



Dr. Bhaswat Sundar Chakraborty, B.Pharm (Hons) Ph.D

Dr. Chakraborty is a B.Pharm(hons) from IIT-BHU and a Ph.D from the University of Saskatchewan, Canada. His professional experiences include:

2005 – Now Senior Vice-President, Research & Development; Chairman, Research & Development Science Core Committee, Cadila Pharmaceuticals Ltd., Ahmedabad, Gujarat, India; Directly responsible for Clinical Pharmacology, Clinical Trials (Ph I-IV), Bioequivalence Trials, Preclinical Studies, Bioinformatics, Data Management. As Chair of Science Core Committee, responsible for co-ordination, problem solving and monitoring of entire R&D activities.

Also presently Member, Board of Governors and Honorary Professor of Pharmacology, Gupta College of Technological Sciences, West Bengal Technical University, India; Member of Advisory Committee of K.B. Institute of Pharmaceutical Education and Research (KBIPER), Gandhinagar, Gujarat, India; Adjunct Professor, Albany College of Pharmacy and Health Sciences, Albany, New York, USA; Principal Faculty, Post Graduate Certificate Course in Clinical Research (PGCCCR), Apollo Hospitals International, Gandhi Nagar, Gujarat, India; Editorial Board Member, Journal of Bioequivalence & Bioavailability; Editorial Board Member, Journal of Analytical and Bioanalytical Techniques, Journal of PharmaSciTech; Ph.D. Guide in Pharmacology, Pharmaceutical Analysis & Clinical Research, Institute of Pharmacy, Nirma University, Ahmedabad, India; Member of the advisory board of Center of Excellence for Health Sciences (CEHS), CIMS Hospital, Ahmedabad, India; Member of the Board, Continuing Education Centre, Nirma University.

Invited Expert, Data & Safety Monitoring Board, All India Institute of Medical Sciences, India; Chair, Institutional Animal Ethics Committee for Preclinical Studies of Cadila Pharmaceuticals; Expert Reviewer, Journal of Chromatography B; Journal of Chromatographic Science; Analytical and Bioanalytical Chemistry; Abstracts for Annual Meetings of American Association of Pharmaceutical Sciences; The Journal of Research and Education in Indian Medicine; Indian Journal of Pharmacology, Indian Pharmacopoeia; Member, FICCI Clinical Research Committee 2008 – present; Member, Board of Studies, Ganpat University, Gujarat, India.

2004 : Founder and President, Nirupama Self Realisation Association (NSRA), Gurgaon and Ahmedabad, India
2003 – 2004: Regulatory Advisor, New Drugs, Dabur Research Foundation, Shahibabad, India
2000 – 2003: President, Foresee Consultants, Toronto, Canada
1997 – 2000: Director, Biopharmaceutics Biovail Corporation International, Contract Research

Division

- 1989 – 1997: Senior Drug Safety and Efficacy Evaluator
Division of Biopharmaceutics Evaluation, Bureau of Pharmaceutical Assessment,
Therapeutic Products Directorate, Health Protection Branch, Health Canada
- 1993 – 1994: Acting Head, Chemistry and Manufacturing Section
Division of Biopharmaceutics Evaluation, Drugs Directorate, Health Protection Branch,
Health Canada
- 1989 – 1997: Acting Chief, Division of Biopharmaceutics Evaluation on different occasions from
September 1989 to January 1997 for a total of 4 months
- 1987 – 1989: Post-Doctoral Fellow with Drs. K.K. Midha and E.M. Hawes
College of Pharmacy, University of Saskatchewan
- 1987 – 1989: Instructor of Biostatistics and Pharmaceutical Chemistry (Pharmacy 330)
College of Pharmacy, University of Saskatchewan.

