

# BEMFOLA® CAN POTENTIALLY REDUCE DRUG WASTAGE AND ASSOCIATED COSTS OF INFERTILITY TREATMENT

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## Introduction

- ▶ Bemfola, an EMA approved biosimilar of Gonal-f, is a recombinant follicle-stimulating hormone (rFSH) used for in-vitro fertilisation (IVF).<sup>1</sup>
- ▶ Having demonstrated equivalent efficacy and safety to Gonal-f, Bemfola is approved for identical indications as Gonal-f and as such, is also a viable alternative to urinary derived FSH, Menopur.
- ▶ NICE guidance (CG-156) concludes that there is no difference in clinical effectiveness between urinary and recombinant FSH products, and therefore recommends the use of either type of product.<sup>2</sup>
- ▶ However, available products do differ in terms of their delivery device and available strengths; Gonal-f is provided as a multidose pen, Menopur in vials or multidose preparation, and Bemfola as a fixed dose pen.
- ▶ The aim of this study was to determine the impact of delivery device on drug wastage and associated cost.

## Methods

- ▶ A retrospective analysis of Gonal-f and Menopur prescription and usage data from five UK infertility clinics was conducted to identify the level of FSH wastage occurring from IVF cycles.
- ▶ Data collected included: number of IVF cycles conducted in the previous 12 months; daily dose; length of treatment; dose adjustment following ultrasound scan; FSH formulation(s) prescribed.
- ▶ The drug wastage occurring for conducted cycles was calculated and compared to the potential wastage which would occur if Bemfola were used for the same cycles.
- ▶ The wastage cost was then determined using NHS list prices.
- ▶ Figures were extrapolated to the annual number of IVF cycles<sup>3</sup> conducted in the UK to estimate the potential wastage and associated cost to the UK each year.

## Results

- ▶ A total of 4,724 IVF cycles were incorporated into the analysis.
- ▶ If Bemfola were used across all of these cycles instead of the respective gonadotrophin, drug wastage would be reduced by 376,800IUs and there would be an associated cost saving of £100,011.
- ▶ Extrapolating these data to the annual number of UK IVF cycles results in a potential cost saving of £1,157,579.

### Gonal-f wastage versus Bemfola

- ▶ Of the 4,078 Gonal-f cycles, overall drug wastage was 650,775IU (5.7% of the total dose prescribed [Figure 1]) equating to 160IU per patient (Figure 2).
- ▶ Had Bemfola been used in these patients, the total wastage would have been 424,800IU and the wastage per patient would have been 104IU (Figure 2).

### Menopur wastage versus Bemfola

- ▶ For the 646 Menopur cycles the wastage was 190,163IU (11.6% of the total dose prescribed [Figure 1]) equating to 294IU per patient (Figure 3).
- ▶ Had Bemfola been used in these patients, the wastage would have been reduced to 61IU per patient (Figure 3).

