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## Technical Design Report for a Carbon-11 Treatment Facility

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The particle therapy is a major contributor to the medical application of accelerator technology and may yet be improved by the use of radioisotopes as beam species, which would allow a better traceability of the applied dose.

The Medicis-Promed network leads an initiative to study the possible technical solutions for the implementation of Carbon-11 radioisotopes in an accelerator-based particle therapy center. The result of this study is a Technical Design Report (TDR) for a Carbon-11 Treatment Facility.

The TDR starts from summarizing the medical advantages of using Carbon-11, it elaborates the required facility layout and performance, and it proposes upgrade options for existing particle therapy centers.

We present here the TDR content and conclusions, and we discuss the next steps.

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