

# **Health Technologies Economic Evaluation**



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# The French healthcare system

## 1. National Health Insurance (NHI)

- Statutory, coverage > 90% of the population
- Three major funds: salarieds, rural workers, self-employed
- Universal Medical Coverage (CMU) since 2000: for uninsured patients and supplementary coverage under threshold income

## 2. Supplementary Health Insurance:

- 92 percent of the population subscribe to supplementary health insurance

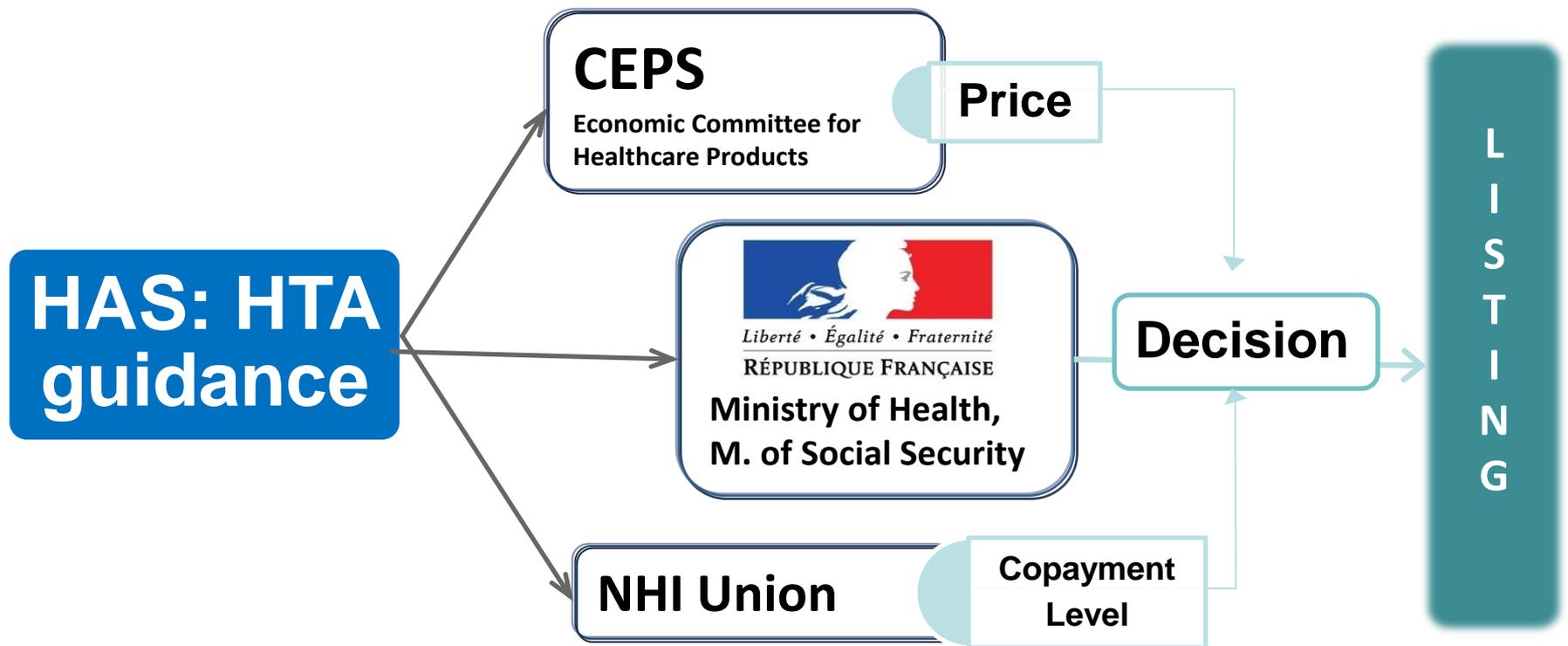
## 3. Which medical services are covered ?

