



CANCER PREVENTION & RESEARCH
INSTITUTE OF TEXAS

Product Development Research Milestones

Updates and milestones regarding research and development activities at
CPRIT-funded companies as reported in Fiscal Year 2023

For Fiscal Year 2023

AlloVir, Inc., a proprietary platform company developing off-the-shelf VSTs that restore immunity in patients with T cell deficiencies. CPRIT approved a \$6 million Product Development Research grant (DP170043) in August 2017 to help establish the safety and effectiveness of their lead product that treats severe viral infections in cancer patients.

1. Posoleucel is an off-the-shelf virus-specific T-cell product designed to treat or prevent multiple viral infections that are frequently observed in the allogeneic hematopoietic stem cell transplant (allo-HSCT) setting. Results from AlloVir's Phase 2 CHARMS trial show that posoleucel appears safe and effective for treating refractory viral infections occurring after allo-HSCT. The trial included 58 adult (69%) and pediatric (31%) patients, who had received allo-HSCT and had an unresponsive viral infection or were intolerant to standard antiviral therapies. The primary efficacy outcome was antiviral response at 6 weeks after the first dose. At that time, the overall response rate (ORR) was 95%. The ORR was 98% for patients with a single infection and 83% for patients with multiple infections. Researchers found that posoleucel elicited a complete response or partial response in nearly all treated patients. These results were published in *Clinical Cancer Research* on January 17, 2023.

2. AlloVir presented final results from a Phase 2 study of posoleucel, an investigational, allogeneic, off-the-shelf, multi-virus-specific T cell (VST) therapy, being studied for the treatment of BK viremia in adult kidney transplant recipients, on June 4, 2023, at the 2023 American Transplant Congress in San Diego. The results support the safety and antiviral activity of posoleucel in adult kidney transplant recipients with BK virus (BKV) infection. Currently, there are no effective treatment options for BKV infection.

"The patients treated with posoleucel had greater increases in BKV-specific T cells as compared to placebo patients, and these cells persisted through week 24 post-dose, which reinforces posoleucel's mechanism of action...As we continue enrollment in three Phase 3 clinical studies exploring the potential of posoleucel to prevent or treat infections in allo-HCT patients, we are also consulting with key opinion leaders and preparing to meet with the FDA to gain alignment on a Phase 3 clinical study design to evaluate posoleucel's treatment of BKV infection in kidney transplant patients," said Diana Brainard, M.D., CEO.

Allterum Pharmaceuticals, Inc., received a \$2.9 million CPRIT Seed Awards for Product Development Research grant (DP190025) in February 2019 to develop a new drug for the treatment of pediatric T-cell acute lymphoblastic leukemia. In May 2023, CPRIT approved a \$11.7 million CPRIT Product Development grant (DP230071) to advance the 4A10 antibody to an Investigational New Drug filing with the FDA and the first-in-human clinical trial.

In May 2023, Fannin Partners, LLC, received a \$2 million Small Business Innovation Research (SBIR) Phase II grant from the National Cancer Institute (NCI) to advance spin-out Allterum Therapeutics' 4A10 monoclonal antibody for the treatment of acute lymphoblastic leukemia (ALL), the most frequently diagnosed cancer in children. The SBIR grant will help support a Phase I clinical trial to assess the safety and activity of 4A10 as monotherapy. The SBIR Phase II grant from NCI, together with additional fundraising, will advance the 4A10 antibody to an Investigational New Drug (IND) filing and the first-in-human clinical trial.

Aravive, Inc., a late clinical-stage oncology company developing targeted therapeutics to treat metastatic disease, received a \$20 million CPRIT New Company Product Development Award (DP150127) in November 2015 to develop AVB-500, a targeted therapy against acute myeloid lymphoma and certain solid tumor indications including ovarian, pancreatic, and breast cancer.

1. Aravive's CEO Gail McIntyre, Ph.D., and CFO Rudy Howard participated in the H.C. Wainwright 24th Annual Global Investment Conference and the Cantor Fitzgerald Oncology & HemOnc Conference, both held in New York City in September 2022. The company's lead product candidate batiraxcept (formerly AVB-500) is in an active registrational Phase 3 trial in platinum resistant ovarian cancer (NCT04729608), a Phase 1b/2 trial in clear cell renal cell carcinoma (NCT04300140), and a Phase 1b/2 trial in pancreatic adenocarcinoma (NCT04983407). Batiraxcept received Fast Track Designation from the FDA and Orphan Drug Designation from the European Commission in platinum-resistant recurrent ovarian cancer.

2. The majority of patients with kidney cancer develop resistance to frontline treatment. Novel agents are critically needed to improve upon treatment options in the refractory setting. Aravive announced on November 29, 2022, that the U.S. Food and Drug Administration (FDA) has granted Fast Track Designation to the company's lead program, batiraxcept, for treatment of patients with advanced or metastatic clear cell renal cell carcinoma (ccRCC) who have progressed after one or two prior lines of systemic therapy. Fast Track is a process designed to facilitate the development and expedite the review of investigational drugs to treat serious conditions and fill an unmet medical need.

3. Aravive announced on January 4, 2023, the achievement of full enrollment in the registrational Phase 3 trial of batiraxcept plus paclitaxel for platinum-resistant ovarian cancer (PROC). The global, randomized, double-blind, placebo-controlled Phase 3 AXLerate-OC trial evaluates the efficacy and tolerability of 15 mg/kg batiraxcept in combination with weekly paclitaxel versus placebo in combination with weekly paclitaxel. The trial enrolled approximately 350 patients with platinum resistant, high grade serous ovarian cancer who received 1-4 prior lines of therapy at approximately 165 sites in the U.S. and Europe. Overall response rates for current treatments in platinum-resistant ovarian cancer range from 4% to 30%. Aravive scientists anticipate that batiraxcept and paclitaxel could be a better option for patients. "Public reporting of topline data remains on track for mid-2023 and, if successful, are expected to support a Biologics License Application for PROC at the end of 2023," said Scott Dove, Ph.D., Chief Operating Officer of Aravive.
4. Aravive announced on February 28, 2023, that the U.S. Food and Drug Administration (FDA) has granted Orphan Drug Designation (ODD) to batiraxcept for the treatment of pancreatic ductal adenocarcinoma cancer (PDAC). The FDA's Office of Orphan Products Development grants ODD status to a drug or biological product to prevent, diagnose or treat a rare disease or condition affecting fewer than 200,000 people in the U.S. "Receiving Orphan Drug Designation is another important milestone for batiraxcept, and it underscores the significant unmet medical need in patients with pancreatic cancer, typically diagnosed at an incurable advanced stage with a 5-year survival rate of 11%," said Gail McIntyre, Ph.D., DABT, Chief Executive Officer of Aravive. The Phase 1b portion of the trial is ongoing and the dose escalation phase was initiated in February 2023. Preliminary results from the 20mg/kg batiraxcept plus gemcitabine and nab-paclitaxel cohort are anticipated in the second half of 2023.
5. Aravive announced on May 16, 2023, that the Company received guidance from the U.S. Food and Drug Administration (FDA) on a registrational Phase 3 trial design for batiraxcept in clear cell renal cell carcinoma (ccRCC). Topline results are expected in 2025 and, if successful, will support a supplemental biologics license application (sBLA) submission in ccRCC," said CEO Gail McIntyre, Ph.D., DABT. The randomized, double-blind, registrational Phase 3 trial is designed to evaluate efficacy and tolerability of batiraxcept at a dose of 15 mg/kg in combination with cabozantinib compared to cabozantinib alone. The primary endpoint is progression-free survival, and secondary endpoints include overall survival, duration of response, and objective response rates. Batiraxcept was granted Fast Track Designation by the FDA for ccRCC in November 2022.
6. Aravive announced on August 2, 2023, that Phase 3 AXLerate-OC trial evaluating the safety and efficacy of batiraxcept in platinum-resistant ovarian cancer did not meet its primary endpoint of progression-free survival (PFS) in the pre-specified subset of patients naïve to prior bevacizumab treatment. The trial did not show any difference between the two arms in the overall population (which included patients previously treated with bevacizumab). The company will continue to evaluate the complete dataset and determine the next steps in the development of batiraxcept. "We are conducting additional analyses on the AXLerate-OC Phase 3 trial to further evaluate the results of this study and determine the best path forward with our two other planned indications in renal cell carcinoma and pancreatic cancer," said Gail McIntyre, Ph.D., DABT, president and CEO.

Asyilia Therapeutics, Inc., a private development stage biotechnology company committed to transforming scientific advances into safe and effective medicines for cancer and auto-immune diseases, received two CPRIT Seed Awards for Product Development Research grants (DP200033, DP220038) in 2020 and 2022 totaling \$6 million to develop an ADC based on antibody 239-87, that recognizes the cell surface form of HSP70.

In December 2022, Asyilia reported ongoing Mechanism of Action study in the murine 4T1 triple-negative breast cancer model to (i) characterize the effect of ASY-77A treatment on the innate and adaptive immune system in the tumor microenvironment, and (ii) correlate its anti-tumor activity with changes in immune cell numbers/types and their activation states.

