

# CHAPTER 7

## Neoadjuvant Treatment with ChT (without RT)

The indication of ChT as the only weapon in a neoadjuvant regimen also continues to be tested. There are several reasons that have driven this line of research:

- Knowledge of the adverse effects of RT on intestinal and urogenital functions.
- The proven sensitivity of rectal tumors to modern systemic ChT regimens.
- Demonstration through TNT protocols of greater adherence to ChT when administered preoperatively in contrast to adjuvant treatment.
- The low risk of recurrence when TME is performed with good technique.
- Some isolated experiences in patients with advanced tumors without the possibility of receiving pelvic RT due to their previous cancer history.
- Some experiences have already been published, and among them we can mention a few.

The study known as MSKCC PILOT was presented at the 2011 meeting of the American Society for Clinical Oncology (ASCO) and later published in 2014. It involved a series of 32 patients with T2-3 N1-2 tumors (stages II and III) treated according to a neoadjuvant ChT protocol with 6 cycles of FOLFOX + bevacizumab.<sup>201</sup> Only in non-response cases would CRT be indicated before surgery. However, this was only necessary in two cases, but due to ChT intolerance. If R0 was not achieved, postoperative RT would be indicated, but this was not necessary either. There was 25% of pCR, with no local recurrence at 4 years and with 84% DFS.

Based on this experience, a multicenter phase III study called PROSPECT (Preoperative Radiation Or Selective Preoperative Radiation and Evaluation before Chemotherapy and TME) was started. This protocol randomizes patients to a control arm of CRT + surgery + adjuvant ChT with 8 cycles of FOLFOX and to another research arm in which patients receive ChT (6 cycles of FOLFOX). After the first 2 cycles they are re-staged. Those who present a response < 20% continue with CRT prior to surgery and then complete another 6 cycles of FOLFOX as adjuvant QT, while those who respond receive 6 cycles and go directly to surgical treatment

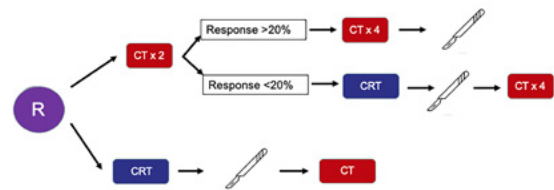


Figure 12: Neoadjuvant treatment with ChT only (ongoing trial). R = Randomized.

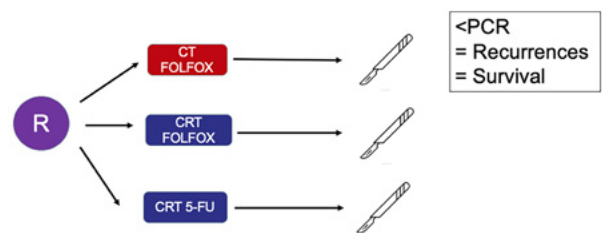


Figure 13: ChT vs. CRT. R = Randomized.

without CRT, and then complete 2 adjuvant cycles with FOLFOX. The results of this trial will be published during this year (Fig. 12).

Another trial conducted in China, known as the Fowarc Trial, randomized stage II and III patients into three arms. Neoadjuvant ChT with FOLFOX, CRT with FOLFOX, and a control arm with CRT only with 5-FU.<sup>46</sup> Although the ChT arm had the lowest pCR rate (7% vs. 14% for the control arm, and 28% for the CRT with FOLFOX arm), there were no differences in the number of local recurrences, DFS or OS (Fig. 13).

Finally, a population study conducted in the USA evaluated survival in 21,707 patients with T3N0 and T2-3N1 tumors treated with CRT vs. neoadjuvant ChT and found a significant difference in OS in favor of CRT (75% vs. 67.2%).<sup>26</sup>

*In light of these data, the indication of ChT without RT cannot be recommended at this time outside of a research protocol.*