Bilaga 5 Tabellverk över ingående studier

Table 1. Included studies in alphabetic order

First author **Year** **Country** **Reference**	**Population** **Inclusion criteria** **Setting** **Study period** **Follow-up**	**Intervention** **Duration** **Drop out** **Compliance**	**Comparison** **Duration** **Drop out** **Compliance**	**Results** (mean±SD)	**Risk of bias** **Comments** **Study limitation**
Agras et al 1994 USA [1]	**Population** N=108 (22% of screened) Mean age: 45±10 (range 22–65) Age onset of BE: 19 Mean BMI: 38.6±6.6 BE/week: 4.5±1.4 **Inclusion criteria** Proposed criteria for BED by Walsh (1992), females, no antidepressant medication **Setting** Outpatients, via advertisements **Study period** NR **Follow-up** Post treatment (36 weeks) and 3 months	CBT+weight loss therapy (CBT-WL) n=36 12 weekly sessions of CBT followed by 18 WL-sessions CBT+weight loss therapy+desipramine (CBT-WL-D) n=36 Desipramine added for the last 6 months, start dos 25 mg/day, max dose 300 mg/day **Duration** 36 weeks **Drop out** CBT-WL: 6 (17%) CBT-WL-D: 8 (23%) **Compliance** NR	Weight loss therapy (WL) n=37 30 group sessions a 90 minutes, weekly for 24 weeks then biweekly **Duration** 36 weeks **Drop out** 10 (27%) **Compliance** NR	**Binge days/week** Post: WL: 1.5±0.2, CBT-WL: 1.2±1.3 CBT-WL-D: 0.9±0.9 3 months: WL: 2, CBT-WL: 1.7 CBT-WL-D: 1.5 **Remisson** WL: 19%, CBT-WL: 37%, CBT-WL-D: 41% 3 months: WL: 14%, CBT-WL: 28% CBT-WL-D: 32% **Depression (BDI)** WL: 11.3±10.3 CBT-WL: 8.9±7.6 CBT-WL-D: 7.8±7.8 **Weight (kg)** WL: 99.2±16.9 CBT-WL: 100±17.6 CBT-WL-D: 105.9±20.5	**Sampling method** Unclear **Blinding** Assessor blinded **Handling of missing data** No ITT

Alfonsson et al 2015 Sweden [2]	**Population** N=100 (71% of screened) Mean age: 44±11 Mean BMI: 41±5.3 94% females **Inclusion criteria** Patients with obesity (BMI≥30) and met DSM-5 criteria for BED **Setting** Outpatients, recruited from routine care at a specialized clinic for obesity **Study period** January 2010–February 2012 **Follow-up** Post treatment, For BA: also at 3 and 6 months FU	Behavioural activation (BA) n=50 *BA*: 4–7/group, 10 weekly 90 min sessions following program by Lejuez et al (2010) and Kanter 2009. **Duration** 10 weeks **Drop out** 16 (32%) **Compliance** 34 (68%) (6 or more sessions out of 10)	Waiting list n=50 **Duration** 3 months **Drop out** 12 (24%) **Compliance** 38 (76%)	**Remission rates (**zero OBEs for past 28 days, based on EDE), N (%) I: 10 (29%), C: 10 (26%), ns **Binge eating, OBE days** Post: I: 7.35±7.03, C: 9.29±9.06 3 months: I: 4.67±6.17 6 months: i: 5.38±7.28 **EDE-Q Total score** Post: I: 3.04±0.84, C: 2.95±0.97 **Depression (HADS)** Depression post I: 5.71±3.83, C: 8.05±5.29	**Sampling method** Random no list, online randomization **Blinding** Blinded assessment **Handling of missing data** No ITT analysis
Brownley et al 2013 USA [3]	**Population** N=24 (58% of screened) Mean age: 36.6±11 Mean BMI: 43.2±5.4 83.3% females **Inclusion criteria** Age 18–65, met DSM-5 criteria for BED, no current suicidal or homicidal intent or other psychiatric conditions, BMI 25–44 **Setting**	Chromium picolinate (CrPi) High dose: 1000 µg/day n=8 Moderate dose: 600 µg/day n=9 **Duration** 6 months **Drop out** High dose: 1 moderate dose:1 **Compliance**	Placebo n=7 **Duration** 6 months **Drop out** 1 **Compliance** NR	Post treatment **Binge frequency (episodes/months)** High dose: –1.65±0.76 Mod dose: –0.93±0.70 C: –0.97±0.78 **EDE-Q Global score** High dose: –0.21±0.07 Mod dose: –0.13±0.07 C: –0.04±0.07 **Depression (QIDS-SR), decline** High dose: –0.3±0.21 Mod dose: –0.41±0.19 C: –0.03±0.21	**Sampling method** NR **Blinding** Double blind **Handling of missing data** NR

	Outpatients, recruited via advertisements **Study period** NR **Follow-up** Post treatment. For intervention group 3 months data was available but not for placebo. **Run in period** N=28, 1 months, 4 was identified as placebo responders	NR			
Carrard et al 2011 Switzerland [4]	**Population** N=74 (46% of screened) Mean age: 36±11.4 BMI: 28.8±5.7 Full BED: 58% **Inclusion criteria** Age 18–60, female, average internet skills, met sub-threshold or full DSM-IV criteria for BED, 1 OBE/week for ≥3 months **Setting** Outpatients, recruited via advertisements **Study period** Started 2008 **Follow-up** Post intervention and 6 months	Internet self-help guided programme n=37 French programme, based on online programme for BN, SALUT project. Consisted of 11 modules **Duration** 6 months **Drop out** 9 **Compliance** Third assessment 28 (75.7%)	Waiting list, Started treatment after 6 months n=37 **Duration** 6 months **Drop out** 7 **Compliance** Third assessment 30 (81.1%)	**Abstinence rate % (n)** Post: I: 35.1 (13), C: 8.1% (3) **Objective binge episodes** Post: 5.57.4, C: 9.1±8.8 **EDE-Q Total** Post: I: 2.5±1.1, C: 2.9±1 **Depression (BDI-II)** Post: I:10±7.4, C: 13.2±9.6 **BMI** Post: I:29.2±6, C: 27.9±5.4	**Sampling method** Computer generated randomization sequence **Blinding** None **Handling of missing data** ITT **Funding** Hans Wilsdorf foundation, MRNT-CT

Carter and Fairburn 1998 United Kingdom [5]	**Population** N=72 (31% of screened, 95% of eligible) Mean age: 39.7±10 Mean BMI: 31.4 **Inclusion criteria** Women aged 18–65, BED according to EDE and research assessment interview **Setting** Single center, outpatient recruited via advertisements **Study period** NR **Follow-up** Post treatment, 3 and 6 months	*Guided self-help (GSH)* Programme led approach with a non-specialist therapists as facilitator, between 6–8 25 minutes sessions n=24+10 *Pure self-help (PSH)* participants were asked to read the book *Overcoming binge eating* and to follow its self-help programme n=24+11 **Duration** 12 weeks **Drop out** GSH: 8 PSH: 0	Waiting list n=24 **Duration** 12 weeks **Drop out** 1	**Binge eating/28 days** Post: C:13.5±10.3, GSH 4.3±7.8, PSH: 9.3±11.7 3 months: GSH: 3.6±3.5, PSH: 5±4.3 6 months: GSH: 3.7±4.2, PSH: 4.7±4 **Global EDE-Q score** Post: C: 3.5±0.8, GSH: 2.1±1.2, PSH: 2.7±1.3 3 months: GSH: 2.1±1.3, PSH:2.6±1.5 6 months: GSH: 2.4±1.3, PSH: 2.6±1.5 **Ceased binge eating, % (n)** Post: C 8% (2), GSH: 50% (17), PSH: 43% (15) 3 months: GSH: 41% (14), PSH: 37%(13) 6 months: GSH:50% (17), PSH: 40% (14) **BMI** Post: C:31.9±7.4, GSH: 31.7±6.1, PSH: 30.7±6.6 3 months: GSH: 30.8±5.9, PSH: 29.4±5.6 6 months: GSH: 31.6±6.2, PSH: 30.4±6.5	**Sampling method** Permuted block by 3 **Blinding** Assessors blinded **Handling of missing data** ITT analysis
Cassin et al 2008 Canada [6]	**Population** N=108 (84% of eligible) Mean age: 42.5±12.7 BED duration: 15.1±11.6 Mean BMI: 332±7.8 **Inclusion criteria** Female, met DSM-IV-TR for BED	Adapted Motivational interviewing (AMI)+receiving self-help hand book One individual AMI-session (mean length 82 minutes), the protocol was based on a book by Treasue and Schmidt 1997,	Self-help handbook Participants were asked to read the book and to complete the worksheets at the initial sessions n=54 **Duration**	**Binge eating frequency (days/months)** I: 2.8±3.5, C: 6.3±6 **Remission** I: 15 (27.8%): C: 6 (11.1%) **Depression (BDI-II)** I: 14.2±11.1, C: 16.2±12.2	**Sampling method** Computerized MINIM program **Blinding** Assessor blinded **Handling of missing data**

	Setting Outpatients, recruited from local television news, magazine, websites or radio **Study period** October 2004–July 2005 **Follow-up** post intervention	but modified for use with individuals with BED n=54 **Duration** 16 weeks **Drop out** 6 (11%)	16 weeks **Drop out** 8 (15%)		ITT analysis
Castelnuovo et al 2011 Italy [7]	**Population** N=60 (60% of screened) Mean age: 46±11 Mean weight: 106.95±6.94 100% females **Inclusion criteria** Age 18–65, BMI≥30, BED DSM-IV criteria **Setting** Consecutive inpatient from single clinical center **Study period** 2008 **Follow-up** Post treatment and 6 months	BST (Brief Strategic Therapy) n=30 Inpatient treatment: diet, physical activity, dietitian counselling, 8 sessions of BST and 8 out patients telephone based support sessions **Duration** 7 months (1 month inpatient and 6 month outpatient sessions) **Drop out** NR	CBT n=30 Inpatient treatment: diet, physical activity, dietitian counselling, 8 sessions of CBT and 8 telephone based out patients sessions of CBT **Duration** 7 months (1 month inpatients and 6 months outpatients) **Drop out** NR	**BED remission, number of weekly binge episodes <2** 6 months: BST: 20%, CBT: 63.3%, p 0.001 **Change in weight** 6 months: CBT: –5.95±17.9, BST: –10.53±6.14	**Sampling method** Web site randomization **Blinding** Unclear if assessor is blinded **Handling of missing data** Unclear
Claudino et al 2007 Brazil [8]	**Population** N=73 (91% of eligible, 15% of screened) Mean age: 38 Mean binge days/week: 3.8 Mean BMI: 37.4	Topiramate+CBT n=37 Topiramate: start dose 25 mg/day for 14 days, increased by 25 mg until target dose of	Placebo+group CBT n=36 CBT: 19 90-min weekly session (adapted Fairburn	**Binge eating frequency, days/wk** Post: I: 0±0.2, C: 0.3±0.6 **Binge episodes/week** Post: I:0±0.2, C: 0.3±0.8	**Sampling method** Cluster of ten, computer generated list **Blinding**

