Houston Methodist Research Institute IBC Meeting Minutes

3/5/2026

Meeting Time Records

Meeting start time: 10:00 am

Meeting end time: 11:22 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, in Person
Vicente Zuno, BS, RBP	Member	Biosafety Officer, affiliated		Yes, in Person
Joan E. Nichols, PhD	Member	Scientific, affiliated		Yes, in Person
Chas Gray, RPh	Member	Scientific, affiliated		Yes, Virtually
Tanya Herzog, DVM	Member	Animal Expert, affiliated		Yes, in Person
Edward Graviss, PhD	Member	Scientific, affiliated		Yes, Virtually
Wenhao Chen, PhD	Member	Scientific, Affiliated		Yes, in Person
Daniel Kiss, PhD	Member	Scientific, affiliated		Yes, in Person
Tamara Steele, BS	Member	Community member, Non-affiliated		No
Jillian Chahal, MPH, CSP	Member	Community member, Non-affiliated		No
Francesca Taraballi, PhD	Member	Scientific, Affiliated		Yes, in Person
Jiangyong Shao, MS	Member	Scientific, Affiliated		Yes, in Person
Nagendran Tharmalingam, PhD	Member	Laboratory representative, Affiliated		Yes, in Person
Anjana Tiwari, PhD	Member	Laboratory representative, Affiliated		Yes, in Person
Dimitrios Wagner, MD PhD	Member	Human gene transfer expert, Non-affiliated		Yes, in Person
Gretchen Gotlieb, MS	Member	Safety representative,		Yes, in Person

		Affiliated		

NON-VOTING MEMBER ATTENDANCE		
Name of Member	**IBC Role**	**Present in Person or Virtually (TEAMS)?**
Brenda Hartman BA	Ex-officio, Director, Central Laboratory Operations	No
Enid Burns	Ex-officio, Central Laboratory Operations Safety Representative	Yes, in Person
Michael Smith	Ex-officio, Legal Counsel	Yes, Virtually
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	Yes, Virtually
Wanda Quezada, CIP	Ex officio, Director Regulatory Oversight	Yes, Virtually

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
Joylise Mitchell, IACUC Analyst
Leola Griffin, QI & Education Manager
Joanna Espinosa, Analyst QI & Education
Shehla Barlas, Analyst QI & Education

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—held both in person and via Microsoft Teams—on March 5, 2026. The meeting was called to order at 10 a.m., with 14 members participating, exceeding the quorum requirement of 9 members.

REPORTS

BSO Report:

- Reported that destruction and deactivation of BSL-3 materials, along with all required documentation, were completed for Dr. Sasha Azar who has since departed the institution.
- The committee discussed procedures for ordering recombinant or synthetic nucleic acid materials from RNA core to external institutions. The BSO noted that other institutions routinely contact the BSO to confirm that incoming materials have received appropriate IBC review and approval prior to transfer.

Updates from the Chair

- The Chair reported updates to the IBC roster noting that Sachin Thakkar and Sasha Azar are no longer members of the committee, as both have departed their respective institutions.

EDUCATION

A research auditor from the Research Integrity team provided an educational overview on research integrity, regulatory compliance, and post-approval monitoring processes related to animal research.

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 prior to and during the meeting.

NEW BUSINESS

- **Discussion Topic**: **Sponsor Contact Phone Number Discussion**:

  The committee discussed whether sponsor contact phone numbers should be required. After reviewing NIH guidelines, it was confirmed that sponsor phone numbers are not a

regulatory requirement and are often nonfunctional or unhelpful when attempts are made to reach knowledgeable personnel.

The committee noted that employee health—not the IBC—is typically impacted during exposure events. Current institutional policy (RE43) directs employees to contact the Principal Investigator (PI) in the event of exposures, spills, or adverse events. The PI is responsible for providing all necessary agent-specific information and coordinating with employee health and sponsors as needed.

