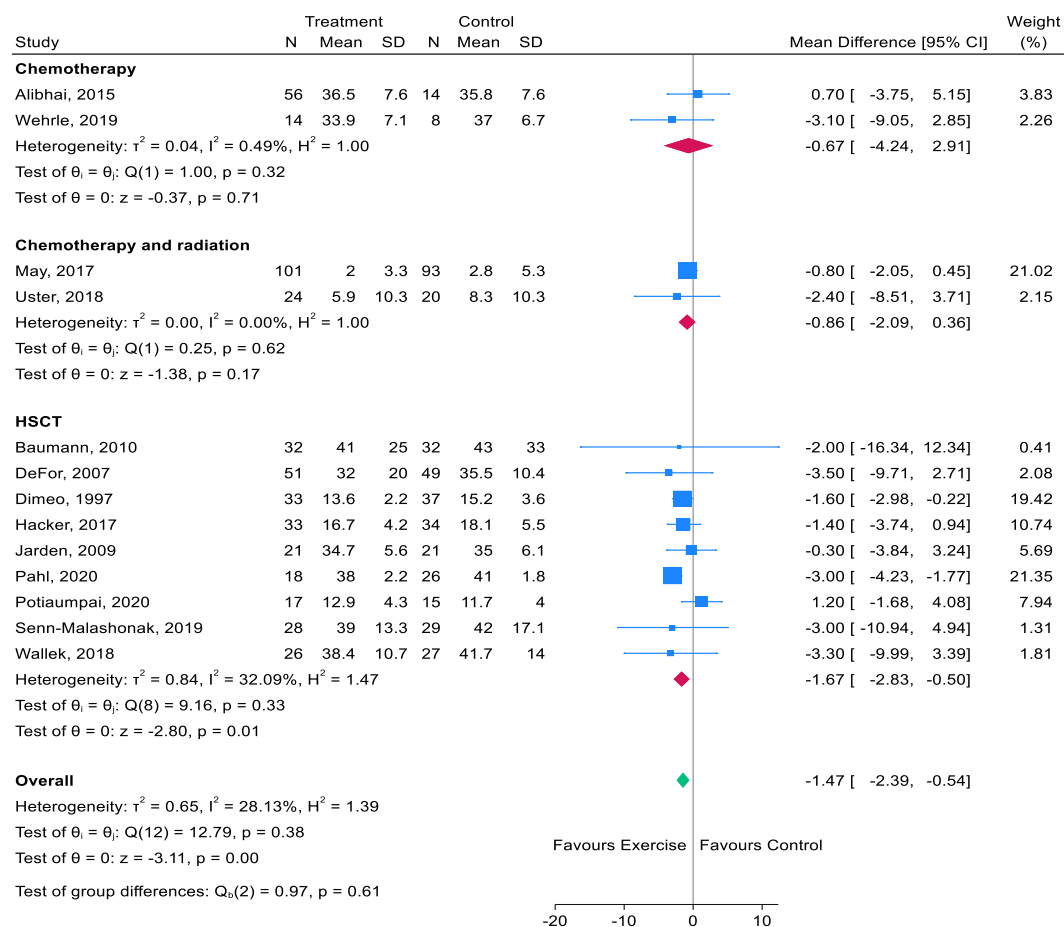


Sensitivity Analysis 1a: Days of hospitalization with three active controls removed i.e., Baumann-2011, Sana Mina-2020 and Wiskermann-2011.



Random-effects REML model

```

.meta regress i.Treatment, random(reml)

Effect-size label: Mean diff.
Effect size: _meta_es
Std. err.: _meta_se

Random-effects meta-regression
Method: REML
Number of obs = 13
Residual heterogeneity:
    tau2 = .7431
    I2 (%) = 26.40
    H2 = 1.36
R-squared (%) = 0.00
Wald chi2(2) = 0.54
Prob > chi2 = 0.7626

```

_meta_es	Coefficient	Std. err.	z	P> z	[95% conf. interval]
Treatment					
2	-.2446497	2.177892	-0.11	0.911	-4.513239 4.023939
3	-.9697286	2.009679	-0.48	0.629	-4.908627 2.96917
_cons	-.7140972	1.924735	-0.37	0.711	-4.486508 3.058314

Test of residual homogeneity: $Q_{res} = \text{chi2}(10) = 10.42$ Prob > $Q_{res} = 0.4045$

Comment:

