UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d)
of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): May 4, 2022

COMPASS THERAPEUTICS, INC.

(Exact name of registrant as specified in its charter)

Delaware	**001-39696**	**82-4876496**
(State or Other Jurisdiction of Incorporation)	(Commission File Number)	(I.R.S. Employer Identification No.)

80 Guest Street, Suite 601
Boston, Massachusetts 02135
(Address of Principal Executive Offices) (Zip Code)

(617) 500-8099
(Registrant's telephone number, including area code)

(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, $0.0001 par value per share	CMPX	NASDAQ Capital Market

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company ☒

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Item 7.01. Regulation FD Disclosure.

On May 4, 2022, Compass Therapeutics, Inc. (the "Company") issued a press release announcing positive interim data for its ongoing Phase 2 clinical trial assessing its clinical program, CTX-009, in combination with paclitaxel in advanced biliary tract cancers. A copy of the press release is attached hereto as Exhibit 99.1 and is incorporated herein by reference.

Also on May 4, 2022, the Company hosted a conference call to discuss the foregoing interim Phase 2 data. A copy of the slide presentation used during the Company's conference call is attached hereto as Exhibit 99.2 and is incorporated herein by reference.

The information in this Item 7.01 (including Exhibit 99.1 and Exhibit 99.2) shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference in any filing under the Securities Act of 1933, as amended, or the Exchange Act, except as expressly set forth by specific reference in such a filing.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits

99.1	Press Release issued on May 4, 2022 titled "Compass Therapeutics Reports Positive Interim Phase 2 Data of CTX-009 in Combination with Paclitaxel in Biliary Tract Cancers"
99.2	Presentation titled "Compass Therapeutics Program Update – May 4, 2022"
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Compass Therapeutics, Inc.

Date: May 4, 2022

By: /s/ NEIL LERNER
Neil Lerner
VP of Finance

Compass Therapeutics Reports Positive Interim Phase 2 Data of CTX-009 in Combination with Paclitaxel in Biliary Tract Cancers

*CTX-009 Demonstrated a **42% Overall Response Rate (ORR) Based on 10 Partial Responses (PRs)** in 24 Enrolled Patients*

CTX-009 Continues to be Well Tolerated, Consistent with the Phase 1 Studies

Compass Plans to Initiate Stage 2 of the Phase 2 Study in the U.S. in Q3 2022

Compass to Host Key Opinion Leader Webinar on May 4, 2022 at 8:00 a.m. ET

BOSTON, May 04, 2022 (GLOBE NEWSWIRE) -- Compass Therapeutics, Inc. (Nasdaq: CMPX), a clinical-stage, oncology-focused biopharmaceutical company developing proprietary antibody-based therapeutics to treat multiple human diseases, today reported additional interim results from a Phase 2 study of CTX-009 in combination with paclitaxel in patients with biliary tract cancers (BTC). The data show that:

- CTX-009 demonstrated a 42% overall response rate (ORR) based on 10 patients with Partial Responses (PRs), including 9 PRs confirmed by RECIST 1.1 and 1 PR pending confirmation
- CTX-009 demonstrated anti-tumor activity in previously treated patients with a clinical benefit rate (CBR) of 92% based on 22 patients with a PR or stable disease (SD) out of 24 enrolled patients
- CTX-009 was well-tolerated and preliminary safety profile is consistent with prior studies

Thomas Schuetz, M.D., Ph.D., Chief Executive Officer, and Scientific Founder of Compass, said “We are excited by these impressive interim Phase 2 results and believe CTX-009 is a promising investigational drug. In the initial data review of this trial, reported in November 2021, CTX-009 exhibited a 29% ORR and a 100% CBR. We are very encouraged by the performance of CTX-009 across a larger patient population, particularly the maturing of the dataset, with the ORR moving from 29% in 17 evaluable patients to 42% in all 24 patients enrolled.”

Dr. Schuetz continued, “The findings reported today suggest that CTX-009, if approved, may represent a novel therapeutic option for patients with BTC who have limited treatment choices and poor prognoses. We are very pleased to see the strategy of blocking both DLL4 and VEGF-A in a bispecific antibody continue to yield positive data.”

Vered Bisker-Leib, Ph.D., President and Chief Operating Officer of Compass said “CTX-009 demonstrated responses across all of the four BTC subtypes enrolled in the trial and good overall tolerability. These are very encouraging aspects of the Phase 2 results and mark an important step forward in the ongoing development of CTX-009 as a potential new treatment for patients with BTC. We look forward to studying CTX-009 further in Phase 2 trials, which we expect to begin in the U.S. in the third quarter.”

CTX-009 Phase 2 Study Overview

The Phase 2 study has a Simon Two-Stage adaptive design where three PRs among the first 21 patients enrolled in the first stage of the study will advance the study to the second stage. In November 2021, Compass reported that there were five PRs observed among the first 17 evaluable patients, and therefore, the criteria to advance the study to its second stage was met. The study is currently being conducted at four leading medical centers in Korea. In the United States, an IND was opened in January of 2022 and first patient dose is projected to take place in early Q3 2022.

Enrollment

All patients enrolled in the study had BTC, classified into four subgroups: intrahepatic cholangiocarcinoma (37.5%), extrahepatic cholangiocarcinoma (12.5%), gallbladder cancer (29.2%) and ampullary cancer (20.8%).

As of the data cut-off date April 14, 2022, 24 patients were enrolled and dosed with at least one cycle of CTX-009 and paclitaxel, and 22 were evaluable for response. All patients enrolled in the study have advanced BTC; 45.8% of the patients received one prior therapy and 54.2% of the patients received at least two prior therapies. Almost all patients (95.8%) received gemcitabine/cisplatin.

Patients had a median age of 61.5 years, an ECOG performance status of 0 (54.2%) or 1 (45.8%).

Preliminary Activity Data

CTX-009 exhibited a 42% ORR based on 10 patients with PRs, including nine confirmed PRs by RECIST 1.1 and one PR pending confirmation.

Two patients were not evaluable for the purpose of efficacy, and 22 of the 24 patients have had stable disease or better observed leading to a CBR of 92%. As of the cutoff date, seven patients were continuing to receive treatment, including five patients who had been on treatment for over nine months.

Preliminary Safety Data

CTX-009, in combination with paclitaxel, continues to be well tolerated, consistent with the Phase 1 studies, with hypertension and neutropenia being the most common events related to CTX-009 and paclitaxel, respectively.

Of the 24 subjects enrolled in the study, all subjects had at least one AE related to CTX-009 and/or paclitaxel. The most common adverse events (all Grades) occurring in at least three patients were anemia (12.5%), asthenia (25.0%), fatigue (16.7%), edema (16.7%), pyrexia

(16.7%), neutropenia (54.2%), thrombocytopenia (20.8%), headache (16.7%), proteinuria (20.8%), dysphonia (12.5%), dyspnea (25%), epistaxis (33.3%), pulmonary hypertension (16.7%, all Grade 1) and hypertension (50.0%).

Grade 3 or greater treatment-emergent adverse events (TEAE) occurring in more than one patient include neutropenia (n=12; 50.0%), hypertension (n=4; 16.7%), anemia (n=3; 12.5%) and thrombocytopenia (n=2; 8.3%); all TEAEs were manageable with standard treatment.

About the Trial

The Phase 2 trial was designed as a prospective, multi-center, open-label, Simon Two-Stage adaptive design trial to evaluate the use of CTX-009 in combination with paclitaxel for the treatment of patients with BTC. The study enrolled patients with advanced, unresectable, metastatic or recurrent biliary tract cancer with an ECOG performance status of 0 or 1.

The initial phase of the trial was conducted in Korea and enrolled 24 subjects at four leading medical centers. All subjects received bi-weekly doses of 10 mg/kg of CTX-009, and paclitaxel, dosed at 80 mg/m^2 weekly every three out of four weeks.

The primary endpoint for the study is ORR, based on the proportion of subjects whose best overall response is assessed to be Complete Response (CR) or Partial Response (PR) per Independent Radiology review. Secondary outcome measures include assessments of several standard measures of disease progression.

