

BNF 1. Gastro-intestinal System Formulary

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Formulary prepared and based on BNF, Summary of Product Characteristics and information provided below unless otherwise stated. For full information on treatment side effects, cautions and contraindications, see electronic British National Formulary (www.bnf.org) or the relevant summary of product characteristics (www.medicines.org.uk).

Relevant Gastro-intestinal NICE Guidelines

NICE - Gastrointestinal conditions overview - everything NICE says in an interactive flowchart- [pathways here](#)

Constipation - [Pathway](#) to guides and Technology Appraisals

Constipation in children and young people: diagnosis and management CG 99- May 2010 reviewed July 2014

[Clinical Guideline CG 99](#)

Crohn's disease: Management in adults, children and young people - CG 152 issued October 2012 - updated May 2016

[Clinical Guideline CG 152](#)

Diarrhoea and vomiting caused by gastroenteritis in under 5s: diagnosis and management CG 84 April 2009 reviewed 2014

[Clinical Guideline CG 84](#)

Gastro-oesophageal reflux disease and dyspepsia in adults: investigation and management CG184 - Spetember 2014

[Clinical Guideline CG 184](#)

Inflammatory bowel disease QS81 - February 2015

[NICE quality standard QS81](#)

Irritable bowel syndrome in adults:diagnosis and management - CG61 Issued February 2008 - reviewed February 2015 updated April 2017

[Clinical Guideline CG 61](#)

Ulcerative colitis - CG166 June 2013 - reviewed Spetember 2015

[Clinical Guideline CG 166](#)

Food allergy in under 19s: assessment and diagnosis CG 116- February 2011 - reviewed February 2014

[Clinical Guideline 116](#)

NICE - Diet, nutrition and obesity overview - [here](#)

Obesity: identification, assessment and management CG 189 November 2014

[Clinical Guideline 189](#)

Obesity in adults: prevention and lifestyle weight management programmes Quality Standard 111 - January 2016

[Quality Standard 111](#)

Preventing excess weight gain - Nice Guideline 7 March 2015

[NICE Gudeline 7](#)













Therapeutic Drug Monitoring


[Suggested Guidance on Monitoring Drugs In Primary Care TAG guidance](#)

Formulary Key

1st line formulary choice		Encouraged
Alternative formulary choice		On Formulary
2nd line formulary choice		2nd Line
Shared Care (TAG Amber)		Shared Care Agreement


▼ - denotes a drug which is subject to additional monitoring and all edverse effects to be reported via the yellow card system.