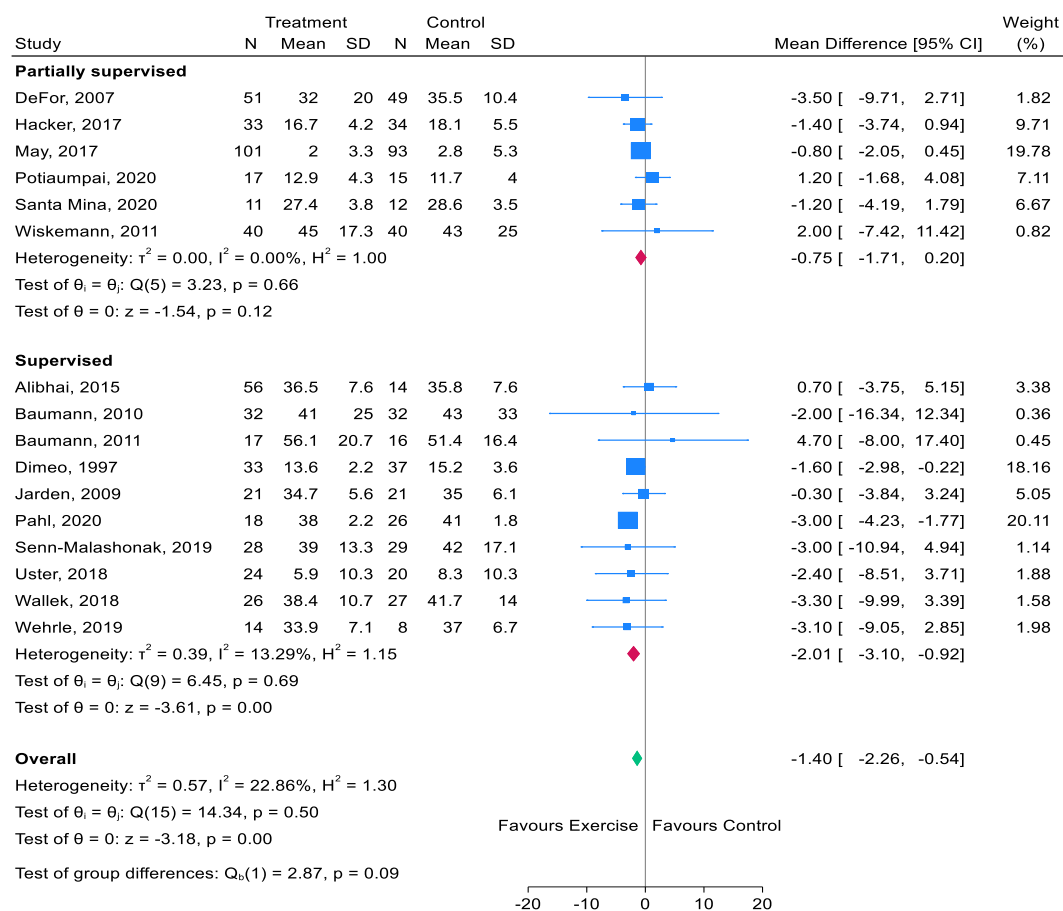
No substantial changes were detected, with the overall effect for the HSCT subgroup reducing from -1.55 (-2.61 to -0.50) to -1.67 (-2.83 to -0.50), and for all studies, from -1.40 (-2.26 to -0.54) to -1.47 (-2.39 to -0.54). The overall effects for the subgroups Chemotherapy and Chemotherapy & radiation were unchanged. A meta-regression showed no significant association between Treatment and the effect size of Mean Difference ($p=0.76$)

Sensitivity Analysis 1b: Proportion of hospital admittance with three active controls removed i.e., Baumann-2011, Sana Mina-2020 and Wiskermann-2011.

Comment:

No sensitivity analysis undertaken as the three studies removed were not included in the meta-analysis for Difference in Proportions.

Sensitivity Analysis 2a: Days of hospitalization with a subgroup analysis for Supervision (Supervised, Partially Supervised, Unsupervised).



Random-effects REML model

```
. xi: meta regress i.Supervision, random(reml)
i.Supervision      _ISupervisi_1-2      (_ISupervisi_1 for Sup-n==Partially supervised omitted)

Effect-size label: Mean diff.
Effect size:      _meta_es
Std. err.:       _meta_se
```

```
Random-effects meta-regression      Number of obs =      16
Method: REML                        Residual heterogeneity:
                                     tau2 =      .1347
                                     I2 (%) =      5.49
                                     H2 =      1.06
                                     R-squared (%) = 76.32
                                     Wald chi2(1) =      3.51
                                     Prob > chi2 =      0.0610
```

