

## The Way Forward to Develop Locoregional Treatments in Oligometastatic Colorectal Cancer

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Calandri et al. [1] report an interesting attempt to understand how and how much IR treatments are used in Italy. The authors start from some important publications already known in the world of interventional radiology and try to offer a detailed picture of the situation.

The advantages afforded by IR treatments have been recognized in the ESMO and NCCN guidelines, which advised that oligometastatic disease (OMD) can benefit from a combined approach [2, 3]. The CLOCC 4004 trial showed a better OS when a combined treatment was performed, in comparison with chemotherapy alone [4]. Chemoembolization adopting loaded microspheres has shown interesting results both in large observational reports and few randomized trials [5].

To better understand this paper it is necessary to know some information about Italian Health Service. The Constitution recognizes the right to health: "The Republic protects health as a fundamental right of the individual and an interest of the community, and guarantees free care to the poor". The reform of Title V of the Constitution—occurred in 2001—entrusted the protection of health to the concurrent legislation between State and Regions, outlining a system characterized by a pluralism of power centers and expanding the role and competences of local autonomies. Due to differences of the Regions in terms of population and wealth and organization skills, dissimilar levels of medical assistance are observed. To remain in the

European stability pact Italy has seen public money transfers in the National Health Service decrease leading to a deterioration in medical services. This meant that the IR treatments developed without a centralized program and resulted in a leopard-like distribution. This explains why in the Calandri et al.'s work there are differences between North and South and is the reason why a limited number of the invited IR centers responded adequately to the questionnaire. Fifty-one (38%) of IR centers replied to the survey but 18 centers did not perform any IR procedures for CRC OMD management. All of the remaining thirty-three centers (24.6%) completed and returned the questionnaire. Responding centers were located 54.5% in Northern Italy, 24.4% in the Central and 21.1% in the Southern.

The most common indication was ablation after chemotherapy regimens in nonsurgical patients. Indeed, combination with chemotherapy is a well-established indication for thermal ablation procedures. Lung ablations were less frequent compared to liver ablations 354 and 1026, respectively. Trans-arterial treatments were performed in 5166 cases of primary or metastatic hepatic lesions. Among these, 690 procedures (13.4%) were performed for liver metastases from CRC, which includes the treatments of trans-arterial chemoembolization (TACE) using irinotecan drug eluting microspheres (DebIRI, 365 treatments, 52,9%) and selective internal radiation therapy (SIRT, 325 treatments, 47,1%). This relatively low number reflects the complexity of SIRT, as well as the failure of the large FOXFIRE GLOBAL study and its role remains confined to the salvage setting.

Calandri et al.'s paper underlines that the road in Italy, but also worldwide, is still long and needs to improve some points: (1) define better the biological heterogeneity of

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OMD CRC as KRAS mutation status and other biological and immunological parameters that must always be considered when planning a study [6], (2) define if it is logical and ethical to treat only patients with liver-only metastases or also patients with liver-dominant metastases, (3) define better the percentage and functionality of liver involvement, (4) define better the meaning of adjuvant therapy and of palliative therapy previously administered, (5) define criteria most commonly accepted when to stop chemotherapy in patients with unresectable metastases and define when it is best to obstain and proceed with palliative care.

To do this, IRs must not only offer a service but also a partnership in defining studies and providing clinical service to oncological patients within multidisciplinary groups.

## **Compliance with Ethical Standards**

Conflict of interest The author declares that he has no conflict of interest.

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