

**INTRODUCTION**

A report published by the European Commission in 2007 revealed that the Maltese population fertility rate is steadily declining when examined over 15 years.<sup>1</sup> Following the passing of the Embryo Protection Act in 2012, patients looking to undergo IVF treatment can now opt for a partially government funded service at Mater Dei Hospital (MDH). Patients are still required to buy the medication used in IVF treatment, which accounts for the majority of treatment costs.

**AIMS**

A feasibility study for state funded IVF treatment in Malta is carried out to assess the sustainability of incorporating IVF medicines in the local government formulary.

**METHOD**

An extensive literature review identified the ‘Long GnRH Agonist Protocol’ as the gold standard of IVF treatment both locally at MDH and across Europe. A treatment algorithm for this protocol was compiled from literature in a flow chart format using Lucid Chart. Once formulated, the protocol was validated by an IVF consultant currently overseeing IVF treatment at MDH, in an attempt to incorporate local treatment practices.

The cost of each treatment cycle was estimated through sensitivity analysis using local wholesale prices when assessing governmental sustainability and local retail prices when evaluating patient affordability. Estimations were based on IVF budgetary allocations for 2015, totalling €500,000 and the 2015 governmental projections aimed at offering 350 free IVF stimulation cycles.

**RESULTS**

The average wholesale cost of 1 stimulation cycle was found to be approximately €1,900. In order to provide free medicines for 350 cycles, the government must allocate a further €665,000 to the pre-allocated sum (Figure 1). The total outlay to include free medicines would be approximately €1.17M.

In addition, if each couple between 25-40 is offered 3 free cycles and couples between the ages of 40-42 are offered 2 free cycles, based on the proportion of women in these age groups from the latest population demographics, the government must allocate a further €1.9M to current budgetary allocations.

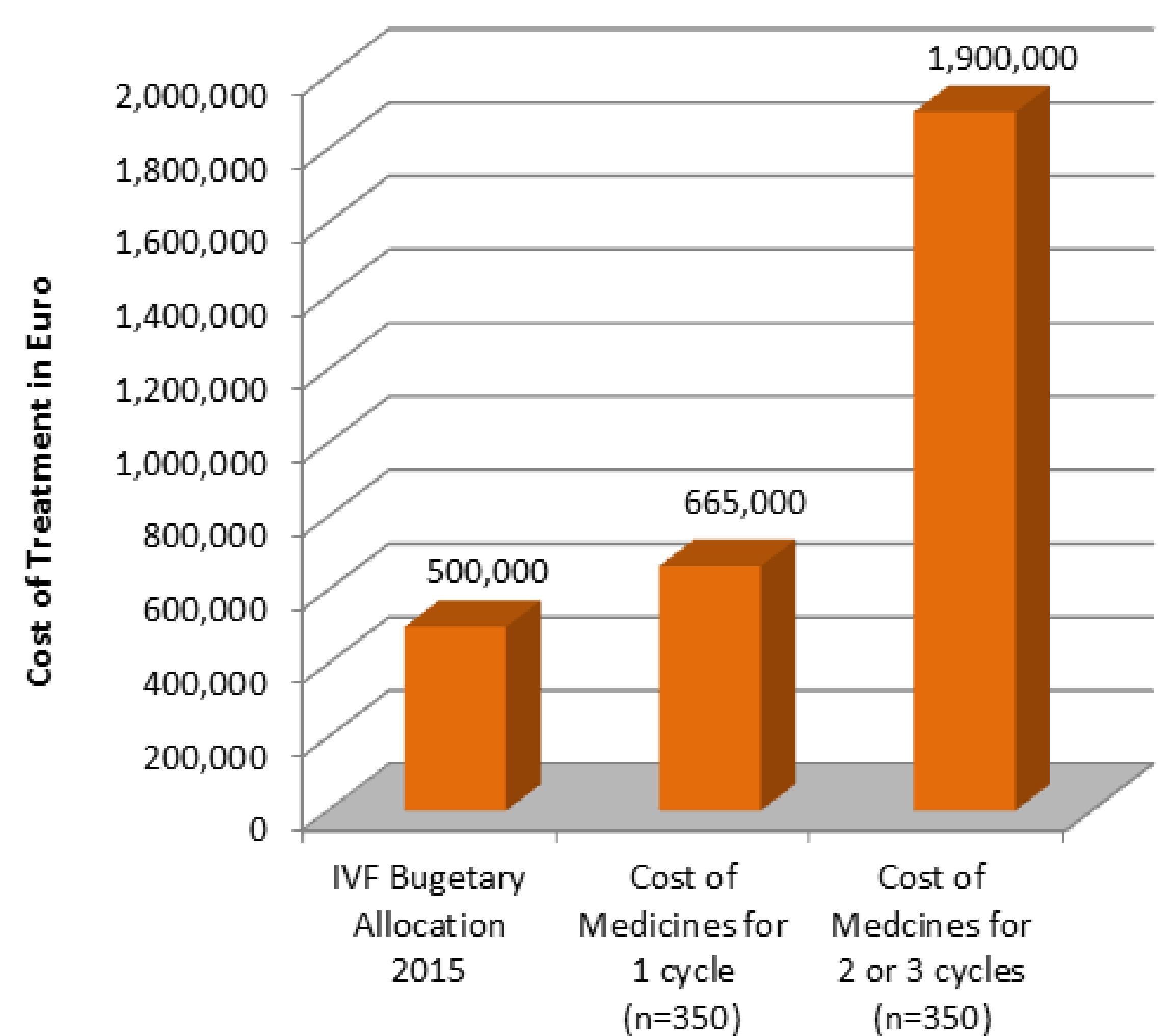


Figure 1: Cost Comparison of Different Hypothetical Scenarios of Government Funded IVF Treatment

**CONCLUSION**

Since the average monthly gross wage in Malta only covers for 57% of the retail cost of a single stimulation cycle, the average patient will not afford to pay for the medicines. Mobilisation of resources towards IVF is a must if full treatment is to be made accessible to all patients. This will benefit the patient and could, in the long term, contribute towards a positive economic growth which may be threatened by declining fertility rates. A life time’s worth of taxes from children born through IVF has been estimated to provide a 700% net return on investment which will ensure that our ageing population can sustain the welfare state.<sup>2</sup>

References  
 1. European Commission. The life of women and men in Europe: A statistical portrait. Luxembourg: Office for Official Publications of the European Communities; 2008.252p. Report No.: ISBN987-92-29-07069-3  
 2. Conolly MP, Pollard MS, Hoorens S, Kaplan BR, Oskowitz SP, Silber SJ. Long-term Economic Benefits Attributed to IVF-conceived Children: A Lifetime Tax Calculation. The American Journal of Managed Care. 2008;14 (9):598-604.