Bellicum Pharmaceuticals, Inc. is a clinical stage company focused on developing novel cellular immunotherapies for certain cancers and orphan inherited blood disorders. CPRIT awarded Bellicum two Product Development grants (RP110508, DP160057) in 2011 and 2016 totaling \$22.5 million to develop the CaspaCIDE safety switch technology.

Houston-based Bellicum Pharmaceuticals announced that a research team from University of North Carolina Lineberger Comprehensive Cancer Center presented data regarding clinical evaluation of the company's CaspaCIDE® safety switch technology at the American Society of Hematology Annual Meeting and Exposition in New Orleans in December 2022. The UNC Lineberger research team concluded that the CaspaCIDE safety switch holds promise as a tool to potentially abrogate the most severe CAR T-cell toxicities. CAR-T cell therapies show tremendous opportunities for treating some cancers; however, they carry the risk of immune-related adverse events like cytokine

release syndrome or neurotoxicities. An “off switch” for the CAR-T treatment that induces cell death in as little as 30 minutes may help stop these potentially fatal outcomes. The study of four patients who received rimiducid to activate the CaspaCDe safety switch showed abrupt reduction of CAR-T cells and a lower immune effector cell neurotoxicity syndrome (ICANS) grade within 24 hours.

ESSA Pharma, Inc., a clinical-stage pharmaceutical company focused on developing novel therapies for the treatment of prostate cancer, received a \$12 million CPRIT Product Development Research Company Relocation grant (CP130020) in 2014 in support of the production and clinical trials of its lead candidate.

1. ESSA Pharma, Inc., announced the appointment of Philip Kantoff, M.D., to its Board of Directors on September 13, 2022. Dr. Kantoff is a renowned medical oncologist and leader in the clinical development of new prostate cancer treatments. “We are eager to leverage Phil’s admirable expertise in prostate cancer clinical research, as we work to further ESSA’s pipeline of first-in-class antigens targeting the N-terminal domain of the androgen receptor,” stated Richard M. Glickman, L.L.D. (Hon), Chairman of ESSA’s Board of Directors. Dr. Kantoff currently serves as the Chief Executive Officer and Co-founder of Convergent Therapeutics, where he spearheads the development of precision radiopharmaceuticals for prostate cancer treatment.
2. ESSA Pharma announced the presentation of preclinical data for its lead first generation androgen receptor (AR) ANITen bAsed Chimera (ANITAC™) N-terminal domain (NTD) degrader in a poster session in Barcelona, Spain, on October 26, 2022. Androgen receptor signaling is the main driver of prostate cancer progression and remains a crucial target for therapeutic intervention in late stages of the disease. Resistance ultimately develops with current antiandrogen therapies and new methods of inhibiting the AR pathway are needed. The preclinical data demonstrate that EPI-8207, an ANITAC, shows robust potency degrading AR. ESSA’s novel approach of targeting the N-terminal domain of the AR represents a new method of blocking AR signaling.
3. ESSA Pharma presented further analyses of initial clinical data from two Phase 1 studies of EPI-7386 in patients with metastatic castration-resistant prostate cancer (mCRPC) at the February 2023 American Society of Clinical Oncology Genitourinary Cancers Symposium in San Francisco, California and online. EPI-7386 is a first-in-class N-terminal domain androgen receptor (AR) inhibitor that suppresses androgen activity through a novel mechanism of action. In this update, EPI-7386 in combination with enzalutamide continues to be safe and well-tolerated at the doses tested with clinically relevant drug exposures of both enzalutamide and EPI-7386 with deep and durable PSA reductions continuing through 13 cycles of dosing in some patients. Updated results of EPI-7386 as a monotherapy demonstrate that EPI-7386 continues to be safe and well-tolerated with clinically relevant drug exposures reached at all dose levels tested. Part 1b of the study is open with enrollment and two doses will be evaluated based on FDA Project Optimus recommendations.
4. ESSA Pharma announced the appointment of Lauren Merendino, M.B.A., to its Board of Directors on June 6, 2023. Ms. Merendino is a leading biopharmaceutical executive who brings over 25 years of commercial experience spanning 20+ disease states, including 15 years of leadership for oncology-specific portfolios. Throughout her career, she has built broad experience in national sales, marketing, as well as commercial strategies for molecules in early development and business development deals. “Lauren’s cross-functional expertise in guiding products through all stages of commercial development adds a valuable perspective that complements the skillset of our Board of Directors,” stated Richard M. Glickman, L.L.D. (Hon), Chairman of ESSA’s Board of Directors.

Hummingbird Bioscience, Inc., a data-driven precision biotherapeutics company discovering and developing transformative biologic medicines for hard-to-treat diseases, received a \$13.1 million CPRIT Product Development Research grant (DP190027) in February 2019.

1. On September 23, 2022, CEO Jerome Boyd-Kirkup, Ph.D., presented at the 2nd Annual VISTA Symposium. The symposium focused on VISTA’s function and applicability in cancer immunology, as well as the latest research and development in programs targeting VISTA.
2. Hummingbird Bioscience presented two poster presentations for HMBD-002, a unique anti-VISTA antibody, at the 37th Annual Meeting of the Society for Immunotherapy of Cancer (SITC) in November 2022. VISTA is an emerging, predominantly myeloid, immune checkpoint, and its blockade has shown benefit in multiple preclinical models of cancer as both a monotherapy and in combination with other immune checkpoint inhibitors. The results of the preclinical studies showed that VISTA blockade with HMBD-002 reprograms tumor associated macrophages and promotes cytotoxic T-cell response and HMBD-002 in combination with anti-PD-1 treatment shows enhanced anti-tumor efficacy compared to monotherapy arms. HMBD-002 is being assessed in a Phase 1 study to determine the recommended Phase 2 dose as a monotherapy and in combination with pembrolizumab. Understanding the cell subset specific immunomodulatory functions of VISTA is important to inform patient selection, develop effective combination strategies, and identify biomarkers of response to anti-VISTA therapy.

3. Hummingbird Bioscience announced on January 4, 2023, that they entered into a licensing agreement with Synaffix B.V. that will enable Hummingbird to develop a next generation antibody-drug conjugates (ADC) program using Synaffix technology. Hummingbird is currently developing two clinical-stage assets: HMBD-001, a humanized anti-HER3 monoclonal antibody targeting a novel epitope on HER3, and HMBD-002, a humanized anti-VISTA IgG4 monoclonal antibody. Both programs are currently in Phase 1 studies. "Hummingbird Bio's Rational Antibody Discovery (RAD) platform generates high affinity antibodies against unique epitopes on hard targets, potentially unlocking novel mechanisms of action. We believe that, by combining Synaffix's ADC technologies with our antibodies, we have the potential to create best-in-class ADCs," said Piers Ingram, Ph.D., Chief Executive Officer and co-founder of Hummingbird.

4. Hummingbird Bioscience is bringing its clinical-stage anti-HER3 drug, a potent driver of tumor growth and resistance against cancer drugs, known as HMBD-001 into molecular-matched patient trials in Australia for the first time. George Clinical announced on May 4, 2023, that the company has initiated preparations in Australia for two oncology Phase 1b trials that will examine the Hummingbird Bioscience precision therapy program targeting HER3 in biomarker-selected patient populations, including lung cancer. HMBD-001 is a unique antibody engineered by Hummingbird Bioscience to bind strongly and specifically to HER3. Preclinical models have shown that HMBD-001 potently inhibits the activation of the MAPK/PI3K signaling pathway and consequently, prevents tumor growth and drug resistance.

Immatics, US, Inc., a clinical-stage biopharmaceutical company active in the discovery and development of T cell-redirecting cancer immunotherapies, received a \$19.65 million CPRIT New Company Product Development Research grant (DP150029) in February 2015 to build a sustainable, world-class cancer immunotherapy company in Texas and translate the value of novel cancer targets into better and longer lives for cancer patients.

1. Immatics announced a clinical data update for the IMA203 monotherapy covering the completed Phase 1a dose escalation part of the trial and initial data from the first 5 patients in the ongoing Phase 1b dose expansion cohort A (monotherapy) on October 10, 2022. Immatics' platform uses a proprietary manufacturing process and XCEPTOR platform designed to enhance T cell engraftment and persistence *in vivo*. The updated data is from 27 patients in Phase 1a and the first 5 in Phase 1b. Overall, IMA203 continues to be well-tolerated and achieved confirmed objective responses across multiple solid cancers such as cutaneous melanoma, ovarian cancer, head and neck cancer, uveal melanoma, and synovial sarcoma. Researchers confirmed clinical responses at high and low PRAME-expression levels above threshold, indicating IMA203's potential to provide clinical benefit for all PRAME biomarker-positive cancer patients.

