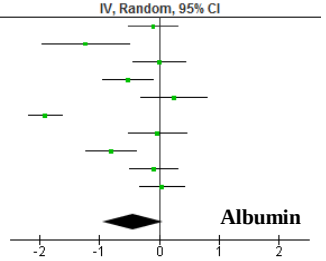
a

Study or Subgroup	Unsuccessful AVF Mean	SD	Total	Successful AVF Mean	SD	Total	Weight	Std. Mean Difference IV, Random, 95% CI
Bilgic 2015	3.87	0.36	51	3.91	0.42	43	10.2%	-0.10 [-0.51, 0.30]
Bojakowski 2012	3.2	1.1	11	4	0.4	34	8.9%	-1.24 [-1.97, -0.51]
Candan 2014	3.8	0.3	42	3.8	0.3	38	10.1%	0.00 [-0.44, 0.44]
Gagliardi 2011	3.26	0.4	37	3.49	0.46	54	10.1%	-0.52 [-0.95, -0.10]
Jaberi 2007	3.4	0.4	18	3.3	0.4	40	9.6%	0.25 [-0.31, 0.80]
Kaygin 2013	3	0.8	75	3.96	0.4	311	10.5%	-1.91 [-2.19, -1.62]
Kim 2013	3.8	3.5	34	3.9	2.2	30	9.9%	-0.03 [-0.52, 0.46]
Kirkpantur 2008	3.67	0.26	38	3.95	0.39	61	10.1%	-0.80 [-1.22, -0.38]
Wu 2009	3.59	0.44	41	3.63	0.43	59	10.2%	-0.09 [-0.49, 0.31]
Yilmaz 2014	3.76	0.68	64	3.73	0.56	44	10.3%	0.05 [-0.34, 0.43]
Total (95% CI)			**411**			**714**	**100.0%**	**-0.44 [-0.95, 0.07]**

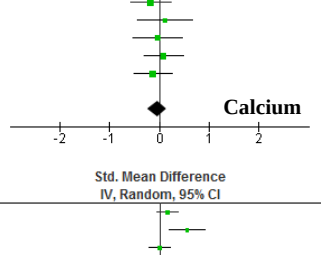
Heterogeneity: Tau² = 0.62; Chi² = 128.09, df = 9 (P < 0.00001); I² = 93%
Test for overall effect: Z = 1.69 (P = 0.09)



b

Study or Subgroup	Unsuccessful AVF Mean	SD	Total	Successful AVF Mean	SD	Total	Weight	Std. Mean Difference IV, Random, 95% CI
Bilgic 2015	8.4	0.52	51	8.5	0.65	43	22.8%	-0.17 [-0.58, 0.24]
Jaberi 2007	9.16	0.6	18	9.08	0.72	40	12.2%	0.12 [-0.44, 0.67]
Kim 2013	8.5	4.1	34	8.6	2.7	30	15.7%	-0.03 [-0.52, 0.46]
Wu 2009	9.97	1.04	41	9.89	0.86	59	23.8%	0.08 [-0.31, 0.48]
Yilmaz 2014	8.02	0.64	64	8.1	0.55	44	25.6%	-0.13 [-0.52, 0.25]
Total (95% CI)			**208**			**216**	**100.0%**	**-0.04 [-0.24, 0.15]**

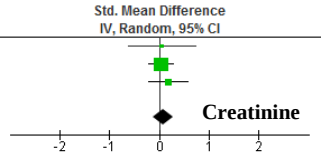
Heterogeneity: Tau² = 0.00; Chi² = 1.29, df = 4 (P = 0.86); I² = 0%
Test for overall effect: Z = 0.43 (P = 0.67)



c

Study or Subgroup	Unsuccessful AVF Mean	SD	Total	Successful AVF Mean	SD	Total	Weight	Std. Mean Difference IV, Random, 95% CI
Bojakowski 2012	5.2	1.9	11	5.1	1.9	34	9.0%	0.05 [-0.63, 0.73]
Kaygin 2013	4.2	2.6	75	4.1	2.5	311	65.1%	0.04 [-0.21, 0.29]
Wu 2009	10.6	2.2	41	10.2	2.2	59	26.0%	0.18 [-0.22, 0.58]
Total (95% CI)			**127**			**404**	**100.0%**	**0.08 [-0.13, 0.28]**

