



Intervention in Liver Cancer with Molecular Glue Degraders March 2022

Michał Walczak, Chief Scientific Officer



Legal notice

This document and the information contained herein (unless otherwise indicated) have been prepared by Captor Therapeutics S.A. (the “Issuer”) solely for informational purposes. For this notice, the presentation that follows shall mean and include the slides that follow, the oral presentation of the slides by the Issuer or any person on behalf of the Issuer, any question-and-answer session that follows the oral presentation, hard copies of this document, and any materials distributed at, or in connection with the presentation (collectively, the “Presentation”). By attending the meeting at which the Presentation is made, or by reading the Presentation, you will be deemed to have (i) agreed to all of the following restrictions and made the following undertakings and (ii) acknowledged that you understand the legal and regulatory sanctions attached to the misuse, disclosure or improper circulation of the Presentation.

The information contained in this Presentation may not be reproduced or redistributed in any way, in whole or in part, to any other person without the prior written consent of the Issuer. This Presentation does not purport to contain all the information that may be required by the recipient to assess the Issuer or its securities. The Issuer prepared this Presentation based on the information which it has and from sources believed to be reliable. To the extent available, the industry, market, and competitive position data contained in this Presentation come from official or third-party sources. There is no guarantee of the accuracy or completeness of such data.

This Presentation contains neither a complete nor a comprehensive financial or commercial analysis of the Issuer, nor does it present its position or prospects in a complete or comprehensive manner. The Issuer has prepared the Presentation with due care, however certain inconsistencies or omissions might have appeared in it. Therefore it is recommended that any person who intends to undertake any investment decision regarding any security issued by the Issuer shall only rely on information released as an official communication (i.e. current/periodic reports) in accordance with the legal and regulatory provisions.

This Presentation may contain certain forward-looking statements, forecasts, estimates, projections, and opinions (“Forward-looking Statements”). By their nature, Forward-looking Statements involve known and unknown risks, uncertainties, assumptions, and other factors because they relate to events and depend on circumstances that will occur in the future whether or not outside the control of the Issuer. No representation is made or will be made that any Forward-looking Statements will be achieved or will prove to be correct. Actual future results and operations could vary materially from the Forward-looking Statements. Similarly, no representation is given that the assumptions disclosed in this Presentation upon which Forward-looking Statements may be based are reasonable. The recipient acknowledges that circumstances may change and the contents of this Presentation may become outdated as a result. The assumptions included herein do not constitute profit forecasts or profit estimates.

No warranties or representations can be made as to the comprehensiveness or reliability of the information contained in this Presentation. Neither the Issuer nor its directors, managers, advisers or representatives of such persons shall bear any liability that might arise in connection with any use of this Presentation. Furthermore, no information contained herein constitutes an obligation or representation of the Issuer, its managers or directors, its shareholders, subsidiary undertakings, advisers or representatives of such persons. Data contained in this Presentation is valid as of the day of its preparation. Consequently, this Presentation will not be subject to changes, updates or modifications to account for events which might occur after this day.

This Presentation does not constitute or form part of, and should not be construed as, an offer to sell or issue, or the solicitation of an offer to purchase, subscribe to, or acquire the Issuer or the Issuer’s securities, or an inducement to enter into investment activity in any jurisdiction in which such offer, solicitation, inducement or sale would be unlawful before registration, exemption from registration or qualification under the securities laws of such jurisdiction. No part of this Presentation, nor the fact of its distribution, should form the basis of, or be relied on in connection with, any contract or commitment or investment decision whatsoever. This presentation is not for publication, release, or distribution in any jurisdiction where to do so would constitute a violation of the relevant laws of such jurisdiction nor should it be taken or transmitted into such jurisdiction.

About Captor



Basel, Switzerland

Wrocław, Poland



Based in Wrocław (Poland) and Basel (Switzerland)

Significantly oversubscribed IPO in April 2021

Five drug programs in large potential markets

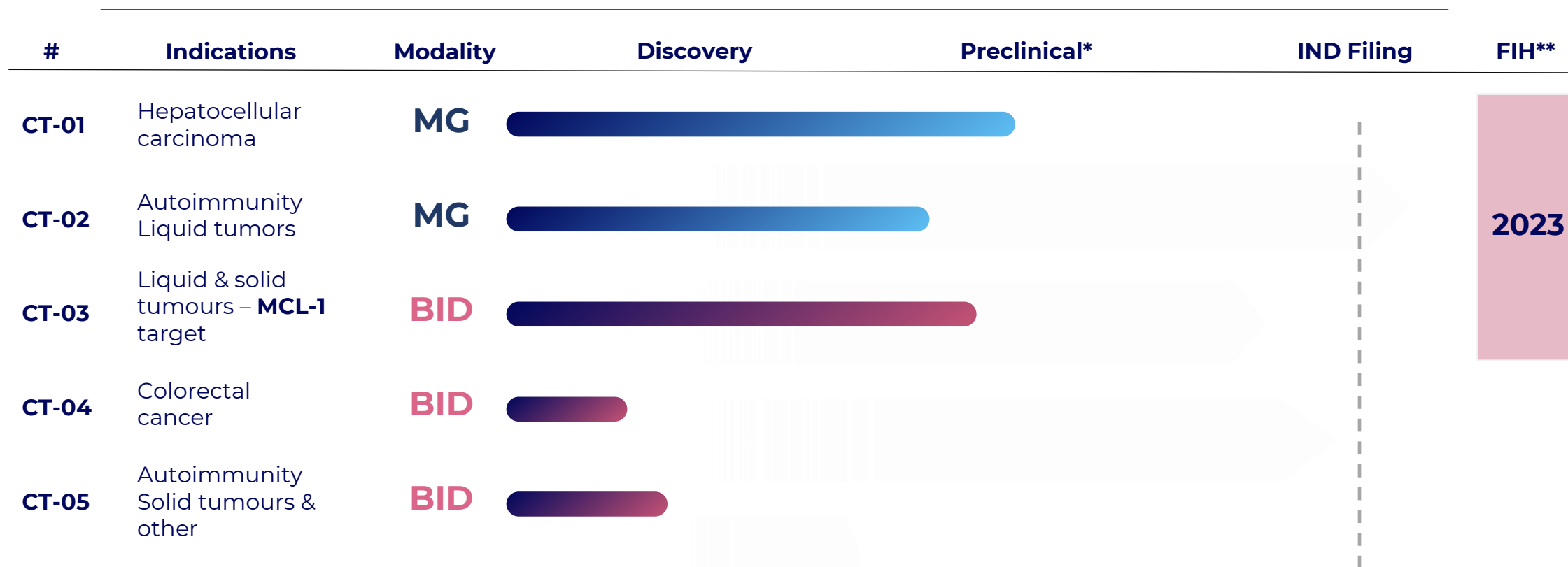
~100 FTEs on board, almost half of them are PhD level specialists

