

# A systematic Review and Meta-Analysis on the Impact of Statin Treatment in HIV Patients on Antiretroviral Therapy

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## Search strategy

Table S1A: Search strategy adapted on PubMed on the 18<sup>th</sup> February, 2023

MesH Terms	Number of records
Statins	34117
Atorvastatin	7321
Rosuvastatin	2,884
Pitavastatin	0
Lovastatin	11888
HIV	106721
<b>Final search with restrictions</b>	
<b>Randomised controlled trials</b>	
(((((Statins[MeSH Terms]) OR (Atorvastatin[MeSH Terms])) OR (Rosuvastatin[MeSH Terms])) OR (Pravastatin[MeSH Terms])) OR (Pitavastatin[MeSH Terms])) OR (Lovastatin[MeSH Terms])) AND (HIV[MeSH Terms]) Filters: Randomized Controlled Trial	15

Table S1B: Search strategy adapted on Scopus

Search terms and strategy	Number of records
Statin OR hmg-coa AND reductase AND inhibitors OR atorvastatin OR	710

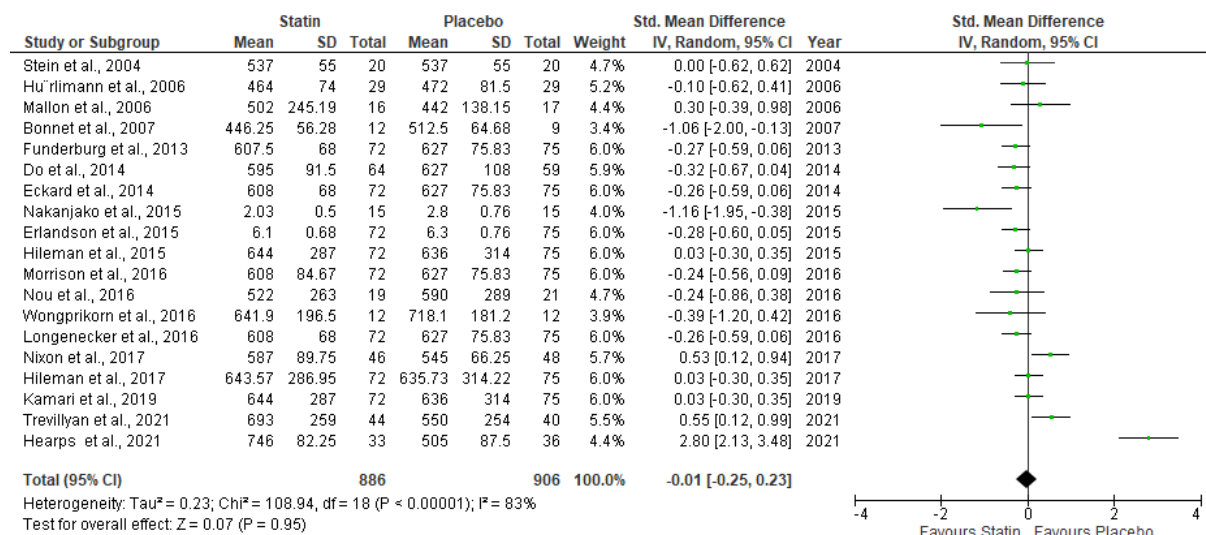
fluvastatin OR simvastatin OR rosuvastatin OR lovastatin OR pitavastatin  AND hiv OR aids AND anti-retroviral AND therapy OR art AND ( LIMIT-TO ( LANGUAGE , "English" ) ) AND ( LIMIT TO ( SRCTYPE , "j" ) ) AND ( LIMIT-TO ( DOCTYPE , "ar" ) )	
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**Table S1C: Search strategy adapted on Cochrane Library**

