

Approved research projects requesting access to ALTTO data
Lapatinib-related rash and its impact on disease free survival following in the ALTTO Trial
The role of regional nodal irradiation in node-positive HER2-positive breast cancer patients treated with breast conserving surgery and axillary lymph-node dissection.
The effect of obesity, diabetes and anti-hyperglycemic drugs on disease-free and overall survival in patients enrolled in the ALTTO trial
Anatomy of ALTTO : Dissecting interim and final databases to understand the observed primary analysis results of dual HER2 inhibition
Targeting the mevalonate pathway to overcome acquired anti-HER2 treatment resistance
Treatment-induced amenorrhea following adjuvant trastuzumab and/or lapatinib in premenopausal women with HER2-positive operable breast cancer enrolled in the ALTTO trial
Evaluation of disease-free survival and other time-to-event endpoints as surrogates for overall survival in the systemic therapy of HER-2-positive early breast cancer
Impact of body mass index (BMI) and weight change after breast cancer diagnosis and treatment in patients with early-stage HER2-positive breast cancer (ALTTO BIG 2-06).
Dissecting the effect of hormone receptor status expression in women with HER2-positive operable breast cancer treated with anti-HER2 agents in the ALTTO trial
To determine the impact of kinase vs helical domain PIK3CA mutations on both relapse free and overall survival in the adjuvant treatment of women with HER2-positive breast cancer.
Subpopulation Treatment Effect Pattern Plot (STEPP) Analysis of the Trastuzumab Control Arm in ALTTO
Tolerability of Adjuvant Trastuzumab or Trastuzumab and Lapatinib in Older Patients - a Sub-analysis of the ALTTO Trial
Impact of cardiac medication use on clinical outcomes of patients with early-stage HER2-positive breast cancer
Serious Adverse Events During Study Treatment in Older Patients– A Sub-analysis of the ALTTO Trial.
The prognostic performance of PREDICT+ in breast cancer patients with early-stage HER2-positive disease
The prognostic and predictive value of disease-free interval from trastuzumab completion in women with HER2-positive operable breast cancer with distant relapses after adjuvant anti-HER2 treatment
Cardiotoxicity Related to Systemic Adjuvant Anti-HER2 Therapies in the ALTTO Trial (BIG 2-06/N063D)
Non-cancer Related Death in Older Patients with Breast Cancer - A Sub-analysis of the ALTTO Trial.
POST-MASTECTOMY AND POST-NEOADJUVANT RADIOTHERAPY IN EARLY BREAST CANCER PATIENTS TREATED WITH ADJUVANT HER2-TARGETED THERAPY: AN ANALYSIS FROM ALTTO
Outcomes of small, node negative, HER2 positive breast cancer patients treated with chemotherapy combined with anti-HER2 drugs in a large adjuvant trial – A sub-analysis of the ALTTO study
Evaluation of the impact of erythropoietin administered concomitantly with adjuvant treatment in survival outcomes of HER2-positive early breast cancer patients enrolled in the ALTTO study
Addressing the value of different adjuvant endocrine therapies in hormone receptor-positive/HER2-positive early breast cancer patients: an exploratory analysis of the ALTTO trial
COMedications and comorBidities in breast cancer: Deciphering interactions between IMMUNE infiltration, response to treatment and prOgnosis (COMBIMMUNO)
Prognostic and predictive value of histological types in patients with early HER2-positive breast cancer: a sub-analysis of the ALTTO trial.

Approved research projects requesting access to Neo-ALTTO data
Body mass index and response to neoadjuvant anti-HER2 therapies in early breast cancer patients: Analysis from NeoALTTO Trial
Genetic predictors of lapatinib-related or lapatinib-exacerbated diarrhea, fatigue, cardiotoxicity, and neuropathy on neoALTTO
PIK3CA mutations as predictor for response/resistance in HER2+ breast cancer with a special attention to subgroups and long-term outcome
Building genomic models that define associations between immune function genes and outcome following neoadjuvant trastuzumab or lapatinib alone or in combination.
Amplification of FGFR signaling and resistance to dual HER2 blockade.
RB-1 loss of function gene-signature (RBSig) as a tool to dissect the heterogeneity of HER2+/ER+ disease and as a marker of responsiveness to neoadjuvant chemotherapy plus anti-HER2 agents in breast cancer patients.
Combined clinical and marker analysis of EFS in NeoALLTO
Studying the impact of BMI on rates of pCR in patients treated with neoadjuvant trastuzumab +/- lapatinib in HER2-positive breast cancer
Integration of cell lines and patient tumors data for predicting drug response in cancer patients
Optimizing HER2-targeting using RNA and DNA based predictive algorithms
Markers of T cell dysfunction and benefit from HER2 blockade
Pathological complete response and long-term clinical benefit in HER2-positive breast cancer: the HER2-CTNeoBC pooled analysis
¹⁸ F-FDG PET/CT and its association with survival outcomes and host/tumor features in NeoALTTO trial
COMedications in Breast cancer: Deciphering interactions between treatment, Immune infiltration and response to NEOadjuvant chemotherapy (COMBINEO research program)
Circulating microRNAs for early detection and prediction of Trastuzumab and/or Lapatinib-induced cardiotoxicity in patients with HER2-positive early-stage breast cancer
Neoantigens as biomarkers of therapeutic response to HER2 targeted therapies.
Therapeutic response prediction based on genomic and expression profiles during HER2-targeted neoadjuvant therapy
Approved research projects requesting access to ALTTO and Neo-ALTTO data
Pregnancies during and following adjuvant anti-HER2 targeted treatment with trastuzumab and/or lapatinib in patients with HER2-positive early-stage breast cancer enrolled in the NeoALTTO and ALTTO trials
Network approaches to predict drug response to anti-HER2 drugs in breast cancer patients
Mechanistic contribution and prognostic relevance of immune-mediated cytotoxicity during neoadjuvant treatment with trastuzumab
Prognostic and Predictive Role of the Intratumoral HER2/CEP17 Ratio in Women treated with Trastuzumab, Lapatinib, or Trastuzumab plus Lapatinib, in theALTTO and Neo-ALTTO Trials: A Biomarker Analysis
EBCTCG meta-analysis of HER2-directed therapies in early breast cancer

