

Central Neuromodulators*

Medications in the upper part of the figure are first-line options.
Medications in the lower part of the figure augment treatment effects



Gut-Brain modulators for Disorders of Gut-Brain Interactions

SSRIs

(paroxetine, fluoxetine, sertraline, citalopram, escitalopram)

When anxiety, depression, and phobic features are prominent with DGBIs

TCAs

(amitriptyline, nortriptyline, imipramine, desipramine)

First-line treatment when pain is dominant in DGBIs

Tetracyclic Antidepressant

(mirtazapine, mianserin, trazodone)

Treatment of early satiety nausea/vomiting, weight loss and disturbed sleep

SNRIs

(duloxetine, venlafaxine, desvenlafaxine, milnacipran)

Treatment when pain is dominant in DGBIs or when side effects from TCAs preclude treatment

Insufficient effect or dosage restricted by side effects

Augmentation

Azapirones (buspirone, tandospirone)
Dyspeptic features, anxiety prominent

Delta Ligand Agents

(gabapentin, pregabalin)
Abdominal wall pain, comorbid fibromyalgia

SSRI

When anxiety and phobic features dominant

Atypical Antipsychotics

Pain with disturbed sleep (quetiapine), anxiety, nausea (olanzapine, sulpiride)
Additional somatic symptoms ("side effects"), comorbid fibromyalgia

Bupropion

Fatigue and sleepiness prominent

Psychological Treatment

CBT when maladaptive cognitions and catastrophizing present

DBT, EMDR with history of PTSD or trauma

Hypnosis, Mindfulness, Relaxation as alternative treatments

SNRI- serotonin and norepinephrine reuptake inhibitor, SSRI- selective serotonin reuptake inhibitor, TCA- tricyclic antidepressant

DGBI Disorder	Suggested Neuromodulator
CAPS	TCA, SNRI, quetiapine, olanzapine
Chronic nausea and vomiting syndrome	Mirtazapine, olanzapine, TCA
Functional bloating	TCA, buspirone, SSRI
Functional chest pain	SSRI, SNRI, TCA
Functional constipation	SNRI, SSRI (not paroxetine)
Functional diarrhea	TCA
Functional Dyspepsia (PDS)	Buspirone, mirtazapine, TCA
Globus	SSRI
IBS-C	SNRI
IBS-D	TCA, SNRI
Insomnia	Quetiapine, mirtazapine, trazodone, olanzapine
Lethargy	Bupropion, sertraline, fluoxetine

Generic RX Name	Brand RX Name	Dose
Amitriptyline	Elavil	25-150 MG
Desipramine	Norpramin	25-150 MG
Imipramine	Tofranil	25-150 MG
Nortriptyline	Pamelor	25-150 MG
SSRIs		
Citalopram	Celexa	10-40 MG
Escitalopram	Lexapro	5-20 MG
Fluoxetine	Prozac	10-40 MG
Paroxetine	Paxil	10-40 MG
Sertraline	Zoloft	50-150 MG
SNRIs		
Duloxetine	Cymbalta	30-90 MG
Milnacipran	Savella	50-100 MG BID
Venlafaxine	Effexor	75-225 MG (>225 for pain)
MISC AGENTS		
Bupropion	Wellbutrin	100-300 MG
Buspirone	Buspar	7.5-30 MG BID
Mirtazapine	Remeron	7.5-45 MG
Trazodone	Desyrel	75-150 MG
ATYPICAL ANTIPSYCHOTICS		
Aripiprazole	Abilify	2.5-5 MG
Brexipiprazole	Rexulti	1-1.5 MG
Olanzapine	Zyprexa	2.5-10 MG
Quetiapine	Seroquel	25-200 MG