TEMPUS

Life Science Research Use Only (RUO) Use Cases

Tempus assays and products labeled as research use only (RUO) are for use when the results will not impact the treatment or other care of a study participant. They can be utilized by life science partners for:

1. Retrospective analysis of clinical samples from an existing or previously closed clinical study and/or
2. Exploratory endpoint analysis within an existing clinical study or a clinical study still to be opened.

These use cases can help support the following research, dependent on the study design:

1. Drug Development and Efficacy Monitoring:
   a. Evaluate the effectiveness of experimental cancer therapies in preclinical and clinical trials. Assess the impact of novel drugs on residual disease burden for early indications of treatment efficacy.

2. Inform Patient Stratification for Future Clinical Trials:
   a. Stratify patients more effectively for future clinical trials based on impact to previous clinical trial results. Enhance the selection process for trial participants, with the goal of more targeted and successful trials.

3. Treatment Response Assessment:
   a. Assess patient response to standard and experimental therapies by monitoring response levels over time. Facilitate the early identification of non-responders and support future adaptive treatment strategies to be incorporated in future trial designs.

4. Longitudinal Disease Surveillance:
   a. Track dynamics in patients post-treatment to understand the long-term impact of interventions. Provide valuable insights into disease recurrence and the need for continued surveillance or intervention.

5. Disease Progression Studies:
   a. Investigate the natural progression of cancer indications and contribute to the understanding of disease biology, enabling the identification of critical intervention points.

6. Exploration of Therapeutic Resistance Mechanisms:
   a. Investigate dynamics in cases of therapeutic resistance. Uncover molecular mechanisms associated with resistance, informing the development of strategies to overcome treatment challenges.

7. Pharmacodynamic Assessments:
   a. Perform pharmacodynamic assessments of drug candidates by studying changes in response to treatment. Support the optimization of dosing regimens and therapeutic strategies.

8. Early Intervention Opportunities:
   a. Identify opportunities for future clinical trial designs for early intervention. Enable the development of interventions aimed at preventing disease recurrence or progression.

9. Companion Diagnostics Development:
   a. Facilitate the development of companion diagnostics by identifying markers that can be used to guide treatment decisions. Support the integration of RUO assays and products into future clinical trials with various therapies.