

## APPENDIX 1: THE MODIFIED GRADE SYSTEM

Grade of Recommendation	Clarity of risk/benefit	Quality of supporting evidence	Implications for clinical practice
<b>1A</b> Strong recommendation. High quality evidence.	Benefits clearly outweigh risk and burdens, or vice versa	Consistent evidence from well performed randomized, controlled trials or overwhelming evidence of some other form. Further research is unlikely to change our confidence in the estimate of benefit and risk.	Strong recommendations, can apply to most patients in most circumstances without reservation. Clinicians should follow a strong recommendation unless there is a clear rationale for an alternative approach.
<b>1B</b> Strong recommendation. Moderate quality evidence.	Benefits clearly outweigh risk and burdens, or vice versa	Evidence from randomized, controlled trials with important limitations (inconsistent results, methods flaws, indirect or imprecise), or very strong evidence of some other research design. Further research may impact on our confidence in the estimate of benefit and risk.	Strong recommendation and applies to most patients. Clinicians should follow a strong recommendation unless a clear and compelling rationale for an alternative approach is present.
<b>1C</b> Strong recommendation. Low quality evidence.	Benefits appear to outweigh risk and burdens, or vice versa	Evidence from observational studies, unsystematic clinical experience, or from randomized, controlled trials with serious flaws. Any estimate of effect is uncertain.	Strong recommendation, and applies to most patients. Some of the evidence base supporting the recommendation is, however, of low quality.
<b>1D</b> Strong recommendation Very low quality evidence	Benefits appear to outweigh risk and burdens, or vice versa	Evidence limited to case studies	Strong recommendation based mainly on case studies and expert judgement
<b>2A</b> Weak recommendation. High quality evidence.	Benefits closely balanced with risks and burdens	Consistent evidence from well performed randomized, controlled trials or overwhelming evidence of some other form. Further research is unlikely to change our confidence in the estimate of benefit and risk.	Weak recommendation, best action may differ depending on circumstances or patients' or societal values
<b>2B</b> Weak recommendation. Moderate quality evidence.	Benefits closely balanced with risks and burdens, some uncertainty in the estimates of benefits, risks and burdens	Evidence from randomized, controlled trials with important limitations (inconsistent results, methods flaws, indirect or imprecise), or strong evidence of some other research design. Further research may change the estimate of benefit and risk.	Weak recommendation, alternative approaches likely to be better for some patients under some circumstances
<b>2C</b> Weak recommendation. Low quality evidence.	Uncertainty in the estimates of benefits, risks, and burdens; benefits may be closely balanced with risks and burdens	Evidence from observational studies, unsystematic clinical experience, or from randomized, controlled trials with serious flaws. Any estimate of effect is uncertain.	Weak recommendation; other alternatives may be reasonable
<b>2D</b> Weak recommendation Very low quality evidence	Uncertainty in the estimates of benefits, risks, and burdens; benefits may be closely balanced with risks and burdens	Evidence limited to case studies and expert judgement	Very weak recommendation; other alternatives may be equally reasonable.

## APPENDIX 2: COMMENTS REGARDING POTENTIAL ADVANTAGES AND COMPLICATIONS OF INDIVIDUAL ORAL BOWEL CLEANSING AGENTS

Oral Bowel Cleansing Agent (OBCA)	Potential advantages of this OBCA	Tolerability and ease of use	Is a low residue diet advised prior to dosing?	Are there complications specific to this OBCA?*	Are there any contraindications specific to this OBCA?*
<b>Citrafleet® or Picolax®</b>	Produces the lowest watery residue:	Powder is reconstituted with a low	Yes	1. Higher risk of hyponatraemia (if excessive water	It is particularly important that patients with conditions predisposing to

(Sodium picosulphate & magnesium citrate)	potentially advantageous for radiological investigation.	volume of water. It then arms on mixing.		ingestion) than with other OBCA's.  2. Risk of hypermagnesaemia in patients with advanced Chronic Kidney Disease.	<b>hypovolaemia</b> are evaluated prior to receiving this OBCA.
<b>Citramag<sup>®</sup></b>  (magnesium carbonate and citric acid)	Produces a low watery residue (although not as low as Picolax <sup>®</sup> ).	Powder is reconstituted with a low volume of hot water.	Yes.	1. Higher risk of hyponatraemia (if excessive water ingestion) than with other OBCA's.  2. Risk of hypermagnesaemia in patients with advanced Chronic Kidney Disease.	It is particularly important that patients with conditions predisposing to <b>hypovolaemia</b> are evaluated prior to receiving this OBCA.
<b>Klean Prep<sup>®</sup></b>  (polyethylene glycol)	Less likely to cause hypovolaemia.	Powder is reconstituted with a high volume of water (up to 4 litres).	Yes.	<i>Lowest risk of provoking hypovolaemia and/or hyponatraemia.</i>	
<b>Moviprep<sup>®</sup></b>  (polyethylene glycol)	Less likely to cause hypovolaemia	Powder is reconstituted with a moderate volume of water (approx 2 litres).	Yes.	<i>Lowest risk of provoking hypovolaemia and/or hyponatraemia.</i>	G6PD deficiency.
<b>Fleet Phosphosoda<sup>®</sup></b>  (sodium phosphate)	Well tolerated.	A low volume of liquid (45 mls) is mixed with a low volume of water (120 mls).	No. It is sufficient to simply avoid solid food during the dosing period.	1. Acute Phosphate Nephropathy.  2. Hypocalcaemia resulting from hyperphosphataemia.  3. Highest risk of hypovolaemia.	Should not be prescribed to patients with; 1. hypovolaemia 2. eGFR < 60 ml/min/1.73m <sup>2</sup> 3. hepatic cirrhosis 4. cardiac failure 5. hypertension 6. renin-angiotensin blockade ...unless <i>all</i> other OBCA's are contraindicated.

