

## Databases and search strategies

**Table S1 – Databases and search strategies (continued)**

Source	Search strategy
Pubmed	<p>(HIV infections [MeSH] OR HIV [MeSH] OR Acquired Immunodeficiency Syndrome [MeSH] OR HIV Seropositivity [MeSH] OR HIV OR hiv-1 OR hiv-2 OR hiv1 OR hiv2 OR hiv infect* OR human immunodeficiency virus OR human immune deficiency virus OR human immuno-deficiency virus OR human immune-deficiency virus OR ((human immun*) AND (deficiency virus)) OR acquired immunodeficiency syndromes OR acquired immune deficiency syndrome OR acquired immuno-deficiency syndrome OR acquired immune-deficiency syndrome OR ((acquired immun*) AND (deficiency syndrome)) OR HIV/AIDS) AND</p> <p>(Anti-retroviral agents [Mesh] OR antiretroviral therapy, highly active [Mesh] OR Antiretroviral* OR ((anti) AND (retroviral*)) OR ARV OR ART OR "antiretroviral therapy" OR HAART OR ((highly) AND (active) AND (antiretroviral*) AND (therap*)) OR ((anti) AND (hiv)) OR ((anti) AND (acquired immunodeficiency)) OR ((anti) AND (acquired immuno-deficiency)) OR (anti AND (acquired immune-deficiency)) OR (anti AND (acquired immun*) AND (deficienc*)) OR Saquinavir [tiab] OR Lopinavir [tiab] OR Indinavir [tiab] OR Ritonavir [Tiab] OR Nelfinavir [tiab] OR Amprenavir [tiab] OR Fosamprenavir [tiab] OR Atazanavir [Tiab] OR Tipranavir [tiab] OR Darunavir [tiab] OR Cobicistat [Tiab] OR Emtricitabine [Tiab] OR Zidovudine [Tiab] OR Didanosine [tiab] OR Stavudine [tiab] OR Lamivudine [Tiab] OR Abacavir [Tiab] OR Nevirapine [tiab] OR Darunavir [Tiab] OR Etravirine [Tiab] OR Elvitegravir [Tiab] OR Alafenamide [Tiab] OR "Tenofovir disoproxil fumarate" [Tiab] OR "Tenofovir Alafenamide" [Tiab] OR Tenofovir [Tiab] OR Efavirenz [Tiab] OR Enfuvirtide [Tiab] OR Raltegravir [tiab] OR Maraviroc [tiab] OR Dolutegravir [tiab] OR Bictegravir [tiab]) AND</p> <p>((("abnormalities, drug-induced"[mesh] OR "drug hypersensitivity"[mesh] OR "drug monitoring"[mesh] OR "drug recalls"[mesh] OR "poisoning"[mesh] OR "safety-based drug withdrawals"[mesh] OR "substance-related disorders"[mesh] OR "Drug-Related Side Effects and Adverse Reactions"[Mesh] OR "Long Term Adverse Effects"[Mesh] OR "product surveillance, postmarketing"[mesh] OR "adverse effects"[sh] OR "complications"[sh] OR "drug effects"[sh] OR "safe"[tw] OR "safety"[tw] OR "side effect*"[tw] OR "undesirable effect*"[tw] OR "treatment emergent"[tw] OR "tolerability"[tw] OR "toxicity"[tw] OR "adverse drug reaction*"[tw] OR "adrs"[tw] OR "adverse effect*"[tw] OR "adverse drug effect*"[tw] OR "adverse reaction*"[tw] OR "adverse event*"[tw] OR "adverse drug event*"[tw] OR "adverse outcome*"[tw] OR "complication*"[tw] OR "harm"[tw] OR "harmful"[tw] OR "harms"[tw] OR "risk"[tw] OR (adverse[tw] AND (effect[tw] OR effects[tw] OR reaction[tw] OR reactions[tw] OR event[tw] OR events[tw] OR outcome[tw] OR outcomes[tw])))</p> <p>AND</p> <p>(((((randomized controlled trial [pt]) OR controlled clinical trial [pt]) OR randomized [tiab]) OR placebo [tiab]) OR clinical trials as topic [mesh: noexp] OR randomly [tiab]) OR trial [tiab]) NOT (animals [MeSH] NOT humans [MeSH]))</p>

