



Institutional Biosafety Committee (IBC) Meeting Minutes

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|------------------------|---------------------------------------|-------------------------------------------------------------------------|-----------|----------|
| Institution: | Wake Forest University Scl | hool of Medicine | | |
| Meeting Date and Time: | September 17 th @ 12:30 pm | | | |
| Meeting Type: | Online via Microsoft Teams | | | |
| | Name | Role and Department | Atten | dance |
| IBC Members Present: | Frank Marini, PhD | IBC Chair, WFIRM | | □ Absent |
| | Anthony Blaeser, PhD | IBC Vice Chair Musculoskeletal Department | ⊠ Present | ☐ Absent |
| | Samuel Centanni, PhD | Voting Member, Translational Neuroscience | ⊠ Present | □ Absent |
| | Ji Hyun Kim, PhD | Voting Member, WFIRM | ☐ Present | ⊠ Absent |
| | Elizabeth Palavecino, MD | Voting Member, Pathology | □ Present | □ Absent |
| | David Ornelles, PhD | Voting Member, Microbiology and Immunology | ⊠ Present | □ Absent |
| | Marlena Westcott, PhD | Voting Member, Microbiology and Immunology | ⊠ Present | ☐ Absent |
| | Brian Strittmatter, PharmD, MSCR | Voting Member, Pharmacy Clinical Trial Services, Pharmacy Manager | ⊠ Present | □ Absent |
| | Patrick McNutt, PhD | Voting Member, WFIRM, | | ☐ Absent |
| | Linda Metheny-Barlow, PhD | Voting Member, Radiation Oncology | ☐ Present | ⊠ Absent |
| | Swapan Das, PhD, MSc | Voting Member, IM. Endocrinology & Metabolism | ⊠ Present | ☐ Absent |
| | Caryn Gee Morse, MD, PhD | Voting Member, IM, Infectious Diseases | | ☐ Absent |
| | Drew Kiraly, MD | Voting Member, Translational Neuroscience | ☐ Present | ⊠ Absent |
| | Robert Hampson, PhD | Voting Member, WFIRM | □ Present | ☐ Absent |
| | Farah Mougeot, PhD, MS | Voting Member, Translational Research – Oral Medicine | □ Present | ⊠ Absent |
| | Kimberly Woodward, MD, MPH | Voting Member, Pathology | | ☐ Absent |
| | Paris Charilaou, MD, FACP | Voting Member, Gastroenterology and Hepatology | ⊠ Present | ☐ Absent |

| | Yuming Jiang, MD, PhD | Voting Member, Radiation Oncology | □ Present | ☐ Absent |
|--------------------------------------------------------|------------------------------|-------------------------------------------------------------------|-----------|----------|
| | Dan Hurley | Local Non-Affiliated Community Member (Charlotte) | ☐ Present | ⊠ Absent |
| | Jeanette Bennett | Community Member (Charlotte) | ☐ Present | ⊠ Absent |
| | Kara Milton | Community Member (Winston Salem) | ⊠ Present | □ Absent |
| | Adam Bray | Community Member (Winston Salem) | ⊠ Present | ☐ Absent |
| | Christpher Ohl, MD | Voting Member, IM, Infectious Diseases (Ad- Hoc) | ☐ Present | ☐ Absent |
| | Scott Gamble, DVM | Voting Member, Animal Expert | ⊠ Present | □ Absent |
| | Lisa Colvin | Voting Contact, IBC Administrator | ⊠ Present | □ Absent |
| | Emylee Pedersen | Voting Contact, IBC Administrator | ⊠ Present | □ Absent |
| | Bernadette Menuey | Voting Member, Biosafety Officer | ⊠ Present | □ Absent |
| | Jessica Baker | Voting Member, IACUC Representative | ⊠ Present | □ Absent |
| | Katy Heide | Voting Member, EHS, Environmental Compliance | ⊠ Present | ☐ Absent |
| | | Ex Officio W/O Vote | | |
| | Suzy Mounsey | Animal Resources Program | □ Present | ☐ Absent |
| | Gaye Hodges | Animal Resources Program | □ Present | □ Absent |
| | Stephen Fisenne | WFU Representative | □ Present | ☐ Absent |
| | Morgan Lawson | Environmental Health & Safety | □ Present | ☐ Absent |
| | Jennifer Williams | Environmental Health & Safety | □ Present | □ Absent |
| | Paul Haliburton | EHS, AVP | ☐ Present | |
| | Joseph Kim | AHWFB Teammate Health | ☐ Present | |
| Quorum: | Yes | | | |
| Call to Order: | Dr. Marini called the meetin | g to order at 12:30 | | |
| Conflicts of Interest: | | s present to identify any confl COIs to disclose for this meet | | t as |
| Review and Approval of Previous Meeting Minutes: | Motion to approve by Dr. Ma | rini, second by Dr. Blaeser | | |
| Review of Prior Meeting Business (if applicable): | NA | | | |

