

MINUTES
Institutional Biosafety Committee (IBC)
Minneapolis VA Health Care System (618)
01/21/2020 at 5 PM
Room 3M-118

[REDACTED], Chair

Attendance: Total voting members: 7 Quorum: 4

Voting members present: [REDACTED]

Members excused: [REDACTED]

New Business

Initial Protocols

Protocol number: [REDACTED]

PI: Mark Klein, MD

Title: Combinatorial Targeting of the Cell Cycle and Key Interacting Pathways in Mesothelioma

Reviewers Comments: In this study lentiviral vectors will be used to up- or down-regulate CDK2 (cyclin-dependent kinase 2) and TXN2 (thioredoxin 2) in mesothelioma cells in vitro. Lenti-ORF-CDK2 (open reading frame) and lenti-ORF-TXN2 for up-regulation and lenti-shRNA vectors for down-regulation will be obtained from OriGene. The lentiviral vector is a third-generation system that utilizes a heterologous coat protein in place of the HIV-1 envelope protein, vector and packaging functions in 4 different plasmids, and removal of the Tat gene necessary for replication. These factors greatly reduce the chance of replication competent lentivirus being produced. The committee was in agreement that description of the laboratory and safety practices for use of the lentiviral vectors was well done. The vote was unanimous for approval with two minor stipulations made for final approval. In Section 32.2 of the application under the heading "Safe use of lentiviral vector systems": 1) In subsection "Personal Protective Equipment (PPE)" it is stated that "Eye goggles or face shields may be worn if desired - this is recommended." This should be changed to required use of eye protection. 2) In subsection "Steps in Safe Handling", items 2 and 3, undiluted bleach is used to inactivate the viral particles. While this is effective, common practice is to use 10% bleach with and exposure time of 20 minutes. It is recommended to change to use of 10% bleach with 20 minutes exposure.

Motion to approve after changes made:

For - 5

Protocol number: [REDACTED]

PI: Mark Klein, MD

Title: Precision Oncology-Based Therapeutic Targeting in Mesothelioma

Reviewer Comments: In this study lentiviral vectors will be used to up- or down-regulate CDK2 (cyclin-dependent kinase 2) and TXN2 (thioredoxin 2) in mesothelioma cells in vitro. Lenti-ORF-

CDK2 (open reading frame) and lenti-ORF-TXN2 for up-regulation and lenti-shRNA vectors for down-regulation will be obtained from OriGene. The lentiviral vector is a third-generation system that utilizes a heterologous coat protein in place of the HIV-1 envelope protein, vector and packaging functions in 4 different plasmids, and removal of the Tat gene necessary for replication. These factors greatly reduce the chance of replication competent lentivirus being produced. The committee was in agreement that description of the laboratory and safety practices for use of the lentiviral vectors was well done. The vote was unanimous for approval with two minor stipulations made for final approval. In Section 32.2 of the application under the heading "Safe use of lentiviral vector systems": 1) In subsection "Personal Protective Equipment (PPE)" it is stated that "Eye goggles or face shields may be worn if desired - this is recommended." This should be changed to required use of eye protection. 2) In subsection "Steps in Safe Handling", items 2 and 3, undiluted bleach is used to inactivate the viral particles. While this is effective, common practice is to use 10% bleach with and exposure time of 20 minutes. It is recommended to change to use of 10% bleach with 20 minutes exposure.

Motion to approve after changes made:

For - 5

Meeting was completed at 5:20 PM, January 21, 2020

Minutes prepared by Julie Furne

Signature applied by [REDACTED] on 01/28/2020 11:46:20 AM CST

[REDACTED]
IBC Chair