RUSH

| RUSH Institutional Biosafety Committee (IBC) | |
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| **Meeting Date** | November 19, 2025 |
| **Meeting Time** | 12:00 PM – 1:00 PM |
| **Meeting Type** | Virtual via Microsoft Teams |
| **IBC Members Present** | 1. Amarjit Virdi, Ph.D. (IBC Chair)<br>2. Ed R. Blazek, Ph.D., SM (NRCM) (BSO)<br>3. James Bremer, Ph.D. (IBC Member / Virology)<br>4. João Mamede, Ph.D. (IBC Member / Recombinant DNA Technologies)<br>5. Jeffrey Oswald, D.V.M., Comparative Research Center (IBC Member / Veterinary Medicine)<br>6. Adam Roubitchek, Ed.D. (Local Non-Affiliated Member)<br>7. Derrick Swistak (Non-Affiliated Member)<br>8. Brett Williams, M.D. (IBC Member / Infectious Disease Physician) |
| **Quorum** | Quorum was declared by the Chair.<br>The IBC has eleven voting members, and six members are required to conduct business. |
| **Other Individuals in Attendance** | 1. Christine VanTubbergen, MPH (Program Manager, Office of Research Affairs) |
| **Call to Order** | The IBC Chair called the meeting to order at 12:00 PM. |
| **Conflicts of Interest** | The IBC Chair reminded all members present to identify any conflicts of interest as each application is reviewed. |
| **Review and Approval of Previous Meeting Minutes** | October 22, 2025<br>Motion: Approve the minutes as circulated.<br>Votes: 7-0-0-0 (for-against-abstain-recuse) |

| **Review of Prior Business** | | |
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| **PI Name & ORA #** | **Application** | **Approval Date** |
| Miller, Rachel, Ph.D.<br>19050702-IBC01 | Initial Application | 10/23/2025 |
| Steinberg, Gary, M.D.<br>25030502-IBC01 | Initial Application | 10/31/2025 |
| Steinberg, Gary, M.D.<br>23072702-IBC02 | Initial Application | Closed 11/05/2025 |
| Wang, Yanling, Ph.D.<br>21110104-IBC02 | Amendment 01 | 11/05/2025 |
| Nathan, Sunita, M.D.<br>24061205-IBC07 | Amendment 06 | 11/06/2025 |
| Elizabeth Berry-Kravis, M.D.<br>23092006-IBC-17 | Amendment 14 | 11/10/2025 |
| Nathan, Sunita, M.D.<br>21070206-IBC22 | Amendment 15 | 11/11/2025 |
| Nathan, Sunita, M.D.<br>21060306-IBC24 | Amendment 21 | 11/11/2025 |
| Nathan, Sunita, M.D.<br>19070910-IBC21 | Amendment 20 | 11/11/2025 |
| Hall, Deborah, M.D.<br>19010804-IBC30 | Amendment 35 | 11/12/2025 |
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| Kelta, Mouhammed, M.D.<br>23081106-IBC08 | Amendment 06 | 11/14/2025 |
| Elizabeth Berry-Kravis, M.D<br>24022207-IBC06 | Amendment 04 | 11/14/2025 |

| **New IBC Applications for Review** | |
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| **PI Name** | Ira Miller, M.D., Ph.D. |
| **ORA#** | 22070504-IBC02 |
| **Project Overview** | **III-E-1** This study aims to develop a biological therapeutic for B cell lymphoma that induces complement-dependent cytotoxicity. Antibody constructs directed towards surface membrane proteins will be utilized. Plasmids encoding single chain antibodies will be transfected into cells. |
| **NIH Guidelines Section** | **III-E-1** |
| **Risk Assessment & Discussion** | • This application was tabled at the previous October 22, 2025 meeting and updates to the application were submitted for review.<br>• No infectious agents will be utilized for this project.<br>• A biological safety cabinet (BSC) will be utilized.<br>• PPE consisting of lab coat and gloves will be utilized.<br>• Liquid waste will be subject to chemical disinfection prior to disposal. Materials that come into contact with the agent will be disposed of as biohazardous waste. |
| **Training** | For research requiring IBC oversight, the PI must complete the CITI Initial Biosafety Training course and clinical lab personnel must complete the CITI Basic Biosafety Training course.<br><br>For research involving human gene transfer, the PI and personnel must complete either the CITI Recombinant Clinical Biosafety Course or the CITI Recombinant Clinical Coordinator course, depending on research activity involvement.<br><br>At least one individual has current CITI International Air and Transportation Association (IATA) training. |
| **Occupational Health Representative Review (if applicable)** | Not applicable. |
| **BSL Assignment** | • BSL-2 |
| **IBC Vote** | • A motion was made to provisionally approve this application pending the following conditions be met:<br>  • Administrative changes to the application.<br><u>Votes</u>:<br>• 7-0-0-0<br>Conflicts of Interest: None |