| New IBC Registrations for Review | | |
|------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| PI Name: | Shah | |
| Registration Number: | B25-CT-WS-004 | |
| IBC Registration Title: | A Phase 3, Randomized, Double-Masked, Active-Controlled Trial of a Single Intravitreal Injection of 4D-150 in Adults with Macular Neovascularization Secondary to Age-Related Macular Degeneration (4FRONT-1) | |
| Project Overview: | 4D-150 is a recombinant AAV-based gene replacement therapy in development for the treatment of Neovascular Age-related Macular Degeneration (nAMD), Diabetic Macular Edema (DME), and Diabetic Retinopathy (DR). This study recruiting patients with treatment naive nAMD. | |
| Applicable NIH Guidelines: | Section III-C-1 | |
| Agent Description: | 4DMT utilizes a discovery platform termed Therapeutic Vector Evolution to invent novel AAV capsids for the treatment of diseases involving specific target tissues in vivo. In this process, | |
| e.g. virulence, pathogenicity, environmental stability | Using Therapeutic Vector | |
| | Evolution, 4DMT invented the AAV capsid variant for development of intravitreal (IVT) gene therapeutics for retinal diseases. | |
| Types of Manipulations: | Manipulations performed by manufacturer of study agent. | |
| Source of nucleic (DNA/RNA) sequences: e.g. species | N/A | |
| Nature of nucleic acid sequences: e.g. structural gene, oncogene | Vascular endothelial growth factor blocker. | |
| Host(s) and Vector(s): | Host: patient vitreous Vector: Wild-type AAV capsid | |
| - | 4D-150 expression to suppress intraocular angiogenic signaling through expression of aflibercept and reduction of vascular endothelial growth factor | |
| Risk Assessment Discussion Points: | Confirm with project manager that providers and care staff have received training from study sponsor on how to appropriately handle AAV. | |
| Training: | Study specific training from Sponsor. | |
| Occupational Health Review (if applicable): | None | |
| Biosafety Level: Animal Biosafety Level: | BSL-2 | |
| IBC Vote: | Approve Pending Modifications | |