**Table S1 – Databases and search strategies (continuation)**

Source	Search strategy	Results
Embase	<p><b>No. Query</b></p> <p><b>#1</b>                      'human immunodeficiency virus infection'/exp OR 'acquired immune deficiency syndrome'/exp OR 'human immunodeficiency virus 1'/exp OR 'human immunodeficiency virus 1 infection'/exp OR 'human immunodeficiency virus 2'/exp OR 'human immunodeficiency virus 2 infection'/exp OR 'hiv aids'/exp OR hiv OR hiv-1 OR hiv-2 OR hiv1 OR hiv2 OR (hiv AND infect*) OR (human AND immunodeficiency AND virus) OR (human AND immune AND deficiency AND virus) OR (human AND immuno-deficiency AND virus) OR (human AND immune-deficiency AND virus) OR (human AND immun* AND deficiency AND virus) OR (acquired AND immunodeficiency AND syndromes) OR (acquired AND immune AND deficiency AND syndrome) OR (acquired AND immuno-deficiency AND syndrome) OR (acquired AND immune-deficiency AND syndrome) OR (acquired AND immun* AND deficiency AND syndrome)</p> <p><b>#2</b>                      'antiretrovirus agent'/exp OR 'highly active antiretroviral therapy'/exp OR antiretroviral* OR (anti AND retroviral*) OR arv OR art OR 'antiretroviral therapy' OR haart OR (highly AND active AND antiretroviral* AND therap*) OR (anti AND hiv) OR (anti AND acquired AND immunodeficiency) OR (anti AND acquired AND immuno-deficiency) OR (anti AND acquired AND immune-deficiency) OR (anti AND acquired AND immun* AND deficienc*) OR saquinavir:ab,ti OR lopinavir:ab,ti OR indinavir:ab,ti OR ritonavir:ab,ti OR nelfinavir:ab,ti OR amprenavir:ab,ti OR fosamprenavir:ab,ti OR atazanavir:ab,ti OR tipranavir:ab,ti OR cobicistat:ab,ti OR emtricitabine:ab,ti OR zidovudine:ab,ti OR didanosine:ab,ti OR stavudine:ab,ti OR lamivudine:ab,ti OR abacavir:ab,ti OR nevirapine:ab,ti OR darunavir:ab,ti OR etravirine:ab,ti OR elvitegravir:ab,ti OR alafenamide:ab,ti OR 'tenofovir disoproxil fumarate':ab,ti OR 'tenofovir alafenamide':ab,ti OR tenofovir:ab,ti OR efavirenz:ab,ti OR enfuvirtide:ab,ti OR raltegravir:ab,ti OR maraviroc:ab,ti OR dolutegravir:ab,ti OR bictegravir:ab,ti</p> <p><b>#3</b>                      'adverse drug reaction'/exp OR 'drug hypersensitivity'/exp OR 'drug monitoring'/exp OR 'drug recall'/exp OR 'drug intoxication'/exp OR 'side effect'/exp OR 'postmarketing surveillance'/exp OR 'drug safety'/exp OR 'drug surveillance program'/exp OR 'drug toxicity'/exp OR 'adverse event'/exp OR 'complication'/exp OR 'drug effect'/exp OR safe OR safety OR 'side effect*' OR 'undesirable effect*' OR 'treatment emergent' OR 'tolerability' OR 'toxicity' OR 'adverse drug reaction*' OR 'adrs' OR 'adverse effect*' OR 'adverse drug effect*' OR 'adverse reaction*' OR 'adverse event*' OR 'adverse drug event*' OR 'adverse outcome*' OR 'complication*' OR 'harm' OR 'harmful' OR 'harms' OR 'risk' OR (adverse AND (effect OR effects OR reaction OR reactions OR event OR events OR outcome OR outcomes))</p> <p><b>#4</b>                      'randomized controlled trial':it OR 'controlled clinical trial':it OR randomized:ab,ti OR placebo:ab,ti OR ('clinical trial'/de AND topic) OR randomly:ab,ti OR trial:ab,ti</p>	<p><b>610,204</b></p> <p><b>522,768</b></p> <p><b>10,788,807</b></p> <p><b>1,832,252</b></p>

