Dr. Haripriya PS
PhD Research Scholar/ BAYER Fellow
Amrita Vishwa Vidyapeetham, Health Science Campus, Kochi-682041, KERALA, India
Mobile No: +91 8921912969,
Email id: haripriyasurendran.sree@gmail.com

Education

Since 2021 - Pursuing PhD, Amrita School of Pharmacy, Amrita Centre for Nano-sciences and Molecular medicine, Amrita Vishwa Vidyapeetham, Health Science Campus, Kochi-682041, KERALA, India
2014 - 2020 – Pharm D (Doctor of Pharmacy): Kerala University of Health Science, KERALA, India
2012 - 2013 – Senior Secondary School: Govt. Vocational Higher Secondary School, Wayanad, KERALA, India
2010 - 2011 Secondary School: Fr. George Kazhikkachalil Memorial Higher Secondary School, Wayanad, KERALA, India

Advanced Studies in PhD

Sl. No	Course work details	Number of credits	Grade/ Percentage	CGPA
1	Ethics in Research and Research Methodology	2	A+	9.75/10
2	Statistical Data Analysis	2	O	
3	Biological Foundation of Neurosciences	4	A+	9.58/10
4	Neuropsychology and Brain mapping	4	A+	
Ratings- O Outstanding; A^+ Excellent.				

Clinical Experience

- Trainee Clinical Pharmacologist at Dept of Medical Oncology and Hematology, Malabar Cancer Center, KERALA, India (2020)
- Trainee Clinical Pharmacologist at Dept of Medical Oncology, Kasturba Medical College, Manipal, Karnataka, India (2020)
- Observership at Department of Clinical Pharmacology, Aster MIMS Kannur, Kerala, India (2019)

- Intern at Pk das Institute of Medical Science, Vaniyamkulam, Palakkad, Kerala, India (2014-2019)

Research Experience

- Pursuing PhD on the topic "Memantine for The Prevention of Radiation-Induced Cognitive Dysfunction in Brain Metastatic Patients -A Randomized Placebo-Controlled Trial CTRI/2022/01/039599"
- Conducting therapeutic drug monitoring (TDM) of memantine for cognitive function preservation in Indian patients with brain metastases patients treated with radiation therapy.
- Conducting systematic review and meta-analysis on the Effect of Radiosurgery Alone vs. other Modalities for Treatment on Cognitive Functions in Patients With 1 To 4 Brain Metastases.
- Conducting Systematic review and meta-analysis on Efficacy and safety of GLP-1 agonists in PCOS- obese patients. (CRD42023471676)
- Conducted a systematic review and meta-analysis on a Systematic Review and Meta-analysis to Elucidate the Dosing and Efficacy of Hippocampal Avoidance Whole Brain Radiotherapy (HA-WBRT) to Preserve the Neuro-Cognitive Functions among Brain Metastasis Patients. (CRD42022307964)
- Conducted a Systematic Review on Efficacy of memantine in preventing neurocognitive dysfunction induced by radiation therapy in patients with brain metastases: a systematic review of clinical trials (CRD42021290179)
- Contributed as a co-author in a meta-analysis titled "Change in KI-67 Index in Patients Receiving Preoperative Endocrine Therapy Among Hormone Positive Breast Cancer Patients.
- Involved as a co-author in research titled "Assessment of clinical outcome and their risk factors in patients with stroke"
- Dissertation on "Antenatal use of corticosteroids to prevent respiratory insufficiency in preterm babies"
- Developed a Patient education program in the form of a MOBILE SOFTWARE to educate the people regarding the awareness of infections and usage of antibiotics among people in Kerala.