It was agreed that: The IBC will not require sponsor contact phone numbers on protocols. The PI will be reaffirmed as the primary point of contact for exposure-related information. This expectation will be incorporated into IBC SOPs and reinforced through onboarding, training, and annual refresher education with support from relevant research oversight groups. Employee Health will be notified to ensure consistent communication and alignment with institutional policy.

- **Motion**: **Discontinue Requiring Sponsor Contact Phone Numbers on IBC-related protocols**
  - Votes
  - Yes: 14
  - No: 0
  - Abstained: 0

- **Discussion Topic: NIH Guidance Document & Exempt Experiments**

  The committee reviewed a newly adapted HMRI NIH guidance document intended to clarify which activities require IBC review/approval and how exempt experiments will be handled. The document was updated to align with current institutional policies and will serve as a reference for investigators and staff.

  Discussion focused on Section 3F (exempt experiments). Although NIH guidelines allow PIs to determine exemption without filing with the IBC, institutional policy still requires registration of exempt work. To streamline this, an interim Microsoft Form was created to allow PIs to list their research and associated genes. Submissions will undergo designated member review, with the option to escalate to full committee review if needed. All registrations will be documented to ensure audit readiness.

  Committee members were asked to review the guidance document and form and submit feedback to the subcommittee. A vote will occur at a future meeting once comments are incorporated.

- 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.

MINUTES REVIEW

The meeting minutes from February 5, 2026, were reviewed. A motion to approve was made and seconded, and the minutes were subsequently approved.

Motion: Approved

- Yes votes: 14
- No votes: 0
- Abstained: 0

AGENDA ITEMS

IBC NEW APPLICATIONS

IBC00002572
Title: Encapsulation of siRNA, mRNA, circRNA, gRNA and aptamers in Lipid Nanoparticle for delivery in biodistribution/imaging/therapeutic studies in cancer, tissue regeneration, and infectious diseases
Principal Investigator: Biana Godin

***Conflict of Interest: Members Biana Godin, Anjana Tiwari recused themselves due to conflict of interest*

Study Overview: This protocol involves the development and optimization of nanoparticle-based delivery systems for nucleic acids intended for applications in cancer, skin regeneration and radiation protection, traumatic brain injury, liver targeting, and infectious diseases. The protocol covers several categories of biological agents—including siRNA, mRNA, circRNA, aptamers, and commercially available fluorescent or bioluminescent cell lines—which will be encapsulated in lipid nanoparticles and evaluated through in vitro and, where applicable, in vivo studies.

siRNA and mRNA: Agents include commercially available siRNAs and mRNAs, as well as mRNA produced by the HMRI RNA Core. siRNA will be used for transient gene silencing (e.g., SIRPα, EphA2) in human and murine cancer cells and macrophages. mRNA constructs include those encoding ERβ, TERT, tuberculosis antigens (85A, 85B, CFP10, ESAT6), HIV antigens (GP160, GP120), and CRISPR-related proteins (CAS9, CBE6, THAD). Lipid nanoparticle encapsulation will be performed under HSC00001581. Administration routes for animal studies include tail vein, intranasal, intraperitoneal, and subcutaneous injection. Scramble siRNAs will serve as controls.

CircRNA: circRNA constructs encode luciferase, GFP, telomerase, and selected tuberculosis antigens. These agents will be encapsulated and evaluated for in vitro expression; luciferase and telomerase expression may also be assessed in vivo under existing approved protocols.

Aptamers: CD44 aptamers will be used as targeting ligands for inflammatory, infectious, and cancer-related applications. Aptamers are commercially sourced and chemically conjugated to

delivery systems per the method described in HSC00002441. In vitro work involves addition to culture plates; in vivo administration may occur via tail vein, intranasal, or intraperitoneal injection.

gRNA: gRNAs will be purchased from vendors or obtained from the RNA Core and encapsulated for in vitro testing.

