Houston Methodist Research Institute IBC Meeting Minutes

1/15/2026

Meeting Time Records

Meeting start time: 10:00 am

Meeting end time: 11:28 am

VOTING MEMBER ATTENDANCE				
Name of Member	**Status (member or alternate)**	**IBC role**	**If Voting Alternate, Member Substitution**	**Present in Person or Virtually (TEAMS)?**
Biana Godin, PhD, M.Sc. Pharm	Chair	Scientific, affiliated		Yes, Virtually
Sasha Azar, PhD	Vice Chair	Scientific, affiliated		Yes, Virtually
Vicente Zuno, BS, RBP	Member	Biosafety Officer, affiliated		Yes, Virtually
Joan E. Nichols, PhD	Member	Scientific, affiliated		Yes, Virtually
Chas Gray, RPh	Member	Scientific, affiliated		Yes, Virtually
Tanya Herzog, DVM	Member	Animal Expert, affiliated		Yes, Virtually
Edward Graviss, PhD	Member	Scientific, affiliated		Yes, Virtually
Wenhao Chen, PhD	Member	Scientific, Affiliated		Yes, Virtually
Daniel Kiss, PhD	Member	Scientific, affiliated		No
Tamara Steele, BS	Member	Community member, Non-affiliated		Yes, Virtually
Jillian Chahal, MPH, CSP	Member	Community member, Non-affiliated		No
Francesca Taraballi, PhD	Member	Scientific, Affiliated		Yes, Virtually
Jiangyong Shao, MS	Member	Scientific, Affiliated		Yes, Virtually
Nagendran Tharmalingam, PhD	Member	Laboratory representative, Affiliated		No
Anjana Tiwari, PhD	Member	Laboratory representative, Affiliated		Yes, Virtually
Dimitrios Wagner, MD PhD	Member	Human gene transfer expert, Non-affiliated		Yes, Virtually

Sachin Thakkar, PhD	Member	Scientific, Non-affiliated		No

NON-VOTING MEMBER ATTENDANCE		
Name of Member	**IBC Role**	**Present in Person or Virtually (TEAMS)?**
Brenda Hartman BA	Ex-officio, Director, Central Laboratory Operations	Yes, Virtually
Gretchen Gotlieb, MS	Ex-officio, Safety Representative, Chemical Hygiene officer, Central Laboratory Operations	Yes, Virtually
Enid Burns	Ex-officio, Central Laboratory Operations Safety Representative	Yes, Virtually
Michael Smith	Ex-officio, Legal Counsel	No
Michael Metcalf	Ex-officio, Environmental Safety	No
Tiffany Gunter	Ex-officio, Employee Health Representative	No
Astrid Marcela Quiroga	Ex-officio, Employee Health Representative	Yes, Virtually
Leon Brown, MS	Ex officio, Radiation safety officer	No

QUORUM INFORMATION

Number of IBC members on the roster: 17

Number required for quorum: 9

All members present by TEAMs received all pertinent material before the meeting and were able to actively and equally participate in all discussions.

ATTENDANCE OFFICE OF RESEARCH PROTECTIONS STAFF
Malissa Mayer-Diaz, Safety Committees Manager
Perla J. Rodriguez, Sr. Analyst
Shane Wilson, Analyst
Prince Agyapong, Analyst
Rebecca Corrigan, IACUC Manager
Wanda Quezada, Director, Regulatory Oversight
Leola Griffin, QI & Education Manager
Joanna Espinosa, Analyst

ATTENDANCE STATUS AND VOTING KEY	
ABSTAIN:	Present for the vote, but not voting "For" or "Against."
ABSENT:	Absent for discussion and voting for reasons other than a conflicting interest.
RECUSED:	Absent from the meeting during discussion and voting because of a conflicting interest.
SUBSTITUTION:	When regular members and their alternate(s) are listed in the ATTENDANCE table above and an alternate member substitutes for the regulator member this identifies the name of the alternate to indicate which individual is serving as the voting member for this vote. May be deleted if there are no substitutions.

CALL TO ORDER

The Institutional Biosafety Committee convened a hybrid meeting via Microsoft Teams on December 4, 2025. The meeting was called to order at 11 a.m. with 13 members in attendance, exceeding the quorum requirement of 9 members.