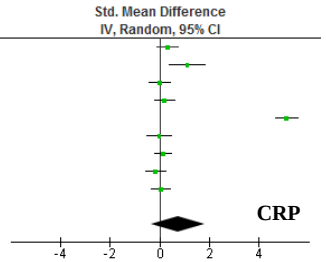
Heterogeneity: Tau² = 0.00; Chi² = 0.35, df = 2 (P = 0.84); I² = 0%
Test for overall effect: Z = 0.74 (P = 0.46)



d

Study or Subgroup	Unsuccessful AVF Mean	SD	Total	Successful AVF Mean	SD	Total	Weight	Std. Mean Difference IV, Random, 95% CI
Bilgic 2015	18.77	20.48	51	13.28	12.47	43	11.2%	0.31 [-0.09, 0.72]
Bojakowski 2012	18.6	16.8	11	7.3	6.6	34	10.8%	1.12 [0.39, 1.84]
Candan 2014	12.6	16.6	42	12.4	16.3	38	11.1%	0.01 [-0.43, 0.45]
Gagliardi 2011	11.98	9.1	37	9.83	11.4	54	11.1%	0.20 [-0.22, 0.62]
Kaygin 2013	18.6	4.3	75	4.6	2.2	311	11.1%	5.11 [4.67, 5.55]
Kim 2013	3.8	13.4	34	4	15.3	30	11.1%	-0.01 [-0.50, 0.48]
Ozdemir 2005	12.9	15	60	11.2	11.4	81	11.2%	0.13 [-0.20, 0.46]
Wu 2009	7.3	9.1	41	8.8	10	59	11.2%	-0.15 [-0.55, 0.24]
Yilmaz 2014	9.75	11.97	64	8.94	12.3	44	11.2%	0.07 [-0.32, 0.45]
Total (95% CI)			**415**			**694**	**100.0%**	**0.75 [-0.32, 1.82]**

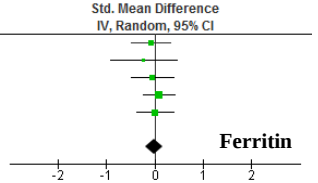
Heterogeneity: Tau² = 2.62; Chi² = 449.81, df = 8 (P < 0.00001); I² = 98%
Test for overall effect: Z = 1.38 (P = 0.17)



e

Study or Subgroup	Unsuccessful AVF Mean	SD	Total	Successful AVF Mean	SD	Total	Weight	Std. Mean Difference IV, Random, 95% CI
Bilgic 2015	422.4	240.8	51	439.1	230.7	43	20.8%	-0.07 [-0.48, 0.34]
Bojakowski 2012	170.4	104.7	11	235.7	314.5	34	7.4%	-0.23 [-0.91, 0.45]
Candan 2014	855.1	714.9	42	890.6	619.1	38	17.8%	-0.05 [-0.49, 0.39]
Ozdemir 2005	552.4	821.6	60	497.6	308.4	81	30.7%	0.09 [-0.24, 0.43]
Yilmaz 2014	542.43	230.45	64	539.15	286.37	44	23.3%	0.01 [-0.37, 0.40]
Total (95% CI)			**228**			**240**	**100.0%**	**-0.01 [-0.19, 0.18]**

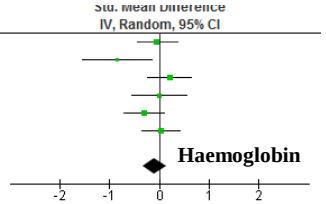
Heterogeneity: Tau² = 0.00; Chi² = 0.90, df = 4 (P = 0.92); I² = 0%
Test for overall effect: Z = 0.10 (P = 0.92)



f

Study or Subgroup	Unsuccessful AVF Mean	SD	Total	Successful AVF Mean	SD	Total	Weight	Std. Mean Difference IV, Random, 95% CI
Bilgic 2015	10.85	1.15	51	10.9	1.26	43	19.7%	-0.04 [-0.45, 0.36]
Bojakowski 2012	9.7	1	11	10.9	1.5	34	9.0%	-0.84 [-1.55, -0.14]
Candan 2014	11.6	1.5	42	11.3	1.3	38	17.8%	0.21 [-0.23, 0.65]
Jaberi 2007	11.6	1.5	18	11.6	1.3	40	13.0%	0.00 [-0.56, 0.56]
Kirkpantur 2008	10.9	1	38	11.2	1	61	19.6%	-0.30 [-0.70, 0.11]
Yilmaz 2014	10.83	1.97	64	10.75	1.82	44	20.9%	0.04 [-0.34, 0.43]
Total (95% CI)			**224**			**260**	**100.0%**	**-0.10 [-0.33, 0.14]**

