**SEARCH STRINGS (from inception up to January 20th, 2018)**

**MEDLINE/Pubmed**

((((("Depression"[Mesh] OR "Depressive Disorder"[Mesh])) OR (depression[Title/Abstract] OR unipolar depression[Title/Abstract] OR depress\*[Title/Abstract] OR major depressive disorder[Title/Abstract] OR major depression[Title/Abstract] OR unipolar depression[Title/Abstract]))) AND (((death[tiab] OR survival[tiab] OR deaths[tiab] OR mortality[tiab])) OR ((((("Mortality"[Mesh]) OR "Death"[Mesh]) OR "Survival"[Mesh]) OR "Survival Analysis"[Majr]) OR "Prognosis"[Mesh]))) AND systematic[sb]

**EMBASE**

Search 1: depression.sh.

Search 2: depressive disorder.sh.

Search 3: (depression or unipolar depression or major depressive disorder or major depression).ti,ab,kw.

Search 4: #1 or #2 or #3

Search5: mortality.sh.

Search6: death.sh.

Search7: survival.sh.

Search8: (mortality or excess mortality or survival or death$).ti,ab,kw.

Search9: #5 or #6 or #7 or #8

Search10: systematic review.pt,sh.

Search11: meta-analysis.pt,sh.

Search12: (systematic review or meta-analysis or meta-analytic review or meta-analytic).ti,ab,kw.

Search13: #10 or #11

Search 14: #4 and #9 and #13

**PsycINFO**

Search 1: depression.sh.

Search 2: depressive disorder.sh.

Search 3: (depression or unipolar depression or major depressive disorder or major depression).ti,ab,kw.

Search 4: #1 or #2 or #3

Search5: mortality.sh.

Search6: death.sh.

Search7: survival.sh.

Search8: (mortality or excess mortality or survival or death$).ti,ab,kw.

Search9: #5 or #6 or #7 or #8

Search10: systematic review.pt,sh.

Search11: meta-analysis.pt,sh.

Search12: (systematic review or meta-analysis or meta-analytic review or meta-analytic).ti,ab,kw.

Search13: #10 or #11

Search 14: #4 and #9 and #13

**Table S1. Reasons for exclusion of each study.**

|  |  |
| --- | --- |
| **Reference** | **Reason for exclusion** |
| Ayerbe, 2013 [1] | Overlapping meta-analysis |
| Ayerbe, 2013 [2] | Overlapping meta-analysis |
| Bartoli, 2013 [3] | Conference abstract |
| Bartoli, 2014 [4] | Editorial |
| Charlson, 2013 [5] | Did not provide data on the association of depression and mortality |
| Coutwright [6] | Did not provide data on the association of depression and mortality; only depressive symptoms |
| Cole, 2007 [7] | Overlapping meta-analysis |
| Doyle, 2015 [8] | Did not provide data on the association of depression and mortality |
| Engelmann, 2016 [9] | Did not provide data on the association of depression and mortality |
| Ghoneim, 2016 [10] | Not a meta-analysis |
| Lichtman, 2014 [11] | Not a meta-analysis |
| Malberg, 2009 [12] | Letter |
| Marzouka, 2010 [13] | Conference abstract |
| Mitchell, 2016 [14] | Conference abstract |
| Park, 2012 [15] | Not a meta-analysis |
| Pinquart, 2010 [16] | Data not available |
| Shi, 2016 [17] | Conference abstract |
| Van den Akker, 2003 [18] | Overlapping meta-analysis |
| Wu, 2016 [19] | Overlapping meta-analysis |
| Wyman, 2013 [20] | Dissertation/Thesis Abstract |
| Maslej, 2017 [21] | Did not provide data on the association of mortality and depression |
| Liu, 2017 [22] | Did not provide data on the association of mortality and depression |
| Aitken, 2017 [23] | Did not provide data on the association of mortality and depression |
| Shi, 2016 [17] | Overlapping meta-analysis |

