

There were no studies that used open surgery as a comparator or evaluated RS in pediatric Kasai portoenterostomy or gastric banding. **Conclusions:** Current evidence on the safety, efficacy, and clinical effectiveness of RS in general or digestive surgical procedures is limited. Multicenter studies with follow-up beyond the immediate postoperative period are needed to evaluate patient outcomes.

## PD126 A Systematic Review Of Interval Cancer Rates In Colonoscopy Screening For Colorectal Cancer

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**Introduction:** Colonoscopy screening has been suggested as a potential primary screening method for colorectal cancer (CRC). A 10-year screening interval has been recommended by some academic societies, but the scientific evidence for this needs to be more comprehensive. We performed a systematic review of interval cancer rates in colonoscopy screening in an asymptomatic population.

**Methods:** We searched the PubMed and Ichushi-Web bibliographic databases for papers published from inception to September 2022. The search terms were “colorectal cancer screening”, “interval cancer”, and “total colonoscopy”. Randomized controlled trials and observational studies were included. The target population was an asymptomatic average-risk population with no polyps or adenomas at the index colonoscopy. Advanced neoplasia (AN) was defined as CRC or an adenoma at least 10 mm in size with a villous component or high-grade dysplasia. The incidence rates of interval CRC and AN per 100,000 person-years (PYs) were estimated.

**Results:** Of the 694 potentially eligible articles, 15 were included. Rates of interval CRC and AN were reported in 15 and 11 studies, respectively. For the meta-analysis, 287,602 patients with negative colonoscopy results were included, with an average follow-up of 7.98 years. Negative colonoscopy results were defined as no adenoma present. The incidence rate per 100,000 PYs was 9.57 (95% confidence interval [CI]: 2.06, 29.94) for interval CRC and 311.5 (95%CI: 153.4, 550.7) for AN. Similar results were obtained even when a negative colonoscopy result was defined as no polyps present.

**Conclusions:** The selected studies were heterogeneous with respect to the target population, follow-up years, and patient characteristics. Although interval AN was reported in all studies, the interval cancer rate was low after a negative result at the index colonoscopy. While the screening interval might be defined as long term, a definitive screening interval could not be recommended because of insufficient evidence.

## PD127 A Systematic Review Of The Clinical Effectiveness Of Recombinant Zoster Vaccine For Preventing Herpes Zoster In Adults

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**Introduction:** The herpes zoster (HZ) virus is associated with significant morbidity. Its incidence and severity are higher among older adults and immunocompromised individuals. This systematic review assessed the clinical efficacy and effectiveness of recombinant zoster vaccine (RZV) for the prevention of HZ and associated complications in adults at least 50 years of age and in adults ( $\geq 18$  years) at increased risk of HZ.

**Methods:** Electronic searches restricted to between 2008 and July 2023 were conducted in Embase, MEDLINE, the Cochrane Library, and clinical trial registries. Two reviewers independently screened articles and extracted data. The review adhered to the PRISMA reporting guidelines. Quality appraisal was assessed using version two of the Cochrane risk-of-bias tool for randomized trials tool and the Risk of Bias in Non-Randomized Studies - of Interventions tool. Meta-analysis was undertaken using Cochrane methodology, with preference given to random effects meta-analysis because of study heterogeneity.

**Results:** Twelve RCTs and five cohort studies were identified. Vaccine efficacy was defined as one minus the incidence rate ratio, multiplied by 100. For the general population, vaccine efficacy was 92 percent ( $n=29,311$  individuals) and vaccine effectiveness was 70 percent ( $n=43,990,671$  individuals). Based on one trial, vaccine efficacy in the general population (aged  $\geq 50$  years) waned from an initial 97.7 percent to 73.2 percent by year 10. Two RCTs reported vaccine efficacy for those at increased risk: 68.2 percent in hematopoietic stem cell transplant recipients and 87.2 percent in those with hematological malignancies. Secondary analyses were limited by sample size.

**Conclusions:** There is clear, consistent evidence that RZV is effective in reducing HZ incidence. Although the vaccine is effective in those who are least 18 years of age and are at increased risk of HZ, efficacy may be lower compared with a general population aged at least 50 years. Secondary analyses (age subgroups, HZ complications, and HZ-related hospitalizations) were limited by small sample size, leading to inconclusive results.