Achievements

- Qualified as a Senior Research Fellow (SRF) BAYER Foundation collaborated with Bhubaneswar City Knowledge and Innovation Centre
- Qualified for registration-only scholarship to attend the 16th Asian Conference on Pharmacoepidemiology (ACPE16) held at The University of Tokyo, Japan, from 12-14 October 2024.
- Travel award to present a paper and attend National Research Scholar Meet-2023 hosted by Advanced Centre for Treatment Research and Education in Cancer, TATA, Mumbai, MAHARASHTRA, India.
- Qualified among 14 research scholars from India to present an oral presentation in National Research Scholars Meet-2023, hosted by Advanced Centre for Treatment Research and Education in Cancer, TATA, Mumbai, MAHARASHTRA, India.
- Certified training in Cochrane Systematic review and meta-analysis by Cochrane-India.
- Secured second position for Paper presentation on Antenatal Use of Corticosteroids to Prevent Respiratory Insufficiency in Preterm Babies at the "National Level Online Conference on Innovations in Pharmaceutical and Biological Sciences (NLOCIPBS-2020)

Paper Presentations

- Oral presentation on A Double-Blinded Placebo-Controlled Randomized Trial with or without Memantine for the Prevention of Radiation-Induced Cognitive Dysfunction in Brain Metastatic Patients- CTRI/2022/01/039599 -An Interim analysis at National Research Scholars Meet-2023, at ACTREC, TATA, Mumbai, India
- Poster presentation on Efficacy of memantine in preventing neurocognitive dysfunction induced by radiation therapy in patients with brain metastases: a systematic review of clinical trials at International Society for Pharmacoeconomics and Outcomes Research, National Harbor, MD, USA
- Poster presentation on Assessment of the Impact of an ARIVU-IFK software in Public Education about Infectious Diseases, Antibiotic Usage and Resistance in India at International Society for Pharmacoeconomics and Outcomes Research, National Harbor, MD, USA

- Paper presentation on Antenatal Use of Corticosteroids to Prevent Respiratory Insufficiency in Preterm Babies at the "National Level Online Conference on Innovations in Pharmaceutical and Biological Sciences (NLOCIPBS-2020)

Publications

- **Surendran HP**, Dutta D, Kalavagunta S et al., A Systematic Review and Meta-analysis to Elucidate the Dosing and Efficacy of Hippocampal Avoidance Whole Brain Radiotherapy (HA-WBRT) to Preserve the Neuro-Cognitive Functions among Brain Metastasis Patients- Submitted to journal of Neuro-Oncology (Under review)
- Dutta D, **Surendran HP**, Kalavagunta S, Sasidharan A, Narmadha MP. Audit of presentation, primary site and pattern of treatment in 778 Indian patients with brain metastases. Neurology-India
- **Surendran HP**, Sah SK, Louis DM, et al. Efficacy of memantine in preventing neurocognitive dysfunction induced by radiation therapy in patients with brain metastases: A systematic review of clinical trials. *Semin Oncol*. 2023;50(3-5):113-122. doi: 10.1053/j.seminoncol.2023.09.004
- **Surendran HP**, Narmadha MP, Kalavagunta S, Sasidharan A, Dutta D. Preservation of cognitive function after brain irradiation. *J Oncol Pharm Pract*. 2022;28(5):1182-1188. doi:10.1177/10781552221077037
- **Surendran HP**, Sah SK, Louis DM, Dutta D. CO104Efficacy of memantine in preventing neurocognitive dysfunction induced by radiation therapy in patients with brain metastases: a systematic review of clinical trials.*Value in health*, https://doi.org/10.1016/j.jval.2022.04.200
- Louis DM, Sah SK, **Surendran HP**. CO70 Change in KI-67 Index in Patients Receiving Preoperative Endocrine Therapy Among Hormone Positive Breast Cancer Patients: A Systematic Review and Meta-Analysis. *Value in health.* 10.1016/j.jval.2022.04.168
- Louis DM, DK V, **Surendran HP** CO102 Effectiveness of Short Term Neoadjuvant Endocrine Therapy on KI67 in Luminal Breast Cancer. *Value in health.* https://doi.org/10.1016/j.jval.2022.04.198