1,100 m² of laboratory space equipped with state-of-the-art equipment

A global, highly qualified team



Pipeline



Partnered Program

Gastrointestinal diseases, e.g. IBD



Partnership with Sosei Heptares

*Preclinical stage include IND-enabling studies

**First in Human; at least 2 projects expected to enter Phase 1 by 2023

BID – Bi-functional Degradar; **MG** – Molecular Glue

TPD-focused Competences in Place

PHARMACOLOGY

**TARGET/E3 LIGASE
ENGAGEMENT**

POI DEGRADATION

REPORTER & ENDOGENOUS
ASSAYS

BIOPHYSICS

LIGAND BINDING

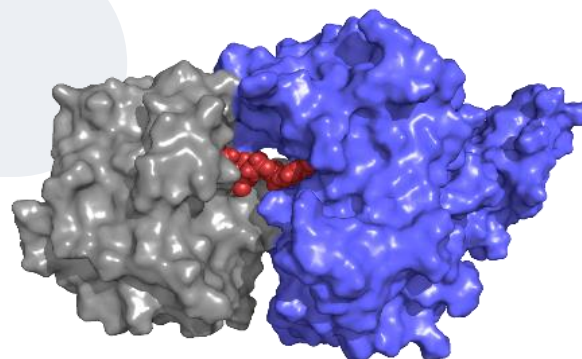
SPR, FP, NMR, BLI, DSF, FRET, BRET

TERNARY COMPLEX FORMATION

PROTEIN SCIENCES

LIBRARY OF E3 LIGASES

PROTEIN PRODUCTION &
LABELING



MODELING

TERNARY COMPLEXES

DOCKING
LINKER DESIGN

MEDICINAL CHEMISTRY

DEGRADERS' BUILDING
BLOCKS

NEW E3 LIGANDS

HTS, FGLD, FOCUSED
LIBRARIES

PROTEOMICS

**SELECTIVITY
PROFILING**

NEW TARGET
IDENTIFICATION

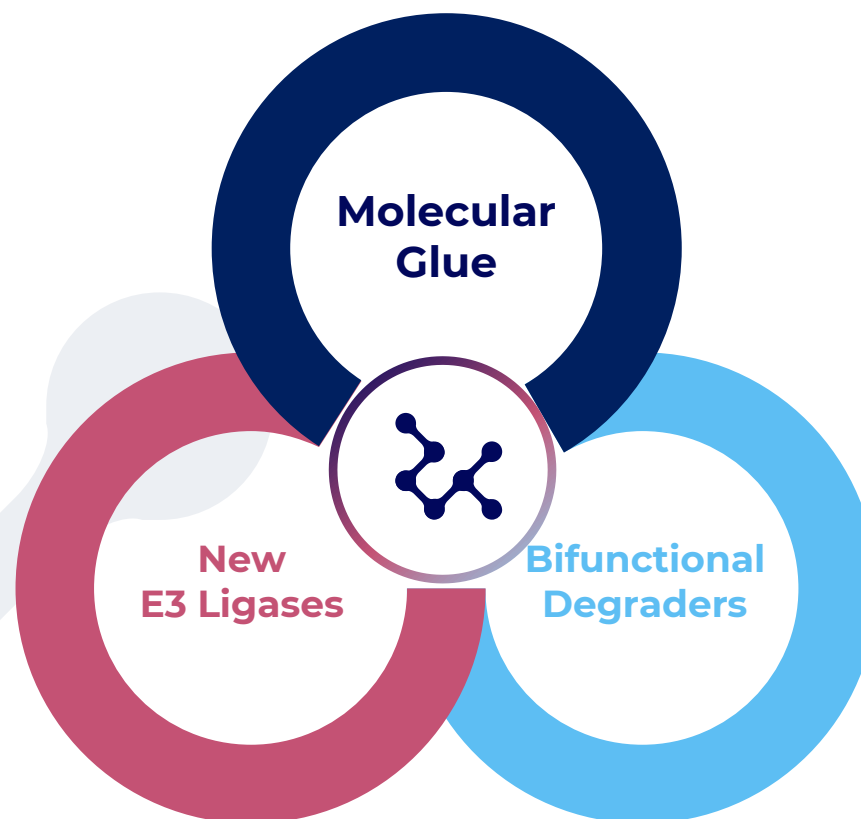
Approach

Molecular Glues

Small molecules with good drug properties that stabilize the interaction between the E3 Ligase and the target

Evolving LiLis™ Platform

To develop new generation degraders exploiting novel E3 ligases



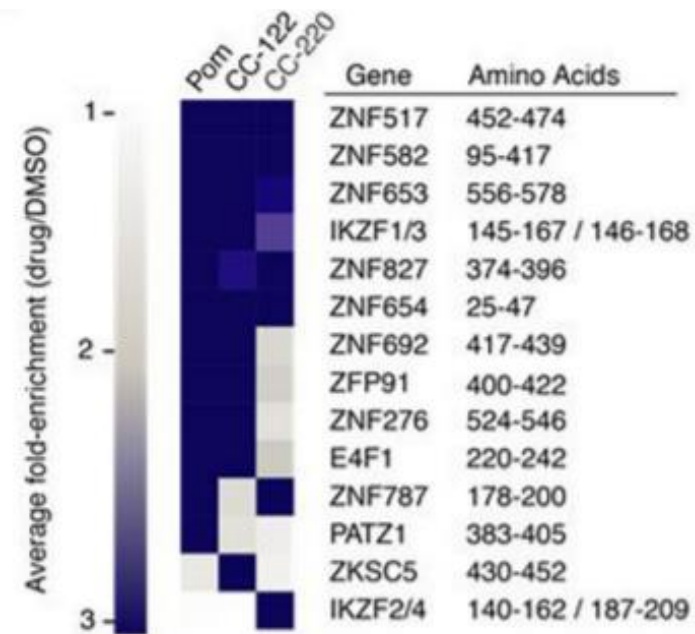
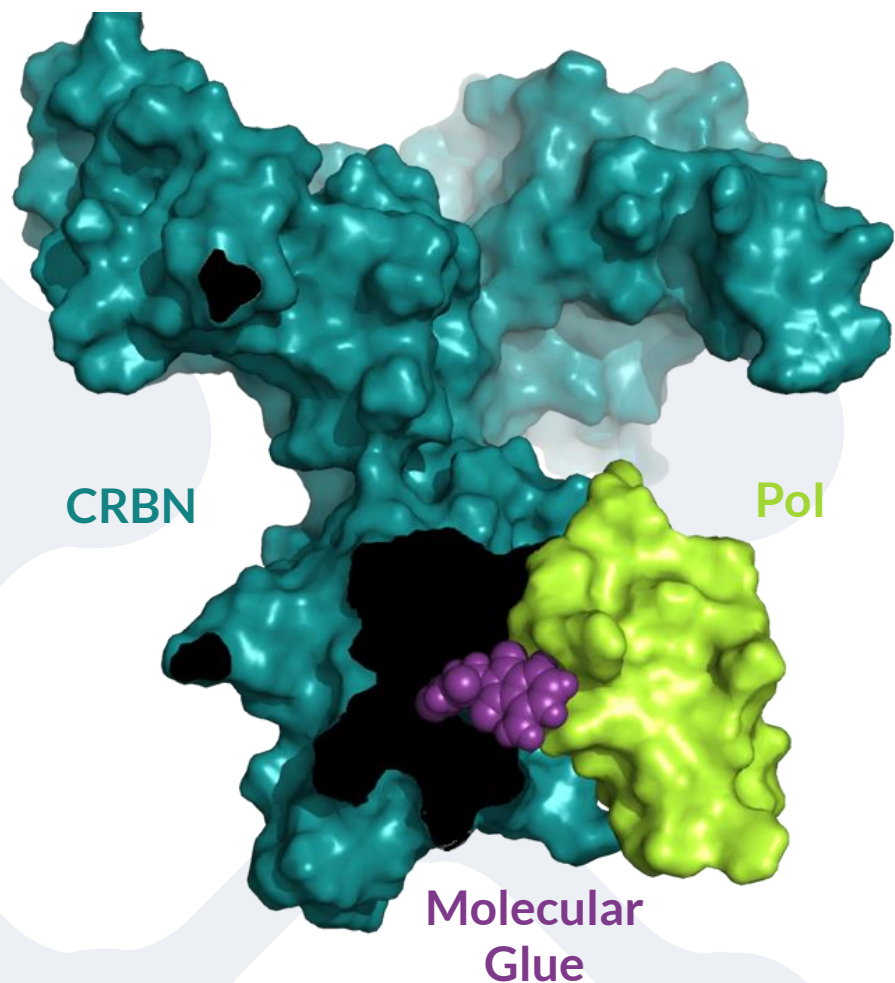
Core capabilities