REPORTS

Biosafety Officer Report

- No reports

CONFLICT OF INTEREST

Committee members were reminded by the IBC Chair to recuse themselves in the event of any conflicts of interest.

OLD BUSINESS

- A list of approved protocols was shown to committee members during the meeting.

NEW BUSINESS

- A list of approved amendments via designated member review was distributed to the committee members one week prior to the meeting and shown during the meeting.
- A list of approved administrative amendments was distributed to the committee members one week prior to the meeting and shown during the meeting.
- A list of approved continuing reviews via designated member review was distributed to the committee members one week prior to the meeting and shown to the committee members during the meeting.
- An annual refresher orientation was presented by Malissa Mayer-Diaz, Safety Committees Manager.

MINUTES REVIEW

The meeting minutes from December 4, 2025, were reviewed. A motion to approve was made and seconded, and the minutes were subsequently approved.

Motion: Approved

- Yes votes: 13
- No votes: 0
- Abstained: 0

AGENDA ITEMS

IBC NEW APPLICATIONS

IBC00002578
Title: Allogenic Natural Killer T-Cells Expressing CD19 Specific Chimeric Antigen Receptor and Interleukin-15 in Relapsed or Refractory B-Cell Malignancies
Principal Investigator: Carlos Ramos

Study Overview: This study evaluates an allogeneic, genetically engineered invariant Natural Killer T-cell (aNKT) therapy expressing a CD19-targeted Chimeric Antigen Receptor (CD19.CAR). Autologous CD19 CAR-T therapies have demonstrated high complete response rates in relapsed/refractory DLBCL and ALL but are limited by production delays, product variability, and reduced efficacy in heavily pretreated lymphoma patients. Additionally, autologous CAR-T treatments are associated with acute toxicities, including cytokine release syndrome (CRS) and neurotoxicity.

To address these limitations, the proposed product uses donor-derived NKT cells, which can be expanded reliably, infused safely without causing graft versus host disease (GVHD), and provide innate antitumor activity. The engineered CD19.CAR-aNKT cells include: a CD28 costimulatory domain, co-expression of IL-15 to enhance cell expansion, persistence, and antitumor function; and shRNA-mediated knockdown of HLA class I and II molecules to reduce host immune rejection and prolong persistence

The clinical protocol consists of a single infusion of CD19.CAR-aNKT cells per patient, using one of the following dose levels: Dose Level 1: 1×10^7 cells/m², Dose Level 2: 3×10^7 cells/m², Dose Level 3: 1×10^8 cells/m², Dose Level 4: 3×10^8 cells/m². This study aims to evaluate the safety, persistence, and antitumor activity of these allogeneic CD19.CAR-aNKT cells in patients with CD19-positive malignancies. There are currently four subjects on study. They have been treated and are all in follow-up. This study is closed to new enrollment. There are no plans to treat any additional patients.

- **Training**: All staff members have completed training.
- **Applicable NIH Guidelines**: Section III-C-1
- **Containment Conditions to be implemented**: BSL2
- **Risk assessment and Discussion**: Since no additional patients will receive CD19.CAR-aNKT cell infusions, there are no ongoing risks to personnel or the environment. The remaining enrolled participants are in long-term follow-up only, which does not involve handling or administering the investigational product.
- **Comments sent to the PI for clarification**: None

- **The motion to approve was seconded and passed.**

Motion: Approved

- Yes Votes: 13
- No Votes: 0
- Abstained: 0
- Recused: 0
- Absent: 0

IBC00002566
Title: Research using plasmids/viral vectors to express/deliver signaling genes in human cell lines to study cell-cell communications in Alzheimer's disease and cancer
Principal Investigator: Stephen Wong

Study Overview: This research includes multiple projects focused on understanding mechanisms of therapy resistance and disease biology using established in-vitro and in-vivo models.