Fluorescent and Bioluminescent Cell Lines: Commercially available, stably transfected cell lines (e.g., 4T1-Luc, ID8-GFP/Luc, MDA-MB-231-GFP/Luc) will be used for disease modeling and cell tracking. Cells will be cultured in vitro for model generation and administered in vivo through routes such as mammary fat pad injection, subcutaneous injection, tail vein, splenic injection, or intraperitoneal injection. All animal work will be conducted under appropriate IACUC-approved protocols.

- **Training**: All staff members have completed training.
- **Applicable NIH Guidelines**: Section III-D
- **Containment Conditions to be implemented**: BSL2
- **Risk assessment and Discussion**: The project involves moderate-risk laboratory research using synthetic nucleic acids (siRNA, mRNA, circRNA, gRNA) and genetically modified fluorescent or bioluminescent cell lines, which require BSL-2/ABSL-2 containment and IBC oversight under NIH Guidelines Section III-D. Key risks include potential exposure to recombinant materials, chemical hazards from nanoparticle formulation, sharps-related risks during animal injections, and accidental release of modified cells. These risks are effectively mitigated through standard biosafety practices, including PPE, biosafety cabinet use, proper waste decontamination, adherence to IACUC animal protocols, and appropriate handling and storage procedures.
- **Comments sent to the PI for clarification**: None
- **The motion to approve the study was seconded and passed.**

Motion: Approved

- Yes Votes: 12
- No Votes: 0
- Abstained: 0
- Recused: 2, Biana Godin, Anjana Tiwari
- Absent: 0

IBC00002644
Title: Research using recombinant plasmid DNA to express TRIM68 & other signaling proteins in human cell lines & monocytes to study nucleic-acid–sensing pathways regulating antiviral immunity & inflammation mechanisms.
Principal Investigator: Zhiqiang Zhang

Study Overview: The project aims to investigate how nucleic acid–sensing pathways regulate immune responses in infection, autoimmunity, and inflammatory diseases, with a focus on the

signaling roles of TRIM68 and related ubiquitin E3 ligases. The work involves expressing or knocking down TRIM68 and associated signaling molecules in THP1-derived macrophages, AC16 cardiomyocytes, and human primary monocytes using plasmid transfection or replication-deficient lentiviral vectors. Isolated primary cells (from commercial buffy coats) and transformed cell lines will be studied under BSL-2 conditions to assess downstream signaling and protein interactions using standard biochemical methods. All materials will be handled, transported, stored, and disposed of using appropriate BSL-2 biosafety practices, including sealed and labeled containers, secondary containment during transport, and routine autoclaving of biohazard waste.

- **Training**: All staff members have completed training.
- **Applicable NIH Guidelines**: Section III-D-1
- **Containment Conditions to be implemented**: BSL2
- **Risk Assessment & Discussion**: This project involves BSL-2 in vitro work using plasmid-based overexpression systems and replication-deficient lentiviral vectors to modulate TRIM68 and related signaling molecules in THP1-derived macrophages, AC16 cardiomyocytes, and human primary monocytes. Primary human cells are obtained from commercial buffy coats and do not involve human subjects. The main risks include potential exposure to recombinant nucleic acids, lentiviral vectors, and human-derived materials, along with standard laboratory risks associated with cell culture and biochemical analysis. All work will be performed in a certified Class II biosafety cabinet using appropriate PPE, with procedures following BSL-2 practices, including secondary containment for transport, secure storage in labeled biohazard-designated freezers, and routine autoclaving of waste. Lentiviral vectors used are replication-deficient, reducing the likelihood of unintended infection. Overall, risks are considered moderate and appropriately mitigated through established biosafety controls and adherence to institutional policies.
- **Comments sent to the PI for clarification**:
    - **Section Staff Identification** - Please make sure to list the training from HMRI. There is no "Institutional Health, Hazard, and Biosafety Committee" in HMRI, so please correct across the board. If BL2 is biosafety level 2, it should be abbreviated as BSL-2
    - **Section DNA Studies -** It was stated in the summary of the previous 3 years that the work with TRIM47 is completed. If this is correct, please make sure to update the information "TRIM47 (NM_033452) Human Tagged ORF Clone"
    - **Section Exposure Management Laboratory** - In the attached Transport SOP, the agents listed in this protocol are not included. It is also unclear which locations the agents will be transported from and to. If no transportation is occurring, the Transport SOP should not be included—please remove it if it is not applicable. If transportation involving these agents *is* occurring, the Transport SOP must be revised to address the following add the agents in this protocol to the Transport SOP, correct typographical errors - change “Immunbiology” to Immunobiology. Update the target review date to February 13, 2029 (currently listed incorrectly as “131, 2029”), and ensure the Transport SOP is properly