**Abbreviation: MA,** meta-analysis

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table S2.** **Description of 16 meta-analytic estimates of the associations of depression and mortality across different populations.** | | | | | | | | | | | | |
| **Author, year** | **Study Population** | **Mortality Type** | **k** | **Follow-upα****(median, lower, higher)** | **Definition of Depression** | **Sample size (MDD/**  **Deaths)** | **RR Fixed Effects**† | **RR Random effects**§ | **RR Largest Study** | **Fixed**  **P-value**¶ | **Random P-value**† | **95% Prediction interval** |
| Cuijpers, 2014 [24] Hofmann, 2013 [25] Park, 2013 [26] | DM | All-cause mortality | 12 | 7.6 (10–3) | CBCD, VSI, | 4373/7452 | 1.45  (1.35–1.55) | 1.51  (1.25–1.82) | 1.6  (1.3–1.8) | < 10-6 | < 0.001 | 0.69–3.21 |
| Van Dooren, 2013 [27] | DM | Cardiovascular mortality | 4 | 7  (8–5) | VSI | 1255/536 | 1.46  (1.18–1.8) | 1.48  (1.08–2.03) | 1.25  (0.83–1.86) | < 0.001 | 0.014 | 0.61–3 |
| Cuijpers, 2014 [24]  Sorensen, 2005 [28]  van Melle, 2004 [29]  Meijer, 2013 [30] | Post AMI | All-cause mortality | 20 | 2  (10–0.3) | VSI, SI | 4183/2358 | 1.98  (1.79–2.21) | 2.09  (1.66–2.63) | 1.48  (1.12–1.96) | < 10-6 | < 10-6 | 0.9–3.54 |
| Meijer, 2011 [31] | Post AMI | Cardiovascular mortality | 5 | 1  (10–0.5) | VSI, | 995/114 | 2.87 (1.88–4.4) | 2.98  (1.65–5.38) | 5.51 (0.61–49.18) | < 0.001 | < 0.001 | 0.26–15.81 |
| Bartoli, 2013 [32] Cuijpers, 2014 [24 ] Pan, 2011 [33] | Stroke | All-cause mortality | 7 | 3  (12–1.25) | CBCD, VSI, SI | 3103/414 | 1.17  (1.1–1.25) | 1.46  (1.15–1.85) | 1.13  (1.06–1.21) | < 10-6 | 0.002 | 0.81–2.14 |
| Pan, 2011 [33] | Stroke | Fatal Stroke | 4 | 13  (29–7.5) | VSI, SI | 1600/377 | 1.61  (1.22–2.13) | 1.58  (1–2.5) | 1.66  (1.16–2.39) | < 0.001 | 0.05 | 0.21–8.08 |
| Cuijpers, 2014 [24]  Meijer, 2013 [30] | ACS | All-cause mortality | 3 | 1.5  (8–1) | CBCD, VSI, SI | 324/163 | 1.21  (1.12–1.31) | 1.82  (1.02–3.26) | 2.8  (1.4–5.7) | < 0.001 | 0.04 | 0.07–48.21 |
| Barth, 2004 [34]  Cuijpers, 2014 [24]  Leung, 2012 [35]  Meijer, 2013 [30] | CHD | All-cause mortality | 10 | 3.3  (15.2–1) | SI, VSI | 2284/1533 | 1.38  (1.25–1.52) | 1.57  (1.27–1.94) | 1.21 (1.04–1.42) | < 10-6 | < 0.001 | 1.16–1.47 |
| Cuijpers, 2014 [24]  Stenman, 2016 [36] | CABG | All-cause mortality | 4 | 5.5  (11.5–5) | VSI | 503/347 | 1.93  (1.43–2.6) | 1.93  (1.43–2.6) | 2.4  (1.4–4) | < 0.001 | < 0.001 | 1.09–3.18 |
| Cuijpers, 2014 [24]  Palmer, 2013 [37] | CKD | All-cause mortality | 12 | 2  (6.5–1) | CBCD, SI, VSI | 922/930 | 1.34  (1.1–1.64) | 1.66  (1.2–2.3) | 0.98  (0.72–1.34) | 0.004 | 0.002 | 0.84–1.41 |