Some of his many awards and achievements are:

- 2011-present Marquis Who's Who in Science and Engineering
- 2005-present: Department of Science and Technology, Govt. of India, Research Grantee
- 2010-present: Welcome Trust, London, UK, Research Grantee
- 1996-1997: AAPS Visiting Scientist to School of Pharmacy, Memorial University of Newfoundland
- 1995-1996: AAPS Visiting Scientist to Faculty of Pharmacy, University of Toronto
- 1982-1987: University of Saskatchewan Graduate Scholarship
- 1981-1982: University Grant Commission Award of India
- 1977-1981: National Merit Scholarship of India
- 1977-1982: Several Annual Awards for highest standing in the class
- 1974-1977: Bihar State Merit Scholarship of India

Research guidance

He has successfully guided twenty two post graduate students and one Ph.D fellow and currently two Ph.D fellows are carrying out their research under his supervision.

He is member of numerous professional bodies like:

- American Association of Pharmaceutical Scientists (AAPS)
- Canadian Society for Pharmaceutical Scientists (CSPS)
- Drug Information Association (DIA).

Publication Details:

Sakore S., **Chakraborty B.S.** (2013). Formulation and evaluation of Enalapril maleate sustained release matrix tablets. *International Journal of Pharmaceutical and Biomedical Research*, 4, 21-26.

Ghosh C., **Chakraborty B.** (2012) LC-MS Methods for Regulated Bioequivalence Studies: Do We Need to Worry about Matrix Effects? *Omics Online Scientific Reports* 1:424. doi:10.4172/scientificreports.424

Sakore S., **Chakraborty B.S.** (2012). In-Vitro and In-Vivo Correlation of Immediate Release Acyclovir Tablet Using Wagner Nelson Method. *International Journal of Pharmacy*, 2, 598-604.

Singhal S., **Chakraborty B.S.** (2012). Signal Detection of Docetaxel in Canadian Spontaneous Adverse Event Reports. *Journal of Pharmacy Research*, 5, 1-6.

Singhal S., **Chakraborty B.S.** (2012). Therapeutic Class-Specific Signal Detection of Paclitaxel-induced Tachycardia. *International Journal of Universal Pharmacy and Life Sciences*, 2, 92-101.

Ghosh C., Shinde C.P., **Chakraborty B.S.** (2012). Influence of Ionization Source Design on Matrix Effects during LC-ESI/MS/MS Analysis. *Journal of Chromatography B*, 893-894,193-200.

Ghosh C., Upadhyay A., Kasodekar S., Gupta V., Sanghvi K., Bhattacharya K., **Chakraborty B.S.** (2012). Rapid determination of isoniazid in human plasma by HPLC-UV and its application to a bioequivalence study. *Global Journal of Analytical Chemistry*, 3, 4.

Chakraborty B.S. (2012) Bayesian Decision Making In Clinical Research: A Primer for Nonstatisticians. *International Journal of Universal Pharmacy and Life Sciences*, 2, 48-54.

Sakore S. **Chakraborty B.** (2012). Bioequivalence Study of Omeprazole Capsule: In Vitro In Vivo Correlation. *International Journal of Universal Pharmacy and Life Sciences*, 2, 37-47.

Sakore S., **Chakraborty B.S.** (2011). In-Vitro-In-Vivo Correlation (IVIVC): A Strategic Tool in Drug Development. *Journal of Bioequivalence & Bioavailability*, S3, doi:10.4172/jbb.S3-001.

Ghosh C., Gaur S., Shinde C.P., **Chakraborty B.S.** (2011). A Systematic Approach to Overcome the Matrix Effect during LC-ESI-MS/MS Analysis by different Sample Extraction Techniques. *Journal of Bioequivalence & Bioavailability*, 3, 122-127. doi:10.4172/jbb.1000072.

Ghosh C., Upadhyay A. Singh A., Bahadur S., Jain P., **Chakraborty B.S.** (2011). Simultaneous Determination of Aspirin and Its Metabolite from Human Plasma By UPLC-UV Detection: Application to Pharmacokinetic Study. *Journal of Liquid Chromatography and Related Technologies*, 34, 2326-2338.

Ghosh C., Jha V., Patra C., Patel N., **Chakraborty B.S.** (2012). Simultaneous determination of Docosahexanoic Acid and Eicosapentanoic Acid by ESI-LC-MS/MS from Human Plasma: Application to Bio-analysis; *Journal of Liquid Chromatography and Related Technologies*, 35, 1812-1825.