Drug	Formulations	Dose	Notes
1. Chronic Bowel Disorders			
1.3 Inflammatory bowel disease			
Warning: Blood Disorders			
It is recommended that patients receiving aminosalicylates should be advised to report any unexplained bleeding, bruising, purpura, sore throat, fever or malaise that occurs during treatment. A blood count should be performed and the drug stopped immediately if there is suspicion of a blood dyscrasia.			
Please refer to the TAG Suggested Guidance on Monitoring Drugs In Primary Care.			
For further information see NICE Guidance CG 152 - Chrons Disease issued October 2012 and NICE Guidance CG 166 - Ulcerative Colitis issued June 2013.			
First Choice			
MESALAZINE	 Tabs MR: 400mg , 800mg Tabs: 250mg , 500mg Suppositories Enema foam 1g/ application	Dose see BNF	Please prescribe by brand. Octasa ® most cost effective MR brand. Some brands of Mesalazine vary in their site of release. Octasa MR and Asacol MR 400mg and 800mg tablets may be interchanged. Risk of blood dyscrasias – counsel patient.
PREDNISOLONE	 T: 5mg Foam: 20mg Enema: 20mg Supp: 5mg	T: variable daily dose Foam: once daily-twice daily Enema: one at night Supp: one twice daily	See BNF for doses.
Budesonide for use in Crohn's disease in adult, as recommended by a specialist			
BUDESONIDE	 Gastro-resistant capsules: 3mg	Crohn's disease: as per specialist recommendation - otherwise, BNF: 3mg 3 times a day for up to 8 weeks, reduce dose for the last two weeks of treatment.	Budenofalk® Formulary choice as per NNUH specialists
Second Choice only if prednisolone is clinically contra-indicated or has caused significant adverse reactions as per treatment pathway.			
BECLOMETASONE DIPROPIONATE (Clipper®)	 T: 5mg gastro-resistant modified release	as per specialist initiation. TAG Green	(Clipper®) for treatment of mild-moderate ulcerative colitis. For managing mild-moderate flares 5mg orally for 4 weeks. See treatment pathway for flares.
Immunosuppressants			
MERCAPTOPYRINE	 T: 50mg	See BNF	Shared care agreement - Mercaptopurine
AZATHIOPRINE	 T: 25, 50mg	See BNF	Shared care agreement - Azathioprine
METHOTREXATE	 T: 2.5mg pre-filled syringes 25mg/ml, 50mg/ml pre-filled pens: 25mg/ml, 50mg/ml	See BNF	Shared Care Agreement - Methotrexate Various volumes of methotrexate pre-filled syringes and pre-filled pens are available. Please check which device the patient has been trained to use and prescribe by brand to ensure the patient gets the correct product. See shared care for further information
1.4 Irritable Bowel syndrome			
Antispasmodics - see also section 6.1 GI smooth muscle spasm for further choices			
Peppermint Oil	 Gastro-resistant C: 0.2ml  Gastro - resistant MR caps: 0.2ml	Adult: 1-2 capsules 3 times a day for up to 2 - 3 months if necessary , dose to be taken before meals, swallowed whole with water.	Mintec ® is the most cost effective first line option.
Treatment of moderate to severe Irritable Bowel Syndrome with Constipation as per pathway ONLY			
LINACLOTIDE ▼	 C: 290 microgram	Adult: one capsule ONCE daily, review treatment if no response after 4 weeks	Symptomatic treatment of moderate to severe Irritable Bowel Syndrome with Constipation (IBS-C) in adults.
2 Constipation and Bowel Cleansing			
2.1 Bowel cleansing			
As per secondary care			
2.2 Constipation			
Constipation - Choice of Laxatives			
Bulk Forming Laxatives			
ISPAGHULA HUSK GRANULES	 Sachet: 3.5g	Adults: One sachet twice daily – after meals. Paeds: 6-12 yrs half to one level 5ml spoonful in water	Fybogel - cost effective choice Full effect can take up to 10 days Plain, lemon or orange flavoured Effervescent, sugar and gluten free Low sodium Contains aspartame 16mg / sachet
Stimulant Laxatives			
SENNA	 T: 7.5mg L: 7.5mg/5ml	Adult dose: 2-4 usually t night Child 2-6 yrs: 2.5-5ml in the morning Child >6 yrs: 5-10ml	Works in 8-12 hours Note lower dose on packs sold to the public.


BISACODYL		T: 5mg	Adult: 5-10mg at night increased if necessary to max. 20mg at night	Tablets act in 10 - 12 hours
		Supp: 10mg	Child: 4-18 yrs: 5 - 20mg once daily:adjusted according to response. Adult: One each morning	SUPPOSITORIES act in 20 - 60 minutes.
			Child 2 - 18 yrs: half to one once daily, adjusted according to response.	

Osmotic Laxatives

First Choice



MACROGOLS		Macrogol 3350 sachets	See BNF for dosage instructions.	CKS recommend macrogols second-line to bulk-forming laxatives for chronic constipation and first-line for faecal impaction. Not for long-term use. Laxido® and Cosmocol® are cost effective choices for both adult and paediatric sachets. Each adult reconstituted sachet provides 5.4mmol/l K+ Reconstituted sachets should be stored in a fridge and used within 6 hours Caution: patients with impaired cardiovascular function should not take more than 2 sachets in any 1 hour. (SPC)
		Macrogol oral concentrate 3350/25ml	See BNF for doses	After dilution the solution should not be kept for more than 24 hours. Diluted oral concentrate provides 5.4 mmol/l K+ Caution: patients with impaired cardiovascular function should not take more than 2 doses in any 1 hour. (SPC)