2. Immatics announced on May 1, 2023, that Bristol Myers Squibb and the company entered into an exclusive worldwide license for the first T cell receptor engineered T cell therapy (TCR-T) candidate from their ongoing collaboration. "The opt-in decision by Bristol Myers Squibb is an example of the success of our ongoing collaboration. The partnership's goal is to leverage Immatics' ability to develop innovative cell therapies that have the potential to deliver future breakthrough therapies for patients," commented Harpreet Singh, Ph.D., CEO and Co-Founder of Immatics.

3. On May 2, 2023, Immatics announced an interim clinical data update for 11 patients with recurrent and/or refractory solid cancers treated with ACTengine® IMA203 TCR-T monotherapy in the ongoing Phase 1b dose expansion Cohort A. IMA203 TCR-T cells are directed against an HLA-A*02-presented peptide derived from PRAME, a broadly expressed solid cancer target with clinical proof-of-concept for IMA203 demonstrated by Immatics in 2022. Overall, IMA203 showed a high rate of deep and durable objective responses across multiple tumor types. IMA203 monotherapy continues to be well tolerated in heavily pre-treated patients and no aggressive immune response was observed in Cohort A at data cut-off. Immatics believes that these results further validate PRAME as one of the most promising solid tumor targets for TCR-based therapies.

4. On July 24, 2023, Immatics announced that Bristol Myers Squibb made a \$35 million equity investment in Immatics. Bristol Myers Squibb purchased 2,419,818 ordinary shares in a private placement transaction at a subscription price per share of \$14.46. Additionally, Bristol Myers Squibb has the right to appoint a member to the Immatics Scientific Advisory Board. "This investment is further testimony to the strength of the relationship and of our differentiated platform technologies that are the foundation of our TCR-based cell therapies and bispecifics," commented Harpreet Singh, Ph.D., CEO and Co-Founder of Immatics. "We remain steadfast in our commitment to advancing innovative treatment options for patients in their fight against cancer and look forward to providing further clinical results in the second half of the year."

5. On August 10, 2023, Immatics announced the initiation of a Phase 1/2 clinical trial with its proprietary Bispecific T cell engaging receptor (TCER®) IMA402. The Phase 1/2 clinical trial (NCT05958121) investigates TCER® IMA402 in HLA-A*02:01-positive patients with

PRAME-expressing recurrent and/or refractory solid tumors. The dose escalation part of the study is designed as a basket trial in focus indications to accelerate signal finding. Initial focus indications are cutaneous and uveal melanoma, ovarian cancer, lung cancer, uterine cancer and synovial sarcoma, among others.

ImmunoGenesis, a clinical-stage immuno-oncology biopharmaceutical company re-envisioning the treatment of immune-excluded tumors, was awarded a \$15.45 million CPRIT Product Development Research grant (DP200094) in August 2020.

ImmunoGenesis announced on July 3, 2023, that Cancer Focus Fund LP, an investment fund partnered with The University of Texas MD Anderson Cancer Center to advance cancer therapies, invested \$4.5 million in the company. The money will support the Phase 1a/1b trial of ImmunoGenesis candidate IMGS-001, an antibody that targets cancer cells that resist immunotherapy. The investment will coincide with an upcoming Series A funding round for ImmunoGenesis, which the company expects to complete in the third quarter.

InformAI, Inc., is a healthcare informatics company which develops predictive analytics tools that speed up medical diagnosis at the point-of-care and extract data insights to improve patient outcomes and is part of JLABS @ TMC innovation facilities. CPRIT awarded the company a \$1.5 million Seed Awards for Product Development Research grant (DP220063) in August 2022 to commercialize RadOnc-AI.

On January 20, 2023, Houston's *InnovationMap* featured digital health company InformAI's technology, RadOnc-AI, which helps doctors prescribe first pass radiation dose plans for head and neck cancers. RadOnc-AI autogenerates the dose treatment plan based on medical images of that patient, reducing what can be an hours-long process for a doctor to calculate and configure to just over five minutes. According to Jim Havelka, Inform AI CEO, because the company developed the technology using the expertise of some of the world's top oncologists, "The first pass plan is in line with what [patients would] get at tier-one institutions." This creates "tremendous equity" among patients who can afford to travel to major facilities and those that cannot.

Invectys USA, Inc., a clinical-stage immuno-oncology company developing novel immuno-therapeutic solutions for cancer patients, to assist patients' immune systems in recognizing and destroying tumor cells, received a \$14.2 million CPRIT Product Development Relocation grant (DP200034) in May 2020.

1. Invectys and the Cell Therapy Manufacturing Center (CTMC), a joint venture between The University of Texas MD Anderson Cancer Center and National Resilience, Inc., announced Food and Drug Administration clearance of an Investigational New Drug (IND) application for a Phase 1/2a clinical study of IVS-3001, Invectys's lead engineered human leukocyte antigen A (HLA-G) targeting CAR T cell therapy for the treatment of solid tumors on December 19, 2022. This trial will be led by principal investigator Aung Naing, M.D., professor, Department of Investigational Cancer Therapeutics and co-PI Samer Srour, M.D., assistant professor, Department of Stem Cell Transplantation and Cellular Therapy at MD Anderson. The planned first-in-human, single-arm, open-label, Phase 1/2a study will evaluate the safety, tolerability, pharmacokinetics, and clinical activity of IVS-3001 in patients with confirmed diagnosis of a locally advanced unresectable or metastatic HLA-G+ select solid tumor malignancy who failed or was intolerant to standard of care.

2. Invectys announced it has initiated the clinical trial of its lead CAR-T program, IVS-3001, in solid tumors. On June 21, 2023, a Phase 1/2a clinical trial (NCT05672459) was initiated at The University of Texas MD Anderson Cancer Center in HLA-G-positive solid tumor patients, particularly those with kidney and ovarian cancers. IVS-3001 is Invectys' cutting-edge CAR-T cell therapy, targeting the rarely exploited immune checkpoint and tumor specific antigen known as HLA-G.

Invectys announced on July 13, 2023, the appointment of Jake Kushner, M.D., as the new Chief Executive Officer (CEO), responsible for leading the transformative efforts in both the Houston and Paris offices of Invectys. As CEO, Dr. Kushner will be building on his previous role as executive advisor and close collaborator to the Invectys management team and board. Dr. Kushner is a renowned endocrinologist who also serves as the Medical Director for McNair Interests where he evaluates and manages medical investments in support of scientific and entrepreneurial solutions for those who suffer from chronic disease. He previously served as Chief of Pediatric Diabetes and Endocrinology at Baylor College of Medicine and Texas Children's Hospital. "Invectys is entering a new, thrilling phase of its development," said Dr. Kushner. "CAR-T cells have delivered stunning results in blood cancers, but their promise in solid tumors has yet to be fulfilled. Invectys has the potential to turn this promise into a reality and breathe new hope into the cancer care field."

3. Invectys announced on July 31, 2023, that the U.S. Food and Drug Administration (FDA) has granted Fast Track designation to IVS-3001. In cancer, HLA-G can be utilized by tumors to create a protective microenvironment, evading the immune system, and promoting tumor growth. The Fast Track designation to IVS-3001 was based on the compelling data from the Investigational New Drug Application (IND) submission, and the potential for addressing the unmet need in patients with HLA-G positive locally advanced or metastatic clear cell renal cell carcinoma (RCC) who have failed or are intolerant to standard RCC therapies. Fast Track designation is a critical regula-

tory designation designed to expedite the development and review process for therapies that address unmet medical needs in serious conditions.

Iterion Therapeutics, a leading biopharmaceutical company dedicated to the development of innovative treatments for cancer, received two CPRIT Product Development grants (DP220019, CP130058) in 2022 and 2014, totaling \$18.9 million to develop tegavivint.

1. Iterion Therapeutics presented results from a preclinical murine study of tegavivint in beta-catenin activated hepatocellular carcinoma at the 34th EORTC-NCI-AACR Symposium held October 26 – 28, 2022, in Barcelona, Spain. The European Organization for Research and Treatment of Cancer, the National Cancer Institute, and the American Association for Cancer Research jointly hosted the symposium.
2. Iterion Therapeutics announced on May 18, 2023, its collaboration in a Phase 1 clinical trial for tegavivint in patients with relapsed or refractory c-Myc-overexpressing large B-cell lymphomas. Tegavivint is a first-in-class small molecule inhibitor of Transducin beta-like protein 1 (TBL1), that has demonstrated safety, clinical and pharmacodynamic activity in a Phase 1 study of patients with desmoid tumors. The first patient has been enrolled in this study, which is being conducted at The Ohio State University Comprehensive Cancer Center in Columbus, Ohio. Patients with relapsed/refractory c-MYC-overexpressing diffuse large B-cell lymphomas represent a significant unmet clinical as their prognosis is particularly poor with very limited effective treatment options.

Marker Therapeutics, Inc., a clinical-stage immuno-oncology company specializing in the development of next-generation T cell-based immunotherapies for the treatment of hematological malignancies and solid tumor indications, received a \$13.11 million CPRIT Texas Company Product Development Awards grant (DP210042) in August 2021 to treat acute myeloid leukemia (AML) with MT-401, which utilizes a novel non-genetically modified approach that recognizes multiple antigens expressed on tumor cells, thereby designed to minimize tumor escape.