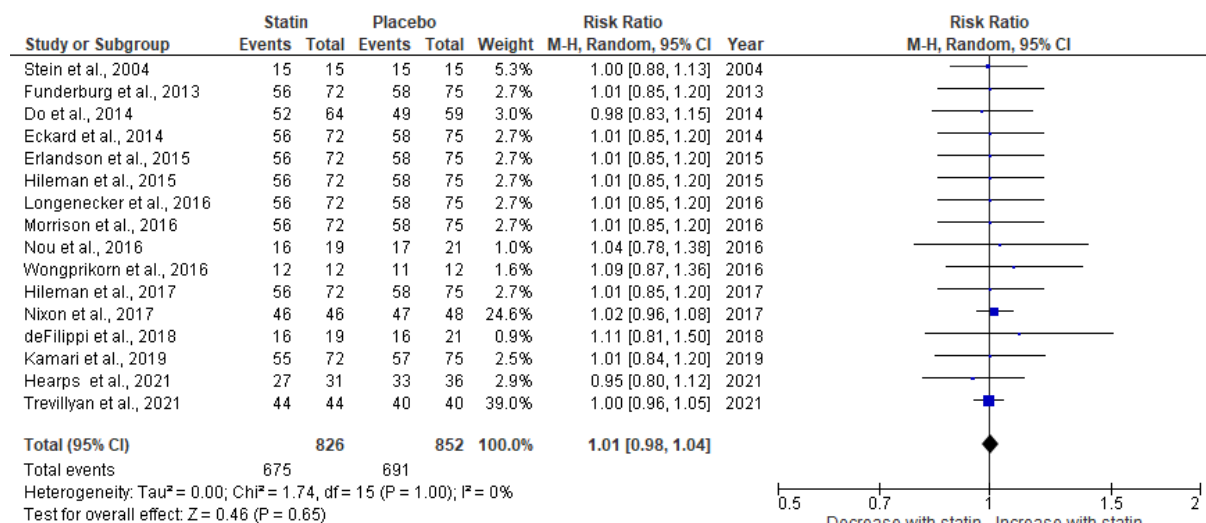
Search terms and strategy	Number of records
<b>Statins in HIV patients on Antiretroviral therapy in Title Abstract</b>  <b>Keyword</b>	70