T-DXd Resistance in Breast Cancer: Prior work identified significant upregulation of S100A8/A9 and S100P signaling in breast tumors resistant to trastuzumab–deruxtecan (T-DXd). The study will investigate tumor-intrinsic mechanisms by which these pathways contribute to resistance, including effects on DNA-damage response, apoptosis avoidance, drug-payload tolerance, and HER2-signaling plasticity. To model these mechanisms, lentiviral overexpression vectors will be used to upregulate S100A8/A9 and S100P in the MDA-MB-231 cell line. Lentiviral shRNA vectors will be used to knock down these genes in the S100-positive SKBR3 cell line.

Mechanisms Linking Cancer Biology and Alzheimer's Disease Protection: This project uses 3D brain organoids that recapitulate key cellular features of Alzheimer's disease to examine how specific genes affect neural biology. Lenti-CRISPRv2 will be used to selectively reduce MERTK gene activity within the organoid cultures. This approach will enable assessment of how decreased MERTK function alters cellular processes relevant to Alzheimer's disease pathology.

In-Vivo Tumor Studies: Mouse studies will utilize the following murine prostate cancer cell lines: TRAMP-C1, TRAMP-C2, PTEN-CaP8, and RM-1. Cell lines will be prepared under standard laboratory conditions. Tumors will be established via subcutaneous injection into mice.

- **Training**: All members should receive both CITI, HMRI, and laboratory specific training related to the agents included in the protocol.
- **Applicable NIH Guidelines**: Section III-D-1
- **Containment Conditions to be implemented**: BSL2
- **Risk Assessment & Discussion**: Although PTEN-CaP8, RM-1, TRAMP-C1, and TRAMP-C2 are murine cancer cell lines, any mammalian cell culture can become contaminated with adventitious agents (e.g., bloodborne viruses or other pathogens) if improperly handled. Standard biosafety practices are necessary to prevent exposure or cross-contamination. If these cells are not fully decontaminated prior to disposal, they

could introduce viable biological material into the environment. While these cell lines are not inherently infectious, they are tumorigenic; accidental inoculation into animals or humans could result in localized tumor formation, underscoring the need for proper containment, PPE, and sharps safety. Lentiviral vectors integrate into the host genome, which can disrupt normal genes or activate oncogenic pathways. Transgene insertion may further increase oncogenic potential. Although modern systems reduce the likelihood of replication-competent lentivirus (RCL), a theoretical risk remains. Accidental exposure can occur through needlesticks, mucous membrane contact, or non-intact skin.

- **Comments sent to the PI for clarification**:
    - **Section Exposure Management – Laboratory:** Transport SOP: Please confirm whether the target review date for the Transport SOP is December 2026. If that is correct, the SOP will need to be updated by that date. If needed, you may extend the review date by one year—for example, to December 2027. Please remove anything that does not apply to lab specific procedures, such as BSL3 practices, dry ice etc. Please include a statement that confirms that study team members will not stop in public areas when transporting hazards from Fondren to the RI.
    - **Section Exposure Management Facility** - Recommendation from the biosafety officer: In accordance with best practices, all work involving lentiviral vectors should be confined to a single room. Please specify what measures are in place to ensure that the rooms are not being used by others during the handling of the lentiviral vectors and that proper door signage is in place. Please contact the biosafety officer for assistance with implementing this requirement. Please ensure that this information is also captured in the SOP for lentivirus provided in the section summary of proposed research.
    - **Section Summary of Proposed Research** - Please clarify the specific procedures that will involve the murine cell lines, such as modification with recombinant or synthetic nucleic acids. In the SOP titled SOP for lentivirus it states that regular trash and hazardous chemical waste stream will be used for waste. Regular trash and hazardous chemical waste stream are not appropriate for disposal of lentiviral vectors.
    - **Section Study Progress**: The two reviews and a commentary listed do not include agents on the protocol. Please include relevant publications or a summary related to the agents listed in the protocol.
    - **Section Animals**: Please ensure that this section reflects all cell lines administered to animals.
    - **Section Completed Approvals**: Please make sure to update the credentials of the team members that expire in March.
    - **Section Hazard Identification**: Will PTEN-CaP8, TRAMP-C1, TRAMP-C2 and RM-1 cell line be treated with recombinant or synthetic nucleic acids? If yes, it should be mentioned in the description. Please provide clarification.
    - **Section Staff Identification**: Please correct all typos. All members should receive both CITI and laboratory specific training related to the agents included in the protocol in HMRI. The responsibilities listed for each team member are very broad. Please provide specific procedures for each member. Please specify which agents

each individual will be responsible for handling.