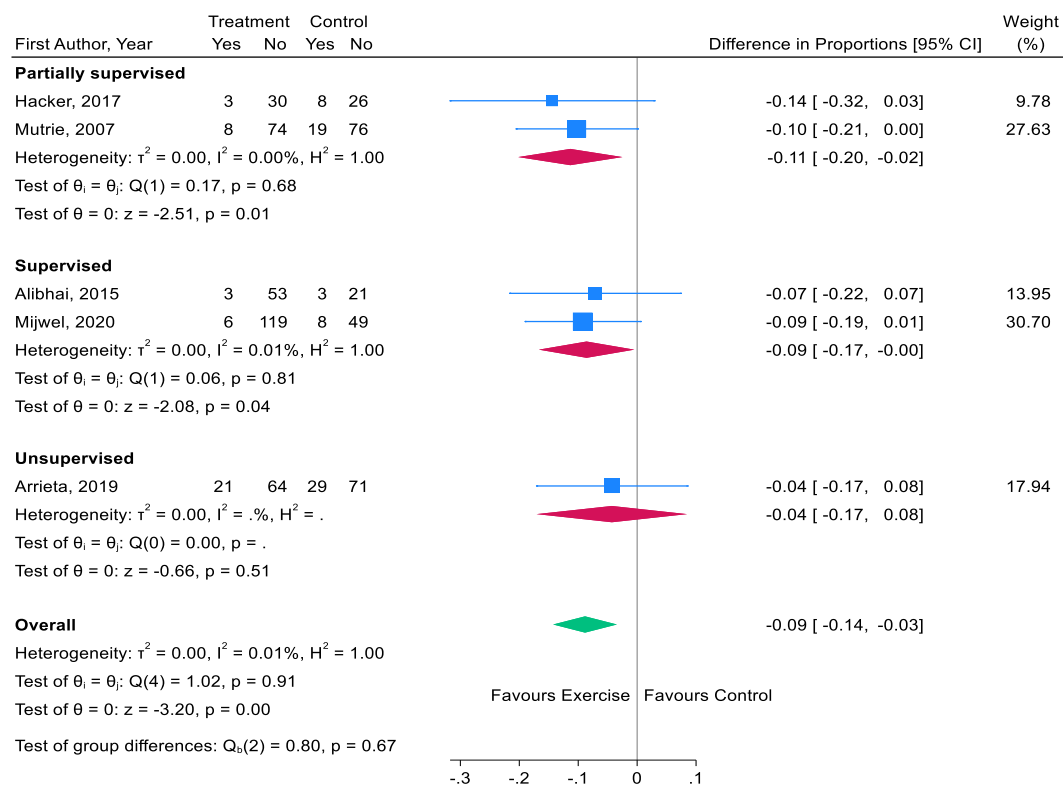
_meta_es	Coefficient	Std. err.	z	P> z	[95% conf. interval]
_ISupervisi_2	-1.34898	.7201094	-1.87	0.061	-2.760369 .0624081
_cons	-.7473577	.537539	-1.39	0.164	-1.800915 .3061993

Test of residual homogeneity: $Q_{res} = \chi^2(14) = 9.68$ Prob > $Q_{res} = 0.7851$

Comment:

The overall mean-difference for Supervised Treatment was 1.26 days less than the overall mean-difference for Partially Supervised Treatment. A meta-regression showed no significant association between Type of Supervision and the effect size of Mean Difference ($p=0.06$)

Sensitivity Analysis 2b: Proportion of hospital admittance with a subgroup analysis for Supervision (Supervised, Partially Supervised, Unsupervised).



