# Appendix 16: Included/excluded studies table for the Psychological Topic Group questions

# Studies Included in the Comparions Covered by This Evidence Table

2.01 Behaviour therapy (BT)

BT v BT+ medication

FOA2005 FOA2005 BT vs BT

DEARAUJO1995 EMMELKAMP1983 GREIST2002 KENWRIGHT2004 BT vs CBT (BDD)

KHEMLANIPATEL2001

BT vs cognitive therapy (CT)

COTTRAUX2001 VANOPPEN1995 BT vs cognitive-behavioural therapy (CBT)

MCLEAN2001 VOGEL2004 BT vs control

MEHTA1990

GREIST2002 HISS1994 LINDSAY1997 LOVELL1994 BT vs control (child/adolescent)

MORITZ1998

BT vs CT (BDD)

KHEMLANIPATEL2001

BT vs rational-emotive therapy (RET)

EMMELKAMP1988 EMMELKAMP1991

2.02 Cognitive therapy (CT)	CT v CT+medication	CT vs behaviour therapy (BT)	CT vs BT (BDD)
		COTTRAUX2001 VANOPPEN1995	KHEMLANIPATEL2001
CT vs control			_

2.03 Cognitive-behavioural therapy (CBT)	CBT vs behaviour therapy (BT)	CBT vs BT (BDD)	CBT vs CBT + medication
	MCLEAN2001 VOGEL2004	KHEMLANIPATEL2001	
CBT vs control	CBT vs control (BDD)	Individual CBT vs group CBT vs	
CORDIOLI2003	ROSEN1995	control (child/adolescent)	
FREESTON1997	VEALE1996	BARRETT2004	
		, ,	
	EMMELKAMP1988		
	EMMELKAMP1991		

Kundalini yoga vs relaxation response + mindfulness meditation

SHANNAHOFFKHALS1999

2.08 Other psychological interventions

2.09 Psycho	logical v	/ Psychological
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Behaviour Therapy (BT) v Cognitive Behaviour Therapy (CBT)

MCLEAN2001

Behaviour Therapy (BT) v Cognitive Behaviour Therapy (CBT) (BDD)

KHEMLANIPATEL2001

Behaviour Therapy (BT) v Cognitive Therapy (CT)

COTTRAUX2001 VANOPPEN1995

Behaviour Therapy (BT) v Cognitive Therapy (CT) (BDD)

KHEMLANIPATEL2001

Behaviour Therapy (BT) v Rational Emotive Therapy (RET)

EMMELKAMP1988 EMMELKAMP1991 Individual CBT vs group CBT vs control (child/adolescent)

BARRETT2004

**Data Used** 

Kundalini yoga v relaxation response + mindfulness meditation

SHANNAHOFFKHALS1999

# **Characteristics of Included Studies**

#### Methods

# **BARRETT2004**

Study Type: RCT

Study Description: Allocation: random, blocked by child's age and timing of referral; assessors

blind to treatment group

Duration of study: 14 weeks, 3&6-mo follow-up

Blindness: Single blind Duration (days):

Setting: Not reported

Notes: Country of study: Australia; Analysis: ITT

Info on Screening Process: Not reported

**Participants** 

N= 77

Age: Mean 12

Sex: 38 males 39 females

Diagnosis:

OCD by DSM-IV

Exclusions: Primary major depression or another primary anxiety disorder, primary externalizing disorder, Tourette's syndrome, autistic spectrum disorder, schizophrenia, organic mental disorder, mental retardation, receiving concurrent psychotherapy

Inclusions: those receiving psychopharmacological treatment, were receiving stable doses of the drug, had normal IQ and at least one parent was willing to attend weekly sessions

Notes: Baseline Y-BOCS (child version) 22.66; common compulsions: cleaning/washing rituals, checking for reassurance, common obsessions: fears of contamination/illness or disease, fears of harm to self and others

Multidimensional Anxiety Scale in Children-

Outcomes

Sibling accomodation

Child Depression Inventory - sibling

Child Depression Inventory - patient

Father Stress

Father Depression

Father Anxiety

Multidimensional Anxiety Scale for Children

Mother Stress

Mother Depression

Mother Anxiety

McMaster Family Assessment Device - Mothe McMaster Family Assessment Device - Father Children's Yale-Brown Obsessive-Compulsive

Scale

NIMH Global OCD Scale

Interventions

**Notes** 

Group 1 N= 24

Wait list control

Group 2 N= 24

Cognitive Behavioural Therapy - Individual CBT: 14 sessions +2 booster sessions at 183 months post-treatment, duration 1.5 hours, parent skills training, family review of progress, 3 components: 1.psychoeducation, anxiety management, cognitive therapy, 2.ERP, 3.maintenance of gains

Group 3 N= 29

Cognitive behavioural therapy - group - In 8 groups ranging from 3 to 6 participants per group (see Individual CBT for intervention details)

#### CORDIOLI2003

Study Type: RCT

Study Description: Allocation: random (computer-generated random numbers list by an independent researcher); raters were blind to treatment

Duration of study: 12 weeks Blindness: Single blind

Duration (days):
Setting: Not reported

Notes: Country of study: Brazil; Analysis: ITT; Participants recruited through media advertisement

Info on Screening Process: 65 screened, 18 excluded: depression with suicide risk (2), OCD secondary to brain injury (1), severe social phobia (2), mental retardation (1), severe anorexia nervosa (1), severe personality disorders (2), Y-BOCS<16 (3), refused treatment (6)

N = 47

Age: Mean 36

Sex: 23 males 24 females

Diagnosis:

OCD by DSM-IV

Exclusions: Aged <18 and >65 years, Y-BOCS <16, taking anti-obesessional medication <3 months before study

Notes: mean duration of OCD 21.1 years; mean baseline Y-BOCS 27

Sessions conducted by therapist with 10 years experience in CBT

Data Used

WHO-QoL Abbreviated Social

WHO Col. Abbreviated Physical

WHO-QoL Abbreviated Physical

Overvalued Ideas Scale

Responders (35% Y-BOCS)

Leaving study early

Hamilton Rating Scale for Depression

Hamilton Rating Scale for Anxiety

NIMH Obsessive Compulsive Rating

Yale-Brown Obsessive-Compulsive Scale: tota

#### Group 1 N= 23

Cognitive behavioural therapy - group - 7-8 participants per group, 12 weekly 2-hour sessions, treatment consisted of practical exercises of exposure-response prevention and cognitive restructuring, homework exercises and focus on strategies for relapse prevention

#### Group 2 N= 24

Wait list control

# COTTRAUX2001

Study Type: RCT

Study Description: Allocation: random (no details), assessor blind to treatment allocation Duration of study: 16 weeks treatment + 26 and 52-week follow-up

Blindness: Single blind
Duration (days):

Setting: Outpatient

Notes: Country of study: France; Analysis: ITT Therapists were psychologists or psychiatrists with a CBT diploma, received additional training of 20h

Info on Screening Process: 85 screened, 20 met exclusion criteria

N = 65

Age: Mean 36

Sex: 16 males 46 females

Diagnosis:

OCD by DSM-IV

Exclusions: Aged <18 and >65 years, taking psychotropic medication, apart from hypnotic drugs, NIMH-OC<7, Y-BOCS<16; psychosis, Tourette syndrome, addiction, pregnancy, major depression and/or Hamilton Depression score >20. or suicidal ideation

Notes: Mean OCD duration 13.45 years; number with Axis 1

comorbidity 23

#### **Data Used**

Responders (25% Y-BOCS)

Quality of Life

Beck Depression Inventory

Salkovskis Responsibility Scale

ITIQ - Responsibility

ITIQ - Interpretation/intrusion

ITIQ - Instrusive thoughts

ITIQ - Inferiority

ITIQ - Guilt

Behavioural Avoidance Test - Discomfort

Behavioural Avoidance Test - Avoidance

Yale-Brown Obsessive-Compulsive Scale: tota

Leaving study early

# Group 1 N= 32

Cognitive therapy - Based on Beckian model, 20 1-h sessions over 16 weeks; consisted of elicitation of intrusive and automatic throughts, dysfunctional danger, responsibility schemas, Socratic discussion, modification of unrealistic interpretations and magical thinking

#### Group 2 N= 33

Individual BT - 20 hours over 16 weeks - first 4 weeks 2 2-hour session per week, maintenance phase of 12 weeks with 40min booster sessions every 2 weeks, therapist-aided Ex/RP in imagination and/or in vivo, Ex/RP through homework and family intervention

#### **DEARAUJO1995**

Study Type: RCT

Study Description: Allocation: random (no details); ratings by independent blind assessor Study duration: 9 weeks treatment + 20- & 32-

week follow-ups

Blindness: Single blind Duration (days):

Setting: Outpatient

Notes: Country of study: UK; Analysis: completer

Therapists (2 of the authors and nurse therapists) were experienced in procedures

and followed a protocol

Info on Screening Process: Not reported

N= 56

Age: Mean 33

Sex: 23 males 23 females

Diagnosis:

OCD by DSM-III-R

Exclusions: OCD duration <1 year, current depression (BDI>=15), suicidal intent, psychosis, organic disease, failure to stop previous medication for at least 15 days

before treatment

Notes: Mean OCD duration 12 years

Data Used

Target rituals (assessor rated): time Compulsive activity checlist

Fixit

Social Adjustment Scale (self-rated)

Anxiety during exposure

Target rituals (self rated): discomfort

Target rituals (self rated): time

Yale-Brown Obsessive-Compulsive Scale:

obsessions

Clinical Global Impressions

Target rituals (assessor rated): discomfort Relapse

Group 2 N= 28

Group 1

N= 28

min imagined exposure)

ERP - imaginal and live exposure - 90-

min sessions, treatment consisted of

devising & performing self-exposure

listening to their own voice describing

imagined situations that evoked fear,

daily homework sessions (60min live + 30

tasks and not engaging in rituals.

ERP - live exposure only - Weekly 90-min sessions, treatment consisted of devising & performing self-exposure tasks and not engaging in rituals, remaining in the anxiety-evoking situations until anxiety had dropped, daily homework sessions (60min live) based on therapy sessions

Outcome details
Fixity: 3 0-8-point
subscales: belief in
consequences of not
ritualizing, insight, conviction
Bizarreness: 0-8 point
measure of how bizarre
belief is
Relapse: loss of 50%
improvement on several

2 N= 28 Improv

# EMMELKAMP1983

Study Type: RCT

Study Description: Allocation: random (no

details

Duration of study: 5 weeks treatment + 1-month

& 6-month follow-up

Blindness: No mention

Duration (days):

Setting: Outpatient

Notes: Country of study: the Netherlands,

Analysis: completer

Therapists were 8 advanced clinical psychology students who had received training in BT

Info on Screening Process: 15 met criteria, 1 did not accept treatment rationale and refused treatment, 2 were unable to carry on homework assignments and dropped out

N= 12

Age: Mean 33 Range 21-52 Sex: 2 males 10 females

Diagnosis:

OCD by Not reported

Exclusions: OCD not main problem and not severe enough to warrant intensive treatment, not married or not living together with partner, not willing to attend sessions as couple, previous behavioural treatment

Notes: Mean OCD duration 7 years (range 1.5-26 years)

Data Used

Maudsley Marital Questionnaire
Anxious mood and depression
Self-Rating Depression Scale
Maudsley Obsessive-Compulsive Inventory
Anxiety Discomfort Scale

Group 1 N=6

Self-controlled exposure in vivo - 10 45min sessions, hierarchy of fears constructed, at each session patient was given several tasks to perform at home starting with easiest, patient decided speed of working through tasks, included self-controlled response prevention

Group 2 N= 6

Partner-assisted exposure - 10 twice weekly treatment sessions at which partner accompanied patient, at home partner encouraged patient and helped him confront distressing stimuli until the patient got used to them, partner had to withold reassurance, included response prevention

# **EMMELKAMP1988**

Study Type: RCT

Study Description: Allocation: random (no

details)

Duration of study: 8 weeks + 1-month + 6-

month follow-ups

Blindness: No mention

Duration (days):

Setting: Not reported

Notes: Country of study: the Netherlands;

Analysis: completer

Therapists were 9 advanced clinical psychology students who had received training in CBT

N= 18

Age: Mean 30 Range 20-56 Sex: 9 males 9 females

Diagnosis:

OCD by DSM-III

Exclusions: Previous behavioural treatment

Notes: Mean OCD duration: 6.6 years;

Data Used

Responder: Anixety Discomfort Scale 70% improvement

Hostility & Direction of Hostility:Intrapunitivity
Hostility & Direction of Hostility:Extrapunitivity

Social Anxiety Scale

Anxiety Discomfort Scale

Self-Rating Depression Scale

Irrational Belief Inventory

Maudsley Obsessive-Compulsive Inventory

Group 1 N=9

Cognitive therapy - 14 twice-weekly 1-hour group sessions; treatment based on ABC framework (person's Activating event, Belief about event, Consequences of belief), patients used ABC homework sheets, irrational beliefs were challenged using a Socratic design

Group 2 N= 9

Group BT - 14 twice-weekly 1-hour group sessions; a hierarchy of fears constructed from which homework tasks performed for 90 minutes twice weekly, all items practiced in vivo; treatment components: self-controlled exposure in vivo, self-imposed response prevention

#### **EMMELKAMP1991**

Study Type: RCT

Study Description: Allocation: random (no

details)

Duration of study: 44 weeks (see notes for

study design)

Blindness: No mention Duration (days):

Setting: Not reported

Notes: Country of study: the Netherlands;

Analysis: completer

Therapists were advanced clinical psychology

students who had done CBT

Info on Screening Process: 31 met criteria, 1 refused treatment because she did not expect that treatment would help her

N= 21

Age: Sex: 10 males 11 females

Diagnosis:

OCD by DSM-III

Exclusions: Aged <18 and >65 years. OCD duration <half a year, received previous cognitive or behavioural treatment,

psychosis, being suicidal

Notes: OCD duration: <5 yrs (n=10), >5 yrs (n=11) Study design: 2 assessment/preparatory sessions + 4-wk waiting period + 6 CT or BT treatment sessions over 4 wks + 4-wk waiting period + 6 CBT or BTsessions over 4 wks + 4-wk follow-up + 6 month follow-up

**Dutch Obsessive-Compulsive Questionnaire** Self-Rating Depression Scale Irrational Belief Inventory Anxiety Discomfort Scale Maudsley Obsessive-Compulsive Inventory

Group 1 N= 10

Cognitive therapy - Treatment based on ABC framework (person's Activating event. Belief about event. Consequences of belief), patients used ABC homework sheets and analysed irrational beliefs 6 days a week for 30 min, irrational beliefs challenged using a Socratic design

Group 2 N= 11

Individual BT - A hierarchy of fears constructed from which homework tasks performed for 90 minutes twice weekly, all items practiced in vivo starting with the easiest: self-controlled exposure in vivo. self-imposed response prevention

# FOA2005

Study Type: RCT

Study Description: Allocation: random (no details); indepentent assessor blind to

randomization

Duration of study: acute phase 12 weeks + discontinuation phase 12 weeks

Blindness: Single blind Duration (days):

Setting: Outpatient

Notes: Country of study: US

Info on Screening Process: 833 screened, 312 did not meet criteria: no OCD (93), received EX/RP or CMI (117), excluded for medical reason (22), comorbidity (75), other reasons (5), unwilling to participate (65), refused to receive CMI (56), or EX/RP (54) or placebo (6), other (191)

N = 122

Age: Mean 35

Sex: 64 males 58 females

Diagnosis:

Obsessive-compulsive neurosis by DSM-III-R

Exclusions: Aged <18 and >70 years, OCD duration <1 year, Y-BOCS<17, current major depression, HAM-D>18, substance abuse or dependence within past 6 months, current schizotypal or borderline personality disorder, previous intensive treatment with CMI or ERP

Notes: Duration of illness 16.4 years, baseline Y-BOCS scores 25

#### Data Used

Data Used

Responders (CGI)

Yale-Brown Obsessive-Compulsive Scale: tota Leaving study early

Clinical Global Impressions

Adverse events NIMH-OC

#### Group 1 N= 36

Clomipramine - Fixed dose first 5 weeks, starting at 25mg/d, increasing to 200mg/d, increased to 250mg/d as tolerated, mean final dose 196mg/d

Responders: CGI=<2

Group 2 N= 26

Placebo - Mean final dose for 209mg/d

Group 3 N= 29

Exposure + response prevention - 15 2-hr sessions over first 3 weeks and 2 home visits, weekly 45 min meetings for remaining 8 weeks, imaginal and in vivo exposure performed

Group 4 N= 31

BT + clomipramine - ERP + CMI, patients met individually with both a therapist and a psychopharmacologist, mean final dose 163+-65mg/d

#### FREESTON1997

Study Type: RCT

Study Description: Allocation: random (no details)

Duration of study: mean 19 weeks Participants referred by professionals or directly contacted the treatment centre

Blindness: Open

Duration (days): Mean 133

Setting: Not reported

Notes: Country of study: Canada, Analysis: ITT

Info on Screening Process: 199 responded, 97 interviewed, no anxiety disorder (12), anxiety disorders other than OCD (11), dominant compulsions (21), below entry-level severity criteria (8), other comorbid conditions (8)

N = 29

Age: Mean 36

Sex: 16 males 13 females

Diagnosis:

OCD by DSM-III-R

Exclusions: Overt compulsions, primary mood disorders, psychoactive substance abuse disorder, psychotic disorder, organic mental disorder, paraphilia or impulse control disorder, medication not stabilized by 12 weeks

Notes: Mean OCD duration 9.4 years, baseline Y-BOCS 23.5, therapists were graduate students trained in cognitive behavioural techniques

#### Group 1 N= 15

Cognitive Behavioural Therapy - 1.5h sessions twice weekly, mean of 25.7 sessions, terminated if sufficient clinical improvement or reached 40 sessions. training on exposure and response prevention using hierarchies of thought, cognitive restructuring, relapse prevention

Group 2 N= 14

Wait list control - Average length of waiting was 18.7 weeks

#### GREIST2002

Study Type: RCT

Study Description: Allocation: random (no

details)

Duration of study: 2 weeks assessment + 10

weeks therapy Blindness: Open

Duration (days):

Setting: Not reported

Notes: Country of study: US (8 sites), Analysis:

ITT

Info on Screening Process: 16 placebo responders, 5 did not complete assessment tasks. 12 violated protocol. 2 withdrew

N = 218

Age: Mean 39 Range 15-80

Sex:

Diagnosis:

OCD by DSM-IV

Exclusions: Y-BOCS<16, Y-BOCS compulsions subscale <7; history of Tourette's disorder, schizophrenia, bipolar disorder, psychosis, primary major depression

Notes: Mean OCD duration 22 +-12 years; 24% had secondary diagnosis of mental disorder; 51% had not taken an SRI for at least 2 weeks before study; baseline Y-BOCS 25 +-5: baseline HRSD 10+-8

Data Used

Relapse

Hamilton Rating Scale for Depression Yale-Brown Obsessive-Compulsive Scale: tota

Group 1 N= 74

Computer-guided BT - Used "BT STEPS", steps 1-3 concern education and assessment, steps 4-9 guide daily self-exposure to triggers of rituals, obsessions and discomfort, self-imposed ritual prevention, planning and performing of self-exposure homework, relapse prevention

Group 2 N= 69

Clinician-guided BT - 11 weekly 1-hour sessions to discuss self-exposure homework to be done daily for an hour and recorded in diaries

Group 3 N= 75

Control - Patients received relaxation therapy - performed relaxation exercises for minimum 1 hour daily, record in daily relaxation diaries

# HISS1994

Study Type: RCT

Study Description: Allocation: random (no

details)

Duration of study: 3 weeks ERP + 1 week relapse prevention/associate therapy + 6-

month follow-up
Blindness: No mention

Duration (days):

Setting: Not reported

Notes: Country of study: US; Analysis: ITT Therapists were 4 doctoral-level clinical psychologists with expertise in ERP with OCD Info on Screening Process: Not reported N= 20

Age: Mean 31

Sex: 12 males 8 females

Diagnosis:

OCD by DSM-III-R Exclusions: Not reported

Notes: Mean OCD duration 11 years; primary compulsion washing (n=6), primary compulsion checking (n=8), washing

and checking (n=3), cognitive rituals (n=1)

**Data Used** 

Obsessive-compulsive symptom severity
Responders (50% Y-BOCS)
State-Trait Anxiety Inventory
Beck Depression Inventory

Hamilton Rating Scale for Depression

Yale-Brown Obsessive-Compulsive Scale: tota

Group 1 N=8

BT + relapse prevention - BT: 15 90-min daily sessions over 3 weeks, imaginal and in vivo exposure + response prevention, homework assignments Relapse prevention: 4 90-min sessions over 1 week, training in self-exposure and cognitive restructuring, how to deal with set-backs

Group 2 N= 10

BT + associative therapy - BT: see BT + relpase prevention intervention Associative therapy: 4 90-min sessions over 1 week, deep muscle relaxation, free association about OC symptoms by patient and by patient's significant other

Obsessive-Compulsive Symptom Severity: measured obsessive fear, avoidance, and ritualistic behaviour on 9-point scale, range 0-24, rated by independent assessor

Y-BOCS self-rated WSAS self-rated

# **KENWRIGHT2004**

Study Type: RCT

Study Description: Allocation: random (sealed-

envelope)

Duration of study: 17 weeks Blindness: No mention

Setting: Outpatient

Duration (days):

Notes: Country of study: US BTSTEPS is an interactive-voice-response system which guides E/RP in 9 steps

Info on Screening Process: 48 referred by a GP or psychiatrist, 4 were unsuitable - 3 wanted at least some face-to-face sessions, 1 had no OCD

N= 44

Age: Mean 40

Sex: 21 males 23 females

Diagnosis:

OCD by DSM-IV

Exclusions: OCD duration<2 years, schizophrenia, bipolar disorder or other psychosis, primary major depression, suicidal plans, alcohol or substance abuse, not on stable dose of SRI

Notes: Mean OCD duration 16+-13 years, mean baseline Y-BOCS 26+-6.2; included patients with cleaning (45%), checking (34%), reapeating/ordering (39%), hoarding (5%), mental rituals (31%) and sexual, violent or blasphemous obsessions (33%)

Data Used

Leaving study early

Work and Social Adjustment Scale

Target rituals (assessor rated): discomfort

Yale-Brown Obsessive-Compulsive Scale: obsessions

Yale-Brown Obsessive-Compulsive Scale: compulsions

Yale-Brown Obsessive-Compulsive Scale: tota

Group 1 N= 22

BT Steps + requested support - Patient advised to phone the clinic for help with working through BTSteps. Mean total support time per patient 16 minutes over 1.5 calls

Group 2 N= 22

BT Steps + scheduled support - 9 telephone calls were scheduled to review progress and to help work through exposure issues. Mean total support time per patient 76 minutes over a mean of 7.5 calls

#### KHEMLANIPATEL2001

Study Type: RCT

Study Description: Allocation: random assignment for first participant, then alternate allocation to each treatment for following

participants

Duration of study: 16 week Blindness: Single blind

Duration (days):

Setting: 17 recruited, 7 dropped out

Notes: Country of study: US; Analysis:

completer

Therapists were a doctoral intern with Master's degree, 2 licensed clinical psychologists

N=1

Age: Mean 32 Range 21-54 Sex: 7 males 3 females

Diagnosis:

BDD by DSM-IV

Exclusions: Not pre-occupied with imagined defect in appearance, preoccupation did not resut in significant distress, preoccupation better accounted for by Anorexia Nervosa or Transsexualism, patient wanted to continue other psychological treatment during study, medication was not stablized 3 months before study

Notes: 6 had comorbid OCD, 5 had comorbid affective

disorder

# LINDSAY1997

Study Type: RCT

Study Description: Allocation: random (no

details)

Duration of study: 3 weeks

Blindness: Open Duration (days):

Setting: Outpatient

Notes: Country of study: Australia; Analysis: ITT Info on Screening Process: Not reported

N = 18

Age: Mean 33

Sex: 6 males 12 females

Diagnosis:

Exclusions: Not reported

Notes: Mean OCD duration 11 years (range 1-26 years)

#### **Data Used**

PADUA

State-Anxiety Inventory
Maudsley Obsessive-Compulsive Inventory

Beck Depression Inventory Y-BOCS (self-report version)

# Group 1 N= 5

Cognitive Behavioural Therapy - Four wks CT+4 wks ERP (12 90-min sessions each); CT based on Beck (1995) & Geremia (1997), therapists modeled how to transform negative irrational thinking into rational adaptive thoughts; for ERP hierarchy of 3 most distressing symptoms constructed

#### Group 2 N= 5

Individual BT - 8 wks of 24 90-min sessions; ERP involved constructing hierarchy of 3 most distressing symptoms, subjective units of distress were recorded each week, most distressing symptoms were treated first, used paradoxical intention during exposure sessions

#### Group 1 N= 9

Individual BT - Exposure and response prevention: 15 hours face-to-face therapy over 3 weeks, graded exposure to situations previously associated with obsessional thoughts or impulses, self-imposed prevention of compulsive rituals, homework exposure tasks

#### Group 2 N= 9

Control - Anxiety management: comprised teaching techniques, such as breathing for management of hyperventilation, progressive muscle relaxation, structured problem-solving about non-OCD life stressors and practicising this at home

#### LOVELL1994

Study Type: RCT

olddy Typol To

Study Description: Allocation: random (no details)

Duration of study: 8 weeks

Patients were referrals from the Psychological

treatment unit, Maudsley Hospital

Blindness: No mention Duration (days):

Setting: Not reported

Notes: Country of study: UK; Analysis:

completer

Info on Screening Process: 17 referrals, 5 dropouts: 1 withdrawal at week 2 due to depression, 4 (1 exp; 3 neutral) dropped out

N= 12

Age: Mean 35

Sex: 5 males 7 females

Diagnosis:

OCD by DSM-III

Exclusions: Aged <18 and >65 years, obsessive thoughts were not dominant feature, OCD duration<1 year, severe motor rituals, on stable doe of medication<3 months, taking >10mg diazepam equivalents, >3 units of alcohol daily, psychotic, severe affective, or physical illness

Notes: Mean OCD duration 14 +-11 years, most common obsessive theme was harm/aggression towards others

#### Data Used

Responders ("much improved" on ruminations

Adjustment rating scales
Beck Depression Inventory
Compulsive activity checlist

Target rituals (assessor rated): time

Target rituals (assessor rated): discomfort

#### Group 1 N=6

Individual BT - Audiotaped exposure to patient's anxiogenic thoughts as identified by therapist & patient: 8 weekly sessions, patient recorded anxiogenic thoughts onto 30sec loop audiotape, anxioloytic thoughts excluded, listening to audiotaped material 1 h twice daily

#### Group 2 N= 6

Control - Neutral prose or poetry: patients recorded neutral non-anxiogenic material onto a 30-sec loop-tape which could be played as long as desired, 8 weekly sessions, listening to audiotaped material 1 h twice daily

Adjustment rating scales (9-point scales): work, home, social, private
Responders: mean reduction in ruminations discomfort and time and in main problem and target of 16 or more
Other measures:
Main problem and target, assessor-rated (9-point scale)

#### MCLEAN2001

Study Type: RCT

Study Description: Allocation: random (no

details)

Duration of study: 3 months treatment + 3

months follow-up

Blindness: No mention Duration (days):

Setting: Not reported

Notes: Country of study: US; Analysis:

completer

Therapists were licenced clinical psychologists

Info on Screening Process: Not reported

N= 93

Age: Mean 35 Range 18-56 Sex: 33 males 30 females

Diagnosis:

OCD by DSM-IV

Exclusions: Aged <18 and >65 years, not fluent in written and spoken English, active thought disorder, mental retardation or organic mental disorder, commencement or change in psychotropic medication in the 3 months prior to assessment, any physical condition that would prevent completion of treatment, concurrent psychological treatment for current Axis I or II disorder

Notes: Mean baseline Y-BOCS22; 33 participants were wait-listed for 3 months before receiving treatment; of 63 completers, 30 were using medication for OCD: multiple medications (6), SSRI alone (13), TCA alone (5), benzodiazepines alone (4). other (2)

Data Used

Responder: Y-BOCS<12 + Y-BOCS 6-point reduction

Responsibility Attitude Scale

Yale-Brown Obsessive-Compulsive Scale: total Yale-Brown Obsessive-Compulsive Scale: obsessions

Yale-Brown Obsessive-Compulsive Scale: compulsions

**Beck Depression Inventory** 

Group 1 N= 49

Cognitive Behavioural Therapy -Treatment conducted in groups of 6-8, 12 weekly sessions, 2.5 hr per session, based on Salkovskis (1996) model trigger leads to an intrusive thought followed by an appraisal, followed by distress and urge to neutralise or engage in compulsive behaviour

#### Group 2 N= 44

Group BT - Treatment conducted in groups of 6-8, 12 weekly sessions, 2.5 hr per session, consisted of exposure and response prevention, hierarchy of fears developed, homework assignments performed

# **MEHTA1990**

Study Type: RCT

Study Description: Allocation: random (no

details)

Duration of treatment: 14 weeks (24 sessions,

2 per week)

Blindness: Open Duration (days):

Setting: Outpatient

Notes: Country of study: India

N = 30

Age: Mean 34 Range 17-56 Sex: 19 males 11 females

Diagnosis: OCD by DSM-III

Notes: Duration of illness 3 years

#### Data Used

Global Assessment of Severity: Occupation Global Assessment of Severity: leisure Global Assessment of Severity: household responsib

Global Assessment of Severity: Family Zung Depression Rating Scale

Montgomery-Asberg Depression Rating Scale

#### Group 1 N= 15

Family-based BT - Self-observation, monitoring of distressing symptoms, training in relaxation therapy, systematic desensitization and ERP, a family member acted as co-therapist who assisted in completing homework assignments, in relaxation therapy and response prevention

# Group 2 N= 15

Individual BT - Self-observation, monitoring of distressing symptoms, training in relaxation therapy, systematic desensitization and ERP, no instructions were given to the family

#### MORITZ1998

Study Type: Cross-over

Study Description: Allocation: random, rater

blind to treatment

Duration of study: 18 wks -3 weekly contact sessions + 6 wks treatment (2 sessions per wk)

in each arm

Blindness: Single blind

Duration (days):

Setting: Outpatient

Notes: Country of study: US; Analysis: completer; participants were community referrals and responders to media announcements

Info on Screening Process: 8 included; dropped out due to lack of improvemen

dropped out due to lack of improvement (1); excluded: baseline CY-BOCS-15 (1); needed behavioural management for which the parents did not want to wait till end of study (2)

N= 4

Age: Mean 8 Range 6-11

Sex: all males Diagnosis:

OCD by DSM-IV

Exclusions: Age<11 years; Y-BOCS<15, OCD duration<6 months, not on stable doses of psychotropic medication; diagnosis of trichotillomania or nail-biting, schizophrenia, depression or bipolar disorder, severe mentally retarded patients, anorexia nervosa, bulimia nervosa, severe neurological disorder

Notes: Mean baseline Y-BOCS 29.25

#### Data Used

Parent Checklist for Compulsive Activities NIMH Global OCD Scale

Children's Yale-Brown Obsessive-Compulsive Scale

#### **Data Not Used**

Subjective Units of Distress Scale - no data Behaviour Assessment System for Children -Parent - no pre-cross-over data

#### Group 1 N= 2

Individual BT - Game-like behavioural program: 2 sessions per week, duration 60-min, parents took part in 50% of games; 24 games in total; games addressed psychoeducation, reassurance-seeking behaviour, doubting, fear of not saying "right thing", asymmetry problems, etc.