- **The motion to approve the study by designated member review was seconded and passed.**

Motion: Approvable by Designated Member Review

- Yes Votes: 13
- No Votes: 0
- Abstained: 0
- Recused: 0
- Absent: 0

IBC00002488
Title: Horner lab -Use of plasmids and viral vectors to deliver recombinant cargos in neural stem cells and neural circuits for studying transplantation outcomes and connectivity.
Principal Investigator: Phillip Horner

Study Overview: This research investigates mechanisms of neural regeneration by studying how stem and progenitor cells in the adult nervous system respond to injury. The study uses viral vectors—retroviral (MLV), lentiviral, and adeno-associated viral (AAV) systems—to deliver genes that regulate cell fate and to label dividing cells within the injured brain and spinal cord. These approaches will help identify determinant genes influencing neuroregeneration and may support future development of treatments for paralysis by enhancing the natural repair process.
Murine leukemia virus (MLV) vectors are produced in-house using Phoenix GP or HEK293T producer cell lines and are used to selectively infect dividing neural progenitor cells, allowing researchers to mark specific cell types and trace their contribution to spinal cord regeneration. Lentiviral vectors, generated either in the laboratory or obtained commercially, are used to modulate gene activity in vivo and in vitro to assess gene function during regeneration. Custom AAV and transsynaptic AAV vectors are used to deliver plasmids that label neural populations, track neuronal connectivity, and evaluate myelin and neural cell regeneration. These AAVs may be purchased or obtained through collaborations and are often tagged with fluorophores for microscopic visualization. Viral vectors—including retroviral, lentiviral, AAV, and transsynaptic AAV constructs—will be injected into rodents or pigs as described in the corresponding animal use protocol. These vectors enable tracking of myelin repair, neuronal communication, and cell fate following injury. For in-vitro studies, concentrated viral supernatants will be applied directly to cultured cells.
The research also includes transplantation studies using human-derived stem cells to evaluate their potential regenerative effects following spinal cord injury. Plasmid constructs used in vector production will be propagated in *E. coli* strains such as DH5α. PiggyBac transposon systems will be used in cultured cells to express fluorescent and gene-modifying components for additional regeneration studies. This work aims to elucidate gene functions and cellular mechanisms that may support recovery after central nervous system injury and inform future therapeutic strategies.

- **Training**: All staff members have completed and are current with their required training.
- **Applicable NIH Guidelines**: Section III-D-1, 4

- **Containment Conditions to be implemented**: BSL2
- **Risk Assessment & Discussion**: The study uses several BSL-2 agents, including AAV vectors, lentiviral vectors, Moloney MLV retroviral vectors, human stem-cell–derived neural cells, HEK293T and Phoenix-GP producer cell lines, as well as PiggyBac plasmid systems. The primary biosafety risks across these materials include potential exposure to viral vectors through aerosols, mucosal contact, or sharps injuries; accidental transduction or insertional mutagenesis; and handling of human-derived cell lines. AAV and transsynaptic AAV constructs pose low but notable risks of unintended gene delivery, while lentiviral and retroviral systems require precautions to prevent generation of replication-competent viruses. Human stem-cell–derived neural cells and HEK293T/Phoenix-GP producer lines require standard BSL-2 handling due to their human origin and viral production capabilities. All agents present low environmental risk when proper decontamination is used. With adherence to BSL-2 practices—including BSC use, PPE, safe sharps procedures, and appropriate ABSL-2 animal handling—the overall risk to personnel and the environment is considered manageable and appropriate for the proposed work.
- **Comments sent to the PI for clarification**:
    - **Section Hazard Identification** - Please specify whether the lentiviral system used is a 2nd or 3rd generation packaging system. Please rephrase AAV as AAV vector so that it is not mistaken for the virus
    - **Section Exposure Management- Laboratory**- Phoenix-GP cells are retroviral packaging lines, not adeno viral. Please correct this.
    - **Section Risk Assessment** - Question 9: Does your proposed project include experiments involving whole animal's genome being altered by stable introduction of recombinant or synthetic nucleic acid molecules, or DNA or RNA molecules derived therefrom, into the germ-line (transgenic animals) and experiments involving viable recombinant or synthetic nucleic acid molecule-modified microorganisms tested on whole animals. (Sec.III.D.4) Please answer "yes", as the PiggyBac transposon integrates in the genome.
    - **Section Viral Studies -** PiggyBac is a non-viral transposon and therefore should not be included in the viral studies section. Please remove it by unselecting "viruses" for Question 5 ('Please check below all that will be involved in your research') in the hazard identification section for the PiggyBac system/vector.
- **The motion to approve the study through designated member review was seconded and passed.**