Ghosh C., Jain I., Shinde C.P., **Chakraborty B.S.** (2012). Rapid and sensitive liquid chromatography/tandem mass spectrometry method for simultaneous determination of enalapril and its major metabolite enalaprilat, in human plasma: Application to a bioequivalence study. *Drug Testing and Analysis*, 4, 94–103.

Ghosh C., Jha V., Shinde C.P., **Chakraborty B.S.** (2011). A LC-MS analysis of acamprosate from human plasma: pharmacokinetic application. *Drug Testing and Analysis*, DOI 10.1002/dta.239.

Ghosh C., Gaur S., Singh A., Shinde C.P., **Chakraborty B.S.** (2011). Estimation of Nevirapine from Human Plasma by ESI-LC-MS/MS: a Pharmacokinetic Application. *Journal of Bioequivalence and Bioavailability*, 3, 20-25. **(Highly cited paper)**.

Kumar A., Kachhadiya R., **Chakraborty B.S.** (2011) Clinical Outcome of Patients of Acute Coronary Syndrome at 7 and 30 days Undergoing Percutaneous Coronary Interventions and Treated with Bivalirudin and Heparin. *International Journal of Contemporary Research and Review*, 2, 31-35.

Ghosh C., Jain I., Gaur S., Patel N., Upadhyay A., **Chakraborty B.S.** (2011). Simultaneous estimation of Atorvastatin and its two metabolites from Human Plasma by ESI-LC-MS/MS. *Drug Testing and Analysis*, 3, 352–362.

Chakraborty B.S. (2011). Clinical trials of antihypertensives: Nature of control and Design. *Indian Journal of Pharmacology*, 43, 13-17.

Sakore S., Kute S., Tekade A., **Chakraborty B.S.** (2010). Long Acting in Situ Gelling Vehicle for Ophthalmic Delivery: A Research. *International Journal of Drug Formulation & Research*, 1, 324-348.

Ghosh C., Shinde C.P., **Chakraborty B.S.** (2010). Ionization Polarity as a Cause of Matrix Effects, its Removal and Estimation in ESI-LC-MS/MS Bioanalysis. *Journal of Analytical and Bioanalytical Techniques* 1, 106. doi:10.4172/2155-9872.1000106.

Kumar A., Kachhadiya R.K., Vaishnavi V., **Chakraborty B.S.** (2010). Comparison of tumor response rate and toxicities with polychemotherapy versus monochemotherapy in patients of metastatic breast cancer: a meta-analysis. *International Journal of Current Research and Reviews*, 1,1-9.

Sakore S., Chaudhary S. **Chakraborty B.S.** (2010). Biowaiver Monograph for Immediate Release Solid Oral Dosage Forms: Ofloxacin. *International Journal of Pharmacy and Pharmaceutical Sciences*, 2, Suppl. 4, 156-161.

Kute S.D., Sakore S., **Chakraborty B.S.** (2010). Formulation Approaches in Ocular Delivery System. *International Journal of Pharmaceutical Sciences and Technology*, 2, 118-145.

Ghosh C., Jha V., Ahir R., Shah S., Shinde C.P., **Chakraborty B.S.** (2010). A Rapid and most Sensitive Liquid Chromatography / Tandem Mass Spectrometry Method for Simultaneous Determination of Alverine and its Major Metabolite, Para Hydroxy Alverine, in Human Plasma: Application to a Pharmacokinetic and Bioequivalence Study. *Drug Testing and Analysis*, 2, 284–291. (**Highly cited paper**).

Sharma G.N., **Chakraborty B.S.**, Sanadya J., Baghel U.S., Ghosh C., Singhal M. (2010). Bio-analytical Estimation of Losartan and Losartan Carboxylic acid Concentrations in Human Plasma by Using LC-MS/MS. *International Journal of Pharmaceutical Quality Assurance*, 2, 13-18.