- **Surendran HP**, Louis DM. PCR154 Assessment of the Impact of an ARIVU-IFK Software in Public Education about Infectious Diseases, Antibiotic Usage and Resistance in India. *Value in health.* https://doi.org/10.1016/j.jval.2022.04.1497
- **Surendran HP**, Louis DM et al., Effect of Antenatal Betamethasone on Respiratory Distress Syndrome in Preterm Neonate. *Research Journal of Pharmacy and Technology.2022;15(4):1533-doi:10.52711/0974-360X.2022.00255*
- Louis DM, **Surendran HP,** Sah SK. Assessment of clinical outcome and their risk factors in patients with stroke. Global journal of research analysis. VOLUME - 10, ISSUE - 04, APRIL - 2021 • PRINT ISSN No. 2277 - 8160 • DOI: 10.36106/gjra
- **Surendran HP,** Naushad N, et al., Antenatal use of Corticosteroids to Prevent Respiratory Insufficiency in Preterm Babies, Asian Journal of Pharmaceutical Education and Research.2020. DOI: 10.38164/AJPER/9.4.2020.19-31

Abstract of PhD Dissertation

Title of the study- Memantine for The Prevention of Radiation-Induced Cognitive Dysfunction in Brain Metastatic Patients -A Randomized Placebo-controlled Trial CTRI/2022/01/039599

Funded by Amrita Vishwa Vidyapeetham University Grant

CTRI Number-CTRI/2022/01/039599

Estimated Sample size- 130

Study design- Double-blinded randomized Placebo-Controlled Study

Expected completion- December 2024

Principle Investigator and Guide - Dr. Debnarayan Dutta, Professor and Head, Department of Radiation Oncology, Amrita Institute of Medical Science and Research

Doctoral Research Committee members- Dr. Debnarayan Dutta[1], Prof. Shantikumar Nair[2], Dr. Sabitha Mangalath[3], Dr. Parasuraman A[4], Prof. Narmadha M P[5], Dr. Dhanya Chandran[6],

1. Professor and Head, Department of Radiation Oncology, Amrita Institute of Medical Science and Research
2. Dean of Research and Head of School of nano-sciences and molecular medicine, Amrita Vishwa Vidyapeetham
3. Principal, Amrita School of Pharmacy, Amrita Vishwa Vidyapeetham
4. Senior Consultant, Department of Neurosurgery, Amrita Institute of Medical Sciences and Research
5. Head of Department of Pharmacy Practice, Amrita School of Pharmacy, Amrita Vishwa Vidyapeetham
6. Head, Department of Clinical Psychology, Amrita Institute of Medical Sciences and Research.

Research Question

1. What is the effect of memantine on preserving neuro cognitive functions in patients receiving radiotherapy (WBRT, SRS, HA-WBRT) for brain metastasis at 6 months compared to a placebo?
2. How do changes in cognitive function correlate to changes in white matter as seen in MRI T2 FLAIR Sequences?
3. What are the changes in quality of life of brain metastatic patients while adding memantine to their radiation therapy?

Research Hypothesis

1. Memantine is more efficacious in preserving the cognitive function of patients who undergo stereotactic radiosurgery (SRS) as compared to whole brain radiation therapy (WBRT)/hippocampal avoidance- whole brain radiation therapy (HA-WBRT).
2. There is a correlation between changes in white matter and subsequent neurocognitive function.
3. Memantine improves the quality of life of brain metastatic patients after radiation therapy.

Reference Contacts:

1. Dr. Debnarayan Dutta, MBBS, MD, PhD
   Professor and Head
   Department of Radiation Oncology
   Amrita Institute of Medical Sciences and Research, Kochi, KERALA, India
2. Dr. Sabitha M, M Pharm, PhD
   Principal
   Amrita School of Pharmacy, Amrita Vishwa Vidyapeetham
   Kochi-Health Science Campus, KERALA, India