Approved research projects requesting access to ALTTO samples and data
Prospective evaluation of HLA-DRB1*07:01 with lapatinib-induced liver injury in adjuvant breast cancer using ALTTO
PIK3CA mutations and PTEN as predictor for response /resistance in HER2+ breast cancer
Immunological parameters and Tumor-infiltrating lymphocytes (TILs) are predictors for response to anti-HER2 therapy
Pharmacogenetic predictors of anti-HER2 directed therapies, validation of comprehensive GWAS analyses
Newly-diagnosed patients with HER2-overexpressing breast cancers and high tumor infiltrating lymphocytes (TILs) at baseline define a good prognostic group that do not require dual anti-HER2 therapy.
Inter-observer variability study in TILs quantification
Primary tumor immune response in the ALTTO trial
Phosphorylated (tyrosine 705) STAT3 status as a predictor of benefit from anti-HER2 therapy in breast cancer
Predicting response to trastuzumab and/or lapatinib in the adjuvant setting based on an immune function gene expression score.
Quantitative, domain-specific HER2 protein analyses in ALTTO: The ECD/ICD project
Integrative multi-omic analysis: towards treatment de-escalation for early stage HER2-positive breast cancer

Approved research projects requesting access to Neo-ALTTO samples and data
Identifying early biomarkers associated with pathological response of HER2-overexpressing breast cancer treated with trastuzumab, lapatinib or the combination using whole genome gene expression profiling
Genotype-drug response relationships uncovered through high throughput kinome re-sequencing.
Predictive Role of PTEN Loss and HER Family Mutations in Patients Treated with HER2-Targeted Therapy
PTEN and IGF-1R Protein Expression and Association with Response of Patients Treated with Trastuzumab and/or Lapatinib in the Context of the Neo-ALTTO Trial
Evaluation of differential markers predicting resistance to anti-HER2 treatment in patients treated with lapatinib or trastuzumab or a combination of the two in addition to chemotherapy
Immunological biomarkers of therapeutic response to HER2 targeted therapies
Cardiac Troponin T and NT-proBNP as potential biomarkers for early detection and prediction of trastuzumab and/or lapatinib-induced cardiotoxicity in HER2 positive early breast cancer patients
Study of the clinical utility of the serum-based test VeriStrat® in women with HER2/ErbB2 overexpressing primary breast cancer treated with neoadjuvant lapatinib, trastuzumab and the combination with paclitaxel chemotherapy.
Host genetics and study drug response (liver safety, efficacy/drug resistance and other safety) in NeoALTTO using GWAS and HLA genotyping
Plasma microRNA levels for predicting and monitoring therapeutic response to neoadjuvant treatment in HER2-positive breast cancer
Plasma Genomic Rearrangements in the NeoALTTO trial
Whole exome sequencing of pre-treatment, Day-14 and residual cancer samples from the NeoALTTO clinical trial
Quantitative, domain-specific HER2 protein analyses in NeoALTTO: The ECD/ICD project
Correlation of outcomes in NeoALTTO with changes in quantitative HER2 and p95HER2 in baseline biopsies, 2 week biopsies and residual tumors
Analysis of circulating tumour DNA in women with HER2/ErbB2 overexpressing primary breast cancer treated with neoadjuvant lapatinib, trastuzumab and the combination with paclitaxel chemotherapy
Gene expression profile to identify patients who benefit from HER2-targeted therapy
Pharmacogenetic predictors of anti-HER2 directed therapies, validation of comprehensive GWAS analyses
miR-205 as potential predictive biomarker of response to HER2-targeted therapy
Understanding the genomic causes of sensitivity and resistance to TRASTUZUMAB and LAPATINIB in early stage HER2-overexpressing breast cancer
Enabling Clinical Epigenetic Diagnostics: The Next Generation of Personalized Breast Cancer Care
Evaluating copy number aberrations (CNA) in HER2+ breast cancer: defining the repertoire of genomic alterations, intra-tumor heterogeneity and potential key genomic drivers associated with pCR and clinical outcome in patients enrolled in the NeoALTTO trial.
Quantitative proteomics analysis as a tool to better understand the mechanisms of resistance or sensitivity to trastuzumab and lapatinib in HER2-positive early breast cancer.
Impact of trastuzumab and/or lapatinib alone and in association with weekly paclitaxel on the ovarian reserve measured by Utilising DNA and Serum from Neo-ALTTO to expand and validate TIL and pCR-associated SNPs and chemokines identified from the ICORG 10-05 clinical trial.
Gene expression profile to identify patients who benefit from HER2-targeted therapy
Quantification of estrogen levels as a clue to identify patients who benefit from HER2-targeted therapy