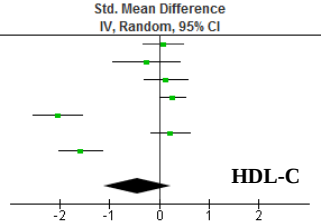
Heterogeneity: Tau² = 0.03; Chi² = 7.78, df = 5 (P = 0.17); I² = 36%
Test for overall effect: Z = 0.80 (P = 0.42)



g

Study or Subgroup	Unsuccessful AVF Mean	SD	Total	Successful AVF Mean	SD	Total	Weight	Std. Mean Difference IV, Random, 95% CI
Bilgic 2015	39.6	10.3	51	38.7	11.2	43	14.5%	0.08 [-0.32, 0.49]
Bojakowski 2012	52.1	18.5	11	56.7	17.6	34	13.2%	-0.25 [-0.94, 0.43]
Candan 2014	33.9	13	42	32.4	8.9	38	14.4%	0.13 [-0.31, 0.57]
Kaygin 2013	42.8	12.5	75	39.6	11.8	311	15.0%	0.27 [0.01, 0.52]
Kirkpantur 2008	31.4	4.4	38	44	7	61	14.1%	-2.04 [-2.53, -1.54]
Wu 2009	54	19	41	50	17	59	14.5%	0.22 [-0.18, 0.62]
Yilmaz 2014	31.8	12.6	64	51.5	11.9	44	14.4%	-1.59 [-2.03, -1.15]
Total (95% CI)			**322**			**590**	**100.0%**	**-0.45 [-1.12, 0.23]**

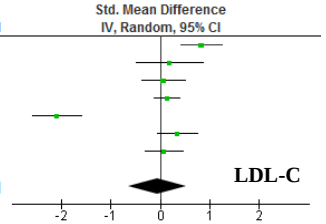
Heterogeneity: Tau² = 0.77; Chi² = 111.79, df = 6 (P < 0.00001); I² = 95%
Test for overall effect: Z = 1.30 (P = 0.20)



h

Study or Subgroup	Unsuccessful AVF Mean	SD	Total	Successul AVF Mean	SD	Total	Weight	Std. Mean Difference IV, Random, 95% CI
Bilgic 2015	154.5	32.6	51	128.7	28.6	43	14.4%	0.83 [0.41, 1.25]
Bojakowski 2012	108.6	48.1	11	99.5	45.7	34	12.9%	0.19 [-0.49, 0.87]
Candan 2014	98	35.1	42	95.9	33	38	14.3%	0.06 [-0.38, 0.50]
Kaygin 2013	118.7	28.6	75	114.8	28.3	311	15.2%	0.14 [-0.12, 0.39]
Kirkpantur 2008	62.8	11	38	97.4	19	61	14.0%	-2.09 [-2.59, -1.59]
Wu 2009	113	33	41	102	30	59	14.5%	0.35 [-0.05, 0.75]
Yilmaz 2014	102.69	36.13	64	99.86	39.49	44	14.6%	0.07 [-0.31, 0.46]
Total (95% CI)			**322**			**590**	**100.0%**	**-0.06 [-0.64, 0.53]**

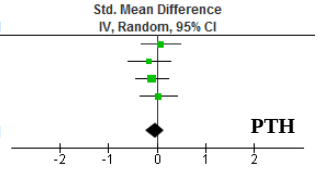
Heterogeneity: Tau² = 0.57; Chi² = 85.58, df = 6 (P < 0.00001); I² = 93%
Test for overall effect: Z = 0.19 (P = 0.85)



i

Study or Subgroup	Unsuccessful AVF Mean	SD	Total	Successful AVF Mean	SD	Total	Weight	Std. Mean Difference IV, Random, 95% CI
Bilgic 2015	332.8	160.5	51	319.5	204.3	43	22.5%	0.07 [-0.33, 0.48]
Candan 2014	267.5	229.5	42	311.4	316.1	38	19.2%	-0.16 [-0.60, 0.28]
Ozdemir 2005	449.4	363.4	60	492	409.9	81	33.2%	-0.11 [-0.44, 0.23]
Yilmaz 2014	371.7	301.04	64	361.57	327.48	44	25.1%	0.03 [-0.35, 0.42]
Total (95% CI)			**217**			**206**	**100.0%**	**-0.04 [-0.23, 0.15]**

