

第58回定例朝食会では、日本の数少ない医療技術評価（HTA: Health Technology Assessment）のエキスパートである五十嵐氏に、そもそもHTAとは何か、医療の価値をどのように測るのか、HTAの結果が政策へどう反映されるのか、といった点について、最新の事例を交えて、わかりやすく解説して頂きました。

**講演者ご紹介：五十嵐中氏** 東京大学大学院 薬学系研究科 医薬政策学 特任准教授

2008年東京大学大学院薬学系研究科博士課程修了。博士（薬学）。2010年より、一般社団法人医療経済評価総合研究所 代表。専門は医療統計学・医療経済学・薬剤経済学。



## 講演内容要旨

### ■HTAとは？

広義には、医療技術の開発・普及・使用に伴う医学的・社会的・経済的な影響を研究する、学際的な政策分析領域を指しています。一方、本朝食会で扱う狭義のHTAとは、費用対効果評価を基き薬の給付判断や価格設定を行う、効率的な医療の実現を目指す研究領域を指しています。HTAという言葉に、CostやEconomicsという言葉が入っていない点が重要です。HTAは、コストや経済性だけを見る手法ではないのです。

### ■効果の検証は、単なる費用比較ではない

HTAでは、必ず「効果」の検証が行われます。「治療薬自体の費用」と「薬を導入しなかった場合にかかる将来の治療費」を比べ、現状では前者の方がコストを抑えられるでしょう。しかし、これでは単なる費用比較であって、正確な比較にはなりません。「効果」の検証には、「健康上のメリット」（救命率、罹患減少、生命予後の改善など）を考慮する必要があります。これは一人あたりの救命率を計算するのではなく、「費用が増えた分」を「効果が増えた分」で割り算するのが正しい計算方法であり、これを「増分費用効果比（ICER: Incremental Cost-Effectiveness Ratio）」と言います。これらが全ての基本となります。

例えば、鮭弁当（800円）と焼肉弁当（1200円）を比較した場合、費用では800円の鮭弁当を選ぶでしょう。しかし鮭弁当に400円を足して、焼肉弁当を食べることによって得られる効果（満足度、エネルギー摂取など）もみて、初めて正しい比較と言えます。



### ■生存年（LY）に質の「スパイス」を加えた質調整生存年（QALY）

では、その「効果」はどのように測定するのか？まず、基準となる治療や投薬によって「生存年数を1年延長するのにかかる費用」を測定します。その際、年数は単なる生存年（LY: Life Year）ではなく、生活の質も反映したQOLスコアにて点数付けした「質調整生存年」（QALY: Quality Adjusted Life Years）という指標を用います。いわば質という「スパイス」を加えることにより、単なる生存年数ではなく、生活の質も反映した指標を用いた比較検討が可能となります。

### ■世界各国のHTA事情

各国によってそのシステムや活用方法は大きく異なります。例えば、英・豪は保険のカバー対象の判断材料に使用しています。また仏では、高めの給付価格を希望する薬剤について経済評価の添付を求めています。更に、独では、価格設定の交渉が難航した際の評価材料と位置づけていますが、現時点では経済評価を実施した適用例はありません。



詳細はこちらから

<http://www.hgpi.org>

▶「HTA 最新の動向」で検索

At this Breakfast Meeting, Dr. Ataru Igarashi, one of the few “Health Technology Assessment” (HTA) professionals in Japan, joined us to explain what HTA is, how it evaluates the value of medicine, and how HTA outcomes can be reflected in policies, with examples from recent HTA case studies.

### Speaker : Dr. Ataru Igarashi

Assistant Professor of Graduate School of Pharmaceutical Sciences at the University of Tokyo

Dr. Igarashi received his Ph.D. (Pharmacoeconomics/Pharmaceutical Economics) from the Endowed Laboratory of Drug Policy and Management in the Graduate School of Pharmaceutical Sciences of the University of Tokyo (2008). He is Co-President of the Health Outcome Research Institute (2010 - Present). He specializes in biostatistics, health economics, and pharmacoeconomics.



## Meeting Summary

### What is HTA?

In a general sense, HTA refers to an academic policy analysis field that conducts research into the medical, social, and economical impact of the development, advancement, and utilization of medical technology.

On the other hand, the strict meaning used for this Breakfast Meeting is the evaluation of drug performance and price setting based on cost-effectiveness evaluations leading to the realization of effective medicine through research.

It is important to note that the words “cost” and “economics” are not included in the term “Health Technology Assessment” (HTA). HTA is not concerned with only these two areas.

### Comparing 800 yen salmon lunch and 1200 yen BBQ lunch

HTA examines effectiveness. If we compare the costs of treatment for a disease today with the costs of treatment in the future assuming that a new drug isn't introduced, the beginning stage costs are likely to be less in today's world. However, this kind of comparison is nothing more than a simple price comparison, which is not the right. “Effectiveness” extends beyond mere health benefits – we need to consider the rate of lives saved, the minimization of infections, prognosis improvements, and so on. In addition, the rate of lives saved should not be calculated on a per person basis; it should be calculated based on differences in cost between two possible interventions, divided by the difference in their effects. This is known as an “Incremental Cost-Effectiveness Ratio” (ICER). All of this is fundamental to HTA.



For a simple analogy, let's make a comparison between a salmon lunch (800 yen) and a BBQ lunch (1200 yen). People may have a tendency to pick up the salmon lunch based solely on its price; however, the content of these two lunches differs greatly. Only once we add 400 yen to the salmon lunch is it possible to perform a correct comparison and look at measures like the beneficial effects of each lunch (satisfaction and energy intake, etc.).

### Adding spice to the quality of life years: How can we measure effectiveness with the quality Adjusted Life Years?

How can we measure effectiveness? First, we need to estimate how much it will cost to increase survivability by 1 year given standard treatments and medicine usage. However, we should not consider only the number of years lived, but also the “Quality Of Life score” (QOL score). “Quality Adjusted Life Years” (QALYs) are a standard measurement for this. By adding the “spice” of quality, we are able to measure not only the number of years lived, but also the quality of those years.

### HTA around the world

Taking a quick glance at reports from Great Britain, Germany, France, and Australia, it is clear that there is a difference in the systems set up for HTA and the way HTA is practically applied in each country. For example, in Great Britain and Australia, decisions about whether a drug should be covered by insurance are based on the outcome of HTA analyses. In France, medicine prices are determined based on their effectiveness, and HTA is used to test the outcomes of setting high prices for certain medications. In Germany, HTA could supposedly be used to resolve conflicts during negotiations between corporations and the Government, although there has of yet been no such conflicts. It is apparent that the use and status of HTA significantly varies among countries.



### For further information

<http://www.hgpi.org/en/> ► Search “Recent Developments in HTA”