Introduction/Background Peritoneal carcinomatosis-associated ileus is frequent in advanced-recurrent ovarian/peritoneal/fallopian cancer and affects the quality of life due to severe symptoms of obstruction. CT-guided insertion of percutaneous gastrostomy (CT-PG) is a new minimal-invasive treatment option within the palliative management of gynaecological cancer patients.

Methodology Based on retrospective analysis we evaluated 18 patients undergoing percutaneous radiologic gastrostomy between September/2015 and April/2022. Clinical characteristics, complications, symptom relief, need of secondary interventions and surgery for ileus, ability of receiving chemotherapy and mortality were identified. CT-guided gastrostomy was applied by Seldinger technique in local anesthesia.

Results The indication of CT-PG was peritoneal carcinomatosis-associated ileus in all patients. 15 patients had already undergone a frustrating endoscopic gastrostomy (PEG) placement or ileus operation prior CT-PG insertion. CT-PG could be successfully placed at 14 patients without any major interventional complication other than a local bleeding which was conservatively managed. The commonly observed metabolic complication after insertion was hypokalaemia requiring parenteral substitution. Symptom relief: 10 of 14 patients who had successful CT-PG showed considerable symptom relief without need of any other subsequent invasive interventions other than one CT-PG re-insertion. Almost in all patients (13) surgery for ileus could be safely omitted. Only 3 patients needed additional PEG-insertion by gastroscopy due to inefficient flow-rate of radiologically inserted gastric tube. Prognosis: 30-days mortality including patients who lost-to-follow-up in all intention-to-threat-population was 72% (13/18) with observed 5-events. Mean hospital stay after successful placement was 9.9 days (2-27 days). Chemotherapy could be administrated in 3 patients; however only 1 patient with primary diagnosis could receive 3-cycles of neoadjuvant chemotherapy. All other patients had been managed according to best-supportive-care principles due to high frailty and were placed on hospice/palliative station shortly after receiving gastrostomy.

Conclusion The CT-PG is minimal invasive, safe, highly symptom-oriented palliative procedure in advanced/recurred peritoneal cancer. CT-PG procedure should be a routine instrument in the palliative management of bowel obstruction in patients with heavily-pretreated ovarian cancer.