Figure 1. % of prescribed dose wasted

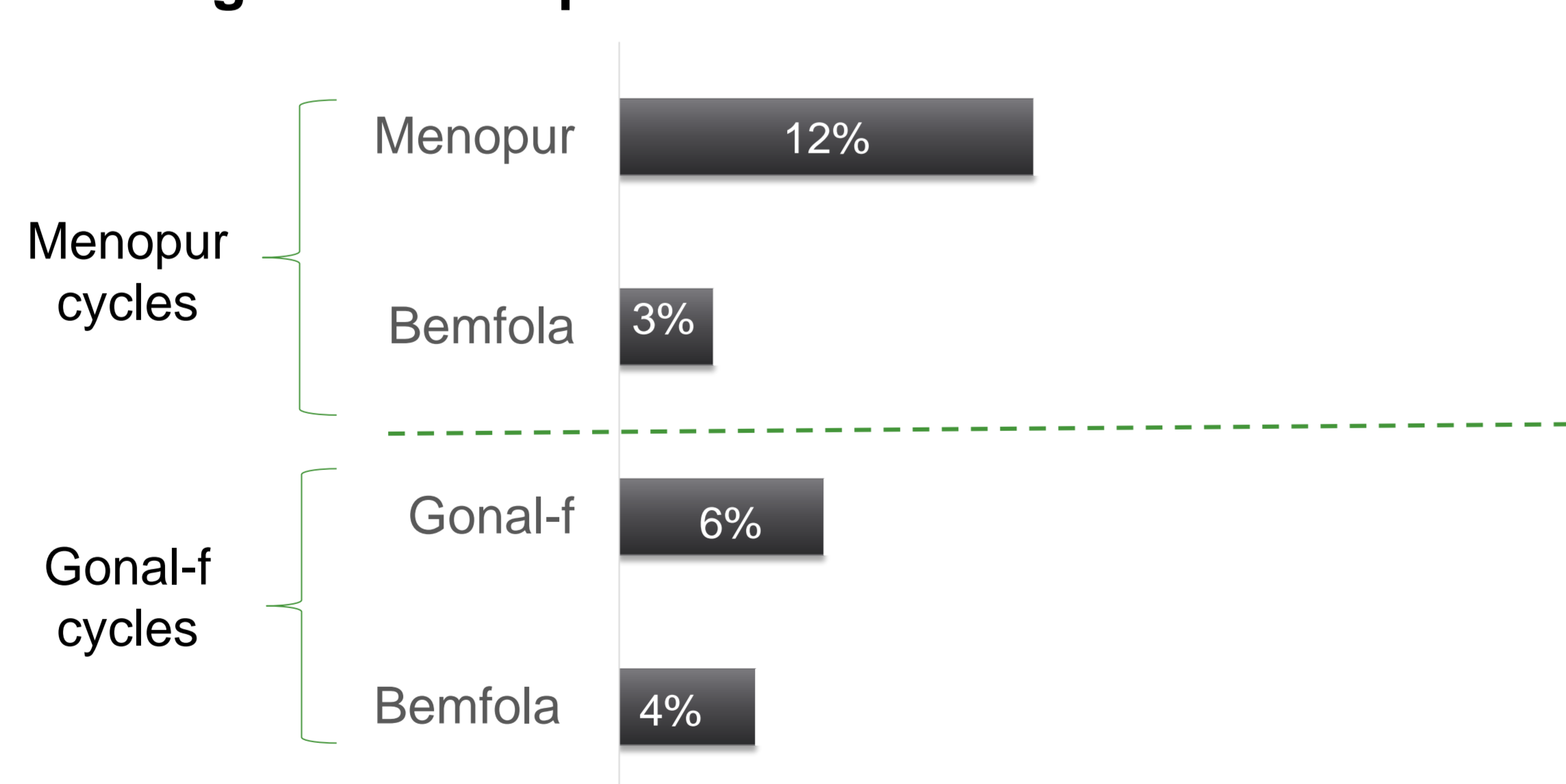


Figure 2. Gonal-f wastage versus Bemfola

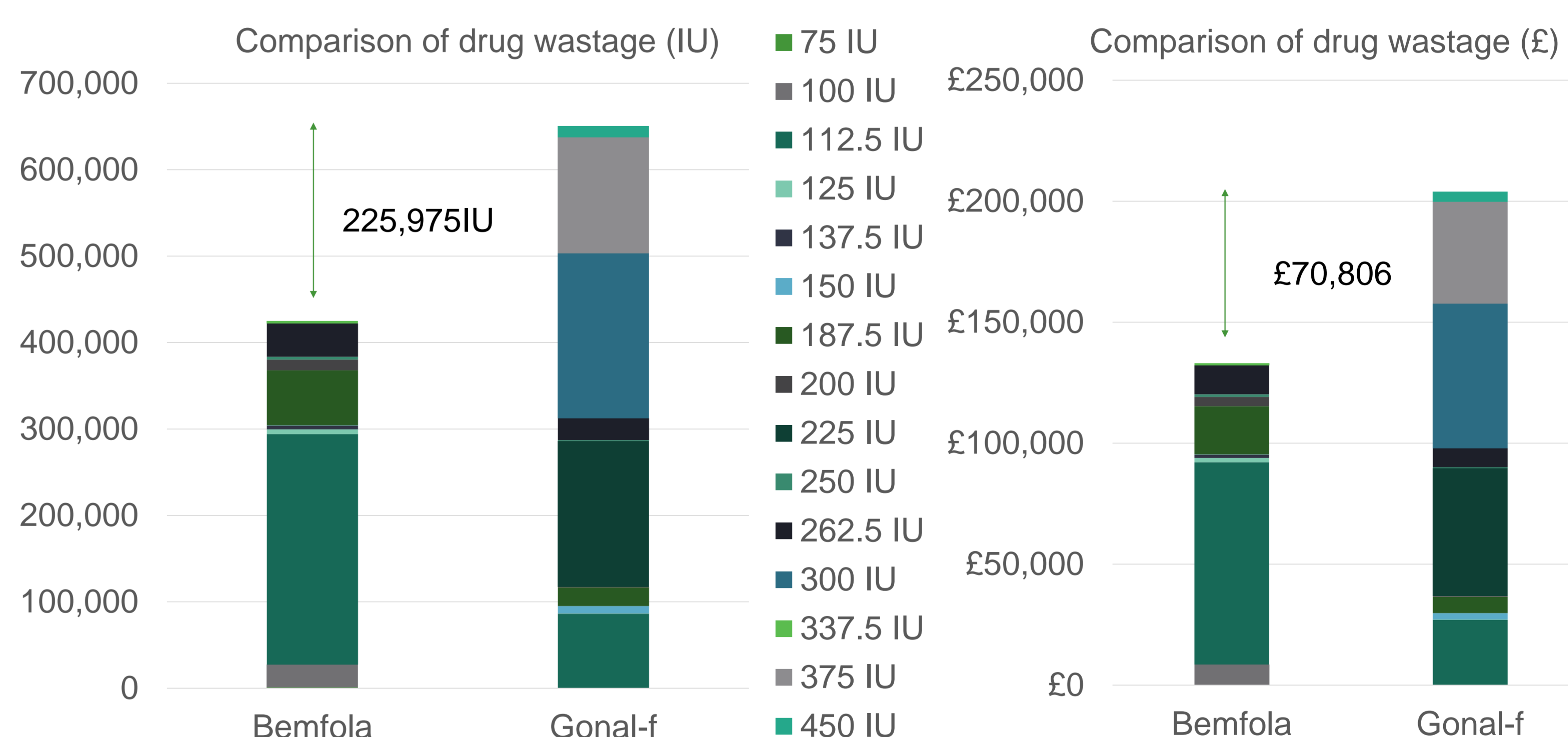
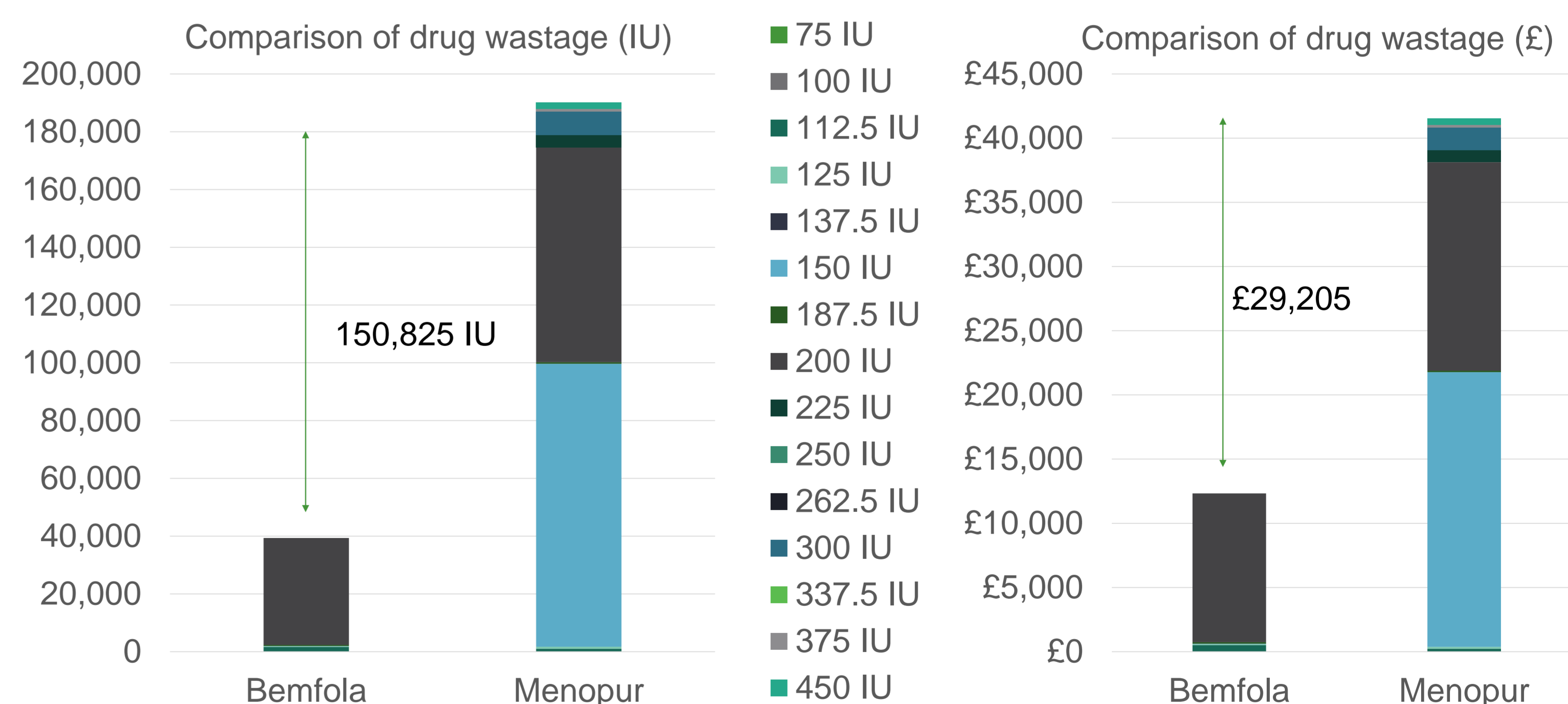


Figure 3. Menopur wastage versus Bemfola



## Limitations

- ▶ Extrapolation of these results to the number of cycles conducted annually in the UK assumes that Menopur or Gonal-f are used for all IVF cycles and in equal proportions to that seen in the five clinics included in the analysis.
- ▶ List prices were used to calculate cost savings when in reality products are offered at discounts. The relative % difference in wastage and therefore cost saving between products will however, remain the same regardless of the price used.

## Conclusion

- ▶ Using Bemfola as an alternative to Gonal-f or Menopur can potentially reduce drug wastage and associated costs to both patients and the NHS.

## References

1. European Medicines Agency. Summary of Product Characteristics. Bemfola. Available at [http://www.ema.europa.eu/docs/en\\_GB/document\\_library/EPAR\\_-\\_Product\\_Information/human/002615/WC500166818.pdf](http://www.ema.europa.eu/docs/en_GB/document_library/EPAR_-_Product_Information/human/002615/WC500166818.pdf). Accessed 15/07/2015  
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