- 100-person team with in-house biophysics, structural biology, HTS, chemistry, biology & proteomics
- Science leadership involved in degradation for > 10 years
- Application of DEL and Affinity Selection MS

Bifunctional Degraders

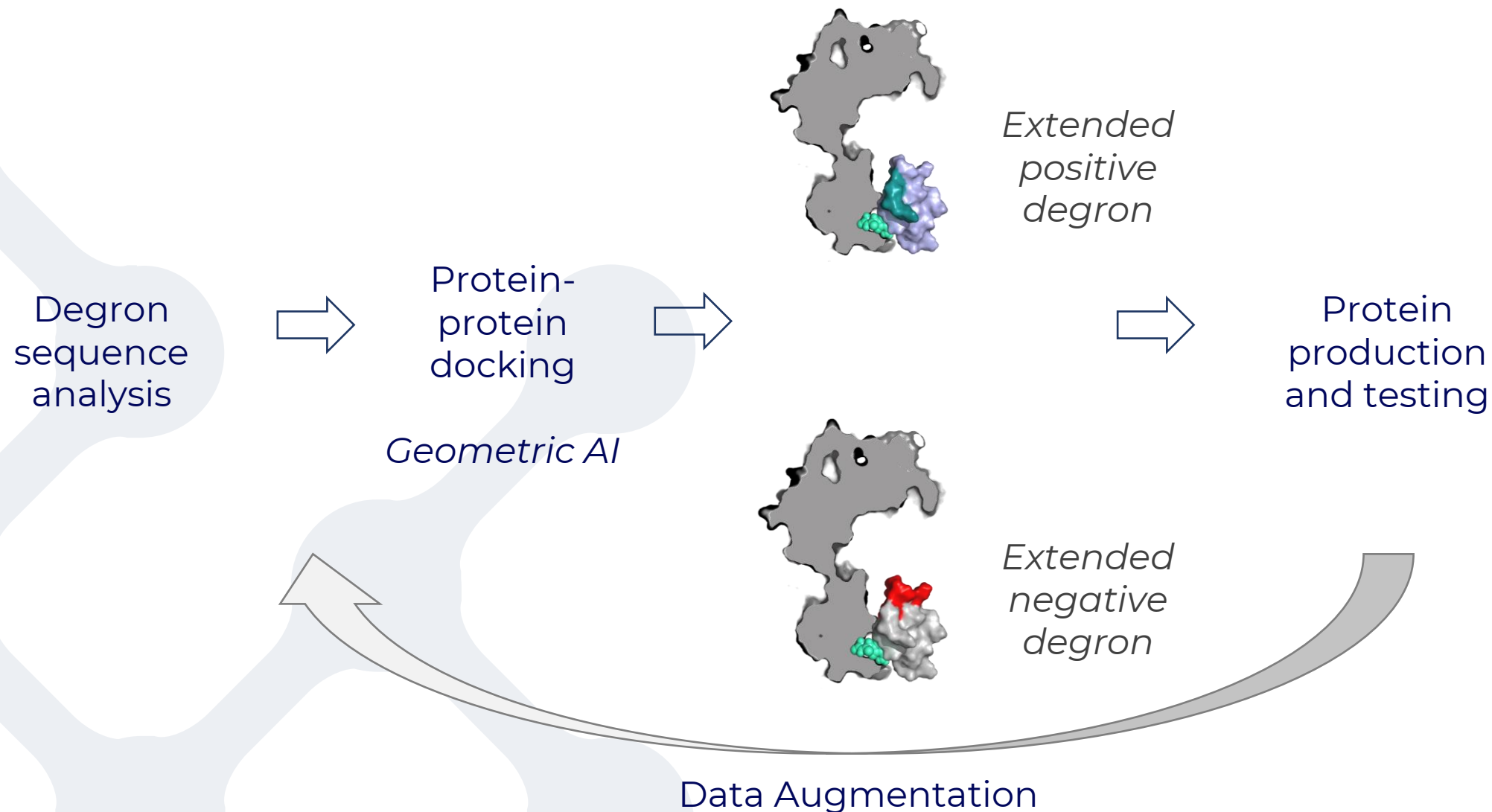
A modular approach to degrader discovery

Molecular Glues and Cereblon Degrome

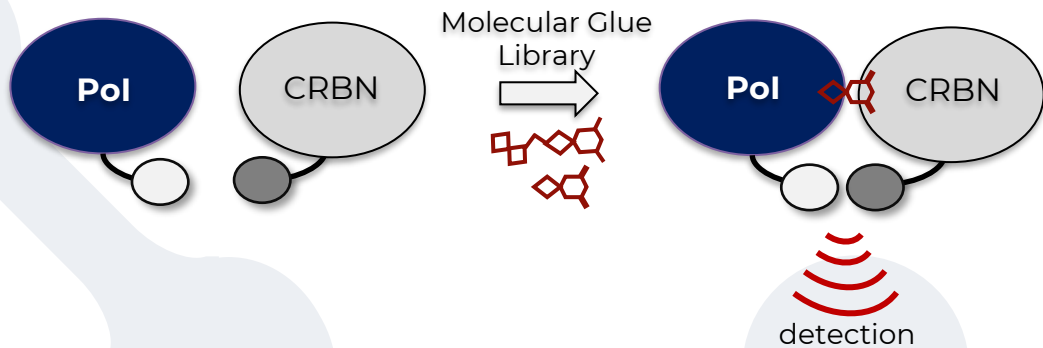


Sievers Q., Petzold G. et al. *Science* (2018) 362(6414)

Molecular Glue Discovery Engine

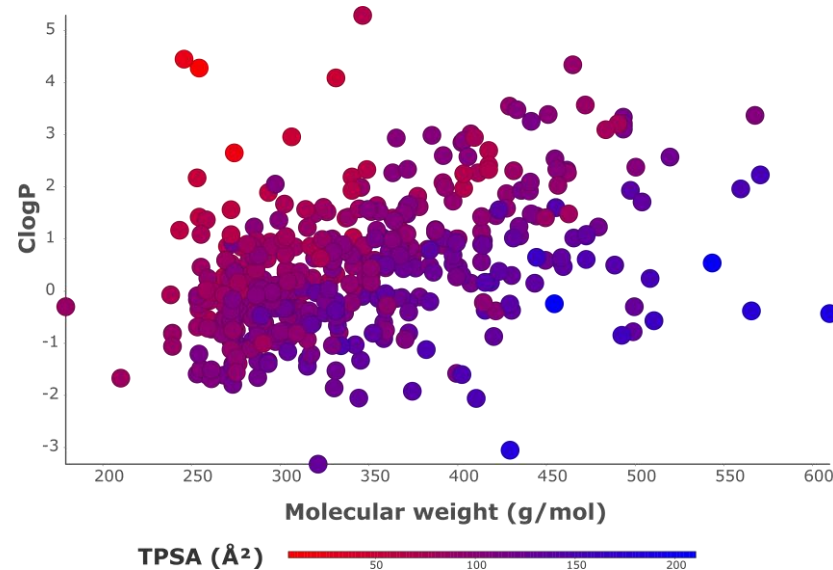


Molecular Glue Toolbox



High throughput CRBN recruitment assay developed

- Multiplexed by proteins
- Detection of weak recruiters (~10 μM) unlike cellular degradation assays
- High sensitivity (beyond proteomics)
- Control of the target levels

