Additional file 1: Forest plots of individual studies examining predictors/correlates

Adherence self-efficacy

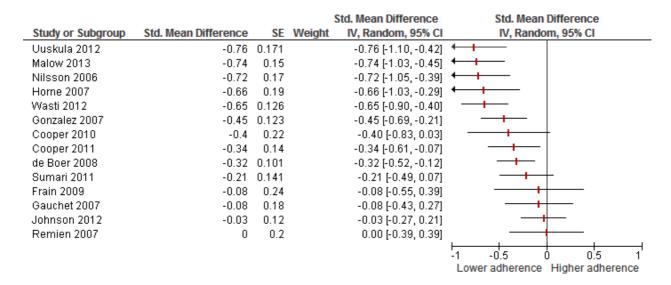
Study or Subgroup	Std. Mean Difference	ÇE.	Weight	Std. Mean Difference IV, Random, 95% CI	Std. Mean Difference IV, Random, 95% CI
Mellins 2003	-0.05		weight	-0.05 [-0.76, 0.66]	IV, Kalidolli, 93% Cl
Kerr 2012		0.18		0.00 [-0.35, 0.35]	
Wagner 2002		0.26		0.00 [-0.55, 0.55]	
Barclay 2 2007	0	0.20		0.00 [-0.59, 0.59]	
Tadios 2006	_	0.12		0.00 [-0.24, 0.24]	
Mathews 2002		0.16		0.08 [-0.23, 0.39]	
Anuradha 2012		0.36		0.10 [-0.61, 0.81]	
Golin 2002		0.19		0.10 [-0.27, 0.47]	
Simoni 2002		0.28		0.14 [-0.41, 0.69]	
Johnson 2006		0.04		0.32 [0.24, 0.40]	+
Moralejo 2006		0.18		0.40 [0.05, 0.75]	
Godin 2005	0.41	0.10		0.41 [0.21, 0.61]	
Colbert 2013		0.19		0.43 [0.06, 0.80]	
Nakimulli 2013	0.43	0.1		0.43 [0.23, 0.63]	
Barclay 1 2007		0.17		0.44 [0.11, 0.77]	- -
Stirratt 2006		0.14		0.45 [0.18, 0.72]	
Li 2011		0.16		0.47 [0.16, 0.78]	- -
Lynam 2006		0.15		0.47 [0.18, 0.76]	
Reynolds 2002	0.52			0.52 [0.30, 0.74]	
Ickovics 2002		0.22		0.63 [0.20, 1.06]	
Pinheiro 2002		0.15		0.68 [0.39, 0.97]	
Huang 2013		0.18		0.75 [0.40, 1.10]	
Duong 2001		0.27		0.76 [0.23, 1.29]	
Chesney 2000		0.25		0.77 [0.28, 1.26]	
Shah 2007		0.14		0.78 [0.51, 1.05]	
Remien 2007	0.78			0.78 [0.37, 1.19]	
Gifford 2000		0.18		0.79 [0.44, 1.14]	
Nilsson 2006		0.18		0.81 [0.46, 1.16]	<u> </u>
Mollassiotis 2002		0.25		0.84 [0.35, 1.33]	
Aragones 2011		0.08		0.89 [0.73, 1.05]	→
Luszczynska 2007	0.95			0.95 [0.54, 1.36]	
Cha 2008		0.14		0.98 [0.71, 1.25]	-
Finnocchario 2011		0.16		1.00 [0.69, 1.31]	
Catz 2000		0.32		1.06 [0.43, 1.69]	
Watt 2010		0.17		1.11 [0.78, 1.44]	\rightarrow
Brown 2013	1.15			1.15 [0.74, 1.56]	\rightarrow
Franke 2010		0.46		1.15 [0.25, 2.05]	
Tran 2013		0.08		1.19 [1.03, 1.35]	\
Dilorio 2007		0.15		1.63 [1.34, 1.92])
					ļ <u></u>
					-1 -0.5 0 0.5 1
					Lower adherence Higher adherence

Current substance use

				Std. Mean Difference	Std. Mean Difference
Study or Subgroup	Std. Mean Difference	SE	Weight	IV, Random, 95% CI	IV, Random, 95% CI
Peltzer 2010	-2.41	0.14	1.3%	-2.41 [-2.68, -2.14]	1
Mellins 2003	-1.74	0.348	0.7%	-1.74 [-2.42, -1.06]	
Berhe 2013	-1.3	0.12	1.3%	-1.30 [-1.54, -1.06]	•
Plankey 2009		0.047	1.5%	-1.24 [-1.33, -1.15]	
Bonolo 2005	-1.16	0.13	1.3%	-1.16 [-1.41, -0.91]	
Wasti 2012		0.135	1.3%	-1.04 [-1.30, -0.78]	-
Falang 2012		0.112	1.3%	-1.01 [-1.23, -0.79]	
Ladefoged 2012	-0.86	0.33	0.8%	-0.86 [-1.51, -0.21]	
King 2012	-0.83	0.12	1.3%	-0.83 [-1.07, -0.59]	
Venkatesh 2010		0.149	1.2%	-0.71 [-1.00, -0.42]	
Boyer 2011		0.042 0.168	1.5% 1.2%	-0.63 [-0.71, -0.55]	
Howard 2002 Heckman 2004		0.100	1.2%	-0.63 [-0.96, -0.30] -0.62 [-0.87, -0.37]	
Catz 2000		0.120	1.0%	-0.62 [-1.11, -0.13]	
Gonzalez 2004	-0.61	0.232	1.0%	-0.61 [-1.06, -0.16]	
Ammassari 2004		0.188	1.1%	-0.60 [-0.97, -0.23]	
Chesney 2000	-0.54	0.25	1.0%	-0.54 [-1.03, -0.05]	
Etienne 2010	-0.54	0.07	1.4%	-0.54 [-0.68, -0.40]	
Finnocchario 2011		0.165	1.2%	-0.53 [-0.85, -0.21]	
Murphy 2004		0.187	1.1%	-0.53 [-0.90, -0.16]	
Fatima 2 2013	-0.53	0.2	1.1%	-0.53 [-0.92, -0.14]	
Sodergard 2006	-0.51	0.07	1.4%	-0.51 [-0.65, -0.37]	
Blackstock 2012	-0.5	0.165	1.2%	-0.50 [-0.82, -0.18]	
Cardarelli 2008	-0.48	0.206	1.1%	-0.48 [-0.88, -0.08]	
Pratt 2001	-0.46	0.13	1.3%	-0.46 [-0.71, -0.21]	
Uuskula 2012		0.164	1.2%	-0.45 [-0.77, -0.13]	
Andrade 2013	-0.45	0.23	1.0%	-0.45 [-0.90, 0.00]	-
Haubrich 1999		0.164	1.2%	-0.43 [-0.75, -0.11]	
Teixera 2012	-0.43	0.17	1.2%	-0.43 [-0.76, -0.10]	
Fatima 1 2013	-0.43	0.16	1.2%	-0.43 [-0.74, -0.12]	
Yun 2005		0.082	1.4%	-0.42 [-0.58, -0.26]	
Golin 2002 Barclay 1 2007	-0.41	0.184 0.184	1.1% 1.1%	-0.41 [-0.77, -0.05]	
Mollassiotis 2002	-0.41		1.1%	-0.41 [-0.77, -0.05] -0.41 [-0.77, -0.05]	
Elul 2013	-0.39	0.06	1.4%	-0.39 [-0.51, -0.27]	
Lyimo 2014	-0.39	0.16	1.2%	-0.39 [-0.70, -0.08]	
Pefura 2013	-0.39	0.07	1.4%	-0.39 [-0.53, -0.25]	
Leserman 2008	-0.39	0.2	1.1%	-0.39 [-0.78, 0.00]	
Kalichman 2003	-0.38	0.21	1.1%	-0.38 [-0.79, 0.03]	
Kleeberger 2001		0.081	1.4%	-0.36 [-0.52, -0.20]	
Peretti 3 2006		0.101	1.4%	-0.33 [-0.53, -0.13]	
Campos 2010		0.122	1.3%	-0.33 [-0.57, -0.09]	
Simoni 2012	-0.32	0.041	1.5%	-0.32 [-0.40, -0.24]	-
Jacquet 2010	-0.3	0.08	1.4%	-0.30 [-0.46, -0.14]	
Kalichman 2010	-0.29	0.141	1.3%	-0.29 [-0.57, -0.01]	

ranomian 2010	0.20	O. 1 11	0.20 [0.01 [0.01]	1
Mugavero 2009	-0.28	0.121	-0.28 [-0.52, -0.04]	
Peretti 2 2006	-0.27	0.081	-0.27 [-0.43, -0.11]	
Kyser 2011	-0.27	0.12	-0.27 [-0.51, -0.03]	
Do 2010	-0.27	0.15	-0.27 [-0.56, 0.02]	- +
Nakimulli 2013	-0.26	0.1	-0.26 [-0.46, -0.06]	
Peretti 1 2006	-0.24	0.081	-0.24 [-0.40, -0.08]	
Juday 2011	-0.23	0.101	-0.23 [-0.43, -0.03]	
Holstad 2006	-0.22	0.181	-0.22 [-0.57, 0.13]	++
Spire 2002	-0.22	0.101	-0.22 [-0.42, -0.02]	
Protopopescu 2009	-0.22	0.06	-0.22 [-0.34, -0.10]	
Silva 2009	-0.21	0.1	-0.21 [-0.41, -0.01]	
Kacanek 2010	-0.21	0.15	-0.21 [-0.50, 0.08]	- +
Tedaldi 2012	-0.2	0.09	-0.20 [-0.38, -0.02]	
Sullivan 2007	-0.2	0.02	-0.20 [-0.24, -0.16]	+
Lazo 2 2007	-0.2	0.06	-0.20 [-0.32, -0.08]	
Ukwe 2010	-0.18	0.12	-0.18 [-0.42, 0.06]	
Johnson 2003	-0.16	0.04	-0.16 [-0.24, -0.08]	+
Kumar 2009	-0.14	0.06	-0.14 [-0.26, -0.02]	
Parruti 2006	-0.11	0.16	-0.11 [-0.42, 0.20]	- +
Glass 2010	-0.11	0.02	-0.11 [-0.15, -0.07]	+
Wagner 2011	-0.1	0.14	-0.10 [-0.37, 0.17]	
Shuter 2008	-0.08	0.26	-0.08 [-0.59, 0.43]	++
Anuradha 2012	-0.06	0.12	-0.06 [-0.30, 0.18]	
Babson 2013	-0.03	0.18	-0.03 [-0.38, 0.32]	
Bottonari 2012	-0.01	0.14	-0.01 [-0.28, 0.26]	
Unge 2010	0	0.1	0.00 [-0.20, 0.20]	
Mathews 2002	0	0.16	0.00 [-0.31, 0.31]	
Kerr 2012	0	0.12	0.00 [-0.24, 0.24]	
Simoni 2002	0	0.3	0.00 [-0.59, 0.59]	
Barclay 2 2007	0	0.3	0.00 [-0.59, 0.59]	
Oyugi 2007	0	0.2	0.00 [-0.39, 0.39]	
lckovics 2002	0.07	0.22	0.07 [-0.36, 0.50]	-
Murri 2001	0.14	0.18	0.14 [-0.21, 0.49]	- 1
Lazo 1 2007	0.21	0.08	0.21 [0.05, 0.37]	
Weidle 2006	0.72	0.07	0.72 [0.58, 0.86]	
				-1 -0.5 0 0.5 1
				Lower adherence Higher adherence
				Lower adherence migher adherence