**Table S2: Quality assessment according to a modified JADAD score guideline.**

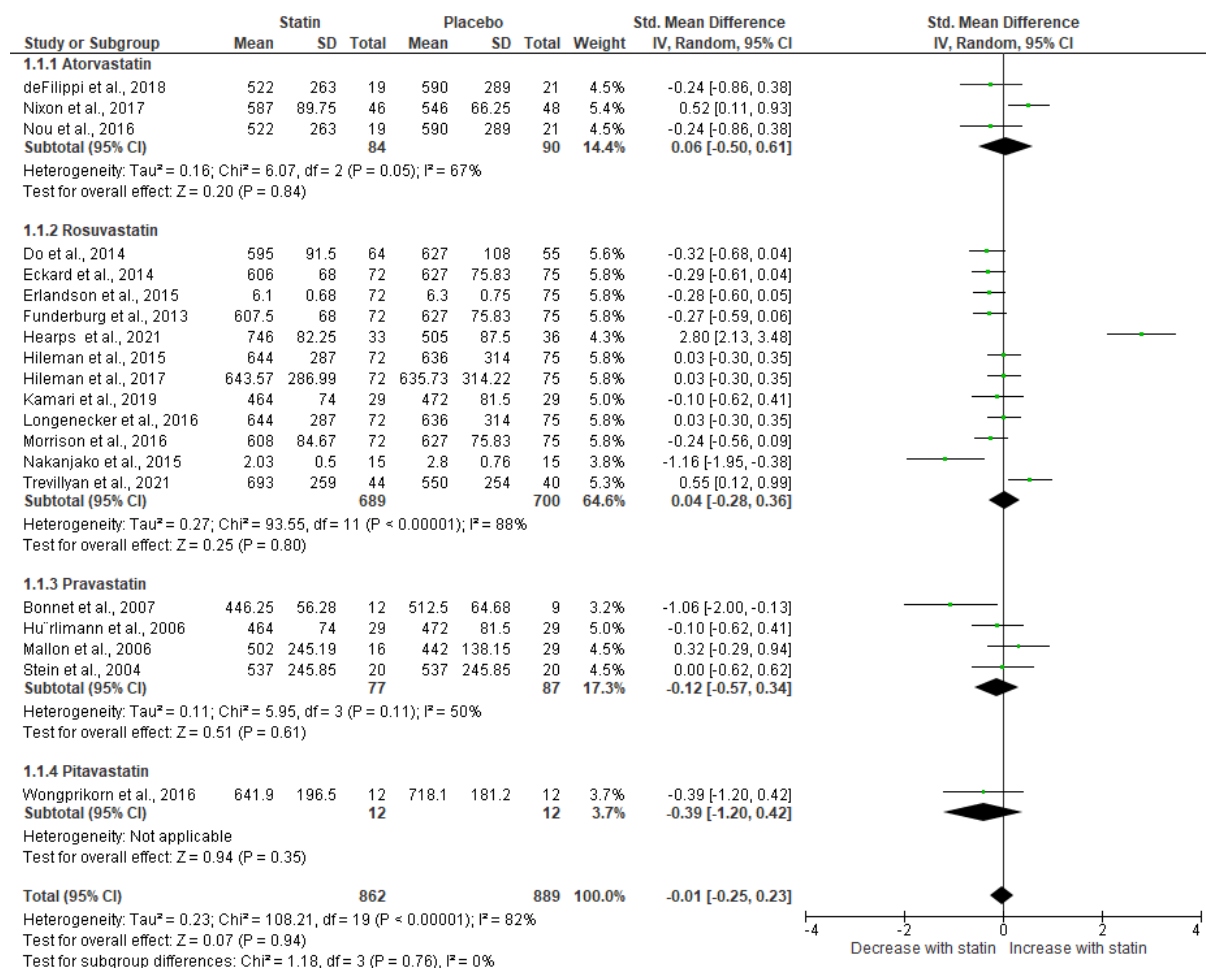
Study	Was the study described as randomised?	Was double-blinded correct?	Losses and exclusions were described	The randomisation was adequate.	Total	Judgement
Bonnet[1]	1	1	1	0	3	Good
Hearps[2]	1	1	0	0	2	Fair
Hileman[3]	1	1	1	1	4	Excellent
Hileman [4]	1	0	1	1	3	Good
Hu"rlimann[5]	1	1	0	0	2	Fair
Kamari[6]	1	1	1	1	4	Excellent
Longenecker[7]	1	1	1	1	4	Excellent
Mallon[8]	1	1	0	1	3	Good
Morrison[9]	1	1	0	1	3	Good
Nakanjako[10]	1	1	1	1	4	Excellent
Nixon[11]	1	1	1	0	3	Good
Nou[12]	1	1	1	1	4	Excellent
Stein[13]	1	1	0	1	3	Good
Trevillyan[14]	1	1	1	1	4	Excellent
Wongprikorn[15]	1	1	0	1	3	Good
Eckard[16]	1	1	1	1	4	Excellent
Erlandson[17]	1	1	1	0	3	Good
Funderburg[18]	1	1	1	1	4	Excellent
Do [19]	1	0	1	1	3	Good
defilippi[21]	1	1	1	0	3	Good
<b>total</b>	<b>20</b>	<b>18</b>	<b>14</b>	<b>14</b>	<b>66</b>	



