Insomnia pairwise MAs

Prepared by Virginia Chiocchia on 30th July, refers to a single outcome analysis (Total Sleep Time) in a frequentist setting

## Number of studies combined: k = 31  
##   
## MD 95%-CI z p-value  
## Fixed effect model 0.1608 [0.0853; 0.2364] 4.17 < 0.0001  
## Random effects model 9.1613 [1.5134; 16.8092] 2.35 0.0189  
##   
## Quantifying heterogeneity:  
## tau^2 = 310.9331; H = 3.77 [3.34; 4.26]; I^2 = 93.0% [91.1%; 94.5%]  
##   
## Quantifying residual heterogeneity:  
## tau^2 = 270.1205; H = 2.24 [1.38; 3.64]; I^2 = 80.1% [47.3%; 92.5%]  
##   
## Test of heterogeneity:  
## Q d.f. p-value  
## 427.19 30 < 0.0001  
##   
## Results for subgroups (fixed effect model):  
## k MD  
## comparison = acetaminophen VS pbo 1 6.0000  
## comparison = artificial juice VS tart cherry ... 1 -8.4000  
## comparison = BBT I VS self-monitoring control 1 -35.2800  
## comparison = chlormethiazole VS temazepam 1 -1.1900  
## comparison = diazepam VS pbo 1 49.9300  
## comparison = diazepam VS promethazine 1 10.1400  
## comparison = diazepam VS propiomazine 1 10.2900  
## comparison = diphenhydramine VS pbo 1 18.0000  
## comparison = diphenhydramine VS temazepam 1 -18.0000  
## comparison = doxepin VS pbo 2 27.8312  
## comparison = esmirtazapine VS pbo 1 23.5796  
## comparison = eszopiclone VS pbo 3 24.2861  
## comparison = flunitrazepam VS nitrazepam 1 -27.8300  
## comparison = food supplement (melatonin, mag ... 1 62.2740  
## comparison = LAT VS MAT 1 7.2000  
## comparison = LAT VS MAT+LAT 1 5.4000  
## comparison = loprazolam VS nitrazepam 1 -39.6000  
## comparison = loprazolam VS pbo 1 39.1600  
## comparison = lormetazepam + sleep hygiene VS ... 1 153.2850  
## comparison = MAT VS MAT+LAT 1 -1.8000  
## comparison = melatonin VS pbo 1 -5.0000  
## comparison = midazolam VS oxazepam 1 48.0000  
## comparison = pbo VS temazepam 1 -36.0000  
## comparison = pbo VS ramelteon 1 -5.8695  
## comparison = pbo VS promethazine 1 -39.7900  
## comparison = pbo VS propiomazine 1 -39.6400  
## comparison = pbo VS zolpidem 1 -24.0100  
## comparison = promethazine VS propiomazine 1 0.1500  
## 95%-CI  
## comparison = acetaminophen VS pbo [ -33.3181; 45.3181]  
## comparison = artificial juice VS tart cherry ... [ -33.8401; 17.0401]  
## comparison = BBT I VS self-monitoring control [ -71.6478; 1.0878]  
## comparison = chlormethiazole VS temazepam [ -26.5836; 24.2036]  
## comparison = diazepam VS pbo [ 24.7587; 75.1013]  
## comparison = diazepam VS promethazine [ 5.0281; 15.2519]  
## comparison = diazepam VS propiomazine [ 5.1025; 15.4775]  
## comparison = diphenhydramine VS pbo [ 4.1779; 31.8221]  
## comparison = diphenhydramine VS temazepam [ -31.8221; -4.1779]  
## comparison = doxepin VS pbo [ 15.3696; 40.2928]  
## comparison = esmirtazapine VS pbo [ 12.4325; 34.7267]  
## comparison = eszopiclone VS pbo [ 15.6253; 32.9469]  
## comparison = flunitrazepam VS nitrazepam [ -68.2061; 12.5461]  
## comparison = food supplement (melatonin, mag ... [ 53.1857; 71.3623]  
## comparison = LAT VS MAT [-287.7362; 302.1362]  
## comparison = LAT VS MAT+LAT [ -43.6675; 54.4675]  
## comparison = loprazolam VS nitrazepam [-107.9968; 28.7968]  
## comparison = loprazolam VS pbo [ 7.9227; 70.3973]  
## comparison = lormetazepam + sleep hygiene VS ... [ 108.4615; 198.1085]  
## comparison = MAT VS MAT+LAT [-296.5979; 292.9979]  
## comparison = melatonin VS pbo [ -18.7220; 8.7220]  
## comparison = midazolam VS oxazepam [ -0.4654; 96.4654]  
## comparison = pbo VS temazepam [ -63.6443; -8.3557]  
## comparison = pbo VS ramelteon [ -13.7392; 2.0002]  
## comparison = pbo VS promethazine [ -59.8494; -19.7306]  
## comparison = pbo VS propiomazine [ -59.6238; -19.6562]  
## comparison = pbo VS zolpidem [ -40.9468; -7.0732]  
## comparison = promethazine VS propiomazine [ 0.0744; 0.2256]  
## Q tau^2 I^2  
## comparison = acetaminophen VS pbo 0.00 -- --  
## comparison = artificial juice VS tart cherry ... 