#### Group 2 N= 2

Control - Comprised non-therapeutic mainstream games purchased at toystore; games such as monopoly, hangman, tic tac toe Subjective Units of Distress Scale: anxiety scores during each game no overall distress score reported

### **ROSEN1995**

Study Type: RCT

Study Description: Allocation: random (no

details)

Duration of study: 10 weeks Blindness: No mention

Duration (days):

Setting: Outpatient

Notes: Country of study: US; Analysis: ITT

Info on Screening Process: 156: excluded: BDD symptoms not severe enough (58), significant physical abnormality (38), anorexia or bulimia nervosa (11), severe depression with

suicidal behaviour (1), male (15)

Study Type: RCT

details): participants not informed about

Duration (days):

television news commentary, newspaper advertisement, physician referral

N = 22

Age: Mean 39

Diagnosis:

Sex: 7 males 14 females

OCD by DSM-III-R

N= 54

Age: Mean 36 Range 20-61

Sex: all females

Diagnosis:

BDD by DSM-III-R

Exclusions: Male, significant physical abnormality, anorexia or bulimia nervosa

Notes: Inclusion: Moderate to severe on items of the Body Dysmorphic Disorder examination and total score 1.25 S.D. above norm for adult women (>61)

Exclusions: Y-BOCS<15; aged<14 years; medication was

not stablized for at least 3 months before study, patients

smoked, had substance abuse disorder, or had spinal or

other physically limiting problems that could interfere with

meditation practice, such as being excessively overweight,

seizure disorder, pulmonary disorder, hypertension, other

retardation, anorexia nervosa, bulimia, tourette's syndrome.

of 3 months (phase 1), the two treatments were merged

cardiovascular disorders, primary diagnosis of

schizophrenia, depression, bipolar disorder, mental

Notes: Baseline Y-BOCS 22.8; four patients had trichotillomania; if treatments differed significantly at the end

(phase 2) which lasted for 12 months

Data Used

**Brief Symptom Inventory** 

Multidimensional Body Self-Relations Questionnaire

Rosenberg Self-Esteem Scale Responders (DSM-BDD, BDDE) Body Shape Questionnaire

**BDD** Examination

Group 1 N= 27

Cognitive Behavioural Therapy -Treatment provided in groups of 4 or 5. consisted of 8 weekly 2-hour sessions. consisted of exposure therapy, thought stopping and relaxation, response prevention to decrease body-checking behaviour, participants kept body-image diary

Group 2 N= 27

Wait list control - Participants were promised CBT after a minimum 10-week waiting period

Responder: (a) no longer meeting DSM-BDD criteria. (b) post-treatment BDDE score 2 S.E.s below baseline score

### SHANNAHOFFKHALS1999

Study Description: Allocation: random (no

meditation protocol

Duration of study: 3 months (phase 1-RCT) +

12 months (phase 2) Blindness: Single blind

Setting: Outpatient; patients recruited through

Notes: Country of study: US; Analysis: LOCF for Y-BOCS, completer for other outcomes Therapists were previously training in respective treatments

Info on Screening Process: 130 adults +5 adolescents screened, 93 adults + 1 adolescent failed to meet initial criteria

# Data Used

Leaving study early Purpose in Life test Profile of Moods scale

Perceived Stress Scale Symptom Checklist-90

Yale-Brown Obsessive-Compulsive Scale: tota

Group 1 N= 12

Yoga - Employed the Kundalini yoga protocol, includes 8 primary techniques, including a yogic breathing technique (blocking right nostril, slow deep inspiration through left nostril, breath retention, and slow complete expiration) and 3 nonmandatory techniques

Group 2 N= 10

Relaxation response and mindfulness meditation - Relaxation response (RR) and Mindfulness meditation (MM) are passive techniques. RR requires a constant mental focus and repetition of a self-selected special word or phrase, MM requires conscious observation of thoughts

# VANOPPEN1995

Study Type: RCT

Study Description: Allocation: random (no

details)

Duration of study: 16 weeks

Blindness: No mention Duration (days):

Setting: Outpatient

Notes: Country of study: the Netherlands;

Analysis: completer

N= 57

Age: Mean 35

trichotillomania

Sex: 17 males 30 females

Diagnosis:

OCD by DSM-III-R

Exclusions: Only obsessions; aged <18 and >65 years; OCD duration <1 year; organic mental disorder, mental retardation or a psychotic disorder; cognitive or behavioural treatment in preceeding 6 months, using anti-depressants

Notes: Mean OCD duration 13 years

#### **Data Used**

Irrational Belief Inventory **Beck Depression Inventory** Symptom Checklist-90 Padua Inventory - Revised

Anxiety Discomfort Scale

Yale-Brown Obsessive-Compulsive Scale: tota

Group 1 N= 35

Cognitive therapy - 16 45-minute sessions, patients learned to consider instrusions as stimuli and to identify anxiety evoking automatic thoughts. which were challenged & replaced by alternative, rational, nondistressing thoughts, used Socratic Dialogue

Group 2 N= 36

Individual BT - 16 sessions lasting 45 minutes, exposure in vivo with response prevention. After all compulsions and avoidance behaviour were inventoried, a fear hierarchy was made, and exposure homework was assigned, patients were asked to keep homework diaries

CT and BT part of data from VanBalkom2002. In addition, those who refused pharmacological treatment or were put on waiting list were randomised to CT or BT.

#### **VEALE1996**

Study Type: RCT

Study Description: Allocation: random (stratified by degree of avoidance, severity of depressive

symptoms)

Duration of study: 12 wks Blindness: No mention Duration (days):

Setting: Not reported

Notes: Country of study: UK; Analysis: ITT Patients were self-referrals/referrals from other agencies

Info on Screening Process: Not reported

# VOGEL2004

envelope technique, wait list patients again randomised to either active treatment) Study duration: 6 weeks

Duration (days): Mean 42

Followup: 3, 6 & 12 months

Setting: Outpatient

Notes: Country of study: Norway; Analysis: ITT Three therapists experienced in cognitive and

Info on Screening Process: 54 screened, exclusions: obessions without compulsions (n=4), another primary axis I disorder (n=5). psychosis (n=1), chronic ego-syntonic OCD (n=1), subclinical OCD (n=2), refused

N = 19

Age: Mean 35

Sex: 1 male 18 females

Diagnosis:

BDD by DSM-IV

Exclusions: Patients with BDD whose primary concern was body weight or shape, concurrent dementia or organic brain disorder, schizophrenia, delusional disorder, alcohol or substance abuse, suicidal intent

Notes: Mean duration of illness: 15 years; included patients with comorbid diagnoses (OCD, social phobia, depressive disorder) so long as patient's primary concern was with the defect in their appearance

Data Used

**BDD** Examination

Montgomery-Asberg Depression Rating Scale

**Derriford Scales** 

Social phobia

Hospital Anxiety

Yale-Brown Obsessive-Compulsive Scale:

compulsions

Hospital Depression

Group 1 N= 9

> Cognitive Behavioural Therapy - 12 sessions: response prevention by external focusing; cognitive restructuring; collecting positive and neutral information about paitient's assumptions to build realistic assumptions about body image. Therapy conducted by accredicted CBT therapists

Group 2 N= 10

Wait list control

Study Type: RCT

Study Description: Allocation: random (sealed

Blindness: Open

behavioural (ERP) interventions

unstable acting-out or suicidal behaviour (n=2). treatment (n=4)

N= 35

Age: Mean 36

Sex: 10 males 25 females

Diagnosis:

OCD by DSM-III-R

Exclusions: History of psychotic disorder, obsessions without compulsions, other primary axis I disorder, suicidal behaviour, chronic ego-syntonic OCD, subclinical OCD

Notes: Twelve were taking stable doses of anti-obsessional medication at time of study Mean baseline Y-BOCS 24.3

#### Data Used

Reliable change Remission (OCD) Clinical Significance State-Anxiety Inventory

**Beck Depression Inventory** 

Yale-Brown Obsessive-Compulsive Scale: total

#### Group 1 N= 16

ERP + CT - Two-hour twice weekly sessions. 10 sessions in vivo/imaginal exposure + RP, 30 mins minimum per session for addressing case-specific comorbidity or OCD-specific beliefs using CT techniques, homework exposure exercises assigned after each session

#### Group 2 N= 19

ERP + relaxation training - Two-hour twice weekly sessions. 10 sessions in vivo/imaginal exposure + RP. 30 mins per session of relaxation training progressive muscle relaxation and release-only relaxation exercises, homework exposure exercises assigned after each session

Remission: Y-BOCS<16 Clinical Significance: Y-BOCS<16 + reliable change on Y-BCOS

# Characteristics of Excluded Studies

Reference ID	Reason for Exclusion
ARAUJO1996	Analysis of data from another study (DEARAUJO1995)
BOERSMA1976	No extractable data for treatment comparisons
DREESSEN1997	No extractable data
DUBOIS1991	Article not in the English language
EMMELKAMP1977	No extractable data for treatment comparisons
EMMELKAMP1980	Cross-over trial: no extractable data for treatment comparisons
EMMELKAMP1980A	No extractable data for treatment comparisons
EMMELKAMP1981	Cross-over trial: no extractable data for treatment comparisons
EMMELKAMP1989	No extractable data for treatment comparisons
EMMELKAMP1990	No extractable data for treatment comparisons
FALSSTEWART1993A	No extractable data for treatment comparisons

**FOA1980** No extractable data

**FRITZLER1997** Delayed group began treatment at mid-point of immediate treatment

group, so post-treatment data not extractable

**GOURNAY1997** Results reported elsewhere (VEALE 1996)

HACKMANN1975 Cross-over trial, data not extractable before the point of cross-over

JONES1998A S.D.s not reported on efficacy measures, data not extractable

**KAZARIAN1977** Non-clinical population (psychology students) **MCKAY1997** No extractable data for treatment comparisons

OCONNOR1999 Allocation random, but 3 participants were given preferred treatment

**RACHMAN1971** No extractable data for treatment comparisons

SALKOVSKIS2003 An experimental study

**STEKETEE1982\_1** No extractable data for treatment comparisons

STEKETEE1982 2 Does not mention whether patients were randomised to treatment

groups: no extractable data for treatment comparisons

STERN1973 Cross-over trial: data not extractable at point of cross-over

#### Characteristics of Studies Not Available

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# Appendix 16: Included/excluded studies table for the Clinical Question: 1.01 TCAs

Characteristics of Included Studies

Methods	Participants	Outcomes	Interventions	Notes
ANANTH1981				
Study Type: RCT  Study Description: Ten patients each were assigned to clomipramine and amitriptyline groups respectively according to a randomized precoded design.  Blindness: Double blind  Duration (days): Mean 28  Followup: 4 weeks  Setting: Inpatient and outpatient  Notes: Country of study: Canada.  Info on Screening Process: 20	N= 20 Age: Mean 37 Range 22-56 Sex: 7 males 13 females Diagnosis: OCD Exclusions: Patients with evidence of psychosis, clinical epilepsy, organic brain syndrome, acute physical illness, pregnancy. Notes: Clinical diagnosis of obsessive-compulsive neurosis based on psychiatric examination, ratings on the Psychiatric Questionnaire for OCN and obsessive traits, resistance and interference scores on the Leyton Obsessive Inventory.	Data Used Leaving study early Data Not Used Adverse events - no extractable data Psychiatric Questionnaire for OCN - no variablility measure	Group 1 N= 10  Clomipramine - Clomipramine was supplied in 25mg tablets and administered on a fixed changing dosage schedule (week 1: 3 tablets daily; week 2: 6 tablets; week 3: 9 tablets; week 4: 12 tablets), average daily dose during final week 133.3mg  Group 2 N= 10  Amitriptyline - Amitriptyline was supplied in 25mg tablets and administered on a fixed changing dosage schedule (week 1: 3 tablets daily; week 2: 6 tablets daily; week 3: 9 tablets daily; week 4: 12 tablets daily); average daily dose during final week 197.4mg	
GOODMAN1990A  Study Type: RCT  Study Description: Allocation: random (no details)  Blindness: Double blind  Duration (days):  Followup: 8 weeks  Setting: Outpatients  Notes: Country of study: US; Analysis: ITT  Info on Screening Process: Not reported	N= 40 Age: Mean 38 Sex: 19 males 21 females Diagnosis: 100% OCD by DSM-III-R Exclusions: OCD duration <1 year, CGI-global severity >=moderate; primary depression; MDD primary diagnosis Notes: Patients with current major depression: Fluvoxamine n=14, Desipramine n=13; chronic tics history n=6; patients attended weekly individual psychotherapy (comprised supportive therapy, psychoeducation, relaxation techniques); mean OCD duration 18 years	Data Used  Leaving study early due to adverse events Leaving study early Hamilton Rating Scale for Depression Yale-Brown Obsessive-Compulsive Scale: tota	Group 1 N= 19  Desipramine - 50mg for first 3 days, increased to 150mg by 2nd week, and upto 300mg based on clinical response; mean final dose 223mg/d (+-48)  Group 2 N= 21  Fluvoxamine - 50mg for first 3 days, increased to 150mg by 2nd week, and upto 300mg based on clinical response; mean final dose 214mg/d (+-55)	
HOEHNSARIC2000 Study Type: RCT Study Description: Randomization using a computer-generated randomization scheme Blindness: Double blind Duration (days): Followup: 12 weeks Setting: Not reported Notes: Country of study: US; Analysis: ITT; study conducted at 16 sites Info on Screening Process: Not reported	N= 116 Age: Mean 38 Sex: 66 males 48 females Diagnosis: 100% OCD by DSM-III-R 100% MDD by DSM-III-R Exclusions: Y-BOCS<20, HRSD-24<18, HRSD-item 1<2, CGI for OCD & MDD<4 Notes: OCD duration: 213 mo; MDD duration 24 mo; Y-BOCS baseline 26; HRSD-24 baseline: 27.5	Data Used Responder (OCD/BDD) Responder (MDD) Remission (MDD) Leaving study early due to adverse events Leaving study early Adverse events Hamilton Rating Scale for Depression NIMH-OC Yale-Brown Obsessive-Compulsive Scale: total	Group 1 N= 80  Sertraline - flexible dosage (based on response and side-effects): 50mg/d first 2 weeks, 100mg/d by week 4, 150mg/d at week 4, 200mg/d at week 5; mean final dose 160.1mg/d+-50  Group 2 N= 86  Desipramine - flexible dosage (based on response and side-effects): 50mg/d titrated upto 300mg/d; mean final dose 193.5mg/d+-90	Response: for OCD: Y-BOCS>=40% reduction, for MDD: HRSD>=50% reduction; MDD remission: HRSD<=17

KHANNA1988 Study Type: Cross-over		Data Not Used Hamilton Rating Scale for Depression - no pre	Group 1 N= 10	
Study Description: Allocation: random (no details) Duration of study: 16 weeks (6 weeks in each treatment + 4 weeks interval between treatments) Blindness: Double blind Duration (days): Followup: 6 weeks Setting: Not reported Notes: Country of study: India; Analysis: completer Info on Screening Process: Not reported	Age: Sex: 8 males 4 females Diagnosis: OCD by DSM-III Exclusions: Primary depression, <2month gap between onset of obession and depression, history of melancholic or psychotic features, lack of response to 300mg amitriptyline or imipramine administered daily for 6 weeks, were not free of psychotropic drugs for or were receiving behaivour therapy at least 4 weeks before onset of study Notes: Two patients had only obsessions, 4 were checkers, 5 were washers, 1 had both checking and washing compulsions	Maudsley Obsessive-Compulsive Inventory - no pre-cross-over data Leyton Obsessional Inventory: trait - no pre- cross-over data Leyton Obsessional Inventory: symptom - no pre-cross-over data Leyton Obsessional Inventory: resistance - no pre-cross-over data Leyton Obsessional Inventory: interference - no pre-cross-over data	Clomipramine - Initial dose 50mg/d for 3 days, 50mg increments every 3 days to 200mg/d as tolerated  Group 2 N= 8  Nortriptyline - Initial dose 50mg/d for 3 days, 50mg increments every 3 days to 200mg/d as tolerated	
Study Type: Cross-over  Study Description: Allocation: random Duration of study: 12 weeks (2-week single- blind placebo + 5 weeks in each treatment)  Blindness: Double blind Duration (days):  Setting: Outpatient  Notes: Country of study: US Info on Screening Process: Not reported	N= 49 Age: Mean 14 Sex: 31 males 18 females Diagnosis: OCD by DSM-III Exclusions: Aged <6 and >18 years, mental retardation, thought disorder or delusional system, neurologic damage, primary affective disorder, primary eating disorder, uncooperativeness with study procedures, >20% improvement on Global OCD scale during initial placebo phase Notes: Included patients with rituals and/or repetitive thoughts deemed unreasonable by the patient that were experienced as distressful and causing significant interference socially, mean age of onset 10.23+-5.8 years, mean duration of illness 3.63+-2.74 years	Data Not Used  NIMH Global Anxiety Scale - no pre-crossover data  NIMH Global Depression Scale - no pre-crossover data  Hamilton Rating Scale for Depression - no pre-crossover data  Leyton Obsessional Inventory (CV): symptom no pre-crossover data  Leyton Obsessional Inventory (CV): resistance - no pre-crossover data  Leyton Obsessional Inventory (CV): interference - no pre-crossover data  Comprehensive Psychopathological Rating Scale: OC - no pre-crossover data  NIMH Global OCD Scale - no pre-crossover data	increments of 25 or 50mg to 250mg/d as	
ELEONARD1991A  Study Type: RCT  Study Description: 8-month continuation study, with all patients receiving clomipramine in months 1-3 and 6-8, and half having desipramine substitution in months 4-5  Blindness: Double blind  Duration (days):  Setting: Outpatient  Notes: Country of study: US  Info on Screening Process: 28 patients receiving maintenance clomipramine therapy, 26 agreed to participate.	N= 26 Age: Mean 15 Range 8-19 Sex: 15 males 11 females Diagnosis: OCD by DSM-III Exclusions: Evidence of mental retardation, thought disorder or delusional system, neurologic damage, primary affective disorder, or primary eating disorder; symptoms that were too mild at the time of evaluation; uncooperativeness with study procedures. Notes: Symptoms had to be present for at least one year.	Data Used Relapse (Physician's Relapse Scale) NIMH-OC Leaving study early Comprehensive Psychopathological Rating Scale: OC Data Not Used Adverse events - no extractable data	Group 1 N= 16  Clomipramine - Patients received clomipramine for the entire 8-month trial. Dosage was kept constant for each patient throughout. Daily dose did not exceed 250mg.  Group 2 N= 10  Desipramine - Patients received clomipramine for the first 3 months, then had desipramine blindly substituted for 2 months, before returning to clomipramine for the last 3 months of the trial.	Relapse: yes-no rating on Physician's relapse scale

THOREN1980A				
Study Type: RCT	N= 24	Data Used	Group 1 N= 8	Obsessional symptoms not
Study Description: The effect of clomipramine was compared with that of nortriptyline and placebo in a 5-week randomized double-blind trial.  Blindness: Double blind Duration (days):  Setting: Inpatient. Notes: Country: Sweden. Info on Screening Process: 38 patients were referred to the study, 9 did not meet inclusion criteria and 3 were unwilling to be hospitalized.	Age: Mean 40 Range 19-61 Sex: 5 males 19 females Diagnosis: OCD  Notes: Diagnosis of OCD was based on the occurrence of pronounced compulsive rituals and thoughts in the absence of signs or symptoms of schizophrenia or organic brain disorder.	Leyton Obsessional Inventory: interference Leyton Obsessional Inventory: resistance Leyton Obsessional Inventory: trait Leyton Obsessional Inventory: symptom OCD Scale (CPRS)  Data Not Used Home Incapacity Scale-Ward Incapacity Scale - amelioration score Individual Self-rating Scale - amelioration scor Obsessional symptoms	Clomipramine - Dosage was increased by 50mg daily up to a final dosage of 50mg 3 times a day, which was then given throughout the study.  Group 2 N=8  Nortriptyline - Dosage was increased by 50mg daily up to a final dosage of 50mg 3 times a day, which was then given throughout the study.  Group 3 N=8  Placebo	extracted as not clear how measured
VOLAVKA1985				
Study Type: RCT  Study Description: Allocation: random (computer-generated random numbers in blocks of six patients)  Blindness: Double blind  Duration (days):  Followup: 12  Setting: Outpatient  Notes: Country of study: US; Analysis:  Info on Screening Process: Not reported	N= 23 Age: Mean 30 Range 19-54 Sex: 11 males 12 females Diagnosis: OCD Exclusions: Aged <18 and >65 years, OCD duration <1 year, primary depression, significant medical disease, schizophrenia, pregnancy, concomittant use of other psychotropic drugs, alcohol or drug abuse Notes: Did not use standardised diagnostic tool	Data Used Global Evaluation of Efficacy Leaving study early due to adverse events Leaving study early Self-Rating Obsessional Neurotic Scale Hamilton Rating Scale for Depression Self-Rating Obsessive-Compulsive Personality	Group 1 N= 11  Clomipramine - Gradual increase (by 50mg/d each week) to 300mg/d, maximum dose was reached by week 5  Group 2 N= 12  Imipramine - Gradual increase (by 50mg/d each week) to 300mg/d, maximum dose was reached by week 5	
Study Type: Cross-over  Study Description: Allocation: random (no details) Duration of study: 2-4 weeks placebo + 16 weeks (6 weeks in each treatment with 4 week placebo interval) Blindness: Double blind Duration (days):  Setting: Outpatient Notes: Country of study: US; Analysis: completer Info on Screening Process: 26 referrals, excluded: other major psychopathology (n=3), NIMH Global OC<6 (n=2), needed hospitalization (n=1), refused to stop medication (n=3), disagreed with study protocol (n=2)	N= 14 Age: Sex: no information Diagnosis:     OCD by DSM-III Exclusions: Other primary axis 1 disorder, aged <18 years, NIMH Global OC <6	Data Not Used  NIMH Global Impairment - no pre-cross-over data  Hamilton Rating Scale for Depression - no pre cross-over data  NIMH Global OCD Scale - no pre-cross-over data  NIMH Global Depression Scale - no pre-cross-over data  NIMH Global Anxiety Scale - no pre-cross-over data  NIMH Global Anxiety Scale - no pre-cross-over data  Comprehensive Psychopathological Rating Scale: OC - no pre-cross-over data	67mg/d  Group 2 N= 10  Desipramine - Initial dose 50mg/d. 50mg	

References of Included Studies

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Hoehn-Saric, R., Ninan, P., Black, D. W., Stahl, S., Greist, J. H., Lydiard, B. et al. (2000). Multicenter double-blind comparison of sertraline and desipramine for concurrent obsessive-compulsive and major depressive disorders. Archives of General Psychiatry., 57, 76-82.

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Thoren, P., Asberg, M., Cronholm, B., Jornestedt, L., & Traskman, L. (1980). Clomipramine treatment of obsessive-compulsive disorder. I. A controlled clinical trial. Archives of General Psychiatry., 37, 1281-1285.

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Volavka, J., Neziroglu, F., & Yaryura-Tobias, J. A. (1985). Clomipramine and imipramine in obsessive-compulsive disorder. Psychiatry Research., 14, 85-93.

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# Appendix 16: Included/excluded studies table for the Clinical Question: 1.02 Clomipramine

Characteristics of Included Studies

Methods	Participants	Outcomes	Interventions	Notes
ALBERT2002 Study Type: RCT Study Description: Allocation: random (no details), allocation to venlafaxine or clomipramine on a 1:2 ratio Blindness: Single blind Duration (days): Followup: 12 weeks Setting: Outpatient Notes: Country of study: Italy; Analysis: ITT Info on Screening Process: Not reported	N= 73 Age: Mean 30 Sex: 35 males 38 females Diagnosis: OCD by DSM-IV Exclusions: OCD duration<1 year, Y-BOCS<16, HRSD- 17>14, current diagnosis of MDD, currently or previously treated with SSRIs Notes: OCD duration: 5.15 years, baseline Y-BOCS 25.4	Data Used Yale-Brown Obsessive-Compulsive Scale: tota Leaving study early due to adverse events Adverse events Responder (OCD/BDD) Leaving study early	Group 1 N= 47	Responders: improvement from baseline in YBOCS score of 35% or more and a CGI score equal to or less than 2
ANANTH1981 Study Type: RCT Study Description: Ten patients each were assigned to clomipramine and amitriptyline groups respectively according to a randomized precoded design. Blindness: Double blind Duration (days): Mean 28 Followup: 4 weeks Setting: Inpatient and outpatient Notes: Country of study: Canada. Info on Screening Process: 20	N= 20 Age: Mean 37 Range 22-56 Sex: 7 males 13 females Diagnosis: OCD Exclusions: Patients with evidence of psychosis, clinical epilepsy, organic brain syndrome, acute physical illness, pregnancy. Notes: Clinical diagnosis of obsessive-compulsive neurosis based on psychiatric examination, ratings on the Psychiatric Questionnaire for OCN and obsessive traits, resistance and interference scores on the Leyton Obsessive Inventory.	Data Used Leaving study early Data Not Used Adverse events - no extractable data Psychiatric Questionnaire for OCN - no variablility measure	Group 1 N= 10  Clomipramine - Clomipramine was supplied in 25mg tablets and administered on a fixed changing dosage schedule (week 1: 3 tablets daily; week 2: 6 tablets; week 3: 9 tablets; week 4: 12 tablets), average daily dose during final week 133.3mg  Group 2 N= 10  Amitriptyline - Amitriptyline was supplied in 25mg tablets and administered on a fixed changing dosage schedule (week 1: 3 tablets daily; week 2: 6 tablets daily; week 3: 9 tablets daily; week 4: 12 tablets daily); average daily dose during final week 197.4mg	
ANSSEAU  Study Type: RCT  Study Description: Alloction: random (computergenerated) Study duration: acute phase(12 wks ZOHAR1996)+responders-only maintenance (30 wks)+relapse-prevention (8 wks) Blindness: Double blind Duration (days):  Setting: Not reported  Notes: Country of study: Europe (27 centres); Analysis: ITT Long-term treatment of responders from ZOHAR1996 study	N= 83 Age: Mean 39 Range 17-66 Sex: 33 males 50 females Diagnosis:     OCD by DSM-III-R Exclusions: Non-responders (25% or greater reduction on Y-BOCS and 2-point or greater reduction on CGI severity subscale) to acute phase trial, developed other Axis I diagnosis, non-compliant during acute phase, required psychotropic medication other than study drug, at serious risk of suicide, became pregnant Notes: Mean OCD duration 17.47 years, 45% were taking concomitant medication	Data Used Responders (25% Y-BOCS) Leaving the study due to severe adverse events Leaving study early due to adverse events Leaving study early Clinical Global Impressions: global improvement Clinical Global Impressions: severity of illness NIMH Obsessive Compulsive Rating Yale-Brown Obsessive-Compulsive Scale: total	Group 1 N= 51  Paroxetine - (see Clomipramine for treatment regime); mean maximum daily dose 51mg+-11.53  Group 2 N= 20  Clomipramine - Patients entered maintenance phase at final dose of acute phase, increased or decreased as tolerated during first 4 weeks, then remained unchanged until end of maintenance phase; mean maximum daily dose 210mg+-52.82  Group 3 N= 12  Placebo - (see Clomipramine for treatment regime)	Partial relapse: Y-BOCS>=baseline score ORCGI severity increase >=1 from last observation

ACI/IN1000	T	T	T .	
ASKIN1999 Study Type: RCT Study Description: Allocation: random (no details) Duration of study: 8 weeks Blindness: Single blind Duration (days): Followup: 8 weeks Setting: Outpatient Notes: Country of study: Austria; Analysis: completer Info on Screening Process: Not reported	N= 42 Age: Mean 25 Sex: 16 males 20 females Diagnosis: OCD by DSM-IV Exclusions: OCD duration <1 year, aged <18 and >65 years, had significant concomitant physical disease, suicidal tendency, history of seizure or organic brain disorder, substance abuse within previous 6 months, other axis I diagnosis, had medication for 1 month, Y-BOCS<20, CGI-Severity<4 Notes: Mean baseline Y-BOCS 24.25	Data Used Leaving study early due to adverse events Adverse events Leaving study early Data Not Used Clinical Global Impressions: severity of illness - no variablility measure Yale-Brown Obsessive-Compulsive Scale: total - no variablility measure Yale-Brown Obsessive-Compulsive Scale: obsessions - no variablility measure Yale-Brown Obsessive-Compulsive Scale: compulsions - no variablility measure	Group 1 N= 22  Clomipramine - 50mg/d fixed dose initially, increased to maximum 150mg/d after 1 week as tolerated  Group 2 N= 20  Sertraline - 50mg/d fixed dose	
BISSERBE1997 Study Type: RCT Study Description: Allocation: random (no details); 1-2 week single-blind placebo washout phase; 16 week double-blind phase Blindness: Double blind Duration (days): Followup: 16 weeks Setting: Outpatient Notes: Country of study: France & Belgium; Analysis: ITT; study conducted at 19 sites Info on Screening Process: 173 screened, 5 excluded (details not given)	N= 168 Age: Mean 40 Range 19-73 Sex: 62 males 106 females Diagnosis: 100% OCD by DSM-III-R Exclusions: Aged <18 years; DSM-III-R OCD<1year; at end of washout phase, Y-BOCS<20, NIMH Global Obsessive Compulsive Scale (NIMH-OC) <7, CGI-S<4; HAM-D>17; Y-BOCS or NIMH-OC >=25% reduction Notes: mean OCD duration: 7 years; baseline Y-BOCS 27.65; baseline NIMH-OC 10; baseline HRSD 8.3	Data Used Responder (OCD/BDD) Attempted suicide Leaving study early due to adverse events Leaving study early Adverse events Data Not Used Yale-Brown Obsessive-Compulsive Scale: total - no variability measure Clinical Anxiety Scale - no variability measure Hamilton Rating Scale for Depression - no variability measure NIMH-OC - no variability measure Clinical Global Impressions: severity of illness - no variability measure	Group 1 N= 86  Sertraline - 50mg/day, increased in 50mg increments after 4 weeks and at 2-week intervals to max. 200 mg/d, mean final dose 129mg/d  Group 2 N= 82  Clomipramine - 50mg/day, increased in 50mg increments after 4 weeks and at 2-week intervals to max. 200 mg/d, mean final dose 90mg/d	Responders: Score of 1-3 on CGI-Improvement
BURNHAM Study Type: RCT Study Description: Allocation: random (no details), medications over-encapsulated, d/blind-labelled bottles used Duration of study: 12 weeks (2 wks placebo phase) Blindness: Double blind Duration (days): Followup: 12 weeks Setting: Not reported Notes: Country of study: US (13 centres); Analysis: ITT	N= 241 Age: Mean 38 Sex: 169 males 72 females Diagnosis: OCD by DSM-III-R Exclusions: OCD duration <6 months, Y-BOCS<16, NIMHOCS<7, other primary psychiatric disorders, major depressive disorder within last 3 months, history of bipolar affective disorders, serious concomitant medical condition, history of seizure disorders, requiring concomitant therapy with other psychotropic drugs, met DSM criteria for substance abuse, abnormal lab or EEG findings, myocardial infarction within a year of study, serious suicidal or homicidal risk, previously received paroxetine, hypersensitivity to clomipramine or other TCAs, or carbamazepine, lactating or pregnant mothers, ongoing behavioural therapy	Data Used Responders (CGI) Responders (25% Y-BOCS) Adverse events Leaving study early due to adverse events Leaving study early Clinical Global Impressions: global improvement NIMH Obsessive Compulsive Rating Yale-Brown Obsessive-Compulsive Scale: total Yale-Brown Obsessive-Compulsive Scale: obsessions Yale-Brown Obsessive-Compulsive Scale: compulsions	Group 1 N= 82  Paroxetine - Initial dose 20mg/d, 10mg increments to maximum 60mg/d as tolerated; mean final dose  Group 2 N= 82  Clomipramine - Initial dose 25mg/d, 25mg increments to maximum dose 250mg/d as tolerated  Group 3 N= 77  Placebo	Contact author for Y-BOCS total data (this sheet is missing in the pdf) CGI responder criteria: CGI severity of illness>=2 decrease from baseline (not extracted)

CCSG1991			
Study Type: RCT	- N= 520	Data Used	Group 1 N= 260
Study Description: Allocation: random; study 2: stratified randomization for those scoring HRSD >=17 and <=21; 1-year extension phase  Blindness: Double blind  Duration (days):  Followup: 10 weeks  Setting: Outpatient  Notes: Country of study: US, study 1 conducted at 9 centres, study 2 conducted at 12 centres; Analysis: ITT  Info on Screening Process: Study 1: 262 entered study, 23 withdrew before treatment period; Study 2: 313 entered study, 31 withdrew before treatment periosal, adverse reaction, failure to meet study criteria	Age: Mean 36 Sex: 221 males 280 females Diagnosis:     OCD by DSM-III Exclusions: Aged >=18 years, Y-BOCS<16; NIMH-OC<7; in study 1 HRSD-17>16, in study 2 HRSD-17>21, patients received behavioral therapy and previous clomipramine treatment Notes: Study 1: OCD duration 15 years, baseline Y-BOCS 26.2, baseline NIMH-OC 9.8, baseline HRSD 6.5; Study 2 (subgroup HRSD-17 n/N=263/281): OCD duration 16.3 years, baseline Y-BOCS 26.6, baseline NIMH-OC 10, baseline HRSD 7	Adverse events Remission (OCD) Leaving study early NIMH-OC Yale-Brown Obsessive-Compulsive Scale: tota	Clomipramine - Initial dose 25mg, increased to 50mg after 3 days, to 75mg after wk1, to 200mg by wk3, and to 250mg final wk; no. participants: study 1=118 mean final daily dose 234 5mg
DEVEAUGHGEISS1992			
Study Type: RCT	N= 60	Data Used	Group 1 N= 29
Study Description: Allocation: random (no details)	Age: Mean 14 Sex: 39 males 21 females	Leaving study early Leaving study early due to adverse events  Data Not Used	Placebo  Group 2 N= 31
Blindness: Double blind Duration (days):	Diagnosis:  OCD by DSM-III	NIMH-OC - no variablility measure	Clomipramine - 25mg days 1-4, increased to 75 mg by week 2, upto
	Exclusions: Aged <10 and >17 years, OCD duration <1	Children's Yale-Brown Obsessive-Compulsive Scale - no variablility measure	maxiumum 3 mg/kg or 200mg, whichever was less
Followup: 8 weeks Setting: Not reported	year, other psychiatric diagnoses, primary MDD, previous clomipramine treatment, concomittant behaviour therapy		140.000
Notes: Country of study: US; Study conducted at 5 centres; Analysis: ITT	Notes: OCD duration 3.7 years, baseline Y-BOCS 27.7		
Info on Screening Process: Not reported			
FALLON1998			
Study Type: RCT	- N= 54	Data Used	Group 1 N= 29
Study Description: Allocation: random (computer-generated random numbers)	Age: Mean 32 Sex: 33 males 21 females	Responder (OCD/BDD) Clinical Global Impressions: severity	Clomipramine IV - 25mg 2 days, 50mg 1 day, 75mg 1 day, 100mg 1 day, 125mg 1
Blindness: Double blind	Diagnosis:	Leaving study early Hamilton Rating Scale for Depression	day, 150mg 1 day, 175mg 1 day, 200mg 1 day, 250mg for 5 days
Duration (days):	OCD by DSM-III	NIMH-OC	Group 2 N= 25
Followup: 14 days	Exclusions: Aged <18 and >65 years, showed good response to oral clomipramine, Y-BOCS<17, medical	Yale-Brown Obsessive-Compulsive Scale: tota	Placebo
Setting: Mixed	disease, primary depression, comorbid substance abuse,		
Notes: Country of study: US; Analysis: Completer	Tourette's disorder, mania, psychosis  Notes: OCD duration 14.9 years, baseline Y-BOCS 27.9+-5; patient considered poorly responsive to oral CMI showed no or only partial improvement, or intolerance to CMI side- effects		

