

References

8 References

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Appendices

9 Appendices

9.1 Appendix A: Institutional Animal Ethics Committee (IAEC) certificates



भारतीय
प्रौद्योगिकी
संस्थान
काशी हिन्दू विश्वविद्यालय

IIT

INDIAN
INSTITUTE OF
TECHNOLOGY
BANARAS HINDU UNIVERSITY

Department of Pharmaceutical Engineering & Technology

Regd. No. 2123/GO/Re/S/21/CPCSEA

Date: 09 February, 2023

IAEC Approval Number: IIT(BHU)/IAEC/2023/002

CERTIFICATE

This is to certify that the project proposal entitled "Oral delivery of dihydroartemisinin in the management of melanoma cancer" submitted by Mr. Dulla Naveen Kumar under supervision of Dr. Ashish Kumar Agrawal has been approved/recommended by the IAEC of *Indian Institute of Technology, Banaras Hindu University, Varanasi* in its meeting dated 09/02/2023 and has been sanctioned 50 Swiss Albino Mice (Female) under this proposal for a duration of Twelve (12) months.

Prof. Vikash Kumar
Dubey

Name & Signature

Chairman

Dr. Vinod Tiwari

Name & Signature

Member Secretary

Dr. Shesh Narayan Mishra

Name & Signature

Main Nominee of CPCSEA

Note: The CPCSEA Guideline should be followed strictly while handling the animals.



Regd. No. 2123/GO/Re/S/21/CPCSEA

Date: 15 February, 2024

IAEC Approval Number: **IIT(BHU)/IAEC/2024/I/003**

CERTIFICATE

This is to certify that the project proposal entitled "Oral delivery of Hesperidin in the management of melanoma cancer" submitted by Mr. Naveen Kumar Dulla under the supervision of Dr. Ashish Kumar Agrawal has been approved/recommended by the IAEC the of Indian Institute of Technology, Banaras Hindu University, Varanasi in its meeting dated 15 February, 2024 and has been sanctioned 30 (M/F) Swiss Albino Mice and 10 (M/F) Sprague -Dawley Rats under this proposal for a duration of 12 (Twelve) months.

Prof. Vikash Kumar Dubey

Name & Signature

Chairman
Chairperson

Institutional Animals Ethics Committee
IIT (BHU), Varanasi-221005

Dr. Vinod Tiwari

Name & Signature

Member Secretary

Member Secretary
Institutional Animals Ethics Committee
IIT (BHU), Varanasi-221005

Dr. Shesh Narayan Mishra

Name & Signature

Main Nominee of CPCSEA

Note: The CPCSEA Guideline should be followed strictly while handling the animal

9.2 Appendix B: Publications

9.2.1 List of publications from thesis works

- 1) **Dulla Naveen Kumar**, Aiswarya Chaudhuri, Deepa Dehari, Armin M Gamper, Dinesh Kumar, Ashish K Agrawal. "Exosomes Improved the in Vitro Anti-Melanoma Efficacy of Dihydroartemisinin". *Journal of Drug Delivery Science and Technology* 2024. <https://doi.org/10.1016/j.jddst.2024.105957>
- 2) **Dulla Naveen Kumar**, Aiswarya Chaudhuri, Deepa Dehari, Armin M Gamper, Dinesh Kumar, Ashish K Agrawal. "Oral delivery of dihydroartemisinin for the treatment of melanoma via bovine milk exosomes". Under communication in *Drug Delivery and Translational Research*, 2024.
- 3) **Dulla Naveen Kumar**, Aiswarya Chaudhuri, Deepa Dehari, Armin M. Gamper, Dinesh Kumar, and Ashish Kumar Agrawal. "Enhanced Therapeutic Efficacy Against Melanoma through Exosomal Delivery of Hesperidin." *Molecular Pharmaceutics* 2024. <https://doi.org/10.1021/acs.molpharmaceut.4c00490>

