

FOR FURTHER INFORMATION CONTACT:

Inquiries related to this license opportunity should be directed to: Michael Pollack, Ph.D., Unit Supervisor, NCI, Technology Transfer Center, Email: PollackM@mail.nih.gov or Phone: 240–276–5519.

SUPPLEMENTARY INFORMATION: Liver cancer is the sixth most common and the third leading cause of cancer death worldwide. The most common liver cancer in adults is hepatocellular carcinoma (HCC), an aggressive malignancy with an increasing global incidence and mortality rate. The current methods for early detection, surveillance, and treatment are suboptimal. This is due to complex etiologies, demonstrating a need for more effective treatments.

Previously, NIH investigators identified a novel viral peptide antigen known as CE1. CE1 belongs to the rhinovirus and enterovirus families (NIH Ref: E–023–2024) producing a dominant humoral response associated with reduced incidence and mortality of HCC. Through phage display from a human single-chain fragment variable (scFv) phage library, NCI inventors isolated two human antibodies (B9 and B10) against the viral peptide, CE1. Human anti-CE1 B9 and B10 antibodies were constructed. These antibodies showed specific binding to liver cancer cell lines and clinical tumor tissues. They inhibited HCC tumor growth via inducing NK cell-mediated antibody-dependent cellular cytotoxicity *in vitro* and *in vivo*. These anti-CE1 antibodies have the potential as liver cancer therapeutics, either on their own or as the targeting domain of an immunoconjugate.

“This Notice is in accordance with 37 CFR 404.4 Authority to grant licenses.”

NIH Reference Number: E–021–2025.

Related Technologies: E–023–2024.

Product Type: Therapeutic.

Therapeutic Area(s): Gastroenterology | Oncology.

Development Stage: Pre-clinical (*in vivo* validation).

Publications: None.

Patents: Provisional Patent filed on August 8, 2025.

Potential Commercial Applications:

- Development of cancer therapeutics overcoming of PD–1/PD–L1 checkpoint blockade resistance.
- Development of alternative or combination immunotherapies for checkpoint-refractory tumors.
- Preclinical screening of alternative or combination immunotherapies for checkpoint-refractory tumors.
- Evaluation of cancer therapeutic strategies for cancers with defective

antigen processing/presentation or loss of MHC–I expression.

- Companion model for comparing checkpoint-resistant MC38 B2m KO tumors against checkpoint-responsive wild-type MC38 tumors.

Competitive Advantages:

- Uniquely models a clinically relevant checkpoint-resistance mechanism.
- Uses the MC38 colon cancer model, which is well-established and regulatorily de-risked.
- Unique model permitting the interrogation of abrogated response to anti-PD–1 and anti-PD–1 treatment.

Collaboration Opportunity: Licensing.

Dated: August 7, 2026.

Richard U. Rodriguez,

Associate Director, Technology Transfer Center, National Cancer Institute.

[FR Doc. 2026–16442 Filed 8–11–26; 8:45 am]

BILLING CODE 4167–05–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

Prospective Grant of an Exclusive Patent License: Development and Commercialization of BL–760 Dye for Intraoperative Fluorescence Imaging

AGENCY: National Institutes of Health, HHS.

ACTION: Notice.

SUMMARY: The National Cancer Institute, an institute of the National Institutes of Health, Department of Health and Human Services, is contemplating the grant of an Exclusive Patent License to practice the inventions embodied in the patents and patent applications listed in the Supplementary Information section of this notice to OptoSurgical LLC (“OptoSurgical”), a company located in Columbia, Maryland, the United States of America.

DATES: Only written comments and/or applications for a license which are received by the National Cancer Institute’s Technology Transfer Center on or before August 27, 2026 will be considered.

ADDRESSES: Requests for copies of the patent applications, inquiries, and comments relating to the contemplated Exclusive Patent License should be directed to: Lauren Nguyen-Antczak, Ph.D., J.D., Senior Technology Transfer Manager, NCI Technology Transfer Center, Telephone: (301)–624–8752; Email: lauren.nguyen-antczak@nih.gov.