Second Choice

LACTULOSE		Solution	Adult: 15ml twice daily Paeds: <1yr 2.5ml twice daily 1-5 yrs 5ml twice daily 5-10 yrs 10ml twice daily	Use lactulose if macrogols are not effective, or not tolerated. Can take up to 48 hrs to work
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Faecal softening drugs

NB: Dantron containing products (Co-danthrusate/Co-danthamer) – these are now only licensed for use in the terminally ill

DOCUSATE SODIUM		C: 100mg L: 50mg/5ml (adult) 12.5mg/5ml (child) Enema: 120mg/10g	Chronic constipation oral dose Adult: Up to 500mg daily in divided doses Rectal dose: Child over 12 years : a 120mg/ 10g unit See BNF for Paediatric doses	Do not give with liquid paraffin Has stimulant and stool-softening action
GLYCEROL		Supp: Infants 1g Children 2g Adults 4g	One as required	Moisten with water before use

Peripheral opioid-receptor antagonist

As an option for treating opioid-induced constipation in adults whose constipation has not adequately responded to laxatives as per treatment pathway.



NALOXEGOL ▼ NICE TA 345		T: 12.5mg	Adults: Recommended dose is 25mg once daily Renal impairment - The starting dose for patients with moderate or severe renal insufficiency is 12.5 mg.	(Moventig®) as per agreed pathway
		T: 25mg		3rd or 4th line after maximised use of other pathway laxatives. Lifestyle modification and opioid review to be conducted as part of management.
			It is recommended that Moventig is taken in the morning , for patient convenience to avoid bowel movements in the middle of the night. Moventig should be taken on an empty stomach at least 30 minutes prior to the first meal of the day or 2 hours after the first meal of the day.	When naloxegol therapy is initiated, it is recommended that all currently used maintenance laxative therapy should be halted, until clinical effect of naloxegol is determined.
				Renal impairment - The starting dose for patients with moderate or severe renal insufficiency is 12.5 mg. Hepatic impairment - No dose adjustment is required for patients with mild to moderate hepatic impairment CYP3A4 inhibitors - The starting dose for patients taking moderate CYP3A4 inhibitors (e.g. diltiazem, verapamil) is 12.5 mg once daily.

Other drugs used in constipation

Prior to prescribing prucalopride two laxatives must have been tried in the preceding 6 month period with no success. Lubiprostone to be used only after 2 laxatives and prucalopride have proved unsuccessful.

[See local pathway](#) for the treatment of refractory symptomatic chronic constipation for full details.

PRUCALOPRIDE

		T: 1mg and 2 mg	Adults: 2 mg once daily	Resolor should not be used in children and adolescents younger than 18 years
			Older people (>65 years): Start with 1 mg once daily, dose can be increased to 2mg daily.	
			Patients with renal impairment: The dose for patients with severe renal impairment (GFR < 30 ml/min/1.73 m ²) is 1 mg once daily	No dose adjustment is required for patients with mild to moderate renal impairment
			Patients with hepatic impairment: Patients with severe hepatic impairment (Child-Pugh class C) start with 1 mg once daily which may be increased to 2 mg if required to improve efficacy and if the 1 mg dose is well tolerated.	No dose adjustment is required for patients with mild to moderate hepatic impairment.
LUBIPROSTONE ▼		C: 24 microgram	Adults (>18 years of age): one 24 microgram capsule taken twice daily	A course of treatment for constipation is 2 weeks - review and continue if effective as per pathway.
			For patients with moderate or severe hepatic impairment (Child-Pugh classification B or C), the initial dosage should be decreased to 24 micrograms (1 capsule once a day after breakfast or supper)	No dosage adjustment is required in patients with renal impairment. If this initial dose is tolerated and an adequate response has not been obtained after an appropriate interval, the dose can be increased to full dosing (one 24-microgram capsule, twice daily) with appropriate monitoring of patient response.

[NICE TA 318](#)


3 Diarrhoea

From section 9 Nutrition and blood

9.2 Fluid and electrolyte loss in diarrhoea


Antibacterial drugs are generally unnecessary, first line treatment in acute diarrhoea is with fluid and electrolyte supplementations.