signed by the PI.

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

Motion: Approvable by Designated Member Review

- Yes Votes: 14
- No Votes: 0
- Abstained: 0
- Recused: 0
- Absent: 0

IBC00002593
Title: Research using viral vectors to express genetic encoded tools in cultured human astrocytes for translational neuroscience
Principal Investigator: Robert Krencik

Study Overview: The Krencik Lab investigates the functional interactions between human neurons and astrocytes in both normal and injury-related contexts using advanced three-dimensional human pluripotent stem cell culture systems. The goal of this work is to better understand neuroregeneration mechanisms and support progress in cellular engraftment therapies and drug discovery. To enable these studies, replication-deficient lentiviral particles will be generated in HEK293FT cells using standard three-plasmid transfection and subsequently applied to neural cell cultures for stable transgene expression. Non-lentiviral plasmids will be used for transient gene expression or genome engineering applications, including TALEN-based safe-harbor targeting in human pluripotent stem cells. All viral production and plasmid transfection procedures will be performed under BSL-2 conditions in a biosafety cabinet, and resulting neural cultures will be analyzed using routine microscopy. Cells used in these experiments are described under protocol HSC00002895. All materials will be handled, stored, and disposed of in accordance with institutional biosafety requirements.

- **Training**: All staff members have completed their required training.
- **Applicable NIH Guidelines**: Section III-D-1
- **Containment Conditions to be implemented**: BSL2
- **Risk Assessment & Discussion**: This project involves BSL-2 laboratory work using human pluripotent stem cell–derived neural cultures and replication-deficient lentiviral vectors to achieve stable gene expression, along with non-viral plasmid transfection for transient expression and TALEN-based genome engineering. The primary risks include potential exposure to lentiviral particles, plasmid DNA, and human stem cell–derived materials, as well as sharps and chemical hazards associated with cell culture workflows. Lentiviral vectors used are non-replicating, reducing the likelihood of unintended infection, but still require BSL-2 containment and adherence to standard viral handling precautions. All virus production, concentration, and transduction procedures will occur in a certified Class II biosafety cabinet with appropriate PPE. Non-viral plasmid transfection and routine

neural cell culture similarly pose low to moderate risks and will be conducted under established BSL-2 practices. Risks of accidental aerosol generation, mucosal exposure, or spills are mitigated through engineering controls, proper training, and routine disinfection protocols. All materials will be stored in labeled, secure biohazard-designated freezers or incubators, transported in secondary containment, and disposed of via institutional biohazard waste streams, including autoclaving. Overall, project risks are considered moderate and adequately controlled by standard BSL-2 biosafety procedures.

- **Comments sent to the PI for clarification**:
    - **Section Summary of Proposed Research**: What specific DNA sequences are being inserted using the plasmids—such as 62196 (Chr.13/CLYBL Left TALEN) and 62197 (Chr.13/CLYBL Right TALEN expression vector)? Please include the list of DNA sequences proposed for insertion, if any. If no DNA is being added, clearly state this. Be sure to clarify that although you are using standard plasmids designed to target specific chromosomal sites for potential DNA insertion, no additional DNA (e.g., an IL-1R agonist expression construct, as referenced in one of the cited publications) is being introduced in this study. Please specify the *E. coli* strain used for plasmid cloning.
    - **Section Plasmid studies:** Please update the host species from 'human' to 'cells'.
- **The motion to approve the study through designated member review was seconded and passed.**