Random-effects REML model

```
. xi: meta regress i.Supervision, random(reml)
i.Supervision _ISupervisi_1-3 (_ISupervisi_1 for Sup-n=Partially supervised omitted)

Effect-size label: Risk diff.
Effect size: _meta_es
Std. err.: _meta_se

Random-effects meta-regression
Method: REML

Number of obs = 5
Residual heterogeneity:
tau2 = 1.3e-08
I2 (%) = 0.00
H2 = 1.00
R-squared (%) = 97.51
Wald chi2(2) = 0.00
Prob > chi2 = 0.6713

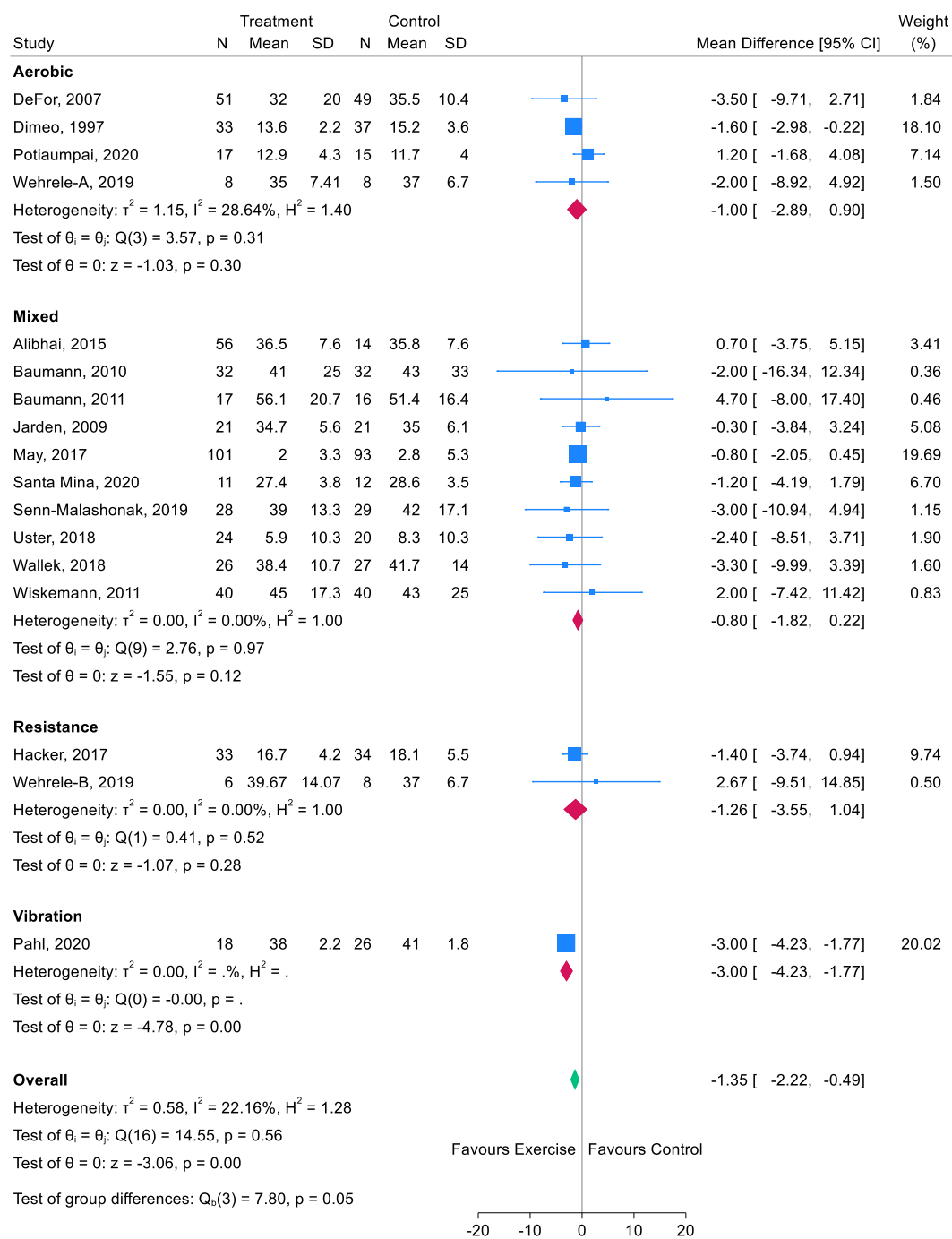
_ meta_es | Coefficient Std. err. z P>|z| [95% conf. interval]
-----+-----+-----+-----+-----
_ISupervisi_2 | .0275857 .0611882 0.45 0.652 [-.0923409 .1475124]
_ISupervisi_3 | .0704586 .0792764 0.89 0.374 [-.0849204 .2258375]
_cons | -.1133997 .045136 -2.51 0.012 [-.2018647 -.0249348]

Test of residual homogeneity: Q_res = chi2(2) = 0.22 Prob > Q_res = 0.8950
```

Comment:

Whilst the overall effect size for Partially Supervised Exercise was found to be significant, Unsupervised Exercise wasn't and Supervised Exercise was borderline significant. A meta-regression showed no significant association between Type of Supervision and the effect size of Mean Difference (p=0.67)

Sensitivity Analysis 3a: Days of hospitalization with a subgroup analysis for Exercise Type (Aerobic, Mixed, Resistance, Vibration).



Random-effects REML model

Favours Exercise Favours Control

-20 -10 0 10 20

Sensitivity Analysis 3a (Continued): Days of hospitalization with a subgroup analysis for Exercise Type (Aerobic, Mixed, Resistance, Vibration).

```
. xi: meta regress i.Exercise, random(reml)
i.Exercise      _IExercise_1-4      (_IExercise_1 for Exe-e==Aerobic omitted)

Effect-size label: Mean diff.
Effect size:  _meta_es
Std. err.:  _meta_se

Random-effects meta-regression      Number of obs =      17
Method: REML                        Residual heterogeneity:
                                     tau2 = 4.0e-08
                                     I2 (%) =  0.00
                                     H2 =  1.00
                                     R-squared (%) = 100.00
                                     Wald chi2(3) =  7.80
                                     Prob > chi2 =  0.0502
```