Concerns about cART



Trust /satisfaction HIV care provider

		1	Std. Mean Difference	Std. Mean Difference
Std. Mean Difference	SE		IV, Random, 95% CI	IV, Random, 95% CI
0	0.16		0.00 F-0.31, 0.311	
0	0.1			
0	0.26		0.00 [-0.51, 0.51]	
0.1	0.18		0.10 [-0.25, 0.45]	
0.1	0.04		0.10 [0.02, 0.18]	+
0.16	0.19		0.16 [-0.21, 0.53]	-
0.16	0.06		0.16 [0.04, 0.28]	
0.17	0.12		0.17 [-0.07, 0.41]	+-
0.2	0.141		0.20 [-0.08, 0.48]	++-
0.24	0.101		0.24 [0.04, 0.44]	
0.27	0.141		0.27 [-0.01, 0.55]	
0.28	0.04		0.28 [0.20, 0.36]	+
0.28	0.13		0.28 [0.03, 0.53]	
0.28	0.05		0.28 [0.18, 0.38]	+
0.3	0.09		0.30 [0.12, 0.48]	
0.3	0.08		0.30 [0.14, 0.46]	
0.35	0.04		0.35 [0.27, 0.43]	+
0.36	0.163		0.36 [0.04, 0.68]	
0.4	0.163		0.40 [0.08, 0.72]	
0.41	0.184		0.41 [0.05, 0.77]	
0.43	0.2		0.43 [0.04, 0.82]	
0.47	0.123		0.47 [0.23, 0.71]	
0.53	0.186		0.53 [0.17, 0.89]	-
0.55	0.249		0.55 [0.06, 1.04]	
0.66	0.2		0.66 [0.27, 1.05]	- + +
0.75	0.171		0.75 [0.41, 1.09]	- + +
0.86	0.21		0.86 [0.45, 1.27]	
0.88	0.2		0.88 [0.49, 1.27]	
0.99	0.13		0.99 [0.74, 1.24]	- *
1.02	0.23		1.02 [0.57, 1.47]	
				-1 -0.5 0 0.5 1
				Lower adherence Higher adherence
	0 0 0.1 0.1 0.16 0.16 0.17 0.2 0.24 0.27 0.28 0.28 0.3 0.3 0.3 0.35 0.36 0.4 0.41 0.43 0.47 0.53 0.55 0.66 0.75 0.88	0 0.16 0 0.1 0 0.26 0.1 0.18 0.1 0.04 0.16 0.19 0.16 0.06 0.17 0.12 0.2 0.141 0.24 0.101 0.27 0.141 0.28 0.04 0.28 0.13 0.28 0.05 0.3 0.09 0.3 0.08 0.35 0.04 0.36 0.163 0.4 0.163 0.4 0.163 0.41 0.184 0.43 0.2 0.47 0.123 0.53 0.186 0.55 0.249 0.66 0.2 0.75 0.171 0.86 0.21 0.88 0.2 0.99 0.13	Atd. Mean Difference SE Weight 0 0.16 0 0.16 0 0.26 0.1 0.18 0.1 0.04 0.16 0.19 0.16 0.06 0.17 0.12 0.2 0.141 0.24 0.101 0.27 0.141 0.28 0.03 0.3 0.09 0.3 0.08 0.35 0.04 0.36 0.163 0.4 0.163 0.41 0.184 0.43 0.2 0.47 0.123 0.55 0.249 0.66 0.2 0.75 0.171 0.86 0.21 0.89 0.13	kid. Mean Difference SE Weight IV, Random, 95% CI 0 0.16 0.00 [-0.31, 0.31] 0 0.1 0.00 [-0.20, 0.20] 0 0.26 0.00 [-0.51, 0.51] 0.1 0.18 0.10 [-0.25, 0.45] 0.1 0.04 0.10 [0.02, 0.18] 0.16 0.19 0.16 [-0.21, 0.53] 0.16 0.06 0.16 [0.04, 0.28] 0.17 0.12 0.17 [-0.07, 0.41] 0.2 0.141 0.20 [-0.08, 0.48] 0.24 0.101 0.24 [0.04, 0.44] 0.27 0.141 0.27 [-0.01, 0.55] 0.28 0.04 0.28 [0.20, 0.36] 0.28 0.03 0.28 [0.03, 0.53] 0.28 0.05 0.28 [0.03, 0.53] 0.28 0.05 0.28 [0.18, 0.38] 0.3 0.09 0.30 [0.12, 0.48] 0.35 0.04 0.35 [0.27, 0.43] 0.36 0.163 0.36 [0.04, 0.68] 0.41 0.184 0.41 [0.05, 0.77] 0.43 0.2

Belief necessity/utility of ART

				Std. Mean Difference	Std. Mean Difference
Study or Subgroup	Std. Mean Difference	SE	Weight	IV, Random, 95% CI	IV, Random, 95% CI
Ukwe 2010	-0.18	0.12		-0.18 [-0.42, 0.06]	
Wagner 2002	0	0.26		0.00 [-0.51, 0.51]	
Remien 2007	0	0.2		0.00 [-0.39, 0.39]	
Johnson 2012	0.16	0.12		0.16 [-0.08, 0.40]	++-
Thrasher 2008	0.22	0.04		0.22 [0.14, 0.30]	+
Uuskula 2012	0.23	0.161		0.23 [-0.09, 0.55]	++-
Cooper 2010	0.25	0.22		0.25 [-0.18, 0.68]	-
Pinheiro 2002	0.25	0.141		0.25 [-0.03, 0.53]	
Duong 2001	0.27	0.27		0.27 [-0.26, 0.80]	-
Cooper 2011	0.31	0.14		0.31 [0.04, 0.58]	
Gonzalez 2007	0.32	0.122		0.32 [0.08, 0.56]	- -
Sumari 2011	0.32	0.142		0.32 [0.04, 0.60]	
French 2011	0.33	0.05		0.33 [0.23, 0.43]	+
de Boer 2008	0.37	0.102		0.37 [0.17, 0.57]	—
Brown 2013	0.47	0.19		0.47 [0.10, 0.84]	 +
Gauchet 2007	0.49	0.185		0.49 [0.13, 0.85]	 +
Horne 2007	0.5	0.186		0.50 [0.14, 0.86]	
Nilsson 2006	0.54	0.166		0.54 [0.21, 0.87]	-
Spire 2002	0.56	0.104		0.56 [0.36, 0.76]	—
Barclay 2007	0.59	0.146		0.59 [0.30, 0.88]	
Malow 2013	0.74	0.15		0.74 [0.45, 1.03]	<u> </u>
Wasti 2012	0.8			0.80 [0.55, 1.05]	
Mathews 2002	0.83	0.174		0.83 [0.49, 1.17]	<u> </u>
Paterson 2000	0.86	0.28		0.86 [0.31, 1.41]	
Wang 2007	0.9	0.2		0.90 [0.51, 1.29]	
					-1 -0.5 0 0.5 1
					Lower adherence Higher adherence
					_