Motion: Approvable by designated member review

- Yes Votes: 13
- No Votes: 0
- Abstained: 0
- Recused: 0
- Absent: 0

IBC00002558
Title: IBC protocols: Research using plasmids/viral vectors to express or inhibit cytokine and protein expressions in human and mouse cell lines to study multiple myeloma
Principal Investigator: Jing Yang

***Tanya Herzog, Voting Member, left the meeting prior to discussion and voting on this protocol*

Study Overview: This three-year resubmission was tabled by the IBC during the previous meeting on December 4, 2025. This research focuses on tumor biology, translational research, and immunology in multiple myeloma (MM) and its associated bone disease. MM is the second most common hematologic malignancy in the U.S., characterized by malignant plasma cell accumulation in bone marrow, leading to impaired hematopoiesis and severe skeletal complications. Over 80% of patients experience skeletal-related events such as fractures, bone pain, and hypercalcemia. The study aims to understand interactions between myeloma cells and bone marrow stromal components (e.g., T cells, osteoblasts, osteoclasts, osteocytes, adipocytes) to identify mechanisms and signaling pathways for targeted therapies. Experimental approaches include gene manipulation (introduction or knockdown) using plasmid DNA and viral vectors (lentivirus, retrovirus) delivered in vitro to cell lines or patient-derived cells. Lentiviral CRISPR/Cas9 and shRNA systems will be used for gene editing and knockdown.

- **Training**: All staff members have completed and are current with their required training.
- **Applicable NIH Guidelines**: Section III-D-1
- **Containment Conditions to be implemented**: BSL2
- **Risk Assessment & Discussion**: All viral work will be conducted in a BSL-2 laboratory using biological safety cabinets. Lentiviral and retroviral vectors are replication-defective and self-inactivating; risk of replication-competent virus (RCV) is minimized by using third-generation systems and validated protocols. No virus will be administered directly to animals; only stable cell lines derived from viral transduction will be used in mouse studies. Standard PPE, biohazard labeling, bleach decontamination, and inventory tracking will be enforced. Viral DNA and stocks will be stored in designated freezers with biohazard labeling. All waste will be decontaminated with 10% bleach prior to disposal.
- **Comments sent to the PI for clarification**:
    - **Section DNA Studies** - Several of the genes listed are protooncogenes or oncogenes. Please identify them as such by answering 'yes' to the question "are any oncogenes" and provide a description and any potential toxic effects to humans.
    - **Section Other Agents** - Once the HSC protocol 3-year resubmission is completed and approved, please update the associated HSC accordingly.
    - **Section Hazard Identification** - The use of broad language is still included in the protocol. for example, cytokine, receptors "or others", "such as". Please revise and be specific about what genes are being manipulated in the protocol in this section. Packing plasmids PVSVG and psPAX2 need to be listed as their own separate hazards

- **Section Summary Of Proposed Research** - The E.coli strain list needs to be inclusive of all strains used in these studies. Please be specific and remove broad language "such as".