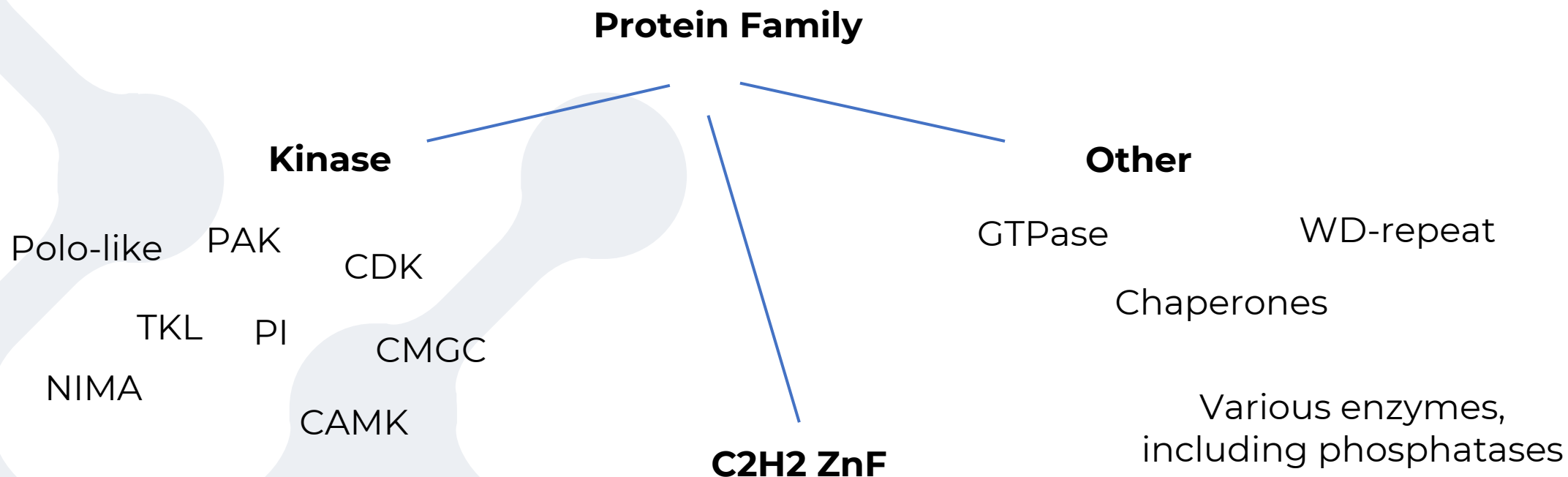


A growing library of molecular glues

- Excellent drug-like properties
- Focused library with high chance of identifying a chemical starting point to CRBN-degron containing proteins
- Patent applications filed for several chemotypes

Identification of CRBN-matching Degrons in Proteome

Continuous and iterative development of degron identification workflow
 Identified over 80 (non-ZnF) proteins that contain putative CRBN degrons



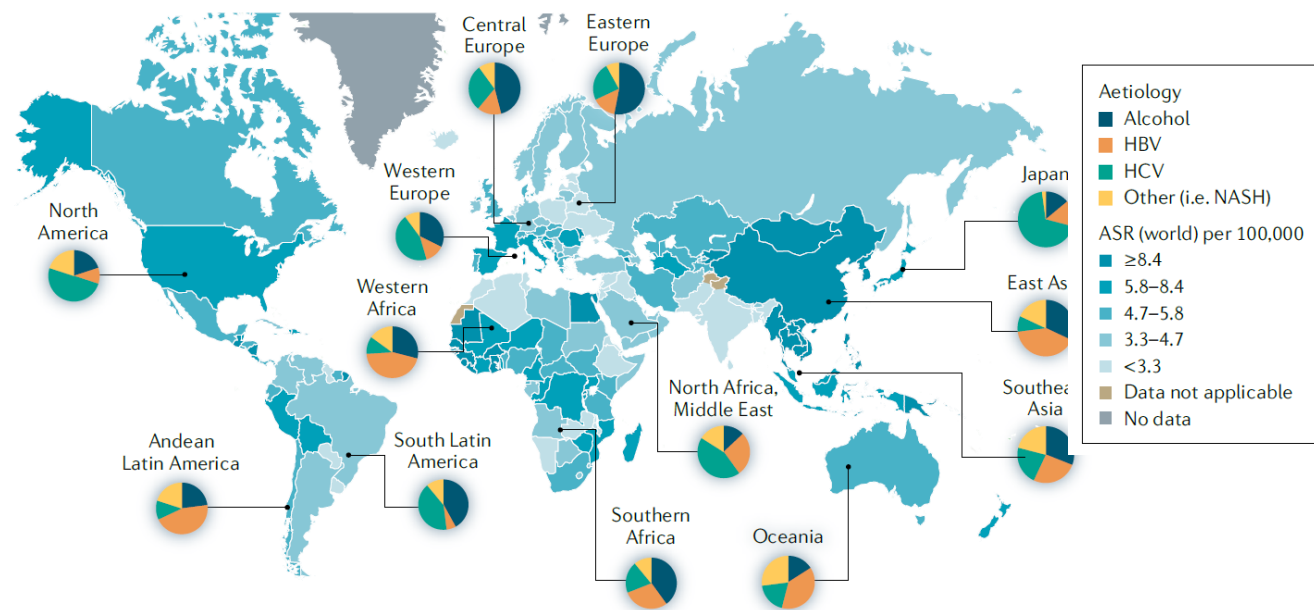
Hepatocellular Carcinoma – a Global Health Challenge

- ~1 000 000 new cases each year, the 2nd most common cause of cancer mortality ¹
- Incidence growing worldwide ²
- For HCC patients, the underlying liver disease impacts the quality of life, rendering treatment-related adverse events even more impactful ²

References: ¹ Global Cancer Statistics 2018, ²Llovet et al. 2021, DOI: 10.1038/s41572-020-00240-3

