PRISMAP – The European medical isotope programme: Production of high purity isotopes by mass separation proposes to federate a consortium of the key European intense neutron sources, isotope mass separation facilities and high-power accelerators and cyclotrons, with leading biomedical research institutes and hospitals active in the translation of the emerging radionuclides into medical diagnosis and treatment.

PRISMAP will create a single-entry point for a fragmented user community distributed amongst universities, research centres, industry and hospitals, in a similar way as how the National Isotope Development Center NIDC, supported by the Department of Energy (DOE), has provided radionuclide sources for users in the USA. PRISMAP brings together a consortium of 23 beneficiaries from 13 countries, one European Research Laboratory and an International Organisation. It further receives support of leading associations and institutions in the field such as the European Association of Nuclear Medicine (EANM) and the International Atomic Energy Agency (IAEA).
Our main goal is to provide a sustainable source of high purity grade new radionuclides for medicine, involving from the onset upcoming major European infrastructures, to provide a single-entry point for all researchers active in this field including SMEs, global pharma, nuclear centres, hospitals and universities, using standardised access procedures. The new isotope enrichment and standardisation techniques triggered in PRISMAP will expand our services and provide them to yet unreachable remote European laboratories. PRISMAP thus strives to create a paradigm shift in the early phase research on radiopharmaceuticals, targeted drugs for cancer – one of the major diseases in Europe – theranostics and personalised medicine, shaping the European isotope landmark as a gold standard to accelerate the development of the pharma industry and ultimately of a better healthcare for the improvement of our citizens’ life.

Objectives
- Provide access to new radioisotopes and new purity grades for the medical research
- Create a common entry port and web interface to the starting research community
- Enhancing clarity and regulatory procedures to enhance research with radiopharmaceuticals
- Improvement of the delivered isotope data and regulation, along with biomedical research capacity
- Insure sustainability of PRISMAP on the long term

Notably, PRISMAP addresses cancer which is a major societal challenge as recently reconfirmed by the European Commission’s European beating cancer plan: https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12154-Europe-s-Beating-Cancer-Plan
This project has been submitted to the INFRAIA-2020-1 call of the Horizon 2020 Framework programme of the European Commission (Integrating and opening research infrastructures of European interest), and is organized along three types of interconnected activities to meet PRISMAP objectives.