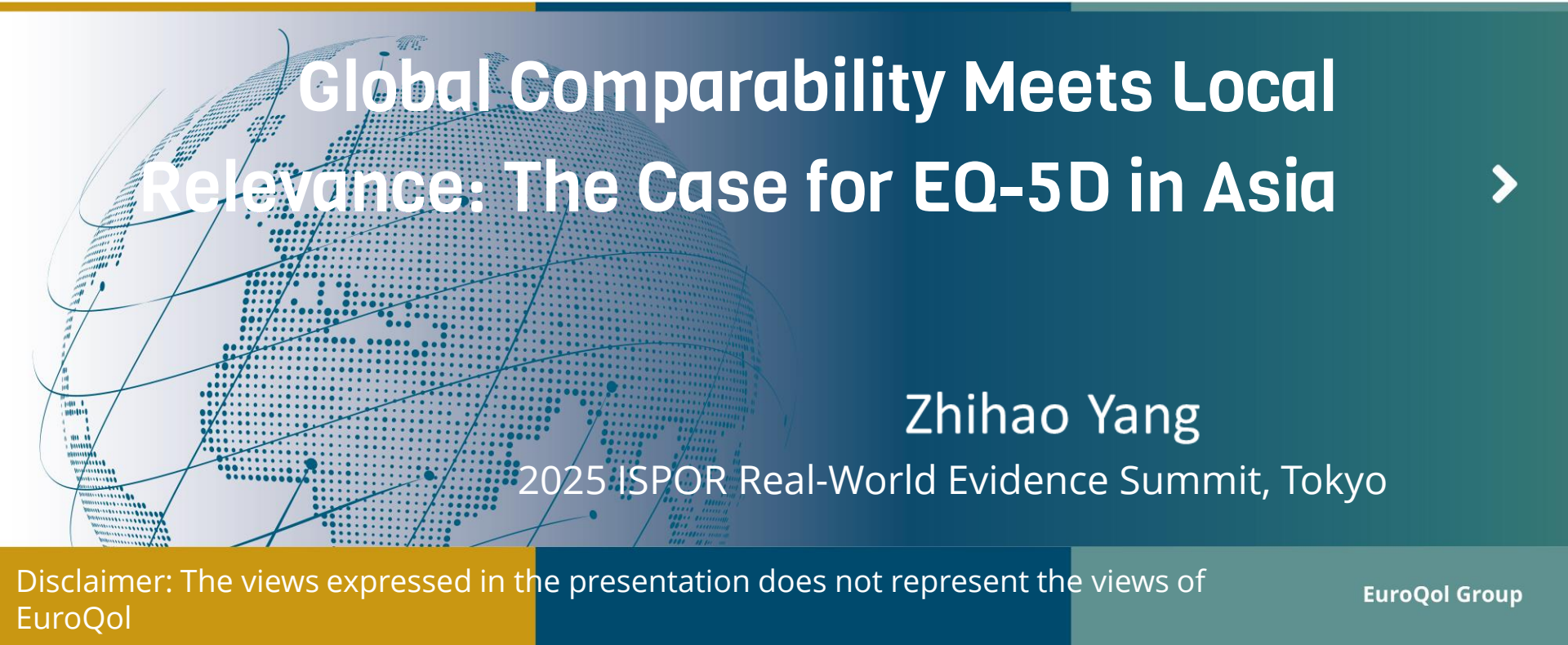




Global Comparability Meets Local Relevance: The Case for EQ-5D in Asia



Zhihao Yang

2025 ISPOR Real-World Evidence Summit, Tokyo

Multi-country Trials on the Rise--Why a Unified PBM (like EQ-5D) Matters

- Number of countries in pivotal trials has nearly doubled in 25 years.
- Trials increasingly complex and multinational.
- For example, FDA MRCT guidance stresses single protocols across regions → outcome harmonisation.
- EQ-5D provides the shared language across countries.

References:

- *Clinical trial diversity: An opportunity for improved insight* (Clin Pharmacol Ther, 2022)
- *Globalization of clinical trials: an analysis of FDA-approved trials (1997–2012)* (UNC Thesis, 2014)
- *Exploratory multiregional clinical trials in East Asia: Current status and future perspectives* (Transl Clin Pharmacol, 2021)
- *Diversity in oncology clinical trials: Current landscape and future perspectives* (Cancer Med, 2023)

Evidence Base: 30 Years of Validation Across Populations and Conditions

- Validated in **hundreds of studies** across oncology, cardiology, neurology, psychiatry, musculoskeletal, infectious diseases, and more.
- Proven in **general populations and patient cohorts**, consistently showing reliability, validity, and responsiveness.
- **Head-to-head comparisons** confirm EQ-5D performs as well as, or better than, other MAUIs (SF-6D, HUI, AQoL).