0.00 -- --  
## comparison = BBT I VS self-monitoring control 0.00 -- --  
## comparison = chlormethiazole VS temazepam 0.00 -- --  
## comparison = diazepam VS pbo 0.00 -- --  
## comparison = diazepam VS promethazine 0.00 -- --  
## comparison = diazepam VS propiomazine 0.00 -- --  
## comparison = diphenhydramine VS pbo 0.00 -- --  
## comparison = diphenhydramine VS temazepam 0.00 -- --  
## comparison = doxepin VS pbo 12.06 270.1205 91.7%  
## comparison = esmirtazapine VS pbo 0.00 -- --  
## comparison = eszopiclone VS pbo 2.98 270.1205 32.8%  
## comparison = flunitrazepam VS nitrazepam 0.00 -- --  
## comparison = food supplement (melatonin, mag ... 0.00 -- --  
## comparison = LAT VS MAT 0.00 -- --  
## comparison = LAT VS MAT+LAT 0.00 -- --  
## comparison = loprazolam VS nitrazepam 0.00 -- --  
## comparison = loprazolam VS pbo 0.00 -- --  
## comparison = lormetazepam + sleep hygiene VS ... 0.00 -- --  
## comparison = MAT VS MAT+LAT 0.00 -- --  
## comparison = melatonin VS pbo 0.00 -- --  
## comparison = midazolam VS oxazepam 0.00 -- --  
## comparison = pbo VS temazepam 0.00 -- --  
## comparison = pbo VS ramelteon 0.00 -- --  
## comparison = pbo VS promethazine 0.00 -- --  
## comparison = pbo VS propiomazine 0.00 -- --  
## comparison = pbo VS zolpidem 0.00 -- --  
## comparison = promethazine VS propiomazine 0.00 -- --  
##   
## Test for subgroup differences (fixed effect model):  
## Q d.f. p-value  
## Between groups 412.15 27 < 0.0001  
## Within groups 15.04 3 0.0018  
##   
## Results for subgroups (random effects model):  
## k MD  
## comparison = acetaminophen VS pbo 1 6.0000  
## comparison = artificial juice VS tart cherry ... 1 -8.4000  
## comparison = BBT I VS self-monitoring control 1 -35.2800  
## comparison = chlormethiazole VS temazepam 1 -1.1900  
## comparison = diazepam VS pbo 1 49.9300  
## comparison = diazepam VS promethazine 1 10.1400  
## comparison = diazepam VS propiomazine 1 10.2900  
## comparison = diphenhydramine VS pbo 1 18.0000  
## comparison = diphenhydramine VS temazepam 1 -18.0000  
## comparison = doxepin VS pbo 2 31.1748  
## comparison = esmirtazapine VS pbo 1 23.5796  
## comparison = eszopiclone VS pbo 3 23.9304  
## comparison = flunitrazepam VS nitrazepam 1 -27.8300  
## comparison = food supplement (melatonin, mag ... 1 62.2740  
## comparison = LAT VS MAT 1 7.2000  
## comparison = LAT VS MAT+LAT 1 5.4000  
## comparison = loprazolam VS nitrazepam 1 -39.6000  
## comparison = loprazolam VS pbo 1 39.1600  
## comparison = lormetazepam + sleep hygiene VS ... 