

# Project Name: AI-powered breast cancer diagnostic platform

Principal Investigator: KT Bae, T Tan, M Koohimoghadam

## Technology

AI-powered breast cancer diagnostic platform utilizing deep learning algorithms for real-time mammogram analysis. Cloud-based SaaS solution delivering automated lesion segmentation, malignancy risk scoring (0-100%), and cancer progression prediction in few seconds. Purpose-built and validated on Asian population data, achieving 15-20% higher accuracy than Western-trained alternatives. Seamlessly integrates with existing hospital PACS systems via DICOM protocol.

## Stage of Development

**Current Stage:** Pilot Testing & Market Validation

- ✓ Prototype developed and functional
- ✓ Pilot deployments active in mainland China hospitals
- ✓ Initial clinical feedback positive
- 🔧 Hong Kong database development (Phase 1)
- 🔧 Regulatory approval process initiated
- 📅 Commercial launch planned (12-18 months)

**Investment Use:** HK\$1.5M seed funding for Hong Kong market validation, database development, and regulatory approval.

## Key Advantages

**Population-Specific Accuracy:** First AI platform optimized for Asian breast tissue characteristics and cancer patterns

**Clinical Validation:** Currently piloting in mainland China hospitals with real-world performance data

**Rapid Deployment:** Cloud-based infrastructure requires no specialized hardware investment

**Proven Technology:** Functional prototype demonstrating 90%+ accuracy on validation datasets

**Regulatory Pathway:** Clear route to medical device approval across Hong Kong, Macau, and Greater China

**Market Gap Solution:** Addresses critical shortage of radiologists while reducing diagnostic errors

## Opportunities

**Immediate Market (Year 1-2):**

- Hong Kong: 200,000+ annual mammograms, HK\$50-80M market
- Macau: Gateway to Greater China regulatory approval
- Mainland China expansion: Leveraging existing pilot partnerships

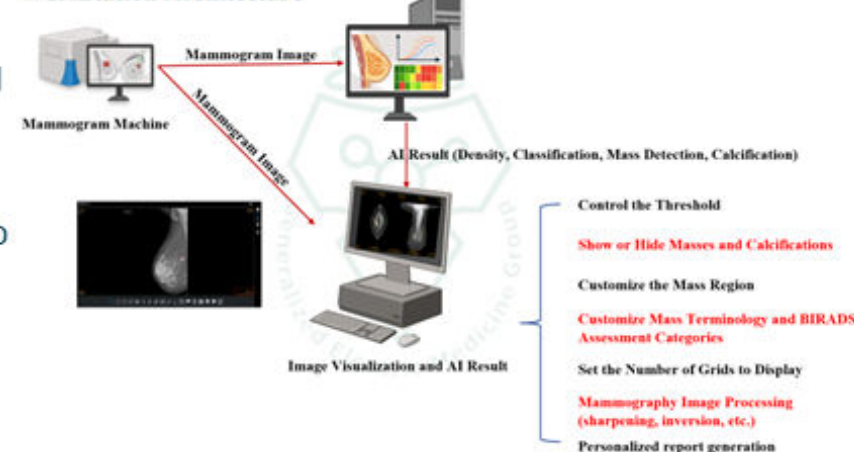
**Revenue Potential:**

- Per-scan licensing: HK\$75-150 per analysis
- Institutional subscriptions: Tiered annual packages
- B2B data services for pharma/research

**Strategic Value:**

- Partnership with or possible acquisition target for medical imaging giants (Philips, GE, Siemens)

## Workstation Architecture



## Intellectual Property

## Contact

✉ : baekt@hku.hk



HKU  
Med

LKS Faculty of Medicine  
The University of Hong Kong  
香港大學李嘉誠醫學院