

# External Control Arm Pilot Project

The ECA Pilot Project



# ECAs Enable Meaningful Comparisons in Challenging Trial Scenarios









**RCT** 

**Enrollment Challenges** 

**Ethical Concerns** 

Long Timelines & Cost

Limited Generalizability

**ECA** 

Alternative Control Group

Addresses Ethical Constraints

Reduced Time & Cost Broader Generalizability

Traditionally, in clinical trials, conducting RCTs can be challenging or unethical in certain cancers and rare diseases due to small populations, lack of clinical equipoise, or limited treatment options.

ECAs provide an approach that leverages real-world and historical data to establish meaningful control groups when RCTs are not feasible.



### **ECA Pilot Timeline**

**Question:** How can we reliably leverage ECAs from RWD and external clinical trial data to support the evaluation of new treatments, particularly where traditional RCTs are not feasible or ethical?

#### Phase 1: Project Scoping

#### Phase 2: Project Design

#### Phase 3: Pilot Execution

- Identify and assess data partners for RWD and historical trial data.
- Select target RCTs and define key criteria for ECA feasibility.
- Align on patient characteristics, endpoints, and matching methods.
- Evaluate data gaps and implementation readiness.

- Adapt RCT eligibility criteria to external datasets and standardize variable definitions.
- Define baseline characteristics & covariates for propensity modeling.
- Draft the Statistical Analysis Plan and align on standardized population reporting.
- Coordinate with the sponsor to obtain Target trial data.

- Define study population using I/E criteria.
- Finalize SAP based on feasibility.
- Data partners build ECA and conduct analysis per SAP.
- Synthesize results and prepare findings for dissemination in 2025/2026.



## The ECA Pilot Project Workflow

**Project Goal:** Collaboratively define a robust process for ECA construction using patient-level RWD and prior clinical trial data to evaluate its applicability for replicating the population and efficacy results observed in target trial data



### Use Case: Metastatic pancreatic ductal adenocarcinoma (mPDAC)

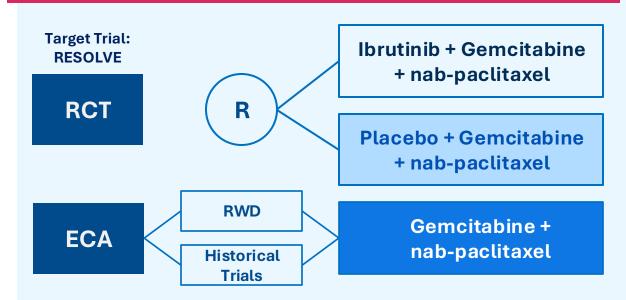
- Relatively lower occurrence
- Unmet need (low survival rate)
- Standard of care relatively unchanged over time
- Completed RCTs to replicate
- Well-understood prognostic factors for propensity score matching/weighting



#### **Regulatory Objectives**

- **Establish criteria** for evaluating whether data are fit-for-purpose for use as an ECA
- Identify characteristics that make data sources similar to clinical trial data
- Evaluate epidemiological and statistical study design and methods for ECA

#### **Approach to Constructing an ECA**



- Applicable eligibility criteria will be selected based on the target trial.
- Propensity score methods will be applied to balance the baseline characteristics.