Depressive symptoms

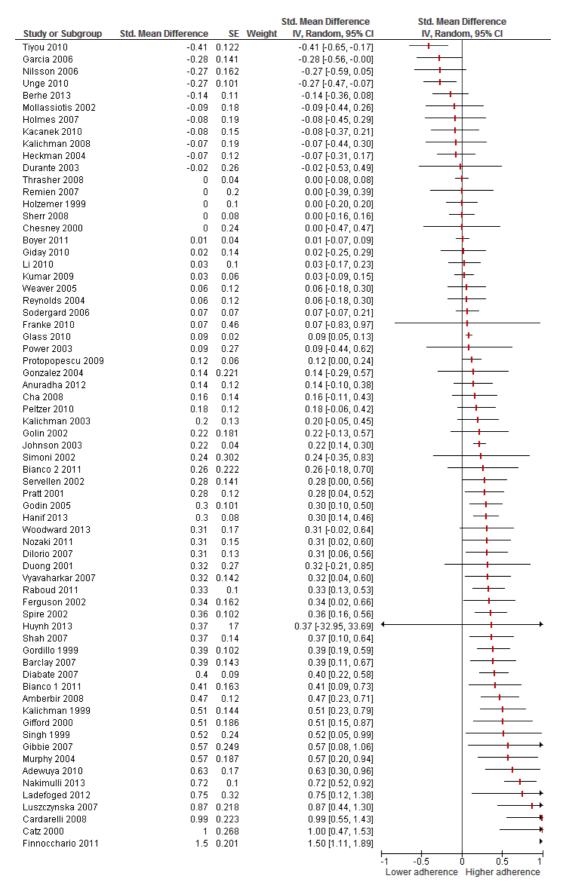
Negash 2013 -1.38 0.13 -1.38 1.63 -1.13 -1.38 1.63 -1.13 -1.38 1.63 -1.13 -1.38 1.63 -1.13 -1.38 1.63 -1.13 -1.38 1.63 -1.13 -1.38 -1.63 -1.28				Std. Mean Difference	Std. Mean Difference
Negash 2013	Study or Subgroup	Std. Mean Difference	SE		
Simoni 2002					
Berhe 2013	_				
Boats 2006					4 -
Ammassari 2004					
Gibble 2007					
Finnochario 2011					4 .
Catz 2000	Finnocchario 2011				4 -
Woodward 2013	Catz 2000				
Reynolds 2002	Woodward 2013	-0.74	0.18		
Tedald 2012	Reynolds 2002				
Cardarelli 2008	Tedaldi 2012	-0.63	0.09		
Cardarelli 2008	Nel 2013	-0.62	0.21	-0.62 [-1.03, -0.21]	← +
Amberbir 2008 Kailchman 2010 -0.6 0.146 -0.60 [-0.84, -0.36] Kailchman 2010 -0.6 0.146 -0.60 [-0.89, -0.31] -0.59 [-0.84, -0.34] Paterson 2000 -0.56 0.28 -0.56 [-1.11, -0.01] Webb 2009 -0.54 0.166 -0.54 [-0.87, -0.21] -0.53 0.13 -0.53 [-0.84, -0.24] -0.54 [-0.87, -0.21] -0.53 0.13 -0.53 [-0.84, -0.22] -0.54 [-0.87, -0.21] -0.54 [-0.87, -0.21] -0.55 [-0.84, -0.22] -0.57 [-0.88, -0.24] -0.58 [-0.88, -0.24] -0.58 [-0.88, -0.24] -0.59 [-0.88, -0.24] -0.59 [-0.88, -0.28] -0.56 [-1.11, -0.01] -0.59 [-0.88, -0.21] -0.59 [-0.88, -0.28] -0.56 [-1.11, -0.01] -0.59 [-0.84, -0.22] -0.58 [-0.88, -0.24] -0.59 [-0.88, -0.28] -0.56 [-1.11, -0.01] -0.59 [-0.88, -0.28] -0.56 [-1.11, -0.01] -0.59 [-0.88, -0.28] -0.59 [-0.88, -0.28] -0.56 [-1.11, -0.01] -0.59 [-0.88, -0.28] -0.57 [-0.88, -0.28] -0.57 [-0.88, -0.28] -0.58 [-0.89, -0.28] -0.58 [-0.89, -0.28] -0.59 [-0.89, -0.28] -0.59 [-0.89, -0.28] -0.59 [-0.89, -0.28] -0.59 [-0.89, -0.28] -0.59 [-0.89, -0.28] -0.59 [-0.89, -0.28] -0.56 [-1.11, -0.01] -0.59 [-0.89, -0.28] -0.56 [-1.11, -0.01] -0.59 [-0.89, -0.28] -0.56 [-1.11, -0.01] -0.59 [-0.89, -0.28] -0.56 [-1.11, -0.01] -0.59 [-0.89, -0.28] -0.56 [-1.11, -0.01] -0.59 [-0.89, -0.28] -0.56 [-1.11, -0.01] -0.59 [-0.89, -0.28] -0.56 [-1.11, -0.01] -0.59 [-0.89, -0.28] -0.56 [-1.11, -0.01] -0.59 [-0.89, -0.28] -0.56 [-1.11, -0.01] -0.59 [-0.89, -0.28] -0.89 [-0.89, -0.28]	Cardarelli 2008	-0.61	0.209		
Calichman 2010	Nilsson 2006	-0.61	0.167		
Dilorio 2007	Amberbir 2008	-0.6	0.12	-0.60 [-0.84, -0.36]	
Paterson 2000	Kalichman 2010	-0.6	0.146		_
Webb 2009 -0.54 0.166 -0.54 [-0.87, -0.21] -0.53 -0.81 -0.53 [-0.84, -0.22] -0.53 -0.83 -0.83 [-0.84, -0.22] -0.53 -0.83 [-0.84, -0.22] -0.53 -0.83 -0.83 [-0.88, -0.28] -0.53 [-0.88, -0.28] -0.52 [-0.80, -0.24] -0.52 [-0.80, -0.24] -0.83 -0.83 -0.83 -0.83 [-0.76, -0.18] -0.83 -0.83 -0.83 -0.83 -0.83 -0.84 [-0.76, -0.18] -0.84 -0.82 -0.47 [-0.76, -0.18] -0.83 -0.83 -0.87 [-0.76, -0.18] -0.84 -0.82 -0.47 [-0.76, -0.18] -0.84 -0.82 -0.84 -0.29 -0.47 [-0.76, -0.18] -0.84 -0.82 -0.47 [-0.76, -0.18] -0.84 -0.82 -0.84 -0.29 -0.47 [-0.76, -0.18] -0.84 -0.82 -0.47 [-0.76, -0.18] -0.84 -0.82 -0.47 [-0.76, -0.18] -0.82 -0.47 [-0.76, -0.18] -0.82 -0.47 [-0.76, -0.18] -0.47 [-0.76, -0.18] -0.47 [-0.76, -0.18] -0.47 [-0.76, -0.18] -0.47 [-0.76, -0.18] -0.83 -0.38 [-0.74, -0.02] -0.38 [-0.74, -0.12] -0.38 [-0.74, -0.12] -0.38 [-0.83] -0.38 [-0.74, -0.02	Dilorio 2007	-0.59	0.13	-0.59 [-0.84, -0.34]	
Fatima 1 2013	Paterson 2000	-0.56	0.28	-0.56 [-1.11, -0.01]	
Pratt 2001	Webb 2009	-0.54	0.166	-0.54 [-0.87, -0.21]	
Venkatesh 2010 -0.52 0.145 -0.52 [0.80, -0.24] ————————————————————————————————————	Fatima 1 2013	-0.53	0.16	-0.53 [-0.84, -0.22]	
Malow 2013	Pratt 2001	-0.53	0.13	-0.53 [-0.78, -0.28]	
Rao 2012	Venkatesh 2010	-0.52	0.145	-0.52 [-0.80, -0.24]	
Cha 2008	Malow 2013	-0.47	0.15	-0.47 [-0.76, -0.18]	
Ickovics 2002	Rao 2012	-0.47	0.09	-0.47 [-0.65, -0.29]	
Weidle 2006 -0.46 0.06 -0.46 [0.58, -0.34] + Farley 2010 -0.39 0.143 -0.39 [0.67, -0.11] + Mollassiotis 2002 -0.38 0.183 -0.38 [-0.62, -0.14] + Etienne 2010 -0.37 0.07 -0.37 [-0.51, -0.23] + Sullivan 2007 -0.37 0.02 -0.37 [-0.41, -0.33] + Johnson 2003 -0.35 0.041 -0.35 [-0.43, -0.27] + Horne 2007 -0.35 0.081 -0.35 [-0.43, -0.27] + Horne 2007 -0.35 0.081 -0.35 [-0.71, 0.01] + Lazo 1 2007 -0.35 0.081 -0.35 [-0.51, -0.19] + Bianco 1 2011 -0.34 0.162 -0.34 [-0.66, -0.02] + Kalichman 2003 -0.33 0.13 -0.33 [-0.58, -0.08] + Tadios 2006 -0.32 0.12 -0.32 [-0.56, -0.08] + Servellen 2002 -0.32 0.142 -0.32 [-0.50, -0.04] + Feldman 2013 -0.32 <td< td=""><td>Cha 2008</td><td>-0.47</td><td>0.14</td><td>-0.47 [-0.74, -0.20]</td><td></td></td<>	Cha 2008	-0.47	0.14	-0.47 [-0.74, -0.20]	
Farley 2010	lckovics 2002	-0.46	0.226	-0.46 [-0.90, -0.02]	
Mollassiotis 2002	Weidle 2006	-0.46	0.06	-0.46 [-0.58, -0.34]	+
Campos 2010	Farley 2010	-0.39	0.143	-0.39 [-0.67, -0.11]	
Etienne 2010	Mollassiotis 2002	-0.38	0.183	-0.38 [-0.74, -0.02]	
Sullivan 2007 -0.37 0.02 -0.37 [0.41, -0.33] + Johnson 2003 -0.35 0.041 -0.35 [-0.43, -0.27] + Horne 2007 -0.35 0.183 -0.35 [-0.71, 0.01] + Lazo 1 2007 -0.35 0.081 -0.35 [-0.51, -0.19] + Bianco 1 2011 -0.34 0.162 -0.34 [-0.66, -0.02] + Kalichman 2003 -0.33 0.13 -0.33 [-0.58, -0.08] + Tadios 2006 -0.32 0.12 -0.32 [-0.56, -0.08] + Gordillo 1999 -0.32 0.101 -0.32 [-0.52, -0.12] + Servellen 2002 -0.32 0.142 -0.32 [-0.60, -0.04] + Feldman 2013 -0.32 0.04 -0.32 [-0.40, -0.24] + Ramadhani 2007 -0.31 0.22 -0.31 [-0.74, 0.12] + Holmes 2007 -0.3 0.19 -0.30 [-0.67, 0.07] + Sumari 2011 -0.28 0.141 -0.28 [-0.56, -0.00] + Simoni 2012 -0.28 0.04 -0.28 [-0.52, -0.04] + Anuradha 2012 -0.26 <td>Campos 2010</td> <td>-0.38</td> <td>0.122</td> <td>-0.38 [-0.62, -0.14]</td> <td> </td>	Campos 2010	-0.38	0.122	-0.38 [-0.62, -0.14]	
Johnson 2003	Etienne 2010			-0.37 [-0.51, -0.23]	
Horne 2007	Sullivan 2007	-0.37	0.02	-0.37 [-0.41, -0.33]	
Lazo 1 2007 -0.35 0.081 -0.35 [-0.51, -0.19] Bianco 1 2011 -0.34 0.162 -0.34 [-0.66, -0.02] Kalichman 2003 -0.33 0.13 -0.33 [-0.58, -0.08] Tadios 2006 -0.32 0.12 -0.32 [-0.56, -0.08] Gordillo 1999 -0.32 0.101 -0.32 [-0.52, -0.12] Servellen 2002 -0.32 0.142 -0.32 [-0.60, -0.04] Feldman 2013 -0.32 0.04 -0.32 [-0.40, -0.24] Ramadhani 2007 -0.31 0.22 -0.31 [-0.74, 0.12] Holmes 2007 -0.3 0.19 -0.30 [-0.67, 0.07] Sumari 2011 -0.28 0.141 -0.28 [-0.56, -0.00] Simoni 2012 -0.28 0.04 -0.28 [-0.56, -0.00] Anuradha 2012 -0.28 0.121 -0.28 [-0.52, -0.04] Do 2010 -0.27 0.15 -0.27 [-0.56, 0.02] Franke 2010 -0.26 0.46 -0.26 [-1.16, 0.64]	Johnson 2003	-0.35	0.041	-0.35 [-0.43, -0.27]	+
Bianco 1 2011				-0.35 [-0.71, 0.01]	-
Kalichman 2003 -0.33 0.13 -0.33 [-0.58, -0.08]	Lazo 1 2007			-0.35 [-0.51, -0.19]	
Tadios 2006 -0.32	Bianco 1 2011		0.162		
Gordillo 1999 -0.32 0.101 -0.32 [-0.52, -0.12]					_
Servellen 2002 -0.32 0.142 -0.32 [-0.60, -0.04]	Tadios 2006				
Feldman 2013					
Ramadhani 2007 -0.31 0.22 -0.31 [-0.74, 0.12] -0.30 [-0.74, 0.12] -0.30 [-0.74, 0.12] -0.30 [-0.74, 0.12] -0.30 [-0.74, 0.12] -0.30 [-0.74, 0.12] -0.30 [-0.74, 0.12] -0.30 [-0.74, 0.12] -0.30 [-0.74, 0.12] -0.30 [-0.74, 0.12] -0.30 [-0.74, 0.12] -0.28 [-0.56, -0.00] -0.28 [-0.56, -0.00] -0.28 [-0.56, -0.00] -0.28 [-0.56, -0.20] -0.28 [-0.56, -0.20] -0.28 [-0.56, 0.02] -0.28 [-0.56, 0.02] -0.28 [-0.56, 0.02] -0.26 [-1.16, 0.64] -0.26 [-1.16, 0					
Holmes 2007 -0.3 0.19 -0.30 [-0.67, 0.07] Sumari 2011 -0.28 0.141 -0.28 [-0.56, -0.00] Simoni 2012 -0.28 0.04 -0.28 [-0.36, -0.20] Anuradha 2012 -0.28 0.121 -0.28 [-0.52, -0.04] Do 2010 -0.27 0.15 -0.27 [-0.56, 0.02] Franke 2010 -0.26 0.46 -0.26 [-1.16, 0.64]					
Sumari 2011 -0.28					
Simoni 2012 -0.28					
Anuradha 2012 -0.28 0.121 -0.28 [-0.52, -0.04] -0.20 [-0.52, -0.04] -0.27 [-0.56, 0.02] -0.26 [-1.16, 0.64] -0.26 [-1.16, 0.64]					
Do 2010 -0.27 0.15 -0.27 [-0.56, 0.02]					
Franke 2010 -0.26 0.46 -0.26 [-1.16, 0.64] + +					
	Franke 2010	-0.26	0.46	-0.26 [-1.16, 0.64]	

			,,,	1
Fatima 2 2013	-0.24	0.2	-0.24 [-0.63, 0.15]	- + +
Sherr 2010	-0.24	0.101	-0.24 [-0.44, -0.04]	
Juday 2011	-0.24	0.101	-0.24 [-0.44, -0.04]	
Bottonari 2012	-0.22	0.141	-0.22 [-0.50, 0.06]	- + +
Raboud 2011	-0.22	0.1	-0.22 [-0.42, -0.02]	
Leombruni 2009		0.181	-0.22 [-0.57, 0.13]	- + -
Mugavero 2009		0.121	-0.22 [-0.46, 0.02]	-
Holzemer 1999	-0.18	0.1	-0.18 [-0.38, 0.02]	-
Gonzalez 2004	-0.18	0.221	-0.18 [-0.61, 0.25]	++-
Moralejo 2006	-0.17	0.161	-0.17 [-0.49, 0.15]	- + -
Andrade 2013	-0.16	0.22	-0.16 [-0.59, 0.27]	
Murri 2001	-0.16		-0.16 [-0.51, 0.19]	
Kyser 2011	-0.16	0.12	-0.16 [-0.40, 0.08]	
Li 2010	-0.15	0.1	-0.15 [-0.35, 0.05]	
Kumar 2009	-0.14	0.06	-0.14 [-0.26, -0.02]	+
Kleeberger 2001	-0.14	0.08	-0.14 [-0.30, 0.02]	-
Protopopescu 2009	-0.14	0.06	-0.14 [-0.26, -0.02]	+
Wagner 2011	-0.12	0.14	-0.12 [-0.39, 0.15]	
Golin 2002	-0.1	0.18	-0.10 [-0.45, 0.25]	
Stirratt 2006	-0.08	0.14	-0.08 [-0.35, 0.19]	- + -
Kalichman 2008	-0.08	0.19	-0.08 [-0.45, 0.29]	
Leserman 2008	-0.04	0.2	-0.04 [-0.43, 0.35]	
King 2012	-0.02	0.11	-0.02 [-0.24, 0.20]	
Hanif 2013	-0.02	0.08	-0.02 [-0.18, 0.14]	
Lazo 2 2007	-0.02	0.06	-0.02 [-0.14, 0.10]	- -
Johnson 2012	-0.02	0.12	-0.02 [-0.26, 0.22]	
Barclay 2 2007	0	0.3	0.00 [-0.59, 0.59]	
Murphy 2004	0	0.18	0.00 [-0.35, 0.35]	
Silva 2009	0	0.1	0.00 [-0.20, 0.20]	
Oyugi 2007	0	0.2	0.00 [-0.39, 0.39]	
Kerr 2012	0	0.12	0.00 [-0.24, 0.24]	
Gonzalez 2007	0	0.12	0.00 [-0.24, 0.24]	
Barclay 1 2007	0	0.18	0.00 [-0.35, 0.35]	
Shuter 2008	0	0.26	0.00 [-0.51, 0.51]	
Chesney 2000	0	0.24	0.00 [-0.47, 0.47]	
Pefura 2013	0.001	0.07	0.00 [-0.14, 0.14]	+
Heckman 2004	0.01	0.12	0.01 [-0.23, 0.25]	
Thrasher 2008	0.02	0.04	0.02 [-0.06, 0.10]	+
Poquette 2013	0.05	0.25	0.05 [-0.44, 0.54]	-
Gifford 2000	0.11	0.18	0.11 [-0.24, 0.46]	- -
Bianco 2 2011	0.16	0.221	0.16 [-0.27, 0.59]	- - - - -
Uuskula 2012		0.161	0.21 [-0.11, 0.53]	- - -
			. ,	
				-1 -0.5 0 0.5 1
				Lower adherence Higher adherence

