Supplementary data
Per protocol

Supplementary Table 1: Basal patients characteristics in the three groups of study

<table>
<thead>
<tr>
<th></th>
<th>PEG-ELS 4L N=81</th>
<th>AscPEG-2L N=96</th>
<th>PiMg N=98</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>62.49±5.37</td>
<td>62.24±5.32</td>
<td>61.13±5.44</td>
<td>0.188</td>
</tr>
<tr>
<td>Male</td>
<td>45 (55.6%)</td>
<td>47 (49%)</td>
<td>49 (50%)</td>
<td>0.649</td>
</tr>
<tr>
<td>Presence of diverticulosis</td>
<td>31(38.3%)</td>
<td>36 (37.5%)</td>
<td>20 (20.4%)</td>
<td>0.012</td>
</tr>
<tr>
<td>Cecal intubation rate</td>
<td>78 (96.3%)</td>
<td>95 (99%)</td>
<td>97 (99%)</td>
<td>0.319</td>
</tr>
</tbody>
</table>
Overall, AscPEG-2L (blue) and PiMg (orange) were statistically significantly better tolerated than the standard solution PEG-ELS 4L (green). A Mann Whitney analysis with Bonferroni correction for multiple comparisons was applied (significant p-value < 0.025). PEG-ELS 4L - high volume polyethylene glycol plus electrolytes solution; AscPEG-2L – low volume polyethylene glycol plus electrolytes combined with ascorbic acid; PiMg - picosulfate sodium combined with magnesium citrate.
Supplementary data Figure 2: Efficacy of low-volume solutions respect to control.

The quality of colonic cleansing differed by preparation regimen. BBPS was better punctuated in the AscPEG-2L group (blue) than in control group (green) and PiMg group (orange). These differences were more evident when looking at right colon (see right part of the figure). A Mann Whitney analysis with Bonferroni correction for multiple comparisons was applied (significant p-value < 0.025). PEG-ELS 4L - high volume polyethylene glycol plus electrolytes solution; AscPEG-2L – low volume polyethylene glycol plus electrolytes combined with ascorbic acid; PiMg - picosulfate sodium combined with magnesium citrate BBPS – Boston bowel preparation scale.
Supplementary data Figure 3. Tolerability tacking into account different products and timeframe regimens.

Globally, low volume preparations were better tolerated than PEG-ELS 4L regardless the way of administration. It seems that taking the preparation the day before was better accepted than in split dose but this slight difference did not reach statistical.

PEG-ELS 4L - high volume polyethylene glycol plus electrolytes solution; AscPEG-2L – low volume polyethylene glycol plus electrolytes combined with ascorbic acid; PiMg - picosulfate sodium combined with magnesium citrate BBPS – Boston bowel preparation scale.
Supplementary data Figure 4: Efficacy taking into account different product and timeframe regimen.

Globally, split dosages were superior to evening dosages (dark colors). AscPEG-2L in split dose (dark blue) appeared to be the most effective being this difference even more manifest in right colon (see right part of the figure). PEG-ELS 4L - high volume polyethylene glycol plus electrolytes solution; AscPEG-2L – low volume polyethylene glycol plus electrolytes combined with ascorbic acid; PiMg - picosulfate sodium combined with magnesium citrate BBPS – Boston bowel preparation scale.