First Choice


ORAL REHYDRATION THERAPY		Powder sachets	One sachet to 200ml water (freshly boiled and cooled for infants). Adults: 200-400mls after each loose motion or according to fluid loss Under 2 years, 1—1½ times normal feed volumes; over 2 years, 1 sachet after every loose motion, max 12 in 24 hrs.	Electrolade - cost effective choice. Discard any unused solution after 1 hour or 24 hours if kept in fridge. Can be purchased as self care.
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Second Choice

Antipropulsives

LOPERAMIDE		C:2mg L: 1mg/5ml	Dose: Chronic diarrhoea Adult: Initially 4-8mg daily in divided doses, adjusted according to response; maintenance up to 16mg daily in 2 divided doses.	Acute diarrhoea - suggest self care except in children as unable to purchase OTC for under 18 years. Suspected <i>Clostridium Difficile</i> DO NOT prescribe as this will lengthen the patients' exposure to the bacterial toxic effect in the gut.
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Opioids - Acute diarrhoea (from section 4.5 Nervous system BNF 70)

CODEINE PHOSPHATE		T: 15, 30, 60mg	Child 12-17 years: 30mg 3 - 4 times a day; usual dose 15-60mg 3 - 4 times a day.	Monitor for opioid side effects.
			Adult: 30mg three to four times daily, usual dose 15-60mg 3 - 4 times a day.	

4 Disorders of gastric acid and ulceration

4.1 Dyspepsia

[CKS - dyspepsia unidentified cause - see list for other scenarios](#)

Alginates

First Choice

ALGINIC ACID COMPOUND PREPARATIONS		L: 250ml or 500ml	Adults: 10-20mls - After meals and at Child 6 - 12 years: 5 - 10 ml	Peptac ® - cost effective choice L: Na ⁺ 6mmol/10ml T: Na ⁺ 2.25 mmol /tablet Sugar-free Max effect if taken ½ hour after food Acidex Advance ® Cost effective choice (however, has slightly higher sodium content than Gaviscon) in sodium restricted patients 5.1mmol Na ⁺ / 5ml. Not recommended for children under 12 years. Children over 12 years: 5—10ml after meals and at bedtime
		T: 500mg	Adult and child over 12 years: 1-2 tablets after meals and at bedtime Child 6 - 12 years : 1 tablet	
		Infant Sachets - Gaviscon	See BNF	Gaviscon Infant ® Sugar-free Na ⁺ 1mmol/5ml Sodium alginate 225mg & Magnesium alginate 87.5mg per single sachet (one dose). Na = Na ⁺ 0.92 mmol per dose

Antacids

First Choice

MAGNESIUM TRISILICATE		L: 200ml	1-2 tablets chewed as required 10 - 20 ml in water three times daily or as required. Child: 5 - 10ml in water three times daily or as required	139mg Na ⁺ / 10ml Laxative effect Can be used in pregnancy
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Second Choice

CO-MAGALDROX		S: 195/220	Adult and child over 12 years: 10 - 20 ml - 20-60 mins after meals and at bedtime or when required	Mucogel - cost effective choice Mucogel = Magnesium Hydroxide 195mg & Aluminium Hydroxide 200mg/ml 139mg Na ⁺ / 10ml = Na ⁺ < 1mmol/10ml & sugar free
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Defoaming drugs

SIMETICONE		L: 40mg/ml	Neonates and infant dose: 0.5 - 1ml before feeds.	Infacol ® CKS suggest one week trial for infantile colic if required.
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4.2 Gastric and duodenal ulceration

Peptic Ulceration

Helicobacter pylori eradication regimens- ref Dr Ian Beales NNUH (Maastricht V guidelines)

All treatment is for 7 days unless relapse or mucosa-associated lymphoid tissue (MALT)oma when treatment is for 14 days