1. In September 2022, Marker announced that it had been awarded a \$2 million grant from the U.S. Food and Drug Administration (FDA) Orphan Products Grants program to support the Phase 2 ARTEMIS trial of the company's lead multi-tumor-associated antigen (MultiTAA) T cell product candidate, MT-401, in patients with post-transplant AML.
2. Marker announced in March 2023 it had treated six patients in Cohorts 4 and 5 through December 2022 using MT-401 manufactured with their new T cell manufacturing process. The new manufacturing process is designed to produce a more potent product with increased antigen specificity and diversity and a reduction in manufacturing time. To date, all six patients have completed dose-limiting toxicity (DLT) periods with no DLTs reported.

Marker also implemented an improved manufacturing process that reduced production time to 9 days (compared to the original process of >30 days). This new process enabled a >90% reduction in the number of operator interventions during production and an improved final T cell product candidate compared to the original product candidate that was used in the ongoing ARTEMIS trial. These process improvements have yielded an MT-401 product candidate that has five times the measurable specificity and four times the potency in terms of tumor killing as compared to the prior manufacturing process. Marker has now treated 12 patients with MT-401 manufactured using the Company's improved process, with 16 patients treated with MT-401 manufactured using the original process, for a total of 28 patients.

"Our ARTEMIS trial showed promising clinical responses in post-transplant MRD positive patients highlighting the potential benefit of our multiTAA-specific T cell therapy in patients where no treatments have been approved," said Juan F. Vera, M.D., president and CEO. "We will continue to track the patients' disease status and look forward to investigating MT-401 in a larger patient population."

3. On May 1, 2023, Marker announced that it has entered into a comprehensive agreement with CellReady™, a newly formed Contract Development and Manufacturing Organization (CDMO) founded by John Wilson, founder and CEO of Wilson Wolf Corporation and Marker Co-Founder and Board Member. This agreement allows Marker to concentrate solely on the clinical advancement of its unique form of T cell therapy, which has demonstrated the ability to recognize and kill cancer cells even as the cancer cells evolve to escape detection. Under the terms of the non-dilutive agreement, CellReady will purchase certain cell manufacturing assets from Marker for approximately \$19 million in cash and reduce Marker's overhead by about \$11 million annually by employing Marker's manufacturing, development, quality, and regulatory affairs personnel, and assuming the leases for Marker's Houston-based manufacturing and research and development facilities.
4. Marker reported non-clinical data on its lead multi-tumor-associated antigen (multiTAA)-specific T cell product candidate, MT-401, on June 26, 2023, which showed increased anti-tumor activity against an acute myeloid leukemia (AML) cell line after treatment with hypomethylating agents (HMA). Marker also announced that the Company has been awarded a \$2 million grant from the National Institutes

of Health Small Business Innovation Research (SBIR) program to support the development of MT-401 for the treatment of patients with AML after hematopoietic stem cell transplant (HSCT).

5. On July 10, 2023, Marker announced that zedenoleucel, its multi-tumor-associated antigen (multiTAA)-specific T cell product candidate, MT-401, was granted Orphan Drug Designation by the Committee for Orphan Medicinal Products of the European Medicines Agency (EMA) for the treatment of patients with acute myeloid leukemia (AML). "This is an important milestone for Marker and a significant step forward in our mission to improve the lives of patients with AML, especially of those with relapsed AML where no therapeutic options have been approved," said Juan F. Vera, M.D., president and CEO.

6. In a set of *in vitro* experiments, the Research and Development team at Marker demonstrated anti-tumor activity of MT-401 OTS in a partially human leukocyte antigen (HLA) matched setting to kill THP-1 cells, an aggressive treatment-resistant Acute Myeloid Leukemia (AML) cell line. Results reported on August 7, 2023, include a significant reduction in leukemic cell growth when treated with MT-401 OTS and untreated THP-1 cells continued to grow in the absence of treatment.

Medicenna Therapeutics, Corp., a clinical stage immunotherapy company developing novel, highly selective versions of IL-2, IL-4 and IL-13 Superkines and first in class Empowered Superkines, received a \$14.14 million New Company Product Development Award grant (DP150031) in 2015, to conduct two clinical trials for glioblastoma multiforme patients to test bizaxofusp's (formerly MDNA55) safety, effectiveness and dosage.

1. In April 2023, Medicenna Therapeutics presented preclinical data characterizing IL-13 Superkines and next-generation Superkines at the 2023 Annual Meeting of the American Association for Cancer Research. The preclinical data demonstrated that two IL-13 Superkines, MDNA132 and MDNA213, exhibit highly selective binding to the IL-13 decoy receptor (IL-13R₂) and, in a mouse model, selectively accumulate in the tumor microenvironment for several days. Medicenna's IL-4 Empowered Superkine, bizaxofusp (formerly MDNA55), has been studied in five clinical trials including a Phase 2b trial for recurrent glioblastoma multiforme (GBM), the most common and uniformly fatal form of brain cancer. Bizaxofusp has obtained FastTrack and Orphan Drug status from the FDA and FDA/EMA, respectively.

2. Despite considerable efforts over the past four decades, outcomes for glioblastoma patients continue to be poor with no standard of care available for recurrent GBM (rGBM). Approved therapies have shown median overall survival (mOS) of only 6–9 months, a 1-year survival rate of 0%–10%, and 12-month progression-free survival (PFS) rate of 2%–10%. In addition, treatment of rGBM is constrained by the aggressive and infiltrative nature of the blood-brain barrier its immunosuppressive tumor microenvironment. These challenges are exacerbated in patients with primary *de novo* GBM, tumors not conducive to resection upon relapse, and contain wild-type IDH genes. This study, published in *Neuro-Oncology* in June 2023, is an open-label, single-arm phase IIb study of MDNA55 in rGBM patients with an aggressive form of GBM on their first or second recurrence. MDNA55 was administered intratumorally as a single dose treatment. The data report that single treatment with MDNA55 increased mOS by up to 50% and 12-month PFS by almost 100% when compared to approved therapies. MDNA55 demonstrated tumor control and promising survival and may benefit rGBM patients when treated at high dose irrespective of IL4R expression level. Combining targeted treatment and advanced drug delivery techniques employed in this study provides an opportunity to explore the efficacy of MDNA55 in a pivotal trial.

3. Medicenna Therapeutics announced on July 25, 2023, that Dr. Fahar Merchant, the Company's President and CEO, was invited to participate and present at the Research Roundtable organized by the National Brain Tumor Society (NBTS). "Medicenna has been recognized for its innovative work in the treatment of rGBM, a uniformly fatal form of brain cancer. Compelling results from the Company's MDNA55 (bizaxofusp) Phase 2b trial were published in June in the journal *Neuro-Oncology*, and when compared to a well-matched external control, bizaxofusp more than doubled the median survival in end-stage rGBM patients," said Dr. Merchant. "It was a privilege to share our pioneering efforts of leveraging data from patient registries together with promising Phase 2b results that secured Medicenna a precedent-setting FDA nod for the first-ever Phase 3 trial in rGBM using an external control arm," added Dr. Merchant.

4. Medicenna Therapeutics announced the issuance of U.S. Patent No. 11,680,090, titled "Interleukin-2 Fusion Proteins and Uses Thereof" on August 1, 2023. The patent further strengthens Medicenna's intellectual property around its BiSKIT™ (Bifunctional SuperKine for ImmunoTherapy) platform. The patent protects a new method for enhancing fitness, survival and proliferation of cancer killing effector T cells and NK cells. Bcl-xL is a critical protein that repairs and maintains the integrity of mitochondria, which serve as the cell's primary "power generator." By fusing IL-2 superkines to Bcl-xL, these first-in-class BiSKITs™ have the potential to further boost the anti-cancer activity of cancer fighting immune cells by improving their lifespan, health, quality and quantity and to avoid the "energy crisis" which is

frequently encountered with current cancer immunotherapies.

5. On August 14, 2023, Medicenna Therapeutics announced the appointment of Brent Meadows, MBA, as its Chief Business Officer, as part of the Company's plans to establish a world-class C-suite in Boston. Mr. Meadows brings over 25 years of business development, commercial strategy and marketing experience at large pharma and biotech companies, including Johnson & Johnson, Bristol-Myers Squibb, Shire/Baxalta, and Regeneron. Mr. Meadows will be responsible for leadership of Medicenna's business development and corporate strategy, including structuring, negotiating and executing key alliances and partnerships with Medicenna's Phase 3 ready glioblastoma ("GBM") asset, bizaxofusp, and its pipeline of clinical and pre-clinical Superkines.

