No	Y	Y		SAE	4

Martin, P			acic Surgery		100mg each	ferrous fumarate 105mg or placebo, Placebo								
25 Grote, L*	2009	60	Restless Leg Syndrome	Sucrose	200mg, 5 doses over 3 weeks		No	Y		Y			RLS score, AE, Anaphylaxis	11
26 Hedenus, M*	2007	67	Haematological Malignancy	Sucrose	100mg weekly for 6 weeks then fortnightly for 8 weeks	No iron	Yes, Both	Y	Y	Y	Y		AE, Epoetin dose	16
27 Henry, DH	2007	187	Oncology	Gluconate	125mg weekly for 8 weeks	Oral iron or no iron	All	Y	Y	Y	Y		AE, SAE	12
28 Hulin, S	2005	93	Surgery - Cardiac	Sucrose	5mg/kg	No iron	No	Y						0.7
29 Karkouti, K	2006	38	Surgery – Cardiac and orthopaedic	Sucrose	200mg daily for 3 days	Placebo	Yes but ESA group excluded from analyses	Y	Y					6
30 Kasper, SM	1998	128	Surgery – autologous blood	Gluconate	102.5mg	Oral iron or placebo	No	Y					AE	3
31 Khalafallah, A*	2010	200	Obstetrics	Polymaltose,	Formula	Oral ferrous sulphate	No	Y		Y			SAE	24
32 Kim, YH	2009	76	Gynecology	Sucrose	200mg alternate days until replete by formula	Oral iron	No	Y					SAE	3
33 Kim, YT	2007	75	Oncology	Sucrose	200mg per dose	No iron	No		Y				SAE, Anaphylaxis	6
34 Kochhar, PK	2012	100	Obstetrics	Sucrose	200mg per dose	No iron	No		Y				SAE, Anaphylaxis	6
35 Krayenbuehl, PA*	2011	90	Fatigue	Sucrose	800mg over 2 weeks. Total dose 13mg/kg	Placebo	No	Y		Y			SAE, AE, Anaphylaxis	12
36 Kulnigg,	2008	200	Gastroente	Carboxym	Ganzoni	Oral ferrous	No	Y		Y	Y		AE, SAE,	12

S*			rology	altose	formula max per dose 1000mg or 15mg/kg	sulphate					Anaphylaxis, QOL	
37 Li, H (1)	2008	46	Renal	Sucrose	200mg weekly for 4 weeks then fortnightly	Oral ferrous succinate	Yes, Both	Y		Y	AE, Anaphylaxis	8
38 Li, H (2)	2008	136	Renal	Sucrose	100mg twice weekly for 8 weeks	Oral ferrous succinate	Yes, Both	Y			AE, SAE	12
39 Li, H (3)	2009	194	Renal	Sucrose	200mg weekly for 4 weeks then either 100 or 200mg weekly for 8 weeks	Oral ferrous succinate	Yes,, Both	Y			Iron studies, ESA requirement, AE, Cost-effectiveness	12
40 Lindgren, S*	2009	91	Gastroenterology	Sucrose	Ganzoni formula, 200mg weekly till replete. Mean dose 1708 mg	Oral ferrous sulphate	No	Y			Iron studies, AE	20
41 Maccio, A	2010	148	Oncology	Gluconate	125mg weekly	Oral iron lactoferrin	Yes, Both	Y			SAE	12
42 Macdougall, IC	1996	37	Renal	Dextran	250mg every 2 weeks	Oral iron or no iron	All	Y			Anaphylaxis, Cost	16
43 Madi-Jebara, SN	2004	120	Cardiac Surgery	Sucrose	Target formula, 200mg/day	Placebo	Yes but ESA group excluded from analysis	Y	Y		SAE, Anaphylaxis	4
44 McMahon, LP	2010	100	Renal	Sucrose	100-200mg every 2 months	Oral ferrous sulphate	No	Y	Y	Y		52
45 Meyer, MP	1996	42	Neonates	Sucrose	6mg/kg/week	Oral ferrous lactate	Yes,, Both		Y	Y	Epoetin dose	4
46 Na, HS	2011	113	Orthopaedics	Sucrose	200mg, one to three doses total.	No iron or epoetin	Yes, Iron group only	Y	Y			6
47 Neeru, S	2012	100	Obstetrics	Sucrose	Formula based	Oral ferrous	No	Y				4