FLAMENT1985	_[			
Study Type: Cross-over  Study Description: Allocation: random (no details) Duration of study: 11 weeks (1 week evaluation, 5 weeks in each treatment) Blindness: Double blind Duration (days):  Setting: Inpatient at first week, 12 remained inpatient for rest of study, 5 outpatient Notes: Country of study: US; Analysis: completer Info on Screening Process: 67 screened, excluded: thought disorder (n=18), delusional (n=5), mental retardation or other neurologic damage (n=4), primary affective disorder (n=3), too mild (n=6), uncooperative with study procedure (n=5)	N= 27 Age: Mean 14 Sex: 18 males 9 females Diagnosis: OCD by DSM-III Exclusions: Ageds <6 and >18 years, presence of other mental disorder, OCD duration<1 year Notes: Included patients who had rituals &/or repetitive thoughts deemed unreasonable by patient, experienced as distressful and causing significant interference in home, school, or interpersonal functioning Mean age of onset 10.2+-3.9 years	Data Not Used Brief Psychiatric Rating Scale - no pre-cross-over data Leyton Obsessional Inventory (CV): resistance - no pre-cross-over data Leyton Obsessional Inventory (CV): interference - no pre-cross-over data NIMH Global Impairment - no pre-cross-over data NIMH Global Depression Scale - no pre-cross-over data NIMH Global Anxiety Scale - no pre-cross-over data Self-Rating Depression Scale - no pre-cross-over data Self-Rating Depression Scale - no pre-cross-over data Comprehensive Psychopathological Rating Scale: OC - no pre-cross-over data NIMH-OC - no pre-cross-over data Obsessive-Compulsive Rating Scale - no pre-cross-over data Leyton Obsessional Inventory (CV): symptom-no pre-cross-over data	Group 1 N= 19  Clomipramine - Fixed schedule: initial dose 50mg/d, 50mg increments daily to 200mg/d as tolerated  Group 2 N= 19  Placebo - Fixed schedule: initial dose 50mg/d, 50mg increments daily to 200mg/d as tolerated	
FOA2005 Study Type: RCT Study Description: Allocation: random (no details); indepentent assessor blind to randomization Duration of study: acute phase 12 weeks + discontinuation phase 12 weeks Blindness: Single blind Duration (days): Setting: Outpatient Notes: Country of study: US Info on Screening Process: 833 screened, 312 did not meet criteria: no OCD (93), received EX/RP or CMI (117), excluded for medical reason (22), comorbidity (75), other reasons (5), unwilling to participate (65), refused to receive CMI (56), or EX/RP (54) or placebo (6), other (191)	N= 122 Age: Mean 35 Sex: 64 males 58 females Diagnosis: Obsessive-compulsive neurosis by DSM-III-R Exclusions: Aged <18 and >70 years, OCD duration <1 year, Y-BOCS<17, current major depression, HAM-D>18, substance abuse or dependence within past 6 months, current schizotypal or borderline personality disorder, previous intensive treatment with CMI or ERP Notes: Duration of illness 16.4 years, baseline Y-BOCS scores 25	Data Used Responders (CGI) Yale-Brown Obsessive-Compulsive Scale: tota Leaving study early Clinical Global Impressions Adverse events NIMH-OC	Group 1 N= 36  Clomipramine - Fixed dose first 5 weeks, starting at 25mg/d, increasing to 200mg/d, increased to 250mg/d as tolerated, mean final dose 196mg/d  Group 2 N= 26  Placebo - Mean final dose for 209mg/d  Group 3 N= 29  Exposure + response prevention - 15 2-hr sessions over first 3 weeks and 2 home visits, weekly 45 min meetings for remaining 8 weeks, imaginal and in vivo exposure performed  Group 4 N= 31  BT + clomipramine - ERP + CMI, patients met individually with both a therapist and a psychopharmacologist, mean final dose 163+-65mg/d	Responders: CGI=<2
FREEMAN1994  Study Type: RCT  Study Description: Allocation: random (no details)  Blindness: Double blind  Duration (days):  Followup: 10 weeks  Setting: Outpatient  Notes: Country of study: UK; Analysis: ITT; study conducted at 9 centres	N= 66 Age: Mean 33 Sex: 35 males 30 females Diagnosis: OCD by DSM-III-R Exclusions: Age <18 and > 65 years; NIMH-OCS<7; Y-BOCS<16; HRSD>=20 or HAM-D item = 3 or 4 Notes: Duration of OCD: Fluvoxamine 47 months, Clomipramine 44.4 months; baseline Y-BOCS 26; baseline NIMH-OC 9.5	Data Used Adverse events Leaving study early due to adverse events Leaving study early Data Not Used Clinical Global Impressions: global improvement - no variablility measure NIMH-OC - no variablility measure Yale-Brown Obsessive-Compulsive Scale: total - no variablility measure	Group 1 N= 34  Fluvoxamine - 50mg increased to 100mg after 1 week and to 150mg after 2 weeks; between weeks 4 & 10 dose could be increase to 250mg, mean final dose 200mg  Group 2 N= 32  Clomipramine - 50mg increased to 100mg after 1 week and to 150mg after 2 weeks; between weeks 4 & 10 dose could be increase to 250mg, mean final dose 200mg	

HEWLETT1992				
Study Type: Cross-over  Study Description: Allocation: random (no details)  Duration of study: 26 months - 6 weeks in each of 4 medications separated by 2-week placebowashout periods  Blindness: Double blind  Duration (days): Mean 349  Notes: Country of study: US	N= 28 Age: Mean 33 Sex: 15 males 13 females Diagnosis:     OCD by DSM-III-R Exclusions: Aged <18 and >65 years; baseline Y-BOCS <16, concurrent diagnosis of schizophrenia, schizoaffective disorder, organic mental disorder, biploar disorder, major depression, were at suicidal, assualtive, or self-mutilative risk, history of alcohol or drug abuse, significant medical problems, concurrent behaviour therapy Notes: Duration of OCD 15.1+-8.9 years, 3 patients had comorbid major depression	Data Used Hamilton Rating Scale for Depression Hamilton Rating Scale for Anxiety Yale-Brown Obsessive-Compulsive Scale: tota	Group 1 N= 28  Clomipramine - Initial dose 25mg/d, increasing every 2-4 days to maximum dose of 250mg/d  Group 2 N= 28  Clonazepam - Initial dose 1 mg/d, increased everey 2-4 days to maximum 10 mg/d  Group 3 N= 28  Clonidine - Initial dose 0.1 mg/d, increased every 2-4 days to maximum dose of 1 mg/d  Group 4 N= 28  Diphenhydramine - Initial dose 25mg/d, increased every 2-4 days to a maximum of 250 mg/d	
INSEL1983B				
Study Type: Cross-over  Study Description: Allocation: random (no details) Duration of study: 2weeks washout+4 weeks placebo+6 weeks drug A+4 weeks placebo +6 weeks drug B+4 weeks placebo Blindness: Double blind Duration (days): Followup: 6 weeks Setting: Outpatient (n=7), inpatient (n=6) Notes: Country of study: US; Analysis: Info on Screening Process: 24 screened, 3 excluded on diagnostic grounds, 8 did not reach active drug trial due to medical abnormalities, no longer met inclusion criteria or conditions deteriorated during washout phase	N= 13 Age: Mean 32 Range 19-57 Sex: 8 males 5 females Diagnosis: OCD by DSM-III Exclusions: OCD duration<1 year, aged >17 years, primary depression or schizophrenia, major medical illness or history of leukotomy or other neurosurgery Notes: Mean duration of illness 6.4 years (range 1.5-13 years)	Data Used  Beck Depression Inventory Profile of Moods scale Leyton Obsessional Inventory: trait Leyton Obsessional Inventory: resistance Leyton Obsessional Inventory: interference Hamilton Rating Scale for Depression NIMH Global Depression Scale NIMH Global Anxiety Scale NIMH Global OCD Scale Obsessive-Compulsive Rating Scale Comprehensive Psychopathological Rating Scale: OC	Group 1 N= 12  Clomipramine - Initial dose 100mg/d, increased to 300mg/d as tolerated.  Protocol later changed to initial dose 50mg/d, with 50mg increments every two days to 300mg/d as tolerated  Group 2 N= 11  Clorgyline - Patients were given 30mg/d from the first day	Data not extractable before the point of cross-over
KATZ1990 Study Type: RCT Study Description: 1-year extension of patients in protocol 59 (i.e., patients with HRSD<17 at baseline) of CCSG1991 study Blindness: Double blind Duration (days): Setting: Outpatient Notes: Country of study: US, analysis: ITT	N= 124 Age: Sex: Diagnosis:  Exclusions: Patients less than minimally responsive to treatment on more than 2 occasions during the initial 10-week acute phase as judged by treating physician, presence of medical contraindications	Data Used Physician's Global Evaluation NIMH-OC Adverse events Leaving study early due to adverse events	Group 1 N= 110  Clomipramine - An initial fixed titration to 200mg/d was followed by flexible dosing up to 250mg/d, and based on individual case review, upto maximum 300mg/d  Group 2 N= 14  Placebo	

KHANNA1988				
Study Type: Cross-over	N= 18	Data Not Used	Group 1 N= 10	
Study Description: Allocation: random (no details) Duration of study: 16 weeks (6 weeks in each treatment + 4 weeks interval between treatments) Blindness: Double blind Duration (days): Followup: 6 weeks Setting: Not reported Notes: Country of study: India; Analysis: completer Info on Screening Process: Not reported	Age: Sex: 8 males 4 females Diagnosis: OCD by DSM-III  Exclusions: Primary depression, <2month gap between onset of obession and depression, history of melancholic or psychotic features, lack of response to 300mg amitriptyline or imipramine administered daily for 6 weeks, were not free of psychotropic drugs for or were receiving behaivour therapy at least 4 weeks before onset of study Notes: Two patients had only obsessions, 4 were checkers, 5 were washers, 1 had both checking and washing compulsions	Hamilton Rating Scale for Depression - no pre cross-over data  Maudsley Obsessive-Compulsive Inventory - no pre-cross-over data  Leyton Obsessional Inventory: trait - no pre-cross-over data  Leyton Obsessional Inventory: symptom - no pre-cross-over data  Leyton Obsessional Inventory: resistance - no pre-cross-over data  Leyton Obsessional Inventory: interference - no pre-cross-over data	days, 50mg increments every 3 days to 200mg/d as tolerated  Group 2 N=8  Nortriptyline - Initial dose 50mg/d for 3 days, 50mg increments every 3 days to 200mg/d as tolerated	
KORAN1996A				
Study Type: RCT	N= 79	Data Used	Group 1 N= 37	Response: Y-BOCS>=25%
Study Description: Allocation: randomization based on randomization schedule Blindness: Double blind Duration (days): Followup: 10 weeks Setting: Outpatient Notes: Country of study: US; Analysis: ITT Info on Screening Process: Not reported	Age: Sex: 43 males 36 females Diagnosis: OCD by DSM-III-R Exclusions: Aged <18 and >65 years, Y-BOCS<16, NIMH<7; DSM major depression, HRSD item1>2, total HRSD-17>21 Notes: Majority of patients were experiencing their first episode, patients received supportive psychotherapy from psychiatric clinician; baseline Y-BOCS 25; baseline HRSD- 17 7.9	Leaving study early due to adverse events Leaving study early Adverse events Responder (OCD/BDD) Hamilton Rating Scale for Depression Yale-Brown Obsessive-Compulsive Scale: tota  Data Not Used Patient Global Improvement - no data Clinical Global Improvement - no data	Fluvoxamine - 50mg for 4 days, 100mg for 4 days, 150mg for 6 days, and based on response upto 300mg; maximum mean dose achieved 255mg/day  Group 2 N= 42  Clomipramine - 25mg for 4 days, 50mg for 4 days, 100mg for 6 days, and based on response upto 250mg; maximum mean dose 201mg/day	reduction
KORAN1997				
Study Type: RCT  Blindness: Double blind  Duration (days):  Followup: 8 weeks  Setting: Inpatient during IV phase and outpatient during oral phase  Notes: Country of study: US, Analysis: ITT  Info on Screening Process: Not reported	N= 15 Age: Mean 31 Sex: 13 males 2 females Diagnosis: OCD by DSM-III-R Exclusions: Aged <15 and >50 years, OCD duration<1 year, Y-BOCS<17, primary MDD, other psychoses, IQ<70, drug or alcohol abuse, MAOI within 4 weeks, depot neuroleptic or fluoxetine within 6 weeks, any other psychotropic drug within 2 weeks of starting clomipramine Notes: OCD duration 13.35, baseline Y-BOCS 26.8,	Data Used Adverse events Responder (OCD/BDD) Yale-Brown Obsessive-Compulsive Scale: tota Leaving study early Data Not Used Hamilton Rating Scale for Depression - no dat	normal saline infusion and oral dose of 200mg clomipramine.	

LEONARD1989A Study Type: Cross-over Study Description: Allocation: random Duration of study: 12 weeks (2-week single- blind placebo + 5 weeks in each treatment) Blindness: Double blind Duration (days): Setting: Outpatient	N= 49 Age: Mean 14 Sex: 31 males 18 females Diagnosis: OCD by DSM-III Exclusions: Aged <6 and >18 years, mental retardation, thought disorder or delusional system, neurologic damage, primary affective disorder, primary eating disorder, uncooperativeness with study procedures. >20%	Data Not Used  NIMH Global Anxiety Scale - no pre-crossover data  NIMH Global Depression Scale - no pre-crossover data  Hamilton Rating Scale for Depression - no precrossover data  Leyton Obsessional Inventory (CV): symptom no pre-crossover data  Leyton Obsessional Inventory (CV):	Group 1 N= 49  Clomipramine - Fixed schedule: 25mg or 50mg (for those weighing less than and greater than 25mg respectively), weekly increments of 25 or 50mg to 250mg/d as tolerated, mean final dose 150+-53mg/d  Group 2 N= 49  Desipramine - Fixed schedule: 25mg or 50mg (for those weighing less than and greater than 25mg respectively), weekly	
Notes: Country of study: US Info on Screening Process: Not reported	improvement on Global OCD scale during initial placebo phase  Notes: Included patients with rituals and/or repetitive thoughts deemed unreasonable by the patient that were experienced as distressful and causing significant interference socially, mean age of onset 10.23+-5.8 years, mean duration of illness 3.63+-2.74 years	resistance - no pre-cross-over data Leyton Obsessional Inventory (CV): interference - no pre-cross-over data Comprehensive Psychopathological Rating Scale: OC - no pre-cross-over data NIMH Global OCD Scale - no pre-cross-over data	increments of 25 or 50mg to 250mg/d as tolerated, mean final dose 150+-53mg/d  Group 3 N= 49  Placebo	
ECONARD1991A  Study Type: RCT  Study Description: 8-month continuation study, with all patients receiving clomipramine in months 1-3 and 6-8, and half having desipramine substitution in months 4-5  Blindness: Double blind  Duration (days):  Setting: Outpatient  Notes: Country of study: US  Info on Screening Process: 28 patients receiving maintenance clomipramine therapy, 26 agreed to participate.	N= 26 Age: Mean 15 Range 8-19 Sex: 15 males 11 females Diagnosis: OCD by DSM-III Exclusions: Evidence of mental retardation, thought disorder or delusional system, neurologic damage, primary affective disorder, or primary eating disorder; symptoms that were too mild at the time of evaluation; uncooperativeness with study procedures.  Notes: Symptoms had to be present for at least one year.	Data Used Relapse (Physician's Relapse Scale) NIMH-OC Leaving study early Comprehensive Psychopathological Rating Scale: OC Data Not Used Adverse events - no extractable data	Group 1 N= 16  Clomipramine - Patients received clomipramine for the entire 8-month trial. Dosage was kept constant for each patient throughout. Daily dose did not exceed 250mg.  Group 2 N= 10  Desipramine - Patients received clomipramine for the first 3 months, then had desipramine blindly substituted for 2 months, before returning to clomipramine for the last 3 months of the trial.	Relapse: yes-no rating on Physician's relapse scale
LOPEZIBOR1996  Study Type: RCT  Study Description: Allocation: random (no details); 8-wk acute phase, responders continued with low dose d/blind treatment, nonresponders high dose d/blind treatment  Blindness: Double blind  Duration (days):  Followup: 8 weeks + 12 weeks  Setting: Not reported  Notes: Country of study: Spain & France; study conducted at 5 sites; Analysis: ITT	N= 55 Age: Mean 34 Sex: 21 males 34 females Diagnosis:     OCD by DSM-III-R Exclusions: Aged <18 years; duration of OCD<6 months; Y-BOCS<16, CGI<4 Notes: OCD duration: not reported; baseline Y-BOCS 26.6; baseline HRSD 15.25; MADRS: 24.3	Data Used Clinical Global Impressions: global improvement Covi Anxiety Scale Montgomery-Asberg Depression Rating Scale Comprehensive Psychopathological Rating Scale: OC Clinical Global Impressions: severity Hamilton Rating Scale for Depression Yale-Brown Obsessive-Compulsive Scale: tota Leaving study early due to adverse events Responder (OCD/BDD) Leaving study early	Group 2 N= 25  Clomipramine - 150mg/d during acute phase, 100mg during continuation phase in responders, 200mg during continuation	Responders: Y-BOCS>=25% reduction

MARCH1990				
Study Type: RCT	- N= 16	Data Used	Group 1 N= 8	
	Age: Mean 15	Leaving study early due to adverse events	Clomipramine - Initial dose 25mg/d for 4	
Blindness: Double blind	Sex: 11 males 5 females	Leaving study early	days, 50mg for 3 days to a maxiumum of	
Duration (days):	Diagnosis:	NIMH-OC Yale-Brown Obsessive-Compulsive Scale: total	3mg/kg per day; mean daily dose 190mg/d	
Followup: 8 weeks	Evaluations: Agod, 410 and 517 years: OCD duration 41 year	raie-brown Obsessive-Compulsive Scale. lots	Group 2 N= 8	
Setting: Outpatients	Exclusions: Aged <10 and >17 years; OCD duration<1 year, receiving behavioural or other forms of psychotherapy		Placebo	
Notes: Country of study: US, Analysis: ITT	Notes: Baseline Y-BOCS 26			
Info on Screening Process: Not reported				
MILANFRANCHI1997				
Study Type: RCT	N= 26	Data Used	Group 1 N= 13	
Study Description: Allocation: random (no details)	Age: Mean 27 Sex: 15 males 11 females	Responder (OCD/BDD) Leaving study early	Fluvoxamine - Initial dose 50mg/d, increased to upto 300mg/d in 2 weeks and maintained for 7 weeks	
Blindness: Double blind	Diagnosis:	Yale-Brown Obsessive-Compulsive Scale: total Leaving study early due to adverse events	Group 2 N= 13	
Duration (days):	OCD by DSM-III-R	Leaving study early due to deverse events	Clomipramine - Initial dose 50mg/d,	
Followup: 9 weeks	Exclusions: Aged <18 amd >65 years; NIMH-OC<7; HRSD-17>17; Y-BOCS<17;		increased to upto 300mg/d in 2 weeks and maintained for 7 weeks	
Setting: Outpatient	Notes: Mean age at first consultation for OCD: fluvoxamine		and maintained for 7 weeks	
Notes: Country of study: Italy; Analysis: ITT	20.9 years, clomipramine 22.5 years; baseline Y-BOCS:			
Info on Screening Process: Not reported	fluvoxamine 29.7 (+-5.5), clomipramine 27.5 (+-6.8); baseline HRSD-17: fluvoxamine 10.3 (+-3), clomipramine 9			
	(+-4)			
MONTGOMERY1990				
Study Type: Cross-over	- N= 14	Data Used	Group 1 N= 7	
Blindness: Double blind	Age: Mean 42 Range 27-54	Comprehensiv Psychopathological Rating Sc - 6 item	Clomipramine - 75 mg fixed dose	
Duration (days):	Sex: 5 males 9 females	o item	Group 2 N= 7	
Followup: 3 weeks	Diagnosis: OCD by DSM-III		Placebo	
Setting: Not reported	Exclusions: OCD duration<5 years, primary depression or			
Notes: Country of study: UK	significant secondary depression, significant physical illness			
Info on Screening Process: Not reported				
MUNDO2001				
Study Type: RCT	N= 227	Data Used Clinical Anxiety Scale	Group 1 N= 115	Y-BOCS endpoint scores: S.D.s not reported, contact
Study Description: Allocation: random (no details)	Age: Mean 35 Sex: 124 males 103 females	Clinical Global Impressions: global improvement	Fluvoxamine - 50mg/d days 1-4, 100mg/d days 5-8, 150mg/d days 9-14, 150-300mg from day 15 till end of study, mean final	author; Response: Y- BOCS>=35% reduction
Blindness: Double blind	Diagnosis:	Clinical Global Impressions: severity	dose 212mg/d+-62	
Duration (days): Mean 62	100% OCD by DSM-III-R	Responder (OCD/BDD)	Group 2 N= 112	
Followup: 10 weeks	Exclusions: Aged <18 and >65 years; NIMH-OC<7; depression present before onset of OCD, was primary to	Leaving study early due to adverse events	Clomipramine - 50mg/d days 1-4, 100mg/d days 5-8, 150mg/d days 9-14,	
Setting: Not reported	OCD; HRSD-17>19, HRSD-item1>2; treatment with psychotropic drugs within 1 week of study or 5 weeks for	Leaving study early Adverse events	150-300mg from day 15 till end of study,	
Notes: Country of study: Europe; study conducted at 40 centres; Analysis: ITT	fluvoxamine	Hamilton Rating Scale for Depression NIMH-OC	mean final dose 206mg/d+-54	
Info on Screening Process: (ITT: defined as patients who received >=1 dose of study medication and provided >=1 valid post-baseline efficacy evaluation either while on study medication or within 3 days of drug discontinuation)	Notes: Benzodiazepine treatment permitted; OCD duration not reported baseline mean Y-BOCS 26; baseline mean NIMH-OC 9.8; baseline mean HRSD 12.2	Yale-Brown Obsessive-Compulsive Scale: total		

	,			
PATO1991 Study Type: Cross-over Study Description: Cross-over after 6 weeks of active drug treatment. Blindness: Double blind Duration (days):  Notes: Country of study: US Mean (SD) doses were 225(49) mg/day for clomipramine and 58 (7) mg/day for buspirone.	N= 20 Age: Mean 35 Sex: no information Diagnosis:     OCD by DSM-III-R  Notes: Patients had experienced obsessive-compulsive symptoms for a minimum of one year. A minimum rating of 4 on the NIMH global OC scale was required for inclusion in the study.	Data Used NIMH-OC Hamilton Rating Scale for Depression Yale-Brown Obsessive-Compulsive Scale: tota Leaving study early due to adverse events Leaving study early	Group 1 N= 9  Clomipramine - Each patient's dose was increased to the maximum that could be tolerated, up to 250mg/day. Patients achieved the maximum doses by day 14 and were maintained on these for the remaining 4 weeks of of the 6-week phase.  Group 2 N= 9  Buspirone - Each patient's dose was increased to the maximum that coould be tolerated, up to 60mg/day. Patients achieved the maximum doses by day 14 and were maintained on these for the remaining 4 weeks of the 6-week phase.	
SMERALDI1992 Study Type: RCT Study Description: Allocation: random (no details) Blindness: Double blind Duration (days): Followup: 12 weeks Setting: Not reported Notes: Country of study: Italy, Analysis: per protocol Info on Screening Process: Not reported	N= 12 Age: Mean 29 Range 18-50 Sex: 10 males 2 females Diagnosis: OCD by DSM-III-R Exclusions: Contraindication to tricyclic or serotonergic treatment Notes: 7 patients had comorbid recurrent major depression; OCD duration not reported; baseline Y-BOCS 28.6, baseline MADRS 15.2	Data Used  Leaving study early due to adverse events  Leaving study early  Montgomery-Asberg Depression Rating Scale  Yale-Brown Obsessive-Compulsive Scale: tota		
STEIN1992 Study Type: RCT Blindness: Double blind Duration (days): Followup: 10 weeks Setting: Inpatient Notes: Country of study: US; Analysis: Info on Screening Process: Not reported	N= 44 Age: Mean 35 Sex: 23 males 21 females Diagnosis: OCD by DSM-III Exclusions: Aged <18 and >65 years, Self-rating Obsessional Neurotic Scale <56, Self-rating Self-rating Obsessive-Compulsive Personality Inventory <56, primary depression Notes: Baseline Obsessive-Compulsive Rating Scale 15.15	Data Used Responder (OCD/BDD) Leaving study early Self-Rating Obsessive-Compulsive Personality Data Not Used Obsessive-Compulsive Rating Scale - no extractable data Self-Rating Obsessional Neurotic Scale - no extractable data	Group 1 N= 21  Clomipramine - Initial dose 25mg/d, increased by 25mg/d every 3-4 days to 100mg/d by day 10, increased to 150mg at day 14, 200mg day 21, 250mg day 28, and 300mg after 7 weeks  Group 2 N= 23  Placebo	Responders: CGI 'much improved' or 'very much improved'.

TUODENIAGOA	1	T	T	I
THOREN1980A  Study Type: RCT  Study Description: The effect of clomipramine was compared with that of nortriptyline and placebo in a 5-week randomized double-blind trial.  Blindness: Double blind  Duration (days):  Setting: Inpatient.  Notes: Country: Sweden.  Info on Screening Process: 38 patients were referred to the study, 9 did not meet inclusion criteria and 3 were unwilling to be hospitalized.	N= 24 Age: Mean 40 Range 19-61 Sex: 5 males 19 females Diagnosis: OCD  Notes: Diagnosis of OCD was based on the occurrence of pronounced compulsive rituals and thoughts in the absence of signs or symptoms of schizophrenia or organic brain disorder.	Data Used Leyton Obsessional Inventory: interference Leyton Obsessional Inventory: resistance Leyton Obsessional Inventory: trait Leyton Obsessional Inventory: symptom OCD Scale (CPRS) Data Not Used Home Incapacity Scale-Ward Incapacity Scale - amelioration score Individual Self-rating Scale - amelioration scor Obsessional symptoms	Group 1 N= 8  Clomipramine - Dosage was increased by 50mg daily up to a final dosage of 50mg 3 times a day, which was then given throughout the study.  Group 2 N= 8  Nortriptyline - Dosage was increased by 50mg daily up to a final dosage of 50mg 3 times a day, which was then given throughout the study.  Group 3 N= 8  Placebo	Obsessional symptoms not extracted as not clear how measured
VALLEJO1992 Study Type: RCT  Blindness: Double blind Duration (days): Followup: 12 weeks Setting: Outpatient Notes: Country of study: UK; Analysis: completer Info on Screening Process: 42, 12 excluded due to pregnancy, under age, psychopathy, schizophrenia, hysteria, anankastic depression, refusal to give signed informed consent	N= 30 Age: Mean 32 Sex: 12 males 14 females Diagnosis:     OCD by DSM-III     31% MDD Exclusions: Aged <18 and >65 years, OCD duration <2 years, primary depression, other psychoses, physical illness, organic brain pathology, pregnant or breast-feeding Notes: OCD duration 17 years	Data Used  Leaving study early due to adverse events  Leaving study early  Hamilton Rating Scale for Depression  Hamilton Rating Scale for Anxiety  Maudsley Obsessive-Compulsive Inventory	Group 1 N= 14  Phenelzine - 45mg/d weeks 1&2, 60mg/d weeks 3 & 4, 75mg/d weeks 5-12  Group 2 N= 16  Clomipramine - 75mg/d weeks 1&2, 150mg/d weeks 3 & 4, 225mg/d weeks 5-12	
VOLAVKA1985 Study Type: RCT Study Description: Allocation: random (computer-generated random numbers in blocks of six patients) Blindness: Double blind Duration (days): Followup: 12 Setting: Outpatient Notes: Country of study: US; Analysis: Info on Screening Process: Not reported	N= 23 Age: Mean 30 Range 19-54 Sex: 11 males 12 females Diagnosis: OCD Exclusions: Aged <18 and >65 years, OCD duration <1 year, primary depression, significant medical disease, schizophrenia, pregnancy, concomittant use of other psychotropic drugs, alcohol or drug abuse Notes: Did not use standardised diagnostic tool	Data Used Global Evaluation of Efficacy Leaving study early due to adverse events Leaving study early Self-Rating Obsessional Neurotic Scale Hamilton Rating Scale for Depression Self-Rating Obsessive-Compulsive Personality	Group 1 N= 11  Clomipramine - Gradual increase (by 50mg/d each week) to 300mg/d, maximum dose was reached by week 5  Group 2 N= 12  Imipramine - Gradual increase (by 50mg/d each week) to 300mg/d, maximum dose was reached by week 5	

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ZOHAR1987A				
Study Type: Cross-over	N= 14		Group 1 N= 10	
Study Description: Allocation: random (no details) Duration of study: 2-4 weeks placebo + 16 weeks (6 weeks in each treatment with 4 week placebo interval) Blindness: Double blind Duration (days):  Setting: Outpatient Notes: Country of study: US; Analysis: completer Info on Screening Process: 26 referrals, excluded: other major psychopathology (n=3), NIMH Global OC<6 (n=2), needed hospitalization (n=1), refused to stop medication (n=3), disagreed with study protocol (n=2)	Age: Sex: no information Diagnosis: OCD by DSM-III Exclusions: Other primary axis 1 disorder, aged <18 years, NIMH Global OC <6	NIMH Global Impairment - no pre-cross-over data  Hamilton Rating Scale for Depression - no pre cross-over data  NIMH Global OCD Scale - no pre-cross-over data  NIMH Global Depression Scale - no pre-cross-over data  NIMH Global Anxiety Scale - no pre-cross-over data  Comprehensive Psychopathological Rating Scale: OC - no pre-cross-over data	67mg/d  Group 2 N= 10  Desigramine - Initial dose 50mg/d, 50mg	
ZOHAR1996A				
Study Type: RCT	N= 399	Data Used	Group 1 N= 201	Response: Y-BOCS>=25%
Study Description: Allocation: random (no details), on a 2:1:1 ratio of paroxetine:clomipramine:placebo; responders could continue into long-term treatment Blindness: Double blind Duration (days): Followup: 12 weeks	Age: Range 16-74 Sex: 190 males 209 females Diagnosis: OCD by DSM-III-R Exclusions: Aged <16 and >70 years, OCD duration <6 months, Y-BOCS<16, NIMH-OC<7, primary diagnosis of MDD or a psychiatric disorder within previous 3 months Notes: OCD duration: 15 years	Clinical Global Impressions: severity of illness Yale-Brown Obsessive-Compulsive Scale: tota Montgomery-Asberg Depression Rating Scale Responder (OCD/BDD) Adverse events Leaving study early Leaving study early due to adverse events Symptom Checklist-90	20mg, and then upto 60mg from day 14	reduction
Setting: Not reported	,		Group 3 N= 99	
Notes: Country of study: multi-national in Europe; Analysis: ITT			Placebo	
Info on Screening Process: 437 enrolled, 406 received active medication, 7 excluded for technical reasons				

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# Appendix 16: Included/excluded studies table for the Clinical Question: 1.03 SSRIs

Characteristics of Included Studies

Methods	Participants	Outcomes	Interventions	Notes
ANSSEAU 1				
Study Type: RCT  Study Description: Alloction: random (computer-generated) Study duration: acute phase(12 wks ZOHAR1996)+responders-only maintenance (30 wks)+relapse-prevention (8 wks) Blindness: Double blind Duration (days):  Setting: Not reported Notes: Country of study: Europe (27 centres); Analysis: ITT Long-term treatment of responders from ZOHAR1996 study	N= 83 Age: Mean 39 Range 17-66 Sex: 33 males 50 females Diagnosis:     OCD by DSM-III-R Exclusions: Non-responders (25% or greater reduction on Y-BOCS and 2-point or greater reduction on CGI severity subscale) to acute phase trial, developed other Axis I diagnosis, non-compliant during acute phase, required psychotropic medication other than study drug, at serious risk of suicide, became pregnant Notes: Mean OCD duration 17.47 years, 45% were taking concomitant medication	Data Used Responders (25% Y-BOCS) Leaving the study due to severe adverse events Leaving study early due to adverse events Leaving study early Clinical Global Impressions: global improvement Clinical Global Impressions: severity of illness NIMH Obsessive Compulsive Rating Yale-Brown Obsessive-Compulsive Scale: total	Group 1 N= 51  Paroxetine - (see Clomipramine for treatment regime); mean maximum daily dose 51mg+-11.53  Group 2 N= 20  Clomipramine - Patients entered maintenance phase at final dose of acute phase, increased or decreased as tolerated during first 4 weeks, then remained unchanged until end of maintenance phase; mean maximum daily dose 210mg+-52.82  Group 3 N= 12  Placebo - (see Clomipramine for treatment regime)	Partial relapse: Y-BOCS>=baseline score OR CGI severity increase >=1 from last observation
ANSSEAU_2 Study Type: RCT Study Description: Allocation: random (computer-generated), patients from maintenance phase re-randomized within group (PARvCMIvPbo) to drug or pbo, except for Pbo gp Blindness: Double blind Duration (days): Setting: Not reported Notes: Country of study: Europe (27 centres); Analysis: ITT	N= 49 Age: Mean 40 Range 17-70 Sex: 24 males 25 females Diagnosis: OCD by DSM-III-R Exclusions: Did not complete maintenance phase; did not consent to further treatment Notes: Patients who completed maintenance phase were continued onto relapse-prevention phase Mean OCD duration 16.08 years; 45% taking concomitant medication	Data Used Relapse Symptom Checklist-90 Leaving the study due to severe adverse events Leaving study early due to adverse events Leaving study early Clinical Global Impressions: efficacy index NIMH Obsessive Compulsive Rating Yale-Brown Obsessive-Compulsive Scale: compulsions	Group 1 N= 14  Paroxetine/paroxetine - Mean maximum daily dose 35.71+-14  Group 2 N= 18  Paroxetine/placebo - Paroxetine tapered off over 2-week period  Group 3 N= 5  Clomipramine/clomipramine - Mean maximum daily dose 230+-44.72  Group 4 N= 7  Clomipramine/placebo - Clomipramine tapered off over 2-week period  Group 5 N= 5  Placebo	Partial relapse: Y-BOCS>=baseline score ORCGI severity increase >=1 from last observation
ASKIN1999  Study Type: RCT  Study Description: Allocation: random (no details) Duration of study: 8 weeks Blindness: Single blind Duration (days): Followup: 8 weeks Setting: Outpatient Notes: Country of study: Austria; Analysis: completer Info on Screening Process: Not reported	N= 42 Age: Mean 25 Sex: 16 males 20 females Diagnosis: OCD by DSM-IV Exclusions: OCD duration <1 year, aged <18 and >65 years, had significant concomitant physical disease, suicidal tendency, history of seizure or organic brain disorder, substance abuse within previous 6 months, other axis I diagnosis, had medication for 1 month, Y-BOCS<20, CGI-Severity<4 Notes: Mean baseline Y-BOCS 24.25	Data Used Leaving study early due to adverse events Adverse events Leaving study early Data Not Used Clinical Global Impressions: severity of illness - no variablility measure Yale-Brown Obsessive-Compulsive Scale: total - no variability measure Yale-Brown Obsessive-Compulsive Scale: obsessions - no variability measure Yale-Brown Obsessive-Compulsive Scale: compulsions - no variability measure	Group 1 N= 22  Clomipramine - 50mg/d fixed dose initially, increased to maximum 150mg/d after 1 week as tolerated  Group 2 N= 20  Sertraline - 50mg/d fixed dose	

