

PRECISEU Best Practice Recognition

Second Edition 2026

Winner in the Category **INNOVATION**

Rinn-Advanced Therapies

Rinn-Advanced Therapies is a new national research center in Ireland, which is patient/society-centric aiming to design, manufacture and clinically implement novel personalised advanced immune cellular medicines.

Advanced cellular immune therapies (ACITs) require an established ecosystem of integrated workflows: the bioprocess, cellular product and patient care are interlinked and determine application and, in turn, require unique, interdisciplinary training. Rinn-Advanced Therapies addresses these challenges by creating a sustainable Irish ecosystem to deliver an innovative Personalised Quality by Design (QbD) approach for improved efficacy and reduced toxicity of ACITs - the right ACIT with the right characteristics given in the right dose and schedule to the right patient at the right time which defines Rinn-Advanced Therapies's personalisation strategy. Rinn-Advanced Therapies's mission is to build a nation-wide ecosystem for the 'living drug' era, with the patient and inclusion at the core. Towards achieving this, Rinn-Advanced Therapies has recently been established as a collaborative National Research Centre that is inter-institutional and inter-disciplinary, comprising seven Research Bodies (RBs), five hospitals, and three allied organisations. This consortium combines existing and emerging expertise across Ireland that covers the whole workstream from designing, producing, and clinically testing ACITs.

Rinn-Advanced Therapies's vision is to enable patients in Ireland to access novel, effective and affordable personalised ACITs through enacting the following overarching objectives:

1. Personalised QbD by integrating data from the patient, the disease, the product and the process;
2. Place patients and society at the core to ensure relevance, acceptance, access, affordability and availability are addressed early and throughout project design;
3. Creating an All-Ireland Integrated Innovation Network. Given the rapid progress in ACITs, Rinn-Advanced Therapies developed a strategy to future-proof activities through the adoption of treatment personalisation as an innovation focus.

Rinn-Advanced Therapies robustly evaluated the research, clinical, regulatory, and industrial landscape in Ireland to identify disease areas and ACIT types for initial focus. A diamond decision model and a matrix was applied to identify key areas of excellence, significance, relevance and potential for innovation. The result was a three-pronged approach: "Pathways" to enable regulatory, operational, organizational and commercialization frameworks; "Capacity" to enable manufacturing of academic CAR-Ts and other ACITs in Ireland with the support of European collaborators; "Innovation" in platform research in the focus disease areas (and cell products) identified by the matrix. MAIN RESEARCH DELIVERABLE: A vein-to-vein innovation ecosystem to discover, manufacture and implement personalised ACITs in Ireland for clinical use.

Rinn-Advanced Therapies is transformative for Ireland, not only through enabling a nation-wide ecosystem for ACITs where none previously existed, but also through enabling patients to have access to novel effective and affordable personalised cell therapies.