	35% females **Inclusion criteria** BMI≥30, age 18–60, DSM-IV criteria for BED, >17 BES, not prior been using topiramate **Setting** Multicentre, outpatients, spontaneously seeking treatment or recruited via media **Study period** September 2004–April 2005 **Follow-up** Post treatment **Run in period** 2–5 weeks, single blind	200 mg/day. Patients presented with <5% reduction in weight or <50% reduction in binge episodes were prescribed increased medication till max dose 300md/day CBT: 19 90-min weekly session (adapted Fairburn model for BED), group of 10, led by therapist. Last 3 sessions occurred biweekly **Duration** 21 weeks **Drop out** 7 (19%)	model for BED), group of 10, led by therapist. The last 3 sessions occurred biweekly **Duration** 21 weeks **Drop out** 10 (20%)	**BED remission** I: 31/37, C:22/36, p 0.03 **Weight** Kg: Post: I: 89.8±13.2, C: 97.5±10.5 BMI: I: 35±3.5, c: 36.7±4.7, p 0.0002 **Depression (BDI)** I: 10.9±7, c: 9.2±6.9, p0.2 **Adverse events** Paresthesia: I: 48.6%, C: 11.1 Taste perversion: I: 24.3%, C: 0 Dysuria: I: 13.5%, C: 0 Insomnia: I: 2.7%, C: 16.7%	Double blind (topiramate), assessor blinded **Handling of missing data** ITT analysis **Fundings** Janssen-Cilag Farmaceuticia, Brazil
Corwin et al 2012 USA [9]	**Population** N=18 Mean age: 44.8±3.7 Mean BMI:37.7±2.3 50% females **Inclusion criteria** Adults, self-reported binge eating ≥3 times/week **Setting** Outpatients, recruited through website/newsletter **Study period** NR	Baclofen 3 times/day Dose titration: 10 days to titrate up, 28 days with full dose (20 mg 3 times/day), 10 days to titrate down Wash out period: 15 days **Duration** 48 days **Drop out** 5 (28%) **Compliance**	Placebo **Duration** 48 days **Drop out** 0	**Binge frequency (% days±SEM)** I: 0.63±0.08, C: 0.78±0.05 **BES score** I: 22.9±3.3, C: 21.4±3.1 **Depression (HAD)** I: 7.1±1.2, C: 5.8±1	**Sampling method** Unclear **Blinding** Double blind **Handling of missing data** Unclear **Fundings** Penn State institute for diabetes and obesity

	Follow-up Post intervention	NR			
Dingemans et al 2007 Netherlands [10]	**Population** N=52 Mean age: 37.6 Mean BMI: 38.9±7.9 94% females **Inclusion criteria** BED according to the DSM-IV **Setting** Outpatients, recruited from 3 eating disorder centers and via advertisements in local newspaper and websites **Study period** NR **Follow-up** Post-treatment and 1year	CBT n=30 CBT: 15 2 hours sessions, the 10 first were weekly, last five were biweekly. Sessions led by two trained therapists **Duration** 20 weeks **Drop out** 2 (7%) **Compliance** unclear	Waiting List n=22 Offered CBT after end of treatment **Duration** 20 weeks **Drop out** 0 **Compliance** unclear	**Objective overeating/28 days** Post: I: 2.1±5.5, C: 4.6±6.0 **Subjective BE episodes/28 days** Post: I: 2.3±5.4, C: 7.9±13.3 **OBE abstinence, N (%)** Post: I: 19 (65%), C: 4 (18%) **EDE-Q Global score** Post: I: 1.3±1., C: 2.3±0.9 **BMI, Change** F(1.49)=2.83, p=0.1 **Depression (BDI)** Post: I: 12.9±13.2, C: 17.4±10.5	**Sampling method** Unclear **Blinding** Unclear **Handling of missing data** NR **Other Comments** All analyses were corrected for BL differences between the groups
Golay et al 2005 Switzerland [11]	**Population** N=89 (91% of screened) Mean age:41 Mean BMI: 36.6 91% females **Inclusion criteria** Age 18–65, BMI≥30, BED met DSM-IV criteria **Setting** Outpatients, two centers specializing in obesity and	Orlistat, 120 mg, TTD with main meal n=44 **Duration** 24 weeks **Drop out** 5 (11%) **Compliance** NR	Placebo n=45 **Duration** 24 weeks **Drop out** 13 (29%) **Compliance** NR	**BED, % (DSM IV)** I: 9/39 (23%), C: 10/34 (29%), p0.539 **Binge eating episodes, weekly** I: 1, C: 1.7 **Depression score (BDI)** I: 8.2±0.8, C: 11.6±1.6.2 **QoL (NHP)** I: 5.4±0.8, C: 6.8	**Sampling method** Generated by sponsor **Blinding** Double blind **Handling of missing data** ITT analysis **Funding** Roche Pharma AG

	eating disorder, consecutive sample **Study period** NR **Follow-up** Post intervention			**Weight loss (LSM)** 24 week: I: –7.4%, C:–2.3%, p0001	
Grilo et al 2014 USA [12]	**Population** N=52 Racially ethnically diverse obese individuals Mean age: 44.5 mean BMI: 37.9 73.4% females **Inclusion criteria** Age 18–65, DSM-5 criteria for BED, BMI≥30–< 50 **Setting** Primary care, recruited via posters and flyers **Study period** NR **Follow-up** Post treatment, 6 and 12 months	Self-help-CBT (shCBT)+placebo capsules n=25 shCBT: given the self-help programme *Overcoming Binge eating (Fairburn 1995)*, primary care physicians instructed participants to read and follow the self-help CBT manual **Duration** 16 weeks **Drop out** Post: 2 (8%) 6 moths:2 12 months: 4 **Compliance** Post: 21 (84%)	Placebo capsules n=27 **Duration** 16 weeks **Drop out** Post: 7 (26%) 6 moths: 5 (18.5%) 12 months: 4 (15%) **Compliance** Post: 14 (52%)	**Remission rates** (zero OBEs past 28 days, EDE interview) Post: I: 6/25 (24%), C: 8/27 (29.6%) 6 months: I: 10/25 (40%), C: 11/27 (40.7%) 12 months: I: 11/25 (40%), C: 10/27 (37%) **Binge episodes/months** (EDE) Post: I: 6.4±7.6, C: 5.3±9.9 6 months: I: 3.6±6.4, C: 5.7±10 12 months: I: 4.9±8.5, C:6.7±13.9 **EDE-Q Global score** Post: I: 1.71.2, C: 2.1±1.2 6 months: I: 1.7±0.9, C: 1.8±1 12 months: I: 1.6±1, C: 1.8±1.1 **Depression (BDI)** Post: I: 9.9±9.7, C: 9.6±11.3 6 months: I: 10.3±10.6, C: 8.7±5.1 12 months: 10.5±9.1, C: 7.5±6.9 **BMI** Post: I: 35.9±5.6, C: 39.6±5.7 6 months: I: 35.3±5.2, C:38.8±5.1 12 months: 35.4±5.9, C: 39.5±5.9	**Sampling method** Randomization schedule, stratified by DSM diagnosis of BED **Blinding** Unclear **Handling of missing data** ITT analysis **Other comments** The groups that received sibutramine were excluded since this drug is no longer used in Sweden due to adverse events

Grilo et al 2013 USA [13]	**Population** N=48 (65% of eligible) Racially ethnically diverse obese individuals Full BED, N=34 Sub-BED, N=14 Mean age: 45.8±11.0 mean BMI: 37.62±4.79 70% females **Inclusion criteria** Age ≤65, DSM-5 criteria for BED, BMI≥30–50 **Setting** Primary care, recruited via posters and flyers **Study period** NR **Follow-up** Post treatment	Self-help-CBT (shCBT) n=24 shCBT: given the self-help programme *Overcoming Binge eating (Fairburn 1995)*, primary care physicians instructed participants to read and follow the self-help CBT manual **Duration** 4 months **Drop out** 0	Usual care, (advice and treatment recommended by their primary care physicians) n=24 **Drop out** 0	**Remission rates** (zero OBEs past month, EDE interview) I: 6/24, C: 2/24 **Binge frequencies** *EDE OBE/month* I: 5.75±5.94, C: 6.50±7.22 **EDE-Q Global score** I: 3.02±0.88, C: 2.81±0.89 **Depression BDI** I: 8.88±7.67, C: 11.96±7.38 **BMI** I: 37.45±5.34, C: 37.42±4.44	**Sampling method** Randomization schedule, stratified by DSM diagnosis of BED, blocks of 12 **Blinding** Unclear **Handling of missing data** ITT analysis
Grilo et al 2013 USA [14]	**Population** N=79 (57% of screened) persons with mental health needs, Mean age: 46.32±9.68 Mean BMI: 37.57±6.62 82% females **Inclusion criteria** Aged 21–65 years, BMI ≥30, BED per DSM5 criteria **Setting**	Orlistat+behavioural weight loss (BWL) n=20 85% females Orlistat: 120 mg 3 times daily BWL: culturally adaptation of the Diabetes-Prevention-Program, 16 sessions **Duration** 4 months	placebo+BWL n=20 70% females Placebo: 3 times daily BWL: culturally adaptation of the Diabetes-Prevention-Program, 16 sessions **Duration** 4 months	**Remission** Post: I: 12 (60%), C: 14 (17%) 6 months: I: 10 (50%), C: 10 (50%) **EDE total** Post: I: 1.6±0.9, C: 2.0±0.7 6 months: I: 1.5±0.8, C: 1.9±1 **BMI** Post: I: 37.9±6.9, C: 36±5 6 months: I: 37.6±5.7, C: 36.7±5.3 **Depression, (BDI)**	**Sampling method** Stratification **Blinding** Double blind **Handling of missing data** ITT analysis **Other comments** Only included data from BED population

	Consecutive sample recruited via clinical teams and referrals at a community mental health center serving economically disadvantaged persons **Study period** August 2007–October 2009 **Follow-up** 6 months	**Drop out** Post treatment: 1 (5%) 6 months: 2 (10%) **Completers** 14 (70%)	**Drop out** Post treatment & 6 months: 1 (5%) **Completers** 15 (75%)	Post: I: 11.4±12, C: 17.7±12 6 months: I: 10.3±10.1, C: 20.9±11.9	
Grilo et al 2011 USA [15]	**Population** N=125 Mean age: 44.±9.4 Mean BMI: 38.8±5.8 67% females **Inclusion criteria** Age 18–60, met full DSM-IV research criteria for BED, BMI 30–55 **Setting** Outpatients recruited via print advertisements **Study period** NR **Follow-up** 6 and 12 months	CBT+Behavioural Weight loss program (BWL) n=35 CBT was delivered first, followed by BWL. CBT: 16 sessions over 16 weeks, following the protocol by Fairburn 1993. BWL: 16 sessions over 24 weeks following the manualized LEARN programme for weight management (Brownell 2000) BWL N=45 16 group 60-min sessions for 24 weeks **Drop out** CBT-BWL BWL **Compliance**	CBT n=45 16 group 60-min sessions **Duration** 24 weeks **Drop out** **Compliance** 34 (76%)	**Remission rate** (zero OBEs the last 28 days) Post: CBT: 44.4%, BWL: 37.8%, CBT-BWL 48.6% 6-month: CBT: 51.1%, BWL: 33.3%, CBT-BWL: 48.6% 12-month: CBT: 51.1%, BWL: 35.6%, CBT-BWL:40% **Binge episodes/months** Post: CBT: 2.2±3.8, BWL: 4.6±11, CBT-BWL: 3.4±9 6 months: CBT: 2.7±8.5, BWL: 5.5±7.6, CBT-BWL: 3.2±7.8 12 months: CBT: 2.4±8.1, BWL: 4.6±6, CBT-BWL: 4±8.4 **EDE-Q Global score** Post: CBT: 1.7±0.9, BWL: 1.8±0.8, CBT-BWL: 1.6±0.9 6 months: CBT: 1.6±0.8, BWL: 1.8±0.7 CBT-BWL: 1.4±0.9 12 months: CBT: 1.5±0.8, BWL: 1.6±0.8 CBT-BWL: 1.4±0.9	**Sampling method** No restriction or stratification, computer-generated sequence. Concealed allocation **Blinding** Unclear **Handling of missing data** ITT analysis