BAILER1995				
Study Type: RCT	N= 44	Data Used	Group 1 N= 20	Full relapse: Y-
Study Description: Allocation: random (computer-generated code, in blocks of 4) Study duration: 6-mo open-label paroxetine + 6-mo d/blind Par v Pbo Blindness: Double blind Duration (days): Setting: Outpatient Notes: Country of study: US (conducted across 13 centres); Analysis: ITT This study is a 12-month extension of the PARvCMIvPbo trial BURNHAM Info on Screening Process: 154 entered open-label phase, 78 eligible for randomization	Age: Mean 41  Sex: 26 males 18 females  Diagnosis:  OCD by DSM-III-R  Exclusions: Participants from open-label phase not showing a Y-BOCS reduction >=25% from baseline and not showing a 2-point or greater reduction on the severity of illness subscale of CGI, patients leaving the acute-phase trial early, other Axis I disorder, history of major depressive disorder within last 6 months, BDD diagnosis, serious medical condition, history of seizure disorder, required concomitant psychotropic drugs for sleep disturbance, substance abuse, at risk of homicide or suicide, received study drug within 30 days of open-label phase, women of child-bearing potential not observing adequate contraception, ongoing behavioural therapy  Notes: Included patients from acute phase trial who in the investigator's opinion would benefit from continued paroxetine therapy. Six-month open-label paroxetine 20-60mg/d (n=154)  Comorbid Generalised Anxiety disorder and Social phobia most common	Relapse Leaving study early due to adverse events Leaving study early Clinical Global Impressions: global improvement Clinical Global Impressions: efficacy index Clinical Global Impressions: severity of illness NIMH Obsessive Compulsive Rating Yale-Brown Obsessive-Compulsive Scale: tota	Paroxetine - Fixed dose 20-60mg/d  Group 2 N= 24  Placebo	BOCS>=baseline score AND CGI severity increase >=1 from last observation Partial relapse: Y- BOCS>=baseline score OR CGI severity increase >=1 from last observation
BEASLEY1992				
Study Type: RCT	N= 355	Data Used	Group 1 N= 266	Acute phase: Used only
Study Description: Allocation: random (no details); 13-week d/blind phase, responders continued onto d/blind extension phase with previously assigned d/blind treatment Blindness: Double blind Duration (days): Followup: 13 weeks + 24 weeks Setting: Outpatient Notes: Country of study: US; Analysis: ITT Info on Screening Process: Not reported	Age: Mean 37 Range 14-70 Sex: 159 males 196 females Diagnosis: OCD by DSM-IV Exclusions: Aged <14 and >70 years; OCD <1 year duration; comorbid axis I disorders excluding depression Notes: baseline Y-BOCS 24; baseline HRSD 9.3	Leaving study early due to adverse events Responder (OCD/BDD) Yale-Brown Obsessive-Compulsive Scale: tota Data Not Used Number with suicidal ideation - no data HRSD-item 3 mean score - no variability measure	Fluoxetine 20 mg - Fixed daily doses Fluoxetine 40 mg - Fixed daily doses Fluoxetine 60 mg - Patients received a dose of 40 mg/day for 1 week before receiving the higher dose  Group 2 N= 89 Placebo	item-3 for Hamilton Depression Scale; 6 patients were excluded from HRSD item-3 analysis; HRSD-item 3 mean change score (S.D.s not given); Continuation phase: response: Y-BOCS>=35% reduction
BERGERON2002  Study Type: RCT  Study Description: Allcoation: random (no details); 1-week placebo phase, 24-weeks double-blind phase  Blindness: Double blind  Duration (days): Mean 168  Followup: 24 weeks  Setting: Not reported  Notes: Country of study: Canada; Analysis: ITT  Info on Screening Process: Not reported	N= 150 Age: Mean 37 Range 18-64 Sex: 70 males 80 females Diagnosis: 100% OCD by DSM-IV Exclusions: Aged <18 and >65 years; OCD <6 months duration; Other Axis 1 disorder, including major depressive episode; >25% reduction in Y-BOCS or NIMH-OC or a >2-point reduction on CGI scale during placebo phase Notes: Mean OCD duration 20.4 years; baseline Y-BOCS; baseline Y-BOCS 25.7; baseline NIMH-OC 10; previous major depression episode n=30	Data Used Adverse events NIMH-OC Hamilton Rating Scale for Depression Remission (OCD) Leaving study early due to adverse events Leaving study early	Group 1 N= 73  Fluoxetine - 20 mg, if patient did not show improvement at different time points (4, 6, 8 weeks), dosage further increased: (a) at 4 weeks increased to 40mg, (b) at 6 weeks increased to 60mg, or (c) at 8 weeks increased to 80mg. Mean final dose 56.7mg +-23  Group 2 N= 77  Sertraline - 50 mg, if patient did not show improvement at different time points (4, 6, 8 weeks), dosage further increased: (a) at 4 weeks increased to 100mg, (b) at 6 weeks increased to 150mg, or (c) at 8 weeks increased to 200mg. Mean dose 139.5mg +-58.5	change score and endpoint scores given

BISSERBE1997  Study Type: RCT  Study Description: Allocation: random (no details); 1-2 week single-blind placebo washout phase; 16 week double-blind phase  Blindness: Double blind  Duration (days):  Followup: 16 weeks  Setting: Outpatient  Notes: Country of study: France & Belgium;  Analysis: ITT; study conducted at 19 sites  Info on Screening Process: 173 screened, 5 excluded (details not given)	N= 168 Age: Mean 40 Range 19-73 Sex: 62 males 106 females Diagnosis: 100% OCD by DSM-III-R Exclusions: Aged <18 years; DSM-III-R OCD<1year; at end of washout phase, Y-BOCS<20, NIMH Global Obsessive Compulsive Scale (NIMH-OC) <7, CGI-S<4; HAM-D>17; Y-BOCS or NIMH-OC >=25% reduction Notes: mean OCD duration: 7 years; baseline Y-BOCS 27.65; baseline NIMH-OC 10; baseline HRSD 8.3	Data Used Responder (OCD/BDD) Attempted suicide Leaving study early due to adverse events Leaving study early Adverse events Data Not Used Yale-Brown Obsessive-Compulsive Scale: total - no variablility measure Clinical Anxiety Scale - no variablility measure Hamilton Rating Scale for Depression - no variablility measure NIMH-OC - no variablility measure Clinical Global Impressions: severity of illness - no variablility measure	Group 1 N= 86  Sertraline - 50mg/day, increased in 50mg increments after 4 weeks and at 2-week intervals to max. 200 mg/d, mean final dose 129mg/d  Group 2 N= 82  Clomipramine - 50mg/day, increased in 50mg increments after 4 weeks and at 2-week intervals to max. 200 mg/d, mean final dose 90mg/d	Responders: Score of 1-3 on CGI-Improvement
BOGETTO2002 Study Type: RCT Study Description: Allocation: random (no details) Blindness: Single blind Duration (days): Followup: 12 weeks Setting: Outpatient Notes: Country of study: Italy; Analysis: per protocol Info on Screening Process: No details	N= 32 Age: Sex: no information Diagnosis: OCD by DSM-IV Exclusions: Age <18 years, OCD <1 years duration, Y-BOCS<16, HAM-D>14, MDD diagnosis Notes: OCD duration not reported, baseline Y-BOCS 23	Data Used Yale-Brown Obsessive-Compulsive Scale: tota Adverse events Leaving study early due to adverse events Leaving study early	Group 1 N= 17  Sertraline 150mg in 5 days - 50mg on days 1 & 2, 100mg on days 3 & 4, 150mg from day 5 onward  Group 2 N= 15  Sertraline 150mg in 15 days - 50mg first 7 days, 100mg days 8-14, 150mg from day 15 onward	
BURNHAM  Study Type: RCT  Study Description: Allocation: random (no details), medications over-encapsulated, d/blind-labelled bottles used Duration of study: 12 weeks (2 wks placebo phase)  Blindness: Double blind Duration (days):  Followup: 12 weeks  Setting: Not reported  Notes: Country of study: US (13 centres); Analysis: ITT	N= 241 Age: Mean 38 Sex: 169 males 72 females Diagnosis: OCD by DSM-III-R Exclusions: OCD duration <6 months, Y-BOCS<16, NIMHOCS<7, other primary psychiatric disorders, major depressive disorder within last 3 months, history of bipolar affective disorders, serious concomitant medical condition, history of seizure disorders, requiring concomitant therapy with other psychotropic drugs, met DSM criteria for substance abuse, abnormal lab or EEG findings, myocardial infarction within a year of study, serious suicidal or homicidal risk, previously received paroxetine, hypersensitivity to clomipramine or other TCAs, or carbamazepine, lactating or pregnant mothers, ongoing behavioural therapy	Data Used Responders (CGI) Responders (25% Y-BOCS) Adverse events Leaving study early due to adverse events Leaving study early Clinical Global Impressions: global improvement NIMH Obsessive Compulsive Rating Yale-Brown Obsessive-Compulsive Scale: tota Yale-Brown Obsessive-Compulsive Scale: obsessions Yale-Brown Obsessive-Compulsive Scale: compulsions	Group 1 N= 82  Paroxetine - Initial dose 20mg/d, 10mg increments to maximum 60mg/d as tolerated; mean final dose  Group 2 N= 82  Clomipramine - Initial dose 25mg/d, 25mg increments to maxiumum dose 250mg/d as tolerated  Group 3 N= 77  Placebo	Contact author for Y-BOCS total data (this sheet is missing in the pdf) CGI responder criteria: CGI severity of illness>=2 decrease from baseline (not extracted)

CARPENTER				
Study Type: RCT	N= 194	Data Used	Group 1 N= 96	Relapse: CGI global
Study Description: Allocation: random Study duration: 16 wks open-label paroxetine + 16 wks d/blind phase (responders from open- label phase) + 5-wks dose-tapering Blindness: Double blind Duration (days): Setting: Outpatient Notes: Country of study: US (across 24 centres) Info on Screening Process: 335 patients entered open-label paroxetine phase, exclusions: adverse events (n=40), lack of efficacy (n=39), did not meet efficacy response criteria (n=20), did not return for any post- randomization evaluations (n=1)	Age: Mean 12 Range 6-18  Sex: 105 males 88 females  Diagnosis:  OCD by DSM-IV  Exclusions: Aged <8 and >17 years, CY-BOCS >=16, OCD duration-3 years, other Axis I disorder, present serious medical condition, mental retardation, history of seizure disorders, requiring or receiving other psychotropic drugs, substance abuse diagnosis, abnormal laboratory findings, at serious suicidal or homicidal risk, receiving other investigational drugs with 30 days of study, failed 2 or more trials with SSRIs or CBT, intolerance to paroxetine, childbearing potential, not observing adequate contraception, receiving BT or psychotherapy  Notes: Mean age of OCD onset 10 years; mean baseline CY-BOCS 9.8  Open-label paroxetine (10-60mg/d); responders (Y-BOCS<25% reduction from baseline + CGI Global Improvement score of 1 or 2) to open-label paroxetine continued onto d/blind phase	Responders (CGI-I) Responders (25% Y-BOCS) Relapse Global Assessment of functioning Adverse events Leaving study early due to adverse events Leaving study early Hamilton Rating Scale for Depression Hamilton Rating Scale for Anxiety Yale-Brown Obsessive-Compulsive Scale: tota Yale-Brown Obsessive-Compulsive Scale: obsessions Yale-Brown Obsessive-Compulsive Scale: compulsions	Paroxetine - Final dose achieved in open- label phase  Group 2 N= 98  Placebo - Dose tapering of paroxetine conducted in a d/blind manner	improvement (a) increase by 1point for 2 consecutive visits; (b) increase >=2 points in a visit; (c) >=5 at any time
CHOUINARD1990 Study Type: RCT Study Description: Allocation: random (no details) Blindness: Double blind Duration (days): Followup: 8 weeks Setting: Not reported Notes: Country of study: US; Analysis: ITT Info on Screening Process: Not reported	N= 87 Age: Mean 37 Sex: 74 males 13 females Diagnosis: OCD by DSM-III Exclusions: Age<18 years; HRSD>15; HRSD depression item>1 Notes: OCD duration 10 years; baseline Y-BOCS 23; baseline NIMH-OC 9.5	Data Used  Leaving study early due to adverse events Leaving study early  Data Not Used  NIMH-OC - no variablility measure  Yale-Brown Obsessive-Compulsive Scale: total - no variablility measure	Group 1 N= 43  Sertraline - Patients were titrated from 50-200mg during first 2 weeks, maintained until the 8th week and titrated off during the last 2 weeks; mean overall dose 160.1mg, mean final dose 180mg+-315  Group 2 N= 44  Placebo - Patients were titrated from 50-200mg during first 2 weeks, maintained until the 8th week and titrated off during the last 2 weeks, mean overall dose 167.8mg, mean final dose 150mg+-180	Measure of variance: root mean square error
FREEMAN1994 Study Type: RCT Study Description: Allocation: random (no details) Blindness: Double blind Duration (days): Followup: 10 weeks Setting: Outpatient Notes: Country of study: UK; Analysis: ITT; study conducted at 9 centres	N= 66 Age: Mean 33 Sex: 35 males 30 females Diagnosis: OCD by DSM-III-R Exclusions: Age <18 and > 65 years; NIMH-OCS<7; Y-BOCS<16; HRSD>=20 or HAM-D item = 3 or 4 Notes: Duration of OCD: Fluvoxamine 47 months, Clomipramine 44.4 months; baseline Y-BOCS 26; baseline NIMH-OC 9.5	Data Used Adverse events Leaving study early due to adverse events Leaving study early Data Not Used Clinical Global Impressions: global improvement - no variability measure NIMH-OC - no variability measure Yale-Brown Obsessive-Compulsive Scale: total - no variability measure	Group 1 N= 34  Fluvoxamine - 50mg increased to 100mg after 1 week and to 150mg after 2 weeks; between weeks 4 & 10 dose could be increase to 250mg, mean final dose 200mg  Group 2 N= 32  Clomipramine - 50mg increased to 100mg after 1 week and to 150mg after 2 weeks; between weeks 4 & 10 dose could be increase to 250mg, mean final dose 200mg	

GELLER2001				
Study Type: RCT  Study Description: Allocation: random (no details), randomization at a 2:1 ratio of fluoxetine to placebo  Blindness: Double blind  Duration (days):  Followup: 13 weeks  Setting: Not specified  Notes: Country of study: US; Analysis: ITT  Info on Screening Process: 148 screened, 45 excluded did not meet eligibility criteria	N= 103 Age: Mean 11 Sex: 49 males 54 females Diagnosis: 100% OCD by DSM-IV Exclusions: Aged <7 and >17 years, CY-BOCS<16; CGI<4; OCD<6 months duration; co-morbid depression, though concurrent depression could be secondary to OCD Notes: OCD duration not reported; mean baseline CY-BOCS 25.4; mean baseline NIMH-OC 9.3	Data Used Suicidal behaviour Responder (OCD/BDD) Adverse events Leaving study early due to adverse events Leaving study early Multidimensional Anxiety Scale for Children NIMH-OC Children's Yale-Brown Obsessive-Compulsive Scale	Group 1 N= 71  Fluoxetine - 10-mg for the first 2 weeks, 20-mg for next 2 weeks, dosage could be increased to 40mg based on CGI response, and to 60mg after 3 weeks, mean dose 24.6mg/d, 16 had 40mg/d final dose, 15 had 60mg/d final dose  Group 2 N= 32  Placebo	
GELLER2004				
Study Type: RCT  Study Description: Allocation: random (computer-generated random list stratified by age group) Duration of study: 10 weeks Blindness: Double blind Duration (days):  Setting: Not reported Notes: Country of study: US & Canada (34 centres) Info on Screening Process: 265 screened	N= 207 Age: Mean 11 Sex: 117 males 86 females Diagnosis: Obsessive-compulsive neurosis by DSM-IV Exclusions: Aged <7 and > 17 years, OCD duration <2 months, CY-BOCS<16, presence of an Axis I disorder other than OCD or concurrent major depressive episode, history of a psychotic episode, bipolar disorder, pervasive developmental disorder, substance abuse/dependence, previous non-response to SSRIs, suicidal/homicidal risk, concurrent psychotherapy or psychotropic pharmacotherapy, serious medical condition Notes: Mean duration of illness 4.2 years, baseline Y-BOCS 24.8 (+-5.01), comorbid conditions were ADHD (9.4%), generalised anxiety disorder (6.9%) and enuresis (6.9%)	Data Used Suicidal behaviour Responders (CGI) Responders (25% Y-BOCS) Adverse events Serious adverse events Leaving study early due to adverse events Leaving study early Children's Yale-Brown Obsessive-Compulsive Scale	Group 1 N= 100  Paroxetine - Initial dose 10mg/day, titrated up to 50mg/d in 10mg/d increments, mean final dose in children 25.4mg/d, in adolescents 36.5mg/d  Group 2 N= 107  Placebo	
GOODMAN1989  Study Type: RCT  Study Description: Allocation: random (no details); 14 of the fluvoxamine patients who responded received treatment upto 8 weeks (last 2 weeks were open-label)  Blindness: Double blind  Duration (days):  Followup: 6 weeks  Setting: Outpatient  Notes: Country of study: US; Analysis:ITT; nonresponders were offered open-label fluvoxamine for a further 6-8 weeks  Info on Screening Process: 50 randomized, 4 dropped out before drug administration (hyperthyroidism n=1, voluntary decision not to participate n=3)	N= 46 Age: Mean 37 Sex: 19 males 23 females Diagnosis: OCD by DSM-III Exclusions: OCD duration<1 year; primary MDD; baseline Y-BOCS 25.3 (patient characteristics based on 42 patients receiving at least 2 weeks medication) Notes: mean OCD duration15 years; concurrent MDD n=20; lifetime MDD n=33; baseline HRSD in patients with depression 24 (+-8), baseline HRSD in patients without depression 13.5 (+-6); all patients attended weekly 50-minute individual psychotherapy sessions	Data Used Leaving study early due to adverse events Leaving study early Responder (MDD) Patient-rated Anxiety Scale Yale-Brown Obsessive-Compulsive Scale: total	Group 1 N= 23  Fluvoxamine - Initial dose 50mg/d, after day 3 could be increased to 100mg/d, after week 2 could be increased to 150mg/d, after week 3 could be increased upto 300mg/d; mean final dose 255mg/d (+-60)  Group 2 N= 23  Placebo - mean final dose 274mg/d (+-49)	Response (MDD) HRSD>=50% reduction

GOODMAN1996				
Study Type: RCT	N= 160	Data Used	Group 1 N= 80	
Study Description: Allocation: random (no details)	Age: Mean 37 Sex: 78 males 78 females	Adverse events Leaving study early due to adverse events	Fluvoxamine - Initial dose 50mg, increasing to 100mg after 4 days, and to	
Blindness: Double blind	Diagnosis:	Leaving study early	150mg after 8 days. After 2 weeks, dosage could be increased or decreased	
Duration (days):	100% OCD by DSM-III-R	NIMH-OC	within 100-300mg/day range; mean daily	
Followup: 10 weeks	Exclusions: Aged<18 years, OCD<=1 year, NIMH-OC<7, HRSD>19	Yale-Brown Obsessive-Compulsive Scale: tota	dose over weeks 5-10 range 215-245mg  Group 2 N= 80	
Setting: Outpatient	Notes: mean OCD duration: 15.6; baseline Y-BOCD=23;		Placebo - mean daily dose weeks 5-10	
Notes: Country of study: US; Analysis: ITT; multicentre study	baseline NIMH-OC=9		range 265-280	
Info on Screening Process: Not reported				
GREIST1995A				
Study Type: RCT	N= 325	Data Used	Group 1 N= 80	Remission: NIMH-OC<=6;
Study Description: Allocation: random (no details); 12-weeks double-blind phase and 40 weeks continuation phase in responders (CGI marked or moderate) at assigned dose Blindness: Double blind	Age: Mean 38 Sex: 191 males 134 females Diagnosis: OCD by DSM-III-R	Responders (CGI-I)  Adverse events  Leaving study early due to adverse events  Leaving study early  Data Not Used	Sertraline 50mg - Patients took four capsules per day in a single dose with the evening meal  Group 2 N= 81  Sertraline 100mg - Subjects were titrated	Y-BOCS & NIMH-OC pooled data not extractable because based on continuation data of responders only and LOCF acute data of non-
Duration (days):	Exclusions: Aged <18 years, HRSD-24>17, NIMH-OC<7	NIMH-OC	upward towards 100mg by day 5	responders
	Notes: Protocol amended during course of study to permit inclusion of women with childbearing potential using	Yale-Brown Obsessive-Compulsive Scale: tota	Group 3 N= 80	CGI-I response: "much improved" or "very much
Followup: 52 weeks	adequate contraceptive measures		Sertraline 200mg - Subjects were titrated upward towards 200mg by day 14	improved"
Setting: Outpatient	Mean duration of illness 5.2 years		Group 4 N= 84	
Notes: Country of study: US; Analysis: ITT			Placebo	
HOLLANDER2003B				
Study Type: RCT	N= 253	Data Used	Group 1 N= 127	Responder: Y-BOCS 35%
Study Description: Allocation: random (no	Age: Mean 37 Range 18-70	Leaving study early due to adverse events	Fluvoxamine CR - Initial dose 100mg	reduction; Remission: Y- BOCS<=8
details)	Sex: 92 males 161 females	Leaving study early Remission (OCD)	titrated in 50mg increments to between 100mg and 300mg over first 6 weeks. If	D003<=0
Blindness: Double blind	Diagnosis:	Responder (OCD/BDD)	intolerance evident at week 1 and after	
Duration (days):	100% OCD by DSM-IV	Yale-Brown Obsessive-Compulsive Scale: tota	week 6, subject was discontinued, mean overall dose 210mg, mean final dose	
Followup: 12 weeks	Exclusions: Age<18, Y-BOCS<21, HRSD<16, significant risk of suicide		271mg	
Setting: Outpatient	Notes: mean OCD duration 16.3, baseline Y-BOCS 26.5;		Group 2 N= 126	
Notes: Country of study: US; Analysis: ITT	HAM-D 7		Placebo - mean overall dose 231 mg, mean final dose 293mg	
Info on Screening Process: Not reported			ū	
HOLLANDER2003D				
Study Type: RCT	N= 348	Data Used	Group 1 N= 86	
Otrodo Decembrica Allegations accompanies d	Age: Mean 41	Responders (25% Y-BOCS)	Paroxetine 40mg - Patients titrated	
	Age. Mean 41	Leaving study early due to adverse events	unword in 00mg ingramants at weekly	
randomization in 4s; separate randomization	Sex: 256 males 92 females	Leaving study early due to adverse events  Leaving study early	upward in 20mg increments at weekly intervals	
	Sex: 256 males 92 females Diagnosis:	Leaving study early due to adverse events Leaving study early		
for phases 1 & 3; d/blind+6-mth open-label	Sex: 256 males 92 females Diagnosis: 100% OCD by DSM-III-R		intervals	
randomization in 4s; separate randomization for phases 1 & 3; d/blind+6-mth open-label paroxetine+6-mth d/blind continuation	Sex: 256 males 92 females Diagnosis:		intervals  Group 2 N= 88	
randomization in 4s; separate randomization for phases 1 & 3; d/blind+6-mth open-label paroxetine+6-mth d/blind continuation Blindness: Double blind	Sex: 256 males 92 females Diagnosis: 100% OCD by DSM-III-R Exclusions: Aged <16 years, NIMH-OC<7, Y-BOCS<16,		intervals  Group 2 N= 88  Paroxetine 20mg  Group 3 N= 85  Paroxetine 60mg - Patients titrated	
randomization in 4s; separate randomization for phases 1 & 3; d/blind+6-mth open-label paroxetine+6-mth d/blind continuation Blindness: Double blind Duration (days):	Sex: 256 males 92 females Diagnosis: 100% OCD by DSM-III-R Exclusions: Aged <16 years, NIMH-OC<7, Y-BOCS<16, episode of Major Depression in previous 3 months		intervals  Group 2 N= 88  Paroxetine 20mg  Group 3 N= 85	
randomization in 4s; separate randomization for phases 1 & 3; d/blind+6-mth open-label paroxetine+6-mth d/blind continuation Blindness: Double blind Duration (days): Followup: 12 week	Sex: 256 males 92 females Diagnosis: 100% OCD by DSM-III-R Exclusions: Aged <16 years, NIMH-OC<7, Y-BOCS<16, episode of Major Depression in previous 3 months		intervals  Group 2 N= 88  Paroxetine 20mg  Group 3 N= 85  Paroxetine 60mg - Patients titrated upward in 20mg increments at weekly	

JENIKE1990A Study Type: RCT	- N= 38	Data Used	Group 1 N= 18	
Study Description: Allocation: random (no details)	Age: Mean 36 Range 20-68 Sex: 20 males 18 females	Leaving study early Adverse events NIMH-OC	Fluvoxamine - Initial dose 50mg titrated upto 300mg/day over 2-3 week period based on patient's tolerance for drug.	
Blindness: Double blind Duration (days):	Diagnosis:  OCD by DSM-III	Yale-Brown Obsessive-Compulsive Scale: tota	Mean maxiumum dose 294mg/day  Group 2 N= 20	
Followup: 10 weeks	Exclusions: OCD duration<1 year, NIMH-OC<7, DSM major depression, HRSD>17		Placebo	I
Setting: Outpatient Notes: Country of study: US; Analysis: ITT Info on Screening Process: Not reported	Notes: OCD duration: Fluvoxamine 20.3 years (+-11.1); Placebo 17.8 years (+-7.6); baseline Y-BOCS 22.7; baseline NIMH-OC 8.8			
JENIKE1990B				
Study Type: RCT	N= 19	Data Used	Group 1 N= 10	I
Study Description: Allocation: random (no details)	Age: Mean 40 Sex: 15 males 4 females	Leaving study early Adverse events	Sertraline - 200mg/day <b>Group 2 N= 9</b>	
Blindness: Double blind Duration (days):	Diagnosis: 100% OCD by DSM-III	NIMH-OC Yale-Brown Obsessive-Compulsive Scale: tota	Placebo	
Followup: 10 weeks	Exclusions: HRSD>=15; NIMH-OC<7; HRSD-17>20, HRSD item 1>2			I
Setting: Not reported	Notes: OCD duration: Sertraline 18 years +-13; Placebo 22			I
Notes: Country of study: US; Analysis: ITT; study terminated early because manufacturers did not agree with extension protocol	years (+-11); baseline Y-BOCS 22.8; baseline NIMH-OC 9			
Info on Screening Process: Not reported				
JENIKE1997				
Study Type: RCT	N= 64	Data Used	Group 1 N= 23	I
Study Description: Allocation: random (no details)	Age: Mean 35 Sex: 36 males 28 females	Clinical Global Impressions OCD Scale (CPRS) Leaving study early	Fluoxetine - Subjects titrated to 80mg/day by week 3; mean maxiumum dose 77.9mg/day	
Blindness: No mention	Diagnosis:	NIMH-OC	Group 2 N= 20	I
Duration (days):	OCD by DSM-III-R Exclusions: Aged<18 years, OCD duration<1 year, NIMH-	Yale-Brown Obsessive-Compulsive Scale: tota	Phenelzine - Subjects titrated to	I
Followup: 10 weeks	OC<7, DSM Major depression, HRSD>17		60mg/day by week 3; all patients achieved maximum dose	I
Setting: Outpatient	Notes: OCD duration not reported; baseline Y-BOCS 19;		Group 3 N= 21	I
Notes: Country of study: US; Analysis: ITT	baseline NIMH-OC 7.7		Placebo	I
Info on Screening Process: Not reported				I

KAMIJIMA2004				
Study Type: RCT  Study Description: Allocation: random (no details) Duration of study: 1 week single-blind placebo run-in, 12 weeks active treatment Blindness: Double blind Duration (days): Followup: 12 weeks Setting: Not reported Notes: Country of study: Japan; Analysis: ITT Info on Screening Process: 202 patients entered placebo run-in period, 11 withdrew: withdrew consent (n=5), experienced adverse events (n=2), met exclusion criteria (n=1), violated protocol (n=1), did not visit institution (n=1), decided to withdraw (n=1)	N= 191 Age: Mean 38 Sex: 74 males 117 females Diagnosis: OCD by DSM-IV Exclusions: Aged <16 years, OCD duration<6 months, Y-BOCS<16, comorbid bipolar disorder, cluster A personality disorder, schizophrenia or other psychotic disorders, alcohol/drug dependency, convulsive disorders, glaucoma, suicidal tendencies or serious organic brain disorders, serious somatic symptoms, drug hypersenstivity, receiving MAOI within 1 week of observation period, ECT or treatment with other drug within 12 weeks of study, pregnant or lactating women Notes: Mean duration of illness 126.6 months, mean baseline Y-BOCS 24	Data Used Serious adverse events Attempted suicide Responders (CGI) Leaving study early due to adverse events Adverse events Yale-Brown Obsessive-Compulsive Scale: total	Group 1 N= 95  Paroxetine - First weeks, 20mg/d, increased to 30mg/d in the second week, to 40mg/d for next 4 weeks, and if tolerated to a maximum of 50mg/d  Group 2 N= 94  Placebo	Responders: CGI "much improved" or "very much improved"
KORAN1996A  Study Type: RCT  Study Description: Allocation: randomization based on randomization schedule  Blindness: Double blind  Duration (days):  Followup: 10 weeks  Setting: Outpatient  Notes: Country of study: US; Analysis: ITT  Info on Screening Process: Not reported	N= 79 Age: Sex: 43 males 36 females Diagnosis: OCD by DSM-III-R Exclusions: Aged <18 and >65 years, Y-BOCS<16, NIMH<7; DSM major depression, HRSD item1>2, total HRSD-17>21 Notes: Majority of patients were experiencing their first episode, patients received supportive psychotherapy from psychiatric clinician; baseline Y-BOCS 25; baseline HRSD- 17 7.9	Data Used Leaving study early due to adverse events Leaving study early Adverse events Responder (OCD/BDD) Hamilton Rating Scale for Depression Yale-Brown Obsessive-Compulsive Scale: tota Data Not Used Patient Global Improvement - no data Clinical Global Improvement - no data	Group 1 N= 37  Fluvoxamine - 50mg for 4 days, 100mg for 4 days, 150mg for 6 days, and based on response upto 300mg; maximum mean dose achieved 255mg/day  Group 2 N= 42  Clomipramine - 25mg for 4 days, 50mg for 4 days, 100mg for 6 days, and based on response upto 250mg; maximum mean dose 201mg/day	Response: Y-BOCS>=25% reduction
KORAN2002 Study Type: RCT Study Description: 80-wk study: 1-wk washout, 16-wk s/blind sertraline, 36-wk continuation in responders, 28-wk d/blind maintenance in continuation responders Blindness: Double blind Duration (days): Followup: 28 weeks Setting: Outpatient Notes: Country of study: US, study conducted at 21 sites; Analysis: ITT Info on Screening Process: 649 enrolled, 460 completed 16-week phase (348 responders), 232 completed continuation phase (227 responders)	N= 223 Age: Mean 39 Sex: 124 males 99 females Diagnosis: 100% OCD by DSM-III-R Exclusions: Aged <18 years, Y-BOCS<20, NIMH-OC<7, HRSD-24>16, receiving concurent BT Notes: OCD duration: Sertraline 21.9 years (+-13.1), placebo 22.4 years (+-12.2); Baseline Y-BOCS: 10.2; NIMH-OC: 4.4+-2.	Data Used Death Relapse Leaving study early due to adverse events Leaving study early Quality of Life Enjoyment and Satisfaction NIMH-OC Yale-Brown Obsessive-Compulsive Scale: total	Group 1 N= 109  Sertraline - The daily dose of sertraline as of week 52 was maintained; mean final dose 187mg/d  Group 2 N= 114  Placebo - The patients took the same number of tablets daily as during week 52, but the sertraline dose was blindly decreased by 50mg/day every 3 days, mean final dose 174mg/d	Responders: Y-BOCS 25% reduction from baseline and CGI<3; Relapse: Y-BOCS increase by 5 points, Y-BOCS total score>=20 and CGI increase by 1 point

