

Appendix 17d: clinical studies characteristics tables – management of subthreshold depressive symptoms

Contents

Service delivery – studies excluded in the guideline update.....	1
Service delivery – relapse prevention – studies excluded in the guideline update.....	3
Psychological and psychosocial interventions – new studies in the guideline update.....	4
Pharmacological interventions – new studies in the guideline update.....	11
Pharmacological interventions – relapse prevention - new studies in the guideline update.....	24

Service delivery - studies excluded in the guideline update

Characteristics of Excluded Studies

Reference ID	Reason for Exclusion
ADLER2004	Dythymia<50% so in major depression group
BRUCE2007	Assessment of depression
GLICK1986	Not diagnosis of depression (schizophrenia and major affective)
HEDRICK2003	Dythymia<50% so in major depression group
HERMENS2007	Minor depression=17.5% so in major depression group
HUNKELER2006	Dythyymia<50% so in major depression group
LIU2003	Dythyymia <50% so in major depression group
LUDMAN2007	Major depression
MIRANDA2003	Major depression
UNUTZER2001	Dythyymia<50% so in major depression group
UNUTZER2006	Dythyymia<50% so in major depression group
VAN2006	Prevention study
WANG2007	No formal diagnosis of depression and non relevant outcomes used at baseline

References of Excluded Studies

ADLER2004 (Published Data Only)

Adler, D.A., Bungay, K.M., Wilson, I.B., Pei, Y., Supran, S., Peckham, E., Cynn, D.J. & Rogers, W.H. (2004) The impact of a pharmacist intervention on 6-month outcomes in depressed primary care patients. *General Hospital Psychiatry*, 26, 199-209.

BRUCE2007 (Published Data Only)

Bruce, M.L., Brown, E.L., Rane, P.J., Mlodzianowski, A.E., Meyers, B.S., Leon, A.C., Heo, M., Byers, A.L., Greenberg, R.L., Rinder, S., Katt, W. & Nassisi, P. (2007) A randomized trial of depression assessment intervention in home health care. *Journal of the American Geriatrics Society*, 55, 1793-1800.

GLICK1986 (Published Data Only)

Glick, I.D., Fleming, L., DeChillo, N., Meyerkopf, N., Jackson, C., Muscara, D. & Good-Ellis, M. (1986) A controlled study of transitional day care for non-chronically-ill patients. *American Journal of Psychiatry*, 143, 1551-1556.

HEDRICK2003 (Published Data Only)

Hedrick, S.C., Chaney, E.F., Felker, B., Liu, C.F., Hasenberg, N., Heagerty, P., Buchanan, J., Bagala, R., Greenberg, D., Paden, G., Fihn, S.D. & Katon, W. (2003) Effectiveness of collaborative care depression treatment in veterans' affairs primary care. *Journal of General Internal Medicine*, 18, 9-16.

HERMENS2007 (Published Data Only)

Hermens, M.L.M., van Hout, H.P.J., Terluin, B., Ader, H.J., Pennix, B.W.J.H., van Marwijk, H.W.J., Bosmans, J.E., van Dyck, R. & de Haan, M. (2007) Clinical effectiveness of usual care with or without antidepressant medication for primary care patients with minor or mild-major depression: a randomised equivalence trial. *BMC Medicine*, 5, 36.

HUNKELER2006 (Published Data Only)

Hunkeler, E.M., Katon, W., Tang, L., Williams, J.W., Kroenke, K., Lin, E.H.B., Harpole, L.H., Arean, P., Levine, S., Grypma, L.M., Hargreaves, W.A. & Unutzer, J. (2006) Long term outcomes from the IMPACT randomised trial for depressed elderly patients in primary care. *BMJ*, 332, 259-263

LIU2003 (Published Data Only)

Liu, C.F., Hedrick, S.C., Chaney, E.F., Heagerty, P., Felker, B., Hasenberg, N., Fihn, S. & Katon, W. (2003) Cost effectiveness of collaborative care for depression in a primary care veteran population. *Psychiatric Services*, 54 (5), 698-704.

LUDMAN2007 (Published Data Only)

Ludman, E.J., Simon, G.E., Grothaus, L.C., Luce, C., Markley, D.K., Schaefer, J. (2007) A pilot study of telephone care management and structured disease self-management groups for chronic depression. *Psychiatric Services*, 58 (8), 1065-1072.

MIRANDA2003 (Published Data Only)

Miranda, J., Duan, N., Sherbourne, C., Schoenbaum, M., Lagomasino, I., Jackson-Triche, M. & Wells, K.B. (2003) Improving care for minorities: can quality improvement interventions improve care and outcomes for depressed minorities? Results of a randomized, controlled trial. *Health Services Research*, 38 (2), 613-630.

UNUTZER2001 (Published Data Only)

Unutzer, J., Rubenstein, L., Katon, W.J., Tang, L., Duan, N., Lagomasino, I.T. & Wells, K.B. (2001) Two-year effects of quality improvement programs on medication management for depression. *Archives of General Psychiatry*, 58, 935-942.

UNUTZER2006 (Published Data Only)

Unutzer, J., Tang, L., Oishi, S., Katon, W., Williams, J.W., Hunkeler, E., Hendrie, H., Lin, E.H.B., Levine, S., Grypma, L., Steffens, D.C., Fields, J. & Langston, C. (2006) Reducing suicidal ideation in depressed older primary care patients. *Journal of the American Geriatrics Society*, 54, 1550-1556.

VAN2006 (Published Data Only)

van 't Veer-Tazelaar, N., van Marwijk, H., van Oppen, P., Nijpels, G., van Hout, H., Cuijpers, P., Stalman, W. & Beekman, A. (2006) Prevention of anxiety and depression in the age group of 75 years and over: a randomised controlled trial testing the feasibility and effectiveness of a generic stepped care programme among elderly community residents at high risk of developing anxiety and depression versus usual care. *BMC Public Health*, 6, 186.

WANG2007 (Published Data Only)

Wang, P.S., Simon, G.E., Avorn, J., Azocar, F., Ludman, E.J., McCulloch, J., Petukhova, M.Z. & Kessler, R.C. (2007) Telephone screening, outreach, and care management for depressed workers and impact on clinical and work productivity outcomes: a randomized controlled trial. *JAMA*, 298 (12), 1401-1411.

Service delivery - studies excluded in guideline update Relapse Prevention

Comparisons Included in this Clinical Question - no comparisons

Characteristics of Included Studies - no included studies

Characteristics of Excluded Studies

Reference ID	Reason for Exclusion
KATON2001	In main service review because it's the only subthreshold service-related study

References of Included Studies - no included studies

References of Excluded Studies

KATON2001 (Published Data Only)

Katon, W., Rutter, C., Ludman, E.J., Von Korff, M., Lin, E., Simon, G., Bush, T., Walker, E. & Unutzer, J. (2001) A randomized trial of relapse prevention of depression in primary care. Archives of General Psychiatry, 58, 241-247.

© NCCMH. All rights reserved.

Psychological and psychosocial interventions - new studies in the guideline update

Comparisons Included in this Clinical Question

Cognitive therapy v Fluoxetine
DUNNER1996

Fluoxetine v Fluoxetine+'Group CBT'
HELLERSTEIN2001A

IPT v Brief supportive psychotherapy v Sertraline v IPT+Sertraline
MARKOWITZ2005

Paroxetine v Problem solving treatment for primary care v Placebo
BARRETT1999

Sertraline v Placebo v Sertraline+CBT v Placebo+CBT
RAVINDRAN1999

Sertraline v Sertraline+IPT v IPT
BROWNE2002

Short-term psychodynamic verbal therapy v short-term psychodynamic art therapy
THYME2007

Characteristics of Included Studies

Methods	Participants	Outcomes	Interventions	Notes
<p>BARRETT1999</p> <p>Study Type: RCT</p> <p>Blindness: Double blind</p> <p>Duration (days): Mean 77</p> <p>Setting: Primary Care; USA</p> <p>Notes: RANDOMISATION: Blocked and stratified by site and diagnosis. Computer generated random number allocation</p>	<p>n= 656</p> <p>Age: Mean 61</p> <p>Sex: 330 males 326 females</p> <p>Diagnosis: 52% Dysthymia by DSM-IV</p> <p>48% Minor Depressive Disorder by DSM-IV</p> <p>Exclusions: Major depression; psychosis; schizophrenia or schizoaffective disorder; bipolar disorder; alcohol or substance misuse in past 6 months; antisocial personality disorder; suicidal risk; moderate or severe cognitive impairment; medical illness with prognosis of <6 months to live; in current treatment (unless taking <50mg amitriptyline and willing to discontinue)</p> <p>Notes: Minor depression: symptoms <4weeks No washout period reported Two diagnosis groups reported separately</p> <p>Baseline: Dysthymia: HAMD-17: Prx 14.0 (3.1); PST-PC 13.7 (2.8); Plb 13.5 (2.8) Minor Depression: HAMD-17: Prx 13.6 (2.8); PST-PC 13.7 (3.1); Plb 13.7 (3.1)</p>	<p>Data Used</p> <p>Remission: HAMD-17 score <7</p> <p>Response: 50% reduction in outcome score</p> <p>Number reporting side effects</p> <p>Leaving study due to side effects</p> <p>Leaving study early for any reason</p> <p>HAMD-17 endpoint</p> <p>Data Not Used</p> <p>NEO - Five Factor Inventory - not relevant</p> <p>Medical Outcomes Survey - not relevant</p> <p>Hopkins Symptom Checklist - not relevant</p> <p>Duke Severity of Illness Checklist - not relevant</p> <p>Notes: Full data set obtained direct from author</p> <p>Dysthymia and minor depression reported separately</p> <p>SFX data reported for Prx and Plb arms only</p>	<p>Group 1 N= 217</p> <p>Paroxetine. Mean dose 20 mg/d - Dysthymia n=111 Minor Depression n=106</p> <p>Group 2 N= 218</p> <p>Problem Solving Therapy - Primary Care. Mean dose 6 sessions - Dysthymia n=115 Minor Depression n=103</p> <p>Group 3 N= 221</p> <p>Placebo - Dysthymia n=112 Minor Depression n=109</p>	<p>Funding: John A Hartford Foundation; John D and Catherine T MacArthur Foundation</p>
<p>BROWNE2002</p> <p>Study Type: RCT</p> <p>Type of Analysis: Completers: completing 6 month MDRS</p> <p>Blindness: Single blind</p> <p>Duration (days): Mean 180</p> <p>Followup: 18 months after treatment</p> <p>Setting: Primary care; Canada</p> <p>Notes: RANDOMISATION: computerised randomisation schedule</p>	<p>n= 707</p> <p>Age: Mean 42</p> <p>Sex: 188 males 398 females</p> <p>Diagnosis: 100% Dysthymic Disorder by DSM-IV</p> <p>Exclusions: Pregnant, lactating, childbearing age and not using contraception, planning pregnancy in next 25 months; history of sertraline use; history of hypersensitivity to other SSRIs; acute suicide risk; participation in other study including investigation products in past month; treatment with depot neuroleptic drugs in past 6 months; on any serotonergic drug; primary or secondary diagnosis of psychotic disorder; clinically significant and unstable medical condition</p> <p>Notes: All demographic and efficacy data reported for 586</p>	<p>Data Used</p> <p>MADRS endpoint</p> <p>Data Not Used</p> <p>Visual Analogue Scale - not relevant</p> <p>Centre for Epidemiologic Studies Depression Scale - not relevant</p> <p>McMater Family Assessment Device - not relevant</p> <p>Social Adjustment Scale - not relevant</p> <p>Utilization of services inventory - not relevant</p> <p>MADRS change - not extractable</p> <p>Response: 40% reduction in outcome score - not extractable</p> <p>Leaving study early for any reason - not extractable</p>	<p>Group 1 N= 196</p> <p>Sertraline. Mean dose 200mg/d (max) - Continued throughout 18 month follow-up</p> <p>Group 2 N= 212</p> <p>Sertraline. Mean dose 200mg/d (max) - Continued throughout 18 month follow-up</p> <p>IPT. Mean dose 10 sessions - Up to 12 1-hour sessions Terminated at 6 months</p> <p>Group 3 N= 178</p> <p>IPT. Mean dose 10 sessions - Up to 12 1-hour sessions Terminated at 6 months</p>	<p>Funding: Medical Research Council of Canada; Pharmaceutical Manufacturers Association of Canada; Pharma</p>