**Table S1 – Databases and search strategies (continuation)**

Source	Search strategy
Embase	5,615,547
	<b>#5</b> 'animal'/exp NOT 'human'/exp
	11,308
Cochrane Central	<b>#6</b> #1 AND #2 AND #3 AND #4 NOT #5
	Search Name: Cochrane RADAR Last Saved: 25/05/2021 20:49:52 Comment:
	ID Search
	#1 MeSH descriptor: [HIV Infections] explode all trees
	#2 MeSH descriptor: [HIV] explode all trees
	#3 MeSH descriptor: [Acquired Immunodeficiency Syndrome] explode all trees
	#4 MeSH descriptor: [HIV Seropositivity] explode all trees
	#5 (HIV OR hiv-1 OR hiv-2 OR hiv1 OR hiv2 OR hiv infect* OR human immunodeficiency virus OR human immune deficiency virus OR human immunodeficiency virus OR human immune-deficiency virus OR ((human immun*) AND (deficiency virus)) OR acquired immunodeficiency syndromes OR acquired immune deficiency syndrome OR acquired immuno-deficiency syndrome OR acquired immune-deficiency syndrome OR ((acquired immun*) AND (deficiency syndrome)) OR AIDS):ti,ab,kw
	#6 #1 OR #2 OR #3 OR #4 OR #5
	#7 MeSH descriptor: [Anti-Retroviral Agents] explode all trees
	#8 MeSH descriptor: [Antiretroviral Therapy, Highly Active] explode all trees
	#9 (Antiretroviral* OR ((anti) AND (retroviral*)) OR ARV OR ART OR "antiretroviral therapy" OR HAART OR ((highly) AND (active) AND (antiretroviral*) AND (therap*)) OR ((anti) AND (hiv)) OR ((anti) AND (acquired immunodeficiency)) OR ((anti) AND (acquired immuno-deficiency)) OR (anti AND (acquired immune-deficiency)) OR (anti AND (acquired immun*) AND (deficienc*)):ti,ab,kw
	#10 (Saquinavir OR Lopinavir OR Indinavir OR Ritonavir OR Nelfinavir OR Amprenavir OR Fosamprenavir OR Atazanavir OR Tipranavir OR Darunavir OR Cobicistat OR Emtricitabine OR Zidovudine OR Didanosine OR Stavudine OR Lamivudine OR Abacavir OR Nevirapine OR Darunavir OR Etravirine OR Elvitegravir OR Alafenamide OR "Tenofovir disoproxil fumarate" OR "Tenofovir Alafenamide" OR Tenofovir OR Efavirenz OR Enfuvirtide OR Raltegravir OR Maraviroc OR Dolutegravir OR Bictegravir):ti,ab
	#11 #7 OR #8 OR #9 OR #10
	#12 MeSH descriptor: [Abnormalities, Drug-Induced] explode all trees
	#13 MeSH descriptor: [Drug Hypersensitivity] explode all trees
	#14 MeSH descriptor: [Drug Monitoring] explode all trees
	#15 MeSH descriptor: [Drug Recalls] explode all trees
	#16 MeSH descriptor: [Poisoning] explode all trees
	#17 MeSH descriptor: [Safety-Based Drug Withdrawals] explode all trees
	#18 MeSH descriptor: [Substance-Related Disorders] explode all trees
	#19 MeSH descriptor: [Drug-Related Side Effects and Adverse Reactions] explode all trees
	#20 MeSH descriptor: [Long Term Adverse Effects] explode all trees
	#21 MeSH descriptor: [Product Surveillance, Postmarketing] explode all trees
#22 MeSH descriptor: [] explode all trees and with qualifier(s): [adverse effects - AE]	
#23 MeSH descriptor: [] explode all trees and with qualifier(s): [complications - CO]	
#24 MeSH descriptor: [] explode all trees and with qualifier(s): [drug effects - DE]	