- Hospital care, ambulatory care, prescription drugs
- For prescription drugs: Coinsurance level depends on the therapeutic value. 100% coverage by NHI in 29 chronic diseases

# HTA in France

## Reimbursement and Pricing

### The actors



# Initial listing: From HAS guidance to CEPS pricing

## Dimensions

- Clinical aspects**
- clinical efficacy
  - clinical effectiveness
  - relative effectiveness
- Other aspects**
- disease characteristics
  - target population
  - impact on public health
  - impact on healthcare organisation (qualitative)

## Criteria

Actual Benefit

Clinical added value

## Results

Insufficient

Sufficient

No CAV(V)

Minor CAV (IV)

High to moderate CAV(I,II,III)

No reimbursement

Reimbursement only if price inferior to comparators

Price may be higher than comparators

European Price

**P  
R  
I  
C  
I  
N  
G**

**HTA: HAS Guidance**

*Decision:* Ministry  
*Pricing:* Economic Committee

# ACTUAL BENEFIT (SMR): reimbursement and copayment level

<b>SMR</b>	<b>Level of reimbursement by NHI</b>
<b>Important</b>	<b>65%</b>
<b>moderate</b>	<b>30%</b>
<b>minimal</b>	<b>15%</b>
<b>insufficient</b>	<b>NO REIMBURSEMENT</b>

## Medical Benefit (SMR)

Niveau de SMR	Nombre de SMR N (%)
Important	177 (71.7%)
Moderate	21 (8.5%)
Minimal	21 (8.5%)
Insuffisant	27 (10.9%)
ND	1 (0.4%)
<b>TOTAL</b>	<b>247</b>

*Si un médicament a plusieurs indications avec le même SMR, celui-ci n'est comptabilisé qu'une fois. S'il possède des SMR différents, ils sont comptabilisés une fois dans chaque catégorie concernée. En 2012, 17 avis ont comporté 2 SMR différents et 7 ont comporté 3 SMR différents ce qui explique que le nombre de SMR formulés (247) soit plus élevé que le nombre d'avis rendus (216).*

# Rules governing price setting

## 1. Primary considerations when setting prices:

- **added clinical benefit** (ASMR),
- prices of **comparators**,
- forecast **sales volumes** (clawback payments in case of overshooting)

## 2. Link between ASMR and price

- drugs that provide **no added clinical benefit** (ASMR 5) as assessed by HAS and **no savings** on treatment costs **cannot be reimbursed**
- Drugs with ASMR 1-3 : the price is not inferior to the lowest price in 4 European countries

# Rules governing price setting

## 1. Spending objective: ONDAM

- Parliament adopts every year a national health spending objective (ONDAM),
- indicative, not compulsory.

## 2. CEPS' s task is to obtain the most advantageous price and financial conditions for the NHI system,

## 3. whilst taking into consideration

- both the pharmaceutical market as a whole
- and the limitations of the ONDAM budget,
- as well as public health needs
- and the obligation to treat all the companies equally.

# Why is France introducing Medico-economic assessment of drugs and devices ?

1. **The economic context**
2. **Increasing costs of expensive therapies without clear clinical superiority**
3. **Very high cost of new therapies ( including targeted therapies , orphan drugs)**
4. **At all levels of the health-care system**
  - **health technologies (reimbursed drugs: <20% of healthcare costs)**
  - **appropriateness of medical choices and practices**
  - **organization of patient pathway**

# The objectives of medico-economic assessment

1. Not just for reducing health-care expenses
2. Not just for indicating the costs
3. But to inform decision makers on possible disproportions between incremental costs and incremental effectiveness
4. And provide them with a scientific and accurate guidance