	<p>completers only</p> <p>Baseline: MADRS: StI 24.9 (6.5); StI+IPT 26.0 (6.3); IPT 24.4 (5.9); AI 25.1 (6.2)</p>	<p>Notes: Author emailed 23/05/08 and 28/05/08 for N per group at randomisation, N per group in mean MDRS calculation at 6 months, standard deviations of mean MDRS at 18 months</p> <p>Author responded 13/06/08 with data</p>		
<p>DUNNER1996</p> <p>Study Type: RCT</p> <p>Type of Analysis: Completers</p> <p>Blindness: No mention</p> <p>Duration (days): Mean 112</p> <p>Setting: Outpatients; USA</p> <p>Notes: RANDOMISATION: no details</p>	<p>n= 31</p> <p>Age: Mean 36</p> <p>Sex: 13 males 11 females</p> <p>Diagnosis: 100% Dysthymic Disorder by DSM-III-R</p> <p>Exclusions: Current treatment with psychotherapy or with fluoxetine within past 2 years; serious concomitant medical conditions; hypersensitivity to fluoxetine; serious risk of suicide; use of an investigational compound in past 30 days; pregnant or lactating women or not using contraception; physical or laboratory abnormalities which would preclude use of fluoxetine; antisocial or borderline personality disorder</p> <p>Notes: n=24 completers reported only</p> <p>Baseline: HAMD-17: Flx 16.5 (4.0); CT 15.4 (3.1) BDI: Flx 20.2 (7.5); CT 18.9 (5.0)</p>	<p>Data Used</p> <p>Remission: HAMD-17 score ≤ 7 and BDI ≤ 10</p> <p>Leaving study due to side effects</p> <p>Leaving study early for any reason</p> <p>BDI endpoint</p> <p>HAMD-17 endpoint</p> <p>Data Not Used</p> <p>Tridimensional Personality Questionnaire - not relevant</p> <p>Hamilton Anxiety Rating Scale - not relevant</p>	<p>Group 1 N= 13</p> <p>Cognitive Therapy</p> <p>Group 2 N= 18</p> <p>Fluoxetine. Mean dose 20mg/d - Fixed dose</p>	<p>Funding: unclear</p>
<p>HELLERSTEIN2001A</p> <p>Study Type: RCT</p> <p>Type of Analysis: 'ITT': Completing 8 week trial only</p> <p>Blindness: No mention</p> <p>Duration (days): Mean 168</p> <p>Followup: 12 weeks after treatment</p> <p>Setting: Tertiary Care; USA</p> <p>Notes: RANDOMISATION: no details</p>	<p>n= 40</p> <p>Age: Mean 45</p> <p>Sex: 20 males 20 females</p> <p>Diagnosis: 100% Primary Dysthymia with early onset by DSM-III-R</p> <p>Exclusions: Organic mental syndromes; major depression; bipolar disorder; severe cyclothymia; psychotic disorder; severe borderline personality disorder; substance or alcohol misuse or dependence in past 6 months; PD, GAD, OCD or PTSD in past 6 months; pregnant or nursing; medical illness assessed as probable cause of dysthymia; undergoing another psychotherapy; serious suicidal risk</p> <p>Notes: Patients are partial responders from 8 week fix trial</p> <p>Baseline: HAMD-17: Flx 19.25 (6.91); Flx/GPT 16.65 (6.75)</p>	<p>Data Used</p> <p>Remission: H-17 item1=0 & no longer meets criteria</p> <p>Remission at follow-up</p> <p>Response at follow-up</p> <p>Response: 50% reduction and CGI score 1/2</p> <p>Leaving study early for any reason</p> <p>Data Not Used</p> <p>Satisfaction with Life Scale - not relevant</p> <p>CGI - not relevant</p> <p>Global Assessment of Functioning Scale - not relevant</p> <p>Attributional Style Questionnaire - not relevant</p> <p>Life Orientation Test - not relevant</p> <p>Inventory of Interpersonal Problems - not relevant</p> <p>HAMD-17 endpoint - no data</p> <p>BDI endpoint - no data</p> <p>Cornell Dysthymia Rating Scale - not relevant</p> <p>Notes: Author emailed 30/05/08 to clarify intervention</p>	<p>Group 1 N= 20</p> <p>Fluoxetine. Mean dose 38.75(18.93)mg/d</p> <p>Group 2 N= 20</p> <p>Fluoxetine. Mean dose 37.36(17.27)mg/d</p> <p>Group CBT. Mean dose 16 sessions - CIGP-CD manual</p>	<p>Funding: Pharma</p>
<p>MARKOWITZ2005</p>				<p>5</p>

<p>Study Type: RCT</p> <p>Type of Analysis: ITT: LOCF</p> <p>Blindness: Blind raters</p> <p>Duration (days): Mean 112</p> <p>Setting: Referral and Advertising; USA</p> <p>Notes: RANDOMISATION: computer-generated random number programme</p>	<p>n= 94</p> <p>Age: Mean 42</p> <p>Sex: 35 males 59 females</p> <p>Diagnosis:</p> <p>100% Dysthymic Disorder by DSM-IV</p> <p>24% Lifetime criteria for MDD by DSM-IV</p> <p>10% Social Phobia by DSM-IV</p> <p>2% Panic Disorder by DSM-IV</p> <p>1% Anorexia Nervosa by DSM-IV</p> <p>1% Stimulant Dependence by DSM-IV</p> <p>Exclusions: Major depression in past 6 months; substance misuse or dependence; history of schizophrenia; psychosis; mania or hypomania; organic mental syndrome; cluster A antisocial or borderline personality disorder; mental retardation; significant suicide risk; concurrent psychotherapy or pharmacotherapy; unstable medical condition; hypersensitivity to sertraline; history of non-response to sertraline; at least 12 weeks, IPT; two or more adequate trials of any antidepressant</p> <p>Baseline: HAMD-24: IPT 18.9 (6.0); BSP 19.7 (4.4); StI 17.8 (3.5); IPT/StI 19.7 (5.5) BDI: IPT 18.0 (7.2); BSP 17.4 (5.6); StI 17.5 (6.7); IPT/StI 18.6 (7.9)</p>	<p>Data Used</p> <p>Remission: HAMD-24 score ≤ 7 and GAF>70</p> <p>Response: 50% reduction in outcome score</p> <p>Leaving study early for any reason</p> <p>BDI endpoint</p> <p>HAMD-24 endpoint</p> <p>Data Not Used</p> <p>Inventory of Interpersonal Problems - not relevant</p> <p>Social Adjustment Scale - not relevant</p> <p>Cornell Dysthymia Rating Scale - not relevant</p>	<p>Group 1 N= 23</p> <p>IPT-D. Mean dose 13.2 (4.0) sessions - 50 minute sessions</p> <p>IPT-D: IPT for dysthymic disorder</p> <p>Group 2 N= 26</p> <p>Brief Supportive Therapy. Mean dose 9.6 (6.3) sessions - 50 minute sessions</p> <p>Group 3 N= 24</p> <p>Sertraline. Mean dose 111.9 (56.3) mg/d</p> <p>Group 4 N= 21</p> <p>Sertraline. Mean dose 116.3 (43.9) mg/d</p> <p>IPT-D - 50 minute sessions</p> <p>IPT-D: IPT for dysthymic disorder</p>	<p>Funding: National Institute of Mental Health; Nancy Pritzker Research Network; Weill Cornell Department of Psychiatry; Pharma</p>
<p>RAVINDRAN1999</p> <p>Study Type: RCT</p> <p>Type of Analysis: Completers</p> <p>Blindness: Double blind</p> <p>Duration (days): Mean 84</p> <p>Setting: Newspaper adverts; Canada</p> <p>Notes: RANDOMISATION: computer-generated schedule with treatments balanced within blocks of consecutive patients</p>	<p>n= 97</p> <p>Age: Range 21-54</p> <p>Sex: 41 males 56 females</p> <p>Diagnosis:</p> <p>100% Primary Dysthymia by DSM-IV</p> <p>Exclusions: Other axis I disorder or physical illness; clinical diagnosis of personality disorder; symptoms sufficient for, or previous diagnosis of, MDD; multiple adverse drug reactions; hypertension; significant dermatitis; malignant, hematological, endocrine, pulmonary, cardiovascular, renal, hepatic, gastrointestinal or neurologic disease; pregnant or lactating females</p> <p>Notes: DSM-III also used for diagnosis</p> <p>1 week placebo washout: no responders</p> <p>Baseline: Not extractable</p>	<p>Data Not Used</p> <p>Coping Strategies Scale - not relevant</p> <p>Daily Hassles and Uplifts Scales - not relevant</p> <p>Batelle Quality of Life Scale - not relevant</p> <p>Cornell Dysthymia Rating Scale - not relevant</p> <p>CGI - not relevant</p> <p>Hamilton Anxiety Rating Scale - not relevant</p> <p>MADRS endpoint - not extractable</p> <p>HAMD-17 endpoint - not extractable</p> <p>Notes: Author emailed 08/05/08 for HAMD-17 and MADRS endpoint data</p> <p>Author responded 09/05/08: busy until mid June but will try to obtain data</p>	<p>Group 1 N= 22</p> <p>Sertraline. Mean dose 177.90 mg/d</p> <p>Group 2 N= 26</p> <p>Placebo</p> <p>Group 3 N= 25</p> <p>Sertraline. Mean dose 177.90 (28.72) mg/d</p> <p>CBT - weekly 90-minute sessions</p> <p>Group 4 N= 24</p> <p>Placebo</p> <p>CBT - weekly 90-minute sessions</p>	<p>Funding: Medical Research Association of Canada; Pharmaceutical Manufacturers Association of Canada; pharmaceutical</p>
<p>THYME2007</p> <p>Study Type: RCT</p> <p>Study Description: Length of study is unclear; 10 sessions so assume 10 weeks</p> <p>Type of Analysis: Completers</p> <p>Blindness: No mention</p> <p>Duration (days):</p>	<p>n= 43</p> <p>Age: Mean 34</p> <p>Sex: all females</p> <p>Diagnosis:</p> <p>64% Dysthymic Disorder by DSM-IV</p>	<p>Data Used</p> <p>BDI follow-up</p> <p>BDI endpoint</p> <p>Data Not Used</p> <p>Personality interview - not relevant</p> <p>Symptom Checklist - 90 - not relevant</p> <p>Impact of Event Scale - not relevant</p>	<p>Group 1 N= 22</p> <p>Short-term psychodynamic verbal therapy - 10 sessions lasting 45 minutes each; given according to Mann (1973)</p>	<p>Funding: County Council of Vasterbotten; Department of Psychiatry</p>

Setting: Outpatients; Sweden Notes: RANDOMISATION: 'impartial individual' selected marked slips of paper from box	36% Depressive symptoms and difficulties by Exclusions: Psychopharmacological treatment Baseline: BDI: Verbal 22.0 (7.55); Art 22.0 (7.49)	HAMD-21 endpoint - not extractable	Group 2 N= 21 Short-term psychodynamic art therapy - 10 sessions lasting 60 minutes each; various drawing tasks followed by reflective dialogue between patients and therapist
--	--	------------------------------------	--