KORAN2002A		1		
Study Type: RCT  Study Description: 16-week 200mg/day acute- phase sertraline treatment, non-responders were randomized to 12-week high-dose or standard dose sertraline double-blind phase Blindness: Double blind Duration (days):  Followup: 12 weeks Setting: Not specified Notes: Country of study: US; study conducted at 17 sites; Analysis: ITT Info on Screening Process: 649 patients received acute phase sertraline treatment, 348 met response and 203 discontinued participation. Of 98 acute phase non- responders, 32 did not continue on to double- blind phase (details not reported)	N= 66 Age: Mean 38 Sex: 35 males 31 females Diagnosis: 100% OCD by DSM-III-R Exclusions: Responders to acute phase: Y-BOCS>=25% reduction or CGI >= moderately improved, Y-BOCS<20, NIMH-OC<7, HRSD-24>=17 Notes: Duration of OCD: 20.4 years, Baseline Y-BOCS: 26.7	Data Used Leaving study early due to adverse events Responder (OCD/BDD)	Group 1 N= 36 Sertraline 200mg - Fixed dose  Group 2 N= 30 Sertraline 250-400mg - Flexible dose, titrated to between 250-400mg/day; mean final dose: 357mg/d	Responder: Y-BOCS>=25% reduction
KRONIG1999 Study Type: RCT Study Description: Allocation: randomization using computer-generated codes Blindness: Double blind Duration (days): Mean 71 Followup: 12 weeks Setting: Outpatients Notes: Country of study: US, study conducted at 10 sites, Analysis: ITT Info on Screening Process: Not reported	N= 167 Age: Mean 37 Sex: 92 males 75 females Diagnosis: OCD by DSM-III-R Exclusions: Aged <18 years, duration of illness<1 year, Y-BOCS>=20, NIMH-OC>=7, CIG>=moderate, HRSD-24>15, HRSD item1>1 Notes: Duration of illness: 17.1 years, Baseline Y-BOCS: Sertraline 25.21 (+-3.79), Placebo 25.05 (+-4.09); Baseline NIMH-OCS: Sertraline 8.99 (+-1.24), placebo 9.11 (+-1.65)	Data Used Leaving study early due to adverse events Leaving study early Adverse events NIMH-OC Yale-Brown Obsessive-Compulsive Scale: tota	Group 1 N= 86  Sertraline - 50mg/d first 3 weeks, based on treatment response titrated to 100mg/d by week 4, 150mg/d by week 6, 200mg/d by end of study; mean maxiumum dose 165(+-55)mg  Group 2 N= 81  Placebo	
LIEBOWITZ2002 Study Type: RCT Study Description: Allocation: random (no details); 8-week acute phase, responders (CGI-Improvement - much or very much improved) entered 8-week maintenance Blindness: No mention Duration (days): Followup: 8 weeks + 8 weeks Setting: Not specified Notes: Country of study: US; Analysis: ITT; study conducted at 2 sites Info on Screening Process: Not reported	N= 43 Age: Mean 13 Sex: 25 males 18 females Diagnosis: 100% OCD by DSM-III-R Exclusions: Aged<6 years and >18 years; OCD duration<1 year; CY-BOCS<16; NIMH-OC<7; full-scale IQ<80 Notes: Comorbidity: Depressive disorders (MDD, dysthymia, 5 in fluoxetine, 4 in placebo), other anxiety disorders, oppositional defiant disorder, ADHD and reading disorder; mean baseline CY-BOCS 23.16, mean baseline NIMH-OC 8.43	Data Used Leaving study early due to adverse events Leaving study early Adverse events Child OC Impact Scale: Parent report version Hamilton Rating Scale for Depression NIMH-OC Children's Yale-Brown Obsessive-Compulsive Scale	Group 1 N= 21  Fluoxetine - 20mg/d weeks 1 & 2, 40mg/d weeks 3 & 4, 60mg/d weeks 5 & 6, depending on clinical response and side effects, increased to 80mg/d; final mean dose in acute phase 64.8mg/d (+-18.9), final mean dose in maintenance phase 65.6 mg/d (+-20.2)  Group 2 N= 22  Placebo	

LOPEZIBOR1996  Study Type: RCT  Study Description: Allocation: random (no details); 8-wk acute phase, responders continued with low dose d/blind treatment, non-responders high dose d/blind treatment  Blindness: Double blind  Duration (days):  Followup: 8 weeks + 12 weeks  Setting: Not reported  Notes: Country of study: Spain & France; study	N= 55 Age: Mean 34 Sex: 21 males 34 females Diagnosis: OCD by DSM-III-R Exclusions: Aged <18 years; duration of OCD<6 months; Y-BOCS<16, CGI<4 Notes: OCD duration: not reported; baseline Y-BOCS 26.6; baseline HRSD 15.25; MADRS: 24.3	Data Used Clinical Global Impressions: global improvement Covi Anxiety Scale Montgomery-Asberg Depression Rating Scale Comprehensive Psychopathological Rating Scale: OC Clinical Global Impressions: severity Hamilton Rating Scale for Depression Yale-Brown Obsessive-Compulsive Scale: total Leaving study early due to adverse events	Group 1 N= 30  Fluoxetine - 40mg/d during acute phase, 20mg during continuation phase in responders and 60mg during continuation phase in non-responders  Group 2 N= 25  Clomipramine - 150mg/d during acute phase, 100mg during continuation phase in responders, 200mg during continuation phase in non-responders	Responders: Y-BOCS>=25% reduction
conducted at 5 sites; Analysis: ITT		Responder (OCD/BDD) Leaving study early		
MALLYA1992				
Study Type: RCT Study Description: Allocation: random (no details) Blindness: Double blind Duration (days): Followup: 10 weeks Setting: Not reported Notes: Country of study: US; Analysis: not specified; multicentre study Info on Screening Process: Not reported	N= 39 Age: Sex: no information Diagnosis: OCD by DSM-III-R Exclusions: Aged <18 years, other psychoses, HRSD>20, received ECT or psychiatric hospitalization within 6 months of study, psychosurgery, women of childbearing potential who were not taking adequate contraceptive measures Notes: Baseline Y-BOCS (completer analysis): Fluvoxamine 19.6+-5, Placebo 22.7 +-6.4	Data Used Responder (OCD/BDD) Adverse events Leaving study early	Group 1 N= 19  Fluvoxamine - Initial dose 50mg/d, increased to a maximum of 300mg/d over a few weeks, mean final dose not reportec  Group 2 N= 20  Placebo - Mean final dose not reported	Responder: Y-BOCS>=35% reduction
MARCH1998 Study Type: RCT Study Description: Allocation: random (no details), stratified by age: children (6-12 years), adolescents (13-17 years) Blindness: Double blind Duration (days): Mean 75 Followup: 12 weeks Setting: Outpatient Notes: Country of study: US; Analysis: ITT; study conducted at 12 sites Info on Screening Process: Not reported	N= 189 Age: Mean 13 Sex: no information Diagnosis:     OCD by DSM-III-R Exclusions: Aged <6 and >17 years; NIMH-OC<7; HRSD-24>17; HRSD item1>1 Notes: OCD duration: children: sertraline 3.4 years, placebo 4.2 years, adolescents: sertraline 6.1 years, placebo 5.5 years; comorbid disorders: ADHD, tic disorder, anxiety, depression	Data Used Suicidal behaviour Leaving study early due to adverse events Leaving study early NIMH-OC Children's Yale-Brown Obsessive-Compulsive Scale	Group 1 N= 94  Sertraline - Initial dose 25mg/d for children and 50mg/d for adolescents; titrated upto maxiumum tolerated dose within first 4 weeks; mean final dose: 167mg/d  Group 2 N= 95  Placebo	Continuous data: adjusted mean change scores

MILANFRANCHI1997				
Study Type: RCT Study Description: Allocation: random (no details) Blindness: Double blind Duration (days): Followup: 9 weeks Setting: Outpatient Notes: Country of study: Italy; Analysis: ITT Info on Screening Process: Not reported	N= 26 Age: Mean 27 Sex: 15 males 11 females Diagnosis:	Data Used Responder (OCD/BDD) Leaving study early Yale-Brown Obsessive-Compulsive Scale: tota Leaving study early due to adverse events	Group 1 N= 13  Fluvoxamine - Initial dose 50mg/d, increased to upto 300mg/d in 2 weeks and maintained for 7 weeks  Group 2 N= 13  Clomipramine - Initial dose 50mg/d, increased to upto 300mg/d in 2 weeks and maintained for 7 weeks	
MONTGOMERY1993 Study Type: RCT Study Description: Allocation: random (no details); 8wk acute phase+16-wk d/blind phase in responders & open-label in non-responders 40mg fluox wk 1, 60mg fluox till end Blindness: Double blind Duration (days): Followup: 16 weeks Setting: Not reported Notes: Country of study: 8 European countries; Analysis: ITT; study conducted at 13 sites; responders: Y-BOCS 25% reduction and CGI much/very much improved Info on Screening Process: 222, 5 discontinued during washout phase, 1 due to adverse event and 4 for reasons not related to study design	N= 217 Age: Mean 37 Sex: 114 males 103 females Diagnosis: OCD by DSM-III-R Exclusions: Aged <18 and >65 years; OCD duration<1 year; Y-BOCS<16 or 10 if obsessions or compulsions present alone; CGI <moderate; 12.11<="" 23.89;="" baseline="" duration:="" hrsd-17="" not="" notes:="" ocd="" reported;="" td="" y-bocs=""><td>Data Used  Leaving study early due to adverse events  Leaving study early  Montgomery-Asberg Depression Rating Scale  Hamilton Rating Scale for Depression  Yale-Brown Obsessive-Compulsive Scale: tota</td><td>Group 1 N= 52 Fluoxetine 40 mg Group 2 N= 55 Fluoxetine 60 mg - 40mg/d at week 1, 60mg/d for rest of acute phase Group 3 N= 57 Placebo Group 4 N= 53 Fluoxetine 20 mg</td><td>responders: Y-BOCS 25% reduction and CGI much or very much improved; only dropout data extractable in continuation phase</td></moderate;>	Data Used  Leaving study early due to adverse events  Leaving study early  Montgomery-Asberg Depression Rating Scale  Hamilton Rating Scale for Depression  Yale-Brown Obsessive-Compulsive Scale: tota	Group 1 N= 52 Fluoxetine 40 mg Group 2 N= 55 Fluoxetine 60 mg - 40mg/d at week 1, 60mg/d for rest of acute phase Group 3 N= 57 Placebo Group 4 N= 53 Fluoxetine 20 mg	responders: Y-BOCS 25% reduction and CGI much or very much improved; only dropout data extractable in continuation phase
MONTGOMERY2001  Study Type: RCT  Study Description: Allocation: random (no details)  Blindness: Double blind  Duration (days):  Followup: 12 weeks  Setting: Not reported  Notes: Country of study: 12 countries; Analysis: ITT; study conducted at 53 sites  Info on Screening Process: 434; 33 excluded: 8 withdrew consent, 8 experienced adverse events, 2 did not meet inclusion criteria, 6 met exclusion criteria, 2 not fully screened, 1 placebo-responder, 6 other reasons	N= 401 Age: Mean 38 Sex: 184 males 217 females Diagnosis:	Data Used Leaving study early due to adverse events Leaving study early Adverse events Responder (OCD/BDD) Sheehan Disability-family life/home responsibilies Sheehan Disability - work Sheehan Disability - social life/home activities Montgomery-Asberg Depression Rating Scale NIMH-OC Yale-Brown Obsessive-Compulsive Scale: total	Group 1 N= 300  Citalopram 20mg - 20mg/d 1st 3 days, then 40mg/d  Citalopram 40mg  Citalopram 60mg - 20mg/d 1st 3 days; 40mg till end of 1st week, 60mg from 2nd week onwards  Group 2 N= 101  Placebo	Responders: Y-BOCS>=25% reduction

MUNDO1997A				
Study Type: RCT Study Description: Allocation: random (no details); patients were not blinded to their treatment, ratings were made under blind conditions Blindness: Single blind Duration (days): Followup: 10 weeks Setting: Inpatient Notes: Country of study: Italy; Analysis: ITT Info on Screening Process: Not reported	N= 30 Age: Mean 31 Sex: 21 males 9 females Diagnosis: OCD by DSM-III-R Exclusions: Psychoactive drug taken within 3 weeks before admission, receiving other concomitant therapy (psychotropic or behavioural) during study Notes: Included patients (N=6) with comorbid axis I tic disorder; OCD duration 13 years, baseline Y-BOCS 28.4, baseline NIMH-OC 10.27; baseline HRSD 11.7; one patient (fluvoxamine) was taking benzodiazepine	Data Used Leaving study early due to adverse events Leaving study early Responder (OCD/BDD) NIMH-OC Yale-Brown Obsessive-Compulsive Scale: tota	Group 1 N= 10  Fluvoxamine - 100mg/d for days 1-4, 150 mg/d for days 5-7, 200, 250, or 300mg/d (depending on clinical need and tolerability) from day 8 to end of study; mean daily dose 290mg (+-31)  Group 2 N= 9  Paroxetine - 20mg/d days 1-7, 40 or 60mg/d (depending on clinical need and tolerability) from day 8 to end; mean daily dose 53.3mg/d (+-10)  Group 3 N= 11  Citalopram - 20mg/d days 1-7, 40 or 60mg/d (depending on clinical need and tolerability) from day 8 to end; mean daily dose 50.9mg/d (+-10.4)	Response: Y-BOCS>=35% reduction and CGI improvement<=3
MUNDO2001 Study Type: RCT Study Description: Allocation: random (no details) Blindness: Double blind Duration (days): Mean 62 Followup: 10 weeks Setting: Not reported Notes: Country of study: Europe; study conducted at 40 centres; Analysis: ITT Info on Screening Process: (ITT: defined as patients who received >=1 dose of study medication and provided >=1 valid post-baseline efficacy evaluation either while on study medication or within 3 days of drug discontinuation)	Age: Mean 35 Sex: 124 males 103 females Diagnosis: 100% OCD by DSM-III-R Exclusions: Aged <18 and >65 years; NIMH-OC<7; depression present before onset of OCD, was primary to OCD; HRSD-17>19, HRSD-item1>2; treatment with psychotropic drugs within 1 week of study or 5 weeks for fluvoxamine Notes: Benzodiazepine treatment permitted; OCD duration not reported baseline mean Y-BOCS 26; baseline mean NIMH-OC 9.8; baseline mean HRSD 12.2	Data Used Clinical Anxiety Scale Clinical Global Impressions: global improvement Clinical Global Impressions: severity Responder (OCD/BDD) Leaving study early due to adverse events Leaving study early Adverse events Hamilton Rating Scale for Depression NIMH-OC Yale-Brown Obsessive-Compulsive Scale: total	Group 1 N= 115  Fluvoxamine - 50mg/d days 1-4, 100mg/d days 5-8, 150mg/d days 9-14, 150-300mg from day 15 till end of study, mean final dose 212mg/d+-62  Group 2 N= 112  Clomipramine - 50mg/d days 1-4, 100mg/d days 5-8, 150mg/d days 9-14, 150-300mg from day 15 till end of study, mean final dose 206mg/d+-54	Y-BOCS endpoint scores: S.D.s not reported, contact author; Response: Y- BOCS>=35% reduction
PERSE1987 Study Type: Cross-over Study Description: Allocation: random (no details) Duration of study: 2 weeks placebo + 8 weeks of either FLV or Pbo + 2 weeks placebo + 8 weeks of either FLV or Pbo Blindness: Double blind Duration (days): Followup: 8 weeks of each drug Setting: Outpatient Notes: Country of study: US, Analysis:per protocol Info on Screening Process: Not reported	N= 20 Age: Mean 40 Range 21-59 Sex: 10 males 10 females Diagnosis:     OCD by DSM-III     20% MDD  Exclusions: Aged <18 and >60 years, OCD duration<1 year, other psychoses, suicidal behaviour, substance abuse, substantial medical illness, history of neurosurgery Notes: OCD duration 14.8 years,3 had histories of atypical bipolar disorder	Data Used General Rating Scale - Obsessions General Rating Scale - Compulsions Hamilton Rating Scale for Anxiety Beck Depression Inventory Hamilton Rating Scale for Depression Maudsley Obsessive-Compulsive Inventory	Group 1 N= 10  Fluvoxamine - Initial dose 50mg/d increased by 25mg/d every 4 days to a maximum of 300mg/d by day 4, mean final dose not reported  Group 2 N= 10  Placebo	

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PHILLIPS2002B			
Study Type: RCT  Study Description: Allocation: random (computer-generated randomization)  Blindness: Double blind  Duration (days):  Followup: 12 weeks  Setting: Outpatient  Notes: Country of study: US; Analysis: ITT  Info on Screening Process: 296 screened, 158 qualified, 74 enrolled: 7 not randomized (3 no longer wished to participate, 2 at risk of suicide and 2 inadequate severity of BDD)	N= 67 Age: Mean 32 Sex: 21 males 46 females Diagnosis: BDD by DSM-IV Exclusions: Aged <18 and >65 years, BDD duration<6 months, Y-BOCS<24, CGI <moderate, (delusional="" 14.5="" 20.7<="" 31,="" 8.7,="" about="" appearance="" baseline="" bdd="" beliefs="" body="" concern="" concerns="" delusional="" disorders,="" duration="" eating="" hrsd="" image="" included="" n="3)," nimh-bdd="" nondelusional="" notes:="" patients="" picking="" related="" skin-="" td="" their="" to="" weight="" with="" y-bocs="" years,=""><td>Data Used Leaving study early due to adverse events Leaving study early Adverse events Responder (OCD/BDD) Social and Occupational Functioning Scale Global Assessment of functioning Hamilton Rating Scale for Depression NIMH-OC Yale-Brown Obsessive-Compulsive Scale: tota</td><td>Group 1 N= 34  Fluoxetine - 20mg/d for 2 weeks, increased to upto 80mg/d; mean final dose 77.7mg/d (+-8)  Group 2 N= 33  Placebo - Mean final dose 76mg/d (+- 13.1)</td></moderate,>	Data Used Leaving study early due to adverse events Leaving study early Adverse events Responder (OCD/BDD) Social and Occupational Functioning Scale Global Assessment of functioning Hamilton Rating Scale for Depression NIMH-OC Yale-Brown Obsessive-Compulsive Scale: tota	Group 1 N= 34  Fluoxetine - 20mg/d for 2 weeks, increased to upto 80mg/d; mean final dose 77.7mg/d (+-8)  Group 2 N= 33  Placebo - Mean final dose 76mg/d (+- 13.1)
POTS2004  Study Type: RCT  Study Description: Allocation: random (computer-generated sequence in blocks of 4), double-blind concealment in medication conditions only, assessors blind to treatment  Blindness: Double blind  Duration (days):  Followup: 12 weeks  Setting: Outpatient  Notes: Country of study: US, conducted at 3 sites, Analysis: ITT  Info on Screening Process: 154 screened, 31 deemed ineligible, 10 not interested, 1 asymptomatic at baseline	N= 112  Age: Mean 12  Sex: 56 males 56 females  Diagnosis:  OCD by DSM-IV  Exclusions: Aged <7 and >17 years, CY-BOCS<17, NIMH  Global Severity Score<8, IQ<81 as measured by Block  Design and Vocabulary subtests in Wechesler Intelligence  Scale for Children, major depression, bipolar illness, primary diagnosis of Tourette disorder, pervasive developmental disorder, psychosis, concurrent treatment with psychotropic medication, previous failed trials with SRIs or CBT, sertraline intolerance, medical or neurological disorder, pregnancy, history of remission following medication, CBT or combination  Notes: Baseline CY-BOCS 24.6, 80% had at least 1 psychiatric comorbid disorder, 63% had affective or anxiety disorders, 27% had ADHD, oppositional defiant disorder or conduct disorder, 16% had comorbid tic disorder	Data Used Children's Yale-Brown Obsessive-Compulsive Scale Leaving study early due to adverse events Leaving study early	Group 1 N= 28  Cognitive Behavioural Therapy - 14 1-hour visits over 12 weeks, involved psychoeducation, cognitive training, mapping of OCD target symptoms, ERP  Group 2 N= 28  Sertraline - Initial dose 25mg/d, increased to 200mg/d over 6 weeks in a fixed flexible upward titration, after which dosage could be adjusted as tolerated  Group 3 N= 28  CBT + Medication - CBT and sertraline treatment began simultaneously and followed the same protocol as for the individual interventions  Group 4 N= 28  Placebo
RIDDLE1992  Study Type: Cross-over  Study Description: Allocation: random (no details)  Blindness: Double blind  Duration (days):  Followup: 8 weeks + 12 weeks cross-over  Setting: Not reported  Notes: Country of study: US; Analysis: ITT  Info on Screening Process: 75 screened, 30 met inclusion criteria (parents declined because they did not want child to receive fluoxetine or wanted fluoxetine treatment open-blind)	N= 14 Age: Mean 12 Range 8-15 Sex: 6 males 8 females Diagnosis: 100% OCD by DSM-III-R Exclusions: Aged <8 and >17 years; CGI<4; previous fluoxetine treatment Notes: Comorbid disorders: MDD (n=2), tic (n=2), separation anxiety (n=3), overanxious (n=3), trichotillomania (n=1), ADHD (n=1); 7 patients continued receiving individual supportive or psychodynamic psychotherapy; baseline CY-BOCS 10	Data Used Revised Children's Manifest Anixety Scale LOI-CV resistance Leyton Obsessional Inventory (CV): interference Leyton Obsessional Inventory (CV): symptom Global Assessment Scale - Children Leaving study early due to adverse events Leaving study early Children's Yale-Brown Obsessive-Compulsive Scale	Group 1 N= 7 Fluoxetine - 20mg/d Group 2 N= 7 Placebo

RIDDLE2001				
Study Type: RCT Study Description: Allocation: random (no	N= 120 Age: Mean 13	Data Used Suicidal behaviour Leaving study early due to adverse events	Group 1 N= 63 Placebo	Response: CY-BOCS>=25% reduction
details); double-blind phase followed by 1-year open label extension  Blindness: Double blind	Sex: 64 males 56 females Diagnosis: OCD by DSM-III-R	Leaving study early Leaving study early Adverse events	Group 2 N= 57  Fluvoxamine - Initial dose 25mg/d, increased by 25mg every 3-4 days upto	
Duration (days):	,	Responder (OCD/BDD)	200mg/d by day 22; after week 4, patients	
Followup: 10 weeks	Exclusions: Aged <8 and >17 years; OCD duration <6 months; CY-BOCS<16; NIMH-OC<8; Children's Depression Rating Scale>=40	Children's Depression Rating Scale - Revised NIMH-OC	were maintained on a constant daily dose, mean final dose 165mg/d +-50,	
Setting: Mixed	Notes: Nonspecific supportive and/or behavioral therapy	Children's Yale-Brown Obsessive-Compulsive	range 50-200, in children (8-12 yrs) 155mg/d, in adolescents (13-17yrs)	
Notes: Country of study: US; Analysis: ITT; study conducted at 17 sites	(e.g. relaxation, but not exposure and response prevention) was permitted during study; OCD duration 3.6 years;	Scale	170mg/d	
Info on Screening Process: 134 screened; 14 discontinued during 1-week washout phase	baseline CY-BOCS 24.2; baseline NIMH-OC 9.5			
ROMANO2001				
Study Type: RCT	N= 71	Data Used	Group 1 N= 36	Response: Y-BOCS>=25%
Study Description: Allocation: random (no details); all patients took 16-week s/blind fluoxetine 20-60mg/d, responders randomized to d/blind 1-year fluoxetine/placebo	Age: Mean 41 Sex: 30 males 40 females Diagnosis: OCD by DSM-IV	Leaving study early due to adverse events Leaving study early SF-36 social functioning Hamilton Rating Scale for Depression	Fluoxetine - Continuation of dose achieved by end of acute phase; 27 received 60mg/d, 8 received 40mg/d, 1 received 20mg/d	reduction and CGI- Improvement "much improved" or "very much improved"
Blindness: Double blind	Exclusions: Aged <14 and >70 years, Y-BOCS<19, CGI not	Yale-Brown Obsessive-Compulsive Scale: tota		
Duration (days):	moderate or worse, previous failure with fluoxetine trial		Placebo - 24 recevied 60mg/d, 10 received 40mg/d	
Followup: 52 weeks	Notes: Mean age at first episode 16 years; baseline Y-		3.1	
Setting: Outpatient	BOCS (at d/blind phase) 10.7			
Notes: Country of study: US, Analysis:ITT, study conducted at 11 sites				
Info on Screening Process: 143 screened, 13 did not meet entry criteria, 130 entered s/blind phase, 71 continued onto d/blind phase, 1 excluded from all analyses because of data integrity concerns				
SMERALDI1992				
Study Type: RCT	N= 12	Data Used	Group 1 N= 6	
Study Description: Allocation: random (no details)	Age: Mean 29 Range 18-50 Sex: 10 males 2 females	Leaving study early due to adverse events  Leaving study early  Mantenner Ashara Penassian Retiral Scale	Clomipramine - 50mg days 1-3, 100mg days 4-7, 150mg days 8-9, 200mg from day 10 onwards	
Blindness: Double blind	Diagnosis:	Montgomery-Asberg Depression Rating Scale Yale-Brown Obsessive-Compulsive Scale: tota	1	
Duration (days):	OCD by DSM-III-R	Tale 2.3411 Obossilve Compulsive Codic. total	Fluvoxamine - 50mg days 1-3, 100mg	
Followup: 12 weeks	Exclusions: Contraindication to tricyclic or serotonergic treatment		days 4-7, 150mg days 8-9, 200mg from day 10 onwards	
Setting: Not reported	Notes: 7 patients had comorbid recurrent major depression;		day 10 onwards	
Notes: Country of study: Italy, Analysis: per protocol	OCD duration not reported; baseline Y-BOCS 28.6, baseline MADRS 15.2			
Info on Screening Process: Not reported				

# ZOHAR1996A

Study Type: RCT

Study Description: Allocation: random (no

details), on a 2:1:1 ratio of

paroxetine:clomipramine:placebo; responders could continue into long-term treatment

Blindness: Double blind Duration (days):

Followup: 12 weeks Setting: Not reported

Notes: Country of study: multi-national in

Europe; Analysis: ITT

Info on Screening Process: 437 enrolled, 406 received active medication, 7 excluded for

technical reasons

N= 399

Age: Range 16-74

Sex: 190 males 209 females

Diagnosis:

OCD by DSM-III-R

Exclusions: Aged <16 and >70 years, OCD duration <6 months, Y-BOCS<16, NIMH-OC<7, primary diagnosis of MDD or a psychiatric disorder within previous 3 months.

Notes: OCD duration: 15 years

Data Used

Clinical Global Impressions: severity of illness Yale-Brown Obsessive-Compulsive Scale: total Montgomery-Asberg Depression Rating Scale

Responder (OCD/BDD)

Adverse events Leaving study early

Leaving study early due to adverse events Symptom Checklist-90

Group 1 N= 201

Paroxetine - 10mg week1, increased to 20mg, and then upto 60mg from day 14 onwards: mean daily dose across study 37.5mg

Response: Y-BOCS>=25%

reduction

Group 2 N= 99

Clomipramine - 25mg week1, increased to 50mg, and then upto 250mg from day 14 onwards: mean daily dose across study 113.1mg

Group 3 N= 99

Placebo

References of Included Studies

### ANSSEAU 1

(Unpublished Data Only)

Ansseau, M., Bejerot, S., Blauwblomme, J. F., Bollen, J., Braccini, De Bleeker, E. et al. A double-blind study to compare the maintenance of efficacy and relapse rates in patients with obsessive-compulsive disorder who responded to paroxetine, clomipramine or placebo in the short-term study 136.

## ANSSEAU 2

(Unpublished Data Only)

Ansseau, M., Bejerot, S., Blauwblomme, J. F., Bollen, J., Braccini, De Bleeker, E. et al. A double-blind study to compare the maintenance of efficacy and relapse rates in patients with obsessive-compulsive disorder who responded to paroxetine, clomipramine or placebo in the short-term study 136.

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# **BAILER**

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Bailer, D. C., Burnham, D., & Oakes, R. Long term treatment with paroxetine of outpatients with obsessive-compulsive disorder: an extension of the comparative study.

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(Published Data Only)

Tollefson, G. D., Birkett, M., Koran, L., & Genduso, L. (1994). Continuation treatment of OCD: double-blind and open-label experience with fluoxetine. Journal of Clinical Psychiatry., 55, 69-76.

Tollefson, G. D., Rampey Jr, A. H., Potvin, J. H., Jenike, M. A., Rush, A. J., Dominguez, R. A. et al. (1994). A multicenter investigation of fixed-dose fluoxetine in the treatment of obsessivecompulsive disorder. Archives of General Psychiatry, 51, 559-567.

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## BERGERON2002

(Published Data Only)

Bergeron, R., Ravindran, A. V., Chaput, Y., Goldner, E., Swinson, R., van Ameringen, M. A. et al. (2002). Sertraline and fluoxetine treatment of obsessive-compulsive disorder: results of a doubleblind, 6-month treatment study. Journal of Clinical Psychopharmacology., 22, 148-154.

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### BOGETTO2002

(Published Data Only)

Bogetto, F., Albert, U., & Maina, G. (2002). Sertraline treatment of obsessive-compulsive disorder: efficacy and tolerability of a rapid titration regimen. European Neuropsychopharmacology., 12, 181-186.

## BURNHAM

(Unpublished Data Only)

Burnham, D. B., Apter, J., Ballenger, J. C., Lydiard, B., Bastani, B., Borison, R. L. et al. (1993). Paroxetine versus clomipramine and placebo in the treatment of obsessive-compulsive disorder.

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(Unpublished Data Only)

Carpenter, D. J., Schaefer, D. M., Lawnnson, S., Truman, M., & Moran, E. A 38-week, two phase, multicentre study to investigate the safety and effectiveness of paroxetine (10-60mg/day) in the treatment of children and adolescent outpatients with obsessive-compulsive disorder.

# CHOUINARD1990 (Published Data Only)

Chouinard, G., Goodman, W., Greist, J., Jenike, M., Rasmussen, S., White, K. et al. (1990). Results of a double-blind placebo controlled trial of a new serotonin uptake inhibitor, sertraline, in the treatment of obsessive-compulsive disorder. Psychopharmacology Bulletin., 26, 279-284.

# FREEMAN1994 (Published Data Only)

Freeman, C. P., Trimble, M. R., Deakin, J. F., Stokes, T. M., & Ashford, J. J. (1994). Fluvoxamine versus clomipramine in the treatment of obsessive compulsive disorder: a multicenter, randomized, double-blind, parallel group comparison. Journal of Clinical Psychiatry., 55, 301-305.

## **GELLER2001** (Published Data Only)

Geller, D. A., Hoog, S. L., Heiligenstein, J. H., Ricardi, R. K., Tamura, R., Kluszynski, S. et al. (2001). Fluoxetine treatment for obsessive-compulsive disorder in children and adolescents: A placebocontrolled clinical trial. Journal of the American Academy of Child & Adolescent Psychiatry, 40, 773-779.

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Gallagher, D. J., Carpenter, D. J., Sheehan, B. M., Bailey, A., & Gardiner, C. (2001). A randomised, multicentre, 10-week, double-blind, placebo-controlled, flexible-dose study to evaluate the efficacy and safety of paroxetine in children and adolescents with obsessive-compulsive disorder.

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# GOODMAN1996 (Published Data Only)

Goodman, W. K., Kozak, M. J., Liebowitz, M., & White, K. L. (1996). Treatment of obsessive-compulsive disorder with fluvoxamine: a multicentre, double-blind, placebo-controlled trial. International Clinical Psychopharmacology., 11, 21-29.

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# **HOLLANDER2003B** (Published Data Only)

Hollander, E., Koran, L. M., Goodman, W. K., Greist, J. H., Ninan, P. T., Yang, H. et al. (2003). A double-blind, placebo-controlled study of the efficacy and safety of controlled-release fluvoxamine in patients with obsessive-compulsive disorder. Journal of Clinical Psychiatry., 64, 640-647.

# **HOLLANDER2003D** (Published Data Only)

Hollander, E., Allen, A., Steiner, M., Wheadon, D. E., Oakes, R., & Burnham, D. B. (2003). Acute and long-term treatment and prevention of relapse of obsessive-compulsive disorder with paroxetine. Journal of Clinical Psychiatry, 64, 1113-1121.

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Jenike, M. A., Hyman, S., Baer, L., Holland, A., Minichiello, W. E., Buttolph, L. et al. (1990). A controlled trial of fluvoxamine in obsessive-compulsive disorder: Implications for a serotonergic theory. American Journal of Psychiatry, 147, 1209-1215.

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Jenike, M. A., Baer, L., Summergrad, P., Minichiello, W. E., Holland, A., & Seymour, R. (1990). Sertraline in obsessive-compulsive disorder: A double-blind comparison with placebo. American Journal of Psychiatry, 147, 923-928.

# **JENIKE1997** (Published Data Only)

Jenike, M. A., Baer, L., Minichiello, W. E., Rauch, S. L., & Buttolph, M. L. (1997). Placebo-controlled trial of fluoxetine and phenelzine for obsessive- compulsive disorder. American Journal of Psychiatry, 154, 1261-1264.

# **KAMIJIMA2004** (Published Data Only)

Kamijima, K., Murasaki, M., Asai, M., Higuchi, T., Nakajima, T., Taga, C. et al. (2004). Paroxetine in the treatment of obsessive-compulsive disorder: randomized, double-blind, placebo-controlled study in Japanese patients. Psychiatry and Clinical Neuroscience, 58, 427-433.

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Kronig, M. H., Apter, J., Asnis, G., Bystritsky, A., Curtis, G., Ferguson, J. et al. (1999). Placebo-controlled, multicenter study of sertraline treatment for obsessive-compulsive disorder. Journal of Clinical Psychopharmacology., 19, 172-176.

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Wilens, T. E., Biederman, J., March, J. S., Wolkow, R., Fine, C. S., Millstein, R. B. et al. (1999). Absence of cardiovascular adverse effects of sertraline in children and adolescents. Journal of the American Academy of Child & Adolescent Psychiatry., 38, 573-577.

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MONTGOMERY1993 (Published Data Only)

Montgomery, S. A., McIntyre, A., Osterheider, M., Sarteschi, P., Zitterl, W., Zohar, J. et al. (1993). A double-blind, placebo-controlled study of fluoxetine in patients with DSM-III-R obsessive-compulsive disorder. European Neuropsychopharmacology, 3, 143-152.

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Montgomery, S. A., Kasper, S., Stein, D. J., Bang, H. K., & Lemming, O. M. (2001). Citalopram 20 mg, 40 mg and 60 mg are all effective and well tolerated compared with placebo in obsessive-compulsive disorder. International Clinical Psychopharmacology., 16, 75-86.

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# POTS2004 (Published Data Only)

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Riddle, M. A., Scahill, L., King, R. A., Hardin, M. T., Anderson, G. M., Ort, S. I. et al. (1992). Double-blind, crossover trial of fluoxetine and placebo in children and adolescents with obsessive-compulsive disorder. Journal of the American Academy of Child & Adolescent Psychiatry., 31, 1062-1069.

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Riddle, M. A., Reeve, E. A., Yaryura-Tobias, J. A., Yang, H. M., Claghorn, J. L., Gaffney, G. et al. (2001). Fluvoxamine for children and adolescents with obsessive-compulsive disorder: a randomized, controlled, multicenter trial. Journal of the American Academy of Child & Adolescent Psychiatry., 40, 222-229.