| | New IBC Registrations for Review |
|--------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PI Name: | Grunwald/Weiduwilt |
| Registration Number: | B25-CT-WS-C-006 |
| IBC Registration Title: | Expanded Access Program (EAP) for Obecabtagene Autoleucel (obe-cel) Out-of- specification (OOS) in Adult Patients with Acute Lymphoblastic Leukemia (NCT06799221) |
| | The purpose of this study is to provide patients the opportunity to be treated with Obecabtagene Autoleucel (obe-cel) Out of Specification (OOS) for treating Acute Lymphoblastic Leukemia through an expanded access program (EAP). Obe-cel (brand name AUCATZYL) is a type of CAR-T cell therapy. |
| Project Overview: | In this study the tests to decide whether obe-cel from the patient's cells are okay to use, show that the product is outside of the range of known standards (so called "Out of Specification", abbreviated as "OOS"). |
| Applicable NIH Guidelines: | Section III-C-1 |
| Agent Description: e.g. virulence, pathogenicity, environmental stability | Obe-cel will be generated by |
| Types of Manipulations: | Manipulations performed by manufacturer of study agent. |
| Source of nucleic (DNA/RNA) sequences: e.g. species | N/A |
| Nature of nucleic acid | DNA Coding for Anti-CD19 CAR expression to target and kill cancer cells. |
| Host(s) and Vector(s): | Host: Patient-derived T-Cells Vector: containing the CD19 CAR expression cassette. |
| Will a transgene be expressed? If so, what is the function of the protein that will be produced? | Anti-CD19 CAR expression |
| | Confirm with project manager that providers and care staff have received training from study sponsor on how to appropriately handle lentivirus. |
| Training: | Study specific training from Sponsor. |
| Occupational Health Review (if applicable): | None |

| Biosafety Level: Animal Biosafety Level: | BSL 2 | |
|---------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| IBC Vote: | Approved Pending Modifications | |
| | New IBC Registrations for Review | |
| PI Name: | Paul/McKay | |
| Registration Number: | B25-CT-WS-C-007 | |
| IBC Registration Title: | BMS CA0881007: A Phase 3, Randomized, Open-Label, Multicenter Study to Compare the Efficacy and Safety ofBMS-986393, a GPRC5D-directed CAR-T Cell Therapy, Versus Standard Regimens in Adult Participants with Relapsed or Refractory and Lenalidomide-refractory Multiple Myeloma (NCT06615479) | |
| Project Overview: | This is a randomized, open label, multicenter, Phase 3 trial comparing the safety and efficacy of arlo-cel (BMS-986393) versus standard of care (SOC) regimens. This study is designed to help us learn whether the study drug works to treat people with relapsing or refractory multiple myeloma (MM). BMS-986393 is a chimeric antigen receptor (CAR) T-cell therapy. In this study the safety and efficacy of BMS-986393 will be compared to 2 current standard of care (SOC) treatments. If this CAR T-cell therapy shows a meaningful benefit, this trial would allow BMS-986393 to be approved as a treatment option earlier in the course of MM. Approximately 440 participants will be randomized in a 1:1 ratio to Arm A (BMS-986393) or Arm B (SOC). Subjects will undergo 3 periods: screening (eligibility), treatment (administration of arlo-cel or SOC regimen, as applicable), and post-treatment (every 3 month follow-up for safety and disease status assessment) periods. | |
| Applicable NIH | | |
| Guidelines: | Section III-C-1 | |
| Agent Description: e.g. virulence, pathogenicity, environmental stability | BMS-986393 is an investigational GPRC5D-targeted CAR T-cell product. | |
| Types of Manipulations: | Manipulations performed by manufacturer of study agent. | |
| Source of nucleic (DNA/RNA) sequences: e.g. species | N/A | |
| Nature of nucleic acid sequences: e.g. structural gene, oncogene | DNA coding for GPRC5D-Directed CAR | |
| Host(s) and Vector(s): | Host: Patient-derived T-Cells Vector: Third generation lentiviral vector | |

