Determining cost data for fertility treatment in different European settings

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CONCLUSION

The costs associated with pregnancy and live birth were the main contributor to the total costs related to one ART treatment cycle with fresh embryo transfer leading to a live birth. Drug acquisition costs for r-hFSH alfa originator contributed to only 6-17% of the total costs

The outcome of this study is aligned with results of an earlier study conducted in the Spanish healthcare setting[1]

INTRODUCTION

- Considerable costs are associated with treatment of infertility but little evidence is available on the main drivers of them
- Decision makers often focus mainly on costs for drugs used for stimulation when making decisions on the treatment of choice

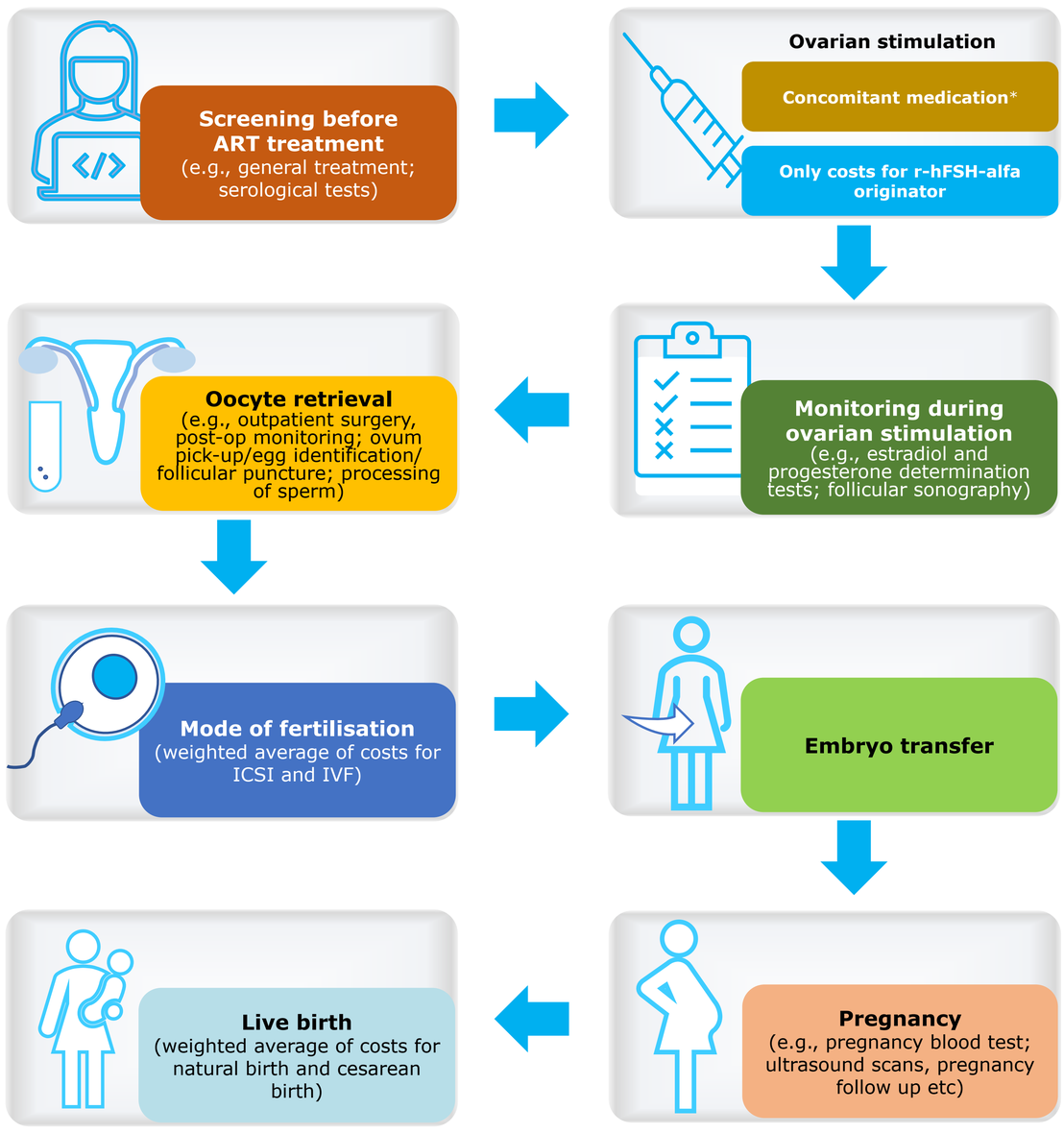
OBJECTIVE

- To analyse key costs for assisted reproductive technology (ART) with one fresh embryo transfer leading to a live birth in Spain, Norway, France, UK, Germany, and Denmark