HIV stigma

			s	td. Mean Difference	Std. Mean Difference
Study or Subgroup	Std. Mean Difference	SE	Weight	IV, Random, 95% CI	IV, Random, 95% CI
Fong 2003	-1.22	0.21		-1.22 [-1.63, -0.81]	←
Sellier 2006	-1.13	0.3		-1.13 [-1.72, -0.54]	←
Nagesh 2013	-1.01	0.13		-1.01 [-1.26, -0.76]	←
Mellins 2003	-0.84	0.37		-0.84 [-1.57, -0.11]	
Fatima 2 2013	-0.74	0.2		-0.74 [-1.13, -0.35]	
Sayles 2009	-0.72	0.18		-0.72 [-1.07, -0.37]	←
Sasaki 2012	-0.65	0.17		-0.65 [-0.98, -0.32]	
Dlamini 2009	-0.46			-0.46 [-0.58, -0.34]	
Nozaki 2011	-0.45	0.15		-0.45 [-0.74, -0.16]	
Dilorio 2007	-0.45			-0.45 [-0.70, -0.20]	
Wagner 2011	-0.43	0.15		-0.43 [-0.72, -0.14]	
Rao 2012	-0.43			-0.43 [-0.61, -0.25]	
Boyer 2011	-0.37			-0.37 [-0.45, -0.29]	+
Cardarelli 2008	-0.37			-0.37 [-0.82, 0.08]	
Waite 2008	-0.37			-0.37 [-0.64, -0.10]	
Lyimo 2014	-0.37			-0.37 [-0.68, -0.06]	
Wasti 2012	-0.36			-0.36 [-0.67, -0.05]	
Durante 2003	-0.36			-0.36 [-0.89, 0.17]	
Sumari 2011	-0.33			-0.33 [-0.62, -0.04]	
Stirratt 2006	-0.32			-0.32 [-0.59, -0.05]	
Frain 2009	-0.3	0.3		-0.30 [-0.89, 0.29]	
Kalichman 2010	-0.29			-0.29 [-0.60, 0.02]	
Gokarn 2012	-0.28			-0.28 [-0.55, -0.01]	
Do 2010	-0.27			-0.27 [-0.56, 0.02]	
Holmes 2007	-0.23			-0.23 [-0.60, 0.14]	
Peretti 3 2006	-0.19			-0.19 [-0.41, 0.03]	<u> </u>
Peretti 2 2006	-0.14			-0.14 [-0.32, 0.04]	<u> </u>
Spire 2002	-0.14			-0.14 [-0.36, 0.08]	
Raboud 2011	-0.14	0.11		-0.14 [-0.34, 0.06]	
Li 2010	-0.14			-0.12 [-0.34, 0.10]	
Fatima 1 2013	-0.12			-0.11 [-0.42, 0.20]	
	-0.11				
Unge 2010 Rintamaki 2006		0.16		-0.10 [-0.45, 0.25]	
Birbeck 2011	-0.09			-0.10 [-0.39, 0.19] -0.09 [-0.27, 0.09]	
Berhe 2013	-0.09				
	-0.07			-0.07 [-0.29, 0.15]	
Falang 2012				-0.06 [-0.33, 0.21]	
Peretti 1 2006	-0.05			-0.05 [-0.21, 0.11]	
Li 2011	-0.03			-0.03 [-0.30, 0.24]	
Rougemont 2009	-0.02			-0.02 [-0.29, 0.25]	
Franke 2010	-0.02			-0.02 [-0.92, 0.88]	
Wang 2007	0	0.19		0.00 [-0.37, 0.37]	
Tadios 2006	0	0.12		0.00 [-0.24, 0.24]	
Giday 2010	0	0.14		0.00 [-0.27, 0.27]	
Kalichman 2008		0.19		0.00 [-0.37, 0.37]	
Peltzer 2010		0.11		0.08 [-0.14, 0.30]	
Sherr 2008	0.11			0.11 [-0.05, 0.27]	<u> </u>
Bonolo 2005	0.27	0.12		0.27 [0.03, 0.51]	
					-1 -0.5 0 0.5 1
					Lower adherence Higher adherence

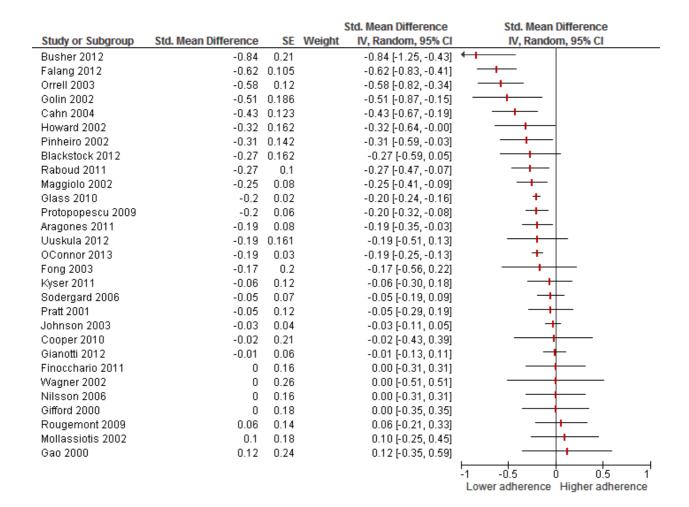
Social support



PI containing regimen

				Std. Mean Difference	Std. Mean Difference
Study or Subgroup	Std. Mean Difference	SE	Weight	IV, Random, 95% CI	IV, Random, 95% CI
Seguy 2 2007	-0.83	0.11		-0.83 [-1.05, -0.61]	
Cahn 2004	-0.63	0.12		-0.63 [-0.87, -0.39]	
Nelson 2013	-0.56	0.09		-0.56 [-0.74, -0.38]	
Fong 2003	-0.56	0.2		-0.56 [-0.95, -0.17]	
Lazo 1 2007	-0.37	0.081		-0.37 [-0.53, -0.21]	
Howard 2002	-0.33	0.162		-0.33 [-0.65, -0.01]	
Finocchario 2011	-0.32	0.162		-0.32 [-0.64, -0.00]	- + -
Trotta 2003	-0.28	0.08		-0.28 [-0.44, -0.12]	
OConnor 2013	-0.27	0.03		-0.27 [-0.33, -0.21]	+
Sumari 2011	-0.26	0.141		-0.26 [-0.54, 0.02]	-
Lazo 2 2007	-0.23	0.06		-0.23 [-0.35, -0.11]	+
Raboud 2011	-0.2	0.1		-0.20 [-0.40, -0.00]	
Gay 2011	-0.14	0.12		-0.14 [-0.38, 0.10]	
Sullivan 2007	-0.14	0.02		-0.14 [-0.18, -0.10]	+
Kyser 2011	-0.12	0.12		-0.12 [-0.36, 0.12]	
Mannheimer 2002	-0.12	0.06		-0.12 [-0.24, -0.00]	+
Protopopescu 2009	-0.12	0.06		-0.12 [-0.24, -0.00]	+
Etard 2007	-0.09	0.19		-0.09 [-0.46, 0.28]	
Glass 2010	-0.03	0.04		-0.03 [-0.11, 0.05]	+
Wagner 2002	0	0.26		0.00 [-0.51, 0.51]	
Orrell 2003	0	0.12		0.00 [-0.24, 0.24]	
Eholie 2007	0	0.13		0.00 [-0.25, 0.25]	
Nilsson 2006	0	0.16		0.00 [-0.31, 0.31]	
Mollassiotis 2002	0	0.18		0.00 [-0.35, 0.35]	
Parruti 2006	0.23	0.161		0.23 [-0.09, 0.55]	++-
Seguy 1 2007	0.38	0.14		0.38 [0.11, 0.65]	- -
					-1 -0.5 0 0.5 1
					Lower adherence Higher adherence

Daily dosing frequency



Financial constraints

			Std. Mean Difference	Std. Mean Difference
Study or Subgroup	Std. Mean Difference	SE	Weight IV, Random, 95% CI	IV, Random, 95% CI
Alakija 2010	-1.47	0.149	-1.47 [-1.76, -1.18]	1
McAllister 2013	-0.98	0.12	-0.98 [-1.22, -0.74]	
Ladefoged 2012	-0.95	0.33	-0.95 [-1.60, -0.30]	←
Hanif 2013	-0.75	0.08	-0.75 [-0.91, -0.59]	
Giday 2010	-0.7	0.14	-0.70 [-0.97, -0.43]	
Wasti 2012	-0.68		-0.68 [-0.93, -0.43]	
Unge 2010		0.105	-0.64 [-0.85, -0.43]	4
Barclay 2 2007		0.315	-0.62 [-1.24, -0.00]	
Ickovics 2002		0.229	-0.59 [-1.04, -0.14]	`
Arrivillaga 2009 Paterson 2000	-0.58 -0.58	0.13 0.28	-0.58 [-0.83, -0.33] -0.58 [-1.13, -0.03]	
Kyser 2011	-0.53	0.12	-0.53 [-0.77, -0.29]	
Blackstock 2012		0.165	-0.52 [-0.84, -0.20]	
Howard 2002		0.165	-0.51 [-0.83, -0.19]	
Yun 2005		0.103	-0.48 [-0.68, -0.28]	
Tran 2013	-0.47	0.07	-0.47 [-0.61, -0.33]	
Duggan 2009	-0.46	0.185	-0.46 [-0.82, -0.10]	
Holmes 2007	-0.45	0.19	-0.45 [-0.82, -0.08]	
Lazo 1 2007	-0.44	0.082	-0.44 [-0.60, -0.28]	
Ammassari 2004		0.184	-0.43 [-0.79, -0.07]	
Campos 2010		0.122	-0.41 [-0.65, -0.17]	
Carballo 2004	-0.38	0.13	-0.38 [-0.63, -0.13]	-
Oku 2014	-0.38	0.1	-0.38 [-0.58, -0.18]	-
Berhe 2013	-0.37	0.11	-0.37 [-0.59, -0.15]	
Graham 2007	-0.36	0.22	-0.36 [-0.79, 0.07]	
Golin 2002	-0.35		-0.35 [-0.71, 0.01]	
Kleeberger 2001 Bonolo 2005	-0.34 -0.33	0.1 0.12	-0.34 [-0.54, -0.14]	
Barclay 1 2007	-0.33		-0.33 [-0.57, -0.09] -0.33 [-0.69, 0.03]	
Kacanek 2010	-0.32	0.102	-0.32 [-0.61, -0.03]	<u> </u>
Holstad 2006		0.182	-0.32 [-0.68, 0.04]	-
Spire 2002		0.101	-0.32 [-0.52, -0.12]	
Colbert 2013	-0.27	0.19	-0.27 [-0.64, 0.10]	
Peretti 2 2006	-0.27	0.081	-0.27 [-0.43, -0.11]	
Singh 1999	-0.25	0.24	-0.25 [-0.72, 0.22]	+ +
Nozaki 2011	-0.25	0.15	-0.25 [-0.54, 0.04]	
Fatima 1 2013	-0.25	0.16	-0.25 [-0.56, 0.06]	
Nakimulli 2013	-0.25	0.1	-0.25 [-0.45, -0.05]	-
Birbeck 2011		0.101	-0.24 [-0.44, -0.04]	
Fatima 2 2013	-0.24	0.2	-0.24 [-0.63, 0.15]	
Brown 2013	-0.23	0.19	-0.23 [-0.60, 0.14]	
Peretti 3 2006 Finnocchario 2011	-0.22	0.101 0.161	-0.22 [-0.42, -0.02] -0.22 [-0.54, 0.10]	
Adewuya 2010	-0.22	0.101	-0.22 [-0.54, 0.10]	
Falang 2012	-0.21	0.101	-0.20 [-0.40, -0.00]	<u> </u>
Gokarn 2012	-0.19	0.14	-0.19 [-0.46, 0.08]	-
Bottonari 2012	-0.19		-0.19 [-0.47, 0.09]	- + +
Boyer 2011	-0.18	0.04	-0.18 [-0.26, -0.10]	+
Silva 2009	-0.17	0.1	-0.17 [-0.37, 0.03]	
Trasher 2008	-0.16	0.05	-0.16 [-0.26, -0.06]	+
Cauldbeck 2009	-0.16	0.281	-0.16 [-0.71, 0.39]	
Uuskula 2012	-0.16		-0.16 [-0.48, 0.16]	
Pinheiro 2002	-0.16	0.14	-0.16 [-0.43, 0.11]	
Simoni 2012	-0.16	0.04	-0.16 [-0.24, -0.08]	<u>+</u>
Peretti 1 2006	-0.15	0.08	-0.15 [-0.31, 0.01]	
Raboud 2011	-0.15	0.1	-0.15 [-0.35, 0.05]	
Wagner 2011	-0.14	0.14	-0.14 [-0.41, 0.13]	
Parruti 2006	-0.14	0.16	-0.14 [-0.45, 0.17]	
Franke 2010	-0.14	0.46	-0.14 [-1.04, 0.76]	• 1