| Will a transgene be | |
|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | Viral expression of BMS-986393 to target GPRC5D an orphan transmembrane G |
| the function of the protein | protein-coupled receptor that is expressed on malignant plasma cells. |
| that will be produced? | protein-coupled receptor that is expressed on malignant plasma cells. |
| | |
| Risk Assessment | Confirm with project manager that providers and care staff have received training |
| Discussion Points: | from study sponsors on how to appropriately handle lentivirus. |
| Training: | Study specific training from Sponsor. |
| Occupational Health | None |
| Review (if applicable): | IVOITO |
| Biosafety Level: | BSL 2 |
| Animal Biosafety Level: | DSL 2 |
| IBC Vote: | Approved Pending Modifications |
| | New IBC Registrations for Review |
| PI Name: | Delbono |
| Registration Number: | B25-W-014 |
| IBC Registration Title: | Sympathetic Nervous System and Sarcopenia |
| Project Overview: | Injection of engineered to express specific neurons in the CNS that can be studied to determine their role in the development of sarcopenia. This will define the role of a group of neurons in the brain and the communication between nerves, muscles, muscle mass, and strength in an animal model for aging. |
| Applicable NIH Guidelines: | Section III-E |
| Agent Description: | |
| e.g. virulence, | |
| pathogenicity, | |
| environmental stability | |
| Types of Manipulations: | N/A |
| Source of nucleic | |
| (DNA/RNA) sequences: | N/A |
| e.g. species | |
| Nature of nucleic acid | |
| sequences: | Dielesieel medien of a coming orbital control of the control of th |
| e.g. structural gene, | Biological marker of norepinephrine neurons and channelrhodopsin expression |
| oncogene | |
| Host(s) and Vector(s): | Host: C57Bl/6 and PS19 mice from colony Vector: |
| Will a transgene be | |
| expressed? If so, what is | CED and Channelyhadanain |
| the function of the protein | GFP and Channelrhodopsin |
| that will be produced? | |
| Risk Assessment | |
| Discussion Points: | N/A |
| | Initial Biosafety Training |
| | Biosafety Retraining |
| Training: | Animal Biosafety |
| | • Emergency and Incident Response to Biohazard Spills and Releases |
| | NIH Recombinant DNA Guidelines |

| Occupational Health Review (if applicable): | N/A |
|---------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| Biosafety Level: Animal Biosafety Level: | BSL/ABSL 1 |
| IBC Vote: | Approve Pending Modifications |
| | New IBC Registrations for Review |
| PI Name: | Zhang, Y |
| Registration Number: | B25-W-006 |
| IBC Registration Title: | PEDF-Rich Exosomes for Post-Prostatectomy Urinary Incontinence |
| Project Overview: | Our research focuses on |
| Applicable NIH Guidelines: | Section III-E |
| Agent Description: e.g. virulence, pathogenicity, environmental stability | Plasmids with, |
| Types of Manipulations: | In vitro transfection of urine-derived stem cells |
| Source of nucleic (DNA/RNA) sequences: e.g. species | Plasmids with |
| Nature of nucleic acid sequences: | Induction of nerve and muscle regeneration, prevention of cancer cells proliferation and metastasis. |

| e.g. structural gene, oncogene | |
|-----------------------------------|-----------------------------------------------------------------------------------|
| onougono | Host: Urine-Derived Stem Cells |
| | Vector: |
| Host(s) and Vector(s): | vector. |
| | |
| Will a transgene be | |
| expressed? If so, what is | |
| the function of the protein | N/A |
| that will be produced? | |
| Risk Assessment | |
| Discussion Points: | None |
| Discussion Fonits. | Initial Biosafety Training |
| | Biosafety Retraining |
| Training: | Animal Biosafety |
| g - | Emergency and Incident Response to Biohazard Spills and Releases |
| | NIH Recombinant DNA Guidelines |
| Occupational Health | Name |
| Review (if applicable): | None |
| Biosafety Level: | DOL (ADOL O |
| Animal Biosafety Level: | BSL/ABSL 2 |
| IBC Vote: | Approve Pending Modifications |
| | New IBC Registrations for Review |
| PI Name: | Orlando, G |
| Registration Number: | |
| nogistration ranibor. | B25-W-016 |
| IBC Registration Title: | Transplantation of encapsulated human islet |
| | Fresh and cryopreserved human islets will be tested in vitro for their health and |
| Dunais at Overniano | implanted in vivo to assess their ability to reverse |
| Project Overview: | , after short-, medium- and long-term |
| | cryopreservation. |
| Applicable NIH | N/A |
| Guidelines: | |
| Agent Description: | |
| e.g. virulence, | N/A |
| pathogenicity, | |
| environmental stability | |
| Types of Manipulations: | N/A |
| Source of nucleic | |
| (DNA/RNA) sequences: | N1/A |
| e.g. species | N/A |
| Nature of nucleic acid | |
| sequences: | N. A. |
| e.g. structural gene, | NA |
| oncogene | |
| Host(s) and Vector(s): | N/A |
| Will a transgene be | |
| expressed? If so, what is | l |
| the function of the protein | NA |
| that will be produced? | |
| iiii so produced. | I |