		BWL: 31 (69%) BT+BWL: 21 (60%)		**BMI** Post: CBT: 38.5±5.7, BWL: 35.7±5.9, CBT-BWL38.9±6.2 6-month: CBT: 38.7±5.7, BWL: 36.6±6.8, CBTBWL: 38.2±5.3 12-month CBT: 38.3±6, BWL: 36.6±6.5, CBT-BWL: 38.7±5.6 **Depression (BDI)** Post: CBT: 10.1±8.8, BWL: 11.1±8.3, CBT-BWL: 9.7±9.2 6 months: CBT: 8.1±7.3, BWL: 11.1±8.7, CBT-BWL:10.1±9.9 12 months: CBT: 9.1±7.9, BWL: 9.6±7.7, CBT-BWL 9.7±9.3	
Grilo et al 2005 [16] Masheb et al 2007 [17] Masheb et al 2008 USA [18]	**Population** N=90 Mean age: 46.3±9 Mean BMI: 35.5±7 Age onset BED: 27.1/27.5/28.9 79% females **Inclusion criteria** DSM-IV criteria for BED, age18–60, BMI≥27 **Setting** Outpatients recruited via print advertisements **Study period** NR **Follow-up** Post treatment	CBT- guided self-help (CBT-gsh) n=37 Behavioural weight loss treatment (BWL-gsh) N=38 *CBT*: self-help version of the professional therapist manual (Fairburn, Marcus, & Wilson, 1993) BWLgsh: manual is the LEARN Program for Weight Management, 16 lessons **Duration** 12 weeks **Completers**	Placebo, same no of sessions as CBT or BWL n=15 **Duration** 12 weeks **Completers** 87%	**Remission rate (**No OBEs for past 28 days) **Self-monitoring, n (%)** BT: 17 (46%), BWL: 7 (18.4%), C: 2 (13.3%) **Remission rate EDE** CBT: 22 (59.5%), BWL: 9 (23.7%), C: 4 (26.7%) **Objective BED/month** *self-monitored* CBT: 3.8±6.1, BWL: 7.3±8.2, C: 6.8±6.1 *EDE-Q method* CBT: 2.8±5.1, BWL: 6.7±8, C: 8.1±6.9 **Depression (BDI)** CBT: 9.5±9.4, BWL: 12.0±10.3, C: 11.4±8.5	**Sampling method** 5:5:2 ratio, permuted blocks **Blinding** Unclear **Handling of missing data** ITT analysis

		CBT:87% BWL: 66%		**BMI** CBT: 33.1±.8, BWL: 34.5±8.8, C: 35.8±7.0 **Rapid responder** (≥65% reduction in BE by 4th treatment wk) CBT:23/37, BWL: 18/38	
Grilo et al 2005 USA [19]	**Population** N=50 (29% of screened, 82% of eligible) Mean age: 47±7 (range 35–58) Mean age onset BED: 25 Mean BMI: 36±4.7 88% females **Inclusion criteria** DSM-IV criteria for BED, age 35–60, BMI≥30 **Setting** Outpatient, consecutive, via advertisement, Yale University Medical School **Study period** NR **Follow-up** 3 months	Orlistat+gsCBT+Diet Orlistat 120 mg 3 times per *CBT:* Individually, using guided self-help and Overcoming Binge Eating (Fairburn 1995). 6 individual meetings (15 – 20 min) *Diet:* balanced calorie diet women 1200 kcal, men;1500 kcal, fat ≤30%, follow Food Guide Pyramid n=25 Mean age of onset: 23.5±12.2 84% females **Duration** 12 weeks **Drop out** 6 (24%) **Compliance/completers** 19 (76%)	Placebo+gsCBT+Diet n=25 Mean age of onset: 27.2±14.0 92% females **Duration** 12 weeks **Drop out** 5 (20%) **Compliance** 20 (80%)	**Remission rates *(****No OBEs for past 28 days, based on EDE), n (%)*** Post: I: 16 (64%), C: 9 (36%),p 0.048 3 months: I: 13 (52%), C: 13 (52%) **Binge Eating, OBEs/Mo** Post: I 3.2±5.5), C: 3.6±5.2) p 0.62 3 months: I: 3.4±6.5), C: 2.8±5.3), p0.87 **Depression (BDI)** Post: I: 10.1±7.7, C: 14.7±9.0 3 months: I: 9.9±8.6, C: 14.6±10.9 **EDE-Q Global score** Post: I 2.1±1, C: 2.4±0.7 3 months: I: 2.2±1.1, C: 2.3±1 **Weight (Kg)** Post: I: –3.5±3.5, C: –1.6±2.4 3 months: I: 3.4±5.0, C: 1.3±3.1 **Adverse events** Gastrointestinal events related to Orlistat (flatus with discharge, fatty or oily stools, oily discharge, increased defecation, and faecal urgency) were higher among the Orlistat group than in	**Sampling method** Computer generated, no restrictions **Blinding** Double **Handling of missing data** ITT analysis **Funding** American Heart Association; zonaghue Medical Research Foundation

				the placebo group Two patients in the Orlistad+gsCBT dropped out due to side effects	
Grilo, Masheb and Wilson 2005 [20] Grilo et al 2006 [21] Grilo et al 2012 USA [22]	**Population** N=108 (54% of eligible, 26% of screened) Mean age: 44±8.6 (range 21–59) Mean BMI: 36.3±7.9 78% females **Inclusion criteria** DSM-IV criteria for BED, age 18–60, 100%–200% of IDW **Setting** Consecutive, Outpatient, Yale University, New Haven **Study period** NR **Follow-up** Post treatment, 6 and 12 months (not for placebo)	Fluoxetine (F), n=27 CBT+placebo (CBT) n=28 CBT+fluoxetine (CBT-F) n=26 *Fluoxetine:* 60 mg/day (mornings) *CBT*: weekly individual 60-minutes sessions for 16 weeks, followed Fairburn's manual for BN **Duration** 16 weeks **Drop out** 6 (23%) **Completers** Fluoxetine: 21 (78%) CBT: 22 (79%) CBT+F: 20 (77%) 6 months Fluoxetine: 16 (59%) CBT: 21 (75%) CBT+F 17 (65%) 12 months Fluoxetine: 17 63(%) CBT: 22 (79%) CBT+fluoxetine: 19 (73%)	Placebo n=27 **Duration** 16 weeks **Drop out** 5 (19%) **Completers** 23 (85%)	**Binge episodes/months (EDE-Q)** Post: C: 7.2±9.2, F: 10.3±11.1, CBT: 1.8±3.9, CBT+F: 4.7±6.9 6 months EMM±SE F: 11.63±2.37, CBT: 5.73±1.43 CBT+F: 3.94±1.55 12 months EMM±SE F: 10.40±1.92, CBT: 4.63±1.48, CBT+F: 4.64±1.70 **Binge episodes/months (daily self-monitoring)** Post: C: 7.4±10.2, F: 11.0±11.2 CBT: 2.6±5.8, CBT+F: 4.2±6.9 **Remission rate (Per EDE)** Post: C: 26%, F: 26%, CBT: 61%, CBT+F: 50% 6 months: F 1/27, CBT: 7/28, CBT+F 9/26, 12 months: F1/27, CBT: 10/28, CBT+F: 7/26 **EDE-Q Global score** Post: C: 2.1±1.6, F: 3.1±1.6, CBT: 2.1±1, CBT+F: 2.2±1.5 6 months, EMM±SE F:3.52±0.27, CBT+F: 2.5±0.26, CBT: 2.5±0.24 12 months, EMM±SE F: 3.32±0.26, CBT+F: 2.4±0.25, CBT: 2.73±0.24	**Sampling method** Computer generated table, blocks of 8, sealed concealment **Blinding** Double **Handling of missing data** ITT **Funding** National Institutes of Healthy. Eli Lily and Co provided fluoxetine and matching Placebo Pills

				Depression (BDI) Post: C: 11.7±10.3, F: 11.8±9.8, CBT: 6.5±6.8, CBT+F: 9.2±7.3 6 months, EMM±SE F: 14.44±1.67, CBT: 10.19±1.49, CBT+F: 10.73±1.64 12 months EMM±SE F: 12.88±1.63, CBT: 11.43±1.49, CBT+f: 11.17±1.57 **BMI** Post: C: 35.7±7.5, F: 38.1±9.6, CBT: 34.2±5.8, CBT+F:34.9±7.9 6 mon EMM±SE F: 36.16±0.58, CBT: 35.93±0.50, CBT+F: 36.86±0.58 12 mon EMM±SE F: 36.15±0.57, CBT: 34.76±0.51, CBT+F: 35.83±0.58	
Guerdjikova et al 2012 USA [23]	**Population** N=40 (63% of screened) Mean age: 40±12 Mean BMI: 40.6±7.4 88% females **Inclusion criteria** Aged 18 and 65 years, met DSMIV-TR criteria for BED, ≥2 binge days/week, met DSM-IV-TR criteria for depressive disorder: ≥25 on IDS-C **Setting** Outpatients, recruited by advertisements, 2 sites:	Duloxetine n=20 30 mg/day for 7 days, increased to 60 mg/day two weeks. In absence of remission of BE or depressive symptoms, side effects: dose could increase to 90 mg/day forth week and 120 mg/day at beginning of sixth week. Dosing either 1or 2/day **Duration** 12 weeks	Placebo n=20 Dose same as intervention group **Duration** 12 weeks **Drop out** 6 (30%) **Compliance** 14/20	**Remission** I: 10 (56%), C: 6 (30%) **Binge day frequency/week** I: 1.0±1.7 (N=18), C: 1.3±1.2 (N=20), p0.15 **Binge episode frequency per week** I: 1.1±2.0, C: 1.3±1.2, p0.27 **BMI** I:37.7±7.5, C: 42.9±7.7, p0.08 **Depression** I: 19.1±11.5, C: 21.6±12.7	**Sampling method** 1:1 ratio, permuted blocks, computer generated **Blinding** Double blind **Handling of missing data** ITT analysis **Fundins** Eli Lilly

	University of Cincinnati Medical Center and the Lindner Center of HOPE **Study period** NR **Follow-up** Post treatment	**Drop out** 7 (35%) **Compliance** 13/20			
Guerdjikova et al 2009 USA [24]	**Population** N=51 (71% of screened) Mean age: 44 Mean BMI: 40 79.5% females **Inclusion criteria** Met DS-IV criteria for BED, BMI≥30, age 18–65 **Setting** Single center, University Medical center, Outpatients recruited via advertisements **Study period** NR **Follow-up** Post intervention and 1 week after	Lamotrigine, flexible dose n=26 84% females Starting at 25mg/day for 2 weeks, then successively increased to 100mg/bid if tolerated **Duration** 16 weeks (12 weeks dosage titration phase and 4 weeks maintenance phase) **Drop out** NR **Compliance** 56% (14) completed	Placebo n=25 75% females **Duration** **Drop out** NR **Compliance** 71% (17) completed	**Remission** ITT: I: 13 (52%), C: 18 (75%), p0.14 Completers: I: 8 (27%), C: 16 (94%) **Binge days/week** I: 1.58±2.12, C: 0.76±1.71 **Binges/week** I:1.65±2.35, C: 0.76±1.71 **BMI** I: 38.24±5.7, C: 41.50±7.42 **Depression (MADRS)** I: 2.16±3.34, c: 0.56±1.23 **EDE-Q Total score** I: 7.96±4.61, C: 9.91±4.19 **Adverse events** No significant difference between the groups. The most common: Headache: I: 35%, C: 28% Insomnia: I: 35%, C. 20% Somnolence: I: 27%, C:8%	**Sampling method** 1:1 ratio computer generate, permuted blocks **Blinding** Double-blind **Handling of missing data** ITT analysis **Funding** GlaxoSmithKleine
Guerdjikova et al	**Population** N=44 (79% of screened)	Escitalopram n=21 (20)	Placebo n=23	**Binges/week** I: 0.9±1.4 (n20), C: 1.7±1.5	**Sampling method**