9.2.2 List of other publications during Ph.D

1. **Dulla Naveen Kumar**, Aiswarya Chaudhuri, Dinesh Kumar, Sanjay Singh, and Ashish Kumar Agrawal. "Impact of the drug loading method on the drug distribution and biological efficacy of exosomes." *AAPS PharmSciTech* 24, no. 6 (2023). <https://doi.org/10.1208/s12249-023-02624-6>
2. **Dulla Naveen Kumar**, Aiswarya Chaudhuri, Farrukh Aqil, Deepa Dehari, Radha Munagala, Sanjay Singh, Ramesh C Gupta, Ashish Kumar Agrawal, Exosomes as Emerging Drug Delivery and Diagnostic Modality for Breast Cancer: Recent Advances in Isolation and Application. *Cancers*, 2022. <https://doi.org/10.3390/cancers14061435>

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4. **Dulla Naveen Kumar**, Aiswarya Chaudhuri, Deepa Dehari, Armin M Gamper, Dinesh Kumar, Ashish K Agrawal. "An investigation of in vitro anti-cancer efficacy of dihydroartemisinin-loaded bovine milk exosomes against triple-negative breast cancer". **The AAPS Journal** 2024. <https://doi.org/10.1208/s12248-024-00958-y>
5. Chaudhuri, Aiswarya, **Dulla Naveen Kumar**, Dinesh Kumar, and Ashish Kumar Agrawal. "Functionalized solid lipid nanoparticles combining docetaxel and erlotinib synergize the anticancer efficacy against triple-negative breast cancer." **European Journal of Pharmaceutics and Biopharmaceutics** (2024). <https://doi.org/10.1016/j.ejpb.2024.114386>
6. Aiswarya Chaudhuri, **Dulla Naveen Kumar**, Saurabh Kumar Srivastava, Dinesh Kumar, Umesh Kumar Patil, Avanish Singh Parmar, Sanjay Singh and Ashish Kumar Agrawal "Combinatorial Delivery of Docetaxel and Erlotinib Loaded 2 Functionalized Nanostructured Lipid Carriers for the 3 Treatment of Triple-Negative Breast Cancer Using Quality by 4 Design Approach" **Pharmaceutics** (2024). <https://doi.org/10.3390/pharmaceutics16070926>
7. Dehari, Deepa, **Dulla Naveen Kumar**, Aiswarya Chaudhuri, Akshay Kumar, Rajesh Kumar, Dinesh Kumar, Sanjay Singh, Gopal Nath, and Ashish Kumar Agrawal. "Bacteriophage entrapped chitosan microgel for the treatment of biofilm-mediated polybacterial infection in burn wounds." **International Journal of Biological Macromolecules** 253 (2023). <https://doi.org/10.1016/j.ijbiomac.2023.127247>

8. Anjum, Md Meraj, **Dulla Naveen Kumar**, Sankha Bhattacharya, Krishna Kumar Patel, Mahalingam Rajamanickam Vijayakumar, Ashish Kumar Agrawal, and Sanjay Singh. "Topical delivery of cyclodextrin crosslinked nanosponge of anacardic acid for treatment of UV-B induced skin photoaging: Formulation, characterization and biochemical estimation." **Journal of Drug Delivery Science and Technology** 87 (2023). <https://doi.org/10.1016/j.jddst.2023.104840>
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10. Dehari, Deepa, Aiswarya Chaudhuri, **Dulla Naveen Kumar**, Rohit Patil, Mayank Gangwar, Sonam Rastogi, Dinesh Kumar, Gopal Nath, and Ashish Kumar Agrawal. "A Bacteriophage Microgel Effectively Treats the Multidrug-Resistant *Acinetobacter baumannii* Bacterial Infections in Burn Wounds." **Pharmaceuticals** 16, no. 7 (2023). <https://doi.org/10.3390/ph16070942>
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Book Chapter

22. Md Meraj Anjum, **Dulla Naveen Kumar**, Aiswarya Chaudhuri, Sanjay Singh, Ashish Kumar Agrawal, (2022) Extracellular Vesicles for Nucleic Acid Delivery: Progress and Prospects for Safe RNA-Based Gene Therapy, CRC Press, USA. [10.1201/9781003186083](https://doi.org/10.1201/9781003186083)
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