48 Okonko, DO	2008	35	Cardiac Failure	Sucrose	on target Hb 110g/l Formula	fumarate 300mg No iron	No	Y		Y	Y	VO2 peak, SAE	18
49 Onken, JE,	2013	507	Haematology	Ferric carboxymaltose	Two doses of 15mg/kg 1 week apart	Oral iron, ferrous sulphate 325mg three times daily	No	Y			Y	SAE	6
50 Olijhoek, G	2001	110	Surgery - preoperative	Saccharate	200mg	Oral iron	Yes, but excluded from metaanalysis	Y				SAE, anaphylaxis	2
51 Pedrazzoli, P	2008	149	Oncology	Gluconate	125mg weekly for 6 doses	No iron	Both	Y	Y		Y	SAE, Anaphylaxis	16
52 Pollack, A	2001	29	Neonates	Sucrose	2mg/kg	Oral iron alone in one group, oral iron plus epoetin in the second group, iron IV plus epoetin in the third group	Yes	Y	Y	Y	Y	AE	3
53 Provenzano, R	2009	230	Renal	Ferumoxyl	510mg twice within 1 week	Oral iron	Both	Y			Y	SAE	5
54 Qunibi, WY	2011	255	Renal	Carboxymaltose	Maximum total 2000mg over 3 doses	Oral iron	Both	Y		Y		AE	8
55 Schaller, G	2005	38	Renal	Sucrose	300mg	Placebo	Both					Anaphylaxis	0.1
56 Schindler, E,	1994	60	Orthopaedic	Gluconate	0.75mg/kg, 3 doses two weeks apart	Oral iron	No	Y		Y		SAE, Anaphylaxis	6
57 Schroder, MD	2005	46	Gastrointestinal	Sucrose	7mg/kg initially, then 200mg 1-2 times weekly	Oral iron sulphate	No			Y		SAE, Anaphylaxis	6
58 Seid, MH	2008	291	Obstetrics	Carboxymaltose	Formula – modified		No	Y				SAE, Anaphylaxis	6

59 Serrano-Trenas, JA*	2011	200	Orthopaedics	Sucrose	Ganzoni, weekly iron 200mg, 3 doses 2 days apart	No iron	No		Y	Y	Y		4
60 Shafi, D	2012	200	Obstetrics	Sucrose	Formula based on weight and target Hb	Oral iron, ferrous ascorbate 100mg per day	No	Y				SAE, Anaphylaxis	6
61 Singh, H	2006	121	Renal	Sucrose	1000mg total in divided doses	No iron	Yes, both groups	Y		Y		Anaphylaxis	10
62 Singh, K	1998	100	Obstetrics	Polymaltose	Formula, total dose	Oral iron fumarate	No	Y		Y		Anaphylaxis	12
63 Sloand, JA	2004	25	Renal and Restless legs syndrome	Dextran	1000mg	No iron	No	Y					4
64 Spinowitz, BS	2008	304	Renal	Ferrumoxyl	510mg, two doses	Oral iron	Both	Y				SAE	5
65 Steensma, DP*	2011	502	Oncology	Gluconate	187.5mg every 3 weeks	Oral ferrous sulphate	Yes, both	Y	Y	Y	Y	SAE	16
66 Stoves, J	2001	45	Renal	Sucrose	300mg monthly	Oral ferrous sulphate	Yes, both	Y			Y		20
67 Toblli, JE	2007	40	Cardiac (CCF)	Sucrose	200mg weekly	Placebo	No	Y					26
68 Van Iperen, CE	2000	36	Intensive Care	Iron Sacharate	20mg per dose	No iron in one group, IV iron alone in second group, IV iron plus epoetin in third group	Yes but ESA excluded from analysis		Y			Mortality	3
69 Van Wyck, DB (1)	2007	361	Obstetrics	Carboxymaltose	Formula, mean cumulative dose 1403mg	Oral ferrous sulphate	No	Y		Y	Y	SAE	6
70 Van Wyck, DB (2)	2009	477	Gynecology	Carboxymaltose	Formula, mean dose 1568mg	Oral ferrous sulphate	No	Y			Y	SAE, QoL	6
71 Van Wyck, DB (3)	2005	188	Renal	Sucrose	1000mg total, divided doses over 14 days	Oral ferrous sulphate	Yes, Both groups	Y		Y	Y	AE	8

72 Verma, S	2011	150	Obstetrics	Sucrose	600mg	Oral ferrous sulphate	No	Y		Anaphylaxis, AE	4
73 Warady, BA	2004	35	Renal	Dextran		Oral iron	Yes	Y		SAE	16
74 Weisbach, V	1999	123	Surgery – preoperative Orthopaedics & Cardiothoracic	Sucrose	200mg	Oral iron fumarate	No	Y	Y		5
75 Westad, S	2008	129	Obstetrics	Sucrose	600mg total in 3 divided doses	Oral ferrous sulphate	No	Y	Y	QoL	12

*Additional supplementary data received from author