2008 USA [25]	Mean age: 39 Mean BMI: 40.2 98% females **Inclusion criteria** Age 18–60, BED according to DSM-IV, BMI≥30 kg/m; **Setting** Single center, outpatients recruited via advertisements **Study period** January 2003–July 2003 **Follow-up** Post intervention	10 mg/day for 7 days, then 20 mg/day for 7 days, and then 30 mg/day, remainder of the study. If side effects dosage reduced to 10mg/day **Duration** 12 weeks **Drop out** 5/20 (25%) **Compliance** 75% (15)	Dose same as for intervention **Duration** 12 weeks **Drop out** 4 (17%) **Compliance** 82.7% (19)	**Binge days/week** I: 0.9±1.4, C: 1.6±1.4 **Remission** I: 50%, C: 26% **BMI** I: 40.4±7, C: 40.5±5 **Depression (HAM-D)** I: 2.4±2.9, C: 4.8±5.1 **Adverse events** No significant difference between the groups. Most common were: Dry mouth: I: 33%, C:27% Diarrhoea: I: 24%, C:22% Fatigue: I: 14%, C: 22% Headache: I: 14%, C:17%	1:1 ratio, permuted blocks, computer generated **Blinding** Double blind **Handling of missing data** ITT analysis **Funding** Forrest Laboratories

Hilbert and Tuschen-Caffier 2004 Germany [26]	**Population** N=28 (36% of eligible, 21% of screened) Full-BED: 71.4% Mean age: 40 Mean BMI: 35.2 **Inclusion criteria** DSM-IV criteria for BED except for frequency criterion (freq 1 day/wk over last 6 months allowed), female **Setting** Outpatient recruited via advertisements in newspaper: Psychotherapeutic unit **Study period** NR **Follow-up** 4 months	CBT-E (CBT with body exposure component) n=14 Mean age: 42.1±12.1 Duration of BED: 13.5±10.7 years 2 hrs sessions, 4–5 members/group. Therapy based on CBT for BN with emphasis on body image disturbance. Sessions conducted by clinical psychologist. Nutritionist and physical therapist also provided services. **Duration** 19 weekly session within 5 month and self-management phase of 3 sessions. **Drop out** 2 (14.3%)	CBT-C (CBT with cognitive restructuring component focused on body image) n=14 Mean age: 38.6±8.5 Duration of BED: 17.7±13.2 years 2 hrs sessions, 4–5 members/groups **Duration** 19 weekly session within 5 month and self-management phase of 3 sessions **Drop out** 2 (14.3%)	**Binges per week past Month** Post: I: 0:6±0:7, C: 1:0±1:9 4 months: I: 1:2±2:0, C: 0:5±1:0 **Binge episodes/28 days, n (%)** Post: I: 0, C: 0 4 months: I: 0, C: 2 (16.6%) **BED diagnosis, n (%)** Post: I: 2 (16.7%), C: 3 (25%) 4 months: I: 3 (25%), C: 1 (8.3%) **Remission (abstinent for last 28 days):** Post: I: 4 (33.3%), C: 9 (75%) 4 months: I: 6 (50%), C: 8 (66.7%) **BMI** Post: I: 33.1±10.4, C: 37.2±10.3 4 months: I: 33.6±11, C: 36.4±11 **Depression (BDI)** Post: I: 12.8±8.8, C: 12.7±9.0 4 months I:13.9±8.7, C: 12.3±6.9	**Sampling method** NR **Blinding** unclear if assessor was blinded **Handling of missing data** No ITT analysis **Funding** Deutshce Forschungsgemeinschaft DFG
Hudson et al 1998 USA [27]	**Population** N=85 (74% of eligible) Mean age: 42 Mean BMI: 35 90.5% females **Inclusion criteria** Age 18–60, criteria for BED DSM-IV, ≥3 BES/wk for ≥6 months. Number of calories consumed ≥1500 kcal, wt >85% of the midpoint of IDW for Height	Fluvoxamine, 50 mg every evening for 3 days. After day 4, dose could be adjusted, individual basis (50–300 mg) n=42 Mean age:41.2 ±9.9 years 93% Females Hx of major depression: 48% **Duration**	Placebo n=43 Mean age:43 ±9.5 years 88% Females Hx of major depression: 28% **Duration** 9 weeks	**Remission rate (ITT)** I: 15 (38%), C: 11 (26) **Frequency of binges** (difference between groups, ±SE) –0.181±0.066, P 0.006 **Depression** (Hamilton) (difference between groups, ±SE) –0.401±0.359, p 0.27 **BMI** (difference between groups, ±SE)	**Sampling method** Randomization schedule **Blinding** Double **Handling of missing data** ITT analysis **Funding**

	Setting Outpatient, 3 centers, recruitment unclear **Study period** February–September 1993 **Follow-up** Post intervention **Run in period** One week lead-in period	9 weeks **Drop out** 6	**Drop out** 13	–0.167±0.083, P 0.04 **Adverse events** Insomnia: I: 44%, C: 14%, p<0.05 Nausea: I: 34%, C: 12%, p<0.01 Abnormal dreams: I: 20%, 5% p<0.01 Headache: I: 42%, C: 28% Asthenia: I: 32%, C:19%	The Upjohn Co. and Solvay Pharmaceuticals
Kelly et al 2014 Canada [28]	**Population** N=41 (69% of eligible) Mean age 45±15 83% females **Inclusion criteria** Meeting DSM-5 criteria for BED, age ≥18 years, access to internet **Setting** Outpatients via advertisements in hospitals and eating disorder community centres, online advertisements **Study period** NR **Follow-up** Post intervention	Self-compassion focused therapy (CFT)+food planning n=15 Behavioural strategies (BS)+food planning n=13 Both groups received psychoeducation based on Fairburn's' CBT. Thereafter they received different strategies to cope with their problems **Duration** 3 weeks **Drop out** CFT:4 BS: 1	Wait list control group n=13 **Duration** 3 weeks **Drop out** 1	**Weekly binge episodes** (±SE) CFT: 2.57±0.84, BS: 1.9±0.76, C: 4.23±0.78 **Weekly binge days** (±SE) CFT: 1.54±0.51, BS: 1.92±0.48, C: 3.88±0.49 **EDE–Q Global score**(±SE) CFT: 2.08±0.11, BS: 2.45±0.11, C: 2.51±0.12 **BMI** (±SE) CFT: 32.67±1.12, BS: 33.08±1.11, C: 33±1.12 **Depression (CESD) (±SE)** CFT: 16.64±1.8, BS: 19.36±1.75, C: 22.92±1.8	**Sampling method** Unclear **Blinding** Unclear **Handling of missing data** ITT analysis

Kristeller et al 2013 USA [29]	**Population** N=150 (93% of eligible, 70% of screened) Mean age: 46.6 88% females Full BED: 66% **Inclusion criteria** Full or subthreshold BED, DSM-IV criteria for BED **Setting** Two sites, outpatients recruited via advertisements **Study period** NR **Follow-up** 1 and 4 months after the weekly session ended	Mindfulness-based eating awareness training (MB-EAT) n=53 Psycho-educational/cognitive behaviour (PECB), n=50 Both groups hade 12 session of group treatment: 9 weekly and 3 monthly. Sessions were 1.5 hrs, except sessions 1 and 6 which were 2 hrs **Duration** 9 weeks treatment and then 3 boosters (1 per month) **Drop out** MB-EAT: 14 (26%) PECB: 23 (46%) **Compliance** MB-EAT PECB	Waiting list n=47 **Duration** **Drop out** 21 (44%)	**BED diagnosis, ITT** 4 months: MB-EAT: 10/31 (32%), PECB: 419/35 (54%)**,** C: 11/21 (520/31 (64%) **Abstainers, (not ITT)** 1 month: MB-EAT:9/36 (25%), PECB:10/32 (31%), C: 0 4 months: MB-EAT: 11/35 (39%), PECB: 10/24 (39%)**,** C: 5/25 (20%) **Binge days/months, not ITT** 1 months: MB-EAT:4.78±5.78, PECB: 5.23±7.95 C:12.83±8.42 4 months: MB-EAT:3.78±5.15, PECB: 5.46±7.67 C:11.38±9.26 **BMI, not ITT** 1 months: MB-EAT:39.54±8.53, PECB: 38.95±8.79, C:38.07±6.29 4 months: MB-EAT:40.05±9.21, PECB:38.93±8.99 C:38.42±6.52 **Depression (BDI) not ITT** 1 months: MB-EAT:8.5±9.47, PECB: 9.48±10.22 C:17.21±11 4 months: MB-EAT:9.31±11.04, PECB:10±10.37 C:14.12±10.79	**Sampling method** Random number **Blinding** Unclear **Handling of missing data** Mix
Laederach-Hoffman et al 1999	**Population** N=31 (31% of eligible) Mean age: 38	Imipramine (25 mg 3 times/day) for 8 weeks	Placebo for 8 weeks thereafter	**Binge eating frequency** Post: I: 2.8±3, C: 5.4±5.1 6 months: I: 4.1±2.1, C: 7.2±4.3	**Sampling method** NR

Switzerland [30]	Mean BMI:39.65 87% females **Inclusion criteria** Age 20–60, DSM-IV criteria for BED, obese defined as BMI >27.5 **Setting** Medical charts of 500 patients were screened, 100 charts were considered suitable, Counselling centre for weight problems **Study period** NR **Follow-up** Post treatment and 6 months FU	Thereafter: *Diet counselling* 30 min individual diet counselling by dietitian biweekly. *Psych Support* –behavioural oriented: 1) individual 15–35 min sessions biweekly 2) group-therapy, 1.5 hours (N=10–14) monthly guided by an assistant dietitian n=15 Mean Age: 40.7±10.9 years **Duration** 8 weeks imipramine 6 months diet and psych support **Drop out** 2 (13%)	*diet counselling and psych Support* – n=16 Mean age: 35.7±10.3 **Duration** 8 weeks placebo 6 months diet and psych support **Drop out** 1 (6%)	**Weight change (kg)** Post I: –2.2±1.8, C: 0.2±3.3 6 months:–1.9±6.3, C: 3±2.2 **Depression (HAMD)** Post I: 9.8±7, C: 16±10.3, p<0.001 6 months: I: 12.6±5.8, C: 19.2±8.7 **Adverse events**: 2 patients	**Blinding** Double **Handling of missing data** No ITT analysis **Funding** NR
Leombruni et al 2008 Italy [31]	**Population** N=42 (24% of screened) Mean age: 39.6±8.5 (range 21–57) Mean BMI: 39.3±3.5 Duration of BED: 144 months **Inclusion criteria** Female, age 18–65 years, BMI ≥30, BED according to DSM-IV-TR, absence of medically unstable conditions, full-syndrome Axis I disorders	Sertraline n=22 25 mg/day for 3 days, then increased in 25-mg increments 3 days to a maximum of 200 mg/day, as tolerated (range 100–200; All received nutritional training+2 sessions of dietary counselling **Duration**	Fluoxetine n=20 10 mg for 3 days, then increased with 10-mg increments every 3 days to a maximum of 80 mg/day (range 40–80 mg). All received nutritional training+2 sessions of dietary counselling	**Abstinent** S: 12 (60%), F: 9 (52.9%) **Binge/week** S:1.1±3.3 (n16), F:0.9±1.1 (n15) **Binge Eating Score ES** S: 15.9±8.2, F: 19.2±11.5 **BMI** S: 36.6±4.3, F: 38.5±5 **Depression (BDI)** S:9.9±5.9, F:8.4±6.2	**Sampling method** Unclear **Blinding** Double blind **Handling of missing data** No ITT **Funding** NR