Characteristics of Excluded Studies

Reference ID	Reason for Exclusion
BARKHAM1999	Replaced dropouts with no post-treatment assessments
BOLTON2003	Major depression >50%
CHOU2004	n<10 p/g
CRAFT2007	'minimal depression'=9.4% only so in major depression group
CUIJPERS2005C	Not RCT
DAI1999	No extractable data
DOYNE1987	Minor depression =22% only so in major depression group
FOSTER2007	No formal diagnosis of depression or minimum baseline score; no extractable data
HANSER1994	Does not separate diagnosis; dropouts replaced; N p/g<10 at end; does not report BDI scores
HARINGSMA2006A	Sample: 39% MDD and remainder no formal diagnosis of depression ('depressive symptoms')
LYNCH1997	No extractable data
MAINA2004	Foreign language
MCNEIL1991	No extractable data (N per group unclear)
MIRANDA1994	Only 33% final sample had minor depression (remainder unclear); no extractable data even from subgroup analysis
MOSSEY1996	No extractable data
NEUGEBAUER2006	N in TAU arm<10
NORTH1990	Review
OXMAN2008	100% minor depression but excludes dysthymia
SANG2007	Foreign language
SEIVEWRIGHT1998	Does not report dysthymia data separately
TYRER1988	No extractable data; n<10 in plb grp
WANG1999	Foreign language
WARING1988	N p/g<10
WILLEMSE2004	Prevention study; no extractable data

References of Included Studies

- BARRETT1999** (Published Data Only)
Oxman, T. E., Barrett, J. E., Sengupta, A., Katon, W., Williams, J. W. J., Frank, E., et al. (2001) Status of minor depression or dysthymia in primary care following a randomized controlled treatment. *General Hospital Psychiatry*, 23, 301-310.
- Frank, E., Rucci, P., Katon, W., Barrett, J., Williams, J. W. J., Oxman, T., et al. (2002) Correlates of remission in primary care patients treated for minor depression. *General Hospital Psychiatry*, 24, 12-19.
- Katon, W., Russo, J., Frank, E., Barrett, J., Williams, J. W. J., Oxman, T., et al. (2002) Predictors of nonresponse to treatment in primary care patients with dysthymia. *General Hospital Psychiatry*, 24, 20-27.
- Williams, J. W. J., Barrett, J., Oxman, T., Frank, E., Katon, W., Sullivan, M., et al. (2000) Treatment of dysthymia and minor depression in primary care: A randomized controlled trial in older adults. *JAMA*, 284, 1519-1526.

Barrett, J. E., Williams, J. W. J., Oxman, T. E., Frank, E., Katon, W., Sullivan, M., et al. (2001) Treatment of dysthymia and minor depression in primary care: a randomized trial in patients aged 18 to 59 years. *Journal of Family Practice*, 50, 405-412.

*Barret, J.E., Williams, J.W., Oxman, T.E., Katon, W., Frank, E., Hegel, M.T., Sullivan, M. & Schulberg, H.C. (1999) The treatment effectiveness project. A comparison of the effectiveness of paroxetine, problem-solving therapy, and placebo in the treatment of minor depression and dysthymia in primary care patients: background and research plan. *General Hospital Psychiatry*, 21, 260-273.

BROWNE2002 (Published Data Only)

Browne, G., Steiner, M., Roberts, J., Gafni, A., Byrne, C., Dunn, E., et al. (2002) Sertraline and/or interpersonal psychotherapy for patients with dysthymic disorder in primary care: 6-month comparison with longitudinal 2-year follow-up of effectiveness and costs. *Journal of Affective Disorders*, 68, 317-330.

DUNNER1996 (Published Data Only)

Dunner, D. L., Schmalzing, K. B., Hendrickson, H., Becker, J., Lehman, A., & Bea, C. (1996) Cognitive therapy versus fluoxetine in the treatment of dysthymic disorder. *Depression*, 4, 34-41.

HELLERSTEIN2001A (Published Data Only)

Hellerstein, D. J., Little, S. A., Samstag, L. W., Batchelder, S., Muran, J. C., Fedak, M., et al. (2001) Adding group psychotherapy to medication treatment in dysthymia: a randomized prospective pilot study. *Journal of Psychotherapy Practice & Research*, 10, 93-103.

MARKOWITZ2005 (Published Data Only)

Markowitz, J. C., Kocsis, J. H., Bleiberg, K. L., Christos, P. J., & Sacks, M. (2005) A comparative trial of psychotherapy and pharmacotherapy for "pure" dysthymic patients. *Journal of Affective Disorders*, 89, 167-175.

RAVINDRAN1999 (Published Data Only)

Ravindran, A.V., Anisman, H., Merali, Z., Charbonneau, Y., Telner, J., Bialik, R.J., Wiens, A., Ellis, J. & Griffiths, J. (1999) Treatment of primary dysthymia with group cognitive therapy and pharmacotherapy: clinical symptoms and functional impairments. *American Journal of Psychiatry*, 156, 1608-1617.

THYME2007 (Published Data Only)

Thyme, K.E., Sundin, E.C., Stahlberg, G., Lindstrom, B., Eklof, H. & Wiberg, B. (2007) The outcome of short-term psychodynamic art therapy compared to short-term psychodynamic verbal therapy for depressed women. *Psychoanalytic Psychotherapy*, 21 (3), 250-264.

References of Excluded Studies

BARKHAM1999 (Published Data Only)

Barkham, M., Shapiro, D. A., Hardy, G. E., & Rees, A. (1999). Psychotherapy in two-plus-one sessions: outcomes of a randomized controlled trial of cognitive-behavioral and psychodynamic-interpersonal therapy for subsyndromal depression. *Journal of Consulting & Clinical Psychology*, 67, 201-211.

BOLTON2003 (Published Data Only)

Bolton, P., Bass, J., Neugebauer, R., Verdelli, H., Clougherty, K. F., Wickramaratne, P., et al. (2003) Group interpersonal psychotherapy for depression in rural Uganda: a randomized controlled trial. *JAMA*, 289, 3117-3124.

CHOU2004 (Published Data Only)

Chou, K. L., Lee, P. W., Yu, E. C., Macfarlane, D., Cheng, Y. H., Chan, S. S., et al. (2004) Effect of Tai Chi on depressive symptoms amongst Chinese older patients with depressive disorders: a randomized clinical trial. *International Journal of Geriatric Psychiatry*, 19, 1105-1107.

CRAFT2007 (Published Data Only)

Craft, L. L., Freund, K. M., Culpepper, L., & Perna, F. M. (2007) Intervention study of exercise for depressive symptoms in women. *Journal of Women's Health*, 16, 1499-1509.

CUIJPERS2005C (Published Data Only)

Cuijpers, P., Smit, F., Voordouw, I., & Kramer, J. (2005) Outcome of cognitive behaviour therapy for minor depression in routine practice. *Psychology & Psychotherapy: Theory, Research & Practice*, 78, 179-188.

DAI1999 (Published Data Only)

Dai, Y., Zhang, S., Yamamoto, J., Ao, M., Belin, T. R., Cheung, F., et al. (1999) Cognitive behavioral therapy of minor depressive symptoms in elderly Chinese Americans: a pilot study. *Community Mental Health Journal*, 35, 537-542.

DOYNE1987 (Published Data Only)

Doyne, E., Ossip-Klein, D., Bowman, E., Osborn, K., Dougall-Wilson, I., & Neimeyer, R. (1987) Running versus weight lifting in the treatment of depression. *Journal of Consulting and Clinical Psychology*, 55, 748-754.

FOSTER2007 (Published Data Only)

Foster, R. P. (2007) Treating depression in vulnerable urban women: a feasibility study of clinical outcomes in community service settings. *American Journal of Orthopsychiatry*, 77, 443-453.

- HANSER1994** (Published Data Only)
Hanser, S. B. & Thompson, L. W. (1994) Effects of a music therapy strategy on depressed older adults. *Journal of Gerontology*, 49, 265-269.
- HARINGSMA2006A** (Published Data Only)
Haringsma, R., Engels, G. I., Cuijpers, P., & Spinhoven, P. (2006) Effectiveness of the Coping With Depression (CWD) course for older adults provided by the community-based mental health care system in the Netherlands: a randomized controlled field trial. *International Psychogeriatrics*, 18, 307-325.
- LYNCH1997** (Published Data Only)
Lynch, D. J., Tamburrino, M. B., & Nagel, R. (1997) Telephone counseling for patients with minor depression: preliminary findings in a family practice setting. *Journal of Family Practice*, 44, 293-298.
- MAINA2004** (Published Data Only)
Maina, G., Picco, C., Saracco, P., Ziero, S., Ceregato, A., & Bogetto, F. (2004) Combined therapy in minor depressive disorders: Unique therapist or split treatment? [Italian]. *Italian Journal of Psychopathology*, 10.
- MCNEIL1991** (Published Data Only)
McNeil, J.K., LeBlanc, E.M. & Joyner, M. (1991) The effect of exercise on depressive symptoms in the moderately depressed elderly. *Psychology and Aging*, 6, 487-488.
- MIRANDA1994** (Published Data Only)
Miranda, J. & Munoz, R. (1994) Intervention for minor depression in primary care patients. *Psychosomatic Medicine*, 56, 136-141.
- MOSSEY1996** (Published Data Only)
Mossey, J. M., Knott, K. A., Higgins, M., & Talerico, K. (1996) Effectiveness of a psychosocial intervention, interpersonal counseling, for subdysthymic depression in medically ill elderly. *Journals of Gerontology Series A-Biological Sciences & Medical Sciences*, 51, M172-M178.
- NEUGEBAUER2006** (Published Data Only)
Neugebauer, R., Kline, J., Markowitz, J. C., Bleiberg, K. L., Baxi, L., Rosing, M. A., et al. (2006) Pilot randomized controlled trial of interpersonal counseling for subsyndromal depression following miscarriage. *Journal of Clinical Psychiatry*, 67, 1299-1304.
- NORTH1990** (Published Data Only)
North, T.C., McCullagh, P. & Tran, Z.V. (1990) Effect of exercise on depression. *Exercise and Sport Sciences Review*, 18, 349-415.
- OXMAN2008** (Published Data Only)
Oxman, T.E., Hegel, M.T., Hull, J.G. & Dietrich, A.J. (2008) Problem-solving treatment and coping styles in primary care for minor depression. *Journal of Consulting and Clinical Psychology*, 76, 933-943.
- SANG2007** (Published Data Only)
Sang, W. H., Zhang, D. R., Tian, G. Q., Yu, X. Z., Liu, J. C., Yang, L. H., et al. (2007) A comparative study of cognitive-behavior therapy and paroxetine for minor depression. [Chinese]. *Chinese Journal of Evidence-Based Medicine*, 7.
- SEIVEWRIGHT1998** (Published Data Only)
Seivewright, H., Tyrer, P., & Johnson, T. (1998) Prediction of outcome in neurotic disorder: a 5-year prospective study. *Psychological Medicine*, 28, 1149-1157.
- TYRER1988** (Published Data Only)
Tyrer, P., Seivewright, N., Ferguson, B., Murphy, S., & Johnson, A. L. (1993) The Nottingham study of neurotic disorder. Effect of personality status on response to drug treatment, cognitive therapy and self-help over two years. *British Journal of Psychiatry*, 162, 219-226.
Tyrer, P., Seivewright, N., Ferguson, B., Murphy, S., Darling, C., Brothwell, J., et al. (1990) The Nottingham Study of Neurotic Disorder: relationship between personality status and symptoms. *Psychological Medicine*, 20, 423-431.
*Tyrer, P., Murphy, S., Kingdon, D., Brothwell, J., Gregory, S., Seivewright, N., Ferguson, B., Barczak, P., Darling, C.M. & Johnson, A.L. (1988) The Nottingham study of neurotic disorder: comparison of drug and psychological treatments. *The Lancet*, 2 (8605), 235-240.
Seivewright, N., Tyrer, P., Ferguson, B., Murphy, S., & Johnson, T. (2000) Longitudinal study of the influence of life events and personality status on diagnostic change in three neurotic disorders. *Depression & Anxiety*, 11, 105-113.
- WANG1999** (Published Data Only)
Wang, C., Jia, F., Fang, R., Zhu, Y. & Huang, Y. (1999) Comparative study of rational-emotive therapy for 95 patients with dysthymic disorder. [Chinese]. *Chinese Mental Health Journal*, 13, 172-173.