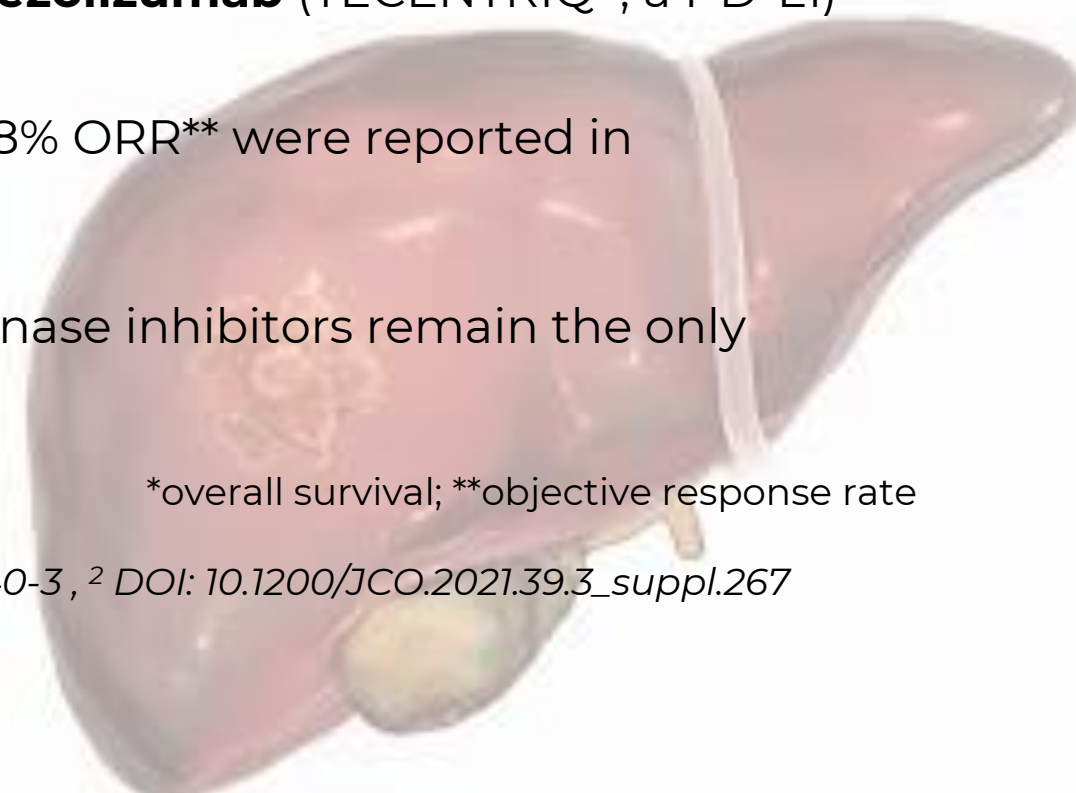
Figure: The major risk factors for HCC include cirrhosis of any etiology, chronic alcohol consumption, diabetes or obesity-related NASH, and infection by HBV or HCV²

DOI: 10.1038/s41572-020-00240-3



A Dramatic Need for New Treatments

- Curative treatments are restricted to early disease
- Recurrence rates after resection as high as 70% at 5 years¹
- OS of Sorafenib < 3 months¹
- In unresectable HCC the combination of **Atezolizumab** (TECENTRIQ[®], a PD-L1) **plus Bevacizumab** (AVASTIN[®])
 - 19.2 months median OS* and 29.8% ORR** were reported in IMbrave150 study²
- In 2nd line treatment of grade ≥ 3 the multikinase inhibitors remain the only option¹

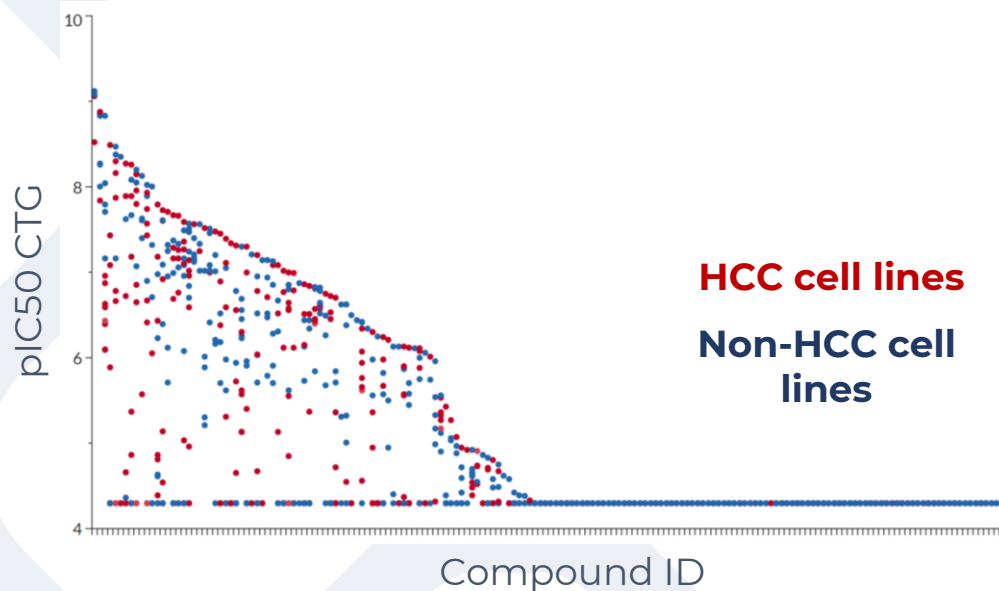
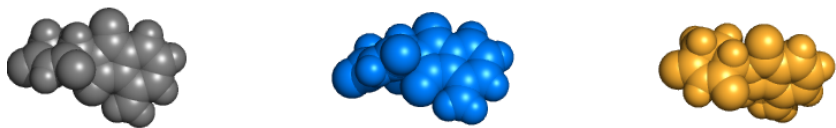


*overall survival; **objective response rate

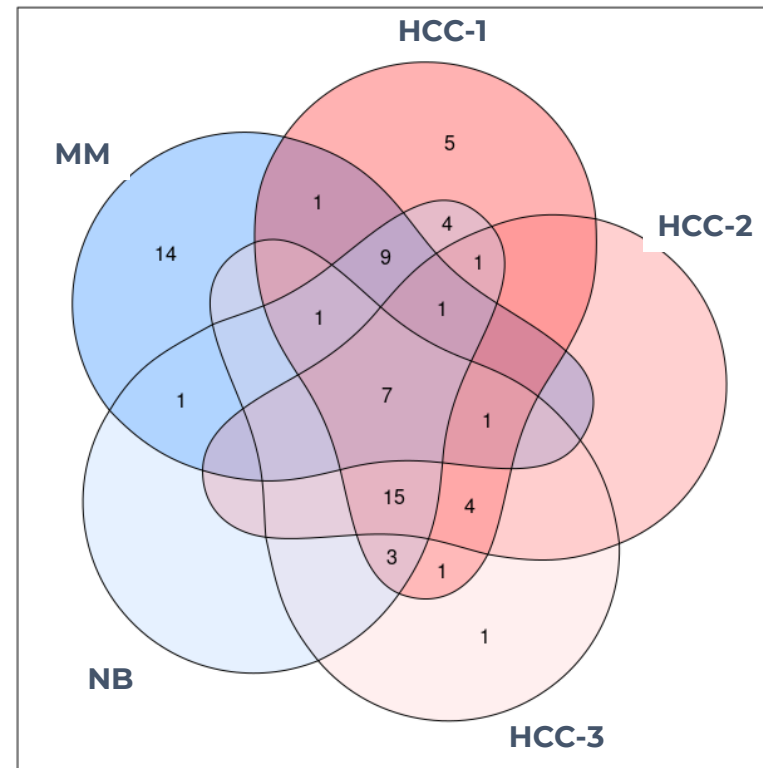
References: ¹Llovet et al. 2021, DOI: 10.1038/s41572-020-00240-3, ² DOI: 10.1200/JCO.2021.39.3_suppl.267