1 153.2850  
## comparison = MAT VS MAT+LAT 1 -1.8000  
## comparison = melatonin VS pbo 1 -5.0000  
## comparison = midazolam VS oxazepam 1 48.0000  
## comparison = pbo VS temazepam 1 -36.0000  
## comparison = pbo VS ramelteon 1 -5.8695  
## comparison = pbo VS promethazine 1 -39.7900  
## comparison = pbo VS propiomazine 1 -39.6400  
## comparison = pbo VS zolpidem 1 -24.0100  
## comparison = promethazine VS propiomazine 1 0.1500  
## 95%-CI  
## comparison = acetaminophen VS pbo [ -44.8288; 56.8288]  
## comparison = artificial juice VS tart cherry ... [ -49.4470; 32.6470]  
## comparison = BBT I VS self-monitoring control [ -83.8626; 13.3026]  
## comparison = chlormethiazole VS temazepam [ -42.2082; 39.8282]  
## comparison = diazepam VS pbo [ 9.0491; 90.8109]  
## comparison = diazepam VS promethazine [ -22.4758; 42.7558]  
## comparison = diazepam VS propiomazine [ -22.3377; 42.9177]  
## comparison = diphenhydramine VS pbo [ -17.0529; 53.0529]  
## comparison = diphenhydramine VS temazepam [ -53.0529; 17.0529]  
## comparison = doxepin VS pbo [ 5.1212; 57.2283]  
## comparison = esmirtazapine VS pbo [ -10.5073; 57.6665]  
## comparison = eszopiclone VS pbo [ 3.2466; 44.6142]  
## comparison = flunitrazepam VS nitrazepam [ -79.4816; 23.8216]  
## comparison = food supplement (melatonin, mag ... [ 28.8038; 95.7442]  
## comparison = LAT VS MAT [-289.4901; 303.8901]  
## comparison = LAT VS MAT+LAT [ -53.2965; 64.0965]  
## comparison = loprazolam VS nitrazepam [-115.2028; 36.0028]  
## comparison = loprazolam VS pbo [ -5.7112; 84.0312]  
## comparison = lormetazepam + sleep hygiene VS ... [ 98.0871; 208.4829]  
## comparison = MAT VS MAT+LAT [-298.3526; 294.7526]  
## comparison = melatonin VS pbo [ -40.0136; 30.0136]  
## comparison = midazolam VS oxazepam [ -10.1941; 106.1941]  
## comparison = pbo VS temazepam [ -78.4484; 6.4484]  
## comparison = pbo VS ramelteon [ -39.0296; 27.2906]  
## comparison = pbo VS promethazine [ -77.7378; -1.8422]  
## comparison = pbo VS propiomazine [ -77.5479; -1.7321]  
## comparison = pbo VS zolpidem [ -60.4039; 12.3839]  
## comparison = promethazine VS propiomazine [ -32.0628; 32.3628]  
## Q tau^2 I^2  
## comparison = acetaminophen VS pbo 0.00 -- --  
## comparison = artificial juice VS tart cherry ... 0.00 -- --  
## comparison = BBT I VS self-monitoring control 0.00 -- --  
## comparison = chlormethiazole VS temazepam 0.00 -- --  
## comparison = diazepam VS pbo 0.00 -- --  
## comparison = diazepam VS promethazine 0.00 -- --  
## comparison = diazepam VS propiomazine 0.00 -- --  
## comparison = diphenhydramine VS pbo 0.00 -- --  
## comparison = diphenhydramine VS temazepam 0.00 -- --  
## comparison = doxepin VS pbo 12.06 270.1205 91.7%  
## comparison = esmirtazapine VS pbo 0.00 -- --  
## comparison = eszopiclone VS pbo 2.98 270.1205 32.8%  
## comparison = flunitrazepam VS nitrazepam 0.00 -- --  
## comparison = food supplement (melatonin, mag ... 0.00 -- --  
## comparison = LAT VS MAT 0.00 -- --  
## comparison = LAT VS MAT+LAT 0.00 -- --  
## comparison = loprazolam VS nitrazepam 0.00 -- --  
## comparison = loprazolam VS pbo 0.00 -- --  
## comparison = lormetazepam + sleep hygiene VS ... 0.00 -- --  
## comparison = MAT VS MAT+LAT 0.00 -- --  
## comparison = melatonin VS pbo 0.00 -- --  
## comparison = midazolam VS oxazepam 0.00 -- --  
## comparison = pbo VS temazepam 0.00 -- --  
## comparison = pbo VS ramelteon 0.00 -- --  
## comparison = pbo VS promethazine 0.00 -- --  
## comparison = pbo VS propiomazine 0.00 -- --  
## comparison = pbo VS zolpidem 0.00 -- --  
## comparison = promethazine VS propiomazine 0.00 -- --  
##   
## Test for subgroup differences (random effects model):  
## Q d.f. p-value  
## Between groups 80.84 27 < 0.0001  
## Within groups 15.04 3 0.0018  
##   
## Details on meta-analytical method:  
## - Inverse variance method  
## - DerSimonian-Laird estimator for tau^2 (assuming common tau^2 in subgroups)