About CTX-009

CTX-009 is a bispecific antibody that simultaneously blocks Delta-like ligand 4/Notch (DLL4) and vascular endothelial growth factor A (VEGF-A) signaling pathways, which are critical to angiogenesis and tumor vascularization. Preclinical and early clinical data of CTX-009 suggest that blockade of both pathways provides robust anti-tumor activity across several solid tumors, including colorectal, gastric, cholangiocarcinoma, pancreatic and non-small cell lung cancer. Partial responses to CTX-009 as a monotherapy have been observed in heavily pre-treated cancer patients who were resistant to currently approved anti-VEGF therapies. CTX-009 has completed a Phase 1 monotherapy dose escalation and dose expansion study and a Phase 2 combination study is ongoing. Initiation of a Phase 2 trial in the U.S. is planned for Q3 2022.

Compass holds the global rights to CTX-009 (also known as ABL001) with the exception of rights in Korea, held by Handok, Inc. (https://www.handok.co.kr/eng/) and rights in China, which Compass out-licensed to Elpiscience Biopharma, Ltd. (https://www.elpiscience.com/).

About Biliary Tract Cancers

Biliary tract cancers (BTC) are a group of rare and aggressive gastrointestinal (GI) cancers that form in the cells of the bile ducts (cholangiocarcinoma), gallbladder or ampulla of Vater (where the bile duct and pancreatic duct connect to the small intestine).

In the United States approximately 18,300 cases of BTC are diagnosed annually,[1] including cholangiocarcinoma, gallbladder and ampullary subtypes. Only 10% of these patients present at an early stage when they would be candidates for surgical resection. The vast majority present with locally advanced or metastatic BTC, for which there are very few therapeutic options.[2]

[1] seer.cancer.gov/statfacts/html/livibd.html

[2] cancer.gov/types/liver/patient/bile-duct-treatment-pdq#_66

About Compass Therapeutics

Compass Therapeutics, Inc. is a clinical-stage oncology-focused biopharmaceutical company developing proprietary antibody-based therapeutics to treat multiple human diseases. Compass's scientific focus is on the relationship between angiogenesis, the immune system, and tumor growth. The company's pipeline of novel product candidates was designed to target multiple critical biological pathways required for an effective anti-tumor response. These include modulation of the microvasculature via angiogenesis-targeted agents, induction of a potent immune response via activators on effector cells in the tumor microenvironment, and alleviation of immunosuppressive mechanisms used by tumors to evade immune surveillance. Compass plans to advance its product candidates through clinical development as both standalone therapies and in combination with proprietary pipeline antibodies and selected targeted therapies based on supportive clinical and nonclinical data. The company was founded in 2014 and is headquartered in Boston, Massachusetts. The Company's website is www.compasstherapeutics.com.

Webinar Information

Compass will host a webcast on Wednesday, May 4th at 8:00 a.m. ET

Registration for the webcast or access to a replay of the call is available by **clicking here.**

Forward-Looking Statements

This press release contains forward-looking statements. Statements in this press release that are not purely historical are forward-looking statements. Such forward-looking statements include, among other things, references to Compass's product candidate, CTX-009, its development, regulatory plans with respect thereto and therapeutic potential thereof. Actual results could differ from those projected in any forward-looking statements due to numerous factors. Such factors include, among others, Compass's ability to raise the additional funding it will need to continue to pursue our business and product development plans, the inherent uncertainties associated with developing product candidates and operating as a development stage company, Compass's ability to identify additional product candidates for development, Compass's ability to develop, complete clinical trials for, obtain approvals for and commercialize any of its product candidates, competition in the industry in which Compass operates and market conditions. These forward-looking statements are made as of the date of this press

release, and Compass assumes no obligation to update the forward-looking statements, or to update the reasons why actual results could differ from those projected in the forward-looking statements, except as required by law. Investors should consult all the information set forth herein and should also refer to the risk factor disclosure set forth in the reports and other documents Compass files with the SEC available at www.sec.gov.

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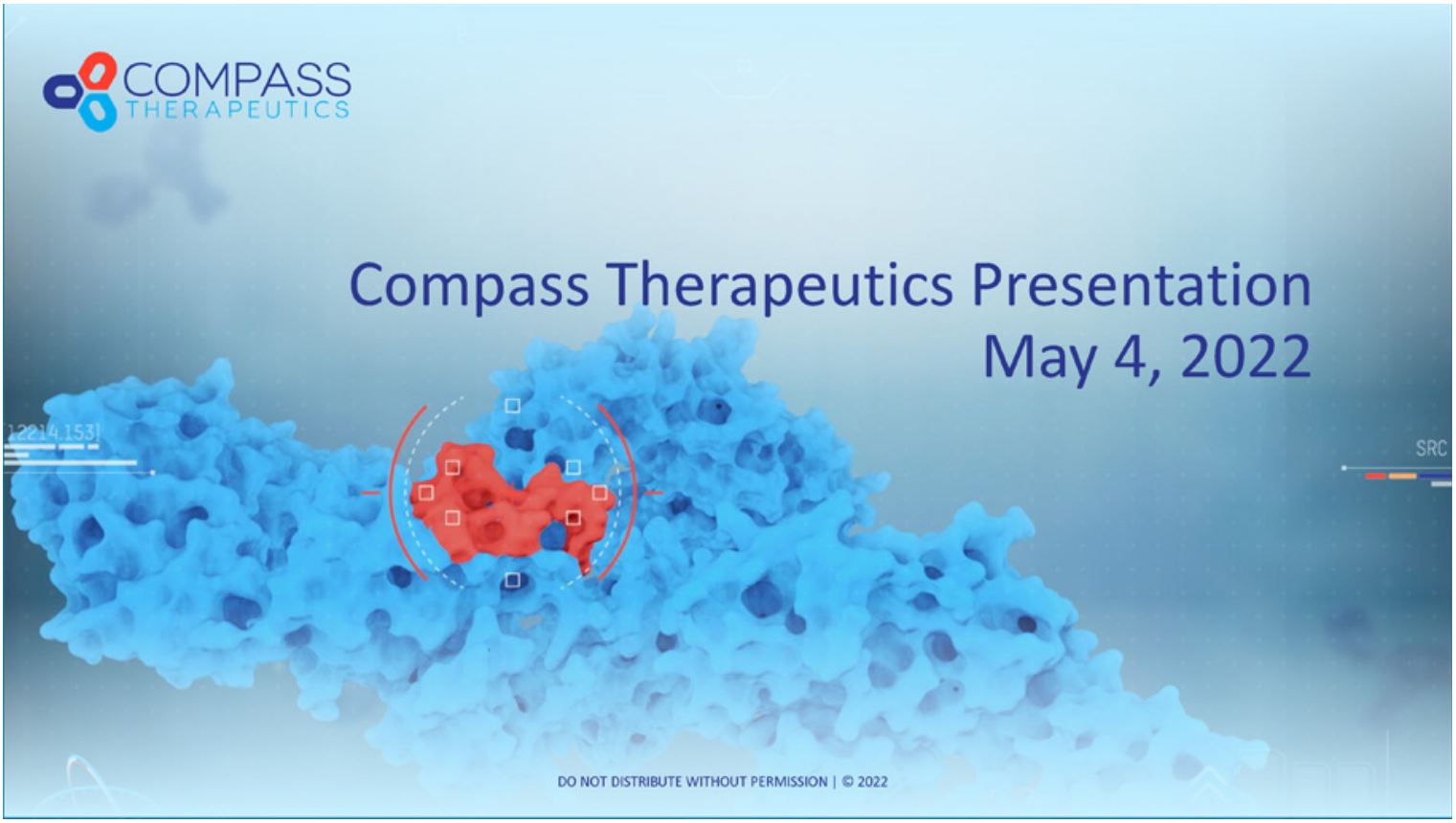
COMPASS
THERAPEUTICS
Compass Therapeutics Presentation
May 4, 2022
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DISCLAIMER

This presentation has been prepared by Compass Therapeutics, Inc. ("we," "us," "our," or the "Company"). Statements contained herein are made as of the date of this presentation unless stated otherwise, and this presentation shall not under any circumstances create an implication that the information contained herein is correct as of any time after such date or that information will be updated or revised to reflect information that subsequently becomes available or changes occurring after the date hereof.

