

RET-reat Studie - **RET** Alterationen in soliden Tumoren

Nationale, multizentrische, retrospektive Erhebung von
Fusionen/Mutationen/Genexpressionsdaten von RET und RET-spezifischen
Therapieansätzen

Study type	Retrospective register
Project lead Study coordination YMO	<p>Dr. med. Kathrin Heinrich Medizinische Klinik und Poliklinik III LMU Klinikum Marchioninistr. 15 81377 München Kathrin.Heinrich@med.uni-muenchen.de</p> <p>Jan Kleilein Medizinische Klinik IV Universitätsklinikum Heidelberg Jan.Kleilein@med.uni-heidelberg.de</p> <p>Dr. med. Sebastian Lange Klinik und Poliklinik für Innere Medizin II Klinikum rechts der Isar TUM Ismaninger Str. 22 81675 München Sebastian.lange@mri.tum.de</p> <p>Lea Elisabeth Reitnauer Universitätsklinikum Münster Medizinische Klinik A Albert Schweitzer Campus 1 48149 Münster Leaelisabeth.Reitnauer@ukmuenster.de</p> <p>Dr. Alexej Ballhausen Medizinische Klinik mit Schwerpunkt Hämatologie, Onkologie und Tumorummunologie CVK Charité – Universitätsmedizin Berlin Augustenburger Platz 1 13353 Berlin alexej.ballhausen@charite.de</p>

Scientific chairs	<p>Prof. Dr. Sebastian Krug Medizinische Klinik IV – Klinik für Gastroenterologie und Infektionskrankheiten Neuenheimer Feld 410 69120 Heidelberg sebastian.krug@med.uni-heidelberg.de</p> <p>Dr. Leonidas Apostolidis Medizinische Klinik VI – Klinik für Medizinische Onkologie Neuenheimer Feld 410 69120 Heidelberg leonidas.apostolidis@med.uni-heidelberg.de</p> <p>Dr. Simon Kreutzfeld Nationales Centrum für Tumorerkrankungen (NCT) Neuenheimer Feld 410 69120 Heidelberg simon.kreutzfeld@med.uni-heidelberg.de</p>
Senior advisors	<p>Prof. Dr. Stefan Fröhling Nationales Centrum für Tumorerkrankungen (NCT) Heidelberg – Abteilung Translationale Medizinische Onkologie Im Neuenheimer Feld 460 69120 Heidelberg stefan.froehling@nct-heidelberg.de</p>
Condition	Advanced solid tumors except thyroid and lung cancer with comprehensive molecular profiling
Design	Retrospective
Objectives	<ul style="list-style-type: none"> - frequency of RET alterations (mutation, fusion, expression data) in solid tumors - association of RET alterations, patient characteristics and clinical outcome (e.g. survival) - evaluation of RET-specific treatment recommendations in Molekular Tumor Boards - clinical outcome of patients receiving RET-specific treatment approaches
Interventions	n/a
Background/Rationale	RET-alterations are low frequently detected molecular changes in solid tumors. The clinical implication of RET-alterations and the available RET-inhibitors has not been

	<p>fully understood and needs to be clarified in malignancies except thyroid and lung cancer. We are aiming for a retrospective database including all patients with RET-alterations discussed in a Molecular Tumor Board. The goal is to characterize frequency and clinical relevance of RET-alterations.</p>
Collected Data	<ul style="list-style-type: none"> - Anonymized or pseudoanonymized - Results of RET molecular profiling <ul style="list-style-type: none"> • Type of RET alteration <ul style="list-style-type: none"> ○ Hotspot mutation exone: SNV, InDel, SNPs ○ Fusions ○ Gen expression <p>Patient data</p> <ul style="list-style-type: none"> • Diagnosis (incl. Oncotree) • Age • Sex • MTB recommendation • Clinical follow-up after MTB • If treated with targeted therapy: <ul style="list-style-type: none"> ○ Documentation of pre- and post-targeted therapy ○ Radiological response ○ Progression-free and overall survival • If not treated with targeted therapy: <ul style="list-style-type: none"> ○ Overall survival
Sample size	<p>All patients with molecular testing including RET alterations and discussion in molecular tumorboards in the participating centers will be included. Patients with RET alterations will be separately assessed (target cohort)</p>
Trial duration	24 months
Participating centers planned	16
Further centers desired?	To be determined
Number of patients	To be determined