Patel A., Shah T., Shah G., Jha V., Ghosh C., Desai J., Khamar B., **Chakraborty B.S.** (2010). Preservation of Bioavailability of Ingredients and Lack of Drug-drug Interactions in a Novel Five Ingredient Polypill (Polycap™) in a Five Arm Phase-I Crossover Trial in Healthy Volunteers. *American Journal of Cardiovascular Drugs*, 10, 95-103. (**Highly cited paper**).

Patel C.D., Modi V.D., **Chakraborty B.S.**, Mathuria N., Dadhaniya P., Borade P.A., Morankar P. (2010). Effect of a Novel Antiinflammatory polyherbal preparation (Sudarshanam oil) on Hematological parameters in Wistar rats. *Acta Poloinae Pharmaceutica-Drug Research*, 67, 277-281.

Gavali D., Kulkarni K.S., Kumar A., **Chakraborty B.S.** (2009). Therapeutic Class Specific Signal Detection of Bradycardia Associated with Propranolol Hydrochloride. *Ind J Pharmacol*, 41, 162-166.

Ghosh C., Singh R.P., Inamdar S., Mote M., **Chakraborty B.S.** (2009). Sensitive, Selective, Precise and Accurate Liquid Chromatography Mass Spectrometric Method for Determination of Clonidine in Human Plasma. *Chromatographia*, 69, 1227-32. (**Highly cited paper**).

Jain S. Vaishnavi V.V., **Chakraborty B.S.** (2009). Effect of Dyslipidemic Drugs on Mortality: A Meta-Analysis. *Ind J Pharmacol*, 41, 4-8.

Dadhaniya P., Patel C., Makwana M., Vachhani K., Gunale B.K., Maseeh A. **Chakraborty B.** (2008). Safety Assessment of Tenatoprazole. Acute and Subacute Toxicity Studies. *Ind J Clin Practice*, 19, 23-27.

Verma R.J., **Chakraborty B.S.**, Patel C., Mathuria N. (2008). Curcumin Ameliorates Aflatoxin- Induced Changes in SDH and ATPase Activities in Liver and Kidney of Mice. *Acta Polonicae Pharmaceutica – Drug Research*, 65, 415-419.

Pant M.C., **Chakraborty B.S.**, Patel N., Bisht S.S., Verma V.P., Singh S., Gupta S., Shah S., Parag P. and Pant R. (2007). Role of Cadi-05 as an adjuvant therapy in advanced Non Small Cell Lung Cancer. *J Thorac Oncology*, 2, S616.

Chakraborty B.S. (2007). Cancer Drug Development – Key Regulatory Considerations. *Health Administrator*, 20, 29-36.

Gallicano K.D., McGilveray I.J., Qureshi, S., Nitchuk W., **Chakraborty B.**, Boyd C. (1991). Situation Paper on Comparative Bioavailability of Oral Contraceptive (OC) Products. *Clinical Biochemistry*, 24, 107-111.

Chakraborty B.S., Hubbard J.W., Hawes E.M., McKay G., Cooper J.K., Gurnsey T., Korchinski E.D. and Midha K.K. (1990). Interconversion between Haloperidol and Reduced Haloperidol in Healthy Volunteers. *Psychiatry Digest* 6, 29-30. (**Published as an outstanding work in its field**).

Midha K.K., McKay G., **Chakraborty B.S.**, Young M., Hawes E.M., Hubbard J.W. Cooper J.K. and Korchinski E.D. (1990). Bioequivalence of Two Thorazine Tablet Formulations Using Radioimmunoassay and Gas Chromatographic-Mass Spectrometric Methods. *Journal of Pharmaceutical Sciences*, 79, 196-201.

Midha K.K., **Chakraborty B.S.**, Schwede R., Hawes E.M., McKay G. Hubbard J.W., Copper J.K. and Moore M. (1990). Comparative Bioavailability of Two Tablet Formulations of Fluphenazine Dihydrochloride in Drug-Free Psychiatric Patients. *Journal of Pharmaceutical Sciences*, 79, 3-8. (**Highly cited paper**).

Chakraborty B.S., Midha K.K., McKay G., Hawes E.M., Hubbard J.W., Korchinski E.D., Choc M.G. and Robinson W.T. (1989). Single Dose Kinetics of Thioridazine and its Two Psychoactive Metabolites in Healthy Humans: A Dose Proportionality Study. *Journal of Pharmaceutical Sciences*, 78, 796-801. (**Highly cited paper**).