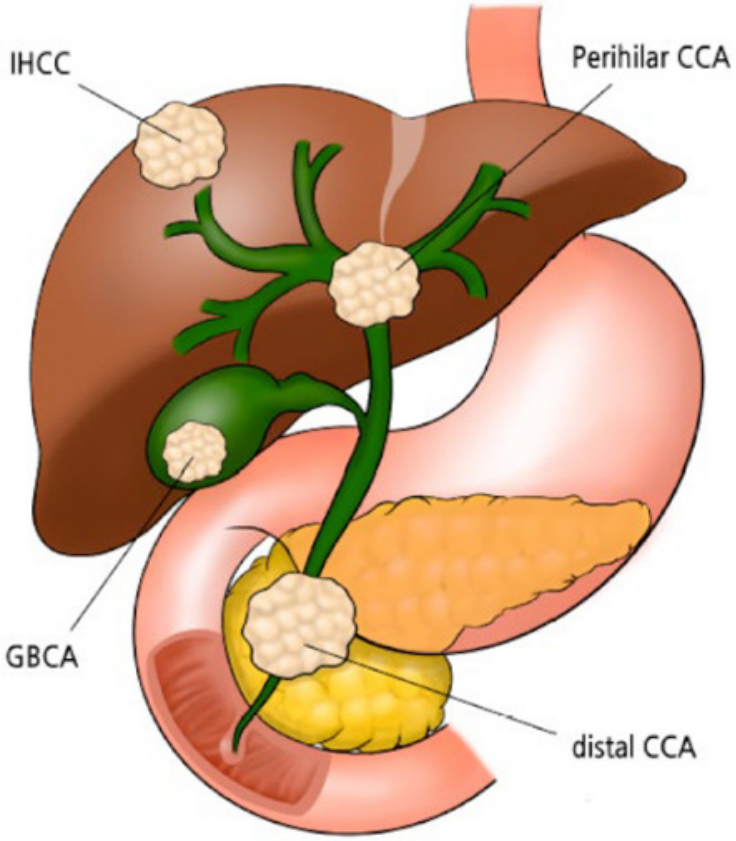
This presentation includes forward-looking statements regarding our drug candidates, the timing of the start and conclusion of ongoing or planned clinical trials, including the potential impact of the ongoing COVID-19 pandemic on our business, the timing and outcome of regulatory decisions, future availability of clinical trial data, our collaborations for our product candidates and the maintenance of those collaborations, business and results from operations, and other matters. Actual results could differ materially from those contained in any forward-looking statements as a result of various factors, including without limitation: that our drug candidates do not advance in development or result in approved products on a timely or cost effective basis or at all; the cost, timing and results of clinical trials; our ability to manage and mitigate the impact of the ongoing COVID-19 pandemic; that many drug candidates that have completed early-stage trials do not become approved drugs on a timely or cost effective basis or at all; the ability to enroll patients in clinical trials; possible safety and efficacy concerns; regulatory developments; our ability to protect our intellectual property rights, and unexpected costs, charges or expenses that reduce cash runway. Our pipeline programs are in various stages of pre-clinical and clinical development, and the process by which such pre-clinical or clinical therapeutic candidates could potentially lead to an approved therapeutic is long and subject to significant risks and uncertainties. These and other risks and uncertainties that we face are described in our most recent Annual Report on Form 10-K, and in other filings that we make with the Securities and Exchange Commission from time to time. We undertake no obligation to update forward-looking statements as a result of new information or otherwise.

This presentation also contains estimates and other statistical data made by independent parties and by us relating to market size and growth and other data about our industry. This data involves a number of assumptions and limitations, and you are cautioned not to give undue weight to such estimates. In addition, projections, assumptions, and estimates of our future performance and the future performance of the markets in which we operate are necessarily subject to a high degree of uncertainty and risk.

This presentation concerns drugs that are under clinical investigation, and which have not yet been approved for marketing by the U.S. Food and Drug Administration (FDA). It is currently limited by Federal law to investigational use, and no representation is made as to its safety or effectiveness for the purposes for which it is being investigated.

Advanced Biliary Track Cancers (BTC)

Richard M. Goldberg MD
Professor and Director Emeritus
The West Virginia University Cancer Institute



Subtypes of BTC

- Gallbladder cancer (GBCA),
- Cholangiocarcinoma
  - intrahepatic [IHCC],
  - Perihilar [PCCA],
  - Extrahepatic [ECC]
- Ampulla of Vater cancer (AVC)

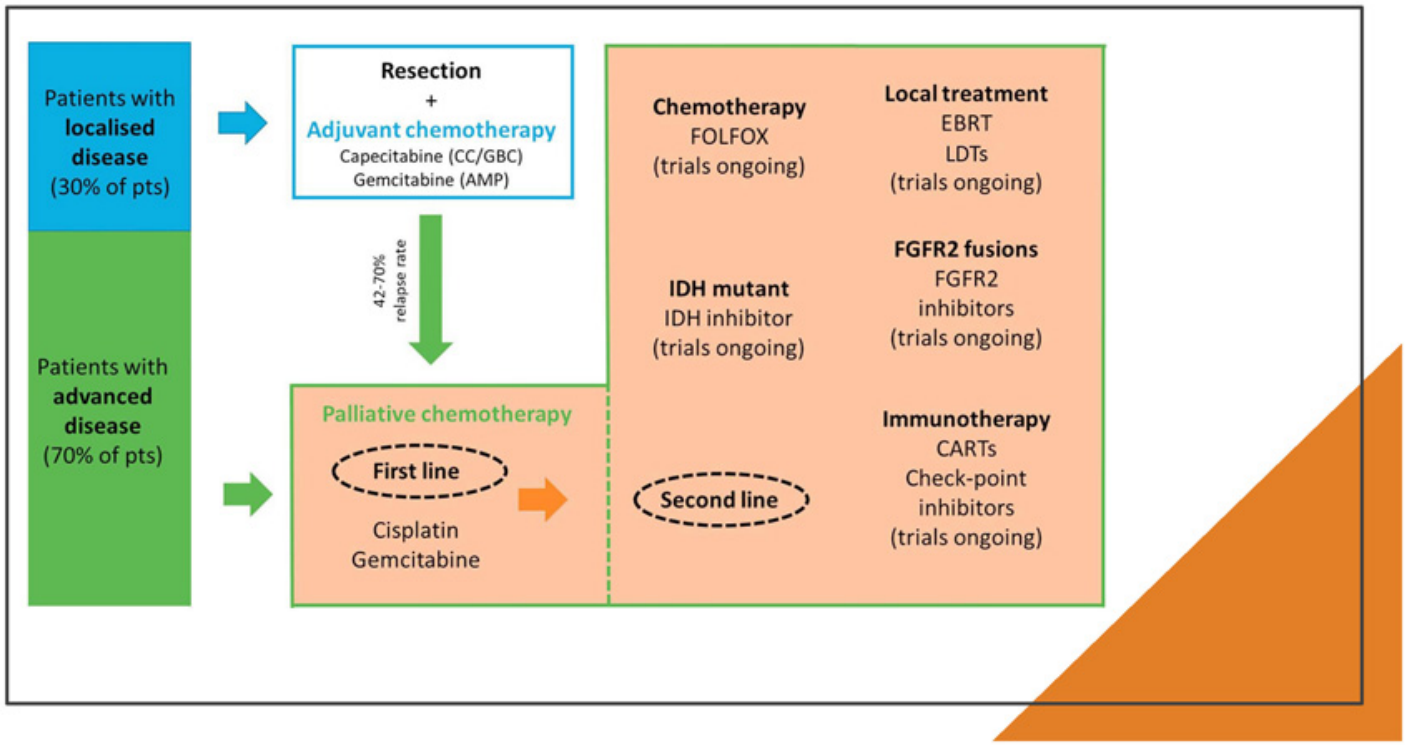
BTC Epidemiology, 2021

	US	Worldwide
Cases	18,300	210,887
Deaths	11,310 (62%)	173,974 (84%)

- Lifetime risk: Highest in Chile and Asian countries
- 76% Increase in incidence over last 2 decades
- Risk factors: Inherited, liver flukes, chronic liver or biliary inflammation, obesity, tobacco use

Presentation

- Jaundice, yellow eyes, itching, dark urine, light colored stool
- Loss of appetite and weight loss
- Abdominal pain
- Night sweats
- Found incidentally at the time of gall bladder surgery