# The principles of medico-economic assessment

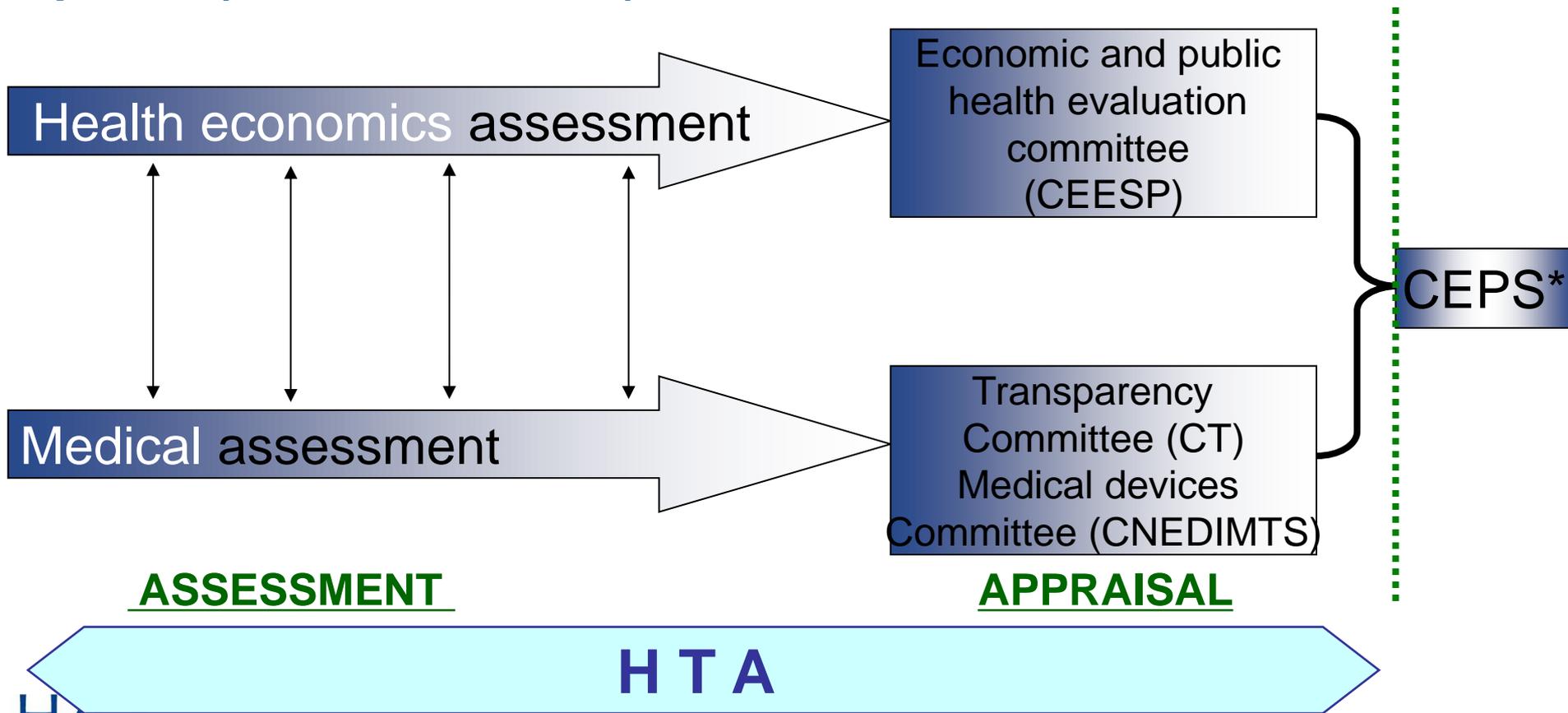
1. **Cost-effectiveness assessment**
2. **Comparative assessment**
  - Qalys used as a tool for comparing drugs
3. **Incremental Cost-Effectiveness Ratio (ICER) Euros per Qaly at different prices**
4. **No predefined ICER threshold**
  - No consensus on the use of thresholds
  - How to define threshold ?
  - One or more thresholds ?

# Medico-economic Assessment in France

1. **New Law (PLFSS 2012) and Decree (Oct 2012) to strengthen HAS' role in documenting the collective added value of technologies**
2. **When ?**
  - **first listing or reevaluation (relisting)**
3. **Which products ?**
  - **Drugs and medical devices**
  - **Innovations: ASMR I to III claimed by the company**
  - and - **Significant impact on health care expenses (health care organization, price, professional practices) 20 M Euros /year at 2 years**
4. **How ?**
  - **Based on data provided by the company**

# Coordinated assessment/appraisal

To provide the pricing committee (CEPS) with an assessment of clinical added value (individual benefit) and an economic opinion (collective benefit)



# Economic opinion process (90 days)

(National early dialogue meeting)

1. Submission
2. Administrative compliance
3. Scientific/methodological compliance
4. Internal analysis + economics sub-committee rapporteur
5. Complementary technical requests
6. Opinion draft
7. Economics sub-committee assessment
8. CEESP validation
9. Sending of the economic opinion to the company
10. Hearing (phase contradictoire)
11. Publication of the final opinion

A METHODOLOGICAL GUIDE

## Choices in Methods for Economic Evaluation

October 2012

Department of Economics and Public Health  
Assessment



[www.has-sante.fr](http://www.has-sante.fr)