| Cuijpers, 2014 [24] | COPD | All-cause mortality | 5 | 1  (5.3–1) | CBCD, VSI | 338/261 | 2.34  (1.69–3.24) | 2.34  (1.69–3.24) | 1.93 (1.04–3.58) | < 10-6 | < 10-6 | 1.23–3.63 |
| Cuijpers, 2014 [24] Satin, 2009 [38] | CA | All-cause mortality | 23 | 4.8  (14–0.5) | VSI, SI | 4034/4817 | 1.48  (1.39–1.57) | 1.55  (1.32–1.81) | 1.37  (1.26–1.5) | < 10-6 | < 10-6 | 0.8–2.51 |
| Cuijpers, 2014 [24] Fan, 2014 [39] Gathright 2017 [40] Sokoreli, 2016 [41]. | HF | All-cause mortality | 22 | 2.7  (30–0.5) | CBCD, VSI, SI | 3418/4345 | 1.17  (1.13–1.21) | 1.46  (1.3–1.65) | 1.33  (1.19–1.42) | < 10-6 | < 10-6 | 0.89–1.92 |
| Cuijpers, 2014 [24] | HIV | All-cause mortality | 4 | 7  (10–1.5) | VSI | 1977/1580 | 1.35  (1.18–1.54) | 1.3  (1.05–1.61) | 1.6  (1.32–1.92) | < 0.001 | 0.017 | 0.61–2.71 |
| Cuijpers, 2014 [24] Dew, 2015 [42] | Posttransplant | All-cause mortality | 6 | 6.5  (12.1–0.5) | VSI, SI | 405/433 | 1.48  (1.24–1.77) | 1.53  (1.18–1.98) | 1.66  (1.12–2.47) | < 0.001 | 0.001 | 0.71–2.65 |
| Baxter, 2011 [43] Cuijpers, 2002 [44] Cuijpers, 2014 [24]  Pederson, 2016 [45] Walker, 2015 [46] | Mixed Sample | All-cause mortality | 101 | 5  (40–0.1) | CBCD, SI, VSI | 87633/242577 | 1.25  (1.23–1.27) | 1.48  (1.39–1.58) | 1.77  (1.41–2.17) | < 10-6 | < 10-6 | 0.85–2.24 |
| Correll, 2017 [47] | Mixed Sample | Cardiovascular mortality | 4 | 8.5  (14.7–4) | SI | 175726/14495 | 1.34  (1.2–1.49) | 1.56  (1.08–2.24) | 1  (0.85–1.17) | < 10-6 | 0.018 | 0.34–6.83 |
| **Abbreviations:**  **ACS,** acute coronary syndrome; **AMI**, acute myocardial infarction; **CA**, cancer; **CABG**, coronary artery bypass grafting; **CBCD**, criteria based clinical diagnosis; **CHD**, coronary heart disease; **CKD**, chronic kidney disease; **COPD**, Chronic obstructive pulmonary disease; **CVD**, cardiovascular disease; **DM,** diabetes mellitus; **HF**, heart failure; **K**, Number of studies; **MDD**, Major depressive disorder; **NA**, not available; **RR**, risk ratio; **SI**, structured interview; **VSI**, validated screening instrument.  α Follow-up in years.  ‡ Fixed effects refer to summary effect size (95% CI) using the meta-analysis fixed-effects model.  § Random effects refers to summary effect size (95% CI) using the meta-analysis random-effects model.  ¶ P-value of summary fixed effects estimate.  † P-value of summary random effects estimate.  \* Kidney, liver, heart and lung transplantation; \*\* Include community samples, inpatients, outpatients and primary care; \*\*\*Includes community samples, inpatients and outpatients | | | | | | | | | | | | |