Patients with localised disease (30% of pts)
Patients with advanced disease (70% of pts)
Resection
+
Adjuvant chemotherapy
Capecitabine (CC/GBC)
Gemcitabine (AMP)
42-70% relapse rate
Palliative chemotherapy
First line
Cisplatin
Gemcitabine
Second line
Chemotherapy
FOLFOX
(trials ongoing)
IDH mutant
IDH inhibitor
(trials ongoing)
Local treatment
EBRT
LDTs
(trials ongoing)
FGFR2 fusions
FGFR2
inhibitors
(trials ongoing)
Immunotherapy
CARTs
Check-point
inhibitors
(trials ongoing)

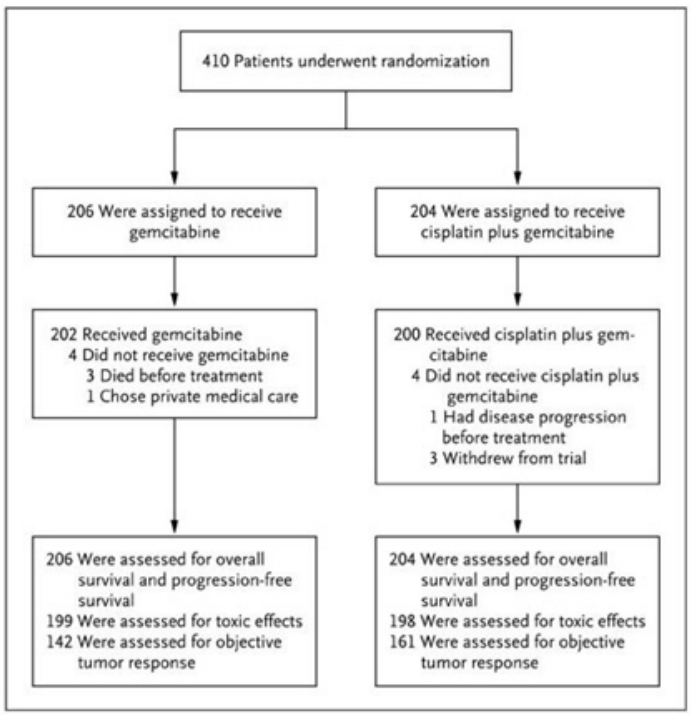
Original Article

Cisplatin plus Gemcitabine versus Gemcitabine for Biliary Tract Cancer

Juan Valle, M.D., Harpreet Wasan, M.D., Daniel H. Palmer, M.D., Ph.D., David Cunningham, M.D., Alan Anthoney, M.D., Anthony Maraveyas, M.D., Ph.D., Srinivasan Madhusudan, M.D., Ph.D., Tim Iveson, M.D., Sharon Hughes, B.Sc., Stephen P. Pereira, M.D., Ph.D., Michael Roughton, M.Sc., John Bridgewater, M.D., Ph.D., for the ABC-02 Trial Investigators

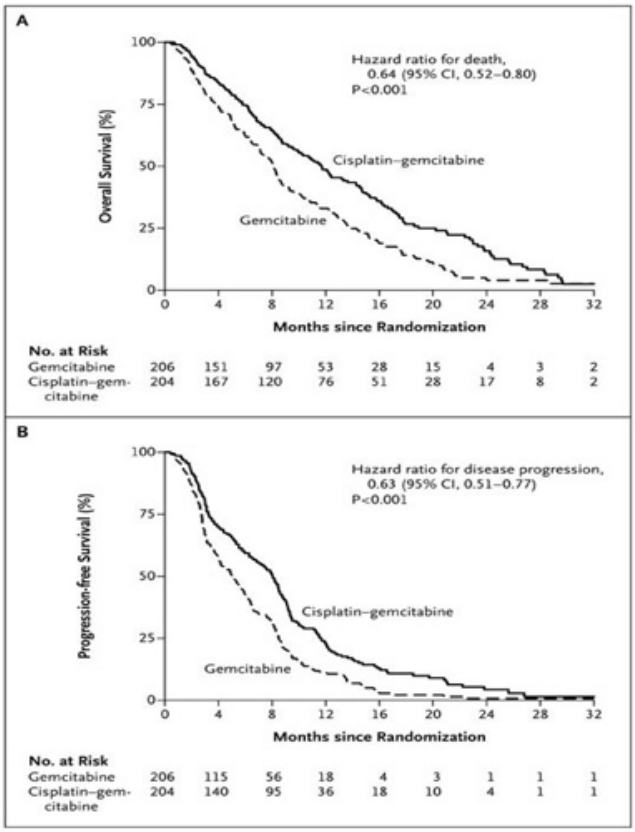
N Engl J Med
Volume 362(14):1273-1281
April 8, 2010

Patient Enrollment, Randomization, and Treatment



- The ABC-02 Study
- Published 2010
- Determined the current standard of care for first line treatment of advanced CCA

Valle J et al. N Engl J Med 2010;362:1273-1281



ABC-02 Outcomes

Median Overall Survival

Gem + Cis: 11.7 mos

Gem: 8.1 mos

Median Progression Free Survival

Gem + Cis: 8.0 mos

Gem: 5.0 mos

The NEW ENGLAND JOURNAL of MEDICINE

Valle J et al. N Engl J Med 2010;362:1273-1281

ASCO Gastrointestinal Cancers Symposium

A Phase 3 randomized, double-blind, placebo-controlled study of durvalumab in combination with gemcitabine plus cisplatin in patients with advanced biliary tract cancer: TOPAZ-1

Do-Youn Oh,[1] Aiwu Ruth He,[2] Shukui Qin,[3] Li-Tzong Chen,[4] Takuji Okusaka,[5] Arndt Vogel,[6] Jin Won Kim,[7] Thatthan Suksomboon charoen,[8] Myung Ah Lee,[9] Masayuki Kitano,[10] Howard Burris,[11] Mohamed Bouattour,[12] Suebpong Tanasanvimon,[13] Renata Zaucha,[14] Antonio Avallone,[15] Juan Cundom,[16] Nana Rokutanda,[17] Julia Xiong,[17] Gordon Cohen,[17] Juan W. Valle[18]

[1]Division of Medical Oncology, Department of Internal Medicine, Seoul National University Hospital, Cancer Research Institute, Seoul National University College of Medicine, Seoul, South Korea; [2]Division of Hematology and Oncology, Lombardi Comprehensive Cancer Center, Georgetown University, Washington, DC, USA; [3]Cancer Center of Nanjing, Jinling Hospital, Nanjing, China; [4]Kaohsiung Medical University Hospital, Kaohsiung Medical University, Kaohsiung, and National Institute of Cancer Research, Tainan, and National Cheng Kung University Hospital, National Cheng Kung University, Tainan, Taiwan; [5]Department of Hepatobiliary and Pancreatic Oncology, National Cancer Center Hospital, Tokyo, Japan; [6]Gastroenterology, Hepatology and Endocrinology, Hannover Medical School, Hannover, Germany; [7]Division of Medical Oncology, Department of Internal Medicine, Seoul National University Bundang Hospital, Seoul, South Korea; [8]Department of Internal Medicine, Faculty of Medicine, Chiang Mai University, Chiang Mai, Thailand; [9]Division of Medical Oncology, Department of Internal Medicine, Seoul St. Mary's Hospital, College of Medicine, The Catholic University, Seoul, South Korea; [10]Second Department of Internal Medicine, Wakayama Medical University, Wakayama, Japan; [11]Sarah Cannon Research Institute, Tennessee Oncology, Nashville, TN, USA; [12]Department of Liver Cancer Unit, AP-HP Hôpital Beaujon, Paris, France; [13]Department of Internal Medicine, Faculty of Medicine, Chulalongkorn University, King Chulalongkorn Memorial Hospital, Bangkok, Thailand; [14]Department of Oncology and Radiotherapy, Medical University of Gdańsk, Gdańsk, Poland; [15]Istituto Nazionale Tumori-IRCCS Fondazione G. Pascale, Naples, Italy; [16]Instituto de Investigaciones Metabólicas, Buenos Aires, Argentina; [17]AstraZeneca, Gaithersburg, MD, USA; [18]Division of Cancer Sciences, The University of Manchester and The Christie NHS Foundation Trust, Manchester, UK

PRESENTED BY: Do-Youn Oh, MD, PhD

TOPAZ-1 study design

TOPAZ-1 is a double-blind, multicenter, global, Phase 3 study

Key eligibility
- Locally advanced or metastatic BTC (ICC, ECC, GBC)
- Previously untreated if unresectable or metastatic at initial diagnosis
- Recurrent disease >6 months after curative surgery or adjuvant therapy
- ECOG PS 0 or 1