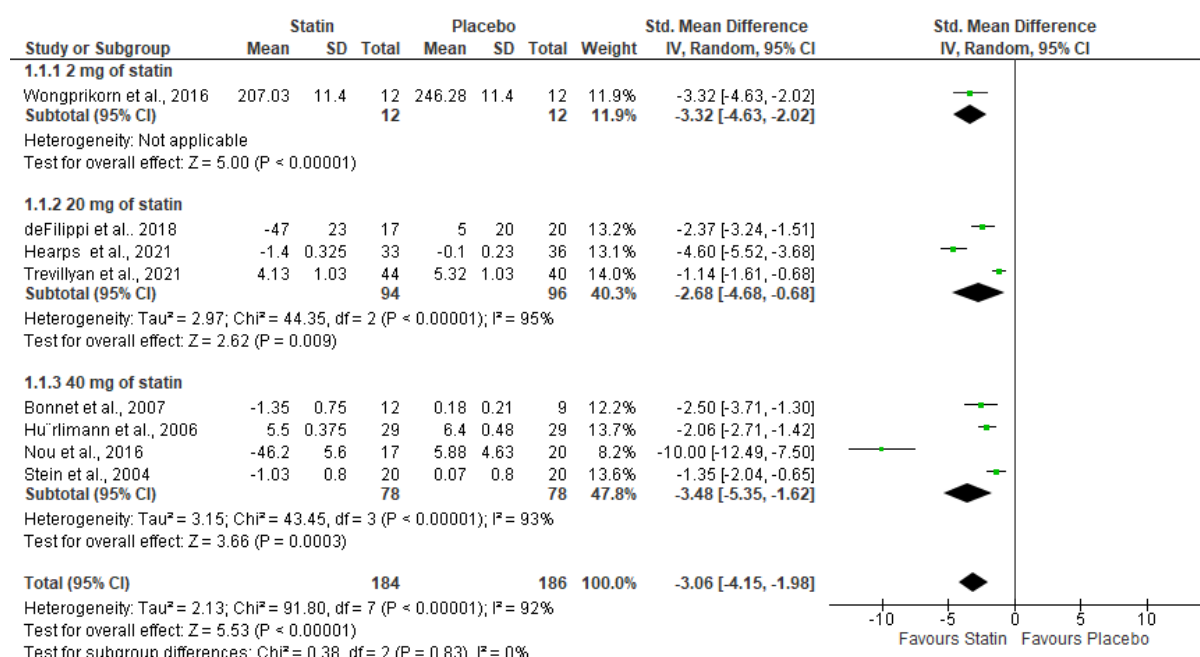
**Figure S1:** Effect of statin on baseline CD4 count in PLHIV on ART. I<sup>2</sup> statistic was used to assess statistical heterogeneity. The probability value of less than 0.05 was considered statistically significant.



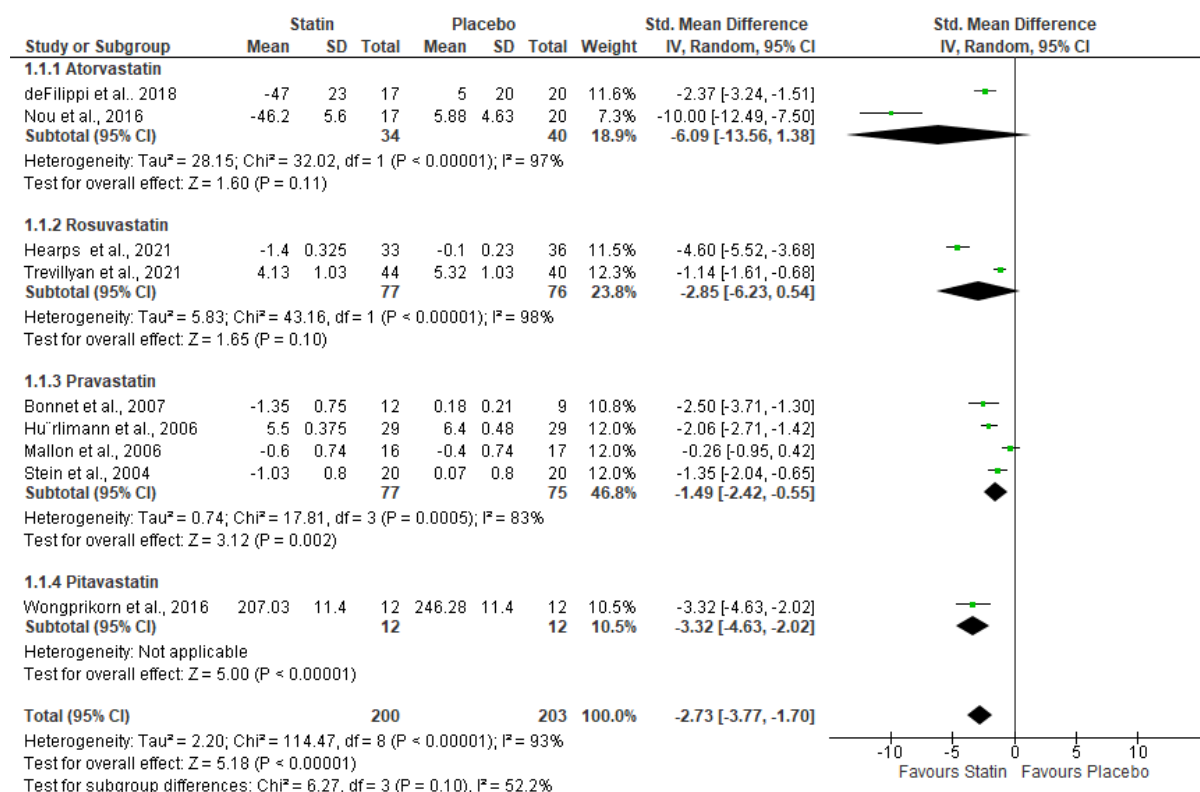
**Figure S2:** Effect of statin on undetectable viral load. I<sup>2</sup> statistic was used to assess statistical heterogeneity. The probability value of less than 0.05 was considered statistically significant.