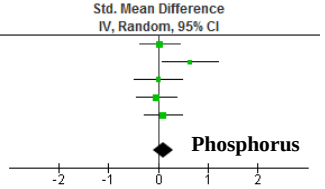
Heterogeneity: Tau² = 0.00; Chi² = 0.87, df = 3 (P = 0.83); I² = 0%
Test for overall effect: Z = 0.43 (P = 0.67)



j

Study or Subgroup	Unsuccessful AVF Mean	SD	Total	Successful AVF Mean	SD	Total	Weight	Std. Mean Difference IV, Random, 95% CI
Bilgic 2015	5.8	1.9	51	5.75	1.79	43	22.9%	0.03 [-0.38, 0.43]
Jaberi 2007	6.25	2.2	18	5.14	1.46	40	11.9%	0.64 [0.07, 1.21]
Kim 2013	5.3	26.2	34	5.2	26.8	30	15.9%	0.00 [-0.49, 0.49]
Wu 2009	4.39	1.36	41	4.45	1.74	59	23.8%	-0.04 [-0.44, 0.36]
Yilmaz 2014	6.29	1.51	64	6.13	1.49	44	25.5%	0.11 [-0.28, 0.49]
Total (95% CI)			**208**			**216**	**100.0%**	**0.10 [-0.10, 0.30]**

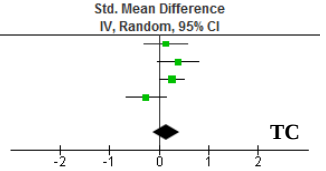
Heterogeneity: Tau² = 0.00; Chi² = 4.15, df = 4 (P = 0.39); I² = 4%
Test for overall effect: Z = 0.99 (P = 0.32)



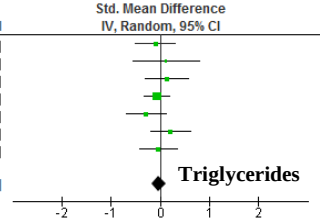
k

Study or Subgroup	Unsuccessful AVF Mean	SD	Total	Successful AVF Mean	SD	Total	Weight	Std. Mean Difference IV, Random, 95% CI
Candan 2014	167	45.3	42	160.7	43.7	38	20.9%	0.14 [-0.30, 0.58]
Gagliardi 2011	148.24	23.5	37	136	35.6	54	21.9%	0.39 [-0.03, 0.81]
Kaygin 2013	183.5	28.2	75	172.3	44.9	311	34.3%	0.26 [0.01, 0.52]
Kirkpantur 2008	145.6	35.1	38	155	34.5	61	22.8%	-0.27 [-0.68, 0.14]
Total (95% CI)			**192**			**464**	**100.0%**	**0.14 [-0.12, 0.41]**

Heterogeneity: Tau² = 0.04; Chi² = 6.05, df = 3 (P = 0.11); I² = 50%
Test for overall effect: Z = 1.07 (P = 0.28)



l

Study or Subgroup	Unsuccessful Mean	SD	Total	Successful Mean	SD	Total	Weight	Std. Mean Difference IV, Random, 95% CI
Bilgic 2015	279.5	90.4	51	288.9	106.6	43	12.6%	-0.10 [-0.50, 0.31]
Bojakowski 2012	158.4	75.8	11	148.6	82.4	34	4.5%	0.12 [-0.56, 0.80]
Candan 2014	181.8	84.7	42	170.1	84.7	38	10.7%	0.14 [-0.30, 0.58]
Kaygin 2013	148.6	74.8	75	153.8	82.2	311	32.6%	-0.06 [-0.32, 0.19]
Kirkpantur 2008	143.6	66.2	38	161.3	61.5	61	12.5%	-0.28 [-0.68, 0.13]
Wu 2009	175	105	41	155	80	59	13.0%	0.22 [-0.18, 0.62]
Yilmaz 2014	195.58	89.41	64	198.78	96.436	44	14.1%	-0.03 [-0.42, 0.35]
Total (95% CI)			**322**			**590**	**100.0%**	**-0.02 [-0.17, 0.12]**

Heterogeneity: Tau² = 0.00; Chi² = 3.80, df = 6 (P = 0.70); I² = 0%
Test for overall effect: Z = 0.33 (P = 0.74)