Phenotypic Cell Viability Screen

Classes of molecular glues



HCC cluster identification

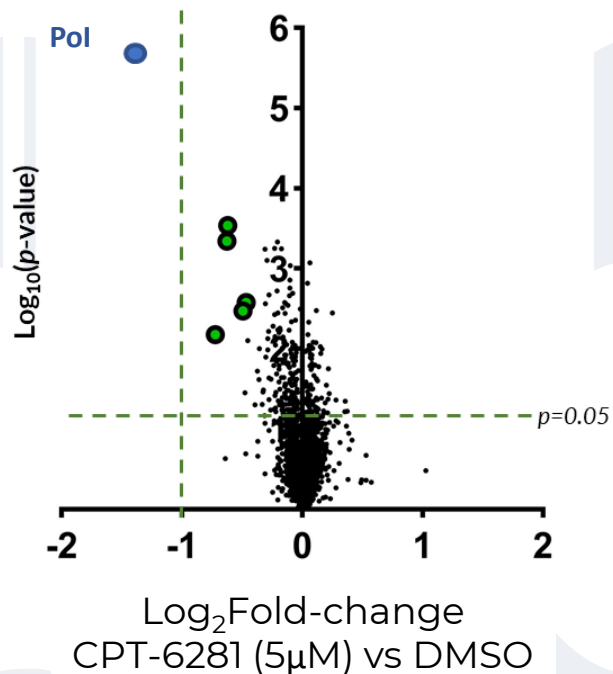


Positive selection - HCC clusters

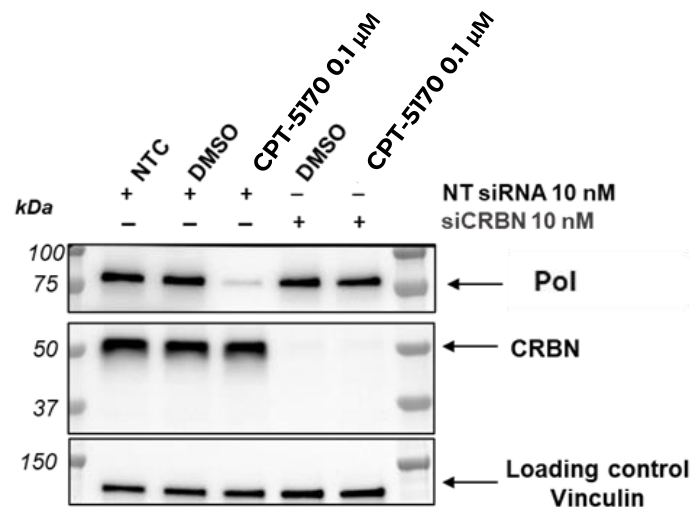
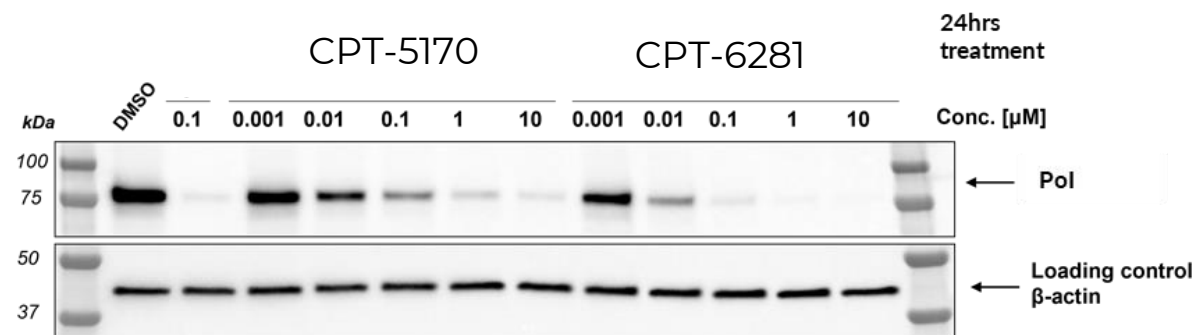
Negative selection - haematological cluster

Targeting Liver Cancer with Molecular Glues

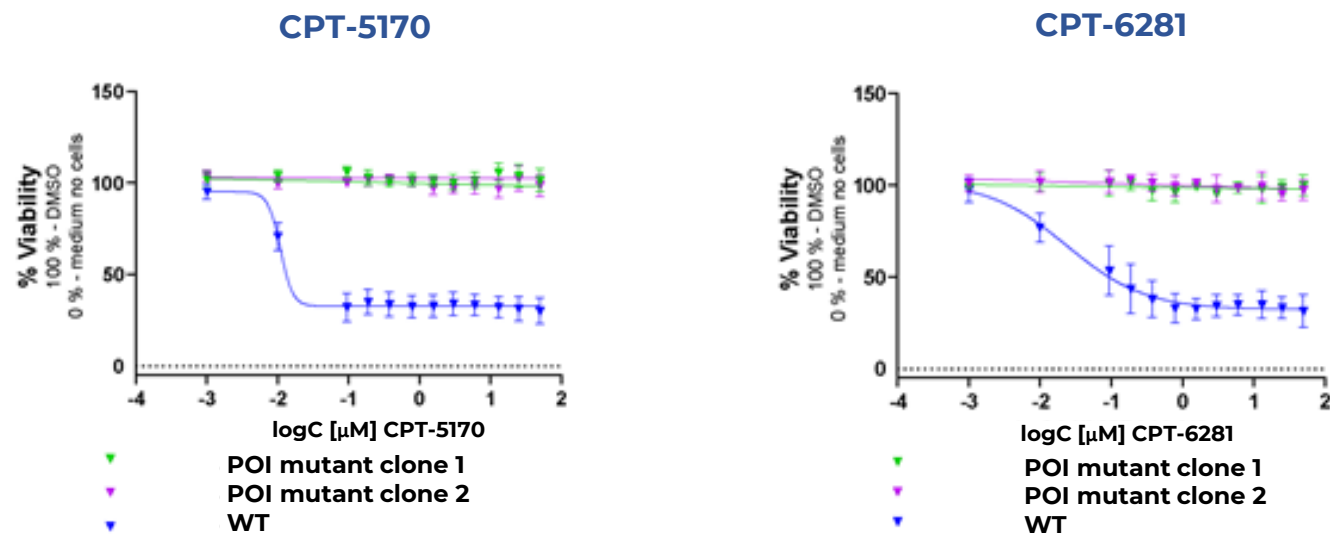
Downregulation of Pol in response to CT-01 compounds treatment in HCC-1 cells



Potent and CRBN-dependent Pol degradation by CT-01 compounds in HCC-1 cells



Pol-dependent Efficacy

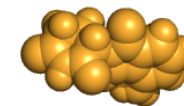
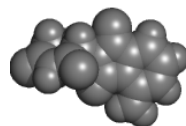


Cell viability after treatment (72 h)

