Guideline

(Note: the suggestions' sequence in each column is arranged based on their significance. Some of the suggestions are based on our research, the inspection methods and treatment methods are based on our literature review of papers and reports)

A. Suggestions on Living Habits

- 1. Sleep more, stay up less;
- 2. Smoke less;
- 3. Eat food with fewer calories and less fat;
- 4. Drink less alcohol;

B. Symptoms for Self-examine

- 1. A lump or thickening in/near the breast or in the underarm area;
- 2. Irregular menstruation, feeling anxious or depressed;
- 3. Nipple discharge;
- 4. Inverted nipples;

C. Inspection Method Recommendation

- 1. Mammography: is the most effective means available and is practicable for females with dense breasts;
- 2. Ultrasonography: is limited by speckle artifacts and is low-specific;
- 3. Magnetic resonance imaging (MRI): is expensive and exhibits great side effects;
- 4. Diffuse optical tomography: is under development;
- 5. Thermography: is an auxiliary tool and is not suitable for large breasts with fatty tissue;

D. Treatment Method Recommendation

- 1. Surgery: is targeted;
- 2. Radiation: is developed and safe;
- 3. Chemotherapy; can apply to females whose cancer has spread to other organs;
- 4. Hormone therapy: can be used for females with tumors that are hormone receptor-positive;
- 5. Targeted drug therapy: works to destroy cancer cells or slow down their growth;
- 6. Immunotherapy: is by boosting the immune system;

Further Readings

- 1. https://www.breastcancer.org/screening-testing/breast-self-exam-bse
- 2. https://www.cancer.net/cancer-types/breast-cancer/types-treatment
- 3. https://www.cdc.gov/cancer/breast/basic_info/treatment.htm
- 4. https://www.google.com/amp/s/amp.cancer.org/cancer/breast-cancer/treatment.html