WARING1988 (Published Data Only)

Waring, E. M., Chamberlaine, C. H., McCrank, E. W., Stalker, C. A., Carver, C., Fry, R., et al. (1988). Dysthymia: a randomized study of cognitive marital therapy and antidepressants. *Canadian Journal of Psychiatry - Revue Canadienne de Psychiatrie*, 33, 96-99.

WILLEMSE2004 (Published Data Only)

Smit, F., Willemse, G., Koopmanschap, M., Onrust, S., Cuijpers, P., & Beekman, A. (2006) Cost-effectiveness of preventing depression in primary care patients: randomised trial. *British Journal of Psychiatry*, 188, 330-336.

*Willemse, G. R., Smit, F., Cuijpers, P., & Tiemens, B. G. (2004) Minimal-contact psychotherapy for sub-threshold depression in primary care. Randomised trial. *British Journal of Psychiatry*, 185, 416-421.

Pharmacological interventions - new studies in guideline update

Comparisons Included in this Clinical Question

Amisulpride v Amineptine v Placebo
BOYER1999

Amisulpride v Amitriptyline
RAVIZZA1999

Amisulpride v Fluoxetine
AMORE2001
SMERALDI1996

Fluoxetine v Placebo
HELLERSTEIN1993
JUDD2004
VANELLE1997

Fluvoxamine v Maprotiline
DEJONGHE1991

Imipramine v Minaprine
SALZMANN1995

Imipramine v Moclobemide v Placebo
VERSIANI1997

Imipramine v Phenelzine
VALLEJO1987

Imipramine v Ritanserin v Placebo
BAKISH1993

Paroxetine v Maprotiline
SZEGEDI1997

Paroxetine v Placebo
BARRETT1999

Ritanserin v Flupenthixol
GEISLER1992

Sertraline v Imipramine v Placebo
THASE1996A

Sertraline v Placebo
RAVINDRAN1999
RAVINDRAN2000
ROCCA2005

Characteristics of Included Studies

Methods	Participants	Outcomes	Interventions	Notes
<p>AMORE2001</p> <p>Study Type: RCT</p> <p>Type of Analysis: 'ITT': at least one post baseline evaluation</p> <p>Blindness: Double blind</p> <p>Duration (days): Mean 84</p> <p>Setting: Outpatients; Italy</p> <p>Notes: RANDOMISATION: not reported</p>	<p>n= 313</p> <p>Age: Mean 47</p> <p>Sex: 100 males 213 females</p> <p>Diagnosis: 89% Dysthymic Disorder by DSM-IV</p> <p>11% Double depression by DSM-IV</p> <p>Exclusions: Suicide risk; history of other psychiatric disorder; mood disorder due to general medical condition; prior treatment with antidepressants; intolerance or inefficacy to either study drug; lack of response to two or more antidepressants; clinically significant concomitant diseases; pregnancy or breastfeeding</p> <p>Notes: No placebo washout reported</p> <p>Baseline: HAMD-17: Ams 17.1 (3.8); StI 17.6 (3.8) MADRS: Ams 21.6 (5.5); StI 21.4 (5.3)</p>	<p>Data Used</p> <p>Number reporting side effects</p> <p>Leaving study due to side effects</p> <p>Leaving study early for any reason</p> <p>Remission: HAMD-17 score =<6</p> <p>MADRS endpoint</p> <p>HAMD-17 endpoint</p> <p>Response: 50% reduction in outcome score</p> <p>Data Not Used</p> <p>Social and Occupational Assessment Scale - not relevant</p> <p>CGI - not relevant</p> <p>Hamilton Anxiety Rating Scale - not relevant</p>	<p>Group 1 N= 157</p> <p>Amisulpride. Mean dose 100mg/d (max)</p> <p>Group 2 N= 156</p> <p>Sertraline. Mean dose 100mg/d (max)</p>	<p>Funding: unclear</p>
<p>BAKISH1993</p> <p>Study Type: RCT</p> <p>Type of Analysis: 'ITT': treatment for minimum 2 weeks</p> <p>Blindness: Double blind</p> <p>Duration (days): Mean 49</p> <p>Setting: Outpatients; Canada</p> <p>Notes: RANDOMISATION: no details</p>	<p>n= 50</p> <p>Age: Mean 38</p> <p>Sex: 26 males 24 females</p> <p>Diagnosis: 100% Dysthymic Disorder by DSM-III</p> <p>Exclusions: Meeting DSM-III criteria for major depressive disorder; signs or symptoms of psychotic disorders; serious</p>	<p>Data Used</p> <p>Leaving study early for any reason</p> <p>Leaving study due to side effects</p> <p>Data Not Used</p> <p>Zerssen Befindlichkeits-Skala - Not relevant</p> <p>Hopkins Symptom Checklist - Not relevant</p> <p>CGI - Not relevant</p> <p>HAMD-17 endpoint - no variability measure</p>	<p>Group 1 N= 16</p> <p>Imipramine. Mean dose 200mg/d (max)</p> <p>Group 2 N= 17</p> <p>Ritanserin. Mean dose 20mg/d (max)</p> <p>Group 3 N= 17</p> <p>Placebo</p>	<p>Funding: unclear</p>

	<p>suicidal risk; women of childbearing potential not using contraceptive; physical illness; substance misuse; present benzodiazepine use; use of any mood-interfering drug or medication that may interact with study drug</p> <p>Notes: Only reports N completing minimum 2 weeks' treatment; original N Not reported 1 week placebo washout: unclear if responders dropped out Baseline: HAMD-17: 15.6 (2.3)</p>	<p>HAMD-17 change - no variability measure Hamilton Anxiety Rating Scale - Not relevant</p>		
<p>BARRETT1999</p> <p>Study Type: RCT</p> <p>Blindness: Double blind Duration (days): Mean 77</p> <p>Setting: Primary Care; USA</p> <p>Notes: RANDOMISATION: Blocked and stratified by site and diagnosis. Computer generated random number allocation</p>	<p>n= 656 Age: Mean 61 Sex: 330 males 326 females</p> <p>Diagnosis: 52% Dysthymia by DSM-IV</p> <p>48% Minor Depressive Disorder by DSM-IV</p> <p>Exclusions: Major depression; psychosis; schizophrenia or schizoaffective disorder; bipolar disorder; alcohol or substance misuse in past 6 months; antisocial personality disorder; suicidal risk; moderate or severe cognitive impairment; medical illness with prognosis of <6 months to live; in current treatment (unless taking <50mg amitriptyline and willing to discontinue)</p> <p>Notes: Minor depression: symptoms <4weeks No washout period reported Two diagnosis groups reported separately</p> <p>Baseline: Dysthymia: HAMD-17: Prx 14.0 (3.1); PST-PC 13.7 (2.8); Plb 13.5 (2.8) Minor Depression: HAMD-17: Prx 13.6 (2.8); PST-PC 13.7 (3.1); Plb 13.7 (3.1)</p>	<p>Data Used Remission: HAMD-17 score <7 Response: 50% reduction in outcome score Number reporting side effects Leaving study due to side effects Leaving study early for any reason HAMD-17 endpoint</p> <p>Data Not Used NEO - Five Factor Inventory - not relevant Medical Outcomes Survey - not relevant Hopkins Symptom Checklist - not relevant Duke Severity of Illness Checklist - not relevant</p> <p>Notes: Full data set obtained direct from author Dysthymia and minor depression reported separately SFX data reported for Prx and Plb arms only</p>	<p>Group 1 N= 217 Paroxetine. Mean dose 20 mg/d - Dysthymia n=111 Minor Depression n=106</p> <p>Group 2 N= 218 Problem Solving Therapy - Primary Care. Mean dose 6 sessions - Dysthymia n=115 Minor Depression n=103</p> <p>Group 3 N= 221 Placebo - Dysthymia n=112 Minor Depression n=109</p>	<p>Funding: John A Hartford Foundation; John D and Catherine T MacArthur Foundation</p>
<p>BOYER1999</p> <p>Study Type: RCT</p> <p>Type of Analysis: 'ITT': at least one post baseline evaluation</p> <p>Blindness: Double blind Duration (days): Mean 84</p> <p>Setting: Outpatients; France</p> <p>Notes: RANDOMISATION: no details</p>	<p>n= 323 Age: Mean 48 Sex: 81 males 242 females</p> <p>Diagnosis: 100% Primary Dysthymia by DSM-III-R</p> <p>Exclusions: Other DSM-III-R diagnosis; risk of suicide; substance or alcohol misuse; severe somatic disorder; pregnancy or lactation; contra-indication to use of either study drug; antidepressant use within past month at daily dose higher than equivalent 50 mg clomipramine; discontinuation of benzodiazepine therapy within past month (regular use) or past week (occasional use); administration of either study drug within past 3 months</p> <p>Notes: n=313 at least one post baseline evaluation No placebo washout reported Baseline: MADRS: 17.9 (0.3 SEM)</p>	<p>Data Used Number reporting side effects Leaving study early for any reason Leaving study due to side effects MADRS endpoint MADRS change</p> <p>Data Not Used Scale for the Assessment of Negative Symptoms - Not relevant Response: CGI - Not relevant</p>	<p>Group 1 N= 104 Amisulpride. Mean dose 50mg/d</p> <p>Group 2 N= 111 Amineptine. Mean dose 200mg/d</p> <p>Group 3 N= 108 Placebo</p>	<p>Funding: unclear</p>
<p>DEJONGHE1991</p> <p>Study Type: RCT</p> <p>Type of Analysis: 'ITT': at least 4 weeks' treatment</p>	<p>n= 48 Age: Mean 40 Sex: 19 males 29 females</p>	<p>Data Used Leaving study early for any reason Response: 50% reduction in outcome score HAMD-17 endpoint</p> <p>Data Not Used</p>	<p>Group 1 N= 24 Fluvoxamine. Mean dose 300mg/d (max)</p> <p>Group 2 N= 24 Maprotiline. Mean dose 150mg/d (max)</p>	<p>Funding: unclear</p>