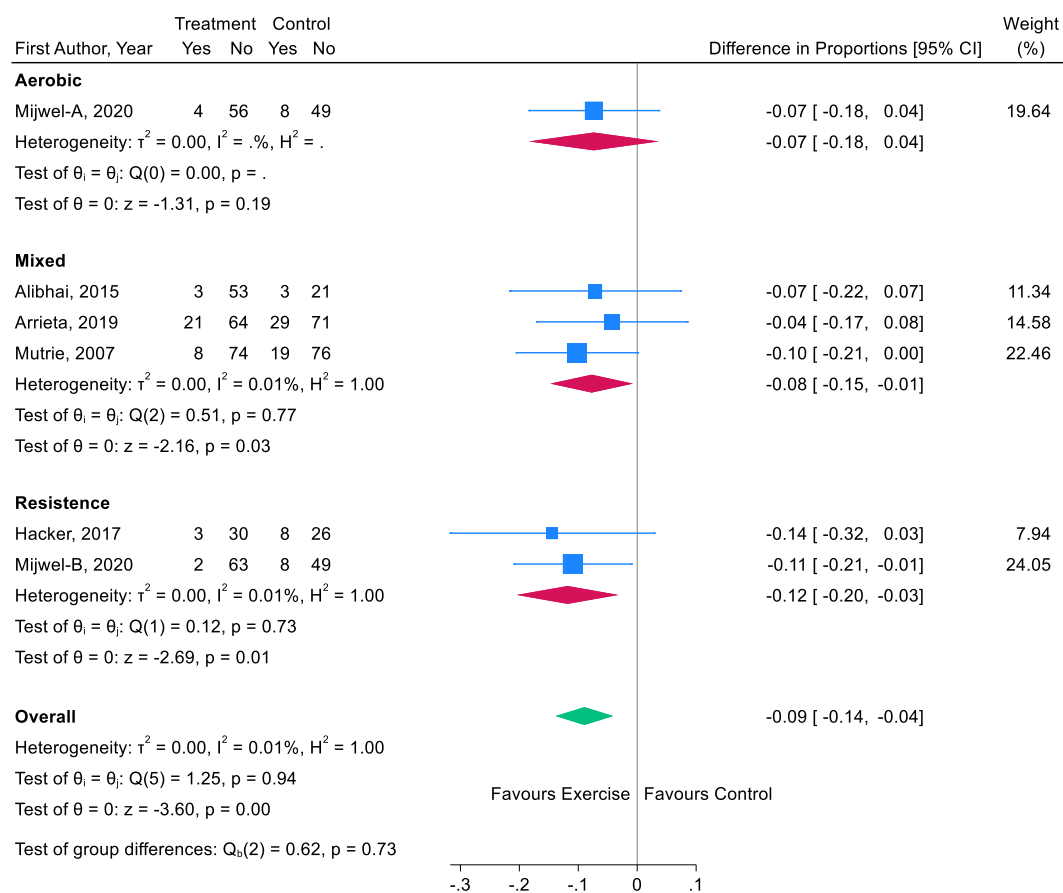
_meta_es	Coefficient	Std. err.	z	P> z	[95% conf. interval]
_IExercise_2	.3918145	.8040359	0.49	0.627	-1.184867 1.966896
_IExercise_3	-.0612657	1.322898	-0.05	0.963	-2.654098 2.531566
_IExercise_4	-1.806076	.8774884	-2.06	0.040	-3.525922 -.0862306
_cons	-1.193924	.613581	-1.95	0.052	-2.39652 .0086729

Test of residual homogeneity: Q_res = chi2(13) = 6.75 Prob > Q_res = 0.9146

Comment:

The subgroup analysis as shown by the forest plot indicates no substantial difference between the three types of exercise. This was supported by meta-regression which showed no significant association between Type of Exercise and the effect size of Mean Difference ($p=0.0502$)

Sensitivity Analysis 3b: Proportion of hospital admittance with a subgroup analysis for Exercise Type (Aerobic, Mixed, Resistance, Vibration).