**Table S1 – Databases and search strategies (continuation)**

Source	Search strategy
Cochrane Central	<p>#25 ("safe" OR "safety" OR "side effect*" OR "undesirable effect*" OR "treatment emergent" OR "tolerability" OR "toxicity" OR "adverse drug reaction*" OR "adrs" OR "adverse effect*" OR "adverse drug effect*" OR "adverse reaction*" OR "adverse event*" OR "adverse drug event*" OR "adverse outcome*" OR "complication*" OR "harm" OR "harmful" OR "harms" OR "risk" OR (adverse AND (effect OR effects OR reaction OR reactions OR event OR events OR outcome OR outcomes)))</p> <p>#26 #12 OR #13 OR #14 OR #15 OR #16 OR #17 OR #18 OR #19 OR #20 OR #21</p> <p>#27 #22 OR #23 OR #24</p> <p>#28 #25 OR #26 OR #27</p> <p>#29 #6 AND #11 AND #28</p>
VHL (Lilacs)	<p>((mh:(HIV infections)) OR (mh:(HIV)) OR (mh:(Acquired Immunodeficiency Syndrome)) OR (mh:(HIV Seropositivity)) OR ((HIV OR hiv-1 OR hiv-2 OR hiv1 OR hiv2 OR hiv infect* OR human immunodeficiency virus OR human immune deficiency virus OR human immuno-deficiency virus OR human immune-deficiency virus OR ((human immun*) AND (deficiency virus)) OR acquired immunodeficiency syndromes OR acquired immune deficiency syndrome OR acquired immuno-deficiency syndrome OR acquired immune-deficiency syndrome OR ((acquired immun*) AND (deficiency syndrome)) OR AIDS))) AND ((mh:(Anti-Retroviral Agents)) OR (mh:(Antiretroviral Therapy, Highly Active)) OR ((Antiretroviral* OR ((anti) AND (retroviral*)) OR ARV OR ART OR "antiretroviral therapy" OR HAART OR ((highly) AND (active) AND (antiretroviral*) AND (therap*)) OR ((anti) AND (hiv)) OR ((anti) AND (acquired immunodeficiency)) OR ((anti) AND (acquired immuno-deficiency)) OR (anti AND (acquired immune-deficiency)) OR (anti AND (acquired immun*) AND (deficienc*)))) OR (ti:((Saquinavir OR Lopinavir OR Indinavir OR Ritonavir OR Nelfinavir OR Amprenavir OR Fosamprenavir OR Atazanavir OR Tipranavir OR Darunavir OR Cobicistat OR Emtricitabine OR Zidovudine OR Didanosine OR Stavudine OR Lamivudine OR Abacavir OR Nevirapine OR Darunavir OR Etravirine OR Elvitegravir OR Alafenamide OR "Tenofovir disoproxil fumarate" OR "Tenofovir Alafenamide" OR Tenofovir OR Efavirenz OR Enfuvirtide OR Raltegravir OR Maraviroc OR Dolutegravir OR Bictegravir))) OR (ab:((Saquinavir OR Lopinavir OR Indinavir OR Ritonavir OR Nelfinavir OR Amprenavir OR Fosamprenavir OR Atazanavir OR Tipranavir OR Darunavir OR Cobicistat OR Emtricitabine OR Zidovudine OR Didanosine OR Stavudine OR Lamivudine OR Abacavir OR Nevirapine OR Darunavir OR Etravirine OR Elvitegravir OR Alafenamide OR "Tenofovir disoproxil fumarate" OR "Tenofovir Alafenamide" OR Tenofovir OR Efavirenz OR Enfuvirtide OR Raltegravir OR Maraviroc OR Dolutegravir OR Bictegravir))) AND ((mh:(Abnormalities, Drug-Induced)) OR (mh:(Drug Hypersensitivity)) OR (mh:(Drug Monitoring)) OR (mh:(Drug Recalls)) OR (mh:(Poisoning)) OR (mh:(Safety-Based Drug Withdrawals)) OR (mh:(Substance-Related Disorders)) OR (mh:(Drug-Related Side Effects and Adverse Reactions)) OR (mh:(Long Term Adverse Effects)) OR (mh:(Product Surveillance, Postmarketing)) OR ("adverse effect" OR "adverse effects" OR "drug effects" OR safe OR safety OR "side effect" OR "side effects" OR "undesirable effect" OR "undesirable effects" OR "treatment emergent" OR tolerability OR toxicity OR "adverse drug reaction" OR "adverse drug reactions" OR adrs OR "adverse drug effect" OR "adverse drug effects" OR "adverse reaction" OR "adverse reactions" OR "adverse event" OR "adverse events" OR "adverse drug event" OR "adverse drug events" OR "adverse outcome" OR "adverse outcomes" OR complication OR complications OR harm OR harmful OR harms OR risk OR ((adverse) AND (effect OR effects OR reaction OR reactions OR event OR events OR outcome OR outcomes)))) AND ((mh:(clinical trials)) OR (randomized controlled trial) OR (controlled clinical trial) OR randomized OR placebo OR randomly OR trial)</p>