<p>Blindness: Double blind Duration (days): Mean 42</p> <p>Setting: Outpatients; Netherlands Notes: RANDOMISATION: no details</p>	<p>Diagnosis: 46% Major Depression (without psychotic features) by DSM-III</p> <p>54% Dysthymic Disorder by DSM-III</p> <p>Exclusions: Other psychiatric diagnosis; suicide risk; behavioural problems; drug or alcohol addiction in past year; exceedingly high or low weight; drug allergy or idiosyncrasy; physical illness interfering with pharmacokinetics, efficacy or assessment; treatment with anticonvulsants, neuroleptics, lithium or ECT in past year; treatment with anaesthetics, opioids or hypnotics in past 3 months; started new somatic or psychiatric treatment in past week; contraindications for antidepressants; needing additional treatment which may interfere with anxiety; pregnancy; unstable social environment; suspected noncompliance; language barrier; participation in drug trial in past 3 months; current psychotherapy</p> <p>Notes: 1 week placebo washout: responders dropped Baseline: HAMD-17: Flv 20.5 (4.7); Mpt 19.6 (4.6)</p>	<p>Psychosomatic Symptom Scale - not relevant CGI - not relevant Zung Depression Selfrating Scale - not relevant</p>		
<p>GEISLER1992</p> <p>Study Type: RCT</p> <p>Type of Analysis: ITT</p> <p>Blindness: Double blind Duration (days): Mean 42</p> <p>Setting: Primary Care; Denmark Notes: RANDOMISATION: not reported</p>	<p>n= 67 Age: Mean 48 Sex: 18 males 52 females</p> <p>Diagnosis: 100% Dysthymic Disorder by DSM-III</p> <p>Exclusions: Serious neurologic or somatic conditions; concurrent mental disorder; inadequate contraception; pregnancy or lactation; alcohol, benzodiazepine or other drug misuse within past year; recurrent thoughts of suicide; concomitant treatment with antidepressants, neuroleptics or antiepileptics</p> <p>Notes: 1 week placebo washout: 3 patients dropped out Baseline: HAMD-17: Rts 19.6; Flp 19.8 (no variability data)</p>	<p>Data Used Number reporting side effects Leaving study due to side effects Leaving study early for any reason HAMD-17 endpoint</p> <p>Data Not Used CGI - not relevant</p> <p>Notes: HAMD-17 endpoint standard deviations calculated from p value 'Corrected' side effects</p>	<p>Group 1 N= 31 Ritanserin. Mean dose 1.3mg/d</p> <p>Group 2 N= 36 Flupenthixol. Mean dose 7.4mg/d</p>	<p>Funding: unclear</p>
<p>HELLERSTEIN1993</p> <p>Study Type: RCT</p> <p>Type of Analysis: 'Completer': 6 weeks at minimum 20mg every 2nd day</p> <p>Blindness: Double blind Duration (days): Mean 56</p> <p>Setting: Advertisement/physician referral; USA Notes: RANDOMISATION: no details</p>	<p>n= 35 Age: Mean 36 Sex: 16 males 16 females</p> <p>Diagnosis: 100% Primary Dysthymia with early onset by DSM-III-R</p> <p>Exclusions: Current major depressive episode; major depression in partial remission; axis I conditions; history of mania or hypomania; experiencing severe stress; history of suicide attempt or self-mutilation; previous trial of fluoxetine or any psychotropic medication within past month</p> <p>Notes: 'Completers': n=32 No placebo washout reported Baseline: HAMD-24: Flx 19.2 (4.33); Plb 18.88 (4.62)</p>	<p>Data Used Leaving study early for any reason HAMD-24 endpoint Response: 50% reduction and CGI score 1/2</p> <p>Data Not Used Hopkins Symptom Checklist - Not relevant Cornell Dysthymia Rating Scale - Not relevant</p>	<p>Group 1 N= 19 Fluoxetine. Mean dose 32.7mg/d</p> <p>Group 2 N= 16 Placebo</p>	<p>Funding: Pharma</p>
<p>JUDD2004</p>				<p>13</p>

<p>Study Type: RCT</p> <p>Type of Analysis: 'ITT': at least one post baseline evaluation</p> <p>Blindness: Double blind</p> <p>Duration (days): Mean 84</p> <p>Setting: USA</p> <p>Notes: RANDOMISATION: no details</p>	<p>n= 162</p> <p>Age: Mean 44</p> <p>Sex: 66 males 96 females</p> <p>Diagnosis: 100% Minor Depression by DIS</p> <p>Exclusions: Major depressive disorder or dysthymic disorder within past 2 years; major depression in partial remission; loss of loved one within past year; serious suicidal risk; substance or alcohol misuse within past year; current diagnosis of axis I disorder; lifetime diagnosis of bipolar disorder (type I), borderline personality disorder, antisocial personality disorder, organic mood disorder, organic psychotic disorder, schizophrenia; use of psychotropic drugs except chloral hydrate within past 7 days; use of MAOI within past 14 days; un stabilised serious medical condition; seizure disorder within past year; severe allergies; non-response or adverse reaction to fluoxetine or participation in fluoxetine study</p> <p>Notes: SCID also used to aid diagnosis 4 week placebo washout: responders dropped</p> <p>Baseline: HAMD-17: ('ITT' n=157) Flx 11.2 (3.7); Plb 10.5 (3.7) BDI: ('ITT' n=147) Flx 13.6 (6.7); 13.9 (6.6)</p>	<p>Data Used</p> <p>Leaving study early for any reason</p> <p>Leaving study due to side effects</p> <p>BDI endpoint</p> <p>HAMD-17 endpoint</p> <p>Data Not Used</p> <p>CGI - Not relevant</p> <p>Medical Outcomes Survey - Not relevant</p> <p>Global Assessment of Functioning Scale - Not relevant</p> <p>Inventory of Depressive Symptomatology - Not relevant</p>	<p>Group 1 N= 81</p> <p>Fluoxetine. Mean dose 20mg/d</p> <p>Group 2 N= 81</p> <p>Placebo</p>	<p>Funding: NIMH; academic fund; pharma</p>
<p>RAVINDRAN1999</p> <p>Study Type: RCT</p> <p>Type of Analysis: Completers</p> <p>Blindness: Double blind</p> <p>Duration (days): Mean 84</p> <p>Setting: Newspaper adverts; Canada</p> <p>Notes: RANDOMISATION: computer-generated schedule with treatments balanced within blocks of consecutive patients</p>	<p>n= 97</p> <p>Age: Range 21-54</p> <p>Sex: 41 males 56 females</p> <p>Diagnosis: 100% Primary Dysthymia by DSM-IV</p> <p>Exclusions: Other axis I disorder or physical illness; clinical diagnosis of personality disorder; symptoms sufficient for, or previous diagnosis of, MDD; multiple adverse drug reactions; hypertension; significant dermatitis; malignant, hematological, endocrine, pulmonary, cardiovascular, renal, hepatic, gastrointestinal or neurologic disease; pregnant or lactating females</p> <p>Notes: DSM-III also used for diagnosis 1 week placebo washout: no responders</p> <p>Baseline: Not extractable</p>	<p>Data Not Used</p> <p>Coping Strategies Scale - not relevant</p> <p>Daily Hassles and Uplifts Scales - not relevant</p> <p>Batelle Quality of Life Scale - not relevant</p> <p>Cornell Dysthymia Rating Scale - not relevant</p> <p>CGI - not relevant</p> <p>Hamilton Anxiety Rating Scale - not relevant</p> <p>MADRS endpoint - not extractable</p> <p>HAMD-17 endpoint - not extractable</p> <p>Notes: Author emailed 08/05/08 for HAMD-17 and MADRS endpoint data Author responded 09/05/08: busy until mid June but will try to obtain data</p>	<p>Group 1 N= 22</p> <p>Sertraline. Mean dose 177.90 mg/d</p> <p>Group 2 N= 26</p> <p>Placebo</p> <p>Group 3 N= 25</p> <p>Sertraline. Mean dose 177.90 (28.72) mg/d</p> <p>CBT - weekly 90-minute sessions</p> <p>Group 4 N= 24</p> <p>Placebo</p> <p>CBT - weekly 90-minute sessions</p>	<p>Funding: Medical Research Association of Canada; Pharmaceutical Manufacturers Association of Canada; pharmaceutical</p>
<p>RAVINDRAN2000</p> <p>Study Type: RCT</p> <p>Type of Analysis: 'ITT': at least 1 dose & post baseline evaluation</p> <p>Blindness: Double blind</p> <p>Duration (days): Mean 84</p> <p>Setting: Outpatients; Canada, France, Spain, Italy, Sweden, UK</p> <p>Notes: RANDOMISATION: no details</p>	<p>n= 310</p> <p>Age: Mean 45</p> <p>Sex: 103 males 207 females</p> <p>Diagnosis: 100% Dysthymia => 5 years by DSM-III-R</p> <p>Exclusions: Taking psychotropic agents or any medication likely to interact with study drug; concomitant major depressive disorder; dysthymia duration <5 years; pregnancy; clinically significant medical condition; diagnosis of psychotic or paranoid disorder; principle diagnosis of anxiety disorder with past 6 months; previous use of sertraline</p> <p>Notes: 1 week placebo washout: responders dropped</p>	<p>Data Used</p> <p>Number reporting side effects</p> <p>Leaving study early for any reason</p> <p>Response: 50% reduction in outcome score</p> <p>Data Not Used</p> <p>Hamilton Anxiety Rating Scale - not relevant</p> <p>Hospital Anxiety and Depression Scale - not relevant</p> <p>CGI - not relevant</p> <p>SIGH-SAD - not relevant</p> <p>MADRS endpoint - no variability measure</p> <p>Remission: SIGH-SAD - not relevant</p>	<p>Group 1 N= 158</p> <p>Sertraline. Mean dose 127.8mg/d</p> <p>Group 2 N= 152</p> <p>Placebo</p>	<p>Funding: pharmaceutical</p>

	Baseline: HAMD-17: StI 19.2 (6.98); Plb 18.6 (6.62)	Notes: Author emailed 18/04/08 for HAMD-17 endpoint and missing variability data Author responded 18/04/08: will try to obtain data from Pfizer NY		
RAVIZZA1999 Study Type: RCT Type of Analysis: 'ITT': at least one post evaluation & capsule Blindness: Double blind Duration (days): Mean 168 Setting: Outpatients; Italy Notes: RANDOMISATION: unbalanced (2 amisulpride: 1amitriptyline)	n= 253 Age: Mean 47 Sex: 90 males 163 females Diagnosis: 98% Primary Dysthymia by DSM-III-R 2% Single episode of MD in partial remission by DSM-III-R Exclusions: Inefficacy or intolerance to either study drug; suicide risk or attempt in past 2 years; misuse of psychoactive substance; use of antidepressant or psychoactive drug in past 2 weeks; discontinuation of benzodiazepines in past 2 weeks; need for psychoactive agents during trial; severe debilitation; uncontrolled clinically relevant concomitant disease; neoplasms; pheochromocytoma; parkinsonism; pregnant or breastfeeding Notes: 1 week placebo washout: responders dropped Baseline: MADRS: Ams 21.0 (2.8); Amt 21.7 (2.6)	Data Used Number reporting side effects Leaving study early for any reason Leaving study due to side effects Response: 50% reduction in outcome score MADRS endpoint Data Not Used Sheehan Disability Scale - not relevant CGI - not relevant Hamilton Anxiety Rating Scale - not relevant Widlocher Depressive Retardation Scale-ERD - not relevant	Group 1 N= 166 Amisulpride. Mean dose 50mg/d Group 2 N= 87 Amitriptyline. Mean dose 75mg/d (max)	Funding: unclear
ROCCA2005 Study Type: RCT Type of Analysis: ITT Blindness: No mention Duration (days): Mean 365 Setting: Outpatients; Italy Notes: RANDOMISATION: quasi-randomised; alternate allocation	n= 138 Age: Mean 72 Sex: 99 males 39 females Diagnosis: 49% Minor Depressive Disorder by DSM-IV-TR 51% Subsyndromal Depressive Symptomatology by DSM-IV-TR Exclusions: Any other axis I or II psychiatric disorder; impairment or decline of global cognitive functions; score \geq 12 on Alzheimer's Disease Assessment Scale; acute or unstable medical or neurological condition that might interfere with safety or results; taken any psychotropic medication in past month Notes: No placebo washout period reported Baseline: HAMD-17: Ctp 12.9; StI 12.9 (no variability data)	Data Used Remission: HAMD-17 score <7 Leaving study due to side effects Leaving study early for any reason Data Not Used Verbal Fluency Test - not relevant Wechsler Memory Scale - not relevant Trail Making Test - not relevant Mini-Mental State Examination - not relevant Global Assessment of Functioning Scale - not relevant Geriatric Depression Scale - not relevant HAMD-17 endpoint - no data HAMD-17 change - not extractable Notes: Author emailed 27/05/08 for HAMD-17 endpoint and mean change data (with SDs)	Group 1 N= 66 Citalopram. Mean dose 20mg/d Group 2 N= 72 Sertraline. Mean dose 50mg/d	Funding: no external financial or material support
SALZMANN1995 Study Type: RCT Type of Analysis: 'Per protocol': treatment > 14 days	n= 67 Age: Mean 55 Sex: 13 males 54 females	Data Used Leaving study due to side effects Number reporting side effects Response: 50% reduction in outcome score	Group 1 N= 34 Imipramine. Mean dose 100mg/d (max)	Funding: unclear