Random-effects REML model

```
. xi: meta regress i.Exercise, random(reml)
i.Exercise      _IExercise_1-3      (_IExercise_1 for Exe=e=Aerobic omitted)

Effect-size label: Risk diff.
Effect size:  _meta_es
Std. err.:  _meta_se

Random-effects meta-regression
Method: REML

Number of obs = 6
Residual heterogeneity:
    tau2 = 3.6e-07
    I2 (%) = 0.01
    H2 = 1.00
R-squared (%) = 0.00
Wald chi2(2) = 0.62
Prob > chi2 = 0.7324
```

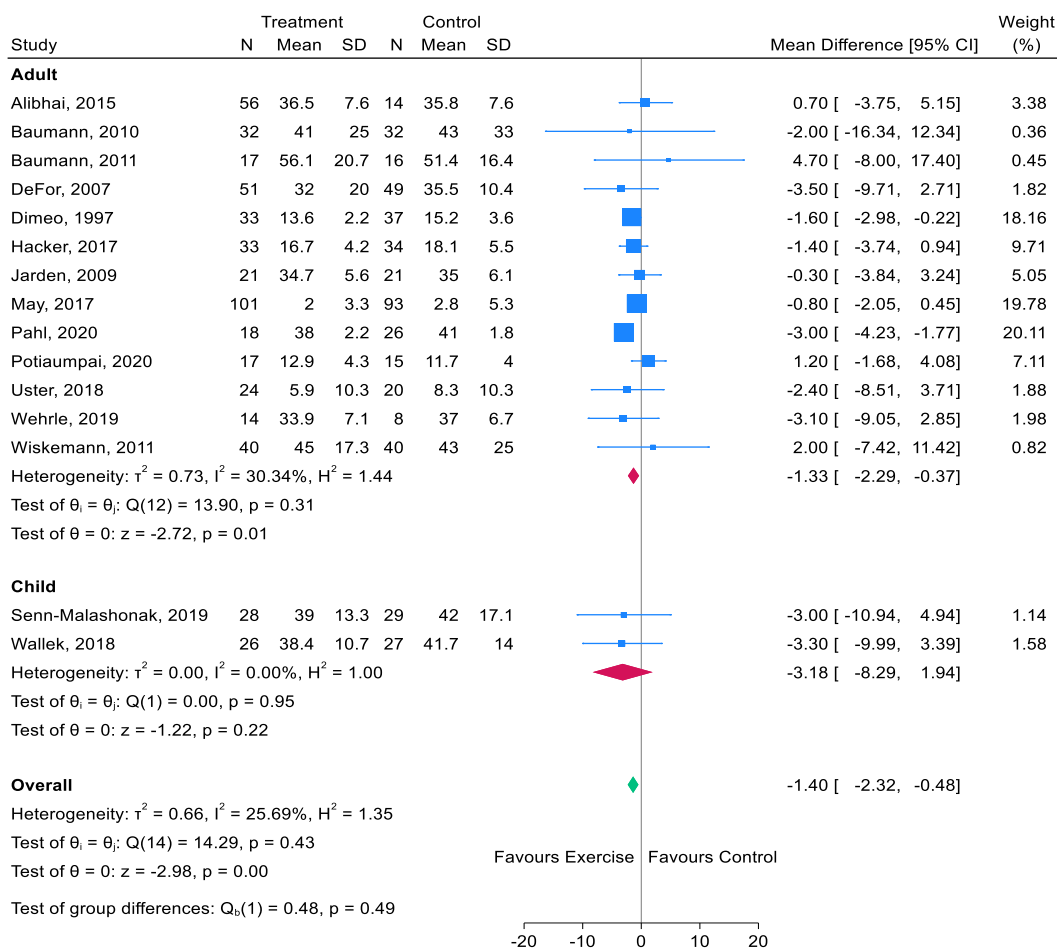
_meta_es	Coefficient	Std. err.	z	P> z	[95% conf. interval]
_IExercise_2	-.0035528	.0665921	-0.05	0.957	-.1340708 .1269653
_IExercise_3	-.0445402	.0713464	-0.62	0.532	-.1843767 .0952962
_cons	-.0736842	.0561615	-1.31	0.190	-.1837586 .0363902

Test of residual homogeneity: $Q_{res} = \text{chi2}(3) = 0.63$ Prob > $Q_{res} = 0.8895$

Comment:

The subgroup analysis as shown by the forest plot indicates no substantial difference between the three types of exercise. This was (just) supported by meta-regression which showed no significant association between Type of Exercise and the effect size of Difference in Proportions ($p=0.73$)

Sensitivity Analysis 4: Days of hospitalization with a subgroup analysis for Adult (Yes=Adult, No=Child).