Motion: Approvable by designated member review

- Yes Votes: 14
- No Votes: 0
- Abstained: 0
- Recused: 0
- Absent: 0

IBC00002596
Title: IBC for Nucleic acid nanoparticle packaging
Principal Investigator: Francesca Taraballi

*** Conflict of Interest: Member Francesca Taraballi recused herself from both the discussion and the vote due to a conflict of interest*

Study Overview: This project involves the preparation of lipid nanoparticles (LNPs) containing a variety of RNA constructs (e.g., mRNA, mmRNA, sRNA, siRNA). RNA materials will be sourced either from commercial vendors or produced through the institutional RNA Core. The RNAs will be packaged into nanoparticles in our laboratory on behalf of collaborating investigators. Completed nanoparticle formulations will be transferred to collaborators under the appropriate Material Transfer Agreements (MTAs) for downstream studies.

All proposed nanoparticle activities fall under existing approvals: LNP work under HSC00002889 and associated chemical hazards under HSC00002883.

LNPs will be synthesized using microfluidic benchtop systems (NanoAssemblr or Helix Nova BT), which enable controlled and reproducible mixing of an organic lipid phase (lipids in ethanol) with an aqueous phase containing nucleic acids and buffer.

- **Training**: All staff members have completed their required training.
- **Applicable NIH Guidelines**: Section III-D-3
- **Containment Conditions to be implemented**: BSL2
- **Risk Assessment & Discussion**: This study involves encapsulating synthetic RNA constructs—including those encoding Chikungunya virus (CHIKV) structural antigens—into lipid nanoparticles (LNPs) using microfluidic systems under existing BSL-2 approvals. Encapsulated RNAs pose a minor biological hazard because LNPs can enter mammalian cells and transiently express CHIKV structural proteins (CP, E1, E2, E3, 6K), which may elicit an immune response if exposure occurs; however, no replication machinery, toxins, or infectious components are used, and no infectious virus can be produced. Chemical risks are limited to standard solvent handling, and equipment-related risks are minimal. Work in biosafety cabinets, closed microfluidic systems, routine PPE, and established waste disposal procedures effectively minimize exposure risk. Overall, the study presents a low to moderate biological risk that is fully manageable within standard BSL-2 practices.
- **Comments sent to the PI for clarification**:
    - **Section Staff Identification:** Please make sure to update years of experience and other info in "other safety training" column. The "Other Safety Training" column lists different years of experience than what is listed in the "Years of Experience" column.
    - **Section Hazard Identification:** Please list the target genes/proteins. Please also use different hazard entries for different types of nucleic acids (e.g. an entry for mRNA/mmRNA, and a separate entry for siRNA/sRNA)
    - **Section Risk Assessment:** For question #7, please update to "yes" given that Chickunguya mRNA (risk group 3) is packaged into LNPs.
- **The motion to approve the study after major changes and designated member review was seconded and approved.**

Motion: Approvable by Designated Member Review

- Yes Votes: 13
- No Votes: 0
- Abstained: 0
- Recused: 1, Francesca Taraballi
- Absent: 0

IBC00002634
Title: ATL Expressing Chimeric Antigen Receptors for Therapy of Relapsed CD19-Positive Malignancies Post-Allogeneic HSCT Infused Only after Engraftment (CARPASCIO)
Principal Investigator: Carlos Ramos

