Baseline population of the NHIS-health examination cohort, in Republic of Korea (n=514795)

Exclusion criteria
- Patient with peritoneal dialysis or hemodialysis or kidney transplant (n=1733)
- Inflammatory bowel disease, familial & hereditary polyposis subjects (n=21056)
- Subjects with previous cancer history (via questionnaire) (n=2999)
- Cancer patients within 1 year after health examination (n=6739)
- Death within 1 year after health examination (n=1611)
- Subjects with missing information for smoking questionnaire and BMI (n=18751)

After excluding the above conditions, the remaining subjects (n=461996)

Selection of control by 1:2 matching

Case: n=48849
- CKD-/DM+ (n=17700)
- CKD+/DM- (n=22643)
- CKD+/DM+ (n=8506)

Control: n=97698
1:2 matching, by sex, age, health examination year and month

Supplementary Fig. 1. Study flow diagram. NHIS, National Health Insurance Service; DM, diabetes mellitus; CKD, chronic kidney disease; BMI, body mass index.