Stratification factors
- Disease status
  - (initially unresectable versus recurrent)
- Primary tumor location
  - (ICC versus ECC versus GBC)

R (1:1)
N=685

- Durvalumab 1500 mg Q3W + GemCis (up to 8 cycles) → Durvalumab 1500 mg Q4W until PD
- Placebo Q3W + GemCis (up to 8 cycles) → Placebo Q4W until PD

Primary objective
- Overall survival

Secondary objectives
- Progression-free survival
- Objective response rate
- Duration of response
- Efficacy by PD-L1 status
- Safety

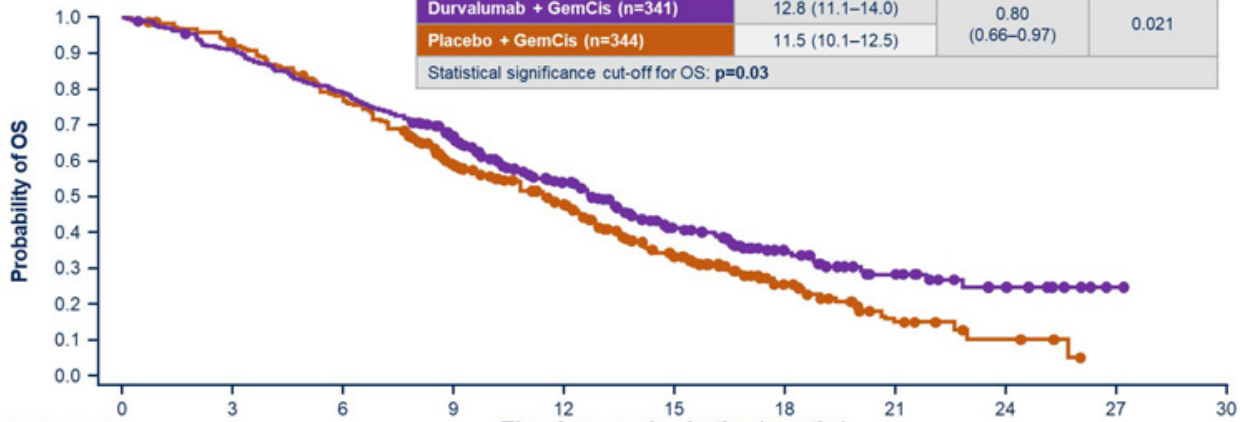
GemCis treatment: gemcitabine 1000 mg/m2 and cisplatin 25 mg/m2 on Days 1 and 8 Q3W administered for up to 8 cycles.

BTC, biliary tract cancer; ECC, extrahepatic cholangiocarcinoma; ECOG, Eastern Cooperative Oncology Group; GBC, gallbladder cancer; GemCis, gemcitabine and cisplatin; ICC; intrahepatic cholangiocarcinoma; PD, progressive disease; PD-L1, programmed cell death ligand-1; PS, performance status; QnW, every n weeks; R, randomization.

PRESENTED BY: Do-Youn Oh, MD, PhD

Primary endpoint: OS

	Median OS (95% CI), months	Hazard ratio (95% CI)	p-value
Durvalumab + GemCis (n=341)	12.8 (11.1–14.0)	0.80 (0.66–0.97)	0.021
Placebo + GemCis (n=344)	11.5 (10.1–12.5)		
Statistical significance cut-off for OS: **p=0.03**			

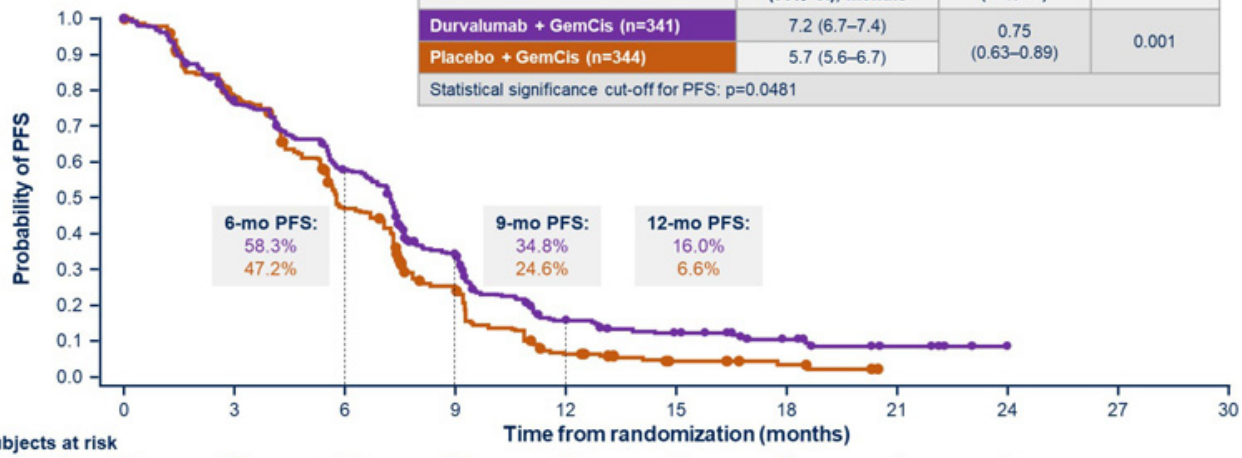


Number of subjects at risk										
Durvalumab + GemCis	341	309	268	208	135	79	49	24	9	1
Placebo + GemCis	344	317	261	183	125	65	29	10	4	0

Median duration of follow-up (95% CI) was 16.8 (14.8–17.7) months with durvalumab + GemCis and 15.9 (14.9–16.9) months with placebo + GemCis.
CI, confidence interval; GemCis, gemcitabine and cisplatin; HR, hazard ratio; mo, month; OS, overall survival.

Secondary endpoint: PFS

	Median PFS (95% CI), months	Hazard ratio (95% CI)	p-value
Durvalumab + GemCis (n=341)	7.2 (6.7–7.4)	0.75 (0.63–0.89)	0.001
Placebo + GemCis (n=344)	5.7 (5.6–6.7)		
Statistical significance cut-off for PFS: p=0.0481			

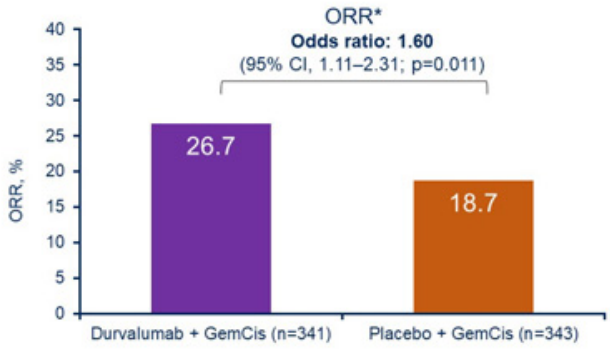


Number of subjects at risk									
Durvalumab + GemCis	341	258	189	100	38	25	15	5	0
Placebo + GemCis	344	255	149	71	17	7	4	0	0

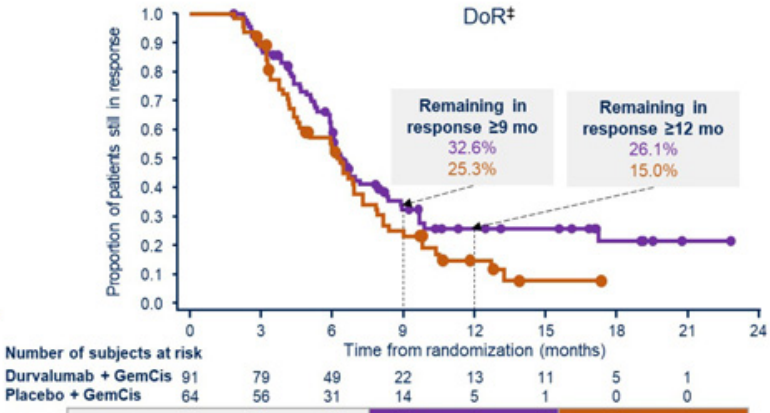
Median duration of follow-up (95% CI) was 9.2 (0.0–24.0) months with durvalumab + GemCis and 6.9 (0.0–20.4) months with placebo + GemCis.
CI, confidence interval; GemCis, gemcitabine and cisplatin; PFS, progression-free survival.