- **The motion to approve the study through designated member review was seconded and passed.**

Motion: Approvable by designated member review

- Yes Votes: 12
- No Votes: 0
- Abstained: 0
- Recused: 0
- Absent: 1, Tanya Herzog

IBC00002553
Title: Phase 1/2 Study of EG-70 as an Intravesical Administration to Patients with BCG-Unresponsive NMIBC and High-Risk NMIBC Patients who are BCG Naïve or Received Incomplete BCG Treatment
Principal Investigator: Raj Satkunasivam

Study Overview: The Sponsor is developing a non-viral gene therapy platform designed to deliver DNA to mucosal tissues and induce localized expression of immune-modulating molecules. EG-70 is the investigational agent being evaluated for the treatment of patients with bacille Calmette-Guérin (BCG)-unresponsive Non-Muscle Invasive Bladder Cancer (NMIBC). EG-70 consists of a plasmid DNA drug substance (N9-h12-R) formulated within a proprietary nanoparticle system composed of arginine-glucose-derivatized poly-D-glucosamine (RXG) and polyethylene glycol-b-poly-L-glutamic acid (PEG-b-PLE). The plasmid encodes interleukin-12 (IL-12) as a single-chain fusion protein, as well as two RNA products designed to activate the RIG-I innate immune signaling pathway.

This study will assess the safety and preliminary efficacy of intravesical EG-70 administration in patients with NMIBC who have failed prior BCG therapy and are otherwise recommended for radical cystectomy. The Phase 2 portion includes two open-label, single-arm cohorts: (1) patients with BCG-unresponsive disease, and (2) patients who are BCG-naïve or have received incomplete BCG therapy. Each cohort will undergo separate efficacy analyses.

Phase 2 treatment cycles are 12 weeks in duration. Patients demonstrating stable disease or complete response at Week 12 may receive a second cycle. After Cycle 2, patients with a complete response may receive up to two additional cycles every 12 weeks. Patients with stable disease or progression will discontinue treatment and be followed for safety for 12 weeks. Patients completing all four cycles without progression will be monitored for disease progression for up to two years following the End-of-Treatment visit. EG-70 is reconstituted with sterile water to a concentration of 0.8 mg plasmid DNA/mL, and a nominal 50-mL intravesical dose is administered for each treatment instillation.

- **Training**: All staff members have completed and are current with their required training.

- **Applicable NIH Guidelines**: Section III-C-1
- **Containment Conditions to be implemented**: BSL2
- **Risk Assessment & Discussion**: EG-70 is a nanoparticle formulation containing plasmid DNA and does not include any live or replicating organisms. As a result, the overall biosafety risk to pharmacy staff and the environment is considered low. The primary occupational hazard is standard physical risk—most notably, potential needlestick injuries during preparation and administration. Standard aseptic technique and sharps precautions are sufficient to mitigate this risk.
- **Comments sent to PI for clarification**:
    - **Section Sponsor Information** - Please provide an emergency contact number for the sponsor that can be reached in the event of an employee exposure incident.
    - **Section Summary of Proposed Research** - Please check if updated documents are available and if yes attach updated versions. For example: EG-70_Engene - SDS US 4.11English (US).pdf(0.01) is dated 11/30/2020
    - **Section Human Clinical Trials** - Please provide un updated IRB approval letter
    - **Section Exposure Management - Clinic/Hospital -** Transport SOP only states that, "All materials shall be packaged in accordance with local and national regulations (OSHA, TSBP, etc.)", but there is no mention of leakproof primary, secondary and outer containers. Please update accordingly.
- **The motion to approve the study through designated member review was seconded and passed.**

Motion: Approvable by designated member review

- Yes Votes: 12
- No Votes: 0
- Abstained: 0
- Recused: 0
- Absent: 1, Tanya Herzog

IBC00002571
Title: Phase 1-2 Trial of HSV-tk Gene Therapy (Replication-Defective Adenovirus) + Valacyclovir combo w/ Radiotherapy & Chemotherapy for Newly Diagnosed Anaplastic Astrocytoma & Glioblastoma
Principal Investigator: David Baskin

Study Overview: This prospective Phase I–II clinical trial evaluates the safety and efficacy of HSV-tk plus valacyclovir gene therapy administered in combination with radiotherapy for patients newly diagnosed with anaplastic astrocytoma (AA) or glioblastoma multiforme (GBM). Eligibility criteria for the study population are outlined separately.