First line choice

OMEPRAZOLE		C: 20mg	40mg twice daily	For seven days of treatment.
AMOXICILLIN	plus	C: 500mg	two capsules (1g) twice daily	Summary of regime
CLARITHROMYCIN	OR	T: 500mg	500mg twice daily	PPI with amoxicillin plus clarithromycin

penicillin allergy

OMEPRAZOLE or		C: 20mg	40mg twice daily	For seven days of treatment.
METRONIDAZOLE	plus	T: 400mg	400mg twice daily	
CLARITHROMYCIN	plus	T: 500mg	500mg twice daily	

relapse & NO previous fluoroquinolones

ESOMEPRAZOLE	plus	C: 40mg	40mg twice daily	For fourteen days of treatment.
AMOXICILLIN	plus	C: 500mg	two capsules (1g) twice daily	
LEVOFLOXACIN	plus	T: 250mg	250mg twice a day	

relapse & PREVIOUS fluoroquinolones

ESOMEPRAZOLE	plus	C: 40mg	40mg twice daily	For fourteen days of treatment. (OMIT if penicillin allergic - less effective regime so refer to secondary care for culture and sensitivities)
AMOXICILLIN	plus	C: 500mg	two capsules (1g) twice daily	
TETRACYCLINE	plus	T: 250mg	500mg four times a day	
METRONIDAZOLE	plus	T: 400mg	400 mg three times daily	


If treatment failure following TWO treatment regimens consider endoscopy for culture and susceptibility – consult specialist.

[Link to local Antibiotics Formulary - Norfolk CCGs](#)

H² - receptor antagonists


Acid suppression with H2RAs is not gastrin fast - a meal will negate acid suppression. Nocturnal dosing is preferable. If twice daily dosing is used the second dose should be given mid-morning.

First Choice


RANITIDINE		T: 150, 300mg	Ulceration: 150mg twice daily or 300mg at night Maint: 150mg at night	See BNF for full details.
		L: 150mg/10ml	Oesophagitis: 150mg twice daily or 300mg at night for up to 12 weeks.	Caution: Elderly, impaired renal or hepatic function. GI Bleed prophylaxis for patients taking aspirin: Recommended dose is Ranitidine 300mg twice daily.

Proton Pump Inhibitors

First Choice

LANSOPRAZOLE		C: 15, 30mg	30mg Treatment 15mg Maintenance Usually once daily	Generic caps are most cost effective choice NICE guidance advocates as required use See BNF for indications and treatment length. Use low dose for maintenance or taking when required. For patients who cannot swallow use Lansoprazole orodispersible tablets as the cost effective choice NOT a "special" liquid.
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Second Choice

OMEPRAZOLE		C: 10, 20mg	20mg Treatment 10mg Maintenance or use 20mg as required. Usually once daily.	Generic caps are most cost effective choice NICE guidance advocates as required use. If 40mg dose required use 2 x 20mg capsules. See BNF for indications and treatment length. For patients who cannot swallow use Losec MUPS NOT oral liquid which is a "special" and is expensive
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Clopidogrel and co-prescription with PPIs. **Locally we would recommend lansoprazole capsules 15-30mg daily or ranitidine 300mg twice daily**

Advice for healthcare professionals -MHRA update since April 2010

Concomitant use of clopidogrel and omeprazole or esomeprazole is to be discouraged unless considered essential.

Doctors should check whether patients who are taking clopidogrel are also buying over-the-counter omeprazole and consider whether other gastrointestinal therapies would be more suitable.

Pharmacists should check whether patients buying omeprazole are also taking clopidogrel.


Consider PPIs other than omeprazole or esomeprazole in patients who are taking clopidogrel. Other gastrointestinal therapy such as H2 blockers (except cimetidine) or antacids may be more suitable in some patients.