	Setting Outpatients, recruited from 176 overweight patients from Eating Disorders Pilot Centre, Psychiatric Clinic, University of Turin **Study period** January 2003–January 2005 **Follow-up** post treatment (24 weeks)	24 weeks **Drop out** 6 (27%) **Compliance** 16 (72.7%)	**Duration** 24 weeks **Drop out** 5 (25%) **Compliance** 15 (75%)	**Side effects (n)** S: 3 (15), F: 2 (11.8%)	
Masheb et al 2011 USA [32]	**Population** N=50 Mean age: 45.8±7.6 (range 29–60) Mean BMI: 39.1±6.6 76% females **Inclusion criteria** Aged 21–60, met DSM-IV-TR criteria for BED, BMI≥30 **Setting** Outpatients recruited via advertisements **Study period** NR **Follow-up** Post treatment (6 months) and 12 months (6 months after end of treatment)	CBT plus low-Energy-Density diet (CBT-ED) n=25 21 hourly individual sessions (40 minutes devoted to CBT and 20 minutes devoted to energy density): weekly for 1–16 sessions, biweekly thereafter **Duration** 6 months **Compliance** 20/25	CBT plus General Nutrition counselling (CBT-GN) n=25 21 hourly individual sessions (40 minutes devoted to CBT and 20 minutes devoted to general information about nutrition): weekly for 1–16 sessions, biweekly thereafter **Duration** 6 months **Compliance** 23/25	**Remission** (0 binges for 28 days prior end of treatment) *self monitoring* CBT-ED: 15/25, CBT-GN: 18/25 *EDE interview* CBT-ED: 13/25, CBT-GN: 11/25 **Binge eating/Months (EDE),** 12 months±SE CBT-ED: 0.7±0.3, CBT-GN: 0±0.2 **EDE-Q total score,** ±SE CBT-ED: 1.9±0.2, CBT-GN: 2.1±0.2 **Mean change in BMI (ITT)** 6 months: CBT-ED: 1.34±2.65, CBT-GN: 0.53±1.59 12 months: CBT-ED: 1.24±2.65, CBT-GN: 0.5±3 **Depression (BDI)** ±SE CBT-ED: 1.9±0.2, CBT-GN: 1.8±0.2	**Sampling method** Computer-generated randomization schedule concealed allocation **Blinding** Unclear if assessor was blinded **Handling of missing data** ITT analysis

Masson et al 2013 USA [33]	**Population** N=60 mean age: 42.8 88.3% females **Inclusion criteria** Meet BED criteria or BED criteria with binge eating occurring ≥1week for six months, ≥18 years of age, High school graduate or equivalent, BMI>17.5 **Setting** Outpatients recruited via advertisements **Study period** February 2011–March 2012 **Follow-up** Post treatment and 6 months (no control group)	Guided self-help based on dialectical behaviour therapy (DBTgsh) n=30 DBTgsh: received an orientation, DBT manual, and six 20-min support calls over 13 weeks **Duration** 13 weeks **Drop out** 3/30 **Compliance** 21/30	Waiting list n=30 **Duration** 13 weeks **Drop out** 3/30 **Compliance** 27/30	**Objective binge frequencies, last 28 days** Post: I: 5.97 (9.42), C: 14.37 (11.86) **Abstinence, last 28 days** Post: I: 40%, C: 3.3% **EDE-Q Total score, LS** Post: I: 137.30±23.51, C: 117.17±17.70	**Sampling method** Urn randomization program, stratified based on age and gender **Blinding** Assessor was blinded **Handling of missing data** ITT analysis
McElroy 2015 USA, Sweden, Spain, Germany [34]	**Population** N=773 (58% of screened), (study 1: 383, study 2: 390) Mean age: 38 Mean BMI: 33.5 86% females **Inclusion criteria** Age 18–55, moderate to severe BED according to DSM-IV-TR, CGI≥4, BMI ≥18 ─ ≤45 **Setting**	Lisdexamfetammine dimesylate (LDX) Dose optimization for 4 weeks (start dose 30 mg), dose maintenance for 8 weeks (70 mg, could be titrated down to 50 mg if 70 mg was not tolerated) N Study 1:192 Study 2:195	Placebo N Study 1:191 Study 2:195 **Duration** 12 weeks **Drop out** Study 1: 29/191 (15%) Study 2: 42/192 (21%)	**Binge days/week, change from BL, (**LS mean±SEM) Study 1: I: –3.87±0.124, C:–2.51±0.124, p <0.001 Study 2: I: –3.92±0.135, C: –2.26±0.137, p0.001 **Remisson/cessation** Study 1: I: 76/190 (40%), C: 26/184 (14.1%) Study 2: I: 63/174 (36.2%), C: 23/176 (13.1%)	**Sampling method** 1:1 randomization **Blinding** Double blinded **Handling of missing data** ITT analysis

	2 multicentrer, outpatients, via investigator´s databases and local advertisements **Study period** November 2012–25 September 2013 **Follow-up** Post treatment **Run in period** 2–4 weeks	**Duration** 12 weeks **Drop out** Study 1: 20/192(10%) Study 2: 32/195 (16%) **Compliance** Study 1: 82% Study 2: 75%	**Compliance** Study 1: 82% Study 2: 75%	**Weight, % change from baseline,** (LS mean±SEM) Study 1: I:–6.25±0.292, C. 0.11±0.295 Study 2: I: –5.57±0.35, C: –1.15±0.353 **Adverse events** **serious** Study 1: I: 3/192, C: 2/187 Study 2: I: 1/181, C: 2/185	
McElroy 2015 USA [35]	**Population** N=60 (43% of screened) Mean age: 41.3±12 Mean BMI: 40.1±8 Obesity: 92% 85% females Mean weekly BE: 4.4±1.2 **Inclusion criteria** Age 18–65 years, met DSM-IV-TR criteria for BED, 3 BED/week for the last 2 weeks, BMI≥25 **Setting** Recruited via radio and advertisements **Study period** NR **Follow-up** post treatment	Armodafinil flexible dose Start dose 150mg/day, after 4 weeks if not stooped BE increased to 250 mg/day n=30 **Duration** 10 weeks+1 weeks discontinuation **Drop out** 8/30 (27%) **Compliance** 53% (16/30)	Placebo n=30 **Duration** 10 weeks **Drop out** 3/30/10%) **Compliance** 50%	**Binge days/week, change from BL,** I: –3.1±2.1, C: –2.4±1.6 **Depression, IDS, change from BL** I: –5.5±6.9, C: –5.5±7.9 **BMI, change from BL** I: –0.6±0.8, C: 0.1±1.2 **Adverse events** Headache: I: 15/30, C: 10/30 Insomnia: I: 13/30, C: 9/30 Nausea: 7/30, C: 4/30 Felling jittery: I: 9/30, C: 0 Dry mouth: 7/30, C:1/30 Anxiety: 3/30, C: 2/30 Fatigue: I: 1/30, C: 4/30 Diarrhea: I: 2/30, C: 3/30 Attentions disturbance: I: 2/30, C: 2/30 Flashes: I: 3/30, C: 1/30 Vivid dreams: I: 2/30, C: 1/30 Dizziness: I: 1/30, C: 2/30 Somnolence: I: 2/30, C:1/30	**Sampling method** 1:1 computer generated coding, permuted blocks, concealed allocation **Blinding** Double blinded **Handling of missing data** ITT analysis

	Run in period 2 weeks				
McElroy et al 2015 USA [36]	**Population** N=260 (42% of screened, 83% of eligible) Mean age 38.7±10.2 Mean BMI.34.9±5.3 81.5% females **Inclusion criteria** Age 18–55 years, met DSM-IV TR criteria for BED, BMI≥25–45 **Setting** 31 sites, outpatients, recruitment unclear **Study period** May 2011–January 2012 **Follow-up** post intervention	Lisdexamfetamine 30, 50 or 70 mg/day Dosage titrated across 3 weeks and maintained for 8 weeks 30 mg/day: n=66 50 mg/day, n=65 70 mg/day, n=65 **Duration** Study duration:14 weeks Treatment: 11 weeks **Drop out** 30 mg/day: N=15 (23%) 50 mg/day, N=13 (20%) 70 mg/day, N=13 (20%)	Placebo n=63 **Duration** 14 weeks **Drop out** 17 (27%)	**BE days/week** Placebo:1.1±1.45 30 mg/day: 1±1.69 50 mg/day: 0.4±0.86 70 mg/day: 0.5±1.25 **Change** Placebo: –3.3±2.04 30 mg/day: –3.5±1.95 50 mg/day: –4.1±1.52 70 mg/day: 4.1±1.57 **BE episodes** Placebo: 1.1±1.55 30 mg/day: 1.2±2.13 50 mg/day0.5±1.01 70 mg/day0.5±1.34 **Remission** Placebo: 21.3% 30 mg/day: 34.9% 50 mg/day: 42.4% 70 mg/day: 50% **Depression (MADRS)** (change±SE) Placebo: –1.7±0.35 30 mg/day: –1.9±0.34 50 mg/day: –1.3±0.33 70 mg/day: –1.6±0.33 **Weight, kg mean change** Placebo: –0.1±3.09 30 mg/day: –3.1±3.64 50 mg/day: –4.9±4.43	**Sampling method** 1:1:1, web response system **Blinding** Double blind **Handling of missing data** ITT analysis

				70 mg/day: –4.9±3.93 **Adverse events** Any: Placebo: 58%, 30 mg/day: 86.4% 50mg/day:86.2%, 70mg/day:81.5% Dry mouth: Placebo: 7.9%, 30 mg/day: 33.3%,50mg/day:33.8%, 70mg/day: 41.5% Decreased appetite: Placebo: 6.3%, 30 mg/day: 25.8%, 50mg/day:20%, 70mg/day:18.5% Insomnia: Placebo: 1.6%, 30 mg/day: 10.6%, 50mg/day: 15.4%, 70mg/day: 13.8%	
McElroy et al 2007 USA [37]	**Population** N=394 Mean age: 44.5 Mean BMI: 38.5 84.2% females **Inclusion criteria** Age 18–65 years, met DSM-IV criteria for BED, ≥3 BE days/week, BMI 30–50 **Setting** Single center, outpatients from private practice and university, recruited via advertisements and radio **Study period** October 2003–February 2005 **Follow-up** Post intervention	Topiramate n=195 Flexible dose; 25 mg/day, titrated weekly over an 8-week period to 400 mg/day or the max tolerated dose. **Duration** 16 weeks **Drop out** 55 (27%) **Completers** 140	Placebo n=199 **Duration** 16 weeks **Drop out** 59 (29%) **Completers** 140	**Remission** I: 113 (58%), C: 57 (29%) **Binge eating days/week.** Mean change: I: –3.5±1.9, C: –2.5±2.1, p<0.001 I: 0.9, C: 2.2 **Depression (MADRS)** Mean change: I: –0±7, C: –0.7±6.2 **BMI,** –0.712 p<0.01 **Adverse events (**p<0.001**)** Parasthesia: I: 55.9%, C: 12.4% Taste perversion: I: 13.9%, C: 1, Concentration problems: I: 12.9%, C: 2.5%	**Sampling method** 1:1 ratio, permuted block, computer generated **Blinding** Double blind **Handling of missing data** ITT analysis **Funding** Ortho-McNeil Neurolocs, AstraZeneca