<p>Blindness: Double blind Duration (days): Mean 42</p> <p>Setting: Outpatients; Germany Notes: RANDOMISATION: lists</p>	<p>Diagnosis: 100% Dysthymic Disorder by DSM-III</p> <p>Exclusions: Dementia; suicide risk; GAD; depressive symptoms due to other psychiatric illness; obsessional or phobic state; drug or alcohol misuse; severe organic disease; epilepsy or EEG abnormality; prostatic hypertrophy; glaucoma</p> <p>Notes: ITT analysis carried out but not reported 4-7 day placebo washout: responders dropped</p> <p>Baseline: HAMD-17: Imp 27.63 (5.22); Mnp 27.81 (3.94)</p>	<p>HAMD-17 endpoint Data Not Used Global Assessment of Therapeutic Success - not relevant Subjective Well-Being Scale - not relevant Figure Symbol Test - not relevant CGI - not relevant HAMD-17 endpoint: items 1-17 without sleep items - not relevant HAMD-17 endpoint: items 1-17 - not relevant</p>	<p>Group 2 N= 33 Minaprine. Mean dose 200mg/d (max)</p>	
<p>SMERALDI1996</p> <p>Study Type: RCT</p> <p>Type of Analysis: 'ITT': at least 1 post evaluation & 1 treatment</p> <p>Blindness: Double blind Duration (days): Mean 84</p> <p>Setting: Outpatients; Italy Notes: RANDOMISATION: no details</p>	<p>n= 281 Age: Mean 49 Sex: 86 males 182 females</p> <p>Diagnosis: 94% Primary Dysthymia by DSM-III-R</p> <p>6% Single episode of MD in partial remission by DSM-III-R</p> <p>Exclusions: Inefficacy or intolerance to either study drug; suicidal risk or attempt in past 2 years; misuse of or dependence on psychoactive substances; antidepressant or psychoactive drug use in past 2 weeks; discontinuation of benzodiazepine use in past 2 weeks; need of psychoactive agent other than study drug during trial; severe debilitation; clinically relevant concomitant unmanaged disease; cancer; pheochromocytoma; parkinsonian syndrome; pregnancy, breast-feeding, or female not using contraceptive; evidence of poor compliance; participation in clinical trial in past 6 months</p> <p>Notes: Demographic data reported for n=268 only 1 week placebo washout period: responders dropped</p> <p>Baseline: MADRS: Ams 21.2 (2.8); Flx 21.6 (2.9)</p>	<p>Data Used Number reporting side effects Leaving study early for any reason Leaving study due to side effects MADRS endpoint Response: 50% reduction in outcome score</p> <p>Data Not Used Sheehan Disability Scale - not relevant Widlocher Depressive Retardation Scale-ERD - not relevant CGI - not relevant Hamilton Anxiety Rating Scale - not relevant</p>	<p>Group 1 N= 142 Amisulpride. Mean dose 50mg/d</p> <p>Group 2 N= 139 Fluoxetine. Mean dose 20mg/d</p>	<p>Funding: unclear</p>
<p>SZEGEDI1997</p> <p>Study Type: RCT</p> <p>Type of Analysis: 'ITT': all receiving an active medication</p> <p>Blindness: Double blind Duration (days): Mean 42</p> <p>Setting: Primary Care & Outpatients; Germany Notes: RANDOMISATION: no details</p>	<p>n= 543 Age: Sex: 152 males 391 females</p> <p>Diagnosis: 45% Minor Depression by Modified RDC criteria</p> <p>55% Major Depression by Modified RDC criteria</p> <p>Exclusions: Requirement of hospitalisation; psychotic symptoms; suicide risk; severe physical disease; pregnancy or lactation; need of benzodiazepine treatment</p> <p>Notes: Minor depression n=245 Two diagnoses reported separately</p> <p>Baseline: Not extractable</p>	<p>Data Used Response: 50% reduction in outcome score</p> <p>Data Not Used CGI - not relevant Raskin Depression Rating Scale - not relevant Bech-Rafaelsen Depression Rating Scale - not relevant MADRS change - no variability measure HAMD-17 change - no variability measure</p> <p>Notes: Data for minor depression group extracted only</p>	<p>Group 1 N= 126 Paroxetine</p> <p>Group 2 N= 119 Maprotiline</p>	<p>Funding: unclear</p>
<p>THASE1996A</p>				

<p>Study Type: RCT</p> <p>Type of Analysis: 'ITT': at least one post baseline evaluation</p> <p>Blindness: Double blind</p> <p>Duration (days): Mean 84</p> <p>Setting: Outpatients; USA</p> <p>Notes: RANDOMISATION: no details</p>	<p>n= 412</p> <p>Age: Mean 42</p> <p>Sex: 143 males 267 females</p> <p>Diagnosis: 100% Primary Dysthymia with early onset => 5 years by DSM-III-R</p> <p>Exclusions: Pregnant, nursing or unwilling to use contraception; major medical condition; bipolar disorder; psychosis; panic disorder; concurrent major depressive disorder; generalised anxiety disorder; alcohol or drug dependency within last 6 months; suicidal risk; previous non-response to 2 or more antidepressants; use of psychotropic drugs within last 2 weeks</p> <p>Notes: 1 week placebo washout: responders dropped</p> <p>Baseline: HAMD-17: Stl 12.7 (4.0); Imp 13.4 (3.8); Plb 12.7 (3.9) MADRS:Stl 18.53 (5.8); Imp 18.64 (5.2); Plb 19.0 (5.8)</p>	<p>Data Used</p> <p>Leaving study due to side effects</p> <p>Leaving study early for any reason</p> <p>Remission: HAMD-17 score =/\leq4</p> <p>Remission: DSM criteria not met & 0 on H-17 item1</p> <p>MADRS change</p> <p>HAMD-29 change</p> <p>HAMD-17 change</p> <p>Data Not Used</p> <p>Hopkins Symptom Checklist - Not relevant</p> <p>Inventory of Depressive Symptomatology - Not relevant</p> <p>Response: CGI - Not relevant</p>	<p>Group 1 N= 134</p> <p>Sertraline. Mean dose 139.6mg/d</p> <p>Group 2 N= 136</p> <p>Imipramine. Mean dose 198.9mg/d</p> <p>Group 3 N= 140</p> <p>Placebo</p>	<p>Funding: part pharmaceutical</p>
<p>VALLEJO1987</p> <p>Study Type: RCT</p> <p>Type of Analysis: Completers</p> <p>Blindness: Double blind</p> <p>Duration (days): Mean 42</p> <p>Setting: Outpatients; Spain</p> <p>Notes: RANDOMISATION: no details</p>	<p>n= 73</p> <p>Age: Mean 42</p> <p>Sex: 12 males 52 females</p> <p>Diagnosis: 53% Dysthymic Disorder by DSM-III</p> <p>47% Major Depression Episode with Melancholia by DSM-III</p> <p>Exclusions: Severe physical disease; on-going medical treatment; pregnancy; psychopathic/sociopathic disorder; Briquet's syndrome; alcohol/drug misuse; psychotic illness; bipolar, OCD, somatoform, panic, eating and phobic disorder</p> <p>Notes: Demographic data for completers (n=64) reported only</p> <p>1 week placebo washout: responders dropped</p> <p>Baseline: HAMD-17 Dysthymic group (n=32): 20.5 (4.0)</p>	<p>Data Used</p> <p>Leaving study early for any reason</p> <p>HAMD-17 endpoint</p> <p>Data Not Used</p> <p>Eysenck Personality Inventory - not relevant</p> <p>Zung Depression Selfrating Scale - not relevant</p> <p>Notes: HAMD-17 extracted for dysthymic group only</p>	<p>Group 1 N= 37</p> <p>Imipramine. Mean dose 250mg/d (max)</p> <p>Group 2 N= 36</p> <p>Phenelzine. Mean dose 75mg/d (max)</p>	<p>Funding: unclear</p>
<p>VANELLE1997</p> <p>Study Type: RCT</p> <p>Type of Analysis: ITT</p> <p>Blindness: Double blind</p> <p>Duration (days): Mean 90</p> <p>Setting: Mixed; France</p> <p>Notes: RANDOMISATION: no details</p>	<p>n= 140</p> <p>Age: Mean 43</p> <p>Sex: 34 males 106 females</p> <p>Diagnosis: 100% Primary Dysthymia by DSM-III-R</p> <p>Exclusions: Depressive disorder other than dysthymia; secondary-type dysthymia; uncontrolled somatic disease; requiring psychotherapy; previous fluoxetine treatment received and ineffective; received psychotropic during previous week (except benzodiazepines); requiring other antidepressant, neuroleptic, lithium or other mood regulator</p> <p>Notes: Phase one of three phase design (6 months total)</p> <p>1 week placebo washout: responders dropped</p> <p>Baseline: HAMD-21: Flx 20.5 (3.1); Plb 20.9 (3.0)</p>	<p>Data Used</p> <p>Number reporting side effects</p> <p>Leaving study early for any reason</p> <p>Remission: HAMD-21 score =/\leq 7</p> <p>Response: 50% reduction and CGI score 1/2</p> <p>HAMD-21 change</p> <p>Data Not Used</p> <p>Echelle de signes somatiques AMPD-5 - Not relevant</p> <p>Hopkins Somatic Complaints Checklist - Not relevant</p> <p>Paykel Life Event questionnaire - Not relevant</p> <p>Global Assessment of Functioning Scale - Not relevant</p> <p>CGI - Not relevant</p> <p>Hamilton Anxiety Rating Scale - Not relevant</p>	<p>Group 1 N= 91</p> <p>Fluoxetine. Mean dose 20mg/d</p> <p>Group 2 N= 49</p> <p>Placebo</p>	<p>Funding: unclear</p>

		Notes: Drop-out and side effects data for whole group but response data excludes one centre with anomalous results		
VERSIANI1997				
<p>Study Type: RCT</p> <p>Type of Analysis: Completers</p> <p>Blindness: Double blind</p> <p>Duration (days): Mean 56</p> <p>Setting: Outpatients; International multicentre</p> <p>Notes: RANDOMISATION: no details</p>	<p>n= 315</p> <p>Age: Mean 41</p> <p>Sex: 91 males 224 females</p> <p>Diagnosis:</p> <p>65% Primary Dysthymia by DSM-III-R</p> <p>35% Double depression by DSM-III-R</p> <p>Exclusions: Previous treatment with either study drug; suicidal; other psychiatric disorder; significant organic disease</p> <p>Notes: 'Completers' (dysthymia n=295): No major protocol violations and treatment > 3 weeks No placebo washout Two diagnosis reported separately</p> <p>Baseline: Dysthymia 'completers': HAMD-17: Imp 19.5 (3.6); Mcl 20.1 (3.8); Plb 19.0 (4.2)</p>	<p>Data Used</p> <p>Leaving study early for any reason</p> <p>Leaving study due to side effects</p> <p>HAMD-17 change</p> <p>Remission: DSM criteria not met</p> <p>Response: 50% reduction in outcome score</p> <p>Data Not Used</p> <p>Hopkins Symptom Checklist - Not relevant</p> <p>CGI - Not relevant</p>	<p>Group 1 N= 103</p> <p>Imipramine. Mean dose 250mg/d (max)</p> <p>Group 2 N= 108</p> <p>Moclobemide. Mean dose 750mg/d (max)</p> <p>Group 3 N= 104</p> <p>Placebo</p>	Funding: unclear

