

Annex 3

Project operational budget and Participants' contributions

Estimated operation costs

The following table provides an overview of the operation costs, considered as average per year.

| MEDICIS average yearly operation costs 10 targets / 30 isotope batches [kCHF] | |
|---|------------|
| Material | 250 |
| CERN & External staff | 400 |
| TOTAL | 650 |

Participants' contributions

The following table summarises the committed financial and material in-kind contributions, per year, of Participants.

| CERN - MEDICIS Project [kCHF] | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026* |
|--|------|------|------|------|------|------|------|------|-------|
| CERN | | | | | 330 | 290 | 310 | 210 | |
| HUG | | 100 | 100 | | | | 100 | | |
| CHUV | | 100 | 100 | | | | | | |
| KU Leuven ¹ | 135 | | | 319 | | 150 | 60 | 60 | 60 |
| ARRONAX ¹ | 29 | 29 | | | | | | | |
| IST | 5 | 5 | 5 | 5 | | 5 | 5 | 5 | |
| NPL | | | | | | | | | |
| PSI | 20 | 20 | 20 | | | 20 | 20 | 20 | |

*Provisional

¹ Since the original commitment was in Euro, the amount in CHF is indicative. The exact contribution will be calculated according to the exchange rate from Euro to CHF at the date when the bill will be issued.

MoU CERN-MEDICIS project

| | | | | | | | | | |
|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Consortium of Latvia (Riga Technical University and University of Latvia) | | | 40 | 40 | 40 | 40 | 50 | 80 | 100 |
| TOTAL: | 189 | 254 | 265 | 364 | 370 | 505 | 545 | 375 | 160 |

The following table summarises the in-kind contributions to the Project by Participants, and the expected deliverables.

| Participant | In-kind contribution | Expected deliverables |
|--|---|--------------------------------|
| Hôpitaux Universitaires de Genève (HUG), Switzerland | Two telemanipulators | 5 isotope batches over 3 years |
| Centre Hospitalier Universitaire Vaudois (CHUV), Switzerland | | 5 isotope batches over 3 years |
| KU Leuven, Belgium | Students, post-doc and professor activities: <ul style="list-style-type: none"> - 0.85FTE in 2018 - 1.36FTE in 2019 - 2.18FTE in 2020 - 0.5FTE in 2021 - 0.5FTE in 2022-2023² - 1FTE in 2024-2026² LISOL separator magnet; Wavemeter MELISSA. | |
| Accélérateur pour la Recherche en Radiochimie et Oncologie à Nantes Atlantique (ARRONAX), Nantes, France | Provision of isotope sources | R&D in isotope mass separation |

² *KU Leuven shall focus on the production, purification and study of radioactive isotopes using laser resonance ionization techniques. KU Leuven shall execute its contribution to this activity through a qualified expert (the “KU Leuven Expert”) who will collaborate with the Resonance Ionization Laser Ion Source (RILIS) team at CERN. In addition to the requirements under Article 4.6 of the MOU, the KU Leuven Expert shall be employed by KU Leuven.*

| | | |
|---|--|---|
| Instituto Superior Técnico (IST), Portugal | Scientific advice and activities at CERN | 4 isotope batches over 4 years |
| National Physical Laboratory (NPL), UK | Measurement services through the use of diverse detectors (scintillators, gamma detectors, ionization chambers) and an Automated Radiochemistry Module Students and scientific staff activities at CERN | 4 isotope batches over 3 years |
| Paul Scherrer Institute (PSI), Switzerland | Radiochemical purification, radiolabeling and use of mass separated radiolanthanides and relevant expertise Scientific advice and activities at CERN R&D in isotope mass separation | 4 isotope batches over 3 years |
| JRC-Directorate G, Karlsruhe, Germany | ²²⁵ Ac and ²¹³ Bi generators Scientific advice on clinical trials and Radiopharmaceuticals for alpha-emitters | R&D in isotope mass separation Production of ²²⁵ Ac sources |
| The Saha Institute of Nuclear Physics (SINP), India | Students and professor activities at CERN | |
| Fundación Andaluza Beturia para la Investigación en Salud (F.A.B.I.S.), Huelva, Spain | Expertise in clinical trials Nuclear Medicine Doctor Radiopharmacy Medical Physicist Radiation Oncology Radiation Detectors Students and professor activities Hot Cell (200kCHF) | R&D in theranostics R&D in isotope production |
| L'Institut Laue-Langevin (ILL), Grenoble, France | Production of isotope batches by neutrons | R&D in isotope mass separation |
| Fondation pour la lutte contre le cancer et pour des recherches médico-biologiques, Switzerland | Scientific Advice | |
| European Association of | Scientific Advice | |

| | | |
|---|---|-------------------------------------|
| Nuclear Medicine (EANM) | | |
| Consortium of Latvia (Riga Technical University and University of Latvia) | Scientific and medical advice | |
| Pakistan Atomic Energy Commission | <p>Secondment of a radiochemist to CERN:</p> <ul style="list-style-type: none"> - 0.5 FTE in 2022 - 0.5 FTE in 2023 - 0.6 FTE in 2024 - 0.5 FTE in 2025 <p>Production of radioisotope batches</p> | At least 2 isotope batches per year |