Study Overview: This Phase I dose-escalation clinical trial evaluates the safety and biological activity of donor T lymphocytes genetically modified via a Moloney retroviral vector to express a CD19-specific chimeric antigen receptor (CD19.CAR). The goal of this gene-transfer approach is to enhance tumor-specific cytotoxicity while minimizing off-target effects. All viral vector manipulation and cell manufacturing were performed in the CAGT BCM GMP facility, and the final cellular product was administered at HMH. Patients received a single infusion of CD19.CAR T cells at ≥ Day 30 post-HSCT in a lymphodepleted setting, followed by intensive clinical monitoring and serial peripheral blood sampling to assess toxicity, persistence of transduced cells, immune reconstitution, and disease response. Study participants were grouped based on disease type and donor source: A1 (residual/relapsed B-cell ALL, HLA-matched related donor), B1 (other B-cell malignancies, HLA-matched related donor), A2 (residual/relapsed B-cell ALL, unrelated or HLA-mismatched donor), and B2 (other B-cell malignancies, unrelated or HLA-mismatched donor). Each donor category included three predefined dose levels: for Group 1 (HLA-matched related donors), doses included 5×10^5, 1×10^6, and 5×10^6 cells/kg; for Group 2 (unrelated or HLA-mismatched donors), doses included 1×10^5, 5×10^6, and 1×10^6 cells/kg. Dose escalation followed a modified continual reassessment method to determine the maximum tolerated dose, defined as the highest dose with ≤20% risk of dose-limiting toxicity.

Three-Year Progress Summary: The study is closed to new enrollment and currently in long-term follow-up, with no active research activities ongoing at HMH. Since initiation, seven patients have been treated with no significant adverse events attributable to the investigational product, indicating an acceptable safety profile. Among treated participants in Group 1, two patients were enrolled at each dose level, and in Group 2 one patient was enrolled at dose level one. Two patients experienced prolonged cytopenias related to lymphodepleting therapy, with one requiring a donor stem-cell boost; one of these patients achieved a 4-month complete remission. Of the remaining patients, two have maintained continuous complete remission, while three experienced progressive disease.

- **Training**: All staff members have completed their required training.
- **Applicable NIH Guidelines**: Section III-C-1
- **Containment Conditions to be implemented**: BSL2
- **Risk Assessment & Discussion**: Because all investigational product manufacturing and administrations for this Phase I CD19.CAR T-cell trial have been completed, there is **no** ongoing risk to HMH staff or the environment. All viral vector manipulation and T-cell genetic modification occurred exclusively within the CAGT BCM GMP facility, and no vector work or product preparation is performed at HMH. The study is closed to new patient enrollment and currently in long-term follow-up only, with no active laboratory procedures, product handling, or clinical infusions taking place. Seven patients received genetically modified T-cell infusions during the treatment phase without significant adverse events related to the investigational product, further supporting the safety of the material. Since no additional CAR-modified T-cell product will be generated, stored,

transported, or administered at HMH, and no research-related interventions remain, the study poses no biological, chemical, or procedural hazard to personnel or the environment.

- **Comments sent to PI for clarification**: None
- **The motion to approve the study was seconded and passed.**

Motion: Approved

- Yes Votes: 14
- No Votes: 0
- Abstained: 0
- Recused: 0
- Absent: 0

IBC00002532
Title: Phase 1b/2 Multicenter, Open-label, Study of Autologous CD19/CD20 Bispecific CAR-T Cell Therapy in Participants with B-cell Non-Hodgkin Lymphoma
Principal Investigator: Sai Ravi Kiran Pingali

Study Overview: 90014496LYM1001 (formerly CCAR039L1101) is a Phase 1b/2 multicenter, open-label clinical trial sponsored by Janssen Research & Development, LLC, evaluating the safety and tolerability of JNJ-90014496, an autologous, bi-specific CAR T-cell product targeting CD19 and CD20 for the treatment of adults with relapsed/refractory or frontline high-risk B-cell non-Hodgkin lymphoma (B-NHL). Participants receive a single intravenous infusion of JNJ-90014496. Per protocol, tissue and fluid samples—including blood, urine, bone marrow, tumor biopsies, and cerebrospinal fluid—may be collected throughout the study to assess safety, detect replication-competent lentivirus (RCL), evaluate transgene expression, and measure persistence and frequency of vector-modified cells. All participants are followed for clinical outcomes until end of study or disease progression and will undergo 15 years of long-term safety monitoring under a separate follow-up protocol.