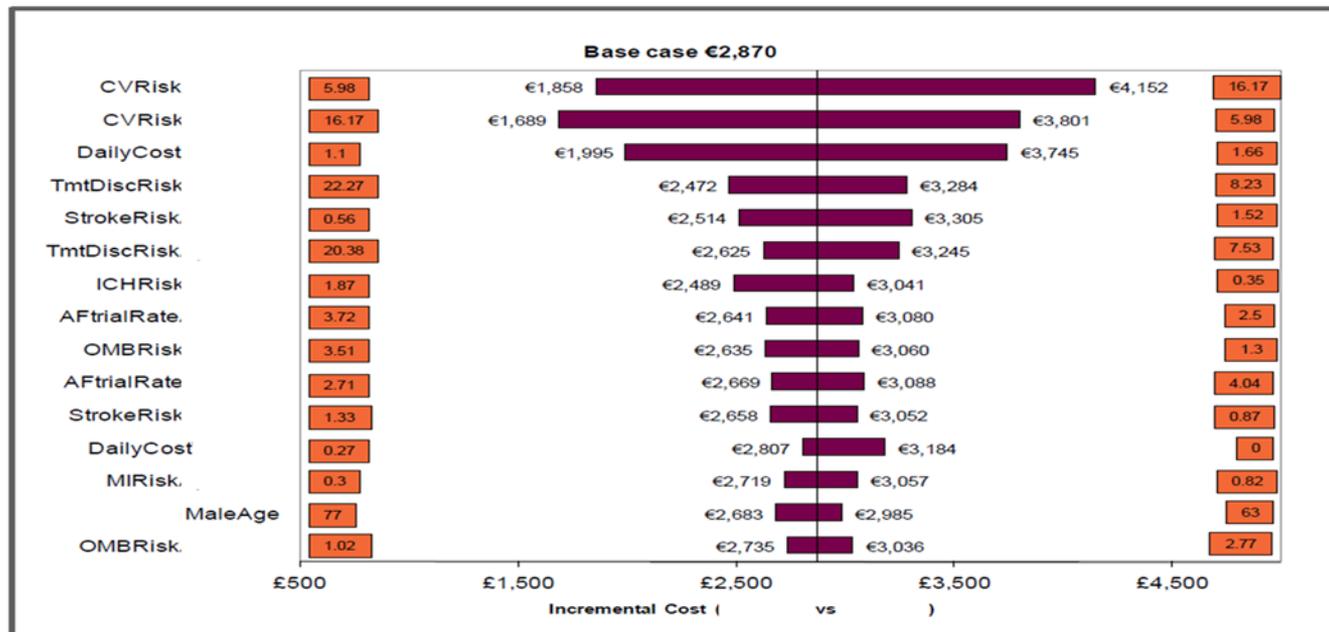
# Content of the economic opinion

- **Administrative completeness of the submission**
- **Compliance with the HAS guidelines for economic evaluation**
- **ICER (cost-effectiveness or cost-utility)**
- **Assessment on the robustness of the ICER**
- **Potential need for additional data for reassessment within 5 years**
  - to verify ICER in real world