Johnson 2003	-0.13	0.04	-0.13 [-0.21, -0.05]	+
Tiyou 2010	-0.12	0.12	-0.12 [-0.36, 0.12]	-
Gibbie 2007	-0.1	0.24	-0.10 [-0.57, 0.37]	!
Leserman 2008	-0.09	0.2	-0.09 [-0.48, 0.30]	
Lazo 2 2007	-0.08	0.06	-0.08 [-0.20, 0.04]	!
Weaver 2005	-0.08	0.12	-0.08 [-0.32, 0.16]	-!-
Gao 2000	-0.08	0.24	-0.08 [-0.55, 0.39]	
Ukwe 2010	-0.07	0.12	-0.07 [-0.31, 0.17]	-! -
Protopopescu 2009	-0.06	0.06	-0.06 [-0.18, 0.06]	!
Frain 2009	-0.06	0.24	-0.06 [-0.53, 0.41]	
Garcia 2006	-0.06	0.14	-0.06 [-0.33, 0.21]	-!-
Huynh 2013	-0.06	0.17	-0.06 [-0.39, 0.27]	- !-
Li 2010	-0.05	0.1	-0.05 [-0.25, 0.15]	-
Dilorio 2007	-0.02	0.22	-0.02 [-0.45, 0.41]	<u> </u>
Gay 2011	-0.01	0.12	-0.01 [-0.25, 0.23]	
Sayles 2009	-0.01	0.17	-0.01 [-0.34, 0.32]	
Juday 2011	-0.01	0.1	-0.01 [-0.21, 0.19]	
Kamau 2011	0	0.1	0.00 [-0.20, 0.20]	
Anuradha 2012	0	0.12	0.00 [-0.24, 0.24]	
Oyugi 2007	0	0.2	0.00 [-0.39, 0.39]	
Wang 2007	0	0.19	0.00 [-0.37, 0.37]	
Gonzalez 2004	0	0.22	0.00 [-0.43, 0.43]	
Bianco 2011	0	0.12	0.00 [-0.24, 0.24]	
Eholie 2007	0	0.13	0.00 [-0.25, 0.25]	
Tadios 2006	0	0.12	0.00 [-0.24, 0.24]	
Safren 2005	0	0.13	0.00 [-0.25, 0.25]	
Do 2010	0	0.15	0.00 [-0.29, 0.29]	
Holzemer 1999	0	0.1	0.00 [-0.20, 0.20]	
Remien 2007	0	0.2	0.00 [-0.39, 0.39]	
Wagner 2002	0	0.26	0.00 [-0.51, 0.51]	
Heckman 2004	0	0.12	0.00 [-0.24, 0.24]	
Vyavaharkar 2007	0	0.14	0.00 [-0.27, 0.27]	
Gonzalez 2007	0	0.12	0.00 [-0.24, 0.24]	
Orrell 2003	0	0.12	0.00 [-0.24, 0.24]	
Peltzer 2010	0	0.11	0.00 [-0.22, 0.22]	
Chesney 2000	0	0.24	0.00 [-0.47, 0.47]	
Kerr 2012	0	0.12	0.00 [-0.24, 0.24]	
Catz 2000	0	0.24	0.00 [-0.47, 0.47]	
Rodrigues 2012	0.001	0.24	0.00 [-0.47, 0.47]	
Kalichman 2010	0.01	0.14	0.01 [-0.26, 0.28]	
Dortz 2003	0.01	0.3	0.01 [-0.58, 0.60]	
Servellen 2002	0.04	0.14	0.04 [-0.23, 0.31]	-
Sherr 2010	0.05	0.1	0.05 [-0.15, 0.25]	-
Kalichman 1999	0.06	0.14	0.06 [-0.21, 0.33]	-
Busher 2012	0.14	0.2	0.14 [-0.25, 0.53]	-
Shah 2007	0.18	0.14	0.18 [-0.09, 0.45]	
Kumar 2009	0.2	0.06	0.20 [0.08, 0.32]	
Brigido 2001		0.342	0.23 [-0.44, 0.90]	-
Elul 2013	0.27	0.06	0.27 [0.15, 0.39]	+
Venkatesh 2010		0.142	0.33 [0.05, 0.61]	
Sellier 2006	1.64	0.32	1.64 [1.01, 2.27]	
				-1 -0.5 0 0.5 1
				Lower adherence Higher adherence
				_

Pill burden

			Std. Mean Difference	Std. Mean Difference
Study or Subgroup	Std. Mean Difference	SE	Weight IV, Random, 95% CI	IV, Random, 95% CI
Carmody 2003	-1.07	0.36	-1.07 [-1.78, -0.36]	
Cauldbeck 2009	-0.76	0.3	-0.76 [-1.35, -0.17]	
Kleeberger 2001	-0.54		-0.54 [-0.70, -0.38]	
Brown 2013	-0.53	0.19	-0.53 [-0.90, -0.16]	
Carballo 2004	-0.45	0.15	-0.45 [-0.74, -0.16]	
Cahn 2004	-0.44	0.123	-0.44 [-0.68, -0.20]	
Bonolo 2005	-0.41	0.12	-0.41 [-0.65, -0.17]	
Wasti 2012	-0.4		-0.40 [-0.64, -0.16]	
Sullivan 2007	-0.37	0.02	-0.37 [-0.41, -0.33]	<u> </u>
Juday 2011	-0.35		-0.35 [-0.59, -0.11]	
Gonzalez 2007		0.182	-0.34 [-0.70, 0.02]	
Diabate 2007	-0.3	0.09	-0.30 [-0.48, -0.12]	
Horne 2007	-0.28	0.182	-0.28 [-0.64, 0.08]	
Fatima 1 2013 Aragones 2011	-0.24 -0.22	0.16 0.08	-0.24 [-0.55, 0.07] -0.22 [-0.38, -0.06]	
Busher 2012	-0.22	0.00	-0.22 [-0.61, 0.17]	
Fong 2003	-0.21	0.2	-0.21 [-0.60, 0.18]	
Silva 2009	-0.2	0.1	-0.20 [-0.40, -0.00]	<u> </u>
Maggiolo 2002	-0.19	0.08	-0.19 [-0.35, -0.03]	-
Parutti 2006	-0.18	0.161	-0.18 [-0.50, 0.14]	
Weaver 2005	-0.16	0.12	-0.16 [-0.40, 0.08]	
Nakimulli 2013	-0.16	0.1	-0.16 [-0.36, 0.04]	
Woods 2009	-0.14	0.221	-0.14 [-0.57, 0.29]	+
Lazo 2 2007	-0.12	0.06	-0.12 [-0.24, -0.00]	
Fatima 2 2013	-0.11	0.19	-0.11 [-0.48, 0.26]	
Protopopescu 2009	-0.1	0.06	-0.10 [-0.22, 0.02]	
Lazo 1 2007	-0.1	0.08	-0.10 [-0.26, 0.06]	++
Pratt 2001	-0.09	0.12	-0.09 [-0.33, 0.15]	
Sellier 2006	-0.07	0.28	-0.07 [-0.62, 0.48]	
Gianotti 2012	-0.06	0.06	-0.06 [-0.18, 0.06]	-
Boyer 2011	-0.04	0.04	-0.04 [-0.12, 0.04]	
Gay 2011	-0.04	0.12	-0.04 [-0.28, 0.20]	
Johnson 2003 OConnor 2013	-0.03 -0.02	0.04 0.03	-0.03 [-0.11, 0.05]	<u>.</u>
Kerr 2012	-0.02	0.03	-0.02 [-0.08, 0.04] 0.00 [-0.24, 0.24]	
Gifford 2000	0	0.12	0.00 [-0.24, 0.24]	
Mellins 2003	0	0.26	0.00 [-0.51, 0.51]	
Nilsson 2006	Ō	0.16	0.00 [-0.31, 0.31]	
Do 2010	0	0.15	0.00 [-0.29, 0.29]	
Mannheimer 2002	0	0.06	0.00 [-0.12, 0.12]	
Wagner 2002	0	0.26	0.00 [-0.51, 0.51]	
Gauchet 2007	0	0.18	0.00 [-0.35, 0.35]	
Catz 2000	0	0.24	0.00 [-0.47, 0.47]	
Cardarelli 2008	0	0.2	0.00 [-0.39, 0.39]	
Gonzalez 2004	0	0.22	0.00 [-0.43, 0.43]	
Campbell 2010	0	0.31	0.00 [-0.61, 0.61]	
Stirratt 2006	0.04	0.14	0.04 [-0.23, 0.31]	
Uuskula 2012	0.05	0.16	0.05 [-0.26, 0.36]	
Golin 2002	0.06	0.18	0.06 [-0.29, 0.41]	
Poquette 2013	0.07	0.25	0.07 [-0.42, 0.56]	
Rintamaki 2006 Saguy 2 2007	0.08 0.09	0.14	0.08 [-0.19, 0.35] 0.09 [-0.11, 0.29]	
Seguy 2 2007 Thrasher 2008	0.09	0.1 0.04	0.09 [-0.11, 0.29]	<u>;</u>
Falang 2012	0.14	0.04	0.14 [-0.06, 0.34]	
Seguy 1 2007	0.19	0.14	0.19 [-0.08, 0.46]	+
Shah 2007	0.3	0.14	0.30 [0.03, 0.57]	
Colbert 2013	0.45	0.19	0.45 [0.08, 0.82]	
	2.10	2	[]	
				'-1 -0'.5 0 0'.5 1' Lower adherence Higher adherence