6. Medicenna Therapeutics announced on August 8, 2023, the appointment of Arash Yavari, MBBS, DPhil, as the Chair of its Development Advisory Committee, a team comprised of industry veterans in immuno-oncology drug development and regulatory strategy. Dr. Yavari is a physician-scientist with over 20 years of broad clinical, scientific and industry drug development experience. "We have been working closely with Dr. Yavari on MDNA11 for the past two years and have appreciated his considerable expertise in drug development. Dr. Yavari's contributions will be instrumental in advancing our planned Phase 2 dose expansion and combination studies which are expected to commence in the third and fourth calendar quarters of this year, respectively," said Dr. Fahar Merchant, President and CEO of Medicenna.

7. Medicenna Therapeutics announced the appointment of Jeff Caravella as Chief Financial Officer on August 28, 2023. In this position, Mr. Caravella will lead Medicenna's financial strategy to support the Company's growth. "His remarkable skills, combined with more than 20 years of profound financing and strategic expertise in the life sciences industry, will be invaluable to our objective of enhancing shareholder value. His nomination comes as the Company initiates a Phase 2 study with MDNA11, seeks partnership for bizaxofusp and Superkines, and expands its executive team with talented new hires in Boston," said Fahar Merchant, Ph.D., President and CEO of Medicenna.

Molecular Templates, Inc., a clinical-stage biopharmaceutical company focused on the discovery and development of proprietary targeted biologic therapeutics, engineered toxin bodies ("ETBs"), received two CPRIT Product Development Research grants (CC121020, DP160071) in 2011 and 2016 totaling \$25.8 million.

1. Molecular Templates received clearance on March 9, 2023, from the United States Food and Drug Administration following review of its Investigational New Drug Application to proceed for clinical testing of its novel MT-8421 ETB program targeting CTLA-4 in patients with relapsed/refractory solid tumors previously exposed to checkpoint inhibitors. "MT-8421 represents a novel approach to target CTLA-4 in a wholly distinct manner from the current monoclonal antibody approaches. MT-8421 was designed to eliminate CTLA-4-expressing Tregs in the tumor microenvironment through a direct cell-kill mechanism independent of the effector cell presence that antibodies rely upon while not effecting Tregs in the periphery, the major mechanism of antibody-mediated autoimmune toxicity," said Eric Poma, Ph.D., CEO and CSO. MT-8421 was well tolerated in a non-human GLP primate toxicology study and achieved serum levels well-above projected IC50 concentrations for Tregs in the TME. MTEM expects to initiate a first-in-human phase I study with MT-8421 by mid-year 2023 at a starting dose of 32 mcg/kg.

2. Molecular Templates announced July 13, 2023, that it entered into a definitive securities purchase agreement with healthcare investors that will provide the company up to \$40 million in gross proceeds. Existing investor BVF Partners LP is leading the financing, which includes current investors BB Biotech AG and Adage Capital Management, and other leading institutional investors.

3. Molecular Templates announced key milestones for 2023 on August 10, 2023. Molecular Templates reported accelerating enrollment across all clinical programs, initiation of first-in-human Phase I study for MT-8421 in 3Q 2023, MT-0169 screening and enrollment resumed following removal of partial clinical hold on patient enrollment by U.S. Food and Drug Administration, advancement of Bristol Myers Squibb research collaboration across multiple targets, and MTEM expects to provide periodic updates on MT-6402, MT-8421, and MT-0169 throughout 2023.

4. On August 2, 2023, Molecular Templates announced executive management changes to implement its next phase of development. Gabriela Gruia, M.D., will assume the role of interim Chief Medical Officer to succeed Roger Waltzman, M.D., Jason Kim will assume the role of President and Chief Financial Officer, Kristen Quigley will assume the role of Chief Operating Officer, and Grace Kim, Ph.D., will assume the role of Chief Strategy Officer and Head of Investor Relations.

OncoNano Medicine, Inc. received a \$6 million CPRIT New Company Product Development Research grant (DP140072) in 2014. Two CPRIT Product Development Research grants (DP200081, DP190066) awarded in 2020 and 2019 totaling \$25.4 million support the development of Pegsitacianine and ONM-501.

1. OncoNano announced on September 29, 2022, positive interim clinical results from an ongoing Phase 2 study of its lead clinical development candidate, pegsitacianine, for the detection of residual disease after cytoreductive surgery (CRS). These results, presented at the World Molecular Imaging Congress in Miami, provide evidence that pegsitacianine could offer surgeons a real-time optical imaging capability that enhances their ability to detect residual cancerous tissue that would otherwise be left behind from their standard of care process surgery to completely remove peritoneal metastases. Pegsitacianine may allow surgeons to more accurately assess the completeness of surgery, or possibly improve outcomes by removing additional lesions. The data presented showed that 15 out of 27 patients (55%) demonstrated a clinically significant detection of pathology-confirmed residual disease after completion of the intended surgery. OncoNano's Chief Medical Officer Kartik Krishnan, M.D., Ph.D., also presented at the Cantor Fitzgerald Oncology, Hematology & HemOnc Conference in New York City on September 28, 2022. In this ongoing study, pegsitacianine is still well-tolerated with no serious drug-related side effects observed.
2. OncoNano presented data on its pre-clinical candidate ONM-501 at the 37th Annual Meeting of the Society for Immunotherapy of Cancer on November 10, 2022. OncoNano's lead therapeutic program in development, ONM-501, is a dual-activating STING (Stimulator of Interferon Genes) agonist advancing towards a first in human trial planned to be initiated in the first half of 2023. *In vivo* PD analysis confirmed STING activation, enhanced tumor lymphocyte infiltration, and tumor PD-L1 upregulation by ONM-501 and demonstrated the target-engagement activity of ONM-501 in multiple species, and high tolerability in rodents and non-human primates, making it a promising therapeutic candidate for clinical evaluation. "The results presented here confirm many of our hypotheses regarding the potential of ONM-501 to provide a robust therapeutic index of immune activating STING activity that may be differentiated from other STING agonists," said Kartik Krishnan, M.D., Ph.D., Chief Medical Officer.
3. OncoNano announced on January 4, 2023, that its lead clinical development candidate, pegsitacianine, a pH-sensitive fluorescent nanoprobe for image-guided cancer surgery, has received Breakthrough Therapy Designation by the U.S. Food and Drug Administration as an adjunct for the visualization of metastatic disease in the abdominal cavity in patients undergoing cancer surgery. "Providing real-time feedback, pegsitacianine demonstrates the capacity to identify tumors that may otherwise go undetected," said Kartik Krishnan, M.D., Ph.D., Chief Medical Officer. Based on the results of an ongoing Phase 2 clinical trial, pegsitacianine enabled surgeons to detect additional cancerous tissue at a clinically significant rate of >50%.
4. OncoNano presented data from a Phase 2 study of pegsitacianine, a pH-sensitive fluorescent nanoprobe for image-guided cancer surgery, at the Society of Surgical Oncology (SSO) 2023 International Congress on Surgical Cancer Care held in Boston in March 2023. The primary objective of this Phase 2 study was to determine if the administration of pegsitacianine (1 mg/kg) prior to surgery results in the detection of additional disease following standard of care surgical resection of peritoneal metastases. The results reveal that, under pegsitacianine guidance, 20 of 40 evaluable patients (50%) had pathology-confirmed disease resected after fluorescent visualization that was not resected in the planned standard of care surgery. "These results show that pegsitacianine can safely be administered up to three days in advance of surgery, without any impact on the planned surgical approach. Importantly, the results of this Phase 2 trial demonstrate pegsitacianine's potential as a new advance for real-time surgical imaging for peritoneal metastasis surgery," said Kartik Krishnan M.D., Ph.D., Chief Medical Officer of OncoNano Medicine.
5. OncoNano presented three posters at the American Association for Cancer Research (AACR) Annual Meeting in April 2023. The posters detail positive nonclinical data for ONM-501, the Company's dual-activating STING (STimulator of INterferon Genes) agonist and lead therapeutic development candidate, formulated with the company's OMNI™ polymer technology as well as positive data for encapsulated bispecific antibody and cytokine using the company's ON-BOARD tumor specific delivery technology. "Our ON-BOARD™ pH-sensitive micelle delivery platform continues to demonstrate improvement of therapeutic indices with a variety of therapeutic protein payloads including the highly potent interleukin-12 and T-cell engagers," said Tian Zhao, Ph.D., Vice President of Research and Development for OncoNano Medicine. "We have seen challenges with other IL-12 and T-cell engager programs related to suboptimal therapeutic index, associated with toxicities related to systemic exposure. In contrast, the tumor-specific delivery of ON-BOARD™ encapsulated molecules demonstrates a much broader therapeutic window. The promising data that we presented at AACR 2023 suggest this technology may provide a solution to overcome the clinical application limitations of these highly potent protein therapeutics."

Peloton Therapeutics, an oncology drug discovery and development company advancing first-in-class small molecule therapies, received a \$3.2 million CPRIT Company Recruitment grant (R1009) in 2010.

