Acknowledgement

I take up this opportunity to convey my heartfelt thanks to my guide Dr. B. Suresh for his guidance and valuable advice. His way of understanding me and providing me constant support throughout my research tenure is truly appreciable and for that I will remain thankful to him forever.

I am grateful to Dr. Edwin Cevallos and Ms. Bonny Cevallos (BIRM Inc., Quito, Ecuador) for their generous gift of BIRM and their consent to use BIRM for my doctoral research work. I am equally thankful to Dr. Dandekar for introducing me to BIRM and putting me in touch with Cevallos.

I am extremely thankful to GVK Biosciences Pvt. Ltd., Hyderabad, India for their support in terms of infrastructure for conducting animal experiments during my stint with them. I am also thankful to my former colleagues Dr. Savithiri Shivakumar, Dr. Amit Sharma, Dr. Amit Awasthi, Dr. Chetan Sharma, Dr. Mukesh Gandhari and Ms. Akhila at GVK, for their technical support and many interactive sessions, which gave me a thorough insight into my work and helped give it a meaningful direction.

I will remain indebted to my friend Chandra Deb, her husband Dr. Amit Das and their loving son Arin for always being there besides me in my difficult times and their support is beyond words.

I am highly grateful to my labmates Pranav, Hiral, Sonam, Shashi, Gowri and Shailja for welcoming me in the lab and making me feel at ease and their never ending support. The support I received especially from Pranav has been a very instrumental part of my research work. His knack for technology, precision, accuracy, perseverance and patience – a highlight of him as a person – is truly appreciable and it has helped me a lot at many stages in my research work. Sonam, the youngest of our team always has helped me tremendously, with an energetic smile, during my later stages of thesis preparation with editing and I would like to express my thanks to her for this support. I would also like to thank Dr. Hetal Roy, for her support.

I am thankful to Sanjay, a friend from long time, who helped me immensely by providing scientific literature and for seeding the thought of pursuing doctoral research in my mind many years ago.

In the wake of life, there have been many friends who have significantly contributed in my journey to this stage and I am extremely thankful to them for their selfless and generous acts. I do not intend to demean their efforts by not mentioning them here, but I will remain obliged to them forever.

I am most gratified to my family – parents, in-laws, my husband and of course my darling son Malav for their unconditional love and constant support in all the ways possible. Without them
this feat would have never been possible. I am especially thankful to my in-laws and husband for their understanding nature and for never complaining about my absence, when they actually wanted me to be there. On a personal note, I will remain indebted to my husband forever for the sacrifices he has made in these last few years for my sake. Words are not enough to express my gratitude for my son Malav, who has been a major driving force for my work and his understanding nature at this tender age is an inspiration to me. I am also thankful to my sister, brother and his family for their behind-the-stage support.

Lastly, I would express my thanks to the Almighty for providing me this opportunity to achieve my long cherished dream of pursuing doctoral research and for finally making it possible. This has made my belief in him even stronger and made me realize that if true efforts are made, anything is possible, irrespective of the obstacles.

Mital Ravalji