<https://www.gov.uk/drug-safety-update/clopidogrel-and-proton-pump-inhibitors-interaction-updated-advice>

6. Gastro-intestinal smooth muscle spasm

Antispasmodics

First Choice

MEBEVERINE		T: 135mg	Adult and child over 10 years: 135 - 150mg three times daily	Take 20 minutes before food.
		C MR: 200mg	Adult and child over 12 years: 200mg MR capsule twice daily	Avoid in paralytic ileus and porphyria Liquid is very expensive


Second Choice

ALVERINE CITRATE		C: 60mg, 120mg	60 - 120mg 1 - 3 times daily	May relieve pain in irritable bowel and diverticular disease.
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NAUSEA AND VOMITING







From Central Nervous System BNF 4.4 Nausea and labyrinth disorders

Antihistamines

CYCLIZINE		T: 50mg	Adults: 50mg up to three times daily	Caution antimuscarinic effects
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Dopamine Receptor Antagonists

METOCLOPRAMIDE		T: 10mg	Adults: 5-10 mg three times daily	Can induce extrapyramidal side effects especially in young female adults. Risk of neurological adverse effects - restricted dose and duration of use. MHRA: should only be prescribed for short-term use (up to 5 days) See MHRA - Drug Safety Update
		L: 5mg/5ml		
DOMPERIDONE ▼		T: 10mg	Adult and child over 12 years and over 35kg: Oral: 10mg every 4-8 hrs. Max 30mg daily.	Small risk of serious ventricular arrhythmia and sudden cardiac death. Short term use ONLY - SHOULD NOT normally exceed 1 week. See MHRA - Drug Safety Update
		L: 5mg/5ml		

7 Liver disorders and related conditions			
URSODEOXYCHOLIC ACID		T: 150mg C: 250mg T: 300mg T: 500mg	Dose as per specialist recommendation Capsules are recommended as cost effective choice locally for 250mg .
8 Obesity			
Lipase inhibitors			
ORLISTAT		C: 120mg	Adult: 120mg up to 3 times a day, dose to be taken immediately before, during or up to 1 hour after each main meal. Prescribe generically - 120mg is POM, 60mg can be purchased as OTC as self care. Adjunct in obesity (in conjunction with a mildly hypocaloric diet in individuals with a BMI of 30kg/m ² or more or in individuals with a BMI of 28 kg/m ² or more in the presence of other risk factors such as type 2 diabetes, hypertension, or hypercholesterolaemia) Continue treatment beyond 12 weeks ONLY if weight loss since start of treatment exceeds 5% (target for initial weight loss may be lower in patients with type 2 diabetes). Continuation of treatment: should ONLY be beyond 12 months after discussing potential benefits and risks with the patient. (BNF 70) Do not take if meal missed or it contains no fat.
9 Rectal and anal disorders			
Management of anal fissures			
GTN OINTMENT 0.4%. Rectogesic		O: 30g	Apply 2.5cm ointment to anal canal every 12 hours until pain stops. Do not use for longer than 8 weeks. Important - Please prescribe by brand as "special" manufactured ointment is expensive. CKS - anal fissure management
1.9.1 Haemorrhoids			
CKS - haemorrhoids - topical preparations CKS - pruritus ani			
ANUSOL		C: 23g O: 25g Supp: 12-24 pack	Apply or insert twice daily and after bowel movement Do not use in pregnancy and lactation Short term use Purchase as SELF CARE
Corticosteroids			
ANUSOL HC		O: 30g Supp: 12 pack	Apply or insert twice daily and after each bowel movement Do not use for longer than 7 days. Do not use in pregnancy and lactation, tuberculous, fungal and viral infection. Caution - local anaesthetic component can be absorbed through the rectal mucosa (avoid excessive application particularly in children and infants) ALSO may cause sensitisation (use for short periods only)
SCHERIPROCT		O: 30g Supp: 12 pack	O: Apply twice daily for 5 - 7 days (3-4 times daily on first day if necessary) then once daily for a few days after symptoms have cleared. Supp: One daily after a bowel movement for 5-7 days (in severe cases initially 2 - 3 times daily). Contains prednisolone and local anaesthetic. Local irritation possible. Prescribe by brand. Do not use for longer than 7 days Caution - local anaesthetic component can be absorbed through the rectal mucosa (avoid excessive application particularly in children and infants) ALSO may cause sensitisation (use for short periods only)
10 Reduced exocrine secretions			
Specialist initiation			
11 Stoma Care			
Specialist initiation of incontinence products			
Prescribing for patients with stoma calls for special care - see BNF 70 for guidance. Stoma products Key Messages Key message 20 - Stoma products Key Message 21 - Stoma Accessories			