McElroy, Hudson et Al 2003 USA [38]	**Population** N=38 (76% of screened) Lifetime major depressive disorder: 86.5% Current major depressive disorder: 31% 95% Females **Inclusion criteria** Aged 18–60, DSM-IV criteria for BED, ≥3 binge episodes weekly for ≥6 months: weght >85% of IBW **Setting** Outpatients recruited via advertisement, single center **Study period** August 2000–July 2001 **Follow-up** Post treatment **Run in period** 1 week of single-blind placebo	Citalopram 20 mg/day for first 7 days: increased as tolerated to 40 mg/day for 7 days, and then 60 mg/day for remainder of study. n=19 Mean age: 42.0±9.0 **Duration** 6 weeks **Drop out** 3 (16%) **Completers** 16/19	Placebo n=19 Mean age:39.2±12.0 95% females **Duration** 6 weeks **Drop out** 4 (22%) **Completers** 15/19	**Binges/week** I: 1.7±3.1, C: 3.4±3.0 **Binge days/week** I: 1.2±2.0, C**:** 2.8±2.2 Remission I: 9/19 (47%), C: 2/19 (21%) **Depression (HAM-D)** I: 1.4±2.3, C: 1.9±3.1 **BMI** I: 40.9±7.0, C: 35.7±7.5 **Adverse events:** Sweating (P=0.008), fatigue (P=0.046), dry mouth, headache, diarrhea, nausea, sedation, insomnia, sexual	**Sampling method** Unclear **Blinding** Double **Handling of missing data** ITT analysis **Funding** In part by Forest Laboratories
McElroy et al 2000 USA [39]	**Population** N=34 Mean age: 42 Mean BMI: 36.1 94.5% females **Inclusion criteria** Aged 18–60 years, DSM-IV criteria for BED, ≥3 BE/week for ≥6 months, BE defined by DSM-	Sertraline 50mg/day for ≥3 days: adjusted as tolerated to between 1 to 4 capsules daily. Mean end of study dose 187±30 mg n=18 89% females	Placebo n=16 100% females **Duration** 6 weeks **Drop out** 3 (19%)	**Binge/week** Post: I: 1.13±1.56, C:3.85±3.81, P=.008 **Frequency of binges** Remission/cessation of binges: I: 7, C: 2 **BMI** Diff between groups in change	**Sampling method** Unclear **Blinding** Double **Handling of missing data** ITT analysis

	IV criteria plus required size at least 1500 kcal weight >85% of IBW **Setting** Outpatient: single center, recruitment unclear **Study period** NR **Follow-up** Post treatment **Run in period** 1 week of single-blind placebo	**Duration** 6 weeks **Drop out** 5 (28%) **Compliance** 13	**Compliance** 13	over time (SE): –0.596 (0.189), P=0.002 in favour of I **Depression (HAMD)** Diff between groups over time (SE): 1.33 (1.00) **Advert Events:** Participants experiencing insomnia: I: 7 (39%), C: 1 (6%), P=0.04	**Funding** In part by Pfizer, Inc
Munsch et al 2007 [40] Munsch et al 2012 Switzerland [41]	**Population** N=80 (80% of eligible, 21 of screened) Mean age: 46.1 Mean BMI: 34 89% females **Inclusion criteria** Aged 18–70, BMI 27–40, meet full DSM-IV-TR1 criteria for BED **Setting** Outpatients recruited via newspaper advertisements **Study period** NR **Follow-up** 6 and 12 months and 6 years	CBT n=44 For both CBT and BWLT: ≤7 members/group, led by therapists, active treatment phase: 16 weekly 90-min group sessions. Follow-up treatment: 6 monthly 90-min group sessions. The last session took place 12 months after the end of active treatment. **Duration** Active: 16 weeks **Drop out** 16 weeks: 13 (29.3%) FU 12 months: 15 (34%)	Behavioural Weight Loss Treatment (BWL) n=36 **Duration** 16 weeks **Drop out** 16 weeks: 9 (25.0%) FU 12 months: 13 (36%) 6 years: 18 (50%) **Compliance** 16 weeks: 67.1% of all sessions FU 12 months: 55%	**Objective binge days/28 days** Post: CBT: 6.20±8.66, BWL: 7.54±9.38 12 months CBT: 4.8±4 8, BWL: 5.77±9.15 **BED diagnosis, %** Post: CBT:50%, BWL: 78% 12 months CBT:43%, BWL:53% 6 years: CBT: 3.8%(1/26),11.5% (3/2) **Remission** Post: CBT:41%, BWL: 58% 12 months CBT:52%, BWL:50% **No of weekly binges (self-reported)** Post: CBT: O.14±0.45, BWL: 1.15±1.89 12 months CBT: 0.52±1.59, BWL: 1.5±2.14 **BMI**	**Sampling method** Permuted block design **Blinding** Assessors blinded **Handling of missing data** ITT analysis

		6 years: 23 (52%) **Compliance** 16 weeks: 67.3% of all sessions FU 12 month: 45%		Post: CBT: 33.58±4.53, BWL: 32.±29 4 12 months CBT: 33.1±5.04, BWL: 33.18±4.17 6 years: CBT: 31.5±5.2, BWL: 33.5±3.8 **Depression (BDI)** Post: CBT: 9.16±7.8, BWL: 9.19±6.54 12 months CBT: 8.23±11.31, BWL: 7.76±6.48	
Pearlstein et al 2003 USA [42]	**Population** N=20 (80% of screened) Mean age: 41.0 Mean BMI: 41.16 85% females **Inclusion criteria** DSM IV research criteria for BED based on EDE **Setting** Outpatient recruited via advertisements and referral from health professional, single center **Study period** NR **Follow-up** Post treatment **Run in period** 1 week of single-blind placebo	Fluvoxamine, flexible dose, titrated up to 150 mg b.i.d. Average dose 239 mg/day n=9 **Duration** 12 weeks **Drop out** 0 **Compliance** 100%	Placebo Average dose 264 mg/day n=11 **Duration** 12 weeks **Drop out** 0 **Compliance** 100%	**Remission** I: 50%, C: 50% **Binge days/past 28 days** I: 3.11±4.20, C: 7.31±9.31 **Depression (HAM-D)** I: 9.38±9.71, C: 7.38±9.71 **Weight, lbs** I: 242±82, C: 262±99 **Adverse events, N:** In study completers: Sedation: I: 8, C: 3 Nausea: I: 4, C: 1 Dry mouth:I: 4, C: 3 Decreased libido: I: 3, C: 0	**Sampling method** Unclear **Blinding** Double **Handling of missing data** Unclear **Funding** Solvay Pharmaceuticals
Peterson et al 2009 USA	**Population** N=129 Mean age: 48	Therapist-led (TL) n=60	Waiting list n=69	**Abstinence/remission rate** Post: C: 10%, TL:52%	**Sampling method** By independent bio-statistician, adaptive

[43]	Mean BMI: 38.7 90% females Antidepressant medication: 78.8% **Inclusion criteria** DSM-IV full criteria for BED, BMI≥25 **Setting** Recruited from two Midwestern clinical sites using advertisements and referrals from local eating disorder treatment clinics and other health professionals **Study period** NR **Follow-up** Post treatment (6 and 12months only for intervention group)	15 group sessions of 80-minute duration over a 20-week time period, weekly sessions for the first 10 weeks and then bi-weekly group size: 2–11 **Duration** 20 week **Drop out** TL: 7/60 (12%)	**Duration** 20 weeks thereafter started treatment **Drop out** 13/69 (19%)	6 months: TL: 43%, 12 months: TL: 21% **OBE days/28 days** Post: C: 13.5±9.3, TL: 4.4±7.3 6 months: TL: 7.4±9.3, 12 months: TL: 10.6±9.3 **OBE episodes** Post: C: 17.6±14.6, TL: 6.3±12.3 6 months: TL: 10.6±14.8, 12 months: TL: 16.2±19.4 **EDE-Q Global score** Post: TL:2.1±0.9, C: 2.3±0.9 6 months: TL: 2.1±0.9 12 months: TL: 2.4±1 **BMI** Post: C: 38.3±7.4, TL: 40.8±11.7 6 months: TL: 39.8±10.0 12 months: TL: 38.3±8.5 **Depression (IDS-SR 22)** Post: C: 23.3±10.7, TL: 19.8±11.3 6 months: TL: 20.3±11.7 12 months: TL: 20.8±12	randomization strategy, concealed **Blinding** Assessors blinded **Handling of missing data** Unclear **Other comments** Only included the group therapist led and waitlist since the other groups had to high drop out to be included. More younger that did not complete trial
Rica et al 2010 Italy [44]	**Population** N=144 (91% of eligible, 82% of screened) Mean age: 47 88.2% females Sub-BED: 43.8% **Inclusion criteria**	Individual CBT (I-CBT) n=72 22 individual sessions of 50 min each, group size:12 **Duration** 24 weeks	Group CBT (G-CBT) n=72 20 group sessions of 60 min each, group size:12 **Duration** 22 weeks	**Remission rate** Post: I-CBT: 33.3%, G-CBT:16.7% 3 years: I-CBT: 36%, G-CBT: 28% **Diagnostic change from BED to s-BED** I-CBT:18.1%, G-CBT: 33.3%	**Sampling method** Table of random no, permuted blocks **Blinding** The assessors were blinded

	Age 18–60 years, meet DSM-IV criteria for BED or subthreshold BED **Setting** Outpatients, Clinic for Eating Disorders, recruited via referrals by family doctors and other clinicians **Study period** January 2000–June 2003 **Follow-up** Post treatment and 3 years	**Drop out** 4/72 (BED patients)	**Drop out** 6/72	**Binge episodes/months,** median (quartiles) Post: I-CBT: 4.0 (0;7.5),G-CBT: 4.0 (2.0;8.0) 3 years: I-CBT: 4.0 (0;6), G-CBT:4.0 (0;8) **BMI,** mean Post: I-CBT: 36.5 (32.1;42.3) G-CBT: 37.4 (32;40.1) 3 years: I-CBT: 36.0 (3;42.7), G-CBT: 37 (31.9;41.8) **Depression (BDI)** median (quartiles) Post: I-CBT: 17 (12;23), G-CBT: 15, (9;22.7) 3 years: I-CBT: 17 (11.7;1.5), G-CBT:14.0 (7;22) **EDE-Q Total,** median (quartiles) Post: **I**-CBT: 2.1 (0.5;3.3), G-CBT: 2.9 (2.3;3.5) 3 years: I-CBT: 1.3 (0.5;3.1), G-CBT: 2.7 (2.1;3.4) **QoL (SCL-90)** median (quartiles**)** Post: I-CBT: 1.2 (0.7;1.7) G-CBT: 1.1 (0.7;1.3) 3 years: I-CBT: 1.2 (0.6;1.7) G-CBT: 1.1 (0.7;1.3) **BES,** median (quartiles) Post: I-CBT: 16 (3.5;30), G-CBT: 17.0 (12;27.7) 3 years: I-CBT: 17.5 (12.0;31), G-CBT: 17 (11;25)	**Handling of missing data** ITT analysis

Schlup et al 2009 [45] Fischer et al 2014 Switzerland [46]	**Population** N=36 (78% of eligible, 27% of screened) Mean age: 44.3±10.3 Mean BMI: 33.4±7.6 **Inclusion criteria** Age 18–70 years, met DSM-IV-TR full diagnostic criteria for BED **Setting** Recruited via newspaper advertisements and flyers, University of Basel **Study period** December 2004–June 2007 **Follow-up** Post treatment, 4 years FU for intervention group	Short version of CBT+booster sessions (sh-CBT) n=18 8 weekly 90-min sessions **Duration** 8 weeks **Drop out** 1/18 **Compliance** Unclear	Waiting list n=18 **Duration** 8 weeks **Drop out** 0 **Compliance** Unclear	**Abstainer rates, %** Sh-CBT: 39%, C: 0% **Objective binge episodes (difference from BL)** Sh-CBT: –5.47, C: –0.43 **Subjective binge episodes, (difference from BL)** Sh-CBT–0.65, C: –0.17 **No of weekly binges (difference from BL)** Sh-CBT: –1.58, C: 0.35 **BMI (difference from BL)** Sh-CBT: 0.01, C: 0.42 **Depression (BDI) (difference from BL)** Sh-CBT: –1.86, C: 0.96	**Sampling method** Permuted block design **Blinding** Unclear **Handling of missing data** Linear mixed model
Shapiro et al 2007 USA [47]	**Population** N=66 (86% of eligible, 56% of screened) Mean age: 39.6±11.4 Mean BMI: 37.72±9.45 92% females Full BED: 70% **Inclusion criteria** Age 18–60, DSM-IV BED-based, subthreshold BED: ≥two objective binge eating episodes/month, BMI≥27,	CBT n=22 CBT: group treatment for weekly 90-minute sessions, 5–10 participants/group CD-ROM n=22 Interactive programme incorporates vivid illustrations, photography, interactive exercises and video clips **Duration**	Waiting list n=22 **Duration** 10 weeks **Drop out** 2/22 (9%)	**Abstinence, N (%)** Post: CD-ROM: 2 (13.3%), CBT: 1 (7.7%), WL: 0 2 months: CD-ROM: 1 (12.5%), CBT: 2 (22.2%), WL: 0 **BES** Post: CBT: 20.92±4.31, CD-ROM: 23.4±5.83, WL: 23.6±6.14 **Binge days/week** Post: CBT: 2.08±0.67, CD-ROM: 2.58±1.56, WL: 2.5±1.2	**Sampling method** Block design **Blinding** Unclear **Handling of missing data** ITT analysis