PRESENTED BY: Do-Youn Oh, MD, PhD

Secondary endpoint: Tumor response



	Durvalumab + GemCis (n=341)	Placebo + GemCis (n=343)
ORR, n (%)	91 (26.7)	64 (18.7)
CR, n (%)	7 (2.1)	2 (0.6)
PR, n (%)	84 (24.6)	62 (18.1)
DCR, n (%)†	291 (85.3)	284 (82.6)



	Durvalumab + GemCis (n=91)	Placebo + GemCis (n=64)
Median DoR (quartile 1–3), months	6.4 (4.6–17.2)	6.2 (3.8–9.0)
Median time to response (quartile 1–3), months	1.6 (1.3–3.0)	2.7 (1.4–4.1)

*By investigator assessments using RECIST v1.1 based on patients in the final analysis set who had measurable disease at baseline. †Analysis of DCR was based on all patients in the full analysis set. ‡Analysis of DoR was based on patients in the full analysis set who had an objective response and measurable disease at baseline.

CI, confidence interval; CR, complete response; DCR, disease control rate; DoR, duration of response; GemCis, gemcitabine and cisplatin; mo, month; ORR, objective response rate; PR, partial response.

Survival after 1st Line Therapy

- In ABC-02 and Topaz-1 median survival post progression was about 3 months

Unmet Need for Second Line Therapies for Cholangiocarcinoma

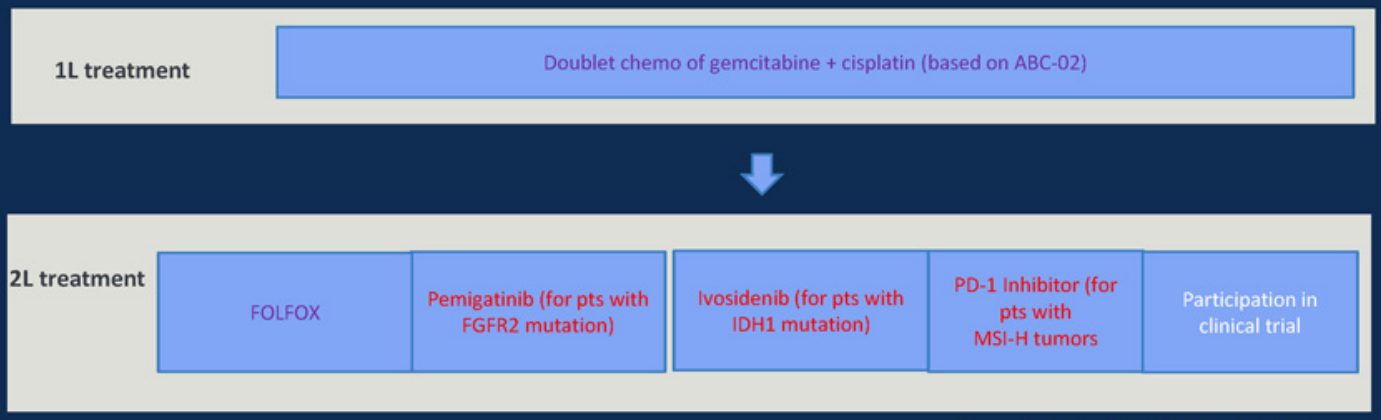
- Historical data of outcomes in 2L chemo-based therapies after gemcitabine/plat-based combo therapy failure result in dismal outcomes with limited progression free survival:

Author	Treatment	Phase	No. of patients	PFS (mo)	OS (mo)	ORR (%)
He *et al.*	FOLFOX-4	II	37	3.1	6.9	21.6
Paule *et al.*	Gem/oxa + cetuximab	II	9	4.0	7.0	11.0
Sasaki *et al.*	Irinotecan	II	13	1.8	6.7	7.7
Suzuki *et al.*	S-1	II	40	2.5	6.8	7.5
Fornaro *et al.*	Gem combination	Retrospective	174	3.0	6.6	3.4

Source: Ahn and Bekaii-Saab 2017*

*OS (mo) reported from He *et al.*, and ORR (%) reported from Paule *et al.* and Fornaro *et al.* are corrected.

Treatment Paradigm for BTC



Source: Adapted from NCCN guidelines

Targeted Therapy in BTC

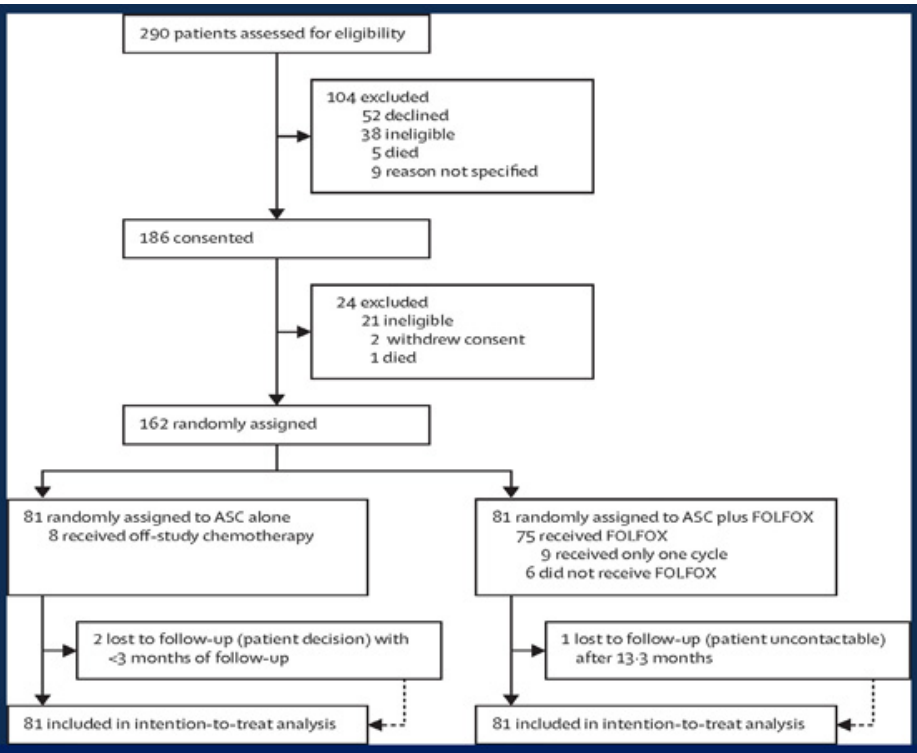
- IDH-1 9.3%
- Microsatellite Instability (MSI-H) 4.3%
- NTRK fusion 0.75%
- FGFR fusion <0.50%

Eligible for current targeted therapies ~14%

Second-line FOLFOX chemotherapy versus active symptom control for advanced biliary tract cancer (ABC-06): a phase 3, open-label, randomised, controlled trial

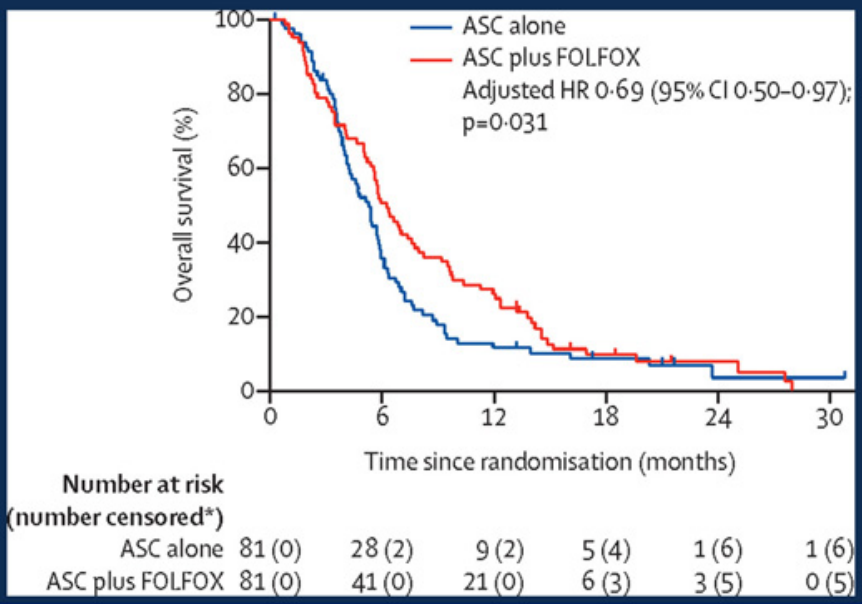
Angela Lamarca, PhD, Prof Daniel H Palmer, PhD, Harpreet Singh Wasan, MD, Paul J Ross, PhD, Yuk Ting Ma, PhD, Arvind Arora, MD, Stephen Falk, MD, Roopinder Gillmore, PhD, Prof Jonathan Wadsley, MA, Kinnari Patel, PhD, Alan Anthoney, MD, Prof Anthony Maraveyas, PhD, Prof Tim Iveson, MD, Justin S Waters, PhD, Claire Hobbs, MSc, Safia Barber, BSc, W David Ryder, Grad.IS, Prof John Ramage, MD, Prof Linda M Davies, MSc, Prof John A Bridgewater, PhD, Prof Juan W Valle, MD