Random-effects REML model

```
. xi: meta regress i.Adult, random(reml)
i.Adult      _IAdult_1-2      (_IAdult_1 for Adult==Adult omitted)

Effect-size label: Mean diff.
Effect size:      _meta_es
Std. err.:       _meta_se

Random-effects meta-regression
Method: REML

Number of obs = 15
Residual heterogeneity:
tau2 = .7071
I2 (%) = 28.18
H2 = 1.39
R-squared (%) = 0.00
Wald chi2(1) = 0.46
Prob > chi2 = 0.4996
```

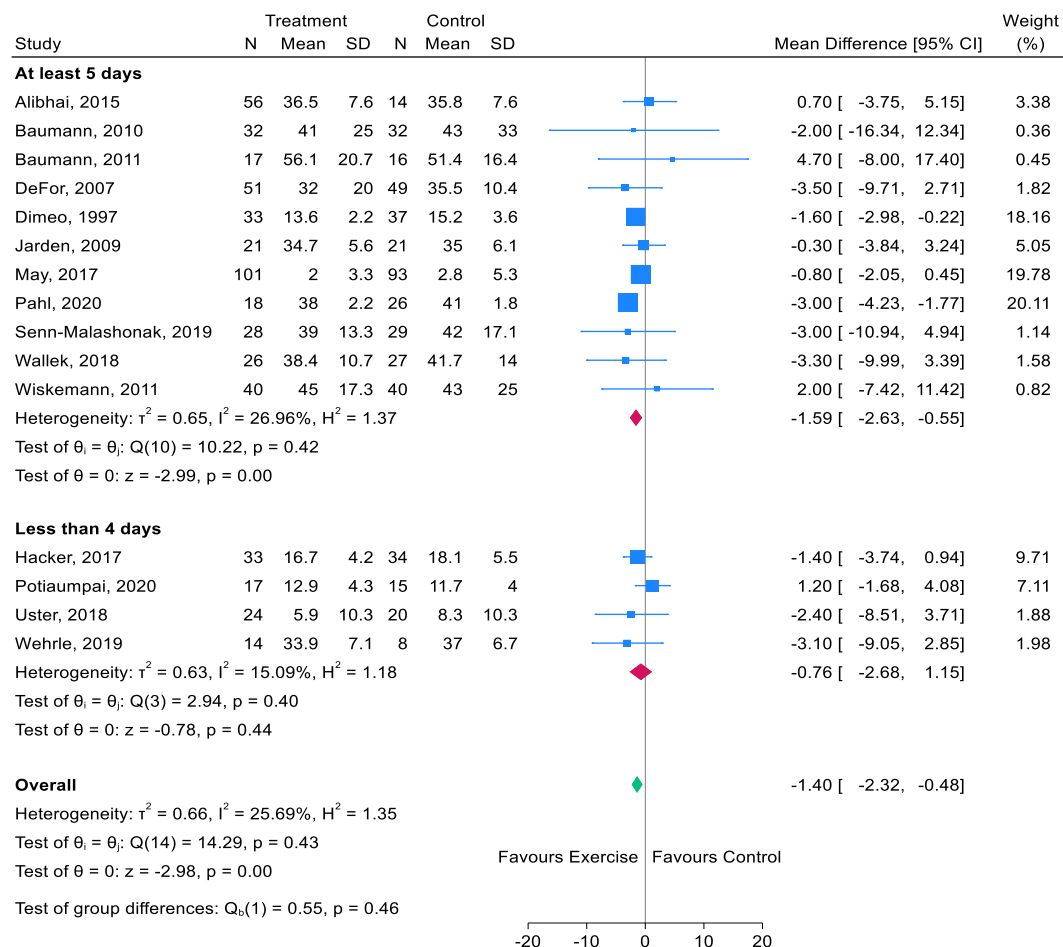
_meta_es	Coefficient	Std. err.	z	P> z	[95% conf. interval]
_IAdult_2	-1.838374	2.722938	-0.68	0.500	-7.175235 3.498487
_cons	-1.335735	.4851467	-2.75	0.006	-2.286605 -.384865

Test of residual homogeneity: $Q_{res} = chi2(13) = 13.90$ Prob > $Q_{res} = 0.3888$

Comment:

The subgroup analysis showed some variation been the overall effect size for studies involving adults (Mean Difference=-1.33 (-2.29 to -0.37)) compared to studies involving children (Mean Difference=-3.18 (-8.29 to 1.94)). However, a meta-regression showed no significant association between Adult (Yes, No) and the effect size of Mean Difference ($p=0.50$).

Sensitivity Analysis 5a: Days of hospitalization with a subgroup analysis for Duration (< 4 days, ≥ 5 days)



