1. **Gaviscon Double Action Liquid** (antacid & alginate) is more effective than antacid in controlling post-prandial oesophageal acid exposure in GERD patients: a double-blind crossover study **(CONCLUSIONS):** Gaviscon Double Action Liquid is more effective than an antacid without alginate in controlling post-prandial oesophageal acid exposure. However, the number and spatial distribution of reflux events within the oesophagus are similar. This suggests that Gaviscon main effectiveness relates to its co-localisation with and displacement/neutralisation of the post-prandial acid pocket, rather than preventing reflux.

2. An alginate-antacid formulation (Gaviscon Double Action Liquid) can eliminate or displace the postprandial 'acid pocket' in symptomatic GERD patients **(RESULTS):** Most patients (8/10) exhibited an acidified segment extending from the proximal stomach into the EGJ when fasted that persisted postprandially. Gaviscon neutralised the acidified segment in six of the eight subjects shifting the pH transition point significantly away from the EGJ. The length and pressure of the EGJ high-pressure zone were minimally affected. **CONCLUSIONS:** Gaviscon can eliminate or displace the 'acid pocket' in GERD patients. Considering that EGJ length was unchanged throughout, this effect was likely attributable to the alginate 'raft' displacing gastric contents away from the EGJ. These findings suggest the alginate-antacid formulation to be an appropriately targeted postprandial GERD therapy.

3. The efficacy of sodium alginate (Gaviscon) for the treatment of gastro-oesophageal reflux in preterm infants **(RESULTS):** Sodium alginate significantly decreased the number of acid gastro-oesophageal reflux detected either by pH monitoring (DG vs. DF: median 17.00 vs. 29.00, P = 0.002) and MII (DG vs. DF: 4.0 vs. 6.00, P = 0.050), and also acid oesophageal exposure (DG vs. DF: 4.0% vs. 7.6%, P = 0.030), without any influence on non-acid gastro-oesophageal reflux. Furthermore, it decreased the number of gastro-oesophageal reflux reaching proximal oesophagus (DG vs. DF: 5.50 vs. 7.50, P = 0.030). **CONCLUSIONS:** The use of sodium alginate in preterm infants seems to be promising, because this drug decreases gastro-oesophageal reflux acidity and height with the advantage of a nonsystemic way of action and a more favourable safety profile over H2 blockers and PPIs.

4. Post-prandial reflux suppression by a raft-forming alginate (Gaviscon Advance [GA]) compared to a simple antacid documented by magnetic resonance imaging and pH-impedance monitoring: mechanistic assessment in healthy volunteers and randomised, controlled, double-blind study in reflux patients **(RESULTS):** MRI visualized a "mass" of GA form at the oesophago-gastric junction (OGJ); simple antacid sank to the distal stomach. The number of post-prandial common cavity reflux events was less with GA than antacid [median 2 (0-5) vs. 5 (1-11); P < 0.035]. Distal reflux events and acid exposure measured by pH-impedance were similar after GA and antacid. There was a trend to reduced proximal reflux events with GA compared with antacid [10.5 (8.9) vs. 13.9 (8.3); P = 0.070]. **CONCLUSIONS:** Gaviscon Advance forms a 'mass' close to the OGJ and significantly suppresses reflux compared with a nonraft-forming antacid. Standard pH-impedance monitoring is suitable for clinical studies of GA in gastro-oesophageal reflux disease patients where proximal reflux is the primary outcome.

5. Gaviscon and domperidon responsive apnea episodes associated with gastro-oesophageal reflux disease in twins ([…]) As gastro-oesophageal reflux disease was thought to be the causes of the treatment-refractory apnea, therapy with gaviscon and domperidon was begun for both cases. Apneic attacks did not recur after gaviscon and domperidon therapy. **CONCLUSION:** Pharmacological therapy for gastro-oesophageal reflux disease has not definitively been shown to be effective in improving symptoms and hence, should be
reserved especially for infants with treatment refractory apnea episodes suspected as being gastro-
esophageal reflux in premature infants.)

6. Alginate antacid (Gaviscon DA) chewable tablets reduce esophageal acid exposure in Chinese patients with gastroesophageal reflux disease (GERD) and heartburn symptoms (CONCLUSIONS: DA alginate antacid was statistically significantly superior to placebo in reducing post-prandial acid exposure without serious clinically relevant health risks. These findings suggest DA alginate antacid tablets are appropriate for treating acid reflux in Chinese GERD patients with heartburn symptoms.)

7. Effect of Gaviscon Infant on gastro-oesophageal reflux in infants assessed by combined intraluminal impedance/pH (RESULTS: The median number of reflux events/hour (1.58 v 1.68), acid reflux events/hour (0.26 v 0.43), minimum distal or proximal pH, total acid clearance time per hour (time with pH below pH 4), and total reflux duration per hour were not significantly different after GI than after placebo. Reflux height was marginally lower after GI (median 66.6% v 77.3% oesophageal length) compared with placebo. CONCLUSIONS: Results showed a marginal but significant difference between Gaviscon Infant and placebo in average reflux height, and raises questions regarding any perceived clinical benefit of its use.)

8. Double-blind controlled study on the efficacy of sodium alginate (Gaviscon) in reducing gastroesophageal reflux assessed by 24 h continuous pH monitoring in infants and children (ABSTRACT: [...]After 8 days of treatment with Gaviscon, results of all the pH monitoring variables were significantly (P less than 0.05) reduced between -35% and -61% of the initial values recorded. In the placebo treated group, the mean values remained little changes (-9.5 to +8.2% of initial values). These data suggest that Gaviscon may prove useful in the medical management of GOR in infants and children.)

9. Randomised clinical trial: alginate (Gaviscon Advance) vs. placebo as add-on therapy in reflux patients with inadequate response to a once daily proton pump inhibitor (CONCLUSION: In patients with residual reflux symptoms despite PPI treatment, adding an alginate offers additional decrease in the burden of reflux symptoms (EudraCT/IND Number: 2011-005486-21).)

10. An open-label, multicentre study to assess the safety and efficacy of a novel reflux suppressant (Gaviscon Advance) in the treatment of heartburn during pregnancy (ABSTRACT: [...] Pregnant women (< or = 38 weeks gestation; n=150) aged 18-40 years suffering from heartburn were instructed to take Gaviscon Advance 5-10 ml, as required, to relieve symptoms. The main outcome measures were the efficacy rating of the study medication by the investigator and women after four weeks using a five-point efficacy scale. After four weeks the investigators' and women's rating of efficacy was 'very good' or 'good' in 88% and 90% of women, respectively. Most women (57%, n=83) reported symptom relief within 10 minutes. Thus Gaviscon Advance effectively and rapidly treats heartburn during pregnancy. Its use during pregnancy presents no known significant safety concerns for mother or child.)

ALTE STUDII ALGINAT DE SODIU:

1. A comparison of gastro-oesophageal reflux in volunteers assessed by ambulatory pH and gamma monitoring after treatment with either Liquid Gaviscon or Algicon Suspension
2. Randomised clinical trial: the clinical efficacy and safety of an alginate-antacid (Gaviscon Double Action) versus placebo, for decreasing upper gastrointestinal symptoms in symptomatic gastroesophageal reflux disease (GERD) in China.
3. Randomised clinical trial: relief of upper gastrointestinal symptoms by an acid pocket-targeting alginate-antacid (Gaviscon Double Action) - a double-blind, placebo-controlled, pilot study in gastro-oesophageal reflux disease