Peritoneal carcinomatosis is an expression of an advanced stage gastrointestinal cancer. Mostly, patients are treated with a systemic chemotherapy, but the overall long-term survival rates are not satisfactory. Actually, there seems to be a paradigm shift in the therapy of peritoneal carcinomatosis. The interdisciplinary treatment with cytoreductive surgery (CRS), HIPEC and systemic chemotherapy moves more and more into the focus of therapy, but is just suitable for a highly selected patient collective. After a complete macroscopic cytoreduction these patients have a survival benefit. Depending on the tumor entity a nearly 50% 5-year survival rate can be achieved.

Due to the extensive surgery and the use of cytotoxic agents, CRS and HIPEC are associated with a significant number of postoperative complications, but the postoperative complications rates are comparable to other major gastrointestinal surgery. In our patient collective of about 350 patients we observed a mortality of 2%. Nevertheless, the chemotherapy-related complications and the possible side effects have to be taken into account in the context of preoperative patient selection and individual dose-finding for intraperitoneal chemotherapy.

Regarding the Quality of Life the data show an impairment at 3 months postoperatively with an improvement over 6-12 months at levels higher than the baseline.

Because of the complex treatment regime, including a long learning curve, patients with peritoneal carcinomatosis should only be evaluated and therapied in a center with experience. If the peritoneal carcinomatosis is diagnosed in an early stage, it is more likely that the described interdisciplinary treatment approach can be applied.