References:

- *Measurement properties of the EQ-5D-5L compared to the EQ-5D-3L across eight patient groups: a multi-country study* (Qual Life Res, 2013)
- *Health utilities using the EQ-5D in studies of cancer* (Pharmacoeconomics, 2007)
- *Validity of EQ-5D-5L in stroke patients* (Health Qual Life Outcomes, 2015)
- *Psychometric properties of EQ-5D in musculoskeletal disorders* (Rheumatology, 2007)

EQ-5D “infrastructure” in Asia

Component	Evidence in Asia
Value Sets	China, Japan, Korea, Thailand, Hong Kong, Singapore, Malaysia, India, Indoneisa etc.
Translations	English, Malay, Simplified Chinese, Traditional Chinese, Hindi, Bahasa, plus many other Asian languages (official versions available from EuroQol)
Administration	Paper, interviewer-administered, and electronic (tablet, online) modes
Leader in methodoolgoy	EQ-VT valuation protocol
Regulatory strength	Standardized translation protocol meeting FDA requirements

Content validity confirmed in Asian populations

- Across **Singapore, China, Korea**, **five EQ-5D dimensions** are relevant in Asian groups (adults and youth).
- Some studies flag terminology (relationships, vitality), which led to rejection of the core five.

Dimension name	Rank($\bar{x} \pm s$)
Moderate problems in walking about (EQ-5D)	4.07 $\pm$ 3.42
Moderate problems with Self-Care (EQ-5D)	4.41 $\pm$ 3.42
Moderate pain/discomfort (EQ-5D)	5.27 $\pm$ 3.43
Moderate problems with usual activities (EQ-5D)	5.51 $\pm$ 4.08
Moderate problems with cognition	6.10 $\pm$ 2.99
Moderate problems with sleep	6.49 $\pm$ 3.31
Moderately anxious/depressed (EQ-5D)	7.27 $\pm$ 3.19
Moderate problems with emotional control	8.07 $\pm$ 3.42
Moderate problems seeing	8.10 $\pm$ 4.27
Moderate problems with adaptation to society	8.44 $\pm$ 3.36
Moderate problems with social support (relationships)	9.20 $\pm$ 3.01
Moderate tiredness/lack of strength	9.32 $\pm$ 2.70
Moderate reduction of appetite	11.1 $\pm$ 2.81
Moderate problems with climate adaption	11.70 $\pm$ 3.59

EQ-5D ‘Poor Performance’? Often a Study Quality Issue, Not an Instrument Issue.

- Low motivation, lack of clarity in survey administration, or poor explanation of self-report tasks can lead to inconsistent or “flat-line” EQ-5D responses.
- Mode of administration (paper vs. electronic), absence of training, or failure to ensure privacy may reduce accuracy.
- Ceiling effects or low sensitivity sometimes stem from **unrepresentative samples** (e.g., mild cases, non-clinical populations), not the instrument itself.

Evolving with Needs: Bolt-ons and EQ-HWB

- EQ-5D has been evolving beyond its 1990 origins.
 - Constant update of the details.
 - Bolt-ons (cognition, vision, fatigue, sleep, skin) address specific gaps.
- EQ-HWB has been developed with patients, caregivers, clinicians, and public input across countries. A broader inclusion of dimensions.
- For youth: EQ-5D-Y (3L & 5L) and EQ-TIPS ensure age-appropriate measurement while preserving comparability.

What decision makers need?

- HTA bodies prioritise comparability, transparency, and reproducibility across submissions and time. A single, widely used PBM with country-specific value sets enables this.
- Regulatory endorsement: EQ-5D is explicitly referenced in China, Japan, Thailand, Korea, and widely used in Singapore.
- Decision-maker trust: Longstanding use in HTA gives EQ-5D high credibility with payers.
- Efficiency in submissions: A common, HTA-aligned instrument reduces delays and increases acceptability of evaluations.

Snapshot of Asian HTA guidance

- China (CGPE 2020): Generic PBMs with Chinese tariffs (e.g., EQ-5D, SF-6D); EQ-5D-Y recommended for children.
- Japan (C2H/Chuikyo, 2024): EQ-5D-5L recommended as first choice PBM when collecting QALYs.
- Thailand (HITAP): EQ-5D preferred; Thai EQ-5D-5L value set published.
- South Korea (HIRA, 2021): CUA preferred; EQ-5D with Korean tariff widely used and accepted.
- Singapore (ACE, 2025): PBM utilities required; Singapore EQ-5D-5L value set available.
- Malaysia (2019 guideline): EQ-5D preferred; Malaysia EQ-5D-5L value set published.

EQ-5D delivers global comparability, proven credibility, and practical readiness — making it the trusted instrument for Asia

EQ-5D: Comparability, Credibility, Readiness

Infrastructure
(Practical readiness in Asia)

Validation
(Scientific credibility)

Comparability
(Global benefit)

EQ-5D (1990s)

EQ-5D-Y 3L (2010)

EQ-5D-5L (2010s)

EQ-5D-Y 5L (2020s)

EQ-TIPS (2020s)

Bolt-ons (2010s+)

EQ-HWB (2020s)

Thank you!