**Table S1 – Databases and search strategies (continuation)**

Source	Search strategy
Epistemonikos	<p>((HIV infections) OR HIV OR (Acquired Immunodeficiency Syndrome) OR (HIV Seropositivity) OR (hiv-1) OR (hiv-2) OR hiv1 OR hiv2 OR (hiv infect*) OR (human immunodeficiency virus) OR (human immune deficiency virus) OR (human immunodeficiency virus) OR (human immune-deficiency virus) OR ((human immun*) AND (deficiency virus)) OR (acquired immunodeficiency syndromes) OR (acquired immune deficiency syndrome) OR (acquired immuno-deficiency syndrome) OR (acquired immune-deficiency syndrome) OR ((acquired immun*) AND (deficiency syndrome)) OR AIDS) AND ((Anti-retroviral agents) OR (antiretroviral therapy, highly active) OR Antiretroviral* OR ((anti) AND (retroviral*)) OR ARV OR ART OR "antiretroviral therapy" OR HAART OR ((highly) AND (active) AND (antiretroviral*) AND (therap*)) OR ((anti) AND (hiv)) OR ((anti) AND (acquired immunodeficiency)) OR ((anti) AND (acquired immunodeficiency)) OR (anti AND (acquired immune-deficiency)) OR (anti AND (acquired immun*) AND (deficienc*)) OR Saquinavir OR Lopinavir OR Indinavir OR Ritonavir OR Nelfinavir OR Amprenavir OR Fosamprenavir OR Atazanavir OR Tipranavir OR Darunavir OR Cobicistat OR Emtricitabine OR Zidovudine OR Didanosine OR Stavudine OR Lamivudine OR Abacavir OR Nevirapine OR Darunavir OR Etravirine OR Elvitegravir OR Alafenamide OR "Tenofovir disoproxil fumarate" OR "Tenofovir Alafenamide" OR Tenofovir OR Efavirenz OR Enfuvirtide OR Raltegravir OR Maraviroc OR Dolutegravir OR Bictegravir) AND ("abnormalities, drug-induced" OR "drug hypersensitivity" OR "drug monitoring" OR "drug recalls" OR "poisoning" OR "safety-based drug withdrawals" OR "substance-related disorders" OR "Drug-Related Side Effects and Adverse Reactions" OR "Long Term Adverse Effects" OR "product surveillance, postmarketing" OR "adverse effects" OR "complications" OR "drug effects" OR "safe" OR "safety" OR "side effect*" OR "undesirable effect*" OR "treatment emergent" OR "tolerability" OR "toxicity" OR "adverse drug reaction*" OR "adrs" OR "adverse effect*" OR "adverse drug effect*" OR "adverse reaction*" OR "adverse event*" OR "adverse drug event*" OR "adverse outcome*" OR "complication*" OR "harm" OR "harmful" OR "harms" OR "risk" OR (adverse AND (effect OR effects OR reaction OR reactions OR event OR events OR outcome OR outcomes ))) AND ((randomized controlled trial) OR (controlled clinical trial) OR randomized OR placebo OR randomly OR trial)</p>

