## Abstract: 24<sup>th</sup> ESPEN Congress Glasgow, UK 31 August – 4 September 2002

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P-133 SAFETY AND TOLERANCE OF AN EARLY ENTERAL ANTIOXIDANT AND GLUTAMINE SOLUTION AFTER MAJOR UPPER GASTROINTESTINAL SURGERY M. M. Berger<sup>1</sup>, J. Goette<sup>2</sup>, P. Stehle<sup>3</sup>, M. Cayeux<sup>1</sup>, R. Chiolero<sup>1</sup>, J. Schroeder<sup>2</sup> <sup>1</sup>Surgical ICU, CHUV, Lausanne, Switzerland, <sup>2</sup>Allgemeine Chirurgie & Thoraxchirurgie, Universitätsklinik, Kiel, <sup>3</sup>Dpt of Nutrition Science, University of Bonn, Bonn, Germany Rationale: Early enteral nutrition is associated positive clinical and biological effects. The present study aimed at testing the clinical safety and tolerance of an enteral supplement containing large doses of antioxidants and glutamine dipeptides early after major intestinal surgery Method: Prospective post-surgery supplementation trial after major intestinal surgery. Nutrients were provided by jejunal route as a single solution containing glutamine 30 g, Se 300 μg, Zn 20 mg, vit. C 1.5 g, vit. E 500 mg, and ß-carotene 10 mg per day (Intestamin, Fresenius Kabi), and started within 6 hours of surgery. The solution (250 kcal in 500 ml) was first administered alone on day 1 and then combined to enteral feeds for 4-5 days: energy was increased over the next 3 days up to 25 kcal/day. Safety and tolerance was assessed using laboratory determinations (substrate monitoring, haematology, liver and kidney tests) and clinical criteria (gastrointestinal tolerance and adverse events)

**Results:** 12 patients aged 62±13 yrs were studied. The laboratory determinations, including micronutrients and glutamine, did not exceed upper reference ranges after surgery. Adverse events occurred in 2 patients (anastomotic leak, subileus and bronchopneumonia) without any relation to nutrient delivery. There was no vomiting, bloating, or diarrhoea. Nausea, flatulence occurred in 1/12 patient (8.3%); hiccups, aspiration, and constipation were found in 2/12 patients (16.7%) **Conclusions:** The solution was clinically well tolerated in the early postoperative setting. Overdose of the supplemented nutrients did not occur. This type of supplementation can be considered as safe for further testing