Merck reported on August 18, 2023, that a drug acquired from Peloton Therapeutics in 2019 helped delay disease progression in patients with advanced renal cell carcinoma. Merck said a pre-planned, interim analysis found its drug, Welireg, to be significantly better than another kidney cancer therapy, everolimus, on the trial's main goal of preventing disease progression. The study enrolled around 740 adults with advanced renal cell carcinoma that had progressed after treatment with two specific kinds of target cancer therapy. Merck also reported that the percentage of patients who responded in some way to the drug was deemed statistically significant.

Perimeter Medical Imaging AI, Inc., a medical technology company driven to transform cancer surgery with ultra-high-resolution, real-time, advanced imaging tools to address areas of high unmet medical need, received a \$745 million CPRIT Product Development Research grant (DP190087) in August 2019 to develop the breakthrough-device-designated investigational Perimeter B-Series OCT with ImgAssist AI.

1. Perimeter announced the commercial placement of its flagship Perimeter S-Series OCT system at a hospital that is part of a major national healthcare system and one of the largest healthcare networks in North Texas on September 29, 2022. Jeremy Sobotta, Perimeter's Chief Executive Officer stated, "This commercial placement of our Perimeter S-Series OCT system at a hospital in a major healthcare network marks a significant milestone for us as we gain traction validating our commercial model. Perimeter S-Series OCT aims to improve patient outcomes and lower healthcare costs, and we are excited that leading surgeons and hospitals are seeing the potential of our ground-breaking technology."

2. Perimeter announced on October 3, 2022, that the TSX Venture Exchange (TSX-V) has approved its application to graduate from a Tier 2 Issuer to a Tier 1 Issuer. Tier 1 is reserved for senior TSX-V companies with the most significant financial resources and those that have demonstrated a sustainable business model and operational track record. Jeremy Sobotta, Perimeter's Chief Executive Officer stated, "We are very pleased that the TSX-V has recognized Perimeter's growth since it became public in 2020. We were already recognized as part of the 2022 TSX Venture 50®." Important factors included in Perimeter's successful tier graduation application include the Company's well capitalized position with cash and cash equivalents as of June 30, 2022; Perimeter's significant intellectual property in its optical tissue imaging system including five issued patents in the U.S. and internationally; and the broadening public distribution of Perimeter's common shares traded on the TSX-V, OTC and FSE.

3. On October 12, 2022, Perimeter presented research at the College of American Pathologists 2022 Annual Meeting validating the potential use of Perimeter S-Series OCT to intraoperatively image specimens across a variety of tissue types, such as breast, thyroid, kidney, liver, lung, colon, heart, pancreas, spleen, and adrenal glands.

4. On November 15, 2022, Perimeter announced another commercial placement of its flagship Perimeter S-Series OCT system at a second hospital within one of the largest healthcare networks in North Texas, which is part of a major national healthcare system. The FDA-cleared Perimeter S-Series OCT system provides real-time, cross-sectional visualization of excised tissues at the cellular level, with 10x greater image resolution than X-ray and ultrasound, and 100x greater than MRI. Jeremy Sobotta, Perimeter's Chief Executive Officer stated, "we are receiving timely, positive feedback that the value provided by our technology is resonating with not only our end-users but other stakeholders within the healthcare system as well."

5. Perimeter reported findings suggesting that the company's wide-field optical coherence tomography (WF-OCT) may be a promising adjunct imaging modality for intraoperative visualization in head and neck surgery, especially at deep margins. The study, released in the December 1, 2022, edition of *JAMA Otolaryngology—Head and Neck Surgery*, included 53 adult patients undergoing primary ablative surgery of the oral cavity or oropharynx for squamous cell carcinoma (SCC). Clinicians imaged the resected specimens with Perimeter S-Series OCT in the operating room prior to routine pathology to allow for post-operative comparisons. The research showed that the Perimeter OCT images correlate to histological results with a process that does not interfere with surgical procedures or final pathology. SCC patients with positive margins after initial surgery are known to have increased risk of local recurrence, poorer rates of progression-free survival, and a need for adjuvant treatments such as radiotherapy, chemotherapy and additional surgery. Advanced imaging technology that allows surgeons to examine margin depth in real-time during surgery can help improve patient outcomes.

6. Perimeter reported on January 10, 2023, that two new commercial installations of its flagship Perimeter S-Series OCT system were completed. Available across the U.S., this FDA-cleared Perimeter S-Series OCT system provides real-time, cross-sectional visualization of

excised tissues at the cellular level. Jeremy Sobotta, Perimeter's CEO stated, "Prior to year-end, we completed two additional commercial placements of our S-Series OCT technology, including successfully leveraging our existing presence within a major national healthcare system, resulting in the third commercial placement in this network...and we remain focused on placing our innovative medical imaging technology in ORs across the U.S. with the goal of improving patient outcomes and reducing overall healthcare costs."

7. Perimeter announced that its investigational AI technology is being featured in a museum exhibit entitled "Artificial Intelligence: Your Mind & The Machine," which is open through May 6, 2023, at the Museum of Science & History (MoSH) in Memphis, TN. Jeremy Sobotta, Perimeter's Chief Executive Officer stated, "Breast surgeons at West Cancer Center & Research Institute in Memphis were among the first healthcare leaders to participate in our ongoing clinical trial evaluating Perimeter's next-generation ultra-high resolution optical imaging technology using AI. Our goal is to harness the power of machine learning and AI to help surgeons quickly visualize microscopic tissue structures in real time so they can make more informed decisions in the operating room in the hopes of reducing re-operations and improving outcomes for cancer patients." Perimeter's next-gen AI is built upon their own technology platform that includes their commercially launched S-Series OCT imaging system along with an extensive proprietary data set.

8. Perimeter reported peer-reviewed research in January 2023 that validates the further exploration of Perimeter's wide-field Optical Coherence Tomography (WF-OCT) technology in visualizing margins during head and neck surgeries. The research study—published in *JAMA Otolaryngology-Head and Neck Surgery* and conducted at Mount Sinai Icahn School of Medicine—included 53 adult patients undergoing primary ablative surgery of the oral cavity or oropharynx for squamous cell carcinoma (SCC). Resected specimens were imaged with Perimeter S-Series OCT in the operating room prior to routine pathology to allow for post-operative comparisons. "We understand that SCC patients with positive margins after initial surgery are known to have increased risk of local recurrence, poorer rates of progression-free survival, and a need for adjuvant treatments such as radiotherapy, chemotherapy and additional surgery," said Arvind K. Badhey, M.D., Department of Otolaryngology, University of Massachusetts Chan Medical School, and lead author. "Our research findings suggest that wide-field OCT may be a promising adjunct imaging modality for intraoperative visualization in head and neck surgery, especially at deep margins."

9. On March 29, 2023, Perimeter announced the publication of a new white paper which features three case studies from the commercial use of its innovative Perimeter S-Series OCT technology. Author of the paper, Amelia Tower, D.O., a board-certified general surgeon with advanced training in breast surgical oncology based in Fort Worth, reported that three adult women (ages 75, 64, and 76) with biopsy-proven ductal carcinoma in situ (DCIS) or invasive ductal carcinoma (IDC) underwent BCS according to institutional standard of care, except that immediately following specimen radiography and prior to inking for permanent histopathology, resected specimens were scanned using WF-OCT imaging. Dr. Tower found that, when assisted by Perimeter S-Series OCT in these three case studies, she was able to make intraoperative clinical decisions to excise additional tissue during the primary surgeries. The goal of sparing the three patients the need for a second surgery and relieving the associated burden on clinical, economic, and psychosocial resources was achieved.

10. Perimeter announced the first commercial placement of its flagship Perimeter S-Series OCT system in the state of Utah on April 25, 2023, which will be used under the direction of breast surgeon, Jennifer J. Tittensor, M.D., FACS. Perimeter announced on May 2, 2023, the initiation of an additional clinical trial site at Baptist MD Anderson Cancer Center in Jacksonville, FL, under the direction of Laila Samiian, M.D., FACS. Perimeter S-Series OCT received FDA 510(k) clearance in 2021 and is a medical imaging tool that uses Optical Coherence Tomography (OCT) to provide clinicians with cross-sectional, real-time margin visualization of an excised tissue specimen. "Surgeons have long recognized the challenge of achieving 'clean' margins while preserving healthy tissue during breast conservation surgery. I believe Perimeter S-Series OCT will assist me to make informed decisions on margin status 'real-time' in the OR, with the goal of providing the best care and outcomes for my patients," said Dr. Tittensor.

11. Perimeter announced on June 5, 2023, that the Board of Directors has appointed Adrian Mendes as Chief Executive Officer, effective immediately. Mr. Mendes is an experienced technology executive with 25 years of experience building and scaling technology companies across many different industries. Most recently, he was the Chief Operating Officer at Groq Inc, an AI hardware company, which he joined shortly after formation in 2016 and helped scale to one of the leading startups in that space.

