Table S2. Korean recommendations and operational definition of appropriate cancer screening used in this study

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|  | **Stomach cancer screening** | **Colorectal cancer screening** | **Breast cancer screening** | **Cervical cancer screening** |
| **National Cancer Screening Guideline**20 | * Male and female ≥40 * Every 2 years * Gastrofibroscopy or UGIS | * Male and female ≥50 * Every 5-10 years * Colonoscopy or barium enema and sigmoidoscopy * Earlier and more frequent screening for high risk groups | * Female ≥40 * Every 1-2 years * Mammogram and clinical breast exam | * Female ≥20 * Every year * Papanicolau tests |
| **National Cancer Screening Program**19 | * Male and female ≥40 * Every 2 years * Gastrofibroscopy or UGIS | * Male and female ≥50 * Every year * FOBT; if positive, colonoscopy or barium enema follows | * Female ≥40 * Every 2 years * Mammogram and clinical breast exam | * Female ≥30 * Every 2 years * Papanicolau test |
| **Lifetime health promotion for Koreans**21 | * Male ≥40, Female ≥50 * Every 2 years | * Male and female ≥50 * FOBT every year, or barium enema or sigmoidoscopy every 5 years, or colonoscopy every 10 years | * Female ≥40 * Every 2 years (40 – 49 years of age) or every 3 years (≥50 years of age) * Mammogram | * Female with history of sexual contact * Every 3 years * Papanicolau test |
| **Screening guideline for seven major cancers**22 | * Male and female ≥40 * Every 2 years * Gastrofibroscopy or UGIS | * Male and female ≥50 * Every 5-10 years * Colonoscopy or barium enema and sigmoidoscopy * Earlier and more frequent screening for high risk groups | * Female ≥40 * Every 1-2 years * Mammogram and clinical breast exam | * Female ≥20 * Every year * Papanicolau test |
| **Other considerations** |  | * Korean male cancer survivors have 4.0 times the risk of colorectal cancer than the general population2 * Colonoscopy every 3 years has been suggested as the most cost effective strategy for male cancer survivors24 | * Korean women have the peak incidence of breast cancer in their forties15 * Asian women have high prevalence of dense breasts25, 26 * Breast sonography is commonly practiced in combination with or as a replacement of mammography in Korea26 |  |
| **Operational definition of appropriate cancer screening used in the current study** | * Within 2 years * Gastrofibroscopy or UGIS | * Within 2 years * FOBT or sigmoidoscopy or colonoscopy or barium enema | * Within 2 years * Mammography or breast sonography | * Within 2 years * Papanicolau test |

UGIS: Upper gastrointestinal series; FOBT: Fecal occult blood testing