Characteristics of Excluded Studies

Reference ID	Reason for Exclusion
ANON1993	Not RCT
BALLUS2000	Sample not separated by diagnosis so in major depression group
BENKERT1997	MD and minor mixed but % not reported: use for MD
BOGETTO1997	Foreign language
BRASSEUR1980	No clear diagnosis; no clear response criteria; no variability data; unclear dropout rate
BURROWS2002	No formal diagnosis
CASACCHIA1994	Dysthymia <50% so in major depression group
CATTIEZ1990	Diagnosis unclear ('minor' in patient selection but mentions dysthymia and major in results); N used in analysis unclear; randomisation unclear; dropouts unclear; HAMD-17 reported by factor
COSTAESILVA1990	Foreign language
COWEN2005	Commentary
DUNBAR1985	Diagnosis not relevant to guideline
EICH2000A	Foreign language
FAVA1997	No relevant outcomes
FUNKE1986	No formal diagnosis
HELLERSTEIN1994	Open label; N p/g<10
KOCSIS1988	Dysthymia <50% so in major depression group
KOCSIS1989	No outcome data reported except response which cannot be extracted due to unclear size of N
KOK1995	Dysthymia <50% so in major depression group

LAAKMAN1995	Diagnosis (mostly BD)
LECRUBIER1997	Dysthymia <50% so in major depression group
LEON1994	Foreign language; dropouts (during first 2 weeks) replaced
LIU2004E	Foreign language: cannot translate
PAIVA1988	N<10 p/g
PAYKEL1988	Minor depression <50% so in major depression group; N.B. secondary to PAYKEL1988A
PAYKEL1988A	Minor depression <50% so in major depression group; N.B. primary to PAYKEL1988
POGGESI2000	N<10 p/g
RICKELS1974	No relevant outcomes; no formal diagnosis
ROSENBERG2007	Dysthymia <50% so in major depression group
ROSENTHAL1992	Open label; N p/g<10 (in 1 arm)
SCARZELLA1990	Foreign language
SERRANOBLANCO2006	Dysthymic group N<10 p/g: can use for MD
SLETVOLD1989	N<10 p/g
TYRER1988	No extractable data; N<10 in placebo group

References of Included Studies

AMORE2001 (Published Data Only)

Amore, M. & Jori, M.C. (2001) Faster response on amisulpride 50mg versus sertraline 50-100mg in patients with dysthymia or double depression: a randomized, double-blind, parallel group study. *International Clinical Psychopharmacology*, 16, 317-324

BAKISH1993 (Published Data Only)

Bakish, D., Ravindran, A., Hooper, C. & Lapierre, Y. (1994) Psychopharmacological treatment response of patients with a DSM-III diagnosis of dysthymic disorder. *Psychopharmacology Bulletin*, 30, 53-58

*Bakish, D., Lapierre, Y.D., Weinstein, R., Klein, J., Wiens, A., Jones, B., Horn, E., Browne, M., Bourget, D., Blanchard, A., Thibaudeau, C., Waddell, C., Raine, D. (1993) Ritanserin, imipramine, and placebo in the treatment of dysthymic disorder. *Journal of Clinical Psychopharmacology*, 13, 409-414

BARRETT1999 (Published Data Only)

Oxman, T. E., Barrett, J. E., Sengupta, A., Katon, W., Williams, J. W. J., Frank, E., et al. (2001) Status of minor depression or dysthymia in primary care following a randomized controlled treatment. *General Hospital Psychiatry*, 23, 301-310.

Frank, E., Rucci, P., Katon, W., Barrett, J., Williams, J. W. J., Oxman, T., et al. (2002) Correlates of remission in primary care patients treated for minor depression. *General Hospital Psychiatry*, 24, 12-19.

Katon, W., Russo, J., Frank, E., Barrett, J., Williams, J. W. J., Oxman, T., et al. (2002) Predictors of nonresponse to treatment in primary care patients with dysthymia. *General Hospital Psychiatry*, 24, 20-27.

Williams, J. W. J., Barrett, J., Oxman, T., Frank, E., Katon, W., Sullivan, M., et al. (2000) Treatment of dysthymia and minor depression in primary care: A randomized controlled trial in older adults. *JAMA*, 284, 1519-1526.

Barrett, J. E., Williams, J. W. J., Oxman, T. E., Frank, E., Katon, W., Sullivan, M., et al. (2001) Treatment of dysthymia and minor depression in primary care: a randomized trial in patients aged 18 to 59 years. *Journal of Family Practice*, 50, 405-412.

*Barret, J.E., Williams, J.W., Oxman, T.E., Katon, W., Frank, E., Hegel, M.T., Sullivan, M. & Schulberg, H.C. (1999) The treatment effectiveness project. A comparison of the effectiveness of paroxetine, problem-solving therapy, and placebo in the treatment of minor depression and dysthymia in primary care patients: background and research plan. *General Hospital Psychiatry*, 21, 260-273.

BOYER1999 (Published Data Only)

Boyer, P., Lecrubier, Y., Stalla-Bourdillon, A. & Fleurot, O. (1999) Amisulpride versus amineptine and placebo for the treatment of dysthymia. *Neuropsychobiology*, 39, 25-32.

DEJONGHE1991 (Published Data Only)

de Jonghe, F., Swinkels, J. & Tuyman-Qua, H. (1991) Randomized double-blind study of fluvoxamine and maprotiline in treatment of depression. *Pharmacopsychiatry*, 24, 21-27

GEISLER1992 (Published Data Only)

Geisler, A., Mygind, S., Riis Knudsen, O. & Sloth-Nielsen, M. (1992) Ritanserin and flupenthixol in dysthymic disorder: a controlled double-blind study in general practice. *Nordic Journal of Psychiatry*, 46, 237-243

HELLERSTEIN1993 (Published Data Only)

Hellerstein, D.J., Yanowitch, P., Rosenthal, J., Samstang, L.W., Maurer, M., Kasch, K., Burrows, L., Poster, M., Cantillon, M. & Winston, A. (1993) A randomized double-blind study of fluoxetine versus placebo in the treatment of dysthymia. *American Journal of Psychiatry*, 150 (8), 1169-1175.

JUDD2004 (Published Data Only)

Judd, L. L., Rapaport, M. H., Yonkers, K. A., Rush, A. J., Frank, E., Thase, M. E., et al. (2004) Randomized, placebo-controlled trial of fluoxetine for acute treatment of minor depressive disorder. *American Journal of Psychiatry*, 161, 1864-1871.

RAVINDRAN1999 (Published Data Only)

Ravindran, A.V., Anisman, H., Merali, Z., Charbonneau, Y., Telner, J., Bialik, R.J., Wiens, A., Ellis, J. & Griffiths, J. (1999) Treatment of primary dysthymia with group cognitive therapy and pharmacotherapy: clinical symptoms and functional impairments. *American Journal of Psychiatry*, 156, 1608-1617.

RAVINDRAN2000 (Published Data Only)

Ravindran, A.V., Guelfi, J.D., Lane, R.M., Cassano, G.B. (2000) Treatment of dysthymia with sertraline: a double-blind, placebo-controlled trial in dysthymic patients without major depression. *Journal of Clinical Psychiatry*, 61, 821-827

RAVIZZA1999 (Published Data Only)

Ravizza, L. (1999) Amisulpride in medium-term treatment of dysthymia: a six-month, double-blind safety study versus amitriptyline. *Journal of Psychopharmacology*, 13, 248-254.

ROCCA2005 (Published Data Only)

Rocca, P., Calvarese, P., Faggiano, F., Marchiaro, L., Mathis, F., Rivoira, E., et al. (2005) Citalopram versus sertraline in late-life nonmajor clinically significant depression: a 1-year follow-up clinical trial. *Journal of Clinical Psychiatry*, 66, 360-369.

SALZMANN1995 (Published Data Only)

Salzmann, E. & Robin, J.L. (1995) Multicentric double-blind study comparing efficacy and safety of minaprine and imipramine in dysthymic disorders. *Neuropsychobiology*, 31, 68-75.

SMERALDI1996 (Published Data Only)

Smeraldi, E. (1998) Amisulpride versus fluoxetine in patients with dysthymia or major depression in partial remission: a double-blind, comparative study. *Journal of Affective Disorders*, 48, 47-56
*Smeraldi, E., Haefele, E., Crespi, G., Casadei, G.L., Biondi, F. & Vigorelli, E. (1996) Amisulpride versus fluoxetine in dysthymia: preliminary results of a double-blind comparative study. *European Journal of Psychiatry*, 11 (Suppl 3), 141S-143S.

SZEGEDI1997 (Published Data Only)

Szegedi, A., Wetzell, H., Angerbach, D., Philipp, M. & Benkert, O. (1997) Response to treatment in minor and major depression: results of a double-blind comparative study with paroxetine and maprotiline. *Journal of Affective Disorders*, 45, 167-178.

THASE1996A (Published Data Only)

Hellerstein, D.J., Kocsis, J.H., Chapman, D., Stewart, J.W. & Harrison, W. (2000) Double-blind comparison of sertraline, imipramine, and placebo in the treatment of dysthymia: effects on personality. *American Journal of Psychiatry*, 157, 1436-1444.

Kocsis, J.H., Zisook, S., Davidson, J., Shelton, R., Yonkers, K., Hellerstein, D.J., Rosenbaum, J. & Halbreich, U. (1997) Double-blind comparison of sertraline, imipramine, and placebo in the treatment of dysthymia: psychosocial outcomes. *American Journal of Psychiatry*, 154, 390-395.

*Thase, M.E., Fava, M., Halbreich, U., Kocsis, J.H., Koran, L., Davidson, J., Rosenbaum, J. & Harrison, W. (1996) A placebo-controlled, randomised clinical trial comparing sertraline and imipramine for the treatment of dysthymia. *Archives of General Psychiatry*, 53, 777-784.

VALLEJO1987 (Published Data Only)

Vallejo, J., Gasto, C., Catalan, R. & Salamero, M. (1987) Double-blind study of imipramine versus phenelzine in melancholias and dysthymic disorders. *British Journal of Psychiatry*, 151, 639-642.

VANELLE1997 (Published Data Only)

Vanelle, J.M., Attar-Levy, D., Poirier, M.F., Bouhassira, M., Blin, P. & Olie, J.P. (1997) Controlled efficacy study of fluoxetine in dysthymia. *British Journal of Psychiatry*, 170, 345-350.

VERSIANI1997 (Published Data Only)

Versiani, M., Amrein, R., Stabl, M. & the International Collaborative Study Group (1997) Moclobemide and imipramine in chronic depression (dysthymia): an international double-blind, placebo-controlled trial. *International Clinical Psychopharmacology*, 12, 183-193.