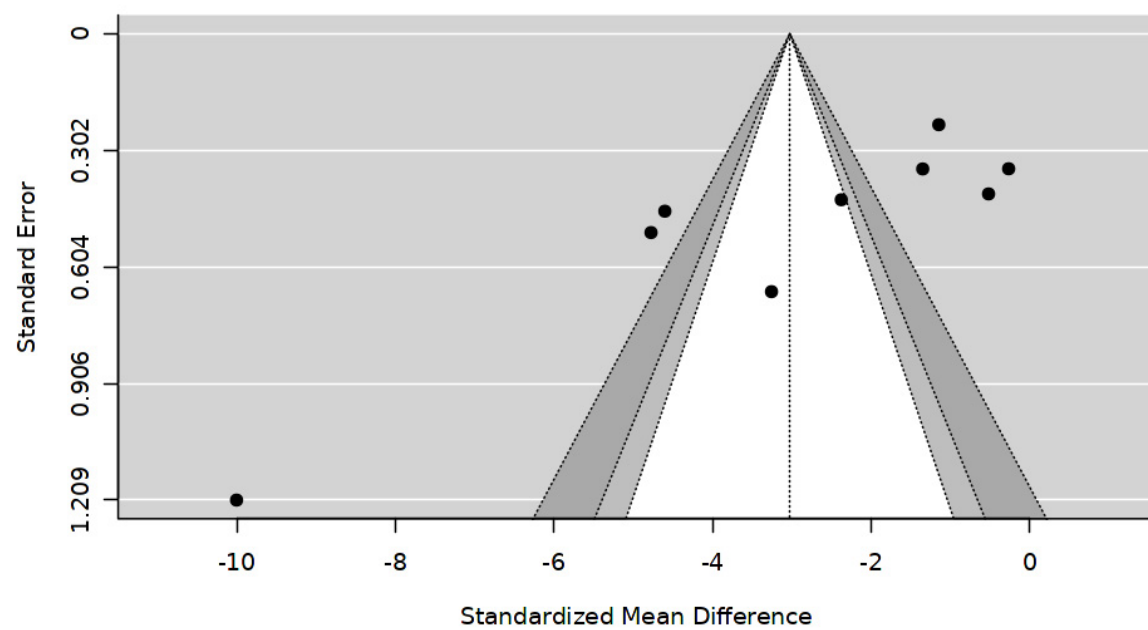
**Figure S3:** Subgroup analysis for CD4 count baseline according to statins.  $I^2$  statistic was used to assess statistical heterogeneity. The probability value of less than 0.05 was considered statistically significant.



**Figure S4:** Subgroup total cholesterol according to doses of statin. I<sup>2</sup> statistic was used to assess statistical heterogeneity. The probability value of less than 0.05 was considered statistically significant.



**Figure S5:** Subgroup total cholesterol according to the form of statin. I<sup>2</sup> statistic was used to assess statistical heterogeneity. The probability value of less than 0.05 was considered statistically significant.



**Figure S6:** Publication bias for total cholesterol using a funnel plot.