

## BACKGROUND AND OBJECTIVE

- International comparisons suggest that the United States (US) spends more than any other industrialized nation on pharmaceuticals,<sup>1</sup> and that prescription drug prices are substantially higher in the US than in peer countries.<sup>2</sup>
- In many European countries, value assessment of innovative drugs by health technology assessment (HTA) authorities is a key step in price negotiations with payers, and in principle should lead to prices that are close to perceived value of those drugs.<sup>3</sup>
- Although the Institute for Clinical and Economic Review (ICER) has no statutory authority, it is the only US-based organization that regularly assesses the value of novel drugs and publishes its health-benefit price benchmarks (HBPBs). HBPBs have widely been interpreted as ICER's recommended US value-based prices (VBPs).
- Due to differences in willingness to pay per QALY and cost of care, we expect differences between HBPBs and EU negotiated prices.
- The objective of this study was to review ICER's value assessments and describe if, and how much, ICER's HBPBs differ from prices negotiated in France and the UK.

## METHODS

- We identified all brand-name prescription drugs for which ICER estimated a HBPB between November 2007 (inception) to July 2022
- HBPBs were extracted from ICER evidence reports and list prices were obtained from the IBM Micromedex RED BOOK (US), the Monthly Index of Medical Specialities (UK), and the Ministère des Solidarités et de la Santé (France).
- HBPBs & drug prices were adjusted for inflation and converted to Euros (2021). In chronic settings we used the annual prices; in acute settings we used price per course
- We compared the mean and median prices across countries and conducted a subgroup analysis which excluded all orphan and oncology drugs from the sample.

## RESULTS

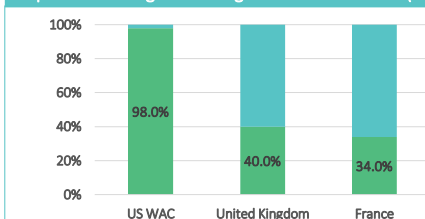
- We identified 50 drug-indication pairs for which price information was available in the US, France, and the UK.
- This included 10 drug-indication pairs which were available in the UK through special market access agreements (orphan drugs and the Cancer Drugs Fund).
- There was only one instance in which ICER did not recommend a discount from US WAC: Benlysta® (belimumab) for lupus nephritis.
- The majority of ICER's HBPBs were higher than prices in the UK and France (60.0% and 66.0% of comparisons, respectively).
- ICER's recommended HBPBs tend to be greater than list prices in the UK and France (by count and median values), and less than the UK and France (mean values).

| Principal Analysis (n=50) |                     |                            | Subgroup Analysis (n=40) |                   |                            |
|---------------------------|---------------------|----------------------------|--------------------------|-------------------|----------------------------|
|                           | Mean (SD)           | Median (Range)             |                          | Mean (SD)         | Median (Range)             |
| ICER                      | € 33,323 (45,645)   | € 24,859 (1,863 - 298,761) | ICER                     | € 22,957 (11,381) | € 23,482 (1,863 - 44,741)  |
| US WAC                    | € 112,808 (104,793) | € 78,661 (5,007 - 486,360) | US WAC                   | € 74,264 (53,976) | € 68,859 (5,007 - 333,828) |
| UK                        | € 55,189 (94,993)   | € 15,464 (4,369 - 355,833) | UK                       | € 14,951 (6,572)  | € 12,477 (4,369 - 29,349)  |
| France                    | € 41,174 (72,617)   | € 11,301 (3,155 - 301,725) | France                   | € 11,315 (4,314)  | € 9,444 (3,155 - 23,256)   |

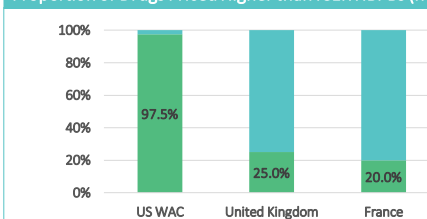
## Average Drug Prices (Expressed as Proportions)

|        | Principal Analysis (n=50) | Subgroup Analysis (n=40) |
|--------|---------------------------|--------------------------|
| ICER   | 2.03                      | 1.00 (Ref)               |
| US WAC | 6.56                      | 3.39                     |
| UK     | 1.32                      | 1.66                     |
| France | 1.00 (Ref)                | 1.24                     |

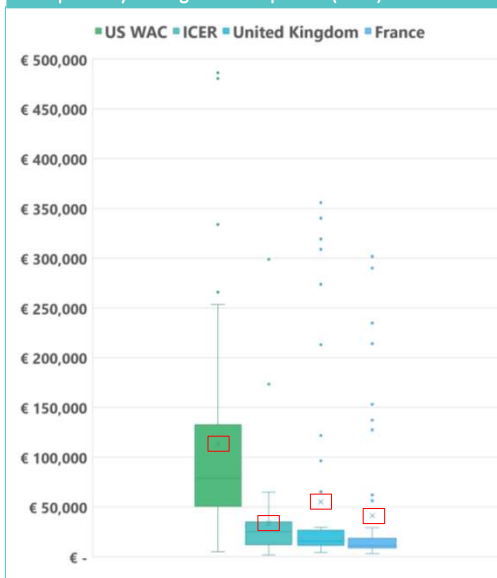
## Proportion of Drugs Priced Higher than ICER HBPBs (n=50)



## Proportion of Drugs Priced Higher than ICER HBPBs (n=40)



## Principal Analysis Drug Price Comparison (n=50)



## Subgroup Analysis Price Comparison (n=40)



## DISCUSSION

- As expected, list prices in the US are significantly higher than ICER's HBPBs.
- Our principal analysis shows that on average, list prices in Europe are higher than HBPBs, although the difference is not as remarkable as in the US.
- Unmet medical need, social equity, and reward for innovation are all important drug's pricing considerations.
- Our subgroup analysis demonstrates that when high-cost cancer therapies and orphan drugs are excluded, list prices in France and the UK are lower than ICER's HBPBs, and the price delta is also less marked. This suggests that EU payers may be more flexible when pricing drugs that are of high social value; see for instance the UK's Highly Specialized Technology Committee and Cancer Drug Fund.
- Outside of the UK, HTA assessments are only the first step of the price setting process; it is possible that during the price negotiations of drugs of high social value, other factors beyond the pure clinical or economic value may be considered.
- Manufacturers developing orphan drugs, cancer therapies or other drugs with high social value, must consider planning ahead for their ICER strategy, as they do for European HTAs, in order to avoid ICER underestimating their HBPB in the US.

## REFERENCES

- Conti et al. Projections of US Prescription Drug Spending and Key Policy Implications- JAMA Health Forum, 2021
- Mulcahy et al. International Prescription Drug Price Comparisons- RAND Report, 2021
- Hofmann et al. A Review of Current Approaches to Defining and Valuing Innovation in Health Technology Assessment. Value in Health, 2021