12. Perimeter announced on August 16, 2023, that it has retained Bristol Capital Ltd. ("Bristol") a leading investor relations firm servicing Canadian and U.S. micro-cap and small-cap companies across international markets, to provide investor relations and communication services. Adrian Mendes, Perimeter's Chief Executive Officer stated, "We are pleased to retain Bristol as part of our commitment to enhance our investor outreach efforts to engage with existing investors and grow our shareholder base. Our strategy includes hosting key

investor webinars with plans for a number of events already underway – including those with key opinion leaders – that aim to communicate Perimeter’s strong business case and key opportunities for growth.”

13. Perimeter announced on August 17, 2023, the first commercial placement of its flagship Perimeter S-Series OCT medical imaging system in the state of Georgia, which will be used at Candler Hospital in Savannah under the direction of breast surgeons, Catherine Ronaghan, M.D. and Emma Walker, D.O. Perimeter S-Series OCT is a medical imaging tool that uses Optical Coherence Tomography (OCT) to provide clinicians with cross-sectional, real-time margin visualization (1-2 mm below the surface) of an excised tissue specimen. It provides 10 times higher image resolution than X-ray and ultrasound, and 100 times greater image resolution than MRI.

Plus Therapeutics, Inc., a U.S. clinical-stage pharmaceutical company developing innovative, targeted radiotherapeutics for rare and difficult-to-treat cancers, received a \$17.6 million CPRIT Product Development Research grant (DP220039) awarded in August 2022, to develop the company’s lead investigational targeted radiotherapeutic 186RNL.

1. On September 6, 2022, Plus Therapeutics released a summary of its Type C clinical meeting minutes with the FDA reflecting the agreement that the company’s ReSPECT-GBM clinical trial should proceed to the planned Phase 2 clinical trial. The ReSPECT-GBM clinical trial is evaluating the company’s lead investigational targeted radiotherapeutic, Rhenium-186 NanoLiposome (186RNL), in recurrent glioblastoma (GBM). Andrew Brenner, Ph.D., professor, Department of Medicine, Neurology, and Neurosurgery at The University of Texas Health Science Center at San Antonio, presented the positive Phase 1 data from the ReSPECT-GBM Phase 1/2a dose escalation clinical trial on September 12, 2022, at the European Society for Medical Oncology Congress 2022 held in Paris, France.
2. Data from an ongoing clinical trial evaluating Plus Therapeutics’ lead investigational targeted radiotherapeutic, Rhenium-186 NanoLiposome (186RNL), in leptomeningeal metastases (LM) was presented at the 35th Annual Congress of the European Association of Nuclear Medicine in October 2022. The Phase 1 dose escalation Trial demonstrated that the dose administered through an intraventricular catheter was well tolerated, all four patients treated to date in Cohorts 1 and 2 were observed to have prompt and complete 186RNL distribution throughout the cerebrospinal fluid subarachnoid space and was well tolerated, and all patients showed a decreased CSF cell count by microfluidic chamber assay after treatment. The findings indicate the potential for 186RNL in patients diagnosed with LM.
3. A January 4, 2023, editorial in *IPO Edge* featured PLUS Therapeutics, highlighting the Austin-based company’s promising treatment targeting brain tumors with greater precision and the company’s Fast Track designation from the FDA for its two most important treatments: recurrent glioblastoma and leptomeningeal metastases. Radiation is one of the only treatment options available for brain cancers because the body’s blood-brain barrier stops chemotherapy from reaching tumors in large enough doses to be effective. Traditional radiation is also problematic because the radiation beam causes serious damage to healthy parts of the brain adjacent to the targeted tumor cells. Plus Therapeutics specializes in targeted radiation treatments, using needle-sized catheters to aim radiation directly into the brain fluid. Developing effective brain cancer treatments is critical because, according to the National Brain Tumor Society, survival rates and mortality statistics have been virtually unchanged for decades and only a small number of drugs approved to treat them.
4. Plus Therapeutics announced on February 1, 2023, completion of enrollment in Cohort 2 of the ReSPECT-LM Phase 1/2a dose escalation clinical trial of rhenium (186Re) obisbameda for the treatment of leptomeningeal metastases (LM). The incidence of LM is on the rise, partly because cancer patients are living longer and partly because many standard chemotherapies cannot reach sufficient concentrations in the spinal fluid to kill the tumor cells, yet there are no FDA-approved therapies specifically for LM. At the 2022 Annual Scientific Meeting and Education Day of the Society for Neuro-Oncology (SNO), Plus Therapeutics presented Phase 1 data from the ReSPECT-LM trial demonstrating that a single administered dose of rhenium (186Re) obisbameda was feasible, safe and well-tolerated across two dosages in four patients from Cohorts 1 and 2, with patients experiencing a decreased cerebrospinal fluid tumor cell count at 48 hours following treatment of 46% to 92%. The U.S. Food and Drug Administration has granted Fast Track designation to rhenium (186Re) obisbameda for the treatment of LM.
5. Plus Therapeutics announced on April 18, 2023, the completion of Cohort 3 of the ReSPECT-LM Phase 1/2a dose-escalation clinical trial of rhenium (186Re) obisbameda for the treatment of leptomeningeal metastases (LM) from solid tumors less than one month since its initiation, demonstrating rapid enrollment. Rhenium (186Re) obisbameda is a novel injectable radiotherapy specifically formulated to deliver highly targeted high dose radiation in CNS tumors in a safe, effective and convenient manner to optimize patient outcomes. Rhenium (186Re) obisbameda has the potential to reduce risks and improve outcomes for CNS cancer patients, versus currently approved therapies, with a more targeted and potent radiation dose. Additionally, the Company has expanded the number of clinical trial sites to include Northwestern Memorial Hospital in Chicago, marking the first expansion of the ReSPECT-LM trial beyond Texas. Thus far, 10

patients have been treated across three cohorts in the ReSPECT-LM Phase 1/Part A dose escalation clinical trial.

6. Plus Therapeutics reported positive interim updates from the ReSPECT-LM clinical studies evaluating the Company's lead radiotherapeutic, rhenium (186Re) obisbameda, for the treatment of leptomeningeal metastases (LM) at the Society of Nuclear Medicine & Molecular Imaging Annual Meeting, which took place in June 2023 in Chicago, Illinois. Interim results from 10 patients in the Phase 1 trial show a single treatment with rhenium (186Re) obisbameda decreased cerebrospinal fluid tumor cell count and was well-tolerated in patients with LM. No dose limiting toxicities were observed and safety observations were generally minor and resolved. Phase 1/Part B, for continued dose escalation (Cohorts 4-7), will open following review by the U.S. Food and Drug Administration, and repeated dosing will be explored. An expansion in Cohort 3 is currently enrolling eligible patients.

7. Plus Therapeutics reported positive data from the ReSPECT-LM clinical study evaluating the Company's lead radiotherapeutic, rhenium (186Re) obisbameda, for the treatment of leptomeningeal metastases (LM) at the Society for Neuro Oncology (SNO)/American Society of Clinical Oncology (ASCO) Central Nervous System (CNS) Cancer Conference in August 2023. No dose limiting toxicities were observed and a maximum tolerated dose or maximum feasible dose was not reached. Most adverse events were mild (Grade 1, 58.7%) or moderate (Grade 2, 24%), with the majority not related to treatment. At the time of the report, five of the ten treated patients remain alive with a median overall survival (OS) of 10 months. The U.S. Food and Drug Administration (FDA) has approved continued dose escalation.

8. Plus Therapeutics announced a second quarter report for 2023 on August 14, 2023. Thus far in 2023, Plus Therapeutics has completed: Phase 1/Part A of the ReSPECT-LM clinical trial; received U.S. Food and Drug Administration (FDA) approval to move to Phase 1/Part B of the ReSPECT-LM clinical trial; and in the second quarter of 2023, achieved all Year 1 goals and objectives set forth in the Company's three-year, \$176M Cancer Prevention & Research Institute of Texas (CPRIT) grant.

Prana Thoracic is developing an electrosurgical instrument intended for cylindrical, single-port excision of targeted lung tissue, using bipolar RF energy for sealing. Prana Thoracic received a \$3 million CPRIT Product Development Research grant (DP220054) in August 2022 to develop the first minimally invasive lung tissue excision tool for early intervention in lung cancer.

1. Prana Thoracic announced March 3, 2023, the closing of its \$3 million founding Series A financing led by New World Angels and joined by Johnson & Johnson Innovation, Inc., Texas Medical Center (TMC) Venture Fund and the University City Science Center's Phase 1 Ventures. William McKeon, TMC President & CEO, congratulated the company, noting, "Prana's cutting-edge technology was developed on the TMC campus, and we are excited to continue to support Prana in meeting its next milestone through funding from the TMC Venture Fund. The technology they are spearheading could be a game changer in how physicians detect and treat lung cancer." With the Series A funds and the CPRIT grant, Prana will continue product development and conduct first-in-human clinical studies.

