OBJECTIVES: To define the factors which affect the price of single pill combinations of antihypertensive including angiotensin receptor blockers (ARB) in Turkey and to estimate the price of the newly formed single pill combination (SPC) or diuretics were evaluated. The prices of the only reimbursed combinations were abstracted from the price list of the Turkish Ministry of Health. ARB type, dose increment regarding minimum available dose of ARB, CCB and diuretics in the market, being original drug and package size were analyzed as predictor in a regression model to estimate the price of the combination.

RESULTS: In Turkey, 113 SPCs which include candesartan or eprosartan or irbesartan or losartan or olmesartan or telmisartan or valsartan as ARB, and hydrochlorothiazide as diuretic or amlodipine as calcium channel blocker (CCB) or diuretics were evaluated. The prices of the only reimbursed combinations were estimated by using the Sullivan method. This estimation was based on age-specific mortality rates of each hypertension group, estimated by Poisson regression using NIPPON DATA80 and the disability prevalence of each hypertension group, estimated by logistic regression using NIPPON DATA80. To consider the effect of the SPCs on the average daily living cost, the blood pressure at baseline was used to categorize hypertension (mild, systolic blood pressure/diastolic blood pressure): optimal (<120/80), prehypertension (120-129/80-89), hypertension I (140-159/90-99), and hypertension II (160/100). The disability prevalence was measured by the Katz activity of daily living scale. RESULTS: Among men/patients who never smoked, DLF (years) at age 60 was 21.0/21.0 for optimal hypertension, 20.9/21.0 for prehypertension, 19.8/21.0 for hypertension I, and 18.9/20.1 for hypertension II. This consistent decrease in hypertension grade was also observed in men and women who were currently smoking. DLF (years) at age 60 was 19.0/21.0 (optimal), 18.7/20.7 (prehypertension), 17.6/19.9 (hypertension I), and 16.6/19.1 (hypertension II). CONCLUSIONS: In Japan, DLF decreases as hypertension grade increases. A strategy for reducing hypertension is recommended to expand the DLF in Japan.