The Lancet Oncology
Volume 22 Issue 5 Pages 690-701 (May 2021)
DOI: 10.1016/S1470-2045(21)00027-9



ABC-06 Trial Schema

Median Survival



Number at risk (number censored*)						
ASC alone	81 (0)	28 (2)	9 (2)	5 (4)	1 (6)	1 (6)
ASC plus FOLFOX	81 (0)	41 (0)	21 (0)	6 (3)	3 (5)	0 (5)

Median Overall Survival
ASC + FOLFOX: 6.2 mos
ASC: 5.3 mos

Patient selection explains
The longer OS

Chemotherapy in BTC

- NCCN Guidelines
  - First Line: Gem/Cis doublet
    - 26.1% ORR
    - 3.6 month increase in median OS vs. Gem alone (HR=0.64)
    - Valle, et al. (2010)
  - Second-line: FOLFOX
    - 5% ORR
    - 0.9 month increase in median OS vs. supportive care (HR=0.69)
    - Lamarca, et al. (2021)
- Taxanes
  - Neither paclitaxel nor docetaxel are recommended by NCCN
  - Paclitaxel: No responses in a 15 patient first-line study [Jones, et al. (1996)]
  - Docetaxel: No responses in a 17 patient first-and second-line study [Pazdur, et al. (1999)]
  - Nab-Paclitaxel is under investigation, but preferred first line regimen is Gem/Cis per NCCN Guidelines

There clearly are unmet needs in managing BTC

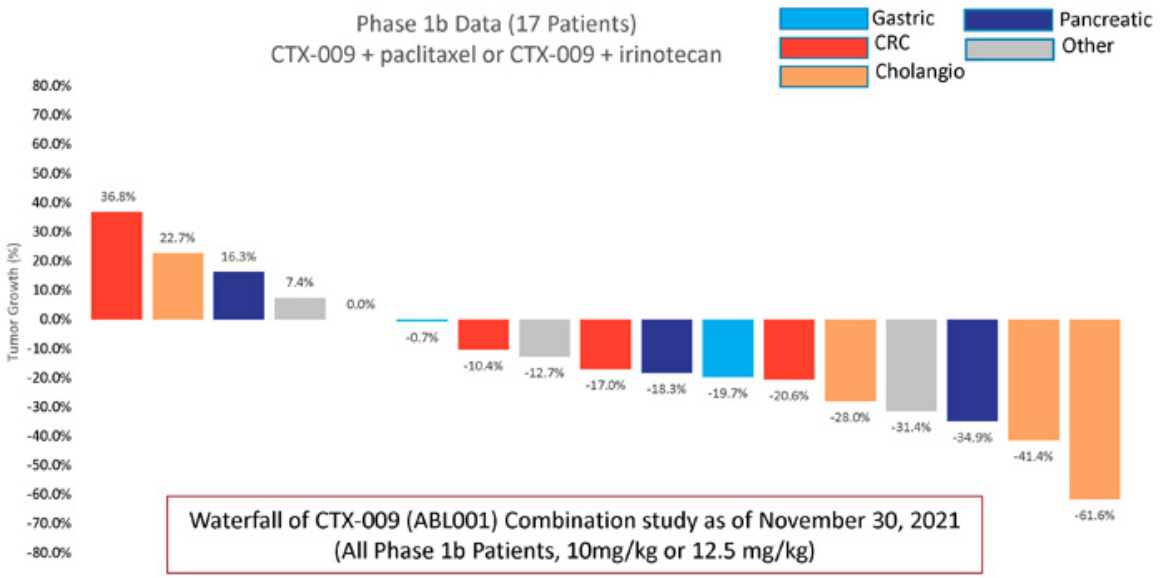
CTX-009 Update: Executive Summary

- **Phase 1:** 8 PRs in patients with advanced cancers both as a monotherapy and in combination with chemotherapy with an acceptable safety profile
- **Phase 2 (Stage 1):** CTX-009 in combination with paclitaxel in patients with BTC is ongoing
  - Interim update (data as of April 14, 2022)
  - 24 patients with BTC have been enrolled and dosed
  - As of 4/14; **10 PRs** for a **42% ORR** (10/24)
  - Responses observed across all 4 BTC subtypes
  - Median time on study is ~6 months
  - Adverse event profile similar to Phase 1 studies
- **Phase 2 (Stage 2):** Plan to initiate Stage 2 in the US in early Q3

Phase 1b Combination Study with Chemo (N=17)

- 4 arms:
  - 10.0 and 12.5 mg/kg CTX-009
  - Irinotecan or paclitaxel
- Activity:
  - 4 PRs, 3 confirmed, including a confirmed PR in pancreatic cancer
  - 9 Stable Disease (SD)
- Overall Response Rate (ORR): 24%
- Clinical Benefit Rate (CBR): 77% (PR + SD)

Phase 1b Combination Study Waterfall Plot



Waterfall of CTX-009 (ABL001) Combination study as of November 30, 2021
(All Phase 1b Patients, 10mg/kg or 12.5 mg/kg)

Phase 1b Combination Safety Data

Drug-related adverse events observed in > 1 patient	Total (n)	Total (%)	Grade 3 (n)	Grade 3 (%)
Hypertension*	5	29%	4	24%
Pulmonary hypertension (all grade 1)	5	29%	0	0%
Neutropenia**	4	24%	3	18%
Anemia**	3	18%	3	18%
Thrombocytopenia**	2	12%	2	12%
Proteinuria	3	18%	0	0%
Dyspnea	3	18%	0	0%
Fatigue	3	18%	0	0%
Anorexia	3	18%	0	0%
Gingival edema (mucositis)	2	12%	0	0%
Nausea	2	12%	1	6%
Anal hemorrhage	2	12%	0	0%

*In clinical trials of bevacizumab, incidence of Grade 3-4 hypertension ranged between 5%-18% (Avastin label). It is typically managed by anti-hypertensive drugs.
**Labeled Grade 3/4 cytopenia events for concomitant chemotherapy agent:
Irinotecan: 31.4% neutropenia, 4.5% anemia, 1.7% thrombocytopenia
Paclitaxel: 52% neutropenia, 16% anemia, 7% thrombocytopenia

Phase 2 Combination Study: CTX-009 Plus Paclitaxel

Phase 2 Study Design:

- Patients with biliary tract cancers after one or two prior therapies
- CTX-009 at 10 mg/kg biweekly plus paclitaxel 80 mg/m^2 weekly 3 of 4 weeks
- Simon 2 Stage adaptive design:
  - Stage 1: 21 patients → ORR
  - Stage 2: if 3 or more PRs → Stage 2: 45 additional patients

Phase 2 Combination Study Status

- November 1, 2021 (previously reported interim data)
  - 24 patients had been enrolled; 17 patients evaluable for response
  - Efficacy data: **5 PRs; 29% ORR**