**Table S3. Adjustment of associations of mortality and MDD in each individual study included in the umbrella review.** Each type of covariate is marked with X if included in the adjustment.

| **Association** | **Study** | **Adjusted by** | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Age** | **Gender** | **Demographics** | **Factors related to the disease** | **Comorbidities** | **Etiology of the condition** | **Treatment** |
| DM/all-cause mortality | Bruce, 2005 | x | x | x | x | x | x | x |
| Egede, 2005 | x | x | x | x | x |  | x |
| Iversen, 2012 | x | x | x | x | x |  | x |
| Lin, 2009 |  |  |  |  |  |  |  |
| Richardson, 2008 | x |  | x |  | x |  |  |
| Rosenthal, 1988 | x |  |  | x | x |  |  |
| Ting , 2013 | x | x |  | x | x | x | x |
| Winkley, 2012 | x | x | x | x | x |  |  |
| Zhang , 2005 | x | x | x |  |  |  |  |
| DM/cardiovascular mortality | Lin, 2009 | x | x | x | x | x |  | x |
| Bruce, 2005 | x | x | x | x | x | x | x |
| Egede, 2005 | x | x | x | x | x |  | x |
| Post AMI/all-cause mortality | Carney, 2009 | x |  |  | x | x |  | x |
| Frassure-Smith, 1993 |  |  | x |  |  |  |  |
| Frassure-Smith, 1995 |  |  | x |  |  |  |  |
| Lauzon, 2003 | x | x |  | x | x |  |  |
| Rumsfeld, 2005 | x |  |  | x |  |  |  |
| Sorensen, 1997 | x |  | x | x |  |  |  |
| Welin, 2000 |  | x |  | x |  |  |  |
| Wheeler, 2012 | x |  |  |  |  |  |  |
| Zuidersma, 2013 | x | x |  | x | x |  |  |
| Post AMI/ cardiovascular mortality | Frasure-Smith, 1999 | x | x |  | x | x |  |  |
| Lane, 2001 | x | x | x |  | x |  |  |
| Welin, 2000 | x | x | x | x | x |  |  |
| Stroke/all-cause mortality | Ellis, 2010 | x | x | x | x | x |  | x |
| Melkas, 2010 | x | x | x | x | x |  |  |
| Williams, 2004 | x | x | x | x | x |  |  |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Stroke | Everson, 1998 | x | x | x |  |  |  |  |
| Surtees, 2008 | x | x | x |  | x |  | x |
| Yasuda, 2002 | x | x | x | x | x |  |  |
| ACS/all-cause mortality | Kronish, 2009 |  |  | x | x |  |  |  |
| CHD/all-cause mortality | Bosworth, 1999 |  |  | x | x | x |  |  |
| Herrmann, 2000 | x | x |  | x | x |  |  |
| CABG/all-cause mortality | Blumenthal, 2003 | x | x |  | x | x |  |  |
| Connerney, 2010 | x | x |  | x | x |  |  |
| Tully, 2008 | x |  |  | x | x |  |  |
| CKD/all-cause mortality | Balogun, 2006 | x |  |  |  |  |  |  |
| Chilcot, 2011 |  |  |  | x | x |  |  |
| Diefenthaeler, 2008 | x |  |  | x | x |  |  |
| Fischer, 2011 | x | x |  | x | x |  |  |
| Hedayati, 2010 | x |  | x |  |  |  |  |
| Hedayati, 2005 | x |  | x |  | x | x |  |
| Kojima, 2010 | x | x | x | x | x |  |  |
| Riezebos, 2010 | x | x |  | x | x |  |  |
| COPD/all-cause mortality | Almagro, 2002 |  |  | x | x | x |  |  |
| De Voogd, 2009 | x | x | x | x | x | x |  |
| Ng, 2007 | x |  | x | x | x | x |  |
| Papaiounaou, 2013 | x | x |  | x | x | x |  |
| Yohannes, 2005 |  |  |  |  |  |  |  |
| CA/all-cause mortality | Arrieta, 2012 | x | x |  | x | x | x |  |
| Chen, 2011 | x |  |  | x |  |  |  |
| Cohen, 2012 |  |  | x | x |  |  |  |
| Gripp, 2007 |  |  |  | x | x | x | x |
| Groenvold, 2007 | x |  | x | x | x |  | x |
| Karvonen-Gutierrez , 2008 | x |  | x | x | x | x |  |
| Nakaya, 2006 | x | x |  | x | x | x |  |
| Nakaya, 2008 | x | x | x | x | x | x |  |
| Pirl, 2008 |  |  |  | x | x |  |  |
| Prieto, 2005 | x |  |  | x |  | x |  |
| Steel, 2007 | x | x | x | x | x | x |  |
| Stommel, 2002 | x | x | x | x | x | x |  |
| Suthahar, 2008 | x | x | x | x |  | x |  |
| Tian , 2009 | x | x |  | x |  |  |  |
| HF/all-cause mortality | Adams, 2012 | x |  | x | x | x | x |  |
| Alhurani, 2015 | x | x | x | x | x |  |  |
| Chung , 2009 | x | x | x | x |  |  |  |
| Diez-Quevedo, 2013 | x | x |  | x | x | x | x |
| Faller, 2007 | x | x | x | x |  | x |  |
| Freedland, 1991 |  |  |  |  |  |  |  |
| Hedayati, 2004 | x |  |  |  | x |  |  |
| Jiang, 2007 | x |  | x | x | x | x |  |
| Junger, 2005 |  |  |  | x |  |  |  |
| Kato, 2009 | x |  |  | x |  |  | x |