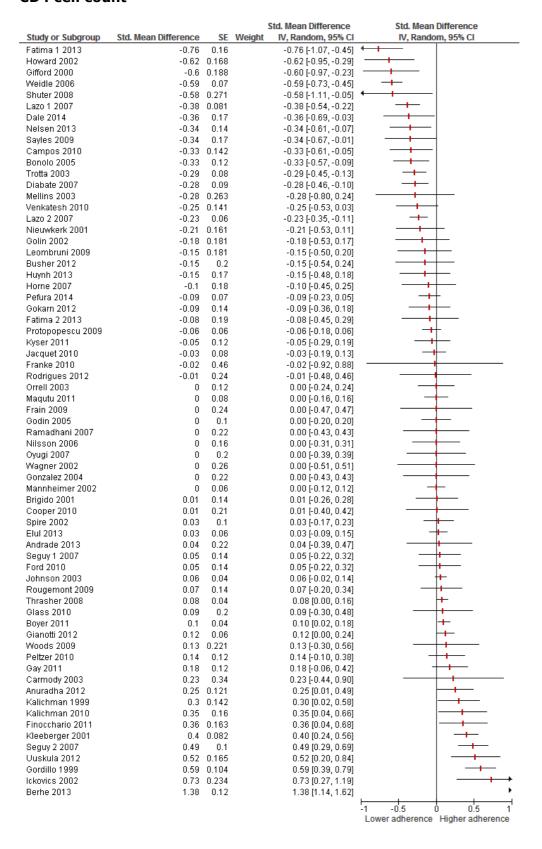
Study or Subgroup Std. Mean Difference SE Weight IV, Random, 95% CI IV, Random, 95% CI Ladefoged 2012 -1.04 0.33 -1.04 [-1.69, -0.39]	
Nozaki 2011 -0.5 0.15 -0.50 [-0.79, -0.21]	
Alakija 2010 -0.46 0.123 -0.46 [0.70, -0.22]	
Wasti 2012 -0.4 0.122 -0.40 [-0.64, -0.16]	
Dortz 2003 -0.38 0.3 -0.38 [-0.97, 0.21] + McAllister 2013 -0.22 0.11 -0.22 [-0.44, -0.00] +	
McAllister 2013 -0.22 0.11 -0.22 [-0.44, -0.00]	
Brigido 2001 -0.16 0.14 -0.16 [-0.43, 0.11]	
Sasaki 2012 -0.16 0.16 -0.16 [-0.47, 0.15]	
Yun 2005 -0.15 0.08 -0.15 [-0.31, 0.01]	
Weidle 2006 -0.12 0.06 -0.12 [-0.24, -0.00]	
Seguy 1 2007 -0.11 0.14 -0.11 [-0.38, 0.16]	
Seguy 2 2007 -0.11 0.1 -0.11 [-0.31, 0.09]	
Mollassiotis 2002 -0.09 0.18 -0.09 [-0.44, 0.26]	
Kacanek 2010 -0.08 0.15 -0.08 [0.37, 0.21]	
Campos 2010 -0.08 0.12 -0.08 [-0.32, 0.16]	
Glass 2010 -0.07 0.02 -0.07 [-0.11, -0.03] +	
Singh 1999 -0.06 0.24 -0.06 [-0.53, 0.41]	
Brown 2013 -0.05 0.19 -0.05 [-0.42, 0.32]	
Ammassari 2004 -0.04 0.18 -0.04 [-0.39, 0.31]	
Gao 2000 -0.02 0.24 -0.02 [-0.49, 0.45]	
Orell 2003 -0.02 0.12 -0.02 [-0.26, 0.22]	
King 2012 -0.02 0.11 -0.02 [-0.24, 0.20]	
Magutu 2011 -0.01 0.08 -0.01 [-0.17, 0.15]	
Peltzer 2010 -0.01 0.11 -0.01 [-0.23, 0.21]	
Gianotti 2012 -0.01 0.06 -0.01 [-0.13, 0.11]	
Rodriques 2012 -0.01 0.24 -0.01 [-0.48, 0.46]	
Garcia 2006 0 0.14 0.00 [-0.27, 0.27]	
Safren 2005 0 0.13 0.00 [-0.25, 0.25]	
Eholie 2007 0 0.13 0.00 [-0.25, 0.25]	
Silva 2009 0 0.1 0.00 [-0.20, 0.20]	
Oyugi 2007 0 0.2 0.00 [-0.39, 0.39]	
Kamau 2011 0 0.1 0.00 [-0.20, 0.20] Ukwe 2010 0 0.12 0.00 [-0.24, 0.24]	
Duong 2001 0 0.26 0.00 [-0.51, 0.51]	
Remien 2007 0 0.2 0.00 [-0.39, 0.39]	
Ramadhani 2007 0 0.22 0.00 [-0.43, 0.43]	
Do 2010 0 0.15 0.00 [-0.29, 0.29]	
Tadios 2006 0 0.12 0.00 [-0.24, 0.24]	
Power 2003 0 0.27 0.00 [-0.53, 0.53]	
Giday 2010 0 0.14 0.00 [-0.27, 0.27]	
Wang 2007 0 0.19 0.00 [-0.37, 0.37]	_
Simoni 2002 0 0.3 0.00 [-0.59, 0.59]	
Nilsson 2006 0 0.16 0.00 [-0.31, 0.31]	
Vyavaharkar 2007 0 0.14 0.00 [-0.27, 0.27]	
Gifford 2000 0 0.18 0.00 [-0.35, 0.35]	
Gay 2011 0 0.12 0.00 [-0.24, 0.24]	
Holzemer 1999 0 0.1 0.00 [-0.20, 0.20]	
Pinheiro 2002 0 0.14 0.00 [-0.27, 0.27]	
Godin 2005 0 0.1 0.00 [-0.20, 0.20]	
Kerr 2012 0 0.12 0.00 [-0.24, 0.24] Haubrich 1999 0 0.16 0.00 [-0.31, 0.31]	
Haubrich 1999 0 0.16 0.00 [-0.31, 0.31]	
Cahn 2004 0 0.12 0.00 [-0.24, 0.24]	
Heckman 2004 0 0.12 0.00 [-0.24, 0.24]	
Mathews 2002 0 0.16 0.00 [-0.31, 0.31]	
Li 2010 0.01 0.1 0.01 [-0.19], 0.21]	
Gibbie 2007 0.01 0.24 0.01 [-0.46, 0.48]	
Parutti 2006 0.01 0.16 0.01 [-0.30, 0.32]	
Kleeberger 2001 0.01 0.08 0.01 [-0.15, 0.17]	
Unge 2010 0.01 0.1 0.01 [-0.19, 0.21]	
Venkatesh 2010 0.01 0.14 0.01 [-0.26, 0.28] Sodergard 2006 0.02 0.07 0.02 [-0.12, 0.16]	
Leserman 2008 0.02 0.07 0.02 [0.12, 0.16]	
Cooper 2010 0.02 0.21 0.02 [-0.39, 0.43]	
Franke 2010 0.02 0.46 0.02 [-0.88, 0.92]	
Jacquet 2010 0.03 0.08 0.03 [-0.13, 0.19]	
Dilorio 2007 0.03 0.32 0.03 [-0.60, 0.66]	
Thrasher 2008 0.05 0.04 0.05 [-0.03, 0.13] †	

E			I.
Blackstock 2012 Boyer 2011	0.06 0.16 0.06 0.04	0.06 [-0.25, 0.37]	
Fatima 1 2013	0.06 0.16	0.06 [-0.02, 0.14] 0.06 [-0.25, 0.37]	
Sumari 2011	0.07 0.14	0.07 [-0.20, 0.34]	-
Etard 2007	0.07 0.19	0.07 [-0.30, 0.44]	-
OConnor 2013	0.07 0.03	0.07 [0.01, 0.13]	†
Uuskula 2012 Murahy 2004	0.07 0.16	0.07 [-0.24, 0.38]	
Murphy 2004 Colbert 2013	0.08 0.18 0.08 0.19	0.08 [-0.27, 0.43] 0.08 [-0.29, 0.45]	
Sellier 2006	0.08 0.28	0.08 [-0.47, 0.63]	
Gordillo 1999	0.09 0.1	0.09 [-0.11, 0.29]	+-
Cambiano 2010	0.09 0.04	0.09 [0.01, 0.17]	
Lazo 2 2007	0.1 0.06	0.10 [-0.02, 0.22]	
Oku 2014 Rintamaki 2006	0.11 0.1 0.11 0.14	0.11 [-0.09, 0.31] 0.11 [-0.16, 0.38]	
Adewuya 2010	0.12 0.17	0.12 [-0.21, 0.45]	
Johnson 2003	0.13 0.04	0.13 [0.05, 0.21]	+
Anuradha 2012	0.13 0.12	0.13 [-0.11, 0.37]	
Kalichman 2010 Mellins 2003	0.14 0.14 0.14 0.261	0.14 [-0.13, 0.41] 0.14 [-0.37, 0.65]	
Nakimulli 2013	0.16 0.1	0.16 [-0.04, 0.36]	
Sayles 2009	0.17 0.17	0.17 [-0.16, 0.50]	-
Fatima 2 2013	0.18 0.2	0.18 [-0.21, 0.57]	 !
Simoni 2012	0.18 0.04 0.18 0.2	0.18 [0.10, 0.26] 0.18 [-0.21, 0.57]	
Fong 2003 Aragones 2011	0.19 0.08	0.19 [0.03, 0.35]	<u> </u>
Murri 2001	0.19 0.181	0.19 [-0.16, 0.54]	- - -
Feldman 2013	0.2 0.04	0.20 [0.12, 0.28]	+
Andrade 2013	0.2 0.22	0.20 [-0.23, 0.63]	
Sherr 2008 Servellen 2002	0.2 0.08 0.2 0.141	0.20 [0.04, 0.36] 0.20 [-0.08, 0.48]	
Mannheimer 2002	0.2 0.141	0.20 [0.08, 0.32]	
Ford 2010	0.2 0.141	0.20 [-0.08, 0.48]	+
Bianco 1 2011	0.2 0.161	0.20 [-0.12, 0.52]	+ + -
Woods 2009	0.2 0.221 0.21 0.12	0.20 [-0.23, 0.63]	
Kyser 2011 Sullivan 2007	0.21 0.12 0.21 0.02	0.21 [-0.03, 0.45] 0.21 [0.17, 0.25]	, ·
Mugavero 2009	0.21 0.121	0.21 [-0.03, 0.45]	
Malow 2013	0.22 0.14	0.22 [-0.05, 0.49]	
Juday 2011	0.22 0.101	0.22 [0.02, 0.42]	
Finnocchario 2011 Luszczynska 2007	0.22 0.161 0.22 0.201	0.22 [-0.10, 0.54] 0.22 [-0.17, 0.61]	
Peretti 1 2006	0.23 0.08	0.23 [0.07, 0.39]	
Boarts 2006	0.23 0.27	0.23 [-0.30, 0.76]	
Gauchet 2007	0.23 0.181	0.23 [-0.12, 0.58]	
Raboud 2011 Nakimuli 2009	0.24 0.1 0.24 0.2	0.24 [0.04, 0.44] 0.24 [-0.15, 0.63]	
Moralejo 2006	0.25 0.161	0.25 [-0.07, 0.57]	
Trotta 2003	0.26 0.08	0.26 [0.10, 0.42]	
Peretti 2 2006	0.27 0.081	0.27 [0.11, 0.43]	—
Lazo 1 2007 Shuter 2008	0.27 0.081 0.27 0.263	0.27 [0.11, 0.43] 0.27 [-0.25, 0.79]	
Kalichman 1999	0.28 0.141	0.28 [0.00, 0.56]	
Diabate 2007	0.29 0.09	0.29 [0.11, 0.47]	
Falang 2012	0.29 0.101	0.29 [0.09, 0.49]	
Wagner 2011 Schneider 2004	0.3 0.142 0.3 0.09	0.30 [0.02, 0.58] 0.30 [0.12, 0.48]	- i -
Duggan 2009	0.3 0.182	0.30 [-0.06, 0.66]	+
Howard 2002	0.31 0.162	0.31 [-0.01, 0.63]	-
Kumar 2009	0.31 0.061	0.31 [0.19, 0.43]	
Spire 2002 Peretti 3 2006	0.32 0.101 0.33 0.101	0.32 [0.12, 0.52] 0.33 [0.13, 0.53]	-
Cardarelli 2008	0.34 0.203	0.34 [-0.06, 0.74]	+
Gonzalez 2007	0.34 0.122	0.34 [0.10, 0.58]	-
Bottonari 2012	0.37 0.143	0.37 [0.09, 0.65] 0.38 [-0.06, 0.82]	
Bianco 2 2011 Golin 2002	0.38 0.224 0.38 0.183	0.38 [0.02, 0.74]	
Sherr 2010	0.42 0.102	0.42 [0.22, 0.62]	
Hansana 2013	0.42 0.11	0.42 [0.20, 0.64]	
Leombruni 2009	0.42 0.184	0.42 [0.06, 0.78]	
Weaver 2005 Gokarn 2012	0.43 0.123 0.47 0.14	0.43 [0.19, 0.67] 0.47 [0.20, 0.74]	-
Kunutsor 2010	0.47 0.11	0.47 [0.25, 0.69]	
Ettenhofer 2009	0.51 0.1	0.51 [0.31, 0.71]	
Paterson 2000	0.52 0.27	0.52 [-0.01, 1.05]	
Gonzalez 2004 Carballo 2004	0.52 0.227 0.54 0.13	0.52 [0.08, 0.96] 0.54 [0.29, 0.79]	
Poquette 2013	0.56 0.25	0.54 [0.29, 0.79]	
Shah 2007	0.56 0.14	0.56 [0.29, 0.83]	
Ickovics 2002	0.59 0.229	0.59 [0.14, 1.04]	
Carmody 2003 Nieuwkerk 2001	0.6 0.35 0.63 0.168	0.60 [-0.09, 1.29] 0.63 [0.30, 0.96]	
Cauldbeck 2009	0.79 0.302	0.79 [0.20, 1.38]	` →
Horne 2007	0.8 0.194	0.80 [0.42, 1.18]	
Wagner 2002	0.84 0.282	0.84 [0.29, 1.39]	
			-1 -0.5 0 0.5 1
			Lower adherence Higher adherence