Chakraborty B.S., Hubbard J.W., Hawes E.M., McKay G., Cooper J.K., Gurnsey T., Korchinski E.D. and Midha K.K. (1989). Interconversion between Haloperidol and Reduced Haloperidol in Healthy Volunteers. *European Journal of Clinical Pharmacology*, 37, 45-48. (**Highly cited paper**).

Midha K.K., **Chakraborty B.S.**, Schwede R., Hawes E.M., Hubbard J.W. and McKay G. (1989). Comparative Bioavailability of a New Commercial Tablet Formulation and Two Lots of a Reference Formulation of Haloperidol. *Journal of Pharmaceutical Sciences*, 78, 443-447. (**Highly cited paper**).

Midha K.K., **Chakraborty B.S.**, Ganes D.A., Hawes E.M., Hubbard J.W., Keegan D.L., Korchinski E.D. and McKay G. (1989). Intersubject Variation in the Pharmacokinetics of Haloperidol and Reduced Haloperidol. *Journal of Clinical Psychopharmacology*, 9, 98-104. (**Highly cited paper**).

Chakraborty B.S., Hawes E.M., McKay G., Hubbard J.W., Korchinski E.D., Midha K.K., Choc M.G. and Robinson W.T. (1988). S-Oxidation of Thioridazine to Psychoactive Metabolites : An Oral Dose-Proportionality Study in Healthy Volunteers. *Drug Metabolism and Drug Interactions*, 6, 425-435.

Chakraborty B.S., Hawes E.M. and Midha K.K. (1988). Development of a Radioimmunoassay for Sulforidazine and its Comparison with a High Performance Liquid Chromatographic Method. *Therapeutic Drug Monitoring* , 10, 205-214.

Chakraborty B.S., Hawes E.M. and Midha K.K. (1987). Development of a Radioimmunoassay for Mesoridazine and its Comparison with a High Performance Liquid Chromatographic Method. *Therapeutic Drug Monitoring*-, 9, 464-471.

Midha K.K., Hubbard J.W., Cooper J.K., Gurnsey T., Hawes E.M., McKay G., **Chakraborty B.S.** and Yeung P.K.F. (1987). Therapeutic Monitoring of Chlorpromazine IV: Comparison of a New High Performance Liquid Chromatographic Method with Radioimmunoassays for Parent Drug and Some of its Metabolites. *Therapeutic Drug Monitoring*, 9, 358-365. (**Highly cited paper**).

Chakraborty B.S., Hawes E.M., Rosenthaler J. and Midha K.K. (1987). A New Radioimmunoassay for Thioridazine and its Comparison with a High Performance Liquid Chromatographic Method and another Radioimmunoassay. *Therapeutic Drug Monitoring*, 9, 227-235.

Chakraborty B.S., Sardesai M.S., Jaworski, T.J., Midha K.K. and Hawes E.M. (1987). Synthesis and Properties of Haptens for the Development of Radioimmunoassays for Thioridazine, Mesoridazine, and Sulforidazine. *Pharmaceutical Research*, 4, 207-213.

Author or co-author of 19 situation papers, policy papers and guidelines of Therapeutic Products Directorate, Health Protection Branch, Health Canada.

REFEREED SHORT COMMUNICATIONS

Patel C., Krishna H. and **Chakraborty B.S.** Significance of Pharmacological/Desirable Effects in the Evaluation of NOAEL. Accepted by *Society of Toxicology International (STOX India)* for publication.

Patel C., Krishna H. and **Chakraborty B.S.** Consideration of Clinical Signs In Pre-Clinical Toxicology Studies. Accepted by *Society of Toxicology International (STOX India)* for publication.

BOOK CHAPTERS

McGilveray I.J. and **Chakraborty B.S.** (1993). Bioequivalence: The Canadian Regulatory Perspective. In *International Symposium on Update on Bioavailability and Bioequivalence*, Bombay College of Pharmacy, Bombay, India