SUPPLEMENTARY INFORMATION:

Intellectual Property

1. PCT Application No. PCT/US2014/064136 filed November 5, 2014, entitled “A New Class of Stable Heptamethine Cyanine Fluorophores And Biomedical Applications Thereof” [HHS Reference No. E–271–2014–0–PCT–01].

2. United States Patent No. 10,280,307 (Application No. 15/524,567) filed May 4, 2017, entitled “A New Class of Stable Heptamethine Cyanine Fluorophores And Biomedical Applications Thereof” [HHS Reference No. E–271–2014–0–US–02].

3. United States Patent No. 10,876,003 (Application No. 16/374,642) filed April 3, 2019, entitled “A New Class of Stable Heptamethine Cyanine Fluorophores And Biomedical Applications Thereof” [HHS Reference No. E–271–2014–0–US–03].

4. PCT Application No. PCT/US2019/018153 filed February 15, 2019, entitled “A New Class of Stable Heptamethine Cyanine Fluorophores And Biomedical Applications Thereof” [HHS Reference No. E–046–2019–0–PCT–01].

5. United States Patent No. 10,961,193 (Application No. 16/969,902) filed August 13, 2020, entitled “A New Class of Stable Heptamethine Cyanine Fluorophores And Biomedical Applications Thereof” [HHS Reference No. E–046–2019–0–US–06].

6. United States Patent No. 11,746,086 (Application No. 17/179,217) filed February 18, 2021, entitled “A New Class of Stable Heptamethine Cyanine Fluorophores And Biomedical Applications Thereof” [HHS Reference No. E–046–2019–0–US–07].

7. United States Patent Application No. 18/520,027 filed November 27, 2023, entitled “A New Class of Stable Heptamethine Cyanine Fluorophores And Biomedical Applications Thereof” [HHS Reference No. E–046–2019–1–US–01].

8. PCT Application No. PCT/US2019/018057 filed February 14, 2019, entitled “Heptamethine Cyanines For Use As Fluorescent Markers Of The Biliary And Renal Systems” [HHS Reference No. E–036–2018–0–PCT–01].

9. United States Patent Application No. 18/358,068 filed July 25, 2023, entitled “Heptamethine Cyanines For Use As Fluorescent Markers Of The Biliary And Renal Systems” [HHS Reference No. E–036–2018–0–US–03].

The patent rights in these inventions have been assigned to the Government of the United States of America.

The prospective exclusive license territory may be the “United States,” and the field of use may be limited to the following:

“Development, manufacture and commercialization of BL–760 dye as

disclosed and claimed in the Licensed Patent Rights for Intraoperative fluorescence imaging to visualize the bile duct and small biliary structures, including gallbladder, during hepatopancreato-biliary surgery in humans.”

The E-271-2014-0 and E-046-2019-0 patent families are primarily directed to a new class of stable heptamethine cyanine fluorophores and biomedical applications thereof, including near-infrared fluorescent contrast agents for intraoperative fluorescence imaging. The E-036-2018-0 patent family is primarily directed to heptamethine cyanines for use as fluorescent markers of the biliary and renal systems, including methods of intraoperative visualization of biliary structures using such agents.

The prospective exclusive license will be royalty bearing, and the prospective exclusive license may be granted unless within fifteen (15) days from the date of this published notice, the National Cancer Institute receives written evidence and argument that establishes that the grant of the license would not be consistent with the requirements of 35 U.S.C. 209 and 37 CFR part 404.

Complete applications for a license that are timely filed in response to this notice will be treated as objections to the grant of the contemplated exclusive patent license. In response to this Notice, the public may file comments or objections. Comments and objections, other than those in the form of a license application, will not be treated confidentially, and may be made publicly available.

License applications submitted in response to this Notice will be presumed to contain business confidential information and any release of information in these license applications will be made only as required and upon a request under the Freedom of Information Act, 5 U.S.C. 552.

“This Notice is made in accordance with 35 U.S.C. 209(e) and 37 CFR 404 Authority to grant exclusive licenses.”

Dated: August 7, 2026.

Richard U. Rodriguez,

Associate Director, Technology Transfer Center, National Cancer Institute.

[FR Doc. 2026-16444 Filed 8-11-26; 8:45 am]

BILLING CODE 4167-05-P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

Government Owned Invention Available for License: MC38 B2m KO Cell Line

AGENCY: National Institutes of Health, HHS.