Random-effects REML model

```

.xi: meta regress i.Duration, random(reml)
i.Duration      _IDuration_1-2      (_IDuration_1 for Dur~n==At least 5 days omitted)

Effect-size label: Mean diff.
Effect size:      _meta_es
Std. err.:       _meta_se

Random-effects meta-regression      Number of obs =      15
Method: REML                        Residual heterogeneity:
                                     tau2 =      .6457
                                     I2 (%) =     24.55
                                     H2 =      1.33
                                     R-squared (%) =  2.38
                                     Wald chi2(1) =    0.55
                                     Prob > chi2 =    0.4594

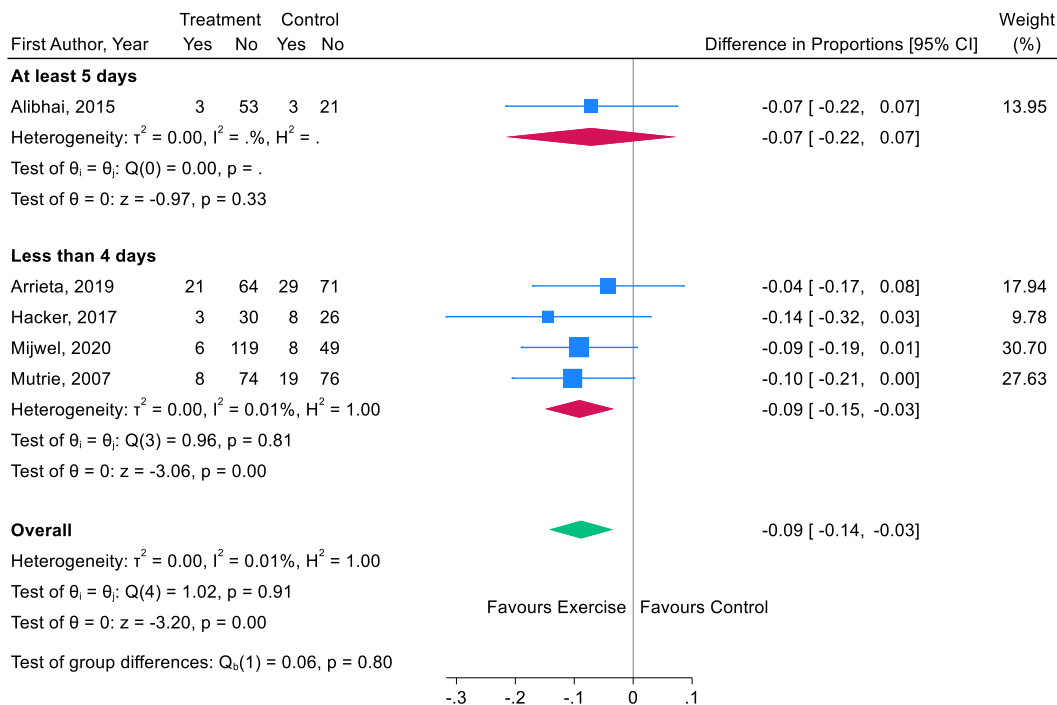
   _meta_es | Coefficient Std. err.   z   P>|z|   [95% conf. interval]
-----+-----+-----+-----+-----+-----
   _IDuration_2 | .8259886   1.116498   0.74   0.459   -1.362307   3.014284
   _cons        | -1.590524   .5322349  -2.99   0.003   -2.633685   -.547363

Test of residual homogeneity: Q_res = chi2(13) = 13.16   Prob > Q_res = 0.4354
    
```

Comment:

A subgroup analysis as displayed by the forest plot indicated no substantial variation between subgroups. A meta-regression showed no significant association between Duration and the effect size of Mean Difference ($p=0.49$)

Sensitivity Analysis 5b: Proportion of hospitalization with a subgroup analysis for Duration (< 4 days, ≥ 5 days)



Random-effects REML model

```
. xi: meta regress i.Duration, random(reml)
i.Duration      _IDuration_1-2      (_IDuration_1 for Dur~n=At least 5 days omitted)

Effect-size label: Risk diff.
Effect size:      _meta_es
Std. err.:       _meta_se

Random-effects meta-regression
Method: REML

Number of obs =      5
Residual heterogeneity:
    tau2 = 2.2e-07
    I2 (%) = 0.01
    H2 = 1.00
R-squared (%) = 57.02
Wald chi2(1) = 0.06
Prob > chi2 = 0.8040

+-----+-----+-----+-----+-----+
|_meta_es| Coefficient | Std. err. | z | P>|z| | [95% conf. interval] |
+-----+-----+-----+-----+-----+
|_IDuration_2| -.0197704 | .079678 | -0.25 | 0.804 | -.1759364 .1363957 |
|_cons| -.0714286 | .0739114 | -0.97 | 0.334 | -.2162923 .0734352 |
+-----+-----+-----+-----+-----+
Test of residual homogeneity: Q_res = chi2(3) = 0.96 Prob > Q_res = 0.8115
```

Comment:

A subgroup analysis as displayed by the forest plot indicated no substantial variation between subgroups concerning point estimates, however, there was substantial greater precision for the subgroup of Less than 4 Days compared to the subgroup of At Least 5 days A meta-regression showed no significant association between Duration and the effect size of Duration ($p=0.80$).