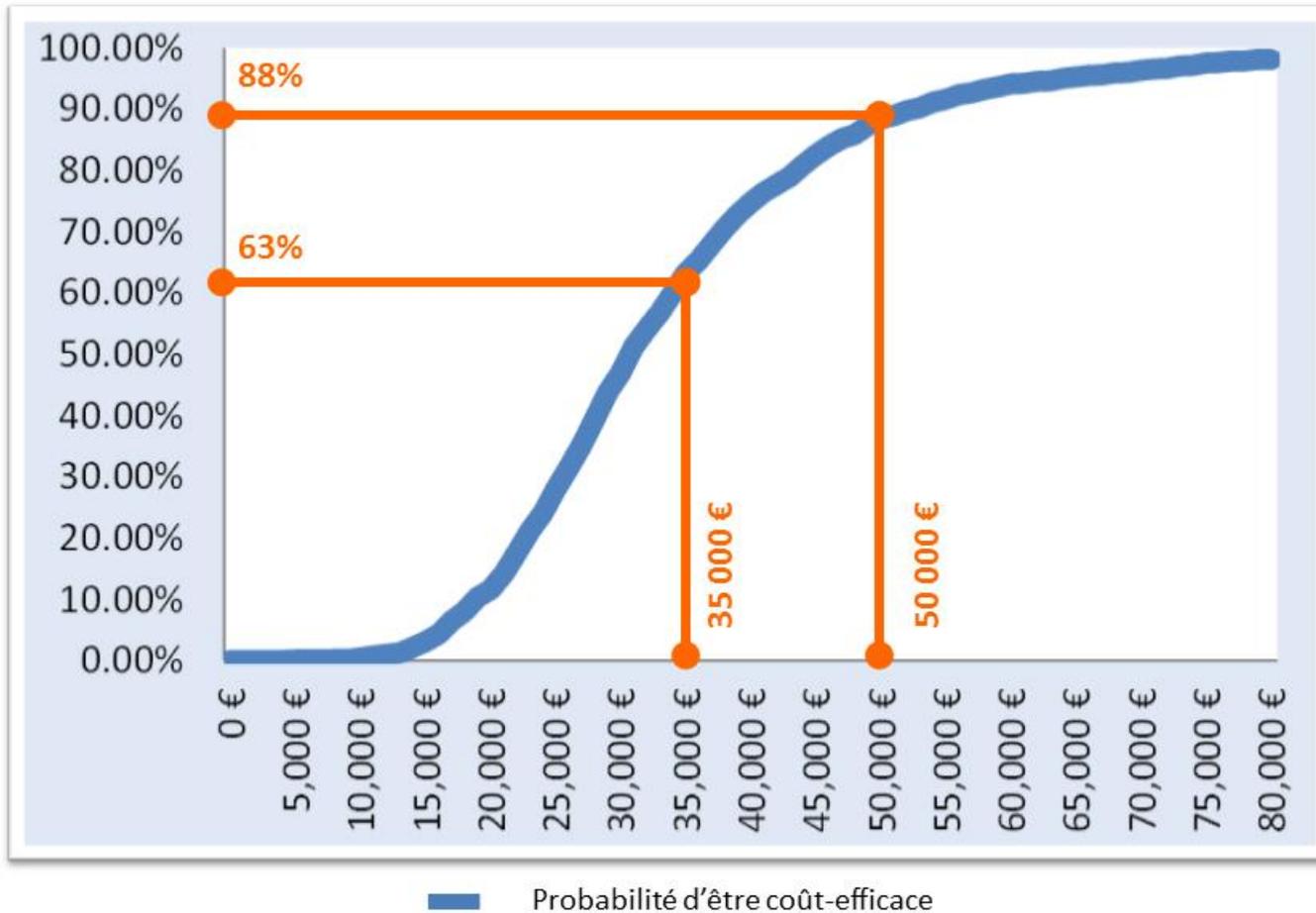
# Univariate Sensitivity Analysis

This analysis defines the parameters which have the most important impact on ICER