- To determine the proportion of costs attributed to the acquisition costs of r-hFSH alfa originator in the analyzed markets

METHODS

- A targeted literature review was performed on price lists, databases and other publicly available information to determine the costs associated with ART treatment. Costs were grouped according to the treatment phase (**Figure 1**), as per the previously published data*.
- Where needed, clarification was provided by country clinical experts
- Total costs related to the entire pathway of one ART treatment cycle leading to a live birth and the proportion attributed to drug acquisition costs (for r-hFSH alfa originator) were determined

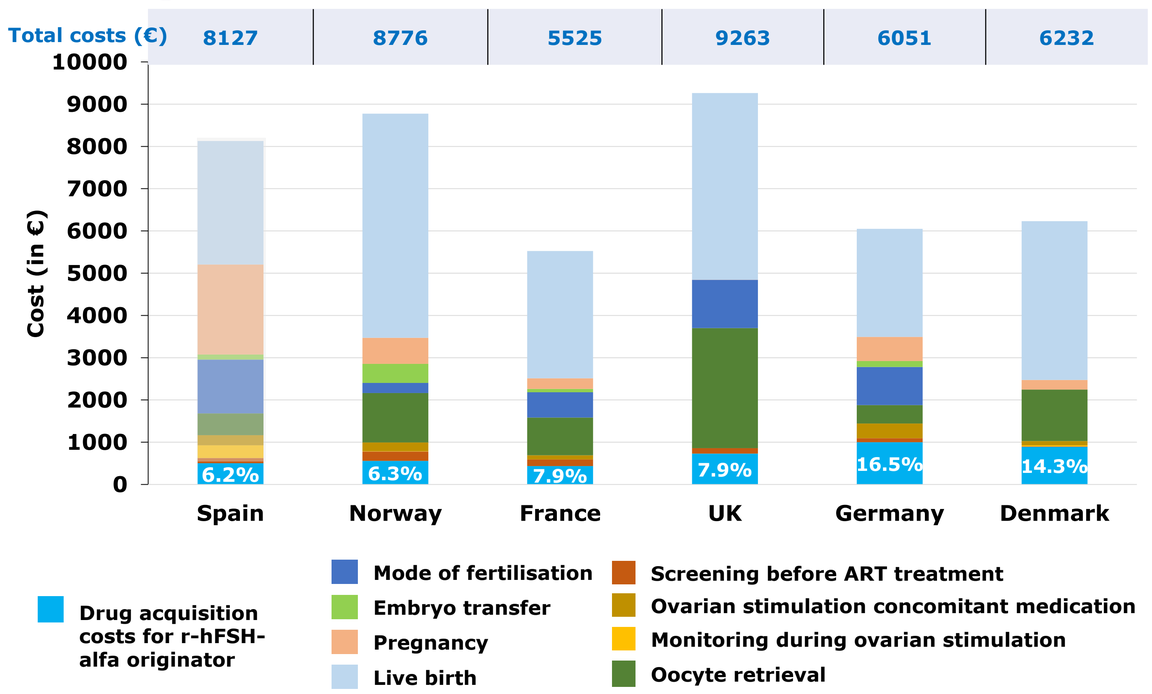
Figure 1. Steps of the patient journey of one ART treatment cycle with fresh embryo transfer leading to a live birth for which costs were estimated