ACTION: Notice.

SUMMARY: The National Cancer Institute (NCI) seeks licensees for a CRISPR/Cas9-engineered MC38 B2m knockout murine colon cancer cell line that models tumor resistance to PD-1/PD-L1 checkpoint blockade caused by loss of MHC-I antigen presentation. This research tool provides an opportunity to study checkpoint-refractory tumors and evaluate alternative or combination immunotherapy strategies for cancers that evade conventional T-cell-mediated recognition.

FOR FURTHER INFORMATION CONTACT:

Inquiries related to this license opportunity should be directed to: Michael Pollack, Ph.D., Unit Supervisor, NCI, Technology Transfer Center, Email: PollackM@mail.nih.gov or Phone: 240-276-5519.

SUPPLEMENTARY INFORMATION: Immune checkpoint blockade (ICB) is a type of cancer immunotherapy targeting proteins such as programmed cell death protein 1 (PD-1) and programmed death-ligand 1 (PD-L1), which tumors use to reduce T-cell immune activity. These therapies can be effective in some patients. However, ICB targeting PD-1/PD-L1 fails to provide clinical benefit for most cancer patients due to primary resistance. In such cases, tumors either do not respond from the outset or acquire resistance after initially responding. One important cause of resistance is defective antigen presentation, the process by which tumor cells display internal protein fragments on their surface using major histocompatibility complex class I (MHC-I) molecules for cancer-killing T cell recognition.

Researchers at the NCI have developed and validated an MC38 B2m knockout murine colon cancer cell line designed to reproduce a clinically relevant form of immunotherapy resistance. Using CRISPR/Cas9, NCI researchers eliminated B2m, a gene required for tumor cells to display MHC-I antigen-presenting molecules to cancer-killing T cells. The resulting MC38 B2m KO cell line produces tumors that lack this key immune-recognition signal and are resistant to anti-PD-1 and anti-PD-L1 therapy in

syngeneic mouse models. This gives researchers a defined, practical preclinical model to: (1) study tumor immune escape and (2) evaluate new immunotherapy strategies in a checkpoint-resistant setting. This is a superior approach versus models only in tumors that remain responsive to checkpoint blockade. This model uses a clinically relevant checkpoint-resistance mechanism by deleting B2m, which causes loss of MHC-I antigen presentation and prevents conventional CD8+ T-cell recognition. It is based upon the MC38 colon cancer model, which has significant response to PD-1/PD-L1 immune checkpoint blockade before B2m knockout. MC38 B2m KO tumors show abrogated response to anti-PD-1 and anti-PD-L1 treatment *in vivo*, while wild-type MC38 tumors showed significant tumor growth reduction under the same treatment framework.

The Center for Immuno-Oncology seeks licensees interested in using this cell line as a research tool for immuno-oncology studies. This model may be useful for evaluating alternative or combination immunotherapy strategies for checkpoint-refractory tumors, including cancers that evade conventional T-cell-mediated recognition due to defective antigen presentation. It facilitates mechanistic studies of tumor immune escape, CD8+ T-cell recognition, and tumor microenvironment remodeling.

“This Notice is in accordance with 37 CFR 404.4 Authority to grant licenses.”

NIH Reference Number: E-123-2026-0.

Related Technologies: N/A.

Product Type: Research Tool.

Therapeutic Area(s): Oncology.

Development Stage: N/A.

Publications:

- Chariou, PL, et al. Generation of murine tumor models refractory to α PD-1/-L1 therapies due to defects in antigen processing/presentation or IFN γ signaling using CRISPR/Cas9 (PMID: 38427670)

Patents: N/A.

Potential Commercial Applications:

- Development of cancer therapeutics overcoming of PD-1/PD-L1 checkpoint blockade resistance.
- Development of alternative or combination immunotherapies for checkpoint-refractory tumors.
- Pre-clinical screening of alternative or combination immunotherapies for checkpoint-refractory tumors.
- Evaluation of cancer therapeutic strategies for cancers with defective antigen processing/presentation or loss of MHC-I expression.
- Companion model for comparing checkpoint-resistant MC38 B2m KO