| Lesman-Leegte, 2009 | x | x |  | x |  |  |  |
| Mommersteeg, 2016 | x | x |  |  | x | x |  |
| Moraska, 2013 | x | x |  | x | x |  |  |
| O'Connor, 2008 | x | x | x | x |  | x |  |
| Rollman, 2012 | x | x |  | x | x |  | x |
| Sherwood, 2007 | x |  |  | x |  | x |  |
| Testa, 2011 | x | x |  |  | x |  |  |
| van den Broek, 2011 | x | x | x | x | x | x |  |
| Volz, 2011 |  |  |  | x |  |  |  |
| Zuluaga, 2010 | x | x | x | x | x | x | x |
| HIV/all-cause mortality | French, 2009 | x | x | x | x | x |  | x |
| Lyketsos, 1996 | x | x | x | x |  |  | x |
| Page-Shafer, 1996 | x | x |  | x | x |  |  |
| Posttransplant/all-cause mortality | Novak, 2010 | x | x |  | x | x |  |  |
| Rosenberg, 2016 | x |  |  | x | x |  | x |
| Mixed samples/all-cause mortality | Aaroma, 1994 | x |  | x | x | x | x |  |
| Abbatecola, 2011 | x | x | x |  |  |  |  |
| Adamson, 2005 | x | x |  |  | x |  |  |
| Almeida, 2010 | x | x |  |  |  | x |  |
| Amador, 2006 | x | x |  | x | x |  |  |
| Anstey, 2002 | x | x | x |  | x |  |  |
| Arfken, 1999 | x | x | x | x | x |  |  |
| Atlantis, 2011 | x | x | x | x | x |  |  |
| Ben-Ezra, 2006 | x | x | x | x | x |  |  |
| Black, 1999 | x | x | x |  | x |  |  |
| Bosworth, 1999 | x | x | x | x | x |  |  |
| Bot, 2012 | x | x |  | x | x |  |  |
| Brill, 1992 |  |  |  | x |  |  |  |
| Bula, 2001 | x | x | x | x | x |  |  |
| Callahan, 1998 | x | x | x | x | x |  |  |
| Chwastiak, 2010 | x | x | x |  |  |  |  |
| Clausen,, 2007 | x |  |  |  |  |  |  |
| Covinsky, 1999 | x | x | x |  | x |  |  |
| Drago, 2007 | x | x | x | x | x | x | x |
| Eaton, 2013 | x | x | x |  |  |  |  |
| Engedal, 1996 |  | x | x |  | x |  |  |
| Fortes, 2011 | x | x | x |  |  |  |  |
| Fu, 2003 | x | x | x | x |  |  |  |
| Gale, 2012 | x |  | x |  | x |  |  |
| Gallo, 2005 |  |  |  | x | x |  |  |
| Ganzini, 1997 |  |  | x | x |  |  |  |
| Guerini, 2010 | x | x |  | x | x |  |  |
| Hamer, 2011 | x | x | x | x | x |  | x |
| Helmer , 1999 |  |  | x | X | x |  |  |
| Herrmann, 1998 |  |  | x |  | x |  |  |
| Herrmann-Lingen, 2001 |  |  |  | X | x |  |  |
| Hjaltadottir, 2011 |  |  |  |  |  |  |  |
| Ho, 2005 | x |  |  | X | x |  |  |
| Imai , 2012 | x | x |  | X |  |  |  |
| Janzing , 1999 | x | x |  | X | x |  |  |
| Kerr, 2011 |  |  | x | X | x |  |  |
| Kinder, 2008 | x |  | x | X | x |  |  |
| Koenig, 1989 | x |  |  | X | x |  |  |
| Kohler, 2013 | x |  | x | X | x |  |  |
| Kojima, 2010 | x |  |  |  |  |  |  |
| Kopp (male), 2011 | x |  |  | X |  |  |  |
| Krause, 2008 |  |  | x | X |  |  |  |
| Kuzuya, 2006 | x |  | x | X | x |  | x |
| Laan, 2011 | x |  | x |  |  |  |  |
| Lawrence, 2000 | x |  | x | X |  |  |  |
| Lemogne , 2012 | x |  | x | X | x |  |  |
| Mallon, 2002 | x |  |  |  | x |  | x |
| Markkula, 2012 |  |  | x | X | x |  |  |
| Marzari , 2005 |  |  |  |  | x |  |  |
| McCusker, 2006 |  |  | x |  | x |  |  |
| Meller, 1999 | x |  | x |  |  |  |  |
| Mogga, 2006 | x | x |  |  |  |  |  |
| Mykletun, 2009 | x | x | x |  | x |  |  |
| Nabi, 2010 | x | x |  |  |  |  |  |
| Onitilo, 2006 | x | x | x | X | x |  | x |
| Patten, 2011 | x | x | x |  | x |  |  |
| Penninx, 1998 | x | x |  | X | x |  |  |
| Phillips, 2009 |  |  |  |  |  |  |  |
| Pieper, 2011 | x | x |  | X | x |  |  |
| Pollak , 1990 | x |  | x |  | x |  |  |
| Riezebos, 2010 | x | x |  | X | x |  |  |
| Ryan , 2008 |  |  | x | X | x |  |  |
| Saz, 1999 | x | x | x |  |  |  |  |
| Schoevers , 2000 | x |  | x | X | x |  |  |
| Schulz, 2000 | x | x | x | X |  |  |  |
| Sharifi, 2012 | x | x | x | X | x | x |  |
| St John, 2012 | x | x | x |  |  |  |  |
| Whooley, 1998 | x | x |  | X | x |  |  |
| Wulsin, 2005 | x | x |  |  | x |  |  |
| Wyman, 2012 | x | x |  |  |  |  |  |
| Yaffe, 2003 | x | x | x |  |  |  |  |
| Young, 2010 | x | x | x | X | x |  |  |
| Zhang , 2005 | x | x | x |  |  |  |  |
| Mixed samples/cardiovascular mortality | Almeida , 2014 | x |  | x | X | x |  |  |
| Murray Thomas, 2013 | x | x |  | X |  |  |  |
| Saint Onge, 2014 | x | x | x |  |  |  |  |