| Risk Assessment Discussion Points: | Protocol lists materials as BSL 1. Protocol will be approved at BSL 2 unless PI provides proof of testing for pathogens. Provide better description for how cells will be transported from lab to the animal facility. Include correct room numbers for location of work taking place. |
|--------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Training: | Initial Biosafety Training Biosafety Retraining Animal Biosafety Emergency and Incident Response to Biohazard Spills and Releases |
| Occupational Health Review (if applicable): | None |
| Biosafety Level: Animal Biosafety Level: | BSL 2 |
| IBC Vote: | Approved Pending Modifications |
| | New IBC Registrations for Review |
| PI Name: | Asthana |
| Registration Number: | B25-W-020 |
| IBC Registration Title: | 3D bioprinting of human islets |
| Project Overview: | Human islets will be 3D bioprinted in bioinks and implanted in the to assess the 3D bioprinted construct's ability to . |
| Applicable NIH Guidelines: | N/A |
| Agent Description: | |
| e.g. virulence, pathogenicity, environmental stability | N/A |
| Types of Manipulations: | N/A |
| Source of nucleic | N/A |
| Nature of nucleic acid sequences: e.g. structural gene, oncogene | N/A |
| Host(s) and Vector(s): | N/A |
| Will a transgene be expressed? If so, what is the function of the protein that will be produced? | N/A |
| Risk Assessment Discussion Points: | Testing of cells for needs to be provided for work to be conducted at BSL1 |
| Training: | Initial Biosafety Training Biosafety Retraining Animal Biosafety Emergency and Incident Response to Biohazard Spills and Releases Bloodborne Pathogens Training |

| Occupational Health Review (if applicable): | None |
|--------------------------------------------------------------|----------------------------------------------------------------------------|
| Biosafety Level: Animal Biosafety Level: | BSL 2 |
| IBC Vote: | Approved Pending Modifications |
| | Modifications for Review |
| PI Name: | Sun, P |
| Registration Number: | 07.2021.100200.1100000.676 |
| negistration Number. | 07.2021.100200.1100000.070 |
| | Role of the pathway in oncogene-induced senescence, DNA |
| IBC Registration Title: | damage responses and tumor suppression/Analysis of Cellular Senescence and |
| | in Xenograft models. |
| Madification Occasion | Update to PI contact information |
| Modification Overview: | Addition of human lung cancer cell lines to study |
| Applicable NIH | NA |
| Guidelines: | |
| Agent Description: | |
| e.g. virulence, | NA |
| pathogenicity, | |
| environmental stability | |
| Types of Manipulations: | NA |
| Source of nucleic | |
| (DNA/RNA) sequences: | NA |
| e.g. species | |
| Nature of nucleic acid | |
| sequences: | NA |
| e.g. structural gene, | |
| oncogene | <u></u> |
| Host(s) and Vector(s): | NA |
| Will a transgene be | |
| expressed? If so, what is the function of the protein | NA |
| • | |
| that will be produced? Risk Assessment | |
| Discussion Points: | NA |
| Training: | NA |
| Occupational Health | |
| Review (if applicable): | None |
| Biosafety Level: | |
| Animal Biosafety Level: | BSL 2 |
| IBC Vote: | Approved |
| | |
| New Business: | Other N/A |
| | |
| Review of Incidents: | None |
| Lab Assessments Update: | N/A |
| IBC Training: | N/A |
| Public Comments: | None |
| | |

Adjournment: 1:42 pm