	regular access to an IBM-compatible computer **Setting** Outpatients recruited via newspaper advertisements **Study period** NR **Follow-up** Post treatment and 2 months for CBT and CD-ROM	10 weeks **Drop out** 10 weeks: CBT: 9 (41%) CD-ROM: 7 (32%) 2 months: CBT: 13 (59%), CD-ROM: 14 (63%)		**BMI** POST, CBT: 37.03±10.49, CD-ROM: 38.63±9, WL: 34.39±6.35	
ter Huurne et al 2015 Netherlands [48]	**Population** N=85 Mean age: 40.2±11.4 BMI >25: 100% Duration of BED> 11 years: 72% **Inclusion criteria** Females, age ≥18 years, BED according to DSM-IV **Setting** Outpatients, announcements and advertisements **Study period** March 2011–December 2013 **Follow-up** Post treatment	Web based CBT n=43 Structured 2 part program, >21 contacts moments and 10 assignments **Duration** 15 weeks **Drop out** 4 (9%) **Compliance** 70% (30/43)	Waiting list n=42 **Duration** 15 weeks **Drop out** 2 (5%) **Compliance** 100%	**EDE-Q Total** I: 2.6±1.3, C: 3.2±0.9 **BMI** I: 34.7±6.5, C: 34.2±5.4 **QoL, (EQ-5D VAS)** I: 67.9±16, C: 62.7±15.5 **Depression (DASS)** I: 8.7±7.5, C: 12±8.3	**Sampling method** Computer generated block size (2, 4 or 8), stratification 1:1, concealed allocation **Blinding** Unclear **Handling of missing data** ITT **Other comments** We only included data from the BED and not BN and EDNOS population
White et al 2013 USA	**Population** N=61(66% of screened) Mean age: 44±12.5 Mean BMI 35.8±6.8	Bupropion, 300mg/day n=31 **Duration**	Placebo n=30 **Duration**	**Remission (no BE/month)** I: 13 (42%), C: 8 (27%) **EDE restrain**	**Sampling method** Stratification by obesity grade And smoking

[49]	**Inclusion criteria** Women, aged 18–65 years, met DSM-IV TR criteria for BED, BMI≥25 **Setting** Outpatients recruited via advertisements **Study period** November 2006–December 2010 **Follow-up** Post intervention	8 weeks **Drop out** 4 (13%) **Compliance** 87%	8 weeks **Drop out** 3 (10%) **Compliance** 90%	I: 1.4±1, C: 1.6±0.8 **EDE-Q Global score** I: 1.8±0.9, C: 2±0.9 **OBE, monthly** I: 5±9.4, C: 6.3±8 **OBE/week** I: 0.8±1.2, C: 1±1.5 **BMI** I: 35.7±6.6, C: 35.2±7.4 **Depression (BDI)** I:8±8.3, C: 8.7±7.2 **Adverse events** No medical events were reported	**Blinding** Double blind **Handling of missing data** ITT analysis, last data carried forward
Wilfley et al 2002 [50] Hilbert et al 2012 USA [51]	**Population** N=162 (83% of eligible, 17% of screened) Mean age: 45.3 Mean BMI: 37.4±5.2 82.7% females **Inclusion criteria** Age 18–65, DSM-IV criteria for BED: ≥2 days of BE/wk, ≥6 months, marked distress regarding BE, ≥3 of 5 associated behavioural features, no regular use of inappropriate compensatory behaviour, BMI 27–48	Interpersonal psychotherapy (IPT) n=81 *Both groups* 9 participants/group 20 90-minutes weekly group sessions+3 individual sessions. Manual-based and led by two therapists *IPT:* focused on problem resolution within 4 social domains: Grief, interpersonal role disputes, role transitions, interpersonal deficits	CBT n=81 *CBT*: 3 phases focusing on behavioural strategies, cognitive skills and relapse prevention **Duration** 23 weeks **Drop out** Post: 4 (5%) 4 months: 6 (7.4%) 8 mo: 10 (12%)	**Binge days/28 days** Post: CBT: 0.6±1.6, IPT: 0.9±2 4 months: CBT: 2.0±4.6, IPT: 1.5±3.9 8 months: CBT: 2.1 (5.0), IPT: 1.9 (4.5) 12 months: CBT: 1.7±4.3, IPT: 1.2±2.6 **Remission/Abstinence from binge-eating** Post: CBT: 64 (79%), IPT: 59 (72%) 12 months: CBT: 48 (59%), IPT: 50 (62%) 4 years (N=90): CBT: 13/25, IPT: 23/30 **Depression (SCL)** Post: CBT:34.8±7.9, IPT: 33.6±8.6 4 months:CBT:34.2±8.3, IPT: 34.6±10.6	**Sampling method** NR **Blinding** NA for participants Assessors blinded, **Handling of missing data** ITT analysis **Funding** NIMH

	Setting Recruited via advertisements, two sites, outpatient, Eating disorder clinics at Yale U and San Diego State **Study period** NR **Follow-up** 4, 8 and 12 months 4 years (but only on 90 of 162 patients)	**Duration** 23 weeks **Drop out** Post: 1 (1.2%) 4 months: 5 (6%) 8 months: 6 (7.4%) 12 months 10 (12%) 4 years: 12 (27%) **Completers** Post treatment: 80 12 months: 68 (84%)	12 mon: 14 (17%) 4 years: 20 (44%) **Completers** Post treatment: 78 12 months: 68 (84%)	8 months: CBT: 33.3±8.6, IPT: 34.4±10.7 12 months: CBT: 33.1±8.2, IPT: 32.2±10.3 **BMI** Post: CBT: 37.5±5.3, IPT: 37.2±5.2 4 months: CBT: 37.4±5.3, IPT: 36.6±5.3 8 months: CBT 37.5±5.1, IPT:36.4±5.5 12 months: CBT 37.2±5.1, IPT: 36.3±5.4 **Depression (SCL)** Post: CBT: 24.8±7.9, IPT: 33.6±8.6 4 months: CBT: 34.3±8.3, IPT: 34.6±10.6 8 months: CBT: 33.3±8.6, IPT: 34.4±10.7 12 months: CBT: 33.1±8.2, IPT: 32.2±10.3	
Wilson et al 2010 [52] Hilbert et al 2015 USA [53]	**Population** N=205 (9% of screened) Mean age: 48 Mean BMI: 36.4 56% females **Inclusion criteria** Age ≥18 years, met DSM-IV criteria for BED, BMI 27–45 **Setting** Recruited via advertisement and clinical referrals, University outpatient clinics **Study period**	Interpersonal psychotherapy (IPT) n=75 Behavioural weight loss treatment (BWL) n=64 Twenty sessions of IPT or BWL or 10 sessions **Duration** 6 months **Drop out** Post: IPT: 5/75, BWL: 18/64	Guided self-help CBT (gsCBT) n=66 **Duration** 6 months **Drop out** Post: 20/66	**Remission, %** Post: IPT: 65%, gsCBT: 60%, BWL: 56% 1 year: IPT:57%, gsCBT: 62%, BWL: 44% 2 years: IPT:68%, gsCBT: 64%, BWL: 47% **No of binge days/28 days** Post IPT: 3.7±7.2, BWL: 4.3±7.9, gsCBT: 3.8±7.2 1 years: IPT: 4.8±7.6, BWL: 6.5±8.7, gsCBT: 4.3±7.8 2 years: IPT: 4.3,±7.8, BWL: 5.8±8.5, gsCBT: 3.7±7.3	**Sampling method** Computer generated sequence, stratification **Blinding** Blinded assessors **Handling of missing data** ITT analysis

	NR **Follow-up** Post treatment, 1 and 2 years after end of treatment			**BMI** Post: IPT: 35.9±5.3, BWL: 35.4±5.7, gsCBT: 36.1±4.4 1 years: IPT: 35.9±5.4, BWL: 36±6.2, gsCBT: 35.7±5 2 years: IPT: 36.1±5.5, BWL: 36.3±6.2, gsCBT: 35.7±4.9 **EDE-Q Global score** Post: IPT: 1.8±0.9, BWL: 2.1±1.0, gsCBT: 1.7±1.0 1 years: IPT: 1.9±1.0, BWL: 2.2±1, gsCBT: 1.7±0.9 2 years: IPT: 1.7±1.1, BWL: 2±1.2, gsCBT: 1.7±1 Rapid responder (reduction in BE ≥70 by 4th week of treatment) BWL: 47/64, CBT: 49/66, IPT: 49/75	

BA= Behavioural activation; BDI=Becks Depression Inventory; BDI-II=Becks Depression Inventory II; BED=binge eating disorder; BES=binge eating scale; BMI=body mass index; BST= Brief Strategic Therapy; BWL=behavioural weight loss; CBT= Cognitive behavioural therapy; CBT-C= CBT with cognitive restructuring component focused on body image: CBT-E= CBT with body exposure component; CBT-ED= CBT plus low-Energy-Density diet; CBT-WL= CBT+weight loss therapy; CBT-WL-D= CBT+weight loss, therapy+desipramine; CESD=Center for Epidemiological Studies for Depression; CFT= Self-compassion focused therapy; CGI= Clinical Global Impressions; DASS=Depression Anxiety Stress Scales; DSM= The Diagnostic and Statistical Manual of Mental Disorders edition; EDE= Eating Disorder Examination; EDE-Q= Eating Disorder Examination-Questionnaire; EMM=estimated marginal of means; G-CBT=group-CBT; GSH= Guided self-help; gsCBT=guided self-help; HAD=Hospital Anxiety and Depression Scale; HAM-D=Hamilton rating scale for depression; I-CBT= Individual–CBT; IDS-C= The Inventory of Depressive Symptomatology, Clinician; IDW= ideal body weight; IPT= Interpersonal psychotherapy; ITT=intention To Treat; LDX=lisdexamfetamine; MADRS= Montgomery Åsberg Depression Rating Scale; MB-EAT= Mindfulness-Based Eating Awareness Training; NHP= Nottingham Health Profile; PECB= Psycho-educational/cognitive behaviour; LSM=Least squares mean; NR=not reported; OBE=objective binge eating; PSH= Pure self-help; QIDS-SR= Quick Inventory of Depressive Symptomatology-self-report; QoL=Quality of Life; SD=standard deviation; shCBT=self-help- CBT;TTD=Three times daily; WL= weight loss therapy

References:

1. Agras WS, Telch CF, Arnow B, Eldredge K, Wilfley DE, Raeburn SD, et al. Weight loss, cognitive-behavioral, and desipramine treatments in binge eating disorder: An additive design. Beh Therapy 1994;25:225-238.
2. Alfonsson S, Parling T, Ghaderi A. Group behavioral activation for patients with severe obesity and binge eating disorder: a randomized controlled trial. Behav Modif 2015;39:270-94.
3. Brownley KA, Von Holle A, Hamer RM, La Via M, Bulik CM. A double-blind, randomized pilot trial of chromium picolinate for binge eating disorder: results of the Binge Eating and Chromium (BEACh) study. J Psychosom Res 2013;75:36-42.
4. Carrard I, Crépin C, Rouget P, Lam T, Golay A, Linden M. Randomised controlled trial of a guided self-help treatment on the Internet for binge eating disorder. Beh ResTherapy 2011;49:482-91.
5. Carter JC, Fairburn CG. Cognitive-behavioral self-help for binge eating disorder: a controlled effectiveness study. J Consult Clin Psychol 1998;66:616-23.
6. Cassin SE, von Ranson KM, Heng K, Brar J, Wojtowicz AE. Adapted motivational interviewing for women with binge eating disorder: a randomized controlled trial. Psychol Addict Behav 2008;22:417-25.
7. Castelnuovo G, Manzoni GM, Villa V, Cesa GL, Molinari E. Brief Strategic Therapy vs Cognitive Behavioral Therapy for the Inpatient and Telephone-Based Outpatient Treatment of Binge Eating Disorder: The STRATOB Randomized Controlled Clinical Trial. Clin Pract Epidemiol Ment Health 2011;7:29-37.
8. Claudino AM, de Oliveira IR, Appolinario JC, Cordas TA, Duchesne M, Sichieri R, et al. Double-blind, randomized, placebo-controlled trial of topiramate plus cognitive-behavior therapy in binge-eating disorder. J Clin Psychiatry 2007;68:1324-32.
9. Corwin RL, Boan J, Peters KF, Ulbrecht JS. Baclofen reduces binge eating in a double-blind, placebo-controlled, crossover study. Behav Pharmacol 2012;23:616-25.
10. Dingemans AE, Spinhoven P, van Furth EF. Predictors and mediators of treatment outcome in patients with binge eating disorder. Behav Res Ther 2007;45:2551-62.
11. Golay A, Laurent-Jaccard A, Habicht F, Gachoud JP, Chabloz M, Kammer A, et al. Effect of orlistat in obese patients with binge eating disorder. Obes Res 2005;13:1701-8.
12. Grilo CM, Masheb RM, White MA, Gueorguieva R, Barnes RD, Walsh BT, et al. Treatment of binge eating disorder in racially and ethnically diverse obese patients in primary care: randomized placebo-controlled clinical trial of self-help and medication. Behav Res Ther 2014;58:1-9.
13. Grilo CM, White MA, Gueorguieva R, Barnes RD, Masheb RM. Self-help for binge eating disorder in primary care: a randomized controlled trial with ethnically and racially diverse obese patients. Behav Res Ther 2013;51:855-61.
14. Grilo CM, White MA. Orlistat with behavioral weight loss for obesity with versus without binge eating disorder: randomized placebo-controlled trial at a community mental health center serving educationally and economically disadvantaged Latino/as. Behav Res Ther 2013;51:167-75.
15. Grilo CM, Masheb RM, Wilson GT, Gueorguieva R, White MA. Cognitive-behavioral therapy, behavioral weight loss, and sequential treatment for obese patients with binge-eating disorder: a

randomized controlled trial. J Consult Clin Psychol 2011;79:675-85.
16. Grilo CM, Masheb RM. A randomized controlled comparison of guided self-help cognitive behavioral therapy and behavioral weight loss for binge eating disorder. Behav Res Ther 2005;43:1509-25.
17. Masheb RM, Grilo CM. Rapid response predicts treatment outcomes in binge eating disorder: implications for stepped care. J Consult Clin Psychol 2007;75:639-44.
18. Masheb RM, Grilo CM. Prognostic significance of two sub-categorization methods for the treatment of binge eating disorder: negative affect and overvaluation predict, but do not moderate, specific outcomes. Behav Res Ther 2008;46:428-37.
19. Grilo CM, Masheb RM, Salant SL. Cognitive behavioral therapy guided self-help and orlistat for the treatment of binge eating disorder: a randomized, double-blind, placebo-controlled trial. Biol Psychiatry 2005;57:1193-201.
20. Grilo CM, Masheb RM, Wilson GT. Efficacy of cognitive behavioral therapy and fluoxetine for the treatment of binge eating disorder: a randomized double-blind placebo-controlled comparison. Biol Psychiatry 2005;57:301-9.
21. Grilo CM, Masheb RM, Wilson GT. Rapid response to treatment for binge eating disorder. J Consult Clin Psychol 2006;74:602-13.
22. Grilo CM, Crosby RD, Wilson GT, Masheb RM. 12-month follow-up of fluoxetine and cognitive behavioral therapy for binge eating disorder. J Consult Clin Psychol 2012;80:1108-13.
23. Guerdjikova AI, McElroy SL, Winstanley EL, Nelson EB, Mori N, McCoy J, et al. Duloxetine in the treatment of binge eating disorder with depressive disorders: a placebo-controlled trial. Int J Eat Disord 2012;45:281-9.
24. Guerdjikova AI, McElroy SL, Welge JA, Nelson E, Keck PE, Hudson JI. Lamotrigine in the treatment of binge-eating disorder with obesity: a randomized, placebo-controlled monotherapy trial. Int Clin Psychopharmacol 2009;24:150-8.
25. Guerdjikova AI, McElroy SL, Kotwal R, Welge JA, Nelson E, Lake K, et al. High-dose escitalopram in the treatment of binge-eating disorder with obesity: a placebo-controlled monotherapy trial. Hum Psychopharmacol 2008;23:1-11.
26. Hilbert A, Tuschen-Caffier B. Body image interventions in cognitive-behavioural therapy of binge-eating disorder: a component analysis. Behav Res Ther 2004;42:1325-39.
27. Hudson JI, McElroy SL, Raymond NC, Crow S, Keck PE, Jr., Carter WP, et al. Fluvoxamine in the treatment of binge-eating disorder: a multicenter placebo-controlled, double-blind trial. Am J Psychiatry 1998;155:1756-62.
28. Kelly AC, Carter JC. Self-compassion training for binge eating disorder: A pilot randomized controlled trial. Psychol Psychother 2014;0.
29. Kristeller J, Wolever RQ, Sheets V. Mindfulness-Based Eating Awareness Training (MB-EAT) for binge eating: A randomized clinical trial. Mindfulness 2014;5:282-297.
30. Laederach-Hofmann K, Graf C, Horber F, Lippuner K, Lederer S, Michel R, et al. Imipramine and diet counseling with psychological support in the treatment of obese binge eaters: a randomized, placebo-controlled double-blind study. Int J Eat Dis 1999;26:231-44.
31. Leombruni P, Piero A, Lavagnino L, Brustolin A, Campisi S, Fassino S. A randomized, double-blind trial comparing

sertraline and fluoxetine 6-month treatment in obese patients with Binge Eating Disorder. Prog Neuropsychopharmacol Biol Psychiatry 2008;32:1599-605.
32. Masheb RM, Grilo CM, Rolls BJ. A randomized controlled trial for obesity and binge eating disorder: low-energy-density dietary counseling and cognitive-behavioral therapy. Behav Res Ther 2011;49:821-9.
33. Masson PC, von Ranson KM, Wallace LM, Safer DL. A randomized wait-list controlled pilot study of dialectical behaviour therapy guided self-help for binge eating disorder. Behav Res Ther 2013;51:723-8.
34. McElroy SL, Hudson J, Ferreira-Cornwell MC, Radewonuk J, Whitaker T, Gasior M. Lisdexamfetamine Dimesylate for Adults with Moderate to Severe Binge Eating Disorder: Results of Two Pivotal Phase 3 Randomized Controlled Trials. Neuropsychopharmacology 2015;0.
35. McElroy SL, Guerdjikova AI, Mori N, Blom TJ, Williams S, Casuto LS, et al. Armodafinil in binge eating disorder: a randomized, placebo-controlled trial. Int Clin Psychopharmacol 2015;30:209-15.
36. McElroy SL, Hudson JI, Mitchell JE, Wilfley D, Ferreira-Cornwell MC, Gao J, et al. Efficacy and safety of lisdexamfetamine for treatment of adults with moderate to severe binge-eating disorder: a randomized clinical trial. JAMA Psychiatry 2015;72:235-46.
37. McElroy SL, Hudson JI, Capece JA, Beyers K, Fisher AC, Rosenthal NR. Topiramate for the treatment of binge eating disorder associated with obesity: a placebo-controlled study. Biol Psychiatry 2007;61:1039-48.
38. McElroy SL, Hudson JI, Malhotra S, Welge JA, Nelson EB, Keck PE, Jr. Citalopram in the treatment of binge-eating disorder: a placebo-controlled trial. J Clin Psychiatry 2003;64:807-13.
39. McElroy SL, Casuto LS, Nelson EB, Lake KA, Soutullo CA, Keck PE, Jr., et al. Placebo-controlled trial of sertraline in the treatment of binge eating disorder. Am J Psychiatry 2000;157:1004-6.
40. Munsch S, Biedert E, Meyer A, Michael T, Schlup B, Tuch A, et al. A randomized comparison of cognitive behavioral therapy and behavioral weight loss treatment for overweight individuals with binge eating disorder. Int J Eat Disord 2007;40:102-13.
41. Munsch S, Meyer AH, Biedert E. Efficacy and predictors of long-term treatment success for Cognitive-Behavioral Treatment and Behavioral Weight-Loss-Treatment in overweight individuals with binge eating disorder. Behav Res Ther 2012;50:775-85.
42. Pearlstein T, Spurell E, Hohlstein LA, Gurney V, Read J, Fuchs C, et al. A double-blind, placebo-controlled trial of fluvoxamine in binge eating disorder: a high placebo response. Arch Womens Ment Health 2003;6:147-51.
43. Peterson CB, Mitchell JE, Crow SJ, Crosby RD, Wonderlich SA. The efficacy of self-help group treatment and therapist-led group treatment for binge eating disorder. Am J Psychiatry 2009;166:1347-54.
44. Ricca V, Castellini G, Mannucci E, Lo Sauro C, Ravaldi C, Rotella CM, et al. Comparison of individual and group cognitive behavioral therapy for binge eating disorder. A randomized, three-year follow-up study. Appetite 2010;55:656-65.
45. Schlup B, Munsch S, Meyer AH, Margraf J, Wilhelm FH. The efficacy of a short version of a cognitive-behavioral treatment followed by booster sessions for binge eating disorder. Behav Res Ther 2009;47:628-35.

46. Fischer S, Meyer AH, Dremmel D, Schlup B, Munsch S. Short-term cognitive-behavioral therapy for binge eating disorder: long-term efficacy and predictors of long-term treatment success. Behav Res Ther 2014;58:36-42.
47. Shapiro JR, Reba-Harrelson L, Dymek-Valentine M, Woolson SL, Hamer RM, Bulik CM. Feasibility and acceptability of CD-ROM-based cognitive-behavioural treatment for binge-eating disorder. Eur Eat Disord Rev 2007;15:175-84.
48. ter Huurne ED, de Haan HA, Postel MG, van der Palen J, VanDerNagel JE, DeJong CA. Web-Based Cognitive Behavioral Therapy for Female Patients With Eating Disorders: Randomized Controlled Trial. J Med Internet Res 2015;17:e152.
49. White MA, Grilo CM. Bupropion for overweight women with binge-eating disorder: a randomized, double-blind, placebo-controlled trial. J Clin Psychiatry 2013;74:400-6.
50. Wilfley DE, Welch RR, Stein RI, Spurrell EB, Cohen LR, Saelens BE, et al. A randomized comparison of group cognitive-behavioral therapy and group interpersonal psychotherapy for the treatment of overweight individuals with binge-eating disorder. Arch Gen Psychiatry 2002;59:713-21.
51. Hilbert A, Bishop ME, Stein RI, Tanofsky-Kraff M, Swenson AK, Welch RR, et al. Long-term efficacy of psychological treatments for binge eating disorder. Br J Psychiatry 2012;200:232-7.
52. Wilson GT, Wilfley DE, Agras WS, Bryson SW. Psychological treatments of binge eating disorder. Arch Gen Psychiatry 2010;67:94-101.
53. Hilbert A, Hildebrandt T, Agras WS, Wilfley DE, Wilson GT. Rapid response in psychological treatments for binge eating disorder. J Consult Clin Psychol 2015;83:649-54.