It should be remembered that the administration of ALL types of OBCA may be complicated by hypovolaemia and/or electrolyte disturbances (including hypokalaemia, hyponatraemia and hypernatraemia).

<sup>+</sup> The following are absolute contraindications to ALL types of OBCA: gastrointestinal obstruction, perforation or ileus; severe inflammatory bowel disease; reduced consciousness; hypersensitivity to any of the ingredients; ileostomy.

### APPENDIX 3: THE CLASSIFICATION OF CHRONIC KIDNEY DISEASE

The diagnosis of Chronic Kidney Disease (CKD) is based on two parameters. The first is the Glomerular Filtration Rate (GFR). An estimated GFR (eGFR), calculated from the serum creatinine concentration, is commonly employed. To ensure that the impairment in renal function is chronic in nature rather than acute, the GFR should be calculated on two occasions over 90

days apart. The second parameter is the presence of markers of kidney damage, which include abnormalities evident on urinalysis (eg proteinuria) or radiological investigation.

<b>Stage</b>	<b>Description</b>	<b>GFR mL/min/1.73m<sup>2</sup></b>
1	Kidney damage evident Normal or elevated GFR	> 90
2	Kidney damage evident Mildly reduced GFR	60 – 89
3A	Moderately reduced GFR +/- documented kidney damage	45 – 59
3B	Moderately reduced GFR +/- documented kidney damage	44 – 30
4	Severely reduced GFR +/- documented kidney damage	15 – 29
5	Kidney Failure +/- documented kidney damage	< 15 or on dialysis

#### **APPENDIX 4: ORAL BOWEL CLEANSING AGENT PATIENT ADVICE SHEET**

The following Patient Advice Sheet is not intended to replace instruction sheets already in existence at a local level. Individual units may wish to use it alongside their existing instruction sheets, or to consider including the information it contains within their existing instruction sheets.

This Patient Advice Sheet provides information that is frequently omitted from the instructions provided by the manufacturers of the oral bowel cleansing agents. It is intended to augment these instructions, not to replace them.

Local contact details should be included on the template to allow patients to raise concerns or uncertainties.

## **AN ADVICE SHEET FOR PATIENTS WHO HAVE BEEN PRESCRIBED AN ORAL BOWEL CLEANSING AGENT.**

You have been prescribed an oral bowel cleansing agent (sometimes also called a 'bowel prep'). Its role is to clear out your bowels. This is important to ensure the safety and success of the planned procedure. There is a risk of developing dehydration, low blood pressure or kidney problems with this medication. The doctor prescribing the oral bowel cleansing agent will have assessed your risk and identified the most appropriate medication for you. You may also have had a blood test to check your kidney function. A number of oral bowel cleansing agents are available. You should refer to the manufacturer's instructions when taking your preparation. However the following rules apply in all cases.

The prescribed dose of oral bowel cleansing agent should not be exceeded. The oral bowel cleansing agent should not usually be taken over a period longer than 24 hours but this can be varied if you have previously had problems achieving a clean bowel with bowel prep.

Oral bowel cleansing agents predispose to dehydration. You should maintain a good fluid intake whilst taking these medications. If you develop the symptoms of dehydration, and cannot increase your fluid intake, then you should seek medical attention. These symptoms include dizziness or lightheadness (particularly on standing up), thirst, or a reduced urine production.

You should follow any specific advice you have been given with regard to your regular medications. Medications that you may have been asked to temporarily discontinue include...

- **antihypertensives** (to lower your blood pressure) such as ACE inhibitors like Ramipril®
- **diuretics** ('water tablets', such as furosemide)
- **non-steroidal anti-inflammatory drugs** (a type of pain killer, such as ibuprofen)
- **iron preparations** (for anaemia, such as ferrous sulphate)
- **aspirin, dipyridamole, clopidogrel or warfarin** (these agents thin your blood; you may have been asked to discontinue them depending on the nature of the procedure that is planned)

If you have not received specific advice regarding your regular medications then you should continue to take them as normal. However, you may need to amend the timing as it is preferable to avoid taking them less than one hour either side of any dose of oral bowel cleansing agent.

Patients taking immunosuppression for transplanted organs should seek the advice of their doctor before taking an oral bowel cleansing agent.

Patients taking the oral contraceptive pill should take alternative precautions during the week following taking the oral bowel cleansing agent.

**If you experience problems, advice from a healthcare professional is available on (Tel No).**