Clinical response will be assessed through neurological examinations, neuropsychological testing, imaging studies, and histological evaluation. Blood samples will be collected for immune response monitoring, complete blood counts, and liver function testing. Toxicity will be graded using CTCAE v4.03 and RTOG neurotoxicity criteria. Patients will also be monitored for median time to progression and overall survival. The primary objective is to determine the overall survival (OS) rate in newly diagnosed AA or GBM patients receiving surgical resection or biopsy followed by ADV/HSV-tk plus valacyclovir therapy and radiotherapy. The secondary objective is to Evaluate local tumor control following surgical resection or biopsy with ADV/HSV-tk plus valacyclovir and radiotherapy, using MRI or CT brain imaging assessed per RANO and iRANO criteria.

A total dose of 5×10^{11} vector particles will be diluted into 1 mL and delivered across 20 injection sites (50 µL per site). Injections will be placed 1–2 cm into the tumor bed and delivered slowly over approximately 60 seconds. The neurosurgeon will avoid injection sites near critical motor or language cortex, ventricular structures, or areas where leakage into the subarachnoid space could occur.

Standard wound closure with sutures (not staples) will be used to avoid interference with radiation planning. Routine perioperative medications—including antibiotics, corticosteroids, anticonvulsants, and analgesics—will be administered as clinically indicated. Vector material is manufactured by Baylor College of Medicine Cell and Gene Therapy. After patient registration and dose assignment, an authorized clinician will prepare and sign a prescription sent to BCM Cell and Gene Therapy. On the day of surgery, the pharmacist will retrieve the appropriate sublot, with verification by two personnel to confirm correct sublot and concentration. The time of removal from storage will be recorded.

- **Training**: All staff members have completed training.
- **Applicable NIH Guidelines**: Section III-C-1
- **Containment Conditions to be implemented**: BSL2
- **Risk assessment and Discussion**: *Personnel Involved in Vector Injection*:
  Risk of exposure during vector preparation and injection is low. The ADV/HSV-tk vector is contained in a small-volume cryovial and transferred into the syringe without anticipated loss. Intertumoral injections may produce only minimal leakage along the needle track. Prior clinical trials have shown no significant toxicity to personnel; patient-related effects may include fever or laboratory abnormalities, managed with standard clinical care. *Post-Surgical Health Care Workers***:** Potential vector shedding through patient bodily fluids is considered very low. Previous studies found no detectable shedding by plaque assay or PCR following AdV-tk administration. Accidental exposure, if it occurred, would involve extremely low concentrations of a replication-defective vector and is expected to pose minimal risk, similar to mild adenoviral illness. Recombination with wild-type adenovirus is theoretical and has not been observed. *Spill or Needle-Stick Exposure:* In the unlikely event of a spill or needle-stick, the biohazard risk remains very low. Standard blood/body fluid exposure procedures are sufficient. Possible effects include mild, short-term inflammation or fever. No adverse effects have been reported in health care workers in prior clinical trials involving similar vectors. *Additional Precautions:* Because the overall risk to personnel and close contacts is

extremely low, no extra monitoring, restrictions, or health screenings are required.

- **Comments sent to the PI for clarification**:
    - **Overall Protocol Comment**: Please carefully review this protocol and address all typos.
    - **Section Study Progress** - Please correct the dosage information throughout the proposal. Some sections list the dose as 5×10^10, while the protocol states that the viral dose is 5×10^11 viral particles. It may be helpful to include a clarification describing the concentration of the original solution received and any subsequent dilutions used to prepare the individual treatment dose.
    - **Section Summary of Proposed Research** - How will the agent be transported from Baylor College of Medicine Cell and Gene therapy?- Please provide clarification for including the document titled "Nanoparticles HSV-tk.pdf". If nanoparticles are not part of the treatment, please remove this document to eliminate confusion.
    - **Section DNA studies** - A transport protocol was provided with pick up at Baylor College Gene and Cell therapy but no room number was given and no delivery point was defined. Please provide specific locations.
    - **Section Exposure Management - Clinic/Hospital**- Is radiotherapy standard of care for these patients?- "The injection syringe is loaded from the vial with no vector Joss anticipated". Please correct this should read no vector loss is anticipated.
    - **Section Other Agents** - While this is independent of IBC review approval, please complete the radiation safety application RSC00001071 linked in the ARAF - the radiation safety officer has requested that this be completed for proper documentation purposes.
- **The motion to approve the study through designated member review was seconded and passed.**