2. In May 2023, Prana Thoracic won the Pitch Perfect Contest for the Medical Devices category at the annual MedCity INVEST conference in Chicago. The Pitch Perfect contest was the centerpiece of the conference, highlighting how different companies are imagining healthcare innovation. The competition saw 23 healthcare startups across biopharma, medical devices, and health tech geared for consumers/employers as well as payers/providers pitch their business plans to teams of investor judges. "Amongst a super strong slate of medtech startups, Joanna's [Nathan, the CEO] presentation superbly conveyed the significant disease burden and the corresponding clinical opportunity of addressing early lung cancer diagnosis and treatment," Dr. Oliver Keown of Intuitive Ventures observed. "Furthermore, beyond the market opportunity, she highlighted a sophisticated plan to de-risk the regulatory, reimbursement and technical milestones that lay ahead for Prana Thoracic."

Salarius Pharmaceuticals, Inc., a clinical-stage biopharmaceutical company using targeted protein inhibition and targeted protein degradation to develop therapies for patients with cancer, received a \$16.1 million CPRIT New Company Product Development Award (DP160014) in May 2016 to support the development of novel drugs for rare pediatric cancers and other cancers by focusing on treatments that interrupt the final steps of the signaling cascade.

1. Salarius announced interim clinical trial results on December 1, 2022, from the company's Phase 1/2 trial, currently in its dose-expansion stage, of its novel oral, reversible, targeted LSD1 inhibitor, seclidemstat, as a treatment for Ewing sarcoma and FET-rearranged sarcomas. These interim results appear to indicate that first- and second-relapse Ewing sarcoma patients treated with seclidemstat in combination with topotecan and cyclophosphamide who achieve disease control may have an increased time to tumor progression (TTP) compared with treatment of topotecan and cyclophosphamide alone, per the Phase 3 rEECur study. This trial has more than 15 clinical trial sites with more than 20 locations throughout the United States.

2. Salarius announced that on December 27, 2022, the U.S. Patent and Trademark Office issued U.S. Patent No. 11,535,603, titled “Deuterium-enriched Piperidinonyl-oxoisindoliny Acetamides and Methods of Treating Medical Disorders Using Same.” The issued claims cover the composition of matter for novel molecular glue degraders including Salarius’ preclinical cereblon-binding compound, SP-3204, through September 2037. Targeted protein degradation (TPD) takes advantage of the body’s own degradation system to promote the selective elimination of disease-causing proteins. The newly issued patent is based on the molecular glue eragidomide (CC-90009) that is known to target the degradation of GSPT1, a protein that is highly expressed in numerous cancers, including hematologic and solid tumors.

3. Aundrietta Duncan, Ph.D., director of Non-Clinical Development at Salarius Pharmaceuticals, presented SP-3164 preclinical data and program progress at the inaugural Molecular Glue Drug Development Summit in January 2023 in Boston. Dr. Duncan presented *in vivo* data demonstrating the activity of SP-3164 therapeutic activity in cancer models and *in vitro* data demonstrating SP-3164’s mechanism of action. SP-3164 is an oral, next-generation molecular glue that uses Salarius’ deuterium-enabled chiral switching platform to stabilize the preferred (S)-enantiomer of avadomide, an extensively studied clinical compound that has demonstrated encouraging clinical efficacy in non-Hodgkin’s lymphomas (NHL) and other hematologic malignancies. SP-3164 is a new chemical entity and has been issued a composition of matter patent. Data presented in December 2022 at the American Society for Hematology Annual Meeting showed compelling SP-3164 activity in lymphoma models and supports SP-3164’s potential in NHL for the clinical trial planned to initiate in 2023.

4. Salarius announced on January 27, 2023, the presentation of preclinical data showing SP-3164’s activity in non-Hodgkin’s lymphoma (NHL) animal models. In a model of diffuse large B-cell lymphoma, SP-3164 exhibited synergistic activity with the approved anti-CD20 drug rituximab, resulting in the complete elimination of tumors in 50% of treated mice. The combination also performed significantly better than the approved regimen, lenalidomide and rituximab. Aundrietta Duncan, Ph.D., director of Non-Clinical Development, also presented data showing that SP-3164 alone demonstrated significant tumor growth inhibition compared with the control group and out-performed standard-of-care treatment in a follicular lymphoma mouse model. “We believe that SP-3164 holds significant promise to improve the treatment paradigm for blood cancers,” said David Arthur, president and CEO.

5. Targeted therapy for molecularly defined subsets of glioblastoma (GBM) has been tested extensively but is largely met with drug resistance and minimal improvements in survival. Lysine-specific demethylase 1 (LSD1/KDM1A) is amongst the chromatin modifiers implicated in stem cell maintenance, growth and differentiation. With support from CPRIT Product Development grant (DP160014) to Salarius Pharmaceuticals, Joya Chandra, Ph.D., Department of Pediatrics at The University of Texas MD Anderson Cancer Center, and colleagues performed RNA-seq to identify genes and biological processes associated with inhibition. Efficacy of various LSD1 inhibitors was assessed in nine patient-derived glioblastoma stem cell (GSC) lines and an orthotopic xenograft mouse model. The results, reported in *Frontiers in Neurology* on April 4, 2023, identified five genes that correlate with resistance to LSD1 inhibition in treatment resistant GSCs, in GSK-LSD1 treated mice, and in GBM patients with low LSD1 expression. This evaluation of pharmacological LSD1 inhibition suggests the need for future investigations of brain penetrant LSD1 inhibitors alone, or in combination with other therapeutic approaches to synergize efficacy for GBM.

6. Salarius announced on May 9, 2023, that the U.S. Food and Drug Administration (FDA) has removed its partial clinical hold on Salarius’ Phase 1/2 Ewing sarcoma clinical trial evaluating seclidemstat, Salarius’ novel oral, reversible, targeted LSD1 inhibitor. The FDA previously granted seclidemstat Fast Track Designation, Orphan Drug Designation and Rare Pediatric Disease Designation for Ewing sarcoma. “We are confident in seclidemstat’s ability to improve the lives of patients with Ewing sarcoma and are delighted the FDA has removed the partial clinical hold,” said David Arthur, president and CEO of Salarius. “Ewing sarcoma is a devastating bone and soft tissue cancer with limited treatment options that afflicts children, adolescents and young adults. We look forward to working with our clinical trial investigators to resume enrollment with the goal of advancing the development of seclidemstat as a potential treatment option.”

7. Lysine-specific demethylase 1 (LSD1) is an epigenetic eraser that is implicated in the regulation of tumor initiating cells. In glioblastoma (GBM), LSD1 is overexpressed in the tumor initiating cells, glioblastoma stem cells (GSCs), and LSD1 directed therapy. However, there is no clinically viable strategy to treat GBM with LSD1 inhibition yet. With support from a CPRIT Product Development grant (DP160014) to Salarius Pharmaceuticals, researchers from The University of Texas MD Anderson Cancer Center sought to understand the relationship between LSD1 and RTK/MAPK signaling and to evaluate the combination efficacy of LSD1 inhibition and kinase signaling inhibition in GBM. The results of this study, published in *The Journal of Pharmacology and Experimental Therapeutics* in June 2023, demonstrate that MAPK activity can be modulated via inhibition of LSD1, and perhaps support the emergence of a resistant subpopulation. This data emphasizes the importance of preemptive therapeutic strategies to improve efficacy and avoid therapeutic resistance that

is common in GBM.

8. Salarius presented a poster related to the company's novel molecular glue, SP-3164, at the European Hematology Association 2023 Hybrid Conference, which was held in Frankfurt, Germany in June 2023. The research demonstrated that in addition to having direct antitumor effects, SP-3164 also induces an anticancer immunomodulatory effect as demonstrated through the induction of cytokine secretion in human T cells following treatment. "We continue to advance our body of knowledge for SP-3164, with data generated to date demonstrating potent antitumor activity that supports our plans to file an Investigational New Drug application with the U.S. Food and Drug Administration in the coming weeks. We plan to begin a Phase 1 study in the second half of the year," said David Arthur, president and CEO of Salarius.

9. On July 11, 2023, Salarius announced U.S. Food and Drug Administration (FDA) clearance of the company's investigational new drug (IND) application to begin a Phase 1 clinical trial with SP-3164, an oral small molecule protein degrader, in patients with relapsed/refractory non-Hodgkin lymphoma (NHL). Salarius expects to begin treating patients in the dose-escalation portion of the trial in the second half of 2023 to evaluate safety, clinical activity, pharmacokinetics, and pharmacodynamics. "We now plan to enroll NHL patients in the dose-escalation portion of the clinical trial and will then focus on patients with diffuse large B-cell lymphoma (DLBCL) in the second portion of the trial," said David Arthur, president and CEO of Salarius.

10. Salarius announced in August 2023 that the FDA removed its partial clinical hold on Salarius' Phase 1/2 trial evaluating seclidemstat in combination with topotecan and cyclophosphamide as a potential treatment for patients with Ewing sarcoma. In addition, The University of Texas MD Anderson Cancer Center is working to restart their investigator-initiated Phase 1/2 study with seclidemstat in combination with azacytidine in patients with myelodysplastic syndrome and chronic myelomonocytic leukemia.

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