

comparative studies that evaluated the safety and effectiveness of complete nutritional formulas for malnourished adults with CKD. Relevant outcomes included rates of death, hospitalization, and adverse effects, and changes in nutritional status, anthropometrics, and health-related quality of life (HRQoL).

**Results.** Three systematic reviews and 22 primary studies were identified. The primary studies comprised nine randomized controlled trials, nine non-randomized comparative studies, and four before-after studies (the latter were only included in the safety review). The majority of studies were conducted in patients on hemodialysis. The studies exhibited methodological heterogeneity in terms of the methods used to measure nutritional status and the interventions and comparators evaluated. There was also inconsistency among the results. Adherence to ONS, especially in the long term, can be affected by taste fatigue produced by repeatedly taking the same formula. Some studies recommend supplementation during hemodialysis sessions.

**Conclusions.** The studies with less risk of bias indicated a trend toward improvements in rates of death and hospitalization, HRQoL and, to a lesser extent, some anthropometric variables and serum markers, such as albumin, when ONS was given to patients with CKD. High quality comparative studies are needed to make conclusive statements about the effectiveness of this intervention.

## PP131 Omalizumab And Ciclosporin For Chronic Spontaneous Urticaria

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**Introduction.** Omalizumab and ciclosporin are recommended in international clinical guidelines for treating antihistamine-resistant chronic spontaneous urticaria (CSU). This meta-analysis aimed to evaluate their comparative efficacy and safety to inform local treatment practices in Singapore.

**Methods.** The PubMed and EMBASE databases were searched for randomized controlled trials (RCTs) published up to October 2018 involving omalizumab or ciclosporin as an add-on therapy to H1-antihistamines for CSU. Key outcomes were changes in weekly Urticaria Activity Score (UAS7), adverse events, and health-related quality of life. Pairwise meta-analysis was conducted for each outcome. Owing to differences in trial designs and patient characteristics across the studies, a random effects model was employed. In the absence of head-to-head trials, the Bucher method of adjusted indirect comparison was used to estimate the comparative effectiveness between omalizumab and ciclosporin, with placebo as the common comparator.

**Results.** Eight omalizumab and two ciclosporin placebo-controlled RCTs comprising 1,740 patients were selected. The magnitude of treatment effect for omalizumab was dose-dependent across all efficacy outcomes: 300 mg was superior to 150 mg. Omalizumab 300 mg, although statistically significantly better than placebo for all efficacy outcomes at week 12, did not achieve clinical significance for all measures. The mean change in UAS7 was statistically better for ciclosporin than for placebo (one RCT) at week 4. The indirect comparison between omalizumab and ciclosporin showed no statistically significant differences for mean change in UAS7.

Omalizumab had a more favorable short-term safety profile than ciclosporin, but long-term safety data were lacking.

**Conclusions.** Both omalizumab and ciclosporin were effective in treating CSU, compared with placebo. However, results of the indirect comparison should be interpreted with caution. On the basis of limited available evidence, and taking into account the similar place in therapy of omalizumab and ciclosporin, the results may be considered acceptable to confirm the clinical comparability of the drugs as an add-on to H1-antihistamines for CSU.

## PP132 Telemedicine Enhances Community Hospital Response Capacity

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**Introduction.** Telediagnostic apps based on information and communication technology tools can be used to enhance community hospital response capacity. Evidence on how this innovative technology can improve health services is limited, but will likely expand in the new decade. The ability of different telediagnostic methods to enhance the response capacity of community hospitals in rural areas of Paraguay was investigated.

**Methods.** This descriptive study was carried out by the Telemedicine Unit of the Ministry of Public Health and Social Welfare, in collaboration with the Department of Biomedical Engineering and Imaging of the Health Science Research Institute and the University of the Basque Country, to evaluate the utility of telediagnostic apps for different disciplines in public health. The results from implementing telediagnosis apps in 60 public community hospitals across the country were analyzed and evaluated.

**Results.** A total of 410,840 diagnoses were performed remotely between January 2014 and August 2018 across 60 rural community hospitals. The diagnoses involved computed tomography (147,627 or 36%), electrocardiography (256,422 or 62%), electroencephalography (6,772 or 2%), and ultrasound (19 or 0.01%). There were no significant differences between the remote and face-to-face diagnoses; remote diagnoses were correct in 93 percent of cases. Utilizing telediagnostic apps reduced costs, which is an important benefit for the 60 communities.

**Conclusions.** The results showed that telemedicine can significantly enhance the community hospital response capacity of diagnostic services and health programs, making optimal use of professional time and productivity, increasing access and equity, and reducing costs. However, before carrying out the systematic implementation of this technology, contextualization with the regional epidemiological profile must be performed.

## PP133 Ensuring Secure Health Data Exchange Across Europe. The SHIELD Project

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