

# Deciphering the role of precision oncology in the treatment of biliary tract cancer in daily routine practice – retrospective analysis from the cancer centre Upper Austria

*Doleschal B.<sup>1</sup>, Piringer G.<sup>2,3,4</sup>, Schreil G.<sup>5</sup>, Decker J.<sup>6</sup>, Aichberger K.<sup>6</sup>, Webersinke G.<sup>1</sup>, Thaler J.<sup>4</sup>, Schmitt C.<sup>2,3</sup>, Petzer A.<sup>1</sup>, Rumpold H.<sup>1</sup>*

<sup>1</sup>Ordensklinikum Linz, Linz, Österreich, <sup>2</sup>Kepler Universitätsklinikum, Linz, Österreich, <sup>3</sup>Johannes Kepler Universität Linz, Medizinische Fakultät, Linz, Österreich, <sup>4</sup>Klinikum Wels-Grieskirchen, Wels, Österreich, <sup>5</sup>Klinikum Pyhrn-Eisenwurzen Klinikum, Steyr, Österreich, <sup>6</sup>Klinikum Rohrbach, Rohrbach, Österreich

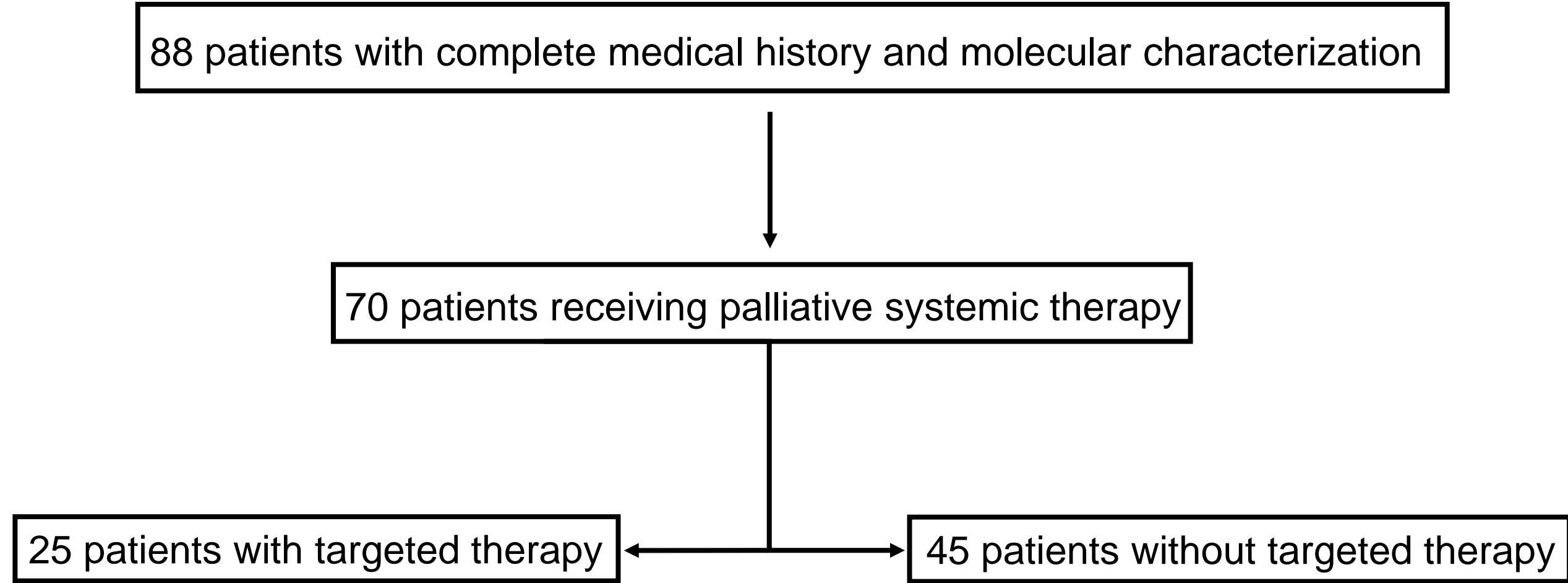
## Introduction

The routine therapeutic landscape of metastatic CCC is still largely based on cytotoxic chemotherapy. This standard becomes increasingly challenged with the introduction of next generation sequencing (NGS) in routine practice and evolving trials of targeted therapies in CCC. However the value of comprehensive genetic profiling of CCC in actual routine clinical practice remains poorly characterized.

## Methods

We performed a retrospective study at the clinical cancer centre of upper Austria (Tumorzentrum Oberösterreich, Kepler Uniklinikum Linz und Klinikum Wels-Grieskirchen) in 2018-2021. Tumor samples from 88 patients with CCC underwent comprehensive genetic profiling. TruSight Tumor 170 Assay (Illumina), Archer FusionPlex Panel (ArcherDX), OncoPrint Focus Assay (Thermo Fisher Scientific) were used vor NGS analysis. Furthermore MSI status was determined by custom made Multiplex PCR-Based Methods. Immunohistochemistry (IHC) collected data on Her2neu and PDL-1 expression.

## Trial flowchart



## Patient characteristics & results

	Targeted therapy (n=25) N (%)	Non-Targeted therapy (n=45) N (%)
Age at diagnosis, median	60y	68y
Gender		
Male	16 (64%)	28 (62%)
Female	9 (36%)	17 (38%)
Localization		
eCC	11 (44%)	20 (44%)
iCC	13 (52%)	22 (49%)
GC	1 (4%)	3 (7%)
Stage		
II-III	14 (56%)	23 (51%)
IV	11 (44%)	22 (49%)
Primary resection	9 (36%)	14 (31%)
1st line platinum therapy	20 (80%)	39 (86%)
Median lines of therapy	3	2
Initiation of targeted therapy		
2nd line	14 (56%)	
3rd line	9 (36%)	
4th line	1 (4%)	
5th line	1 (4%)	

