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so. The three most frequently mentioned reasons for not performing cost-effectiveness analysis were lack of human resources (22%), lack of external incentive (19%) or funding (19%).

98% of all participants expected patient benefits and 62% perceived economic benefits from the MR-Linac over standard treatment. While participants were optimistic towards technology benefits, also critical remarks were given regarding the actual added value in the radiation oncology field, including technological complexities and the substantial staffing and structural investments.

Conclusion

A substantial proportion of members of the MR-Linac Consortium has no or only limited knowledge about cost-effectiveness analysis. While most participants claimed that demonstrating cost-effectiveness is important for reimbursement, the majority had no knowledge on whether cost-effectiveness analysis was performed at their institutions or indicated that it was not being performed. As a result, the opportunity to steer research and development within the MR-Linac Consortium may not be optimally used. More and better understanding of cost-effectiveness is needed to improve the use and quality of such analyses and the consortium.

PO-1051 Analysis Of A Mono-Institutional Internal Procedure Protocol During Covid-19 Second Wave

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Purpose or Objective

Italy was one of the most affected countries in Europe by COVID-19 pandemic. Starting from October 2020 to February 2021, a new increment of contagion has been reported. It affected our district more harshly than first wave: 92.5% of confirmed infections and 70% of reported deaths happened in the examined four-month period. During the national lockdown, we ensured Radiotherapy (RT) activities with a reorganization of our Unit according to a specific internal procedure protocol, as reported in a previous publication. This protocol was adopted in order to manage the emergency of the second wave. Specific national and international guidelines were also adopted for a wider use of hypo-fractionated RT.

Materials and Methods

RT activity during the second wave was analyzed according to a specific internal procedure protocol and Ministry of Health recommendation concerning a reorganization of visits workloads and RT planning, definition of dedicated routes and triage areas, management of suspected and positive COVID-19 cases, use of personal protective equipment, management of environments and management of intra-institutional meetings and tumor boards. A comparison of activity volumes of RT Unit in the period (October 2020-February 2021) with the same but COVID-free period of the last year (October 2019-February 2020) was made.

Results

In the checked four-month period, 297 first RT visits were performed, 205 new patients were prepared for Simulation Computed Tomography (Simul CT) and 237 patients were treated on one LINAC. In the same period of 2019-2020, 370 patients underwent first RT visits, 166 new patients were prepared for Simul CT and 195 patients were treated on one LINAC (Table 1). No positive cases of COVID-19 infection were recorded in healthcare professionals. There were 3 cases of COVID-19 positivity among treated patients, with a median RT interruption of 11 days (range: 1-21). Finally, 3 new protocols for clinical trials using high conformal and short course RT (accelerated partial breast RT, dose-intensification in short course RT for rectal cancer and ultra-hypo-fractionated stereotactic RT for prostate cancer) were proposed and approved by institutional tumor board and ethics committee. They are currently on-going in clinical practice.

Table 1: Comparison of activity volumes of our Radiotherapy Unit in the period October 2020 – February 2021, with the same period COVID-free (October 2019 – February 2020).

	Time: October 2020 – February 2021	Time: October 2019 – February 2020
First Radiotherapy visit	297	370
New patients prepared for Simul CT	205	166
Patients treated on LINAC	237	195

Conclusion

Although the number of first visits was slightly lower during the second wave, the number of planned and treated patients did not decrease, according to the workload of our radiation unit. These data confirmed the efficacy of our organizational model planned to guarantee an optimal continuity of RT courses without workload reduction nor treatments interruption and ensuring safety of cancer patients, environments and radiation oncology staff, as reported in the previous experience during the first wave of pandemic.