*e.g., medication for final oocyte-maturation triggering; GnRH analogue (agonists, antagonists)

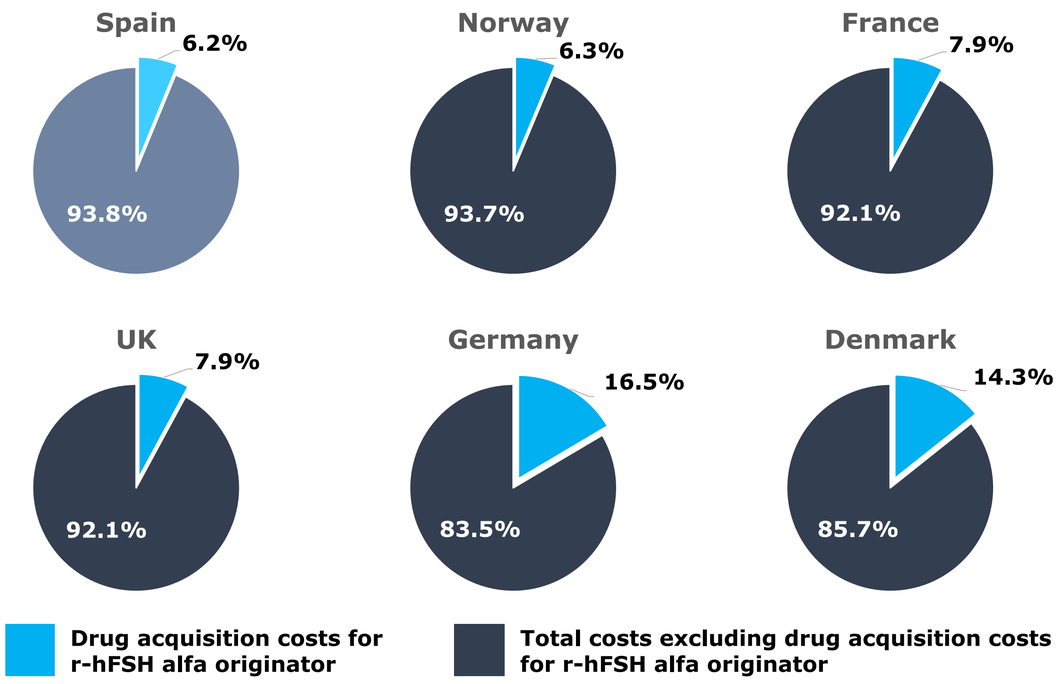
RESULTS

Figure 2. Total costs and breakdown of costs associated with one ART treatment cycle using a fresh embryo transfer leading to a live birth



- The total costs of one cycle for ART treatment leading to a live birth varied between countries (**€5,525-€9,263**), with pregnancy and live birth being the major contributors in all countries (ranging from **47 to 68% of total costs**) (**Figure 2**)
- In contrast, drug acquisition costs for r-hFSH-alfa originator contributed only in a limited way to total cost, accounting for **6-8% (Spain, Norway, France, UK)** and **14-17% (Denmark, Germany)** of the total costs of one ART treatment cycle leading to a live birth (**Figure 3**)

Figure 3. Cost of drug acquisition for r-hFSH alfa originator as a proportion of total costs of one ART treatment cycle leading to a live birth



*Data for Spain was previously reported at ISPOR 2021[1] and serves as the reference from previously reported literature for the current analysis.

Abbreviations: ART, assisted reproductive technology; **GnRH,** gonadotropin releasing hormone; **ICSI,** intracytoplasmic sperm injection; **IVF**, in vitro fertilisation

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References: 1. Roeder C, et al. POSC104. *Value Health.* 2022;25(1):S107.

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