References of Excluded Studies

- ANON1993** (Published Data Only)
Fluoxetine in dysthymia (1993). *Nurses' Drug Alert*, 17, 76-77.
- BALLUS2000** (Published Data Only)
Ballus, C., Quiros, G., de Flores, T., de la Torre, J., Palao, D., Rojo, L., Gutierrez, M., Casais, L. & Riesgo, Y. (2000) The efficacy and tolerability of venlafaxine and paroxetine in outpatients with depressive disorder or dysthymia. *International Clinical Psychopharmacology*, 15, 43-48.
- BENKERT1997** (Published Data Only)
Benkert, O., Szegedi, A., Wetzel, H., Staab, H. J., Meister, W. & Philipp, M. (1997) Dose escalation vs. continued doses of paroxetine and maprotiline: a prospective study in depressed out-patients with inadequate treatment response. *Acta Psychiatrica Scandinavica*, 95, 288-296.
- BOGETTO1997** (Published Data Only)
Bogetto, F., Barzega, G., Bellino, S., Maina, G. & Ravizza, L. (1997) Drug treatment of dysthymia: A clinical study. [Italian]. *Rivista di Psichiatria*, 32.
- BRASSEUR1980** (Published Data Only)
Brasseur, R. (1980) The treatment of light to moderate depression. A double-blind clinical investigation with flupentixol-melitracen versus maprotiline. *Acta Therapeutica*, 6.
- BURROWS2002** (Published Data Only)
Burrows, A.B., Slazman, C., Satlin, A., Noble, K., Pollock, B.G. & Gersh, T. (2002) A randomized, placebo-controlled trial of paroxetine in nursing home residents with non-major depression. *Depression and Anxiety*, 15, 102-110
- CASACCHIA1994** (Published Data Only)
Casacchia, M., Bolino, F., Marola, W., Pirro, R., Nivoli, G., Rapisarda, V. & Pancheri, P. (1994) Controlled multicentre study of teniloxazine in mild depression of the elderly. *New Trends in Experimental and Clinical Psychiatry*, 10 (4), 187-192.
- CATTIEZ1990** (Published Data Only)
Cattiez, P. H., Dierick, M., Troisfontaines, B., van Audenrode, L., Defleur, J., Hermans, W., et al. (1990) Moclobemide (Ro 11-1163) vs. clomipramine in the treatment of depression: A double-blind multicenter study in Belgium. *Drug Development Research*, 21, 325-331.
- COSTAESILVA1990** (Published Data Only)
Costa-e-Silva, J. A. (1990) Treatment of dysthymic disorder with low-dose amisulpride. A comparative study of 50 mg/d amisulpride versus placebo. [French]. *Annales de Psychiatrie.*, 5, 242-249.
- COWEN2005** (Published Data Only)
Cowen, P. J. (2005) Fluoxetine improves minor depressive disorders. *Evidence-Based Mental Health*, 8, 36.
- DUNBAR1985** (Published Data Only)
Dunbar, G. C., Naarala, M. & Hiltunen, H. (1985) A double-blind group comparison of mianserin and clomipramine in the treatment of mildly depressed psychiatric out-patients. *Acta Psychiatrica Scandinavica, Supplementum*, 320, 60-66.
- EICH2000A** (Published Data Only)
Eich, H., Agelink, M. W., Lehmann, E., Lemmer, W. & Klieser, E. (2000) [Acupuncture in patients with minor depressive episodes and generalized anxiety. Results of an experimental study]. [German]. *Fortschritte der Neurologie-Psychiatrie*, 68, 137-144.
- FAVA1997** (Published Data Only)
Fava, M., Nierenberg, A.A., Quitkin, F.M., Zisook, S., Pearlstein, T., Stone, A. & Rosenbaum, J.F. (1997) A preliminary study on the efficacy of sertraline and imipramine on anger attacks in atypical depression and dysthymia. *Psychopharmacology Bulletin*, 33, 101-103
- FUNKE1986** (Published Data Only)
Funke, H. J., Holtmann, W., Ismail, S., Jansen, W., Leonhardt, K. F., Muth, H., et al. (1986) Double-blind comparison of diclofensine with nomifensine in outpatients with dysphoric mood. *Pharmacopsychiatry*, 19, 120-123.
- HELLERSTEIN1994** (Published Data Only)
Hellerstein, D.J., Yanowitch, P., Rosenthal, J., Hemlock, C., Kasch, K., Samstag, L.W. & Winston, A. (1994) Long-term treatment of double depression: a preliminary study with serotonergic antidepressants. *Progress in Neuropsychopharmacology and Biological Psychiatry*, 18 (1), 139-147.
- KOCSIS1988** (Published Data Only)
Kocsis, J.H., Francis, A.J., Voss, C., Mann, J.J., Mason, B.J. & Sweeney, J. (1988) Imipramine treatment for chronic depression. *Archives of General Psychiatry*, 45, 253-256.
- KOCSIS1989** (Published Data Only)
Kocsis, J., Mason, B., Frances, A., Sweeney, J., et al. (1989) Prediction of response of chronic depression to imipramine. *Journal of Affective Disorders*, 17, 255-260.

- KOK1995** (Published Data Only)
Kok, L.P. & Tsoi, W.F. (1995) A controlled double-blind trial of moclobemide and imipramine in the treatment of depression. *Singapore Medical Journal*, 36, 38-40.
- LAAKMAN1995** (Published Data Only)
Laakman, G., Faltermaier-Temizel, M., Bossert-Zaudig, S., Baghai, T. & Lorkowski, G. (1995) Treatment of depressive outpatients with lorazepam, alprazolam, amitriptyline and placebo. *Psychopharmacology*, 120, 109-115.
- LECRUBIER1997** (Published Data Only)
Lecrubier, Y., Boyer, P., Turjanski, S., Rein, W. & Amisulpride Study Group (1997) Amisulpride versus imipramine and placebo in dysthymia and major depression. *Journal of Affective Disorders*, 43, 95-103.
- LEON1994** (Published Data Only)
Leon, C. A., Vigoya, J., Conde, S., Campo, G., Castrillon, E. & Leon, A. (1994). [Comparison of the effect of amisulpride and viloxazine in the treatment of dysthymia]. [Spanish]. *Acta Psiquiatrica y Psicologica de America Latina*, 40, 41-49.
- LIU2004E** (Published Data Only)
Liu, J., Cui, Y. & Dong, W. (2004) Effect of sertraline in treatment of dysthymia. [Chinese]. *Chinese Mental Health Journal*, 18, 265-266.
- PAIVA1988** (Published Data Only)
Paiva, T., Arriga, F., Wauquier, A., Lara, E., Largo, R. & Leitao, J.N. (1988) Effects of ritanserin on sleep disturbances of dysthymic patients. *Psychopharmacology*, 96, 395-399
- PAYKEL1988** (Published Data Only)
Paykel, E.S., Freeling, P. & Hollyman, J.A. (1988) Are tricyclic antidepressants useful for mild depression? A placebo controlled trial. *Pharmacopsychiatry*, 21, 15-18.
- PAYKEL1988A** (Published Data Only)
Paykel, E.S., Hollyman, J.A., Freeling, P. & Sedgwick, P. (1988) Predictors of therapeutic benefit from amitriptyline in mild depression: a general practice placebo-controlled trial. *Journal of Affective Disorders*, 14, 83-95.
- POGGESI2000** (Published Data Only)
Poggesi, I., Pellizzoni, C. & Fleishaker, J.C. (2000) Pharmacokinetics of reboxetine in elderly patients with depressive disorders. *International Journal of Clinical Pharmacology and Therapeutics*, 38, 254-259
- RICKELS1974** (Published Data Only)
Rickels, K., Schneider, B., Pereira-Ogan, J. A., Perioff, M. M., Segal, A. & Vandervort, W. (1974) Pipradrol in mild depression: A controlled study. *Journal of Clinical Pharmacology*, 14, 127-133.
- ROSENBERG2007** (Published Data Only)
Rosenberg, C., Lauritzen, L., Brix, J., Jorgensen, J.B., Kofod, P. & Bayer, L.B. (2007) Citalopram versus amitriptyline in elderly depressed patients with or without mild cognitive dysfunction: a Danish multicentre trial in general practice. *Psychopharmacology Bulletin*, 40 (1), 63-73.
- ROSENTHAL1992** (Published Data Only)
Rosenthal, J., Hemlock, C., Hellerstein, D.J., Yanowitch, P., Kasch, K., Schupak, C., Samstag, L. & Winston, A. (1992) A preliminary study of serotonergic antidepressants in treatment of dysthymia. *Progress in Neuro-Psychopharmacology & Biological Psychiatry*, 16, 933-941.
- SCARZELLA1990** (Published Data Only)
Scarzella, R., Scarzella, L. & Rovera, G. G. (1990) Amisulpride versus sulpiride: Double-blind clinical study in 68 patients with dysthymic disorder. [Italian]. *Giornale di Neuropsicofarmacologia*, 12.
- SERRANOBLANCO2006** (Published Data Only)
Serrano-Blanco, A., Gabarron, E., Garcia-Bayo, I., Soler-Vila, M., Carames, E., Penarrubia-Maria, M. T., et al. (2006) Effectiveness and cost-effectiveness of antidepressant treatment in primary health care: a six-month randomised study comparing fluoxetine to imipramine. *Journal of Affective Disorders*, 91, 153-163.
- SLETVOLD1989** (Published Data Only)
Sletvold, H. & Gotestam, K. G. (1989) Placebo and antidepressive effects: Zimelidine and doxepin in a double-blind extended placebo study on outpatients with minor depression. *European Journal of Psychiatry*, 3, 151-156.

TYRER1988

(Published Data Only)

Tyrer, P., Seivewright, N., Ferguson, B., Murphy, S., & Johnson, A. L. (1993) The Nottingham study of neurotic disorder. Effect of personality status on response to drug treatment, cognitive therapy and self-help over two years. *British Journal of Psychiatry*, 162, 219-226.

Tyrer, P., Seivewright, N., Ferguson, B., Murphy, S., Darling, C., Brothwell, J., et al. (1990) The Nottingham Study of Neurotic Disorder: relationship between personality status and symptoms. *Psychological Medicine*, 20, 423-431.

*Tyrer, P., Murphy, S., Kingdon, D., Brothwell, J., Gregory, S., Seivewright, N., Ferguson, B., Barczak, P., Darling, C.M. & Johnson, A.L. (1988) The Nottingham study of neurotic disorder: comparison of drug and psychological treatments. *The Lancet*, 2 (8605), 235-240.

Seivewright, N., Tyrer, P., Ferguson, B., Murphy, S., & Johnson, T. (2000) Longitudinal study of the influence of life events and personality status on diagnostic change in three neurotic disorders. *Depression & Anxiety*, 11, 105-113.

© NCCMH. All rights reserved.

Pharmacological interventions - relapse prevention - new studies in guideline update

Comparisons Included in this Clinical Question

Desipramine v Placebo
MILLER2001A

Characteristics of Included Studies

Methods	Participants	Outcomes	Interventions	Notes
MILLER2001A Study Type: RCT Study Description: 1) Open acute phase: full & partial remitters to phase 2 2) Continuation phase: all (non dropouts) to phase 3 3) Maintenance phase Type of Analysis: 'ITT' Blindness: Double blind Duration (days): Followup: 84 Acute; 112 Continuation; 2years maintenance Notes: RANDOMISATION: no details Info on Screening Process: Kocsis1996: Dysthymia and MD mixed Miller2001A: Dysthymic group only (n=27)	n= 27 Age: Mean 37 Sex: 15 males 12 females Diagnosis: 100% Dysthymia by DSM-III-R Exclusions: Diagnosis of schizophrenia; current substance misuse or dependence; history of mania or hypomania; severe or chronic medical illness; contraindication to desipramine Notes: Kocsis1996 - Dysthymia and MD mixed. Acute and continuation phases: not RCTs and not reported by intervention group; Maintenance phase: not reported by diagnosis so use for MD group Miller2001A - Dysthymics in maintenance phase only (relapse prevention) Baseline: HAMD-17: Dysthymic patients at entry to maintenance phase: Desipramine 3.1 (2.5); Placebo 3.9 (5.2)	Data Used Recurrence Notes: Have not extracted data from acute and continuation phases (Kocsis1996) as are not RCTs. Data from dysthymics in maintenance phase only Recurrence: HAMD>12 & GAS <60 on three consecutive ratings	Group 1 N= 14 Continued to Desipramine. Mean dose 234 (64) mg/d - Total N in group =28 (pure dysthymics reported here) Group 2 N= 13 Tapered to Placebo - Total N in group =25 (pure dysthymics reported here)	Funding: Grant by National Institute of Mental Health, Rockville, MD

Characteristics of Excluded Studies

References of Included Studies

MILLER2001A (Published Data Only)

Kocsis, J.H., Friedman, R.A., Markowitz, J.C., Leon, A.C., Miller, N.L., Gniwesch, L. & Parides M. (1996) Maintenance therapy for chronic depression: a controlled clinical trial of desipramine. Archives of General Psychiatry, 53, 769-774.

*Miller, N. L., Kocsis, J. H., Leon, A. C., Portera, L., Dauber, S. & Markowitz, J. C. (2001) Maintenance desipramine for dysthymia: a placebo-controlled study. Journal of Affective Disorders, 64, 231-237.

References of Excluded Studies