| **New IBC Applications for Review** | |
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| **PI Name** | Mindy Simpson, M.D. |
| **ORA#** | 23110201-IBC01 |
| **Project Overview** | **III-C-1** This is a Phase 1/2, two-part open-label study designed to determine a safe and well-tolerated dose of a CRISPR/Cas9-based coagulation Factor IX gene insertion therapy (REGV131-LNP1265) for the treatment of adult, adolescent, and pediatric patients with moderately severe congenital hemophilia B. The capsid of REGV131 is |

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| | derived from adeno-associated virus serotype 8 (AAV8) and contains a single-stranded DNA template encoding wild-type human coagulation Factor IX. LNP1265 is a lipid nanoparticle encapsulating a Cas9 mRNA and single guide RNA. The trial is sponsored by Regeneron Pharmaceuticals (ClinicalTrials.gov ID: NCT06379789).<br><br>Participants will receive a single dose of REGV131-LNP1265. Part 1 of the study will consist of dose escalation and dose confirmation in adult patients. Part 2 will consist of dose expansion of the recommended dose for expansion (RDE), as determined in Part 1. Adolescent and pediatric patients will receive a weight-adjusted RDE. |
| **NIH Guidelines Section** | **III-C-1** |
| **Risk Assessment & Discussion** | • This application was provisionally approved at the previous October 22, 2025 meeting and a response from the sponsor was submitted for review.<br>• Adeno-associated virus is a RG-1 agent.<br>• The study drug will be prepared within a biological safety cabinet (BSC).<br>• PPE consisting of disposable rear-closing gown, gloves, surgical mask, face shield, shoe covers, and eye protection will be utilized when preparing or administering the agent.<br>• Materials that come into contact with the agent will be disposed of as biohazardous waste.<br>• Previously, the IBC recommended changes to the informed consent form (ICF) regarding risks of other AAV gene therapies. The study sponsor requested that, when describing deaths that occurred during other AAV gene therapy trials, that "not sponsored by Regeneron" be parenthetically added. |
| **Training** | For research requiring IBC oversight, the PI must complete the CITI Initial Biosafety Training course and clinical lab personnel must complete the CITI Basic Biosafety Training course.<br><br>For research involving human gene transfer, the PI and personnel must complete either the CITI Recombinant Clinical Biosafety Course or the CITI Recombinant Clinical Coordinator course, depending on research activity involvement.<br><br>At least one individual has current CITI International Air and Transportation Association (IATA) training. |
| **Occupational Health Representative Review (if applicable)** | Not applicable. |
| **BSL Assignment** | • BSL-1 |
| **IBC Vote** | • A motion was made to respond to the sponsor regarding the below point(s):<br>  • The IBC does not accept the parenthetical statement within the ICF proposed by the sponsor as there is no scientific basis for implying that this trial has reduced risk compared to other AAV gene therapy trials.<br><u>Votes</u>:<br>• 6-0-0-0<br>Conflicts of Interest: None |

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| **New Business** | First-in-human trial of CRISPR gene-editing therapy safely lowered cholesterol, triglycerides<br>• https://newsroom.heart.org/news/first-in-human-trial-of-crispr-gene-editing-therapy-safely-lowered-cholesterol-triglycerides#:~:text=Research%20Highlights:,without%20need%20for%20any%20treatment |
| **Review of Incidents** | Nothing to report. |
| **Inspections/Ongoing Oversight** | Nothing to report. |
| **IBC Training** | Nothing to report. |
| **Public Comments** | There were no public comments. |
| **Adjournment** | The IBC Chair moved to adjourn the meeting at 12:46 PM<br>The next meeting scheduled is for January 21, 2026 at 12:00 PM via Microsoft Teams. |