Houston Methodist is participating only in Phase 2 of the study. In this phase, all enrolled participants (Cohort A and Cohort B) will receive JNJ-90014496 at the recommended Phase 2 dose (RP2D) of 75×10^6 CAR^+ T cells (range $52.5–100 \times 10^6$). The study drug is manufactured and supplied by the sponsor; IDS Pharmacy is responsible for thawing the product, and Houston Methodist infusion nurses will administer the infusion. Research staff will receive, transport, and deliver the CAR T-cell product directly to the patient care unit.

Product handling follows strict sponsor-specified procedures. The frozen infusion bag, enclosed in a sealed plastic bag, is thawed bedside or in an appropriate preparation area using either a 37 °C ± 2 °C water bath (<10 minutes) or a dry-thawing device (15–25 minutes). If thawed away from bedside, the product is placed in an insulated ambient-temperature transport container until administration; if thawed at bedside, it must arrive from storage in a device maintaining temperatures below –135 °C in vapor-phase liquid nitrogen. The product is administered intravenously by gravity or pump, and closed-system transfer devices (CSTDs) are prohibited. The infusion line and bag are flushed with saline after administration, and the entire infusion

process—including post-flush—must occur within 1.5 hours of thaw. All tubing connections are performed without sharps, and all materials contacting the study agent are disposed of as biohazardous waste.

- **Training**: All staff members have completed their required training.
- **Applicable NIH Guidelines**: Section III-C-1
- **Containment Conditions to be implemented**: BSL2
- **Risk assessment and Discussion**: Because all genetic modification of T cells is performed by the Sponsor at qualified manufacturing facilities, the JNJ-90014496 product received at Houston Methodist consists of fully processed, autologous CAR-T cells in which the lentiviral vector is integrated into the T-cell genome and no replication-competent lentiviral particles are expected to be present. As a result, the primary biosafety considerations for study personnel are equivalent to those associated with handling standard, non-engineered human blood products, namely the potential for unrecognized bloodborne pathogens intrinsic to autologous cells. Product preparation at Houston Methodist is limited to thawing the sealed infusion bag by IDS Pharmacy and delivering the thawed product directly to the patient care unit for infusion by trained hospital nursing staff. No vector manipulation, cell processing, or laboratory work with the engineered cells occur on-site. All handling follows Sponsor-mandated procedures, including maintaining the product frozen in vapor-phase liquid nitrogen during transport, thawing at bedside or in a designated preparation area, and administering the agent via a closed infusion system without the use of sharps. All materials that contact the product are disposed of as biohazardous waste. Because the product contains no free viral particles, poses no risk of environmental release, and involves minimal manipulation, the overall risk to staff and the environment remains low and comparable to standard clinical infusion of autologous cellular therapy products.
- **Comments sent to the PI for clarification**:
    - **Staff Identification**: Please identify who is responsible for transporting the study drug from pharmacy to the patient care area. This individual should be properly trained for transportation and included in this section.
    - **Hazard Identification**: Please select "Pharmacy" to include exposure management precautions for the thawing and preparation of the therapeutic
    - **Summary of Proposed Research**: Per the information provided in the ARAF documentation - Phase 1 is complete and recruitment will be for Phase 2 is this correct? Please clarify which dosing approach will be applied—2 million CAR T cells/kg or the fixed dose of 50–100 million CAR T cells—given that the study protocol describes two dosing tracks.
- **The motion to approve the study through designated member review was seconded and passed.**

Motion: Approvable by designated member review

- Yes Votes: 14
- No Votes: 0

- Abstained: 0
- Recused: 0
- Absent: 0

IBC AMENDMENTS

IBCA00001460
Title: PI Amendment 1 for 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: Dharam Kaushik

Amendment Overview: This amendment reflects a change in Principal Investigator from Dr. Raj Satkunasivam to Dr. Dharam Kaushik, following Dr. Satkunasivam's departure from Houston Methodist. Dr. Satkunasivam has been removed from the study team accordingly. The Houston Methodist site is closed to enrollment, and no subjects were enrolled under this protocol at this site. All required study activities, including long-term follow-up, have been completed for all participants enrolled at other sites. The study remains open solely for query resolution and additional data requests from the study sponsor. Dr. Kaushik meets all qualifications to serve as Principal Investigator and will assume oversight responsibilities for the remainder of the study's administrative close-out period.