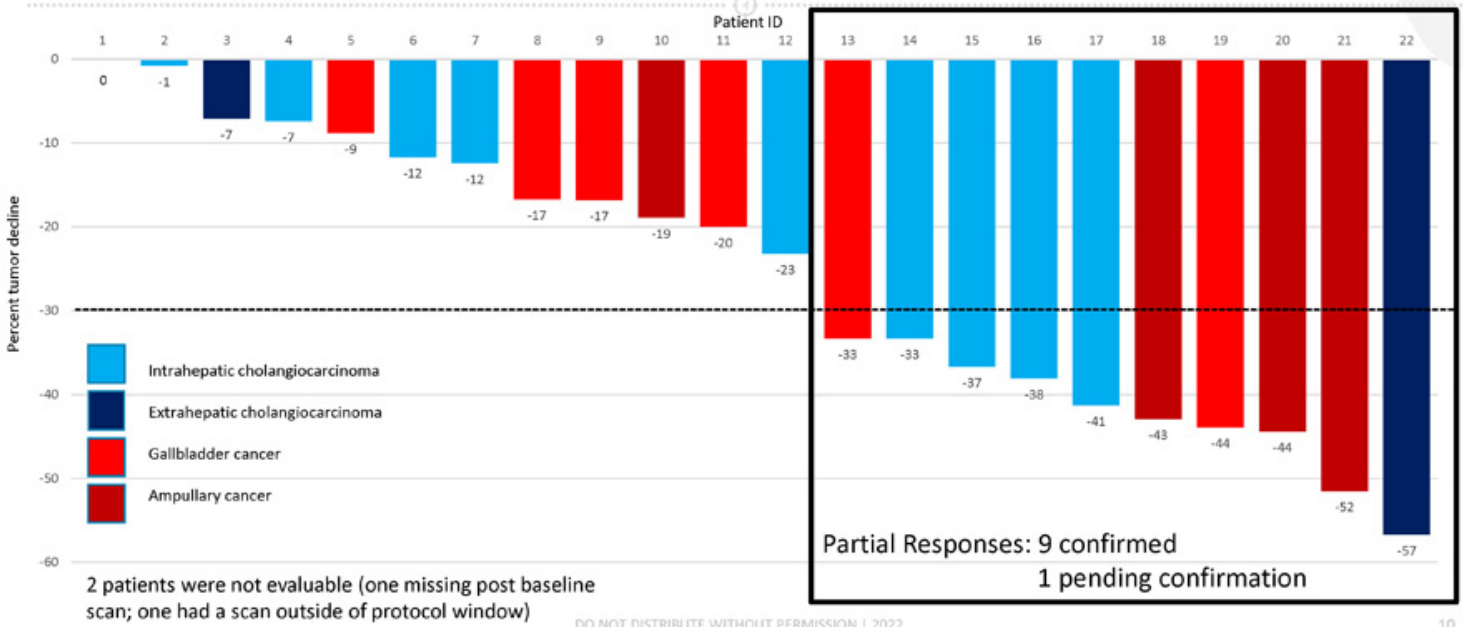
- April 14, 2022 (interim data)
  - 24 patients enrolled; 22 patients evaluable for response
  - Efficacy data: **10 PRs; 42% ORR**
  - Plan to proceed to Stage 2 in the US and Korea

Phase 2: Patient Baseline and Demographics

	24 Total Patients
Age	
Median (years)	61.5
Gender, n(%)	
Male	14 (58%)
Female	10 (42%)
ECOG performance status, n(%)	
0	13 (54%)
1	11 (46%)

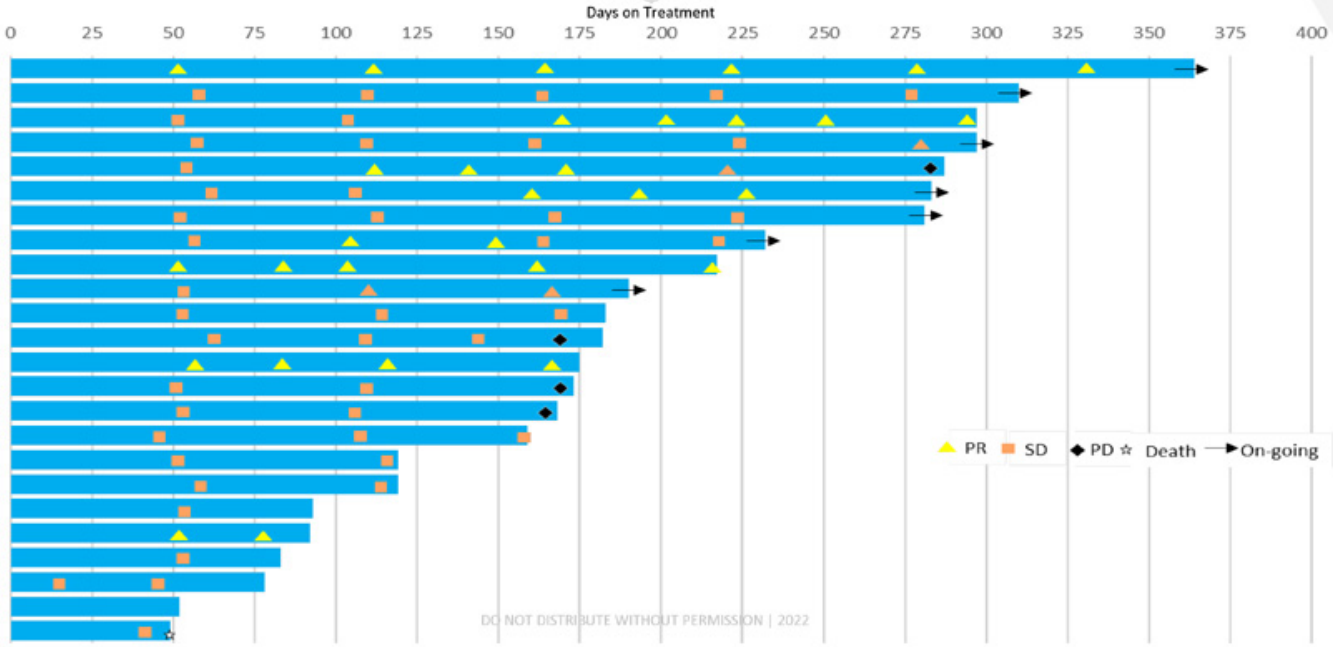
	24 Total Patients
Prior systemic therapies, n(%)	
1	11 (46%)
2	13 (54%)
Prior Gem/Cis regimen	23 (96%)
BTC subtype, n (%)	
Intrahepatic cholangiocarcinoma	9 (38%)
Extrahepatic cholangiocarcinoma	3 (13%)
Gallbladder cancer	7 (29%)
Ampullary cancer	5 (21%)

Phase 2 Waterfall: ORR = 42%; CBR = 92%



2 patients were not evaluable (one missing post baseline scan; one had a scan outside of protocol window)

Swimmer Plot: Median Time on Study ~ 6 Months



Safety Data: Treatment-Related ≥ Grade 3 Adverse Events

Phase 2 BTC study of CTX-009 plus paclitaxel

Event	24 total Patients N (%)
Neutropenia	12 (50.0%)
Hypertension	4 (16.7%)
Anemia	3 (12.5%)
Thrombocytopenia	2 (8.3%)
Additional events observed in 1 patient: Intestinal perforation, Asthenia, Catheter site hemorrhage, Fatigue, Cholangitis, Abdominal infection, Bacterial gastritis, Pneumonia (fatal), Post-procedure hemorrhage, Decreased appetite, Cerebral hemorrhage, Proteinuria, Embolism	

Avastin and paclitaxel label information

Event	Avastin (label)	Paclitaxel (label)
Neutropenia		52%
Hypertension	5-18%	
Anemia		16%
Thrombocytopenia		7%
	Additional events: GI perforation, wound healing complications, Proteinuria, hemorrhage	Additional events: Hypersensitivity reactions, infections, bleeding, neuropathy

CTX-009 Next Steps

- Initiate Stage 2 of the Phase 2 BTC study in the US in early Q3
- Initiate Phase 2/3 study in patients with colorectal cancer in the third line setting in the US in Q4 2022
- Initiate Phase 2 study in patients with advanced ovarian cancer in the US in Q1 2023
- Continue to evaluate additional indications for CTX-009 both as a monotherapy and in combination with chemotherapy

CTX-009 Interim Phase 2 Study Summary

- 24 patients with BTC have been enrolled and dosed
- 10 partial responses (PRs) for a **42% ORR** in patients treated in the second- and third-line settings (54% of patient were treated in the 3rd line setting)
- Other regimens in BTC:
  - FOLFOX (NCCN guidelines): 5% ORR in the second-line setting
  - TOPAZ-1 (Phase 3 development): 26.7% ORR for Gem/Cis/Durvalumab (anti-PD-L1) in the first-line setting
- Median time on study approximately 6 months, with 7 patients ongoing
- Adverse event profile similar to Phase 1