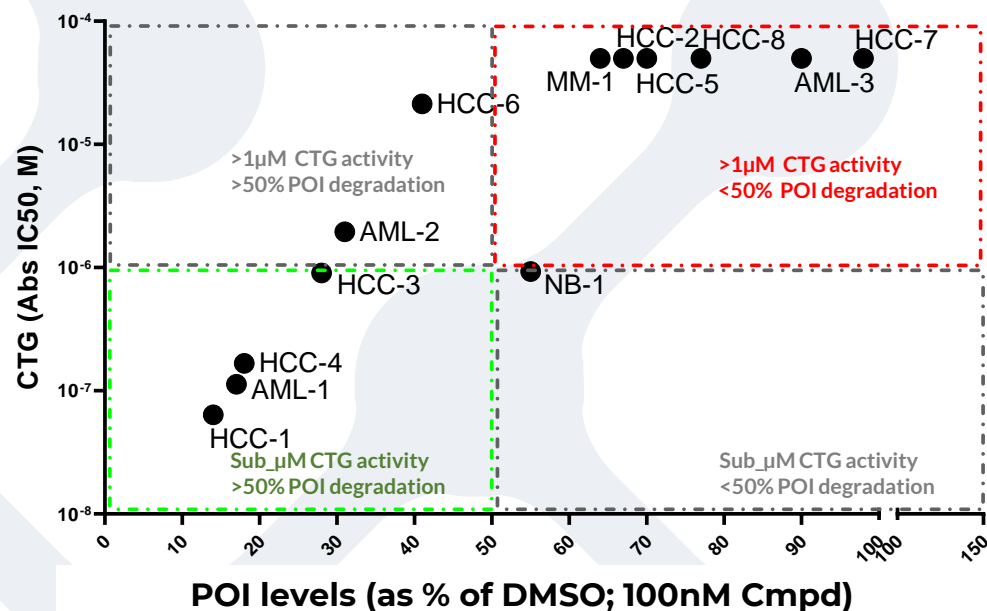
POI mutation mitigated the cytotoxic effect of CPT-5170 and CPT-6281 in HCC cell lines

