

I-Oncology Kashmir

Breast cancer has emerged as the most prevalent and deadliest cancer affecting women in Jammu and Kashmir, with an average of two women succumbing to the disease every day in 2023 amounting to 732 deaths—and 9,321 new cases diagnosed between 2019 and 2023. This surge is particularly alarming among younger women under 50, highlighting an urgent need for early detection and awareness. Furthermore, triple-negative breast cancer (TNBC)—a notably aggressive subtype resistant to hormone therapy—accounts for approximately one in three breast cancer cases in India, a rate significantly higher than that observed in Western populations.

In response to this crisis, Dr. Manzoor and Dr. Ashok Sharma are active collaborators in **I-Oncology**, a pioneering initiative that leverages the power of artificial intelligence alongside multidisciplinary expertise to revolutionize cancer care. **I-Oncology** integrates advanced AI-driven diagnostic tools, predictive analytics, and personalized treatment strategies to enhance early detection, accurate diagnosis, and effective management of cancer. Their efforts within this initiative include comprehensive early-detection programs, awareness campaigns across various GDCs in Kashmir, and community-based screening camps. Additionally, partnerships with leading institutions such as ACTREC and the Indian Cancer Society strengthen the capacity to deliver cutting-edge preventive and diagnostic oncology services. Together, through I-Oncology, they are helping transform the fight against breast cancer in Kashmir—striving for earlier detection, greater awareness, and improved outcomes for women throughout the region.

Dr. Manzoor is leveraging the innovative capabilities of **I-Oncology** to advance early detection of breast cancer in Kashmir, in close collaboration with the Sher-i-Kashmir Institute of Medical Sciences (SKIMS). By integrating AI-powered diagnostic algorithms such as deep learning-based image analysis using platforms like Google's TensorFlow and IBM Watson Health, machine learning models for risk stratification, and natural language processing of patient records with tools like Apache cTAKES, I-Oncology enhances the accuracy and speed of detecting early-stage breast tumors and identifying high-risk individuals. This collaboration with SKIMS provides access to a rich repository of clinical data, histopathological images, and patient demographics, which are used to train and validate AI models tailored specifically to the regional population. Through this multidisciplinary approach, they aim to develop a comprehensive screening framework that combines AI-driven imaging analysis with molecular biomarkers and personalized risk assessments, ultimately enabling earlier diagnosis and more effective intervention to improve breast cancer outcomes in Kashmir.