Time since HIV diagnosis

			Std. Mean Difference	Std. Mean Difference
Study or Subgroup	Std. Mean Difference		Weight IV, Random, 95% CI	IV, Random, 95% CI
Fong 2003	-0.77	0.2	-0.77 [-1.16, -0.38]	
Cauldbeck 2009	-0.68	0.296	-0.68 [-1.26, -0.10]	
Holstad 2006	-0.47		-0.47 [-0.83, -0.11]	
Huynh 2013	-0.47	0.18	-0.47 [-0.82, -0.12]	
Bonolo 2005	-0.45	0.12	-0.45 [-0.69, -0.21]	
Horne 2007		0.184	-0.44 [-0.80, -0.08]	
Weaver 2005	-0.41	0.122	-0.41 [-0.65, -0.17]	-
Gauchet 2007		0.183	-0.38 [-0.74, -0.02]	<u> </u>
Blackstock 2012		0.163	-0.36 [-0.68, -0.04]	-
Glass 2010	-0.35	0.02	-0.35 [-0.39, -0.31]	+
Kyser 2011	-0.32	0.12	-0.32 [-0.56, -0.08]	
Woods 2009	-0.32	0.223	-0.32 [-0.76, 0.12]	
Silva 2009	-0.31	0.1	-0.31 [-0.51, -0.11]	
Carballo 2004	-0.27	0.13	-0.27 [-0.52, -0.02]	
Leombruni 2009	-0.25	0.181	-0.25 [-0.60, 0.10]	- + -
Kalichman 2008	-0.23	0.19	-0.23 [-0.60, 0.14]	
Adewuya 2010	-0.22	0.17	-0.22 [-0.55, 0.11]	- + -
Tedaldi 2012	-0.22	0.09	-0.22 [-0.40, -0.04]	
Seguy 2 2007	-0.2	0.1	-0.20 [-0.40, -0.00]	
Bianco 2 2011	-0.2	0.221	-0.20 [-0.63, 0.23]	
Nelsen 2013	-0.2	0.14	-0.20 [-0.47, 0.07]	
Golin 2002	-0.18	0.181	-0.18 [-0.53, 0.17]	- +
Juday 2011	-0.17	0.1	-0.17 [-0.37, 0.03]	-
Peretti 1 2006	-0.13	0.08	-0.13 [-0.29, 0.03]	
Sayles 2009	-0.11	0.17	-0.11 [-0.44, 0.22]	- + -
Sasaki 2012	-0.1	0.16	-0.10 [-0.41, 0.21]	
Peretti 2 2006	-0.1	0.08	-0.10 [-0.26, 0.06]	-++
Wagner 2011	-0.08	0.14	-0.08 [-0.35, 0.19]	-
Raboud 2011	-0.06	0.1	-0.06 [-0.26, 0.14]	
Aragones 2011	-0.04	0.08	-0.04 [-0.20, 0.12]	
Kalichman 1999	-0.03	0.14	-0.03 [-0.30, 0.24]	
Spire 2002	-0.03	0.1	-0.03 [-0.23, 0.17]	
Godin 2005	0	0.1	0.00 [-0.20, 0.20]	
Gonzalez 2007	0	0.12	0.00 [-0.24, 0.24]	
Thrasher 2008	Ō	0.04	0.00 [-0.08, 0.08]	+
Nilsson 2006	0	0.16	0.00 [-0.31, 0.31]	
Barclay 2007	Ō	0.14	0.00 [-0.27, 0.27]	
Simoni 2002	0	0.3	0.00 [-0.59, 0.59]	
Kerr 2012	Ō	0.12	0.00 [-0.24, 0.24]	
Mollassiotis 2002	Ō	0.18	0.00 [-0.35, 0.35]	
Catz 2000	0	0.24	0.00 [-0.47, 0.47]	
Eholie 2007	Ō	0.13	0.00 [-0.25, 0.25]	
Gonzalez 2004	Ō	0.22	0.00 [-0.43, 0.43]	
Boyer 2011	Ō	0.04	0.00 [-0.08, 0.08]	+
Rodrigues 2012	0.01	0.24	0.01 [-0.46, 0.48]	
Sumari 2011	0.02	0.14	0.02 [-0.25, 0.29]	
Li 2010	0.03	0.14	0.03 [-0.17, 0.23]	
Johnson 2003	0.06	0.04	0.06 [-0.02, 0.14]	[-
Mellins 2003	0.08	0.26	0.08 [-0.43, 0.59]	
Uuskula 2012	0.00	0.26	0.08 [-0.43, 0.59]	<u> </u>
Peretti 3 2006	0.11	0.10	0.12 [-0.08, 0.32]	
	0.12			<u> </u>
Protopopescu 2009		0.06	0.13 [0.01, 0.25]	<u> </u>
Seguy 1 2007	0.13	0.14	0.13 [-0.14, 0.40]	
Gay 2011	0.13	0.12	0.13 [-0.11, 0.37]	
Hansana 2013	0.14	0.11	0.14 [-0.08, 0.36]	
Bianco 1 2011	0.16	0.161	0.16 [-0.16, 0.48]	
Peltzer 2010	0.57	0.12	0.57 [0.33, 0.81]	
				-1 -0.5 0 0.5 1 Lower adherence Higher adherence

CD4 cell count



Male gender

				Std. Mean Difference	Std. Mean Difference
Study or Subgroup	Std. Mean Difference		Weight	IV, Random, 95% CI	IV, Random, 95% CI
Ramadhani 2007	-1.99	0.25		-1.99 [-2.48, -1.50]	1
Woods 2009	-0.73			-0.73 [-1.19, -0.27]	
Busher 2012	-0.62	0.21		-0.62 [-1.03, -0.21]	<u>'</u>
Tedaldi 2012	-0.58	0.09		-0.58 [-0.76, -0.40]	 _
Sasaki 2012	-0.47	0.16		-0.47 [-0.78, -0.16]	
Gauchet 2007	-0.45			-0.45 [-0.81, -0.09]	
Fong 2003	-0.43	0.2		-0.43 [-0.82, -0.04]	
Finnocchario 2011	-0.38			-0.38 [-0.70, -0.06]	<u>'.</u>
Weidle 2006	-0.35	0.06		-0.35 [-0.47, -0.23]	<u> </u>
Nelsen 2013	-0.35	0.14		-0.35 [-0.62, -0.08]	
Ladefoged 2012 Rougemont 2009	-0.34	0.32		-0.34 [-0.97, 0.29]	
-	-0.33 -0.3			-0.33 [-0.61, -0.05] -0.30 [-0.52, -0.08]	<u> </u>
King 2012 Bell 2007		0.11 0.263		-0.28 [-0.80, 0.24]	
Pinheiro 2002	-0.28			-0.28 [-0.56, -0.00]	
Poquette 2013	-0.26	0.141		-0.26 [-0.75, 0.23]	
Kamau 2011		0.101		-0.25 [-0.45, -0.05]	<u> </u>
Adewuya 2010	-0.24	0.17		-0.24 [-0.57, 0.09]	
Negash 2013	-0.22	0.12		-0.22 [-0.46, 0.02]	
Cooper 2010	-0.21	0.22		-0.21 [-0.64, 0.22]	
Protopopescu 2009	-0.19	0.06		-0.19 [-0.31, -0.07]	<u> </u>
Gokarn 2012	-0.18	0.14		-0.18 [-0.45, 0.09]	-
Shuter 2008	-0.18			-0.18 [-0.69, 0.33]	
Blackstock 2012		0.161		-0.18 [-0.50, 0.14]	
Brigido 2001		0.141		-0.17 [-0.45, 0.11]	
Dortz 2003	-0.17	0.3		-0.17 [-0.76, 0.42]	
Uuskula 2012		0.161		-0.16 [-0.48, 0.16]	-
Venkatesh 2010	-0.14	0.14		-0.14 [-0.41, 0.13]	- + -
Boyer 2011	-0.13	0.04		-0.13 [-0.21, -0.05]	+
Pefura 2013	-0.11	0.07		-0.11 [-0.25, 0.03]	
Juday 2011	-0.1	0.1		-0.10 [-0.30, 0.10]	
Graham 2007	-0.09	0.21		-0.09 [-0.50, 0.32]	
Seguy 1 2007	-0.09	0.14		-0.09 [-0.36, 0.18]	
Ford 2010	-0.08	0.14		-0.08 [-0.35, 0.19]	
Garcia 2009	-0.08	0.14		-0.08 [-0.35, 0.19]	
Mugavero 2009	-0.07	0.12		-0.07 [-0.31, 0.17]	
Etienne 2010	-0.07	0.07		-0.07 [-0.21, 0.07]	-++
Kalichman 2010	-0.07	0.14		-0.07 [-0.34, 0.20]	- +-
Li 2010	-0.04	0.1		-0.04 [-0.24, 0.16]	
Pratt 2001	-0.03	0.12		-0.03 [-0.27, 0.21]	
Jacquet 2010	-0.02	0.08		-0.02 [-0.18, 0.14]	
Parruti 2006	-0.02	0.16		-0.02 [-0.33, 0.29]	
Orell 2003	0	0.12		0.00 [-0.24, 0.24]	
Giday 2010	0	0.14		0.00 [-0.27, 0.27]	
Silva 2009	0	0.1		0.00 [-0.20, 0.20]	
Remien 2007	0	0.2		0.00 [-0.39, 0.39]	
Barclay 2007	0	0.14		0.00 [-0.27, 0.27]	
Gonzalez 2004	0	0.22		0.00 [-0.43, 0.43]	
Murphy 2004	0	0.19		0.00 [-0.37, 0.37]	
Mathews 2002	0	0.16		0.00 [-0.31, 0.31]	
Seguy 2 2007	0	0.1		0.00 [-0.20, 0.20]	
Do 2010	0	0.15		0.00 [-0.29, 0.29]	
Eholie 2007	0	0.13		0.00 [-0.25, 0.25]	
Wang 2007	0	0.19		0.00 [-0.37, 0.37]	
Haubrich 1999	0	0.16		0.00 [-0.31, 0.31]	
Power 2003	0	0.27		0.00 [-0.53, 0.53]	
Murri 2001	0	0.18		0.00 [-0.35, 0.35]	
Nilsson 2006	0	0.16		0.00 [-0.31, 0.31]	
Safren 2005	0	0.13		0.00 [-0.25, 0.25]	
Catz 2000	0	0.24		0.00 [-0.47, 0.47]	
Heckman 2004	0	0.12		0.00 [-0.24, 0.24]	
Holzemer 1999	0	0.1		0.00 [-0.20, 0.20]	
Oyugi 2007 Mannheimer 2002	0	0.2		0.00 [-0.39, 0.39]	
	0	0.06		0.00 [-0.12, 0.12]	
Simoni 2002 Kerr 2012	0	0.3 0.12		0.00 [-0.59, 0.59] 0.00 [-0.24, 0.24]	
kerr 2012 Ingersoll 2004	0	0.12		0.00 [-0.24, 0.24]	
Mollassiotis 2002	0	0.18		0.00 [-0.35, 0.35]	
	·	0.10		0.00 [0.00, 0.00]	I