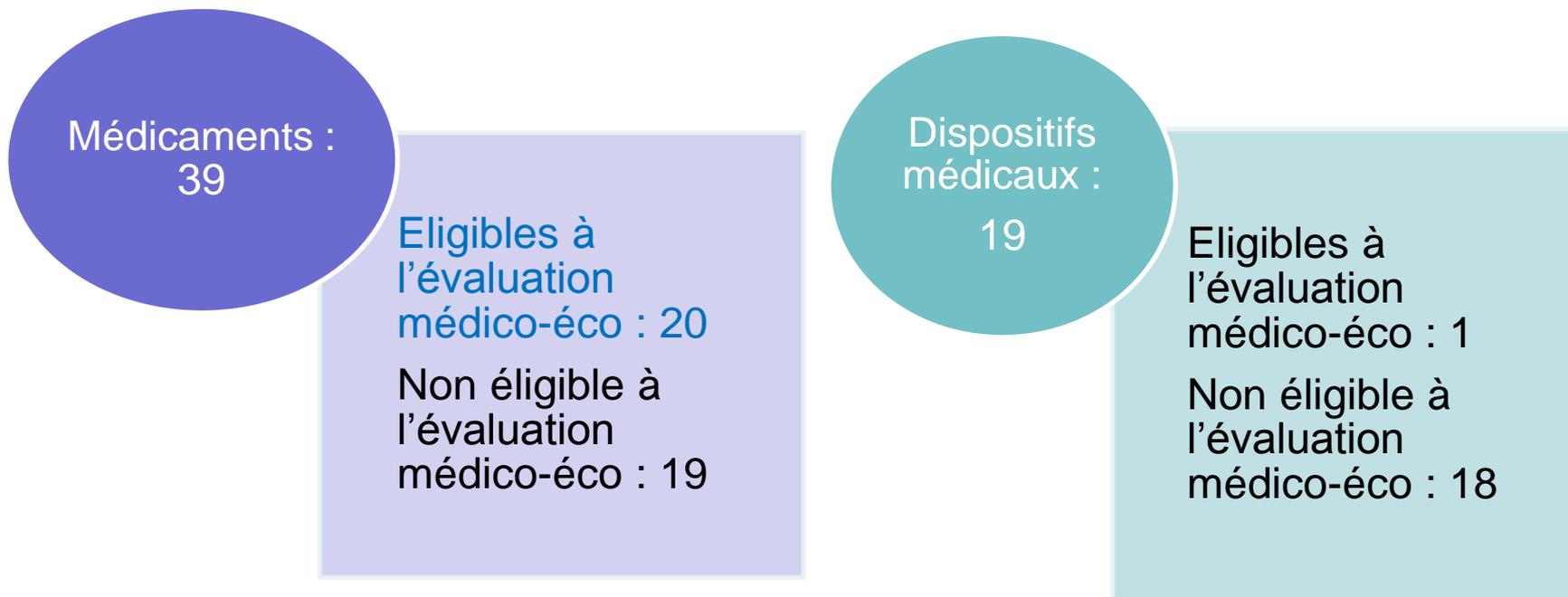
Tornado Diagram Illustrating Results from Univariate Sensitivity Analysis for Incremental Costs



# Acceptability curve



# Preliminary Experience (September 2014)



# CEESP Opinions by September 2014

**Number of opinions: 13**

## **Compliance with HAS methodological guidelines**

- 5 opinions with major limitations
- 6 opinions with important limitations
- 1 opinion with minor limitations

## **ICER results**

- < 30 000 €/QALY: 3 opinions
- > 100 000 €/QALY: 2 opinions
- Dominant: 1 opinion

# Drugs and diseases

## ➤ 4 cancer drugs:

- 1 breast cancer : Kadcyla<sup>®</sup> (trastuzumab emtansine)
- 1 colorectal cancer: Vectibix<sup>®</sup> (panitumumab)
- 1 prostate cancer : Xofigo<sup>®</sup> (radium 223 dichloride)
- 1 chronic lymphoid leukemia : Gazyvaro<sup>®</sup> (obinituzumab) \*

## ➤ 3 antiviral drugs

- 2 HCV : Sovaldi<sup>®</sup> (sofosbuvir), Olysio<sup>®</sup> (simeprevir)
- 1 HIV : Tivicay<sup>®</sup> (dolutegravir)

## ➤ 2 multiple sclerosis drugs

- Lemtrada<sup>®</sup> (alemtuzumab)
- Tecfidera<sup>®</sup> (dimethyl fumarate)

# Drugs and diseases (cont'd)

## ➤ 3 vaccines

- 2 rotavirus: Rotateq<sup>®</sup>, Rotarix<sup>®</sup>
- 1 zona et post-herpetic neuralgia: Zostavax<sup>®</sup>

## ➤ 8 other diseases

- Opsumit<sup>®</sup> (macitentan)
- Adempas<sup>®</sup> (riociguat)
- Nplate<sup>®</sup> (romiplostin)
- Esbriet<sup>®</sup> (pirfenidone)
- Defitelio<sup>®</sup> (defibrotide)
- Entyvio<sup>®</sup> (vedolizumab)
- Xolair<sup>®</sup> (omalizumab)
- Botox<sup>®</sup> (botulinic toxin type A)

# Questions

- 1) **No threshold : how CEPS uses this information for pricing negotiations ?**
- 2) **The « Sovaldi case » : acceptable ICER but huge budget impact**
- 3) **HE used for pricing not for reimbursement**
- 4) **Publication (only after CEPS decision )**

# Conclusion

1. **Complex system with 3 parameters (SMR, ASMR,CE)**
2. **HE assessment is used for pricing not for reimbursement**
3. **HE relies on CE not on the budgetary impact**
4. **HAS'proposal**
  - **only one (comparative) clinical assessement (REA) for the individual benefit**
  - **HE assessment for the collective impact**