# **ROMANO2001** (Published Data Only)

Romano, S., Goodman, W., Tamura, R., & Gonzales, J. (2001). Long-term treatment of obsessive-compulsive disorder after an acute response: a comparison of fluoxetine versus placebo. Journal of Clinical Psychopharmacology., 21, 46-52.

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Zohar, J. & Judge, R. (1996). Paroxetine versus clomipramine in the treatment of obsessive-compulsive disorder. OCD Paroxetine Study Investigators. British Journal of Psychiatry., 169, 468-474.

# Appendix 16: Included/excluded studies table for the Clinical Question: 1.05 SNRIs

## Characteristics of Included Studies

Methods	Participants	Outcomes	Interventions	Notes
ALBERT2002				
Study Type: RCT Study Description: Allocation: random (no details), allocation to venlafaxine or clomipramine on a 1:2 ratio Blindness: Single blind Duration (days): Followup: 12 weeks Setting: Outpatient Notes: Country of study: Italy; Analysis: ITT Info on Screening Process: Not reported	N= 73 Age: Mean 30 Sex: 35 males 38 females Diagnosis: OCD by DSM-IV Exclusions: OCD duration<1 year, Y-BOCS<16, HRSD-17>14, current diagnosis of MDD, currently or previously treated with SSRIs Notes: OCD duration: 5.15 years, baseline Y-BOCS 25.4	Yale-Brown Obsessive-Compulsive Scale: total Leaving study early due to adverse events Adverse events Responder (OCD/BDD)	Group 1 N= 47  Clomipramine - 50mg/d, increased to minimum 150mg/d, upto a maximum of 225mg/d; mean daily dose (in completers) 168.1+-28.9mg  Group 2 N= 26  Venlafaxine - 25mg tid, increased to 75mg tid, upto a maximum of 350mg; mean daily dose (in completers) 265+-52.5mg	Responders: improvement from baseline in YBOCS score of 35% or more and a CGI score equal to or less than 2
DENYS2003A Study Type: RCT Study Description: Allocation: random (no details) Blindness: Double blind Duration (days): Followup: 12 weeks Setting: Outpatient Notes: Country of study: Netherlands, Analysis: ITT Info on Screening Process: Not reported	N= 150 Age: Sex: Diagnosis: OCD by DSM-IV Exclusions: Aged <18 and >65 years, Y-BOCS<18, HRSD-17>14; primary diagnosis of MDD or any other psychotic disorder, use of antidepressants or antipsychotics 1 month before screening Notes: mean OCD duration 15 years; baseline Y-BOCS 26.1, baseline HRSD 8.1, comorbid mood disorders n=32, comorbid anxiety disorders n=16, other comorbid axis 1 disorders n=12, comorbid axis II disorders n=45	Hamilton Rating Scale for Anxiety Leaving study early due to adverse events Leaving study early	Group 1 N= 75  Paroxetine - Fixed dosing schedule: 15mg/d wk1-2, 30mg/d wk 3-4, 45mg/d wk 5-6, 60mg/d wk 7-12  Group 2 N= 75  Venlafaxine XR - Fixed dosing schedule: 75mg/d wk1-2, 150mg/d wk3-4, 225mg/d wk5-6, 300mg/d wk7-12	Response: Y-BOCS>=35% reduction; Global subjective QoL data - completer analysis

References of Included Studies

# **ALBERT2002** (Published Data Only)

Albert, U., Aguglia, E., Maina, G., & Bogetto, F. (2002). Venlafaxine versus clomipramine in the treatment of obsessive-compulsive disorder: a preliminary single-blind, 12-week, controlled study. Journal of Clinical Psychiatry, 63, 1004-1009.

# **DENYS2003A** (Published Data Only)

Denys, D., van der Wee, N., van Megen, H. J. G. M., & Westenberg, H. G. M. (2003). A double blind comparison of venlafaxine and paroxetine in obsessive-compulsive disorder. Journal of Clinical Psychopharmacology, 23, 568-575.

# Appendix 16: Included/excluded studies table for the Clinical Question: 1.06 MAOIs

Characteristics of Included Studies

Methods	Participants	Outcomes	Interventions	Notes
INSEL1983B				
Study Type: Cross-over  Study Description: Allocation: random (no details) Duration of study: 2weeks washout+4 weeks placebo+6 weeks drug A+4 weeks placebo +6 weeks drug B+4 weeks placebo Blindness: Double blind Duration (days): Followup: 6 weeks Setting: Outpatient (n=7), inpatient (n=6) Notes: Country of study: US; Analysis: Info on Screening Process: 24 screened, 3 excluded on diagnostic grounds, 8 did not reach active drug trial due to medical abnormalities, no longer met inclusion criteria or conditions deteriorated during washout phase	N= 13 Age: Mean 32 Range 19-57 Sex: 8 males 5 females Diagnosis: OCD by DSM-III Exclusions: OCD duration<1 year, aged >17 years, primary depression or schizophrenia, major medical illness or history of leukotomy or other neurosurgery Notes: Mean duration of illness 6.4 years (range 1.5-13 years)	Data Used  Beck Depression Inventory Profile of Moods scale Leyton Obsessional Inventory: trait Leyton Obsessional Inventory: resistance Leyton Obsessional Inventory: interference Hamilton Rating Scale for Depression NIMH Global Depression Scale NIMH Global Anxiety Scale NIMH Global OCD Scale Obsessive-Compulsive Rating Scale Comprehensive Psychopathological Rating Scale: OC	Group 1 N= 12  Clomipramine - Initial dose 100mg/d, increased to 300mg/d as tolerated. Protocol later changed to initial dose 50mg/d, with 50mg increments every two days to 300mg/d as tolerated  Group 2 N= 11  Clorgyline - Patients were given 30mg/d from the first day	Data not extractable before the point of cross-over
JENIKE1997				
Study Type: RCT	- N= 64	Data Used	Group 1 N= 23	
Study Description: Allocation: random (no details) Blindness: No mention Duration (days): Followup: 10 weeks Setting: Outpatient Notes: Country of study: US; Analysis: ITT Info on Screening Process: Not reported	Age: Mean 35 Sex: 36 males 28 females Diagnosis:     OCD by DSM-III-R Exclusions: Aged<18 years, OCD duration<1 year, NIMH-OC<7, DSM Major depression, HRSD>17 Notes: OCD duration not reported; baseline Y-BOCS 19; baseline NIMH-OC 7.7	Clinical Global Impressions OCD Scale (CPRS) Leaving study early NIMH-OC Yale-Brown Obsessive-Compulsive Scale: tota	Fluoxetine - Subjects titrated to 80mg/day by week 3; mean maxiumum dose 77.9mg/day  Group 2 N= 20  Phenelzine - Subjects titrated to 60mg/day by week 3; all patients achieved maximum dose  Group 3 N= 21  Placebo	
VALLEJO1992				
Study Type: RCT  Blindness: Double blind  Duration (days):  Followup: 12 weeks  Setting: Outpatient  Notes: Country of study: UK; Analysis: completer  Info on Screening Process: 42, 12 excluded due to pregnancy, under age, psychopathy, schizophrenia, hysteria, anankastic depression, refusal to give signed informed consent	N= 30 Age: Mean 32 Sex: 12 males 14 females Diagnosis:     OCD by DSM-III     31% MDD Exclusions: Aged <18 and >65 years, OCD duration <2 years, primary depression, other psychoses, physical illness, organic brain pathology, pregnant or breast-feeding Notes: OCD duration 17 years	Data Used Leaving study early due to adverse events Leaving study early Hamilton Rating Scale for Depression Hamilton Rating Scale for Anxiety Maudsley Obsessive-Compulsive Inventory	Group 1 N= 14  Phenelzine - 45mg/d weeks 1&2, 60mg/d weeks 3 & 4, 75mg/d weeks 5-12  Group 2 N= 16  Clomipramine - 75mg/d weeks 1&2, 150mg/d weeks 3 & 4, 225mg/d weeks 5-12	

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# **JENIKE1997** (Published Data Only)

Jenike, M. A., Baer, L., Minichiello, W. E., Rauch, S. L., & Buttolph, M. L. (1997). Placebo-controlled trial of fluoxetine and phenelzine for obsessive- compulsive disorder. American Journal of Psychiatry, 154, 1261-1264.

# VALLEJO1992 (Published Data Only)

Vallejo, J., Olivares, J., Marcos, T., Bulbena, A., & Menchon, J. M. (1992). Clomipramine versus phenelzine in obsessive-compulsive disorder. A controlled clinical trial. British Journal of Psychiatry., 161, 665-670.

# Appendix 16: Included/excluded studies table for the Clinical Question: 1.07 Anxiolytics

Characteristics of Included Studies

Methods	Participants Participants	Outcomes	Interventions	Notes
HOLLANDER2003C				
Study Type: RCT	N= 27		Group 1 N= 17	
Study Description: Allocation: random (2/3rds assigned to clonazepam) Duration of study: 10 weeks Blindness: Double blind Duration (days): Setting: Outpatients recruited through physician referral, 1993-1995 Notes: Country of study: US Info on Screening Process: 27 screened and entered into double-blind treatment	Age: Mean 38  Sex: 18 males 9 females  Diagnosis:  OCD by DSM-III-R  Exclusions: 1: DSM-III-R diagnoses of psychotic disorders (other than delusional disorder, somatic type), major depression with psychosis, bipolar disorder or organic mental disorder; 2: current substance abuse; 3: current suicidal ideation; 4: Patients with major depression taking antidepressants and not in full remission for at least 3 months; 5: pregnancy and/or breast feeding; 6: intolerance to tapering or discontinuation of other medications; 7: history of major medical disorders (e.g., current seizure disorder, cardiovascular, hepatic, renal, gastrointestinal, pulmonary, metabolic, endocrine, haematologic or other systemic diseases).  Notes: Sample included both treatment naïve and treatment resistant patients with OCD (resistance = failure of 2 or more trials with SRIs at adequate dose range for at least 12 weeks of therapy).	NIMH-OC Hamilton Rating Scale for Depression Hamilton Rating Scale for Anxiety Yale-Brown Obsessive-Compulsive Scale: total Leaving study early due to adverse events Responder (OCD/BDD)	Clonazepam - Medication was dispensed 3 times a day according to a prearranged dosage schedule (3-6mg/day). Dosage levels were fixed during weeks 1-3 (1 mg at mid-day for week 1, 1mg BID for week 2, and 1mg TID for week 3) and flexible during weeks 4-10.  Group 2 N= 10  Placebo	
PATO1991				
Study Type: Cross-over Study Description: Cross-over after 6 weeks of active drug treatment. Blindness: Double blind Duration (days):  Notes: Country of study: US Mean (SD) doses were 225(49) mg/day for clomipramine and 58 (7) mg/day for buspirone.	N= 20 Age: Mean 35 Sex: no information Diagnosis:     OCD by DSM-III-R  Notes: Patients had experienced obsessive-compulsive symptoms for a minimum of one year. A minimum rating of 4 on the NIMH global OC scale was required for inclusion in the study.	NIMH-OC Hamilton Rating Scale for Depression Yale-Brown Obsessive-Compulsive Scale: total Leaving study early due to adverse events Leaving study early	Clomipramine - Each patient's dose was increased to the maximum that could be tolerated, up to 250mg/day. Patients achieved the maximum doses by day 14 and were maintained on these for the remaining 4 weeks of of the 6-week phase.  Stroup 2 N=9  Buspirone - Each patient's dose was increased to the maximum that coould be tolerated, up to 60mg/day. Patients achieved the maximum doses by day 14 and were maintained on these for the remaining 4 weeks of the 6-week phase.	

References of Included Studies

HOLLANDER2003C (Published Data Only)

Hollander, E., Kaplan, A., & Stahl, S. M. (2003). A double-blind, placebo-controlled trial of clonazepam in obsessive-compulsive disorder. World Journal of Biological Psychiatry., 4, 30-34.

PATO1991 (Published Data Only)

Pato, M. T., Pigott, T. A., Hill, J. L., Grover, G. N., Bernstein, S., & Murphy, D. L. (1991). Controlled comparison of buspirone and clomipramine in obsessive-compulsive disorder. American Journal of Psychiatry., 148, 127-129.

# Characteristics Table and Reference List for the ReferenceID's Included in The Clinical Question: 1.09 Other pharmacological interventions

Methods	Participants	Outcomes	Interventions	Notes
DENBOER1992				
Study Type: RCT  Study Description: A double-blind, placebo- controlled study with syntocinon (oxytocin) was  carried out in 12 patients with OCD.  Blindness: Double blind  Duration (days):  Setting: Outpatient anxiety clinic of the  department of Biological Psychiatry, Academic  Hospital Utrecht, The Netherlands.  Info on Screening Process: 12 patients entered  the study.	N= 12 Age: Sex: 3 males 9 females Diagnosis: OCD by DSM-III-R Exclusions: Patients with a score of 15 or more on the 17- item Hamilton Rating Scale for Depression, major affective disorder, schizophrenia, and other psychotic disorders, and those suffering from significant medical problems on the basis of a complete medical evaluation. Only those patients who used small amounts of benzodiazepines (e.g., oxazepam 30mg daily) were elected to participate in the study. People who were treated with antidepressants were excluded from the study. No behavior therapy was given during the study. All patients underwent behavior therapy before inclusion in the study, but only those who stopped therapy more than 6 months before the study were included.  Notes: OCD with a minimum duration of 1 year. Oxytocin group: mean age (SD) = 39.8 (7.5), mean duration of illness (SD) = 13.8 (10.8). Placebo group: mean age (SD) = 39.8 (8.9), mean duration of illness (SD) = 14.2 (10.6)).	Data Used General Symptom Index State-Anxiety Inventory Self-Rating Depression Scale Hamilton Rating Scale for Anxiety Hamilton Rating Scale for Depression Adverse events Leaving study early	Group 1 N= 6  Oxytocin - Patients were treated for 6 weeks. Following a wash-out period of 1 week, oxytocin was administered intranasally (one squeeze in each nostril, 4 times a day). The solution contained 40 IU/ml oxytocin and one squeeze delivered about 22 IU oxytocin.  Group 2 N= 6  Placebo - Patients were treated for 6 weeks. Following a wash-out period of 1 week, placebo was administered intranasally (one squeeze in each nostril, 4 times a day).	
EPPERSON1996  Study Type: Cross-over  Study Description: Allocation: random (no details)  Duration of study: 7 days in each treatment phase separated by 7-day placebo washout  Blindness: Double blind  Duration (days):  Notes: Country of study: US; Analysis: ITT	N= 7 Age: Mean 46 Sex: 4 males 3 females Diagnosis: OCD by DSM-IV 100% MDD by DSM-IV  Notes: Mean age of OCD onset 18.7+-3.7 years; contamination concerns and cleaning rituals were the primary symptoms, one patient was a hoarder, all had comorbid major depression, 1 one dependent personality disorder, 1 had Tourette's syndrome	Data Used Beck Depression Inventory Yale-Brown Obsessive-Compulsive Scale: total	Group 1 N= 7  Oxytocin - Patients received intranasal oxytocin 40 IU/mL for 1 week  Group 2 N= 7  Placebo - Patients received saline placebo for 1 week	
FUX1996 Study Type: Cross-over	N= 13	Data Used	Group 1 N= 7	
Study Description: Double-blind, controlled cross-over trial of 18g/day of inositol or placebo for 6 weeks each.  Blindness: Double blind  Duration (days):  Setting: Not reported.  Notes: No washout period between the phases of the cross-over.	Age: Mean 34 Range 23-56 Sex: 5 males 8 females Diagnosis: 100% OCD by DSM-III-R  Notes: Mean duration of illness was 8.1 years (SD=5, range=1-17).	Yale-Brown Obsessive-Compulsive Scale: tota  Data Not Used  Hamilton Rating Scale for Depression - no pre cross-over data  Hamilton Rating Scale for Anxiety - no pre- cross-over data	Inositol - Dose of inositol (1g/day) was given as 2 teaspoonfuls in juice 3 times	
Info on Screening Process: 15 patients entered the trial, 13 included in the data analysis.				

References of Included Studies

**DENBOER1992** (Published Data Only)

Den Boer, J. A. & Westenberg, H. G. (1992). Oxytocin in obsessive compulsive disorder. Peptides, 13, 1083-1085.

**EPPERSON1996** (Published Data Only)

Epperson, C. N., McDougle, C. J., & Price, L. H. (1996). Intranasal oxytocin in obsessive-compulsive disorder. Biological Psychiatry., 40, 547-549.

**FUX1996** (Published Data Only)

Fux, M., Levine, J., Aviv, A., & Belmaker, R. H. (1996). Inositol treatment of obsessive-compulsive disorder. American Journal of Psychiatry., 153, 1219-1221.

# Appendix 16: Included/excluded studies table for the Clinical Question: 1.10 Augmentation

Methods	Participants Participants	Outcomes	Interventions	Notes
ATMACA2002				
Study Type: RCT  Study Description: Allocation: random (no details)  Study duration: 3 month open-label screening with SRI + 8 weeks double-blind  Blindness: Single blind  Duration (days):  Setting: Not reported  Notes: Country of study: Turkey; Analysis: ITT  Info on Screening Process: 52 entered open-label phase, 19 responded, 4 dropped out due to treatment incompliance, 2 due to intolerance	N= 27 Age: Mean 28 Sex: 14 males 13 females Diagnosis: OCD by DSM-IV Exclusions: Included patients applying to University between Sept and Dec 2000, had received at least 1 adequate SRI trial prior to open-label phase Excluded OCD with psychotic features, study drug intolerance during open-label phase, Y-BOCS<18, patient had improved enough as agreed by authors, CGI-l>minimal improvement Notes: OCD age of onset: 22 years, baseline Y-BOCS: 24; comorbid disorders: major depression (8), social phobia (2), hypochondriasis (2), panic disorder (2)	Data Used Responders (30% Y-BOCS) Clinical Global Impressions: severity of illness Yale-Brown Obsessive-Compulsive Scale: tota Leaving study early Adverse events	Group 1 N= 14  SRI + Quetiapine - Quetiapine 50mg/d added to SRI and increased by a 25mg/d in each 2 week period based on response and side-effects to maximum 200mg/d; mean final dose 90.38mg/d +-42.7; fluoxetine 40mg/d n=5; fluvoxamine 200mg/d n=5; clomipramine 150mg/d n=4  Group 2 N= 13  SRI + Placebo - fluoxetine 40mg/d n=5; fluvoxamine 200mg/d n=4; clomipramine 150mg/d n=4	
BARR1997 Study Type: RCT Study Description: Allocation: random (no details) Study duration: 6 weeks, and 10 weeks in a subgroup who joined the study later Blindness: Double blind Duration (days): Setting: Not reported Notes: Country of study: US; Analysis: Completer (those completing 10-week study duration) Info on Screening Process: 33 randomised, 3 dropped out within first 3 weeks due to adverse effects, 30 completed 6 weeks, 23 completed 10 weeks	N= 30 Age: Mean 38 Sex: 17 males 13 females Diagnosis: OCD by DSM-III-R Exclusions: OCD duration<2 years, had received SSRI for <10 weeks before start of study, Y-BOCS<16, CGI>minimally improved Notes: Baseline Y-BOCS 25; 3 patients were receiving low-dose benzodiazepines, 3 were receiving behaviour therapy Study duration originally 6 wks, but in 25 patients enrolling into study later, duration continued to 10 weeks - data extracted for this subgroup	Data Used Yale-Brown Obsessive-Compulsive Scale: total	Group 1 N= 10  SSRI + Desipramine - The daily dose of desipramine was adjusted weekly in order to obtain a plasma desipramine level greater than 125ng/ml; mean final dose 150.9mg/d +-69.7  Group 2 N= 13  SSRI + Placebo	

DANNON2000				
Study Type: RCT	N= 14	Data Used	Group 1 N= 16	
Study Description: Allocation: random (no details) Study duration: Minimum 15-wk open-label paroxetine 60mg/d, non-responders (Y-BOCS<25% reduction) 6-wk d-blind phase Blindness: Double blind Duration (days): Setting: Not reported Notes: Country of study: Israel, Analysis: completer Info on Screening Process: 23 entered open-label phase & 16 d-blind phase, 3 drop-outs due to lack of compliance, 4 responded to open-label treatment, 2 drop-outs in d-blind phase due to adverse effects	Age: Mean 34 Sex: 8 males 6 females Diagnosis:     OCD by DSM-IV Exclusions: Aged<18 and >72 years, response to open-label paroxetine (Y-BOCS>=25% reduction), other primary psychiatric diagnosis, major medical problems, pregnancy, substance or alcohol abuse, contraindication to beta-blocker treatment Notes: Mean OCD duration of episode 7.5 months, mean baseline Y-BOCS 30; baseline MADRS 16.4; baseline HAMS-ANX 12.5	Hamilton Rating Scale for Anxiety Montgomery-Asberg Depression Rating Scale Yale-Brown Obsessive-Compulsive Scale: tota Leaving study early due to adverse events Leaving study early	Paroxetine + Pindolol - Pindolol 2.5mg tid + Paroxetine 60mg/d  Group 2 N= 16  Paroxetine + Placebo - Placebo + Paroxetine 60mg/d	
FUX1999				
Study Type: Cross-over	N= 10	Data Used	Group 1 N= 6	
Study Description: Allocation: random Duration of study: 6 weeks in each treatment; data extractable at point of cross-over Blindness: Double blind	Age: Mean 30 Sex: 2 males 8 females Diagnosis: Exclusions: Inclusion: were clinically stable and on stable	Yale-Brown Obsessive-Compulsive Scale: tota		
Duration (days):	doses of SRI for at least 8 weeks,		fluvoxamine (200-250mg) or clomipramine (150-225mg)	
Setting: Not reported  Notes: Country of study: Israel; Analysis: completer  Info on Screening Process: 13 recruited, 3 dropped out after baseline assessment	Notes: Mean duration of illness 11.1 +-6 years; mean baseline Y-BOCS 27.6 +-5.83		Clothip annie (136 225mg)	
GRADY1993				
Study Type: Cross-over	N= 14	Data Used	Group 1 N= 14	Data not extractable at the
Study Description: Allocation: random (no details), both patients & assessors not informed of treatment order or duration Study duration: 8 wks(4 wks in each treatment)	Age: Mean 39 Sex: 7 males 7 females Diagnosis: OCD by DSM-III-R	NIMH Global Anxiety Scale Hamilton Rating Scale for Depression NIMH Obsessive Compulsive Rating Yale-Brown Obsessive-Compulsive Scale: tota	Buspirone - Dose increased over 2 weeks, and all patients reached stable dose of 60mg/d during the final two weeks Group 2 N= 14	point of cross-over
Blindness: Double blind Duration (days):	Exclusions: Had not been maintained with stable doses of 80mg/d fluoxetine for 10 weeks, OCD duration <1 year		Placebo	
Notes: Country of study: US; Analysis: completer	Notes: Mean baseline Y-BOCS 17.7; patients were maintained with same dose of open-label fluoxetine throughout study			

HOLLANDER2003E				
Study Type: RCT  Study Description: Allocation: random (no details), raters were blind to drug condition Duration of study:8 weeks  Blindness: Double blind  Duration (days):  Setting: Outpatient  Notes: Country of study: US; Analysis: ITT  Info on Screening Process: Not reported	N= 16 Age: Mean 40 Sex: 9 males 7 females Diagnosis:     OCD by DSM-IV Exclusions: OCD duration<2 years, major medical illness, history of schizophrenia, schizoaffective disorder or bipolar disorder Included patients who were treatment-resistant: non-response (CGI>=3) to at least two SRI trials, taking SRI medication for >=12 weeks Notes: mean OCD duration 22.65 years; mean baseline Y-BOCS 29.27	Data Used Adverse events Responders (CGI; 25% Y-BOCS) Leaving study early Yale-Brown Obsessive-Compulsive Scale: tota	Group 1 N= 10  SRI + Risperidone - Initial risperidone dose 0.5mg/d, increased weekly by 0.5mg over first 6 weeks until 3mg/d was reached or reported side-effects. Mean final dose 2.25+-0.86mg/d  Group 2 N= 6  SRI + Placebo - Initial dose 0.5mg/d, increased weekly by 0.5mg over first 6 weeks until 3mg/d was reached or reported side-effects. Mean final dose 2.75+-0.5mg/d	Response: CGI "much improved" or "very much improved" and Y-BOCS>=25% reduction
MCDOUGLE1991				
Study Type: RCT  Study Description: Allocation: random (no details); patients, treating staff and raters were blind to treatment Study 1 duration: 2 weeks Study 2 duration: 4 weeks Blindness: Double blind Duration (days):  Setting: 22 outpatient, 8 inpatient Notes: Country of study: US; Analysis: ITT Info on Screening Process: 74 completed 2-week placebo and minimum 6- or 7-week single-blind fluvoxamine, 44 were not considered treatment refractory	N= 30 Age: Mean 35 Sex: 11 males 19 females Diagnosis: OCD by DSM-III-R 50% MDD by DSM-III-R Exclusions: Following fluvoxamine alone treatment, Y-BOCS>=35% reduction or Y-BOCS<16, CGI>minimal improvement, and consensus of clinician of improvement; MDD primary to OCD Notes: OCD duration: not reported; mean baseline Y-BOCS 25.4	Data Used Responder (OCD/BDD) Hamilton Rating Scale for Depression Hamilton Rating Scale for Anxiety Yale-Brown Obsessive-Compulsive Scale: tota	Group 1 N= 16  SSRI + Lithium - Initial Li dose 900mg/d, dosage adjusted to keep serum level between 0.5&1.2mmol/l, same fluvoxamine dose as during s-blind treatment Study 1: mean fluvox 286+-23.4mg/d; mean Li 954.5+-180.9mg/d Study 2: 300mg/d fluvox; mean serum Li 0.79 + - 0.23 mmol/l  Group 2 N= 14  SSRI + Placebo - Study 1: mean fluvoxamine dose 277.8+-44.1mg/d Study 2: all received 300mg/d fluvoxamine	
MCDOUGLE1993A  Study Type: RCT  Study Description: Allocation:random (no details) Study duration: 1 week placebo, 8 weeks fluvoxamine single-blind, 6 weeks fluvoxamine+buspirone double-blind Blindness: Double blind Duration (days): Setting: Inpatients and outpatients Notes: Country of study: US; Analysis: ITT Info on Screening Process: 50 entered single-blind phase, 17 were not considered treatment refractory	N= 33 Age: Sex: 16 males 17 females Diagnosis:  Exclusions: Following fluvoxamine alone treatment, Y-BOCS>=35% reduction or Y-BOCS<16, CGI>minimal improvement, and consensus of primary investigators of improvement Notes: OCD duration: not reported; mean baseline Y-BOCS 25.5	Data Used Responder (OCD/BDD) Hamilton Rating Scale for Anxiety Hamilton Rating Scale for Depression Yale-Brown Obsessive-Compulsive Scale: tota	Group 1 N= 19  SSRI + Buspirone - Initial buspirone dose 15mg/d, increased by 15mg/d to maxiumum 60mg/d depending on clinical response and side effects; mean fluvoxamine dose 278.9+-38.4  Group 2 N= 14  SSRI + Placebo - Mean fluvoxamine dose 296.4mg/d+-13.4	

MCDOUGLE1994A	T			
	- N 24	Deta Head	Group 1 N-17	Pagnange V POCC: 950/
Study Type: RCT  Study Description: Allocation: random (no details)  Study duration: 1week placebo, 8 weeks d-blind fluvoxamine alone, 4 week d-blind fluvoxamine+haloperidol  Blindness: Double blind  Duration (days):  Setting: 9 inpatient, 25 outpatient  Notes: Country of study: US; Analysis: ITT  Info on Screening Process: 62 entered fluvoxamine alone treatment phase,16 responded to fluvoxamine alone, 7 had side effects, 4 non-compliant, one had exacerbation of motor tics	N= 34 Age: Mean 35 Sex: 26 males 8 females Diagnosis: OCD by DSM-III-R 47% MDD by DSM-III-R 24% Tourette's syndrome by Schedule for Tourette+other Behavioural Syndromes 21% Chronic motor tic disorder by Schedule for Tourette+other Behavioural Syndromes Exclusions: Not refractory to fluvoxamine alone treatment; primary MDD; primary tic disorder Inclusion criterion for refractoriness: Y-BOCS<35% reduction or Y-BOCS>=16; CGI<=minimal improvement; consensus of treating clinicans Notes: Mean OCD duration 19.4 years, mean baseline Y-BOCS 25.2; OCD patients with comorbid Tic disorder were specifically sought from the community	Responder (OCD/BDD) Yale-Brown Obsessive-Compulsive Scale: tota	Group 1 N= 17  SSRI + Haloperidol - Haloperidol 2mg/d for 3 days, increased by 2mg every 3 days to a maximum of 10mg/d + 300mg fluvoxamine; mean haloperidol dose 6.2mg/d+-3  Group 2 N= 17  SSRI + Placebo - Mean fluvoxamine dose before augmentation phase 282.4mg/d+-49.8	Response: Y-BOCS>=35% reduction; CGI "much improved" or "very much improved"; consensus of improvement between treating clinician and primary investigators
Study Type: RCT  Study Description: Allocation: random (computer-generated list) Study duration: 1 week placebo + 12 weeks open-label SRI + 6 weeks d-blind SRI + risperidone Blindness: Double blind Duration (days):  Setting: 9 inpatients, 27 outpatients Notes: Country of study: US; Analysis: ITT (Y-BOCS scores) and per protocol (HAM-D and HAM-A scores) Info on Screening Process: 70 entered open-label SRI treatment phase, 34 excluded: 23 responded to SRI treatment, 7 had adverse effects to SRI, 4 were non-compliant	N= 36 Age: Mean 37 Sex: 21 males 15 females Diagnosis: OCD by DSM-IV 83% MDD by DSM-IV 14% Chronic motor tic disorder by Schedule for Tourette+other Behavioural Syndromes 19% Tourette's syndrome by DSM-IV Exclusions: Not refractory to fluvoxamine alone treatment; medical or cardiac problems, pregnant, were receiving psychotropic medications within 4 weeks of study Inclusion criterion for refractoriness: Y-BOCS<35% reduction or Y-BOCS>=16; CGI<=minimal improvement; consensus of treating clinicans Notes: OCD duration: 17.44 years; baseline Y-BOCS 27.6	Hamilton Rating Scale for Depression Hamilton Rating Scale for Anxiety Yale-Brown Obsessive-Compulsive Scale: tota Adverse events Responder (OCD/BDD)	Group 1 N= 20  SRI + Risperidone - Risperidone 1mg/d for 7 days, increased by 1mg per week to maximum of 6mg/d + SRI; mean risperidone dose 2.2mg/d; SRI dose: CMI 250mg/d, Fluvox 300mg/d, Fluox 80mg/d, Sert 150mg/d, Par 40mg/d  Group 2 N= 16  SRI + Placebo - Mean CMI 212.5+-47.87, Fluvoxamine 300mg/d+-0, Fluoxetine 60mg/d+-20, Sertraline 200mg/d+-0	
MUNDO1998 Study Type: RCT Study Description: Allocation: random (no details) Duration of study: 8 weeks Blindness: Double blind Duration (days): Notes: Country of study: Italy	N= 15 Age: Mean 26 Sex: 7 males 9 females Diagnosis: OCD by DSM-IV Exclusions: Comorbid diagnoses except for Tic Disorder or Tourette Syndrome, previous unsuccessful trial with fluvoxamine, HAM-D scores > 17, severe medical illness, history of seizures, respiratory diseases or dysrhythmias, pregnancy, lactation or history of allergy or intolerance to study drugs Notes: Duration of illness 9 years	Data Not Used Hamilton Rating Scale for Depression - no dat NIMH-OC - no data Yale-Brown Obsessive-Compulsive Scale: total - no data	Group 1 N= 7 Placebo - Fluvoxamine + placebo Group 2 N= 8 Pindolol - Fluvoxamine + pindolol: Fluvoxamine - days 1-3 100mg/d, days 4-7 200mg/d, day 8 onwards 300mg/d; Pindolol - day 1 2.5mg/d, day 2 2.5mg/d b.i.d, day 3 onwards 2.5mg/d t.i.d	

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NOORBALA1998				
Study Type: RCT	N= 34		Group 1 N= 15	
Blindness: Double blind Duration (days):	Age: Mean 32 Range 18-54 Sex: 31 males 3 females	Yale-Brown Obsessive-Compulsive Scale: total	Clomipramine + Nortriptyline - 150mg/d clomipramine + 50mg/d nortriptyline Group 2 N= 15	
	Diagnosis:		•	
Followup: 8 weeks	OCD by DSM-IV		Clomipramine + placebo - 150mg/d clomipramine + placebo	
Setting: Outpatient	Exclusions: Y-BOCS<18, OCD duration<1 year, HRSD>19, HRSD item 1>2, other psychiatric diagnosis within 1 year of		olempiae i placese	
Notes: Country of study: Iran; Analysis: per protocol	study, pregnant or lactating, unstable medical disorders such as cardiovascular, hepatic, renal illnesses			
Info on Screening Process: 34, 4 dropped out due to non-compliance	Notes: Baseline Y-BOCS 33.19			
PALLANTI1999				
Study Type: RCT	N= 16		Group 1 N= 7	Response: Y-BOCS >=35%
Study Description: Allocation: random (no details)	Age: Mean 25 Sex: 10 males 6 females	Responders (35% Y-BOCS) Hamilton Rating Scale for Depression	Citalopram - 20mg/d initial dose, increase after 2 weeks to 40mg/d	reduction
Blindness: Open	Diagnosis:	Yale-Brown Obsessive-Compulsive Scale: total	-	
Duration (days):	OCD by DSM-III-R		Citalopram + Clomipramine - 20mg/d citalopram initial dose, increased after 2	
Followup: 90 days	Exclusions: Aged <18 and >45 years; OCD duration<1 year; Y-BOCS<25, any other axis I disorder, a medical disorder		weeks to 40mg/d; 25mg/d clomipramine	
Setting: Outpatient	that would contraindicate with clomipramine		initial dose, increased after 2 weeks to 150mg/d	
Notes: Country of study: Italy; Analysis: ITT	Notes: Included patients who had failed an adequate trial of		5	
Info on Screening Process: Not reported	clomipramine and of fluoxetine, failure defined as Y-BOCS<35% reduction and CGI - minimal improvement; baseline Y-BOCS 33.2; baseline HRSD 12.6			
PIGOTT1991				
Study Type: Cross-over	N= 16		Group 1 N= 16	
Study Description: Allocation: random (no details) Duration of study: 8 weeks (4 weeks in each treatment)	Age: Mean 39 Sex: 8 males 8 females Diagnosis:	NIMH Obsessive Compulsive Rating - no pre- cross-over data Hamilton Rating Scale for Depression - no pre- cross-over data	Lithium carbonate - Initial dose 300mg/d, 300mg/d increments every 3 days, to maximum 1500mg/d in three divided doses per day, mean daily dose 1034+-	
Blindness: Double blind	OCD by DSM-III-R	Yale-Brown Obsessive-Compulsive Scale: total - no pre-cross-over data	153mg/d <b>Group 2 N= 16</b>	
Duration (days):	Exclusions: Aged <18 and >65 years, less than partial response to CMI based on Y-BOCS and NIMH Global OC scores, history of drug abuse or addiction, significant renal.	total - no pre-cross-over data	Thyroid hormone - Fixed dose of 25micrograms/d administered in two	
Setting: Outpatient	hepatic, metabolic, or neurologic abnormalities		divided doses per day	
Notes: Country of study: US; Analysis: ITT	Notes: Mean duration of illness 19+-8 years, duration of CMI			
Info on Screening Process: Not reported	treatment 30+-4 weeks, mean daily dose CMI 185+-50mg/d, baseline Y-BOCS 17+-5; patients were maintained on same dose of open-lable CMI throughout study			

# SHAPIRA2004

Study Type: RCT

Study Description: Allocation: random (no details). Study duration: 6-week, double-blind augmentation phase following 8-week, openlabel monotherapy phase.

