Cancer Patients' Willingness to
Pay per Quality-Adjusted Life
Year in ASIA-Pacific: A Systematic
Review and Correlation Analysis
with Population Metrics

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OBJECTIVES:

Cancer patients' Willingness To Pay per Quality-adjusted life year (Ca-WTPQ) in Asia-Pacific has not been sufficiently studied and reviewed. When direct evidence is unavailable, it is unclear whether GDP per capita or the general population's WTPQ (Gp-WTPQ) could facilitate the estimation of Ca-WTPQ.

GDP per capita has highly positive correlation with cancer patients' willingness to pay per QALY.

General population
willingness to pay per QALY
for non-life-threatening
diseases might inform the
estimation of willingness to
pay per QALY for cancer.

Identification of studies via databases and registers Records identified PubMed (n = 148)Records removed EconBiz (n = 72)before screening: $CiNii^* (n = 6)$ Duplicate records $CNKI^{**}$ (n = 20) removed (n = 16) Value in Health journal (n = 25) Records screened Records excluded (n = 255)(n = 246)Reports sought for Reports not retrieval retrieved (n = 9)(n = 0)Reports assessed for Reports excluded (n = 9)(n = 0)*CiNii: Japan Scholarly and Academic Information Navigator Studies included in review (https://ci.nii.ac.jp/) **CNKI: China Reports of included studies National Knowledge (n = 9)Infrastructure (http://cnki.net/)

METHODS:

Four databases, and one journal were searched for studies from 63 economies in Asia-Pacific. Papers or abstracts were included, without limitation on publication language or year. WTPQ from the same economy for the same population health and (lifestatus threatening/cancer versus non-life threatening) was combined. GDP per capita and inflation rate were obtained from international agencies. All values were adjusted to 2020 US dollars. 255 citations were screened. Nine studies from Australia, Japan, Korea, Taiwan, Thailand Vietnam and were identified, and four of them are directly about Ca-WTPQ.

FINDINGS:

GDP per capita positively correlates with Ca-WTPQ (n=3 economies), and Gp-WTPQ for life-threatening/cancer diseases (n=5 economies). Due to small sample size, this is statistically insignificant. When Ca-WTPQ is unavailable within an economy, GDP per capita might facilitate the estimation.

There is insufficient data on the economy level (n=1 only) to draw a difference between Ca-WTPQ, and Gp-WTPQ for life-threatening/cancer. If they are considered interchangeable, they are highly correlated with Gp-WTPQ for non-life-threatening disease (n=3). Under this strong assumption, Gp-WTPQ for non-life-threatening diseases might inform the estimation of WTPQ for life-threatening/cancer disease.