**Abbreviations:** **NA,** not adjusted; **NI**, adjustment covariates not informed.

**Table S4. AMSTAR rating of the included systematic reviews and meta-analyses.**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Reference** | **AMSTAR Item** | | | | | | | | | | | **Total** |
| **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** |
| Barber, 2016 [48] | CA | Y | Y | Y | N | Y | Y | Y | N | N | Y | **7** |
| Barth, 2004 [34] | CA | N | Y | N | Y | Y | N | N | Y | Y | Y | **6** |
| Bartoli, 2013 [32] | CA | N | N | N | N | Y | N | N | Y | Y | Y | **4** |
| Baxter, 2011 [43] | CA | N | Y | Y | N | Y | N | N | Y | Y | N | **5** |
| Correll, 2017 [47] | Y | Y | Y | N | N | Y | Y | Y | Y | Y | N | **8** |
| Cuijpers, 2002 [44] | CA | CA | Y | N | N | Y | N | N | Y | N | N | **3** |
| Cuijpers, 2013 [49] | CA | CA | Y | N | N | N | Y | N | Y | Y | Y | **5** |
| Cuijpers, 2014 [24] | CA | CA | Y | N | N | Y | Y | Y | Y | Y | Y | **7** |
| Dew, 2015 [42] | Y | Y | Y | N | N | Y | Y | Y | Y | Y | Y | **9** |
| van Dooren, 2013 [27] | CA | Y | Y | N | N | Y | N | N | Y | Y | Y | **6** |
| Fan, 2014 [39] | CA | N | Y | N | N | Y | Y | Y | Y | Y | Y | **7** |
| Gathright 2017 [40] | N | CA | Y | CA | N | Y | N | N | Y | Y | Y | **5** |
| Hofmann, 2013 [25] | CA | Y | Y | N | Y | Y | Y | Y | Y | Y | Y | **9** |
| Leung, 2012 [35] | CA | N | Y | N | N | Y | Y | Y | Y | Y | Y | **7** |
| Meijer, 2011 [31] | CA | CA | Y | CA | N | Y | Y | N | Y | Y | N | **5** |
| Meijer, 2013 [50] | N | Y | Y | N | N | Y | N | N | N | N | Y | **4** |
| van Melle, 2004 [51] | CA | N | Y | N | N | Y | N | N | Y | Y | N | **4** |
| Palmer, 2013 [37] | CA | N | N | N | Y | Y | Y | Y | Y | Y | Y | **7** |
| Pan, 2011 [33] | CA | Y | Y | N | N | Y | Y | Y | Y | Y | Y | **8** |
| Park, 2013 [26] | CA | Y | Y | N | Y | Y | Y | Y | Y | Y | Y | **9** |
| Pederson, 2016 [45] | CA | Y | Y | N | N | Y | Y | Y | Y | Y | Y | **8** |
| Salte, 2015 [52] | CA | N | Y | N | N | Y | Y | N | N | N | Y | **4** |
| Satin, 2009 [38] | CA | N | Y | N | N | Y | N | N | Y | Y | Y | **5** |
| Sokoreli, 2016 [41] | CA | Y | Y | CA | N | Y | N | N | Y | N | Y | **7** |
| Sorensen, 2005 [53] | CA | N | Y | CA | CA | Y | Y | Y | NA | NA | N | **4** |
| Stenman, 2016 [36] | Y | N | Y | Y | N | Y | Y | Y | Y | Y | Y | **9** |
| Walker, 2015 [46] | CA | Y | Y | N | N | Y | N | N | Y | Y | Y | **6** |