Blindness: Double blind

Duration (days): Setting: No details.

Notes: Country of study: US. Analysis: ITT/LOCF.

Info on Screening Process: 74 treated with open-label fluoxetine; 44 were partial or non-responders after 8 weeks and enrolled in augmentation phase.

N= 44

Age: Mean 37

Sex: 18 males 26 females

Diagnosis:

OCD by DSM-IV

Exclusions: Primary depression, schizophrenia or other psychotic disorders; active bipolar disorder; abuse of alcohol or other significant substance within 6 months; increased risk of seizures or history of neurosurgery, encephalitis or significant head trauma; significant medical condition such as heart. liver or renal disease.

Notes: Inclusion: subjects age 14-70, at least 1-year duration of a current DSM-IV principal diagnosis of OCD plus definition of OCD by a rating of "moderate" or greater on the global severity item of CGI and Y-BOCS score of 19 or greater

Data Used

Leaving study early due to adverse events Leaving study early

Responders (25% Y-BOCS)

Yale-Brown Obsessive-Compulsive Scale: tota

Group 1 N= 22

Fluoxetine + Olanzapine - Olanzapine was initiated at 5mg daily and titrated upward to a maximum of 10mg as early as the second week.

Group 2 N= 22

Fluoxetine + Placebo - Up to 40mg fluoxetine.

Responders: 25% or greater improvement in Y-BOCS scores from augmentation baseline to end of treatment.

References of Included Studies

### ATMACA2002

(Published Data Only)

Atmaca, M., Kuloglu, M., Tezcan, E., & Gecici, O. (2002). Quetiapine augmentation in patients with treatment resistant obsessive-compulsive disorder: a single-blind, placebo-controlled study. International Clinical Psychopharmacology., 17, 115-119.

### **BARR1997**

(Published Data Only)

Barr, L. C., Goodman, W. K., Anand, A., McDougle, C. J., & Price, L. H. (1997). Addition of desipramine to serotonin reuptake inhibitors in treatment-resistant obsessive-compulsive disorder. American Journal of Psychiatry., 154, 1293-1295.

# DANNON2000

(Published Data Only)

Dannon, P. N., Sasson, Y., Hirschmann, S., Iancu, I., Grunhaus, L. J., & Zohar, J. (2000). Pindolol augmentation in treatment-resistant obsessive compulsive disorder: a double-blind placebo controlled trial. European Neuropsychopharmacology., 10, 165-169.

#### FUX1999

(Published Data Only)

Fux, M., Benjamin, J., & Belmaker, R. H. (1999). Inositol versus placebo augmentation of serotonin reuptake inhibitors in the treatment of obsessive-compulsive disorder: A double-blind cross-over study. International Journal of Neuropsychopharmacology, 2, 193-195.

#### GRADY1993

(Published Data Only)

Grady, T. A., Pigott, T. A., L'Heureux, F., Hill, J. L., Bernstein, S. E., & Murphy, D. L. (1993). Double-blind study of adjuvant buspirone for fluoxetine-treated patients with obsessive-compulsive disorder. American Journal of Psychiatry., 150, 819-821.

# HOLLANDER2003E

(Published Data Only)

Hollander, E., Rossi, N. B., Sood, E., & Pallanti, S. (2003). Risperidone augmentation in treatment-resistant obsessive-compulsive disorder: a double-blind, placebo-controlled study. International Journal of Neuropsychopharmacology, 6, 397-401.

#### MCDOUGLE1991

(Published Data Only)

McDougle, C. J., Price, L. H., Goodman, W. K., Charney, D. S., & Heninger, G. R. (1991). A controlled trial of lithium augmentation in fluvoxamine-refractory obsessive-compulsive disorder: Lack of efficacy. Journal of Clinical Psychopharmacology, 11, 175-184.

## MCDOUGLE1993A

(Published Data Only)

McDougle, C. J., Goodman, W. K., Leckman, J. F., Holzer, J. C., Barr, L. C., McCance-Katz, E. et al. (1993). Limited therapeutic effect of addition of buspirone in fluvoxamine-refractory obsessive-compulsive disorder. American Journal of Psychiatry., 150, 647-649.

#### MCDOUGLE1994A

(Published Data Only)

McDougle, C. J., Goodman, W. K., Leckman, J. F., Lee, N. C., Heninger, G. R., & Price, L. H. (1994). Haloperidol addition in fluvoxamine-refractory obsessive-compulsive disorder. A double-blind, placebo-controlled study in patients with and without tics. Archives of General Psychiatry., 51, 302-308.

# MCDOUGLE2000A (Published Data Only)

McDougle, C. J., Epperson, C. N., Pelton, G. H., Wasylink, S., & Price, L. H. (2000). A double-blind, placebo-controlled study of risperidone addition in serotonin reuptake inhibitor-refractory obsessive-compulsive disorder. Archives of General Psychiatry, 57, 794-801.

# MUNDO1998 (Published Data Only)

Mundo, E., Guglielmo, E., & Bellodi, L. (1998). Effect of adjuvant pindolol on the antiobsessional response to fluvoxamine: a double-blind, placebo-controlled study. International Clinical Psychopharmacology., 13, 219-224.

# NOORBALA1998 (Published Data Only)

Noorbala, A. A., Hosseini, S. H., Mohammadi, M. R., & Akhondzadeh, S. (1998). Combination of clomipramine and nortriptyline in the treatment of obsessive-compulsive disorder: a double-blind, placebo-controlled trial. Journal of Clinical Pharmacy & Therapeutics., 23, 155-159.

# PALLANTI1999 (Published Data Only)

Pallanti, S., Quercioli, L., Paiva, R. S., & Koran, L. M. (1999). Citalopram for treatment-resistant obsessive-compulsive disorder. European Psychiatry: the Journal of the Association of European Psychiatrists., 14, 101-106.

# PIGOTT1991 (Published Data Only)

Pigott, T. A., Pato, M. T., L'Heureux, F., Hill, J. L., Grover, G. N., Bernstein, S. E. et al. (1991). A controlled comparison of adjuvant lithium carbonate or thyroid hormone in clomipramine-treated patients with obsessive-compulsive disorder. Journal of Clinical Psychopharmacology., 11, 242-248.

# **SHAPIRA2004** (Published Data Only)

Shapira, N.A., Ward, H.E., Mandoki, M., Murphy, T.K., Yang, M.C.K., Blier, P. & Goodman, W.K. (2004). A double-blind, placebo-controlled trial of olanzapine addition in fluoxetine-refractory obsessive-compulsive disorder. Biological Psychiatry., 553, 553-555.

# Appendix 16: Included/excluded studies table for the Clinical Question: 1.13 SRIs vs non-SRIs

Methods	Participants	Outcomes	Interventions	Notes
GOODMAN1990A Study Type: RCT Study Description: Allocation: random (no details) Blindness: Double blind Duration (days): Followup: 8 weeks Setting: Outpatients Notes: Country of study: US; Analysis: ITT Info on Screening Process: Not reported	N= 40 Age: Mean 38 Sex: 19 males 21 females Diagnosis: 100% OCD by DSM-III-R Exclusions: OCD duration <1 year, CGI-global severity >=moderate; primary depression; MDD primary diagnosis Notes: Patients with current major depression: Fluvoxamine n=14, Desipramine n=13; chronic tics history n=6; patients attended weekly individual psychotherapy (comprised supportive therapy, psychoeducation, relaxation techniques); mean OCD duration 18 years	Data Used Leaving study early due to adverse events Leaving study early Hamilton Rating Scale for Depression Yale-Brown Obsessive-Compulsive Scale: total	Group 1 N= 19  Desipramine - 50mg for first 3 days, increased to 150mg by 2nd week, and upto 300mg based on clinical response; mean final dose 223mg/d (+-48)  Group 2 N= 21  Fluvoxamine - 50mg for first 3 days, increased to 150mg by 2nd week, and upto 300mg based on clinical response; mean final dose 214mg/d (+-55)	
HOEHNSARIC2000 Study Type: RCT Study Description: Randomization using a computer-generated randomization scheme Blindness: Double blind Duration (days): Followup: 12 weeks Setting: Not reported Notes: Country of study: US; Analysis: ITT; study conducted at 16 sites Info on Screening Process: Not reported	N= 116 Age: Mean 38 Sex: 66 males 48 females Diagnosis: 100% OCD by DSM-III-R 100% MDD by DSM-III-R Exclusions: Y-BOCS<20, HRSD-24<18, HRSD-item 1<2, CGI for OCD & MDD<4 Notes: OCD duration: 213 mo; MDD duration 24 mo; Y-BOCS baseline 26; HRSD-24 baseline: 27.5	Data Used Responder (OCD/BDD) Responder (MDD) Remission (MDD) Leaving study early due to adverse events Leaving study early Adverse events Hamilton Rating Scale for Depression NIMH-OC Yale-Brown Obsessive-Compulsive Scale: total	Group 1 N= 80  Sertraline - flexible dosage (based on response and side-effects): 50mg/d first 2 weeks, 100mg/d by week 4, 150mg/d at week 4, 200mg/d at week 5; mean final dose 160.1mg/d+-50  Group 2 N= 86  Desipramine - flexible dosage (based on response and side-effects): 50mg/d titrated upto 300mg/d; mean final dose 193.5mg/d+-90	Response: for OCD: Y-BOCS>=40% reduction, for MDD: HRSD>=50% reduction; MDD remission: HRSD<=17
JENIKE1997 Study Type: RCT Study Description: Allocation: random (no details) Blindness: No mention Duration (days): Followup: 10 weeks Setting: Outpatient Notes: Country of study: US; Analysis: ITT Info on Screening Process: Not reported	N= 64 Age: Mean 35 Sex: 36 males 28 females Diagnosis: OCD by DSM-III-R Exclusions: Aged<18 years, OCD duration<1 year, NIMH-OC<7, DSM Major depression, HRSD>17 Notes: OCD duration not reported; baseline Y-BOCS 19; baseline NIMH-OC 7.7	Data Used Clinical Global Impressions OCD Scale (CPRS) Leaving study early NIMH-OC Yale-Brown Obsessive-Compulsive Scale: total	Group 1 N= 23  Fluoxetine - Subjects titrated to 80mg/day by week 3; mean maxiumum dose 77.9mg/day  Group 2 N= 20  Phenelzine - Subjects titrated to 60mg/day by week 3; all patients achieved maximum dose  Group 3 N= 21  Placebo	

PATO1991			
Study Type: Cross-over Study Description: Cross-over after 6 weeks of active drug treatment. Blindness: Double blind Duration (days):  Notes: Country of study: US Mean (SD) doses were 225(49) mg/day for clomipramine and 58 (7) mg/day for buspirone.	N= 20 Age: Mean 35 Sex: no information Diagnosis:     OCD by DSM-III-R  Notes: Patients had experienced obsessive-compulsive symptoms for a minimum of one year. A minimum rating of 4 on the NIMH global OC scale was required for inclusion in the study.	Data Used NIMH-OC Hamilton Rating Scale for Depression Yale-Brown Obsessive-Compulsive Scale: tota Leaving study early due to adverse events Leaving study early	Group 1 N= 9  Clomipramine - Each patient's dose was increased to the maximum that could be tolerated, up to 250mg/day. Patients achieved the maximum doses by day 14 and were maintained on these for the remaining 4 weeks of of the 6-week phase.  Group 2 N= 9  Buspirone - Each patient's dose was increased to the maximum that coould be tolerated, up to 60mg/day. Patients achieved the maximum doses by day 14 and were maintained on these for the remaining 4 weeks of the 6-week phase.
VALLEJO1992			
Study Type: RCT	N= 30	Data Used	Group 1 N= 14
Blindness: Double blind Duration (days):	Age: Mean 32 Sex: 12 males 14 females	Leaving study early due to adverse events Leaving study early Hamilton Rating Scale for Depression	Phenelzine - 45mg/d weeks 1&2, 60mg/d weeks 3 & 4, 75mg/d weeks 5-12  Group 2 N= 16
Followup: 12 weeks	Diagnosis:	Hamilton Rating Scale for Anxiety	Clomipramine - 75mg/d weeks 1&2,
Setting: Outpatient	OCD by DSM-III 31% MDD	Maudsley Obsessive-Compulsive Inventory	150mg/d weeks 3 & 4, 225mg/d weeks 5-
Notes: Country of study: UK; Analysis: completer	Exclusions: Aged <18 and >65 years, OCD duration <2 years, primary depression, other psychoses, physical illness, organic brain pathology, pregnant or breast-feeding		12
Info on Screening Process: 42, 12 excluded due to pregnancy, under age, psychopathy, schizophrenia, hysteria, anankastic depression, refusal to give signed informed consent	Notes: OCD duration 17 years		
VOLAVKA1985			
Study Type: RCT	N= 23	Data Used	Group 1 N= 11
Study Description: Allocation: random (computer-generated random numbers in blocks of six patients)	Age: Mean 30 Range 19-54 Sex: 11 males 12 females Diagnosis:	Global Evaluation of Efficacy Leaving study early due to adverse events Leaving study early	Clomipramine - Gradual increase (by 50mg/d each week) to 300mg/d, maximum dose was reached by week 5
Blindness: Double blind	OCD	Self-Rating Obsessional Neurotic Scale Hamilton Rating Scale for Depression	Group 2 N= 12 Imipramine - Gradual increase (by
Duration (days):	Exclusions: Aged <18 and >65 years, OCD duration <1 year, primary depression, significant medical disease,	Self-Rating Obsessive-Compulsive Personality	50mg/d each week) to 300mg/d,
Followup: 12	schizophrenia, pregnancy, concomittant use of other		maximum dose was reached by week 5
Setting: Outpatient	psychotropic drugs, alcohol or drug abuse		
Notes: Country of study: US; Analysis:	Notes: Did not use standardised diagnostic tool		
Info on Screening Process: Not reported			

References of Included Studies

# GOODMAN1990A (Published Data Only)

Goodman, W. K., Price, L. H., Delgado, P. L., Palumbo, J., Krystal, J. H., Nagy, L. M. et al. (1990). Specificity of serotonin reuptake inhibitors in the treatment of obsessive-compulsive disorder. Comparison of fluvoxamine and desipramine. Archives of General Psychiatry, 47, 577-585.

# **HOEHNSARIC2000** (Published Data Only)

Hoehn-Saric, R., Ninan, P., Black, D. W., Stahl, S., Greist, J. H., Lydiard, B. et al. (2000). Multicenter double-blind comparison of sertraline and desipramine for concurrent obsessive-compulsive and major depressive disorders. Archives of General Psychiatry., 57, 76-82.

# **JENIKE1997** (Published Data Only)

Jenike, M. A., Baer, L., Minichiello, W. E., Rauch, S. L., & Buttolph, M. L. (1997). Placebo-controlled trial of fluoxetine and phenelzine for obsessive- compulsive disorder. American Journal of Psychiatry, 154, 1261-1264.

# PATO1991 (Published Data Only)

Pato, M. T., Pigott, T. A., Hill, J. L., Grover, G. N., Bernstein, S., & Murphy, D. L. (1991). Controlled comparison of buspirone and clomipramine in obsessive-compulsive disorder. American Journal of Psychiatry., 148, 127-129.

# VALLEJO1992 (Published Data Only)

Vallejo, J., Olivares, J., Marcos, T., Bulbena, A., & Menchon, J. M. (1992). Clomipramine versus phenelzine in obsessive-compulsive disorder. A controlled clinical trial. British Journal of Psychiatry., 161, 665-670.

# VOLAVKA1985 (Published Data Only)

Volavka, J., Neziroglu, F., & Yaryura-Tobias, J. A. (1985). Clomipramine and imipramine in obsessive-compulsive disorder. Psychiatry Research., 14, 85-93.

# Appendix 16: Included/excluded studies table for the Clinical Question: 1.11 Psychological vs pharmacological interventions

Methods	Participants Participants	Outcomes	Interventions	Notes
DEHAAN1998				
Study Type: RCT Study Description: Allocation: random (no details) Duration of study: 12 weeks Blindness: Duration (days): Setting: Outpatient Notes: Country of study: the Netherlands; Analysis: completer Info on Screening Process: 32, 4 refused treatment, 1 was admitted to hospital, 1 left the country	N= 22 Age: Mean 14 Sex: 11 males 11 females Diagnosis: OCD by DSM-III-R Exclusions: Aged <8 and >18 years, OCD duration<6 months, diagnosis of organic mental disorders, psychotic disorders, Tourette's disorder, autism, mental retardation, or a primary diagnosis of major depressive disorder, receiving behavior therapy or seotonergic antidepressants within 6 months of study Notes: Mean OCD duration 2.47 years; comorbid anxiety disorder (n=2), eating disorder (n=1), tic disorder (n=1); mean baseline CY-BOCS 22.65	Data Used Leaving study early Responders (30% Y-BOCS) Child Depression Inventory - patient Child Behaviour Checklist Leyton Obsessional Inventory - Child version Children's Yale-Brown Obsessive-Compulsive Scale	Group 1 N= 13  Individual BT - 12 weekly sessions, administered by behavior therapists or trained child psychiatrists, consisted of ERP aimed at reducing anxiety, constructing a hierarchy of rituals, homework assignments, explaining mechanisms by which rituals are preserved  Group 2 N= 10  Clomipramine - 12 weekly sessions, 25mg for first week, increased to a maximum 200mg/d	
FOA2005 Study Type: RCT Study Description: Allocation: random (no details); indepentent assessor blind to randomization Duration of study: acute phase 12 weeks + discontinuation phase 12 weeks Blindness: Single blind Duration (days): Setting: Outpatient Notes: Country of study: US Info on Screening Process: 833 screened, 312 did not meet criteria: no OCD (93), received EX/RP or CMI (117), excluded for medical reason (22), comorbidity (75), other reasons (5), unwilling to participate (65), refused to receive CMI (56), or EX/RP (54) or placebo (6), other (191)	N= 122 Age: Mean 35 Sex: 64 males 58 females Diagnosis: Obsessive-compulsive neurosis by DSM-III-R Exclusions: Aged <18 and >70 years, OCD duration <1 year, Y-BOCS<17, current major depression, HAM-D>18, substance abuse or dependence within past 6 months, current schizotypal or borderline personality disorder, previous intensive treatment with CMI or ERP Notes: Duration of illness 16.4 years, baseline Y-BOCS scores 25	Data Used Responders (CGI) Yale-Brown Obsessive-Compulsive Scale: total Leaving study early Clinical Global Impressions Adverse events NIMH-OC	Group 1 N= 36  Clomipramine - Fixed dose first 5 weeks, starting at 25mg/d, increasing to 200mg/d, increased to 250mg/d as tolerated, mean final dose 196mg/d  Group 2 N= 26  Placebo - Mean final dose for 209mg/d  Group 3 N= 29  Exposure + response prevention - 15 2-hr sessions over first 3 weeks and 2 home visits, weekly 45 min meetings for remaining 8 weeks, imaginal and in vivo exposure performed  Group 4 N= 31  BT + clomipramine - ERP + CMI, patients met individually with both a therapist and a psychopharmacologist, mean final dose 163+-65mg/d	Responders: CGI=<2

# **MARKS1980**

Study Type: RCT

Study Description: Allocation: random (no details), assessors blind to treatment group Study duration: 4 weeks drug only + 3 weeks exposure or relax + 3 weeks exposure

Blindness: Single blind Duration (days):

Setting: Initial 4 weeks drugs-only phase in outpatient setting, 6 weeks of psychological treatment in inpatient setting, after which patients were discharged

Notes: Country of study: UK; analysis: ITT Patients referred by psychiatrists and GPs Follow-up at 8, 16, 52 and 104 weeks post treatment N= 40

Age: Mean 35

Sex: 11 males 29 females

Diagnosis: OCD

Exclusions: Mild obsessive-compulsive rituals less than one year's duration, aged <18 and >59 years, history of psychosis, did not agree to involve relatives in treatment, previous adequate behavioural treatment

Notes: Mean duration of illness 11.75 years,

Data Used

Wakefield Inventory

Hamilton Rating Scale for Depression
Behavioural avoidance test - Performance

Behavioural Avoidance Test - Discomfort

Compulsive activity checlist
Target rituals (self rated): time

Target rituals (self rated): discomfort
Target rituals (assessor rated): time

Target rituals (assessor rated): discomfort

Group 1 N= 10

BT + clomipramine - CMI: initial dose 10mg raised to 225mg, continued for next 8 months Social life and work adjustment was rated on 0-8 point scales used by

Exposure: Included modelling and retraining of day-to-day ritualistic habits, patients instructed to carrout out exposure tasks between sessions and to keep records of their performance

Group 2 N= 10

Placebo + relaxation - Pbo: initial dose 10mg raised to 225mg, continued for next 8 months

Relaxation: 45 min daily, after 15 sessions (week 7) switched to exposure, patients instructed by tape-recorder and modelling by therapist to tense and relax body parts alternately

Group 3 N= 10

Clomipramine + relaxation - CMI: initial dose 10mg raised to 225mg, continued for next 8 months Relaxation: 45 min daily, after 15 sessions (week 7) switched to exposure

sessions (week 7) switched to exposure, patients instructed by tape-recorder and modelling by therapist to tense and relax body parts alternately

Group 4 N= 10

BT + Placebo - Therapist modelled activities which the patient avoided, then refrained from ritualizing. Patients practiced this on day-to-day rituals and were instructed to carry out exposure tasks between sessions and to keep records of their performance

Cognitive Behavioural Therapy - 14 1-

hour visits over 12 weeks, involved

psychoeducation, cognitive training,

Anxiety, lesiure, sex, family, social life and work adjustment was rated on 0-8 point scales used by Gelder and Marks (1966) Wakefield Inventory is a modified and shortened version of the Zung depression rating scale

# POTS2004

Study Type: RCT

Study Description: Allocation: random (computer-generated sequence in blocks of 4), double-blind concealment in medication conditions only, assessors blind to treatment

Blindness: Double blind Duration (days):

Followup: 12 weeks Setting: Outpatient

Notes: Country of study: US, conducted at 3

sites, Analysis: ITT

Info on Screening Process: 154 screened, 31 deemed ineligible, 10 not interested, 1

asymptomatic at baseline

N= 112

Age: Mean 12

Sex: 56 males 56 females

Diagnosis:

OCD by DSM-IV

Exclusions: Aged <7 and >17 years, CY-BOCS<17, NIMH Global Severity Score<8, IQ<81 as measured by Block Design and Vocabulary subtests in Wechesler Intelligence Scale for Children, major depression, bipolar illness, primary diagnosis of Tourette disorder, pervasive developmental disorder, psychosis, concurrent treatment with psychotropic medication, previous failed trials with SRIs or CBT, sertraline intolerance, medical or neurological disorder, pregnancy, history of remission following medication, CBT or combination

Notes: Baseline CY-BOCS 24.6, 80% had at least 1 psychiatric comorbid disorder, 63% had affective or anxiety disorders, 27% had ADHD, oppositional defiant disorder or conduct disorder, 16% had comorbid tic disorder

**Data Used** 

Children's Yale-Brown Obsessive-Compulsive Scale

Leaving study early due to adverse events Leaving study early

mapping of OCD target symptoms, ERP

Group 2 N= 28

Group 1 N= 28

Sertraline - Initial dose 25mg/d, increased to 200mg/d over 6 weeks in a fixed flexible upward titration, after which dosage could be adjusted as tolerated

Group 3 N= 28

CBT + Medication - CBT and sertraline treatment began simultaneously and followed the same protocol as for the individual interventions

Group 4 N= 28

Placebo

References of Included Studies

# **DEHAAN1998** (Published Data Only)

de Haan, E., Hoogduin, K. A., Buitelaar, J. K., & Keijsers, G. P. (1998). Behavior therapy versus clomipramine for the treatment of obsessive-compulsive disorder in children and adolescents. Journal of the American Academy of Child & Adolescent Psychiatry., 37, 1022-1029.

# FOA2005 (Published Data Only)

Kozak, M. J., Liebowitz, M. R., & Foa, E. B. (2000). Cognitive behavior therapy and pharmacotherapy for obsessive-compulsive disorder: The NIMH-sponsored collaborative study. In W.K.Goodman & M. V. Rudorfer (Eds.), Obsessive-compulsive disorder: contemporary issues in treatment. Personality and clinical psychology series (pp. 501-530).

Simpson, H. B., Liebowitz, M. R., Foa, E. B., Kozak, M. J., Schmidt, A. B., Rowan, V. et al. (2004). Post-treatment effects of exposure therapy and clomipramine in obsessive-compulsive disorder. Depress. Anxiety, 19, 225-233.

\*Foa, E. B., Liebowitz, M. R., Kozak, M. J., Davies, S., Campeas, R., Franklin, M. E. et al. (2005). Randomized, placebo-controlled trial of exposure and ritual prevention, clomipramine, and their combination in the treatment of obsessive-compulsive disorder. Am.J.Psychiatry, 162, 151-161.

# MARKS1980 (Published Data Only)

Marks, I. M., Stern, R. S., Mawson, D., Cobb, J., & McDonald, R. (1980). Clomipramine and exposure for obsessive-compulsive rituals: i. British Journal of Psychiatry., 136, 1-25.

## POTS2004 (Published Data Only)

Franklin, M., Foa, E., & March, J. S. (2003). The pediatric obsessive-compulsive disorder treatment study: rationale, design, and methods. J Child Adolesc.Psychopharmacol., 13 Suppl 1, S39-S51. POTS (2004). Cognitive-behavior therapy, sertraline, and their combination for children and adolescents with obsessive-compulsive disorder: the Pediatric OCD Treatment Study (POTS) randomized controlled trial. JAMA, 292, 1969-1976.

# Appendix 16: Included/excluded studies table for the Clinical Question: 1.12 Combination therapy

Methods	Participants Participants	Outcomes	Interventions	Notes
COTTRAUX1990				
Study Type: RCT  Study Description: Allocation: random (no details); independent assessor blind to ratings Study duration: 15-day washout+24 weeks treatment+6-month- & 1-year follow-up Blindness: Single blind Duration (days):  Setting: Outpatient  Notes: Country of study: France; Analysis:completer During 1 year follow-up, some patients remained on serotonergic drugs, some were shifted to clomipramine  Info on Screening Process: 65 screened	N= 60 Age: Mean 36 Sex: 16 males 28 females Diagnosis: OCD by DSM-III Exclusions: Primary diagnosis of major depressive disorder, patients with Gilles de la Tourette disorder, organic mental disorders and schizophrenia, patients were taking MAOI, barbituates, clormethiazole, phenothiazines, butyrophenones, and neuroleptics, benzodiazepines apart from occasional use of bromazepam up to 6mg/d Notes: Mean duration of illness in 44 completers 13 years, 51 had previous antidepressant treatment, 10 received ECT, 12 were failures of psychodynamic treatments or psychoanalysis, 3 received behaviour therapy without success, 2 presented pure obsessions	Data Used Global criterion of improvement (duration/rituals) Target rituals (self rated): discomfort Target rituals (self rated): duration of rituals Target rituals (self rated): duration of rituals Target rituals (assessor rated):duration of rituals Retardation scale Target rituals (assessor rated): time Leaving study early due to adverse events Target rituals (assessor rated): discomfort Hamilton Rating Scale for Depression Beck Depression Inventory Montgomery-Asberg Depression Rating Scale Behavioural Avoidance Test - Avoidance Behavioural Avoidance Test - Discomfort Compulsive activity checlist Leaving study early	Group 1 N= 20  BT + Placebo - Exposure + placebo (see Fluvoxamine + Exposure therapy details for Exposure method)  Group 2 N= 20  Fluvoxamine + exposure therapy - fluvoxamine up to 300mg; exposure homework & flooding in fantasy for 8 weeks, guided exposure and response prevention for a further 16 weeks. Couple therapy, cognitive restructuring, flooding in fantasy and assertive training was added, upto 25 sessions  Group 3 N= 20  Fluvoxamine + antiexposure therapy - fluvoxamine up to 300mg; antiexposure involved asking patients to avoid any kind of exposure to feared situations, to relax at a fixed period daily, to let rituals and/or obsessive thoughts to just happen, patients were given an explanatory manual	Global criterion of improvement: >30% reduction in duration of rituals per day
FOA1992 Study Type: RCT Study Description: Allocation: random (no details); drugs administered double-blind Duration of study: 22 weeks plus 9-month, 1 yr and 2 yr follow-ups Blindness: Double blind Duration (days): Setting: Outpatient and inpatient Notes: Country of study: US; Analysis: completer Info on Screening Process: 80 met OCD criteria, 48 entered the study	N= 48 Age: Mean 33 Sex: 25 males 13 females Diagnosis: OCD by DSM-III Exclusions: OC symptom duration less than 1 year, current major depression, psychosis, organic mental disorder, and current substance abuse Notes: Mean age at symptom onset 24.1+-18.4 years, for 26 patients main ritual was washing/cleaning, for 12 patients main ritual was checking/repeating	Data Used OC symptoms: fear (self-rated) OC symptoms: fear (assessor rated) OC symptoms: compulsive symptoms (self-rated) OC symptoms: compulsive symptoms (assessor rated) OC symptoms: avoidance (self-rated) OC symptoms: avoidance (assessor rated) Social Adjustment Scale (self-rated) Compulsive activity checlist State-Anxiety Inventory Hamilton Rating Scale for Depression Beck Depression Inventory	Group 1 N= 10  Mild-depressed placebo - see "High-depressed imipramine"  Group 2 N= 9  High-depressed Imipramine - first 6 wks drug only: increased up to 250mg by 3 wks, mean daily dose 229mg  BT: 15 daily 2-hr sessions over next 3 wks, at 4th wk home-visits by therapists for 4 hours on 2 days, BT consisted of ERP and imaginal exposure, 12 weeks of supportive therapy  Group 3 N= 10  High-depressed placebo - see "High-depressed imipramine"  Group 4 N= 9  Mild-depressed imipramine - see "High-depressed imipramine"	Follow-up at 6 months, 12 months and 24 months not extractable as n in each group not reported

FOA2005				
Study Type: RCT	N= 122	Data Used Responders (CGI)	Group 1 N= 36	Responders: CGI=<2
Study Description: Allocation: random (no details); indepentent assessor blind to randomization Duration of study: acute phase 12 weeks + discontinuation phase 12 weeks Blindness: Single blind Duration (days):  Setting: Outpatient Notes: Country of study: US Info on Screening Process: 833 screened, 312 did not meet criteria: no OCD (93), received EX/RP or CMI (117), excluded for medical reason (22), comorbidity (75), other reasons (5), unwilling to participate (65), refused to receive CMI (56), or EX/RP (54) or placebo (6), other (191)	Age: Mean 35  Sex: 64 males 58 females  Diagnosis: Obsessive-compulsive neurosis by DSM-III-R  Exclusions: Aged <18 and >70 years, OCD duration <1 year, Y-BOCS<17, current major depression, HAM-D>18, substance abuse or dependence within past 6 months, current schizotypal or borderline personality disorder, previous intensive treatment with CMI or ERP  Notes: Duration of illness 16.4 years, baseline Y-BOCS scores 25	Yale-Brown Obsessive-Compulsive Scale: total Leaving study early Clinical Global Impressions Adverse events NIMH-OC	Clomipramine - Fixed dose first 5 weeks, starting at 25mg/d, increasing to 200mg/d, increased to 250mg/d as tolerated, mean final dose 196mg/d  Group 2 N= 26  Placebo - Mean final dose for 209mg/d  Group 3 N= 29  Exposure + response prevention - 15 2-hr sessions over first 3 weeks and 2 home visits, weekly 45 min meetings for remaining 8 weeks, imaginal and in vivo exposure performed  Group 4 N= 31  BT + clomipramine - ERP + CMI, patients met individually with both a therapist and a psychopharmacologist, mean final dose 163+-65mg/d	
HOHAGEN1998				
Study Type: RCT	N= 49	Data Used	Group 1 N= 25	
Study Description: Allocation: random (no details); medication administered double-blind Patients recruited from University hospitals Duration of study: 8 weeks Blindness: Double blind	Age: Mean 35 Sex: 20 males 29 females Diagnosis: OCD by DSM-III-R 22% MDD by DSM-III-R	Clinical Global Impressions Symptom Checklist-90 Hamilton Rating Scale for Depression Responders (35% Y-BOCS) Yale-Brown Obsessive-Compulsive Scale: total	BT + Placebo - BT: used a multimodal psychotherapy approach; behavior analysis wks 0-3; ERP wks 4-8, exposure comprised 3 levels: therapist-aided, cotherapist aided, self-management.  Exposure began in clincial environment, then conducted at home	
Duration (days): Setting: inpatient	Exclusions: OCD secondary to affective disorder or schizophrenia; Y-BOCS<=16; lifetime diagnosis of psychotic disorder, drug or alcohol abuse, organic psychosyndromes,		Placebo: as in BT+fluv  Group 2 N= 24	
	The group of the control of the cont	1	Elementaria DE Elementaria el initial	1

epilepsy or acute suicidal tendency and pregnancy,

free within 7 days of study

11.7+-11.6 years

disorder

concurrently using thyroid medicaiton, alpha-or beta-

blockers or other psychoactive substances; not medication-

Notes: Baseline Y-BOCS 28.2+-3.4; mean OCD duration

Comorbid disorders: 47% Axis I disorder, 53.1% personality

Notes: Country of study: Germany; Analysis:ITT

stomach upset, other because of acute suicidal

Info on Screening Process: 60 recruited, 2

dropped out, one because of nausea and

tendencies

Fluvoxamine + BT - Fluvoxamine: initial

300mg in 5 weeks, unless side-effects

occurred, dose reduced by 50mg in a

became intolerable. If side-effects

double-blind manner. Mean dose

288.1mg (range 250-300mg)