Motion: Approvable by designated member review

- Yes Votes: 12
- No Votes: 0
- Abstained: 0
- Recused: 0
- Absent: 1, Tanya Herzog

IBC AMENDMENTS

IBCA00001444
Title: Hazard Amendment 2 for Research using Gasdermin C plasmid to facilitate other plasmid transfection efficiency in various mouse and human immortalized cell lines.
Principal Investigator: Yinan Gong

Amendment Overview: This amendment adds in vivo studies to the protocol. Cell lines previously reviewed and approved for in vitro use will now be utilized in mouse studies. Tumor cell lines MEF, NIH3T3, MC38, LLC, and B16F10-OVA will be administered to mice via subcutaneous injection, using doses ranging from 100,000 to 1,000,000 cells per injection.

- **Training**: All staff members have completed and are current with their required training
- **Applicable NIH Guidelines**: Section III-D-4
- **Containment Conditions to be implemented**: BSL2, ABSL1
- **Risk Assessment & Discussion:** The study utilizes several established mouse-derived immortalized cell lines, including B16F10-OVA melanoma cells, LLC lung cancer cells, MC38 colon cancer cells, and MEF fibroblasts. These are not primary murine cells and do not inherently pose infectious risk. Genetic modifications performed in these lines include deletion of Xkr8, Tmem30A, GSDME, or MLKL, or expression of constructs such as MFG-E8, GSDMD, MLKL, NF-κB::CFP, or shRNA targeting ACSL4, POR, SLC52A2, RFK, STAT1, or IFNGR. All introduced or deleted genes are non-pathogenic and are not associated with increased hazard to personnel or the environment. These genetic alterations are used solely to study cell-death pathways and immune-related signaling and do not confer infectious, toxic, or environmentally persistent properties to the cell lines. Standard BSL-2 practices are sufficient to safely handle these modified cell lines.
- **Comments sent to PI for clarification:**
    - **Section Risk Assessment** - *Question 9: Does your proposed project include experiments involving whole animal's genome being altered by stable introduction of recombinant or synthetic nucleic acid molecules, or DNA or RNA molecules derived therefrom, into the germ-line (transgenic animals) and experiments involving viable recombinant or synthetic nucleic acid molecule-modified microorganisms tested on whole animals. (Sec.III.D.4)* - Please update to "yes" given that cell lines modified with recombinant or synthetic nucleic acids are being injected into mice.
    - **Section Animals** - For the cell lines being administered to animals - please select "S.C" under "what is the route of administration"
    - **Section Exposure Management - Animal Facility -** Please complete this section
- **The motion to approve the amendment through designated member review was seconded and passed.**

Motion: Approvable by designated member review

- Yes Votes: 12
- No Votes: 0
- Abstained: 0
- Recused: 0
- Absent: 1, Tanya Herzog

IBCA00001445
Title: PI Amendment 3 for Reprogramming macrophages in the inflammation sites to anti-inflammatory phenotype using CRISPR liposomes for various diseases
Principal Investigator: Kyuson Yun

Amendment Overview: This amendment requests the replacement of Principal Investigator Fransisca Leonard with Kyuson Yun. Dr. Yun has extensive experience working with the nucleic acid materials included in the application—CRISPR components, sgRNA, siRNA, and mRNA. Prior to the committee's review, the study team clarified that the formulation of liposomes encapsulating these recombinant or synthetic nucleic acids will be performed by a team member who previously trained under Dr. Leonard.

- **Training**: All staff members have completed and are current with their required training
- **Applicable NIH Guidelines**: Not applicable
- **Containment Conditions to be implemented**: Not applicable
- **Risk Assessment & Discussion:** Not applicable
- **Comments sent to PI for clarification:** None
- **The motion to approve the amendment was seconded and passed.**

Motion: Approved

- Yes Votes: 12
- No Votes: 0
- Abstained: 0
- Recused: 0
- Absent: 1, Tanya Herzog

ADJOURNMENT

The meeting adjourned at 11:28 am