**Table S1 – Databases and search strategies (conclusion)**

Source	Search strategy
Global Index Medicus	<p>((mh:(HIV infections)) OR (mh:(HIV)) OR (mh:(Acquired Immunodeficiency Syndrome)) OR (mh:(HIV Seropositivity)) OR ((HIV OR hiv-1 OR hiv-2 OR hiv1 OR hiv2 OR hiv infect* OR human immunodeficiency virus OR human immune deficiency virus OR human immuno-deficiency virus OR human immune-deficiency virus OR ((human immun*) AND (deficiency virus)) OR acquired immunodeficiency syndromes OR acquired immune deficiency syndrome OR acquired immuno-deficiency syndrome OR acquired immune-deficiency syndrome OR ((acquired immun*) AND (deficiency syndrome)) OR AIDS))) AND ((mh:(Anti-Retroviral Agents)) OR (mh:(Antiretroviral Therapy, Highly Active)) OR ((Antiretroviral* OR ((anti) AND (retroviral*)) OR ARV OR ART OR "antiretroviral therapy" OR HAART OR ((highly) AND (active) AND (antiretroviral*) AND (therap*)) OR ((anti) AND (hiv)) OR ((anti) AND (acquired immunodeficiency)) OR ((anti) AND (acquired immuno-deficiency)) OR (anti AND (acquired immune-deficiency)) OR (anti AND (acquired immun*) AND (deficienc*)))) OR (ti:((Saquinavir OR Lopinavir OR Indinavir OR Ritonavir OR Nelfinavir OR Amprenavir OR Fosamprenavir OR Atazanavir OR Tipranavir OR Darunavir OR Cobicistat OR Emtricitabine OR Zidovudine OR Didanosine OR Stavudine OR Lamivudine OR Abacavir OR Nevirapine OR Darunavir OR Etravirine OR Elvitegravir OR Alafenamide OR "Tenofovir disoproxil fumarate" OR "Tenofovir Alafenamide" OR Tenofovir OR Efavirenz OR Enfuvirtide OR Raltegravir OR Maraviroc OR Dolutegravir OR Bictegravir))) OR (ab:((Saquinavir OR Lopinavir OR Indinavir OR Ritonavir OR Nelfinavir OR Amprenavir OR Fosamprenavir OR Atazanavir OR Tipranavir OR Darunavir OR Cobicistat OR Emtricitabine OR Zidovudine OR Didanosine OR Stavudine OR Lamivudine OR Abacavir OR Nevirapine OR Darunavir OR Etravirine OR Elvitegravir OR Alafenamide OR "Tenofovir disoproxil fumarate" OR "Tenofovir Alafenamide" OR Tenofovir OR Efavirenz OR Enfuvirtide OR Raltegravir OR Maraviroc OR Dolutegravir OR Bictegravir)))) AND ((mh:(Abnormalities, Drug-Induced)) OR (mh:(Drug Hypersensitivity)) OR (mh:(Drug Monitoring)) OR (mh:(Drug Recalls)) OR (mh:(Poisoning)) OR (mh:(Safety-Based Drug Withdrawals)) OR (mh:(Substance-Related Disorders)) OR (mh:(Drug-Related Side Effects and Adverse Reactions)) OR (mh:(Long Term Adverse Effects)) OR (mh:(Product Surveillance, Postmarketing)) OR ("adverse effect" OR "adverse effects" OR "drug effects" OR safe OR safety OR "side effect" OR "side effects" OR "undesirable effect" OR "undesirable effects" OR "treatment emergent" OR tolerability OR toxicity OR "adverse drug reaction" OR "adverse drug reactions" OR adrs OR "adverse drug effect" OR "adverse drug effects" OR "adverse reaction" OR "adverse reactions" OR "adverse event" OR "adverse events" OR "adverse drug event" OR "adverse drug events" OR "adverse outcome" OR "adverse outcomes" OR complication OR complications OR harm OR harmful OR harms OR risk OR ((adverse) AND (effect OR effects OR reaction OR reactions OR event OR events OR outcome OR outcomes)))) AND ((mh:(clinical trials)) OR (randomized controlled trial) OR (controlled clinical trial) OR randomized OR placebo OR randomly OR trial)</p>