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| **Table S5.** **Evaluation of heterogeneity, small-study effects and excess of significance bias in 21 meta-analytic estimates investigating the associations of depression and mortality.** | | | | | | | | |
| **Author, year** | **Population** | **Mortality type** | **Egger's P-value**¶, † | **I2 / P**‡ | **Number of studies** | **Excess of significance** | | |
| **Observed** | **Expected** | **P-value** |
| Cuijpers, 2014 [24] Hofmann, 2013 [25] Park, 2013 [26] | DM | All-cause mortality | 0.589 | 83.616/<0.001 | 12 | 5.726 | 1.727 | 0.189 |
| Van Dooren, 2013 [27] | DM | Cardiovascular mortality | 0.647 | 52.512/0.097 | 4 | 0.388 | 7.404 | 0.007 |
| Cuijpers, 2014 [24]  Sorensen, 2005 [28]  Van Melle, 2004 [29]  Meijer, 2013 [30] | Post AMI | All-cause mortality | 0.404 | 66.6/<0.001 | 20 | 10.969 | 0.215 | 0.643 |
| Meijer, 2011 [31] | Post AMI | Cardiovascular mortality | 0.557 | 42.353/0.139 | 5 | 2.373 | 0.316 | 0.574 |
| Bartoli, 2013 [32] Cuijpers, 2014 [24 ] Pan, 2011 [33] | Stroke | All-cause mortality | 0.014 | 62.177/0.015 | 7 | 0.05 | 316.281 | 0 |
| Pan, 2011 [33] | Stroke | Fatal Stroke | 0.758 | 46.665/0.131 | 4 | 0.018 | 221.216 | 0 |
| Cuijpers, 2014 [24]  Meijer, 2013 [30] | ACS | All-cause mortality | 0.108 | 86.386/0.001 | 3 | 0.544 | 5.357 | 0.021 |
| Barth, 2004 [34]  Cuijpers, 2014 [24]  Leung, 2012 [35]  Meijer, 2013 [30] | CHD | All-cause mortality | 0.047 | 62.637/0.004 | 10 | 1.181 | 14.22 | 0 |
| Cuijpers, 2014 [24]  Stenman, 2016 [36] | CABG | All-cause mortality | 0.966 | 0/0.766 | 4 | 2.32 | 0.105 | 0.746 |
| Cuijpers, 2014 [24]  Palmer, 2013 [37] | CKD | All-cause mortality | 0.002 | 44.369/0.049 | 12 | 0.174 | 85.532 | 0 |
| Cuijpers, 2014 [24] | COPD | All-cause mortality | 0.026 | 0/0.635 | 5 | 3.011 | 1.314 | 0.252 |
| Cuijpers, 2014 [24] Satin, 2009 [38] | CA | All-cause mortality | 0.364 | 69.597/<0.001 | 23 | 4.534 | 11.617 | 0.001 |
| Cuijpers, 2014 [24] Fan, 2014 [39] Gathright 2017 [40] Sokoreli, 2016 [41]. | HF | All-cause mortality | <0.001 | 78.413/<0.001 | 22 | 6.503 | 12.268 | 0 |
| Cuijpers, 2014 [24] | HIV | All-cause mortality | 0.388 | 55.156/0.082 | 4 | 1.797 | 0.643 | 0.423 |
| Cuijpers, 2014 [24] Dew, 2015 [42] | Posttransplant | All-cause mortality | 0.656 | 36.485/0.163 | 6 | 0.864 | 13.3 | 0 |
| Baxter, 2011 [43] Cuijpers, 2002 [44] Cuijpers, 2014 [24]  Pederson, 2016 [45] Walker, 2015 [46] | Mixed Sample | All-cause mortality | <0.001 | 89.276/0 | 101 | 17.832 | 97.157 | 0 |
| Correll, 2017 [47] | Mixed Sample | Cardiovascular mortality | 0.496 | 87.884/<0.001 | 4 | 1.006 | 5.282 | 0.022 |
| **Abbreviations:** **ACS,** acute coronary syndrome; **AMI**, acute myocardial infarction; **CA**, cancer; **CABG**, coronary artery bypass grafting; **CBCD**, criteria based clinical diagnosis; **CHD**, coronary heart disease; **CKD**, chronic kidney disease; **COPD**, Chronic obstructive pulmonary disease; **DM,** diabetes mellitus; **HF**, heart failure; **MDD**, major depressive disorder; **NA**, not available; **NE**, not evaluated because the number of observed studies with significant results was smaller than the expected number. | | | | | | | | |
| ¶ P-value from the Egger’s regression asymmetry test.  † Values in bold identify the studies with small-study effects (i.e., P < 0.1 in Egger’s test and the effect size of the largest study more conservative than the random-effects summary effect size).  ‡ I2 metric of inconsistency (95% CI) and the P-value of the Q test.  \* Kidney, liver, heart and lung transplantation  \*\* Include community samples, inpatients, outpatients and primary care; \*\*\*Includes community samples, inpatients and outpatients | | | | | | | | |