Increasing Poi Degradation Sensitizes HCC Cell Lines

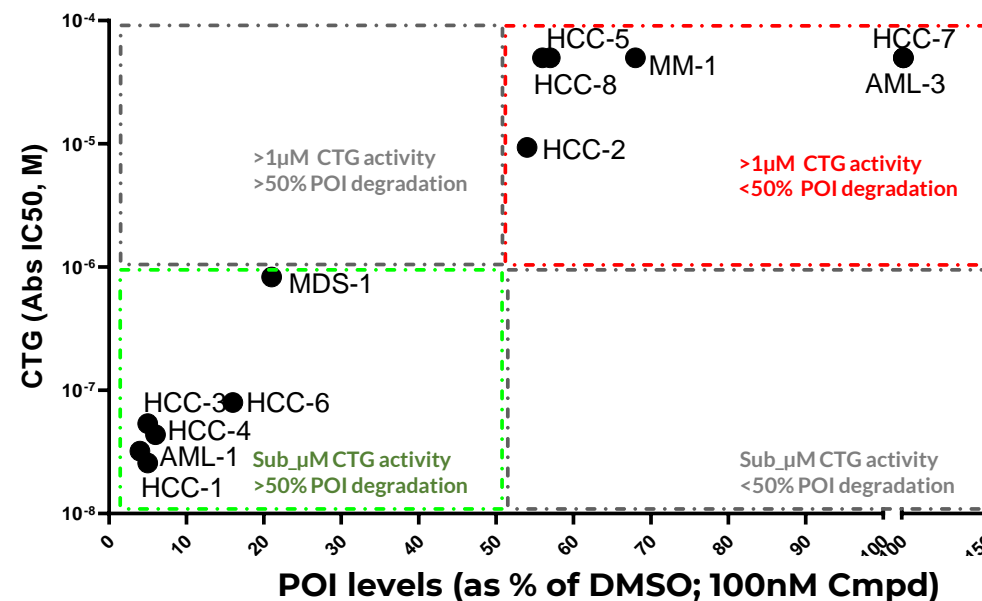
Molecular Glue Evolution



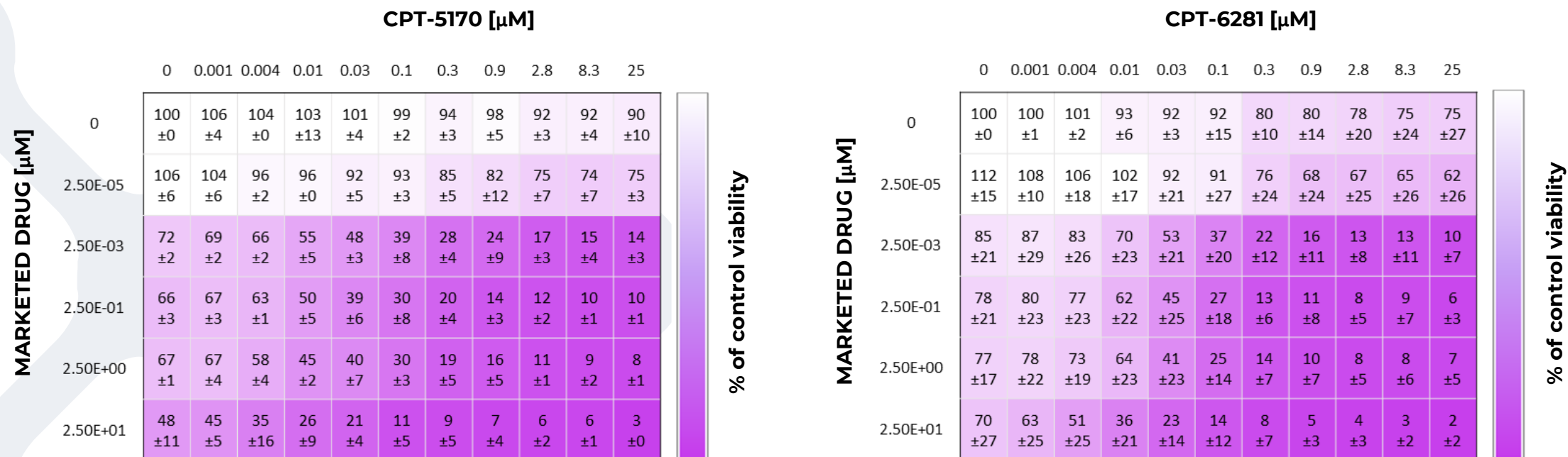
CPT-5170



CPT-6281

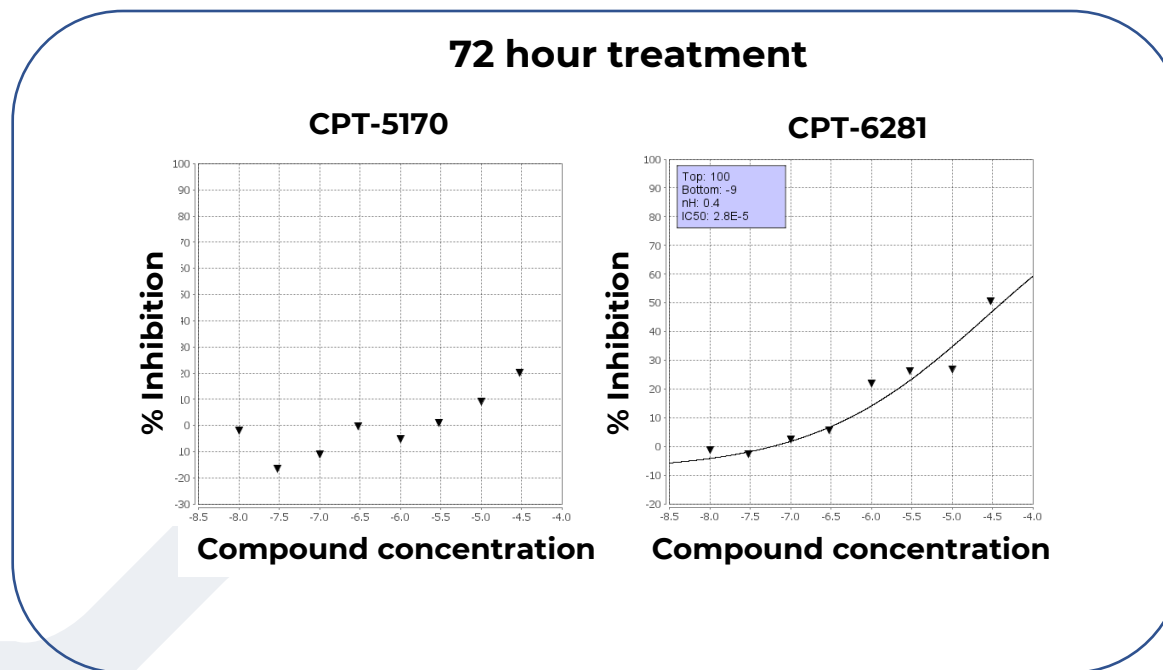


Synergy in Combination with Marketed Drug



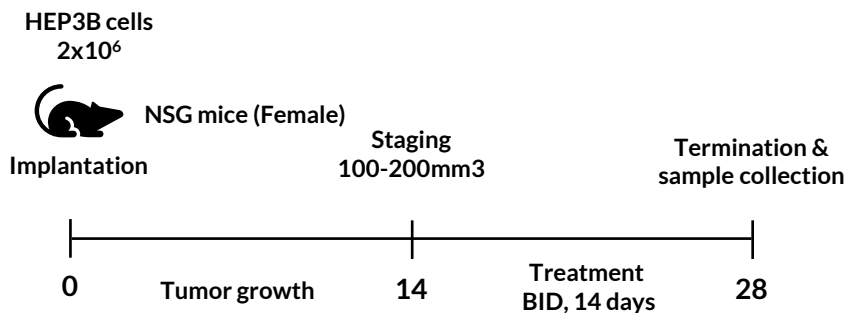
Strong synergy of potency and sensitivity of CT-01 degraders in combination with a marketed drug - CTG viability assay

Compounds Non-Toxic to Primary Hepatocytes

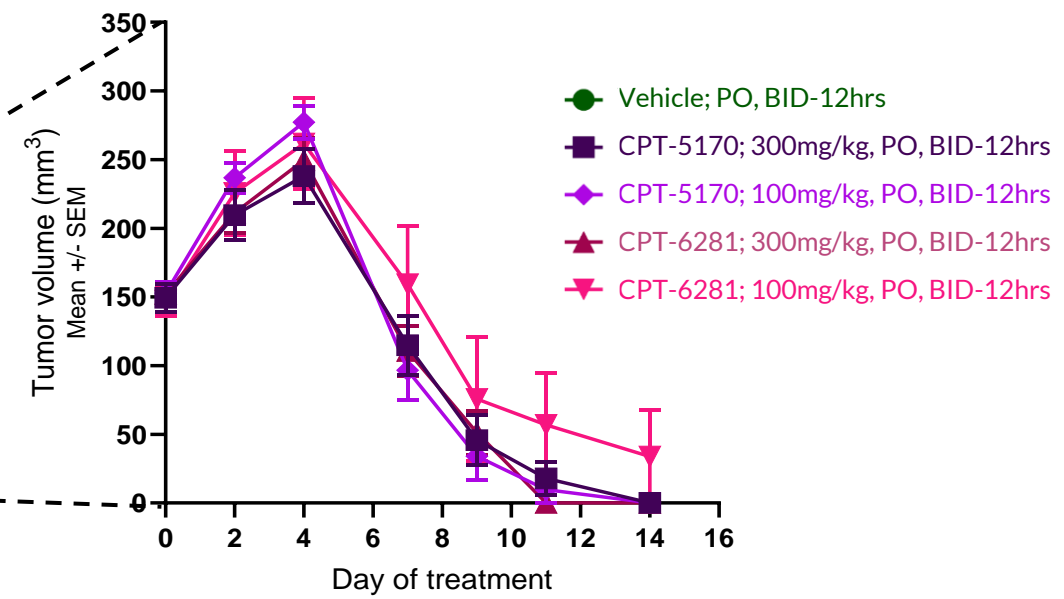
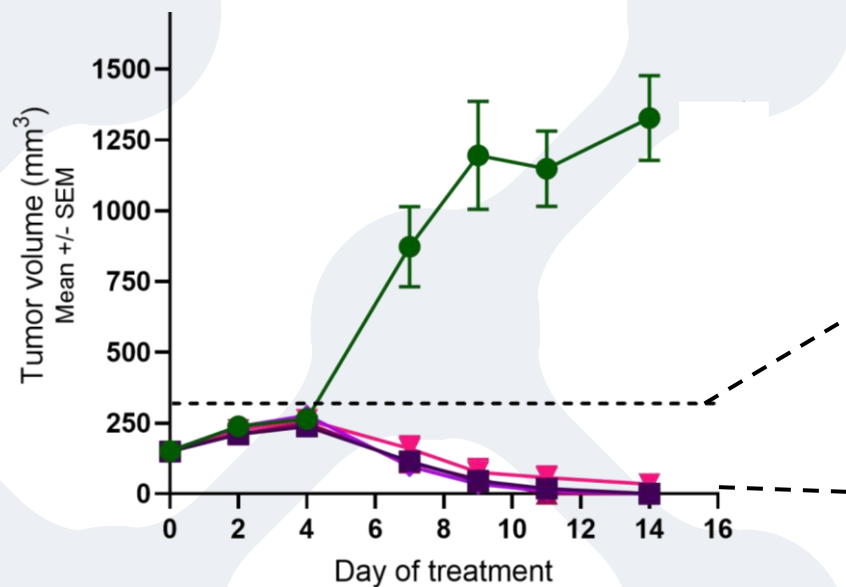


	Primary hepatocytes	HCC-1	HCC-2	HCC-3
CPT-5170	<i>not calculable</i>	33.8E-09	54.5E-09	105E-09
CPT-6281	2.8E-05	14.7E-09	29.3E-09	23.1E-09

Potent Anti-tumor Efficacy *in vivo*



- 9 x Group 1: Vehicle; PO, BID-12hrs
- 9 x Group 2: CPT-5170; 300mg/kg, PO, BID-12hrs
- 9 x Group 3: CPT-5170; 100mg/kg, PO, BID-12hrs
- 9 x Group 4: CPT-6281; 300mg/kg, PO, BID-12hrs
- 9 x Group 5: CPT-6281; 100mg/kg, PO, BID-12hrs



Summary & Outlook

1. Rationalization of Molecular Glue discovery yields potent degraders with selective activity across HCC cell lines
2. Developed Molecular Glues induce potent tumor regression
3. IND-enabling studies start in Q2 2022

Acknowledgements

Team Captor

Development of targeted oncogenic transcription factor degradation technology in the treatment of hepatocellular carcinoma (POIR.01.01.01-00-0740/19)

The goal of project is the development of a drug candidate in the treatment of hepatocellular carcinoma that allows the elimination of cancer cells through induced degradation of oncogenic transcription factor. The efficacy and bioavailability of the drug candidate will be tested in preclinical phase, followed by the Phase I clinical trials.

Project has a 8.1M EUR budget for years 2020-2023. The National Centre of Research and Development supports the project through 6.4M EUR grant-aid.