- **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 PI amendment was seconded and passed.**

Motion: Approved

- Yes Votes: 14
- No Votes: 0
- Abstained: 0
- Recused: 0
- Absent: 0

Continuing Reviews

IBCC00000619
Title: 2026 IBC Review for RNA manufacturing of antigens of Risk group 4 pathogens
Principal Investigator: John Cooke

Overview: The study initially included generation of mRNA and saRNA constructs encoding the Nipah virus glycoprotein G, which is implicated in viral entry and entry-independent pathogenic mechanisms. These RNA products were manufactured solely by RNAcore and shipped to collaborators as part of a multisite effort to explore mechanisms of infection and disease caused by high-consequence viral pathogens.
The amendments expand the project's scope to include generation of additional mRNA and self-amplifying RNA (saRNA) constructs encoding viral glycoproteins from multiple high-consequence pathogens. Amendment 1 adds production of CCHF virus glycoproteins GP38 and MLD, Amendment 2 includes constructs encoding the Hazara virus glycoprotein precursor (GPC) and the GPC delta50 variant, and Amendment 3 adds constructs encoding the Andes virus glycoprotein precursor. For all amendments, RNAcore's role remains limited to manufacturing the RNA using standard procedures, with all materials shipped to collaborators under institutional Transport SOPs as part of a multi-institutional effort to study viral entry mechanisms, host–pathogen interactions, and disease pathogenesis. To date, the RNAcore has successfully manufactured seven distinct RNA constructs, each produced at approximately 3 mg scale, for use in vaccine development and comparative therapeutic evaluation. These include:

- **Nipah virus:** G antigen (1 RNA)
- **CCHF virus:** MLD and GP38 (2 RNAs)
- **Hazara virus:** GPC precursor and GPC delta50 variant (2 RNAs)
- **Andes virus:** GPC precursor with and without VLP tag (2 RNAs)

All RNAs have been shipped to collaborating investigators in Washington State as part of a large research consortium evaluating the performance of RNA-based vaccine candidates relative to alternative vaccine platforms.

- **Training**: All staff members have completed and are current with their required training
- **Applicable NIH Guidelines**: Section III-D-2
- **Containment Conditions to be implemented**: BSL2
- **Risk Assessment & Discussion:** During the risk assessment review, the committee emphasized that when shipping RNA constructs containing sequences derived from Risk Group 4 (RG4) pathogens, it is essential to provide the IBC with detailed information to ensure appropriate containment decisions and compliance with NIH Guidelines for recombinant or synthetic nucleic acid molecules. Specifically, the designated member reviewer requested clarification on the exact RNA constructs shipped, noting that such materials—although non-infectious—encode proteins from high-risk pathogens and must therefore be fully documented. ORP staff obtained clarification from the study team, which confirmed that seven vaccine-related RNA candidates were manufactured and shipped: Nipah virus glycoprotein G (1 RNA) Crimean-Congo hemorrhagic fever (CCHF) virus glycoproteins MLD and GP38 (2 RNAs) Hazara virus (HAZV) glycoprotein precursor (GPC) and the GPC delta50 variant (2 RNAs) Andes virus glycoprotein precursor, with and without VLP tag (2 RNAs). These RNAs were produced using standard RNAcore manufacturing processes and shipped to collaborators following institutional Transport SOPs.
- **Comments sent to PI for clarification:** Under question *"Please give a status report for your research: (Progress to date)"* Please include details of the manufactured RNA

constructs that were shipped.

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

Motion: Approve by designated member review

- Yes Votes: 14
- No Votes: 0
- Abstained: 0
- Recused: 0
- Absent: 0

ADJOURNMENT

The meeting adjourned at 11:22 am