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| **Table S6. Sensitivity analysis using credibility ceilings for the meta-analyses investigating the associations between depression and mortality for associations that presented highly suggestive evidence criteria.** | | | | | |
| **Reference** | **Population** | **Mortality** | **10% Credibility ceiling ES (95% CI)** | **20% Credibility ceiling ES (95% CI)** | **30% Credibility ceiling ES (95% CI)** |
| Cuijpers, 2014 [24] Satin, 2009 [38] | CA | All-cause mortality | 1.164 (1.003–1.324) | 1.088 (0.897–1.279) | 1.007 (0.776–1.237) |
| Cuijpers, 2014 [24] Fan, 2014 [39] Gathright 2017 [40] Sokoreli, 2016 [41]. | HF | All-cause mortality | 1.083 (1.018–1.148) | 1.083 (0.992–1.173) | 1.079 (0.937–1.221) |
| Baxter, 2011 [43] Cuijpers, 2002 [44] Cuijpers, 2014 [24]  Pederson, 2016 [45] Walker, 2015 [46] | Mixed Sample | All-cause mortality | 1.068 (1.028–1.109) | 1.048 (0.999–1.097) | 1.031 (0.965–1.097) |
| Cuijpers, 2014 [24]  Sorensen, 2005 [28]  van Melle, 2004 [29]  Meijer, 2013 [30] | Post-AMI | All-cause mortality | 1.458 (1.066–1.851) | 1.326 (0.829–1.824) | 1.179 (0.531–1.827) |
| **Abbreviations: CI**, confidence interval; **CKD**, chronic kidney disease; **ES**, effect size.  \* Kidney, liver, heart and lung transplantation  \*\* Include community samples, inpatients, outpatients and primary care | | | | | |

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