BT: see BT + placebo

dose 50mg, increased weekly by 50mg to

# **MARKS1980**

Study Type: RCT

Study Description: Allocation: random (no details), assessors blind to treatment group Study duration: 4 weeks drug only + 3 weeks exposure or relax + 3 weeks exposure

Blindness: Single blind Duration (days):

Setting: Initial 4 weeks drugs-only phase in outpatient setting, 6 weeks of psychological treatment in inpatient setting, after which patients were discharged

Notes: Country of study: UK; analysis: ITT Patients referred by psychiatrists and GPs Follow-up at 8, 16, 52 and 104 weeks post treatment

N= 40

Age: Mean 35

Sex: 11 males 29 females

Diagnosis: OCD

Exclusions: Mild obsessive-compulsive rituals less than one year's duration, aged <18 and >59 years, history of psychosis, did not agree to involve relatives in treatment, previous adequate behavioural treatment

Notes: Mean duration of illness 11.75 years,

Data Used

Wakefield Inventory

Hamilton Rating Scale for Depression Behavioural avoidance test - Performance

Behavioural Avoidance Test - Discomfort

Compulsive activity checlist

Target rituals (self rated): time
Target rituals (self rated): discomfort

Target rituals (assessor rated): time

Target rituals (assessor rated): discomfort

Group 1 N= 10

BT + clomipramine - CMI: initial dose 10mg raised to 225mg, continued for next 8 months social life and work adjustment was rated on 0-8 point scales used by

Exposure: Included modelling and retraining of day-to-day ritualistic habits, patients instructed to carrout out exposure tasks between sessions and to keep records of their performance

Group 2 N= 10

Placebo + relaxation - Pbo: initial dose 10mg raised to 225mg, continued for next 8 months

Relaxation: 45 min daily, after 15 sessions (week 7) switched to exposure, patients instructed by tape-recorder and modelling by therapist to tense and relax body parts alternately

Group 3 N= 10

Clomipramine + relaxation - CMI: initial dose 10mg raised to 225mg, continued for next 8 months

Relaxation: 45 min daily, after 15 sessions (week 7) switched to exposure, patients instructed by tape-recorder and modelling by therapist to tense and relax body parts alternately

Group 4 N= 10

BT + Placebo - Therapist modelled activities which the patient avoided, then refrained from ritualizing. Patients practiced this on day-to-day rituals and were instructed to carry out exposure tasks between sessions and to keep records of their performance

Anxiety, lesiure, sex, family, social life and work adjustment was rated on 0-8 point scales used by Gelder and Marks (1966) Wakefield Inventory is a modified and shortened version of the Zung depression rating scale

# **NEZIROGLU2000**

Study Type: RCT

Study Description: Allocation: random (no

details)
Duration of study: 10 weeks FLX + 33 weeks

BT or FLX + 9 weeks FLX

Blindness: Open Duration (days):

Setting: Not reported

Notes: Country of study: US; Analysis: ITT Info on Screening Process: Not reported

N= 10

Age: Mean 14 Range 10-17 Sex: 6 males 4 females

Diagnosis:

OCD by DSM-IV

Notes: Mean age of OCD onset 9.9+-11.7 years
Included patients who had previously failed to comply with

let

Comorbid disorders: ADHD (n=2), trichotillomania (n=1)

Data Used

Clinical Global Impressions: global improvement

Clinical Global Impressions: severity

NIMH Global OCD Scale

Yale-Brown Obsessive-Compulsive Scale: tota

Responder (MDD)

Group 1 N= 5

Fluvoxamine + BT - Fluvoxamine alone first 10 weeks, 20 BT sessions 90 min, once a week over 33 weeks, BT consisted of ERP. Following ERP, 4 patients continued with fluvoxamine until week 52

Group 2 N= 5

Fluvoxamine - Fluvoxamine adminstered from baseline to week 52, initial dose 50mg/d increased over the first month to a maximal dose of 200 mg/d at 50mg increments. Patients were kept at 200mg during all phases including maintenance.

# **POTS2004**

Study Type: RCT

Study Description: Allocation: random (computer-generated sequence in blocks of 4), double-blind concealment in medication conditions only, assessors blind to treatment

Blindness: Double blind Duration (days):

Followup: 12 weeks Setting: Outpatient

Notes: Country of study: US, conducted at 3

sites, Analysis: ITT

Info on Screening Process: 154 screened, 31 deemed ineligible, 10 not interested, 1

asymptomatic at baseline

N= 112

Age: Mean 12

Sex: 56 males 56 females

Diagnosis:

OCD by DSM-IV

Exclusions: Aged <7 and >17 years, CY-BOCS<17, NIMH Global Severity Score<8, IQ<81 as measured by Block Design and Vocabulary subtests in Wechesler Intelligence Scale for Children, major depression, bipolar illness, primary diagnosis of Tourette disorder, pervasive developmental disorder, psychosis, concurrent treatment with psychotropic medication, previous failed trials with SRIs or CBT, sertraline intolerance, medical or neurological disorder, pregnancy, history of remission following medication, CBT or combination

Notes: Baseline CY-BOCS 24.6, 80% had at least 1 psychiatric comorbid disorder, 63% had affective or anxiety disorders, 27% had ADHD, oppositional defiant disorder or conduct disorder. 16% had comorbid tic disorder

#### Data Used

Children's Yale-Brown Obsessive-Compulsive

Leaving study early due to adverse events Leaving study early

#### Group 1 N= 28

Cognitive Behavioural Therapy - 14 1hour visits over 12 weeks, involved psychoeducation, cognitive training, mapping of OCD target symptoms, ERP

#### Group 2 N= 28

Sertraline - Initial dose 25mg/d, increased to 200mg/d over 6 weeks in a fixed flexible upward titration, after which dosage could be adjusted as tolerated

#### Group 3 N= 28

CBT + Medication - CBT and sertraline treatment began simultaneously and followed the same protocol as for the individual interventions

Group 4 N= 28

Placebo

# VANBALKOM1998

Study Type: RCT

Study Description: Allocation: random (no

details)

Duration of study: 8 wks + 8 wks Participants were GP referrals and mental health agencies, responders to media ad

Blindness: No mention Duration (days):

Setting: Outpatient

Notes: Country of study: Netherlands; Analysis: completer

Info on Screening Process: 152, 35 declined participation (refused randomization to pharmacological treatment) (16), waiting list condition (5), or CBT(1), not willing to stop antidepressants or neuroleptics (5), other (8)

N= 117

Age: Mean 35

Sex: 30 males 40 females

Diagnosis:

OCD by DSM-III-R

Exclusions: OCD duration<1 year, patients with obsessions only, organic mental disorders, psychotic disorders, psychoactive substance use, mental retardation, other severe mental disorders, SSRI medication in 6 months before study, pregnancy

Notes: Mean OCD duration in completers (N=70) 12.5 +-10.4 years. All therapists (5 psychologists and 1 psychiatrist) were experienced with BT for OCD and received training in cognitive therapy

#### Data Used

Leaving study early
Symptom Checklist-90: OC
Beck Depression Inventory
Anxiety Discomfort Scale
Yale-Brown Obsessive-Compulsive Scale: tota

# Group 1 N= 25

Cognitive therapy - 16 45-minute sessions for first 8 weeks, patients learned to consider intrusions as stimuli and to identify anxiety evoking automatic thoughts, which were challenged & replaced by alternative, rational, nondistressing thoughts, used Socratic Dialogue

# Group 2 N= 22

Individual BT - 16 sessions lasting 45 minutes, exposure in vivo with response prevention. After all compulsions and avoidance behaviour were inventoried, a fear hierarchy was made, and exposure homework was assigned, patients were asked to keep homework diaries

#### Group 3 N= 28

Fluvoxamine + BT - Patients received 6 30-minute sessions of fluvoxamine only during first 8 weeks, fluvoxamine started at 50mg every night, increased upto maximum 300mg/d based on patient response, during next 10 sessions, behavioural therapy added to fluvoxamine treatment

#### Group 4 N= 24

Fluvoxamine + CT - Patients received 6 30-minute sessions of fluvoxamine only during first 8 weeks, fluvoxamine started at 50mg every night, increased upto maximum 300mg/d based on patient response, during next 10 sessions, cognitive therapy added to fluvoxamine treatment

#### Group 5 N= 18

Wait list control - Lasted for 8 weeks

#### COTTRAUX1990 (Published Data Only)

Cottraux, J., Mollard, E., Bouvard, M., & Marks, I. (1993). Exposure therapy, fluvoxamine, or combination treatment in obsessive-compulsive disorder: one-year followup. Psychiatry Research., 49, 63-75.

\*Cottraux, J., Mollard, E., Bouvard, M., Marks, I., Sluys, M., Nury, A. M. et al. (1990). A controlled study of fluvoxamine and exposure in obsessive-compulsive disorder. International Clinical Psychopharmacology., 5, 17-30.

# FOA1992 (Published Data Only)

Foa, E. B., Kozak, M. J., Steketee, G. S., & McCarthy, P. R. (1992). Treatment of depressive and obsessive-compulsive symptoms in OCD by imipramine and behaviour therapy. British Journal of Clinical Psychology., 31, 279-292.

# FOA2005 (Published Data Only)

Kozak, M. J., Liebowitz, M. R., & Foa, E. B. (2000). Cognitive behavior therapy and pharmacotherapy for obsessive-compulsive disorder: The NIMH-sponsored collaborative study. In W.K.Goodman & M. V. Rudorfer (Eds.), Obsessive-compulsive disorder: contemporary issues in treatment. Personality and clinical psychology series (pp. 501-530).

Simpson, H. B., Liebowitz, M. R., Foa, E. B., Kozak, M. J., Schmidt, A. B., Rowan, V. et al. (2004). Post-treatment effects of exposure therapy and clomipramine in obsessive-compulsive disorder. Depress. Anxiety, 19, 225-233.

\*Foa, E. B., Liebowitz, M. R., Kozak, M. J., Davies, S., Campeas, R., Franklin, M. E. et al. (2005). Randomized, placebo-controlled trial of exposure and ritual prevention, clomipramine, and their combination in the treatment of obsessive-compulsive disorder. Am.J.Psychiatry, 162, 151-161.

#### HOHAGEN1998 (Published Data Only)

Hohagen, F., Winkelmann, G., Rasche-Ruchle, H., Hand, I., Konig, A., Munchau, N. et al. (1998). Combination of behaviour therapy with fluvoxamine in comparison with behaviour therapy and placebo. Results of a multicentre study. British Journal of Psychiatry - Supplementum., 173, 71-78.

# MARKS1980 (Published Data Only)

Marks, I. M., Stern, R. S., Mawson, D., Cobb, J., & McDonald, R. (1980). Clomipramine and exposure for obsessive-compulsive rituals: i. British Journal of Psychiatry., 136, 1-25.

# **NEZIROGLU2000** (Published Data Only)

Neziroglu, F., Yaryura-Tobias, J. A., Walz, J., & McKay, D. (2000). The effect of fluvoxamine and behavior therapy on children and adolescents with obsessive-compulsive disorder. Journal of Child & Adolescent Psychopharmacology., 10, 295-306.

#### POTS2004 (Published Data Only)

Franklin, M., Foa, E., & March, J. S. (2003). The pediatric obsessive-compulsive disorder treatment study: rationale, design, and methods. J Child Adolesc.Psychopharmacol., 13 Suppl 1, S39-S51. POTS (2004). Cognitive-behavior therapy, sertraline, and their combination for children and adolescents with obsessive-compulsive disorder: the Pediatric OCD Treatment Study (POTS) randomized controlled trial. JAMA, 292, 1969-1976.

# VANBALKOM1998 (Published Data Only)

de Haan, E., Van Oppen, P., van Balkom, A. J., Spinhoven, P., Hoogduin, K. A., & Van Dyck, R. (1997). Prediction of outcome and early vs. late improvement in OCD patients treated with cognitive behaviour therapy and pharmacotherapy. Acta Psychiatrica Scandinavica., 96, 354-361.

\*van Balkom, A. J., de Haan, E., Van Oppen, P., Spinhoven, P., Hoogduin, K. A., & Van Dyck, R. (1998). Cognitive and behavioral therapies alone versus in combination with fluvoxamine in the treatment of obsessive compulsive disorder. Journal of Nervous & Mental Disease., 186, 492-499.

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# Appendix 16: Included/excluded studies table for the Other Medical Topic Group

# Studies Included in the Comparions Covered by This Evidence Table

3.01 Neurosurgery

Stereotactic anterior capsulotomy vs cingulotomy

FODSTAD1982

3.02 Deep brain stimulation

Electrical capsular stimulation: on vs off

NUTTIN2003

3.03 Repetitive transcranial magnetic stimulation

Active vs placebo

ALONSO2001

Right vs left

GREENBERG1997 SACHDEV2001

3.05 Other interventions

Plasma exchange vs IV immunoglobulin vs placebo

PERLMUTTER1999

# **Characteristics of Included Studies**

Methods	Participants	Outcomes	Interventions	Notes
ALONSO2001				
Study Type: RCT Study Description: Allocation: random (no details), patients & clinician blind to treatment Duration of study: 10 weeks Number of sessions: 18 (3 per week for 6 weeks) Blindness: Double blind Duration (days): Setting: Outpatient Notes: Country of study: Spain; Analysis: ITT Info on Screening Process: Not reported	N= 18 Age: Mean 35 Range 20-59 Sex: 6 males 12 females Diagnosis: OCD by DSM-IV Exclusions: Not right-handed, any other DSM-IV axis I disorder, history of seizure or head trauma Notes: Brain target right dorsolateral prefrontal cortex; patients received 18 sessions at 1 Hz; duration of each session 20 minutes	Data Used Responder (OCD/BDD) Hamilton Rating Scale for Depression Yale-Brown Obsessive-Compulsive Scale: tota Adverse events	Group 1 N= 10  Transcranial Magnetic Stimulation - The intensity was 110% of the motor threshold as determined by the miniumum intensity in the right motor cortex that produced a visible motor response in the left thumb  Group 2 N= 8  Placebo - The intensity was 20% of the motor threshold	

FODSTAD1982				
Study Type: RCT  Study Description: Allocation: random (sealed envelope technique)  Blindness: No mention  Duration (days):  Followup: 12 months  Setting: Not reported  Notes: Country of study: Sweden, Analysis: Info on Screening Process: Not reported  GREENBERG1997  Study Type: Cross-over  Study Description: Allocation: random (no details)  Blindness: Single blind  Duration (days):  Setting: Not reported	N= 4 Age: Mean 47 Range 37-60 Sex: all females Diagnosis: OCD Exclusions: Inclusion criteria: poor response to extensive psychiatric treatment, experienced severe suffering and social disability Notes: No formal diagnosis performed, patients had chronic obsessive compulsive neurosis as manifested by obsessional t houghts and compulsive behaviour  N= 12 Age: Mean 37 Sex: 6 males 6 females Diagnosis: OCD by DSM-III-R Exclusions: History of seizure or head traum, were reciving medications that lower the seizure threshold	Data Used Hamilton Rating Scale for Depression Comprehensive Psychopathological Rating Scale: OC  Data Used NIMH self-rating scale	Group 1 N= 2  Anterior capsulotomy - Bilateral steriotactic capsulotomy; lesion points were on and 4 mm below the intercommissural line at distance of half the intercommissural distance in front of the anterior commissure  Group 2 N= 2  Cingulotomy - 4 lesions each on the left and right were made 7 and 11 mm above the roof of the frontal horn, 13 and 17 mm lateral to the midsagittal plane  Group 1 N= 12  Right lateral prefrontal cortex stimulation - Repetitive Transcranial Magnetic Stimulation, 30 min per session, stimulation site was right lateral prefrontal cortex, motor threshold set at 2% below value at which 5 successive pulses produced no visible abductor pollicis	Hamilton Scale as modified by Vilkki, 1977  Other measures: Mood scale: 100-point visual analog scale administered by blind researcher
Notes: Country of study: US; Analysis: ITT Info on Screening Process: Not reported	Notes: Mean baseline Y-BOCS 19.8 +-9.7 Stimulation used 80% motor threshold, 20 Hz/2 seconds per minute for 20 minutes. Motor threshold was set at 2% below the value at which 5 successive pulses produced no visible abductor pollicis brevis contraction		brevis contraction  Group 2 N= 12  Left lateral prefrontal cortex stimulation - Repetitive Transcranial Magnetic Stimulation, 30 min per session, stimulation site was left lateral prefrontal cortex, motor threshold set at 2% below value at which 5 successive pulses produced no visible abductor pollicis brevis contraction	
NUTTIN2003	_			
Study Type: Cross-over  Study Description: Allocation: random (cointoss); patients, evaluating psychiatrist & psychologist were blinded Study duration: 6 months (3 months in each condition)  Blindness: Double blind Duration (days):  Setting: Not reported Notes: Country of study: Belgium Info on Screening Process: Not reported	N= 4 Age: Sex: no information Diagnosis: OCD by DSM-IV 50% MDD by DSM-IV Exclusions: Aged <18 or >60 years; Y-BOCS<30 + GAF>45 persisting over 5 years, despite adequte trials or intolerance to 2 SSRIs & clomipramine, augmentation startegies, and CBT; current or past psychotic disorder, clinically significant disorder or medical illness affecting brain function or structure, current or unstably remitted substance abuse Notes: Two patients had comorbid major depression, one	Data Not Used  Beck Depression Inventory - no data  Clinical Global Severity Scale - no pre-cross- over data  Clinical Global Improvement - no pre-cross- over data  Yale-Brown Obsessive-Compulsive Scale: total - no pre-cross-over data	Group 1 N= 4  Capsular stimulation off - Stimulator off for 3 months  Group 2 N= 4  Capsular stimulation on - Stimulation electrodes placed in and dorsal to internal capsule, stimulator kept on for 3 months, stimulation performed at threshold level to achieve obvious acute reduction of obsessive thoughts, depression and anxiety	

PERLMUTTER1999 Study Type: RCT	N= 30	Data Used Emotional lability	Group 1 N= 10	
Study Description: Children with severe, infection-triggered exacerbations of OCD/tic disorders were randomly assigned treatment with plasma exchange, IVIG or placebo.  Blindness: Double blind Duration (days):  Followup: 1 month and 1 year Setting: National Institute of Mental Health outpatient clinic.  Notes: IVIG and placebo: double-blind. Plasma exchange: open. First assessment at 1 month. Follow-up at one year for plasma exchange and IVIG only.  Info on Screening Process: 200 children were screened by telephone; 58 underwent face-to-face screening at the clinic. 28 did not meet eligibility criteria or were unwilling to participate in the trial. 30 enrolled in the trial.	Age: Sex: 19 males 11 females Diagnosis: OCD by DSM-III Exclusions: History of Sydenham's chorea or rheumatic fever, autism, schizophrenia or other psychotic disorder, a neurological disorder other than a tic disorder, an autoimmune disorder, or other medical illness. Notes: Eligibility criteria were a tic disorder, OCD, or both. Mean age (SD): plasma exchange 10.3 years (2.8), IVIG 9.1 years (2.4), placebo 9.4 (2.3).	Global severity Depression Anxiety Psychosocial functioning Global impairment Obsessions and compulsions Leaving study early due to adverse events Adverse events Leaving study early	Plasma exchange - One plasma volume (45mL/kg bodyweight) was exchanged in each procedure, and 5 or 6 procedures were done, once a day or on alternate days, to complete a course in 10-12 days.  Group 2 N= 10  IV immunoglobulin - Children received 1g/kg IVIG daily for 2 consecutive days.  Group 3 N= 10  IV placebo - Children received 1g/kg saline solution daily for 2 consecutive days.	
SACHDEV2001				
Study Type: RCT	N= 12	Data Used	Group 1 N= 6	
Study Description: Allocation: random (no details); patient and assessor was blind to side (left v right) of stimulation Duration of study: 2 weeks	Age: Mean 40 Sex: 9 males 3 females Diagnosis: OCD by DSM-IV	State-Anxiety Inventory  Montgomery-Asberg Depression Rating Scale Beck Depression Inventory Yale-Brown Obsessive-Compulsive Scale: tota	5 seconds each, 25 seconds between	
Blindness: Double blind	Exclusions: History of psychosis, substance abuse or tic		stimulating coil was centrered over the	
Duration (days):	disorders		right dorsolateral prefrontal cortex  Group 2 N= 6	
Followup: 1 month Setting: Not reported Notes: Country of study: Australia; Analysis: ITT Info on Screening Process: Not reported	Notes: Duration of illness: 17.3 years, 9 patients had a history of comorbid major depression; baseline Y-BOCS 24.15+-7.81		Left rTMS - 5 rTMS sessions per week, stimulation parameters 10Hz, 30 trains of 5 seconds each, 25 seconds between trains, and 110% resting motor	
into on octaering Frocess, Not reported			threshold. A 70-mm 8-shaped stimulating coil was centrered over the left dorsolateral prefrontal cortex	

# **Characteristics of Excluded Studies**

Reference ID Reason for Exclusion

**NUTTIN1999** Single case double-blind study (for more results see NUTTIN2003)

# **References to Included Studies**

ALONSO2001 (Published Data Only)

Alonso, P., Pujol, J., Cardoner, N., Benlloch, L., Deus, J., Menchon, J. M. et al. (2001). Right prefrontal repetitive transcranial magnetic stimulation in obsessive-compulsive disorder: a double-blind, placebo-controlled study. American Journal of Psychiatry., 158, 1143-1145.

**FODSTAD1982** (Published Data Only)

Fodstad, H., Strandman, E., Karlsson, B., & West, K. A. (1982). Treatment of chronic obsessive compulsive states with stereotactic anterior capsulotomy or cingulotomy. Acta Neurochirurgica, 62, 1-23.

# **GREENBERG1997** (Published Data Only)

Greenberg, B. D., George, M. S., Martin, J. D., Benjamin, J., Schlaepfer, T. E., Altemus, M. et al. (1997). Effect of prefrontal repetitive transcranial magnetic stimulation in obsessive-compulsive disorder: a preliminary study. American Journal of Psychiatry., 154, 867-869.

# **NUTTIN2003** (Published Data Only)

Nuttin, B. J., Gabriels, L. A., Cosyns, P. R., Meyerson, B. A., Andreewitch, S., Sunaert, S. G. et al. (2003). Long-term electrical capsular stimulation in patients with obsessive-compulsive disorder. Neurosurgery., 52, 1263-1272.

# **PERLMUTTER1999** (Published Data Only)

Perlmutter, S. J., Leitman, S. F., Garvey, M. A., Hamburger, S., Feldman, E., Leonard, H. L. et al. (1999). Therapeutic plasma exchange and intravenous immunoglobulin for obsessive-compulsive disorder and tic disorders in childhood. Lancet, 354, 1153-1158.

# **SACHDEV2001** (Published Data Only)

Sachdev, P. S., McBride, R., Loo, C. K., Mitchell, P. B., Malhi, G. S., & Croker, V. M. (2001). Right versus left prefrontal transcranial magnetic stimulation for obsessive-compulsive disorder: a preliminary investigation. Journal of Clinical Psychiatry., 62, 981-984.

# **References to Excluded Studies**

#### NUTTIN1999

Nuttin, B., Cosyns, P., Demeulemeester, H., Gybels, J., & Meyerson, B. (1999). Electrical stimulation in anterior limbs of internal capsules in patients with obsessive-compulsive disorder. Lancet., 354, 1526.

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# **Characteristics of all excluded studies**

Reference ID	Reason for Exclusion
AMIN1977	Diagnoses: phobic or obsessive neurosis
ANTONELLI1973	Diagnoses: psychoneuroses
ARAUJO1996	Analysis of data from another study (DEARAUJO1995)
BOERSMA1976	No extractable data for treatment comparisons
CASSANO1981	Diagnoses: phobic-obsessive psychoneurotics
CHOUINARD1992	Analysis of data from other studies (CHOUINARD1992, GREIST 1995a, GREIST 1995b)
CORYELL1989	No extractable data for drug-placebo comparison
CUI1986	Article not in the English language
DENBOER1987	Diagnoses: phobic disorders or anxiety states
DEVEAUGHGEISS1989B	Preliminary results of trials reported in CLOMIPRAMINECOL 1991; findings also presented in DEVEAUGHGEISS 1989A
DEVEAUGHGEISS1990	Analysis of data from CLOMIPRAMINECOL1991
DEVEAUGHGEISS1991C	Analysis of data from CLOMIPRAMINECOL1991 and DEVEAUGHGEISS 1992
DIAMOND1989	No extractable data for drug-placebo comparison
DREESSEN1997	No extractable data
DUBOIS1991	Article not in the English language
EINAT2000	Results of OCD study reported elsewhere (FUX 1996)
EMMELKAMP1977	No extractable data for treatment comparisons
EMMELKAMP1980	Cross-over trial: no extractable data for treatment comparisons
EMMELKAMP1980A	No extractable data for treatment comparisons
EMMELKAMP1981	Cross-over trial: no extractable data for treatment comparisons
EMMELKAMP1989	No extractable data for treatment comparisons
EMMELKAMP1990	No extractable data for treatment comparisons
ERZEGOVESI1992	Not a therapeutic intervention
FALSSTEWART1993A	No extractable data for treatment comparisons
FOA1980	No extractable data
FRITZLER1997	Delayed group began treatment at mid-point of immediate treatment group, so post-treatment data not extractable

GEISLER1969	Article not in the English language
GOURNAY1997	Results reported elsewhere (VEALE 1996)
GREIST1990	Sub-population of CLOMIPRAMINECOL 1991
HACKMANN1975	Cross-over trial, data not extractable before the point of cross-over
HEMBREE2003	Not an RCT (patients chose their treatment)
HESSO1969	Article not in the English language
HOLLANDER1993	Not a therapeutic intervention
HOLLANDER1999	Cross-over trial, data not extractable at point of cross-over
INSEL1982	Analysis of data from INSEL 1983B; no extractable data for drug-comparator comparison
INSEL1985	Treatment study not an RCT
JIANXUN1998	Article not in the English language
JONES1998A	S.D.s not reported on efficacy measures, data not extractable
KARABANOW1977	Diagnoses: obsessive-compulsive and psychopathological traits
KASVIKIS1988	Analysis of data from another study (MARKS1988)
KASVIKIS1988A	No extractable data for treatment comparisons
KAZARIAN1977	Non-clinical population (psychology students)
KEULER1996	Not a therapeutic intervention
KIM1997	Not a therapeutic intervention
KORAN1996	Analysis of data from another study (BEASLEY1992)
KORAN2001A	Not a therapeutic intervention
LAX1992	Treatment outcomes reported elsewhere (MARKS 1988)
LEONARD1995	Not an RCT; analysis of data from other studies (FLAMENT1985 and LEONARD1989A)
LIN1979	No extractable data for treatment comparisons
MARAZZITI1997	Sub-population of MILANFRANCHI 1997
MARKS1988	No extractable data for treatment comparisons
MAVISSAKALIAN1983A	Linked to VOLAVKA 1985 - part of multi-centre study; no extractable data for treatment comparisons (except leaving the study early)
MAVISSAKALIAN1986	Data pooled from other studies
MAWSON1982	No extractable data for relevant treatment comparisons
MCKAY1997	No extractable data for treatment comparisons
1	1

MONTEIRO1987	No extractable data for drug-placebo comparison
MONTELEONE1997	Fluvoxamine treatment section of study not an RCT
MUNDO1995A	Not a clinical intervention study
MUNDO1997	No extractable data for drug-comparator comparisons
MUNDO1999	Part 1 - not a clinical intervention study; Part 2 - no extractable data for drug-comparator comparison (apart from leaving study early and reasons for leaving)
NUTTIN1999	Single case double-blind study (for more results see NUTTIN2003)
OCONNOR1999	Allocation random, but 3 participants were given preferred treatment
ORVIN1967	Diagnoses: obsessive-compulsive and phobic reactions, schizophrenia
OSULLIVAN1991	No extractable data for treatment comparisons
PATO1988	Not an RCT
PETER2000	No extractable data
PIDRMAN1997	No extractable data for drug-comparator comparison
PIGOTT1990	Cross-over trial: data not extractable at point of cross-over
PIGOTT1992	No extractable data for drug-placebo comparison
PIGOTT1992A	Not an RCT: all patients received adjuvant buspirone
PRASAD1984	Features Zimelidine which is no longer used
PRICE1987	Not an RCT
RACHMAN1971	No extractable data for treatment comparisons
RAO2002	Review of another study (PHILLIPS 2002B)
RAPOPORT1980	Cross-over trial: data not extractable at point of cross-over
RAVIZZA1995	No extractable data for drug-comparator comparison
RAVIZZA1996A	Open-label trial
SALKOVSKIS2003	An experimental study
SALLEE1998	No extractable data for drug-comparator comparison
SHAOMEI239	Article not in the English language
SOOMRO2002	Review of another study (KORAN 2002)
STEIN1999	Not a therapeutic intervention
STEIN2001	Analysis of data from another study (MONTGOMERY2001)
STEKETEE1982_1	No extractable data for treatment comparisons

STEKETEE1982_2	Does not mention whether patients were randomised to treatment groups: no extractable data for treatment comparisons
STERN1973	Cross-over trial: data not extractable at point of cross-over
STERN1977	Analysis of data from MARKS 1980; no extractable data for drug-placebo comparison
TURNER1985	Not an RCT
USHIJIMA1997	Article not in the English language
WAXMAN1977	Diagnoses: phobic and obsessional disorders
WEIR2000	Review of another study (PERLMUTTER 1999)
YARGIC1995	Article not in the English language
YARYURATOBIAS1976	Design - double-blind 4 month study, with placebo given on 4th or 6th week; no extractable data for drug-placebo comparison
YARYURATOBIAS1996	No extractable data for treatment comparisons (apart from leaving the study early); insufficient trial information.
ZAHN1984	Part of INSEL 1983B; psychophysiological outcome measures (skin conductance and tonic heart rate)
ZHANG2002	Article not in the English language
ZITTERL1999	Sub-population of another study (MONTGOMERY1993)
ZOHAR1987	No extractable data

# References to all excluded studies

# **AMIN1977**

Amin, M. M., Ban, T. A., Pecknold, J. C., & Klingner, A. (1977). Clomipramine (Anafranil) and behaviour therapy in obsessive-compulsive and phobic disorders. Journal of International Medical Research., 5, 33-37.

# **ANTONELLI1973**

Antonelli, F., De Gregorio, M., & Dionisio, A. (1973). Trazodone in the treatment of psychoneuroses: a double-blind study. Current Therapeutic Research, Clinical & Experimental., 15, 799-804.

# ARAUJO1996

Araujo, L. A., Ito, L. M., & Marks, I. M. (1996). Early compliance and other factors predicting outcome of exposure for obsessive-compulsive disorder. British Journal of Psychiatry., 169, 747-752.

#### **BOERSMA1976**

Boersma, K., Den Hengst, S., Dekker, J., & Emmelkamp, P. M. G. (1976). Exposure and response prevention in the natural environment: a comparison with obsessive-compulsive patients. Behaviour Research and Therapy, 14, 19-24.

# CASSANO1981

Cassano, G. B., Castrogiovanni, P., & Mauri, M. (1981). A multicenter controlled trial in phobic-obsessive psychoneurosis. The effect of chlorimipramine and of its combinations with haloperidol and diazepam. Progress in Neuro-Psychopharmacology, 5, 129-138.

#### CHOUINARD1992

Chouinard, G. (1992). Sertraline in the treatment of obsessive compulsive disorder: two double-blind, placebo-controlled studies. [Review] [40 refs]. International Clinical Psychopharmacology., 7, 37-41.

#### CORYELL1989

Coryell, W. H., Black, D. W., Kelly, M. W., & Noyes, R., Jr. (1989). HPA axis disturbance in obsessive-compulsive disorder. Psychiatry Research., 30, 243-251.

#### **CUI1986**

Cui, Y. H. (1986). A double-blind trial of chlorimipramine and doxepin in obsessive-compulsive neurosis. [Chinese]. Chung-Hua Shen Ching Ching Shen Ko Tsa Chih [Chinese Journal of Neurology & Psychiatry]., 19, 279-281.

#### **DENBOER1987**

Den Boer, J. A., Westenberg, H. G., Kamerbeek, W. D., Verhoeven, W. M., & Kahn, R. S. (1987). Effect of serotonin uptake inhibitors in anxiety disorders; a double-blind comparison of clomipramine and fluvoxamine. International Clinical Psychopharmacology., 2, 21-32.

#### **DEVEAUGHGEISS1989B**

DeVeaugh-Geiss, J., Landau, P., & Katz, R. (1989). Treatment of Obsessive Compulsive Disorder with clomipramine. Psychiatric Annals, 19, 97-101.

# **DEVEAUGHGEISS1990**

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