McAllister 2013	0.001	0.11	0.00 [-0.21, 0.22]	
Kunutsor 2010	0.01	0.11	0.01 [-0.21, 0.23]	
Dilorio 2007	0.02	0.13	0.02 [-0.23, 0.27]	
Elul 2013	0.03	0.06	0.03 [-0.09, 0.15]	
				i.
Spire 2002	0.04	0.1	0.04 [-0.16, 0.24]	- -
Ammassari 2004	0.04	0.18	0.04 [-0.31, 0.39]	
Rintamaki 2006	0.05	0.14	0.05 [-0.22, 0.32]	<u> </u>
Wanchu 2006	0.06	0.16	0.06 [-0.25, 0.37]	-
Peltzer 2010	0.07	0.13	0.07 [-0.18, 0.32]	'
Ferguson 2002	0.07	0.16	0.07 [-0.24, 0.38]	
OConnor 2013	0.08	0.03		+
			0.08 [0.02, 0.14]	:
Etard 2007	0.08	0.17	0.08 [-0.25, 0.41]	
Bottonari 2012	0.08	0.14	0.08 [-0.19, 0.35]	
Holstad 2006	0.08	0.18	0.08 [-0.27, 0.43]	
Bianco 2011	0.08	0.12	0.08 [-0.16, 0.32]	- +
Golin 2002				
	0.09	0.18	0.09 [-0.26, 0.44]	'
Anuradha 2012	0.09	0.12	0.09 [-0.15, 0.33]	
Johnson 2003	0.09	0.04	0.09 [0.01, 0.17]	 +-
				1:
Aragones 2011	0.09	0.08	0.09 [-0.07, 0.25]	
Sherr 2010	0.09	0.1	0.09 [-0.11, 0.29]	
Cauldbeck 2009	0.1	0.28	0.10 [-0.45, 0.65]	<u>'</u>
Falang 2012	0.1	0.1	0.10 [-0.10, 0.30]	++-
=				
Colbert 2013	0.11	0.19	0.11 [-0.26, 0.48]	
Simoni 2012	0.12	0.04	0.12 [0.04, 0.20]	+
Feldman 2013	0.12	0.04	0.12 [0.04, 0.20]	+
				1:
Nakimuli 2009	0.13	0.2	0.13 [-0.26, 0.52]	 -
Servellen 2002	0.13	0.14	0.13 [-0.14, 0.40]	- - - - - - - - - -
				<u> </u>
Nakimulli 2013	0.14	0.1	0.14 [-0.06, 0.34]	
Glass 2010	0.19	0.02	0.19 [0.15, 0.23]	+
Moralejo 2006	0.2	0.161		
•			0.20 [-0.12, 0.52]	
Raboud 2011	0.2	0.1	0.20 [0.00, 0.40]	
Ubbiali 2008	0.23	0.101	0.23 [0.03, 0.43]	
Ukwe 2010	0.24	0.121	0.24 [0.00, 0.48]	
Thrasher 2008	0.25	0.04	0.25 [0.17, 0.33]	+
Nieuwkerk 2001	0.26			
		0.161	0.26 [-0.06, 0.58]	
Kumar 2009	0.27	0.061	0.27 [0.15, 0.39]	—
Yun 2005	0.27	0.081	0.27 [0.11, 0.43]	- -
Oku 2014	0.27	0.1	0.27 [0.07, 0.47]	
Luszczynska 2007	0.28	0.202	0.28 [-0.12, 0.68]	
	0.29	0.12		
Kyser 2011			0.29 [0.05, 0.53]	
Cahn 2004	0.3	0.121	0.30 [0.06, 0.54]	
Leombruni 2009	0.3	0.182	0.30 [-0.06, 0.66]	+
Nozaki 2011	0.31	0.15	0.31 [0.02, 0.60]	
Tiyou 2010	0.31	0.122	0.31 [0.07, 0.55]	
Rodrigues 2012	0.32	0.24	0.32 [-0.15, 0.79]	
Kalichman 1999	0.32	0.142	0.32 [0.04, 0.60]	
Birbeck 2011	0.32	0.101	0.32 [0.12, 0.52]	
Cardarelli 2008	0.34	0.203	0.34 [-0.06, 0.74]	
Campos 2010	0.35	0.122	0.35 [0.11, 0.59]	- -
			0.35 [0.11, 0.59]	
Bonolo 2005	0.35	0.12	0.55 [0.11, 0.58]	' ·
Gifford 2000	0.36	0.183	0.36 [0.00, 0.72]	
Malow 2013	0.37	0.14	0.37 [0.10, 0.64]	
				1 :
Huynh 2013	0.39	0.17	0.39 [0.06, 0.72]	
Wasti 2012	0.4	0.122	0.40 [0.16, 0.64]	—
Sayles 2009	0.4	0.17	0.40 [0.07, 0.73]	
				1 :
Andrade 2013	0.43	0.23	0.43 [-0.02, 0.88]	
Leserman 2008	0.43	0.2	0.43 [0.04, 0.82]	[
	0.43	0.27	0.43 [-0.10, 0.96]	
Duong 2001				
Duggan 2009	0.44	0.184	0.44 [0.08, 0.80]	-
Sumari 2011	0.46	0.144	0.46 [0.18, 0.74]	- -
Wagner 2002	0.51	0.268	0.51 [-0.02, 1.04]	
Hanif 2013	0.52	0.08	0.52 [0.36, 0.68]	—
				
Unge 2010	0.53	0.103	0.53 [0.33, 0.73]	1
Sellier 2006	0.56	0.28	0.56 [0.01, 1.11]	
Brown 2013	0.58	0.19	0.58 [0.21, 0.95]	
Paterson 2000	0.58	0.28	0.58 [0.03, 1.13]	
Kacanek 2010	0.63	0.15	0.63 [0.34, 0.92]	
Franke 2010	0.7	0.46	0.70 [-0.20, 1.60]	
Alakija 2010	0.74	0.128	0.74 [0.49, 0.99]	
Gay 2011	0.74	0.128	0.74 [0.49, 0.99]	
Godin 2005	0.84	0.109	0.84 [0.63, 1.05]	
Magutu 2011	0.95	0.08	0.95 [0.79, 1.11]	-
Ickovics 2002	1.05		1.05 [0.56, 1.54]	
		0.249		
Carmody 2003	1.09	0.36	1.09 [0.38, 1.80]	
			•	
				-1 -0.5 0 0.5 1
				Lower adherence Higher adherence
				-

Duration of ART

Ctudy or Cubarous	Ctd Moon Difforonce	er.		Std. Mean Difference	Std. Mean Difference
Study or Subgroup	Std. Mean Difference		Weight	IV, Random, 95% CI	IV, Random, 95% CI
Brown 2013	-0.47	0.19 0.184		-0.47 [-0.84, -0.10]	
Holstad 2006				-0.43 [-0.79, -0.07]	
Garcia 2006		0.143		-0.41 [-0.69, -0.13]	
Blackstock 2012		0.162		-0.33 [-0.65, -0.01]	
Venkatesh 2010	-0.31	0.142		-0.31 [-0.59, -0.03]	<u>.</u>
Pefura 2013	-0.27	0.07		-0.27 [-0.41, -0.13]	
Maggiolo 2002	-0.27	0.08		-0.27 [-0.43, -0.11]	
Sellier 2006	-0.25	0.28		-0.25 [-0.80, 0.30]	
Poquette 2013	-0.25	0.25		-0.25 [-0.74, 0.24]	
Golin 2002		0.181		-0.22 [-0.57, 0.13]	
Pinheiro 2002		0.141		-0.20 [-0.48, 0.08]	
Bell 2007		0.261		-0.18 [-0.69, 0.33]	
Etard 2007	-0.16	0.19		-0.16 [-0.53, 0.21]	
Sullivan 2007	-0.14	0.2		-0.14 [-0.53, 0.25]	
Anuradha 2012	-0.13	0.12		-0.13 [-0.37, 0.11]	
Kacanek 2010	-0.08	0.15		-0.08 [-0.37, 0.21]	
Tran 2013	-0.07	0.07		-0.07 [-0.21, 0.07]	<u> </u>
Sodergard 2006 Woods 2009	-0.05	0.07		-0.05 [-0.19, 0.09]	
	-0.05	0.22		-0.05 [-0.48, 0.38]	
Raboud 2011	-0.04	0.1		-0.04 [-0.24, 0.16]	
Cauldbeck 2009	-0.04	0.28		-0.04 [-0.59, 0.51]	
Glass 2010	-0.01	0.02		-0.01 [-0.05, 0.03]	
Safren 2005	0	0.13		0.00 [-0.25, 0.25]	
Catz 2000	0	0.24		0.00 [-0.47, 0.47]	
Silva 2009	0	0.1		0.00 [-0.20, 0.20]	
Ramadhani 2007	0	0.22		0.00 [-0.43, 0.43]	
Do 2010	0	0.15		0.00 [-0.29, 0.29]	
Gonzalez 2004	0	0.22 0.12		0.00 [-0.43, 0.43]	
Kerr 2012		0.12		0.00 [-0.24, 0.24]	
Campbell 2010	0	0.14		0.00 [-0.61, 0.61]	
Barclay 2007	0	0.14		0.00 [-0.27, 0.27]	
Wang 2007				0.00 [-0.37, 0.37]	
Boyer 2011	0.01 0.01	0.04 0.08		0.01 [-0.07, 0.09]	
Aragones 2011				0.01 [-0.15, 0.17]	
Rodrigues 2012 Cambiano 2010	0.02	0.24		0.02 [-0.45, 0.49]	
	0.02	0.15		0.02 [-0.27, 0.31]	
Sumari 2011	0.02	0.14		0.02 [-0.25, 0.29]	
Jacquet 2010	0.04	0.08		0.04 [-0.12, 0.20]	
Fong 2003	0.08	0.2		0.08 [-0.31, 0.47]	<u></u>
Nozaki 2011	0.08	0.15		0.08 [-0.21, 0.37]	
Adewuya 2010	0.2	0.17		0.20 [-0.13, 0.53]	<u> </u>
Nakimuli 2009	0.27	0.2		0.27 [-0.12, 0.66]	
Uuskula 2012	0.29	0.162		0.29 [-0.03, 0.61]	
Kunutsor 2010	0.3	0.11		0.30 [0.08, 0.52]	<u> </u>
Hanif 2013	0.32	0.08		0.32 [0.16, 0.48]	
Andrade 2013	0.43	0.23		0.43 [-0.02, 0.88]	
Wasti 2012		0.123		0.44 [0.20, 0.68]	
Howard 2002		0.164		0.44 [0.12, 0.76]	
Alakija 2010		0.123		0.46 [0.22, 0.70]	
Unge 2010				0.46 [0.26, 0.66]	
Ladefoged 2012	0.52	0.32		0.52 